Hispanic American Historical Review 66:4

CCC 0018-2168/86/$1.50

Business Imperialism and British Enterprise in Brazil: The St. John d'el Rey Mining Company, Limited, 1830–1960*

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FOREIGN entrepreneurs have played a highly visible and controversial role in Latin American history since the voyages of Columbus in the fifteenth century. Throughout the colonial period, monarchs and bureaucrats periodically debated the role non-Iberian entrepreneurs should play in the New World empires. The wars of independence in the nineteenth century opened Latin American nations to a massive influx of British, and later, North American capital, raising new questions about the role of the foreigner in national affairs. With the emergence of strong cultural and economic nationalism in the twentieth century, politicians and scholars have focused increasingly on the role of foreign investors and foreign enterprise in the development process. Most of the scholarly literature during the past three decades has concentrated on the national and international arenas, ranging over such issues as capital flows, foreign control of vital national industries and resources, multinational corporations, and theories of dependency and imperialism.[1] The macroeconomic perspective has dominated the literature, while few scholars have analyzed the operations and evolution of individual foreign companies. Thus, despite the longstanding and controversial role of foreign business in Latin America, we know very

*The author would like to thank the editors of *HAHR* and two anonymous reviewers for their comments on earlier versions of this article. Research for this article was made possible by a Fulbright-Hays Fellowship and a grant from the Vanderbilt University Research Council.

1. See, for example: Gary A. Gereffi, *The Pharmaceutical Industry and Dependency in the Third World* (Princeton, 1983); Fernando Henrique Cardoso and Enzo Faletto, *Dependencia y desarrollo en América Latina: Ensayo de interpretación sociológica* (Mexico City, 1969); Peter Evans, *Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil* (Princeton, 1979).

little about the actual operations, organization, and finances of specific firms.[2]

To a large degree, this ignorance stems from lack of access to company archives. The demise of foreign firms has often been accompanied by the destruction of records, and firms still operating in Latin America are often reluctant to open private archives to outsiders. In spite of these obstacles, unexploited archives do exist, and the history of business in Latin America (both foreign and national) offers untapped possibilities, as Warren Dean noted nearly two decades ago.[3] Careful analysis of the archives of foreign companies would allow us to clarify the debates over their role in Latin America—to move beyond the myths, legends, and propaganda. Such an analysis would allow us to begin to offer more precise answers to important and neglected issues. How do foreign firms in Latin America operate and evolve? What sort of business strategies do they pursue? Exactly what do they put into the host economy? How much do they remit abroad in profits and dividends? What is the nature of their relationship with local and national politics? To what extent do they shape their environment, and to what extent are they shaped by more powerful forces? In short, careful scrutiny of individual firms will clarify the controversial role of foreign companies in Latin American development—and underdevelopment. Monographic studies will provide new perspectives on the macroeconomic arena.[4]

One of the central issues in the debate over dependency theory has been the role of foreign capital in shaping national politics and the national economy. Theorists of imperialism and dependency from Lenin to André Gunder Frank have stressed how the entry of British capital into Latin American countries distorted the economies of the new republics by gearing them toward the production and export of raw materials and foodstuffs, thereby integrating these nations into the emerging world economy in an unequal relationship of exchange: raw materials and agricultural products for manufactured goods and capital. According to this

2. Some recent studies using company archives are: Thomas L. Karnes, *Tropical Enterprise: The Standard Fruit and Steamship Company in Latin America* (Baton Rouge, 1978); Robert W. Randall, *Real del Monte: A British Mining Venture in Mexico* (Austin, 1972); Jonathan C. Brown, "Why Foreign Oil Companies Shifted Their Production from Mexico to Venezuela during the 1920s," *American Historical Review*, 90:2 (Apr. 1985), 362–385; and Allen Wells, *Yucatán's Gilded Age: Haciendas, Henequen, and International Harvester, 1860–1915* (Albuquerque, 1985).

3. Warren Dean, "Sources for the Study of Latin American Economic History: The Records of North American Private Enterprises," *Latin American Research Review*, 3:3 (Summer 1968), 79–86.

4. D. C. M. Platt, ed., *Business Imperialism, 1840–1930: An Inquiry Based on British Experience in Latin America* (Oxford, 1977) is a recent effort to reevaluate issues of imperialism and dependency through an analysis of business archives.

logic, foreign business, through domination and control of the export sector, extracted favorable treatment from the already receptive political elites who acted as their "collaborators" in the national system. This leverage and the assistance of the collaborating elites—and, where appropriate, of their own countries' diplomats—provided British (and later North American) business with extraordinary influence in national politics as foreigners developed the export sector to the detriment of diversification in the internal market. Finally, their political and economic power allowed foreign businesses to extract profits at levels higher than possible in domestic markets in the industrial nations.[5]

This article addresses these issues by examining the rise and fall of one of the most profitable and enduring foreign enterprises in Latin American history. The British-owned and operated St. John d'el Rey Mining Company, Limited developed the largest gold mine in Latin America for a century and a quarter (1834–1960) in Nova Lima, Brazil.[6] Around the Morro Velho mine in central Minas Gerais, the British constructed a business empire of gold mines, iron ore deposits, woodlands, farms, hydroelectric plants, and a private railway, eventually encompassing more than 150 square miles of real estate. From the midnineteenth century until the 1950s, the company was the single largest industrial employer, landowner, and taxpayer in Minas Gerais, and the producer of the vast majority of Brazil's gold bullion. This essay looks at the growth of the St. John's operations, focusing on management, labor strategies, technological development, company finances, and the politics of business. The St. John d'el Rey's long and continuous control of the Morro Velho mine offers a rare opportunity to study the creation and evolution of an important foreign enterprise in Brazil, and to see the local, national, and international forces which interacted to shape the history of the company.[7]

5. See, for example: Richard Graham, "Sepoys and Imperialists: Techniques of British Power in Nineteenth-Century Brazil," *Inter-American Economic Affairs*, 23:2 (Autumn 1969), 23–37; V. I. Lenin, *Imperialism: The Highest Stage of Capitalism* (New York, 1939); and André Gunder Frank, *Capitalism and Underdevelopment in Latin America* (New York, 1967). See also the classic statement of John Gallagher and Ronald E. Robinson, "The Imperialism of Free Trade," *The Economic History Review*, 2nd series, 6:1 (1953), 1–15.

6. Nova Lima has gone through several name changes. The Portuguese created the *freguesia* in 1748 that became the *distrito* of Congonhas do Sabará under the empire in 1836. In 1891, the republican regime of Minas Gerais elevated Congonhas to the status of a *vila*, naming it Vila Nova de Lima in honor of a distinguished local family. In 1923, the name was shortened to Nova Lima. Waldemar de Almeida Barbosa, *Dicionário histórico-geográfico de Minas Gerais* (Belo Horizonte, 1971), pp. 320–321.

7. This detailed analysis has been made possible by the existence of one of the richest business archives in Latin America. The current owners of the gold mine, Mineração Morro Velho, S.A. (jointly controlled by Bozano, Simonsen of São Paulo and the Anglo American Corporation of South Africa) have conserved a vital part of the documentation of the old English company. These records include a nearly complete run of correspondence between

Despite its success and long history, the St. John has only recently attracted scholarly attention. Until a few years ago, the only history of it was a brief, anecdotal volume the company commissioned for its 125th anniversary in 1955. Two young scholars in Minas Gerais have recently published works on the company. Yonne de Souza Grossi's *Mina de Morro Velho: A extração do homem* focuses on the history of the miners union between 1934 and 1964, relying heavily on personal interviews with union activists and secondary sources. Douglas Libby worked in the St. John archives in Texas, producing a monograph on the company's use of slave labor in the nineteenth century. This article, and a book manuscript in progress, combine research in company archives in Brazil and Texas, as well as a wide variety of municipal, state, and national archives to present the most comprehensive analysis available of the St. John d'el Rey Mining Company, Limited.[8]

At the outset, it is important to place the role of the St. John d'el Rey in proper perspective by issuing several caveats. First, although this was the most powerful and successful of all the gold mining companies in Brazil, gold itself was a small and insignificant segment of the national economy.[9] After 1840, coffee would arise as the principal export and the motor of the Brazilian economy. A truer test of British political and economic power must come from more dynamic sectors of the economy, and gold rarely comprised more than 1 percent of export earnings in this export-oriented economy. Second, unlike coffee or other agroexports, gold has

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the London office and Morro Velho, reports of company departments for most of this century, diaries of the superintendents, and a wide range of documents on all aspects of company operations. In addition, the Nettie Lee Benson Latin American Collection of the University of Texas acquired the London office records in the mid-1970s. Although less complete, this rich collection includes a complete run of the company's annual reports, thousands of photographs, stock registers, minutes of board meetings, and some of the company's earliest correspondence. I would like to thank the staff of the Manuscript Department of the collection for guiding me through the materials in Austin (hereafter SJUT). I am grateful to the officials of Mineração Morro Velho, S.A., particularly Juvenil T. Félix, *diretor presidente*, and Paulo Sarmento, *diretor comercial*, for providing access to their archive (hereafter SJNL), and for their exceptional assistance and support during my research in Nova Lima in 1979–80 and 1985.

8. Bernard Hollowood, *The Story of Morro Velho* (London, 1955); Yonne de Souza Grossi, *Mina de Morro Velho: A extração do homem: Uma história de experiência operária* (Rio de Janeiro, 1981); Douglas Cole Libby, *Trabalho escravo e capital estrangeiro no Brasil: O caso de Morro Velho* (Belo Horizonte, 1984); and Marshall C. Eakin (book manuscript), "British Enterprise in Brazil: The St. John d'el Rey Mining Company, Limited and Nova Lima, Minas Gerais, 1830–1960."

9. At the beginning of the twentieth century, gold accounted for 6.77 percent of Mineiro exports, cattle for 17.17 percent, and coffee 51.58 percent. Minas Gerais, Secretaria de Agricultura, *Relatório*, 1906, Table 6, "Exportações comparativas de 1853–54, 1873–74 e 1904," Arquivo Público Mineiro, Belo Horizonte (hereafter APM).

not historically been subject to the market fluctuations of the international economy. The price of gold did vary, and it increased dramatically in the 1930s, but the St. John d'el Rey did not function within the classic export pattern of drastically fluctuating demand and prices. Third, although the gold mining boom of the early nineteenth century revived a dormant industry, even within Minas Gerais gold mining remained a secondary industry.[10] Minas Gerais experienced relative economic decline in the nineteenth century, as São Paulo and Rio de Janeiro took off with the coffee boom after 1840. Within Minas Gerais, the southern and southwestern portions of the province (Zona da Mata and the Zona Sul) benefited from the coffee boom, leaving the old Zona Metalúrgica to experience economic stagnation. Although the capital of Minas Gerais would remain in the old mining region, the politicians of the Sul and Mata zones would emerge as major figures in Mineiro politics, and would be more interested in cattle and coffee than mining.[11] The St. John d'el Rey, therefore, operated an exceptionally successful foreign enterprise, but one isolated from the economic mainstream of both the nation and Minas Gerais. As a British enterprise, the company benefited from the European *mentalité* of the imperial elites. As a gold mining enterprise, the St. John suffered from the benign neglect of provincial and national governments more interested in agriculture and cattle raising than an isolated and secondary industry.

Brazilian Gold and British Capital

In the eighteenth century, Brazil experienced the first of the great gold rushes of the Western world, preceding those of California, Australia, Alaska, Canada, and South Africa by more than 150 years. In the first half of the eighteenth century, Brazilian gold played a major role in the surging Western European economy and tightened Portugal's subordination to English economic and political power, making the mother country a virtual economic appendage of the colony.[12] The rush also

10. For a recent economic history of Brazil since independence, see Nathaniel H. Leff, *Underdevelopment and Development in Brazil*, 2 vols. (London, 1982). For Minas Gerais, see Francisco Iglésias, *Política econômica do governo provincial mineiro (1835–1889)* (Rio de Janeiro, 1958); and John D. Wirth, *Minas Gerais in the Brazilian Federation 1889–1937* (Stanford, 1977).

11. Peter Louis Blasenheim, "A Regional History of the Zona da Mata in Minas Gerais, Brazil, 1870–1906" (Ph.D. diss., Stanford, 1982).

12. C. R. Boxer, *The Golden Age of Brazil, 1695–1750: Growing Pains of a Colonial Society* (Berkeley, 1962); Pierre Vilar, *A History of Gold and Money, 1450–1920*, Judith White, trans. (London, 1976), pp. 222–231; and Virgílio Noya Pinto, *O ouro brasileiro e o comércio anglo-português (Uma contribuição aos estudos da economia atlântica no século XVIII)* (São Paulo, 1979).

opened up the Brazilian interior to effective European colonization, and shifted the axis of economic and political power to the southeast of Brazil where it remains today. After 1750, the production of bullion leveled off and then began a long decline, leaving the new captaincy of Minas Gerais in decadence and economic stagnation. Gold production, which had apparently reached as high as 15 million grams annually in the mid-eighteenth century, had fallen to barely 800,000 grams by 1814.[13] The mining industry suffered from inadequate technology, management, and capital investment. The British would provide large amounts of all three in the early nineteenth century.

The transfer of the Portuguese court, under British escort, to Rio de Janeiro in 1808 opened Brazilian commerce to foreigners, and British merchants quickly flocked to Brazilian ports.[14] The independence of Brazil in 1822 and the Constitution of 1824 removed the last major barriers to foreign investment in the country—especially in mining. Subsoil rights continued to belong to the crown under the imperial regime as they had under the colony, but the new constitution allowed the monarchy to grant mining concessions to foreigners, albeit with restrictions. Foreigners had to pay 5 percent higher taxes than nationals. They had to offer up to one-third of their company stock to Brazilian investors, and, finally, foreign companies were required to pay a deposit of 150,000 milreis (roughly 14,259 pounds sterling in 1830) to the treasury as a guarantee against future payment of taxes and duties.[15] These minor obstacles in no way hindered the flow of British investment into the moribund mining industry in Brazil.

By the third decade of the nineteenth century, Great Britain had begun to ride a wave of economic expansion and prosperity growing out of a half-century of industrial revolution and the peace of post-Napoleonic Europe. The former had produced an impressive accumulation of capital and industrial production, and the British crisscrossed the globe in search of markets for their goods and capital. The latter made access to those markets less problematic. The wars for independence in Latin America in the

13. W. L. von Eschwege, *Pluto brasiliensis*, 2 vols., Domício de Figueiredo Murta, trans. (São Paulo, 1944), II, 49; João Pandiá Calogeras, *As minas do Brasil e sua legislação*, 3 vols. (Rio de Janeiro, 1904–1905); and Pinto, *O ouro brasileiro*, p. 114.

14. C. H. Haring, *Empire in Brazil: A New World Experiment with Monarchy* (Cambridge, MA, 1958), pp. 5–6; John Mawe, *Travels in the Interior of Brazil* (London, 1815); Richard Graham, *Britain and the Onset of Modernization in Brazil, 1850–1914* (Cambridge, 1968); Alan K. Manchester, *British Preeminence in Brazil* (Chapel Hill, 1933).

15. Imperial decrees of Sept. 16, 1824 and Nov. 5, 1828. See Pastas históricas, two file folders located in the Departamento do Patrimônio, SJNL (hereafter SJNL/P) containing notes on company history compiled in the early 1950s. The exchange would have been less favorable in 1825 (approximately £32,397). Exchange rates have been taken from José do Nascimento Brito, *Economia e finanças do Brasil* (Rio de Janeiro, 1945), p. 65.

1820s provided limitless opportunities for the British, and in the century following independence Great Britain inundated the Latin American republics with investments and manufactured goods. British investors pumped some £25 to £30 million into Latin America in the 1820s, with Brazilian projects taking the single largest share of this capital. The financial and speculative "bubble" burst in 1825, and investment slowed considerably for the next 25 years. Investment accelerated after midcentury, and by the 1890s British investments in Latin America probably totaled more than £550 million, with Brazil receiving approximately one-sixth of the total.[16]

The major portion of British capital investment funded the construction of railroads, ports, communications systems and public utilities, and the purchase of government bonds. In the 1890s, for example, nearly 50 percent of British investment in Latin America went into government bonds, another 35 percent to railways, about 7 percent to banking and finance, and 3 percent each to public utilities and mining ventures. Total British investment in Latin American mining hovered around £3.5 million for most of the nineteenth century, rising to more than £20 million in the 1890s and reaching £38 million by World War I.[17] The major focal points of British mining investment were Brazil, Colombia, Mexico, and Chile, with Peru joining the group in the latter part of the century. Gold mining companies were concentrated in Brazil, Mexico, and Colombia. Almost without exception, the mining companies funded by British investors in nineteenth-century Brazil were gold mining enterprises. Brazil accounted for some 6 percent of British capital invested in Latin American mining ventures in the 1820s, and probably 3 percent of that invested in the 1890s.[18]

British investment in Brazilian gold mining during the nineteenth century flowed in three major waves. The first wave appeared in the 1820s and lasted into the 1830s. Great Britain had adopted the gold standard in 1816 and other nations followed her lead in the succeeding decades. The British eagerly sought to stimulate the production of Latin America's precious metals, which had declined in the late colonial period

16. J. Fred Rippy, "Early British Investments in the Latin American Republics," *Inter-American Economic Affairs*, 6:1 (Summer 1952), 40; D. C. M. Platt, *Latin America and British Trade 1806–1914* (New York, 1973), pp. 36–37; and Irving Stone, "British Direct and Portfolio Investment in Latin America Before 1914," *The Journal of Economic History*, 37:3 (Sept. 1977), 690–722.

17. Stone, "British Direct and Portfolio Investment," 694.

18. Rippy, "Early British Investments," 41; Rippy, "The Most Profitable British Mining Investments in the Hispanic World," *Inter-American Economic Affairs*, 8:2 (Autumn 1954), 43; and Rippy, *British Investments in Latin America, 1822–1949: A Case Study in the Operations of Private Enterprise in Retarded Regions* (Minneapolis, 1959), pp. 24 and 50.

and practically ceased during the revolutionary upheavals. This rush for gold (and silver) began with the floating of joint-stock ventures, the first great venture being the Real del Monte gold mine in Mexico. Before the bubble burst in 1825, speculation ran rampant in London financial markets as seemingly everyone from clerks to the highest politicians scrambled to get into the American mining ventures.[19]

A second, somewhat more intense wave swept into Minas Gerais in the 1860s, primarily due to the success of previous ventures. The third, and least intense, wave of investment stretched across the last quarter of the century. The mining ventures that arose out of these waves, by and large, did not last long. Of those companies established in the first wave only two survived midcentury. None of the companies founded in the 1860s survived the century, although two lasted into the 1890s. Those founded in the third wave (with one exception) disappeared by 1905.[20] Brazil was not exceptional in the failure of mining ventures. Mining has always been a high-risk enterprise, and Latin America has been the graveyard of many a British mining venture. J. Fred Rippy estimated that the English invested in approximately 400 mining companies in Latin America after 1820: less than a score became profitable. Of the 18 British companies to which the nineteenth-century Brazilian gold mining boom gave birth, however, several did become profitable, including the most successful of all the British gold mining ventures in Latin America.[21]

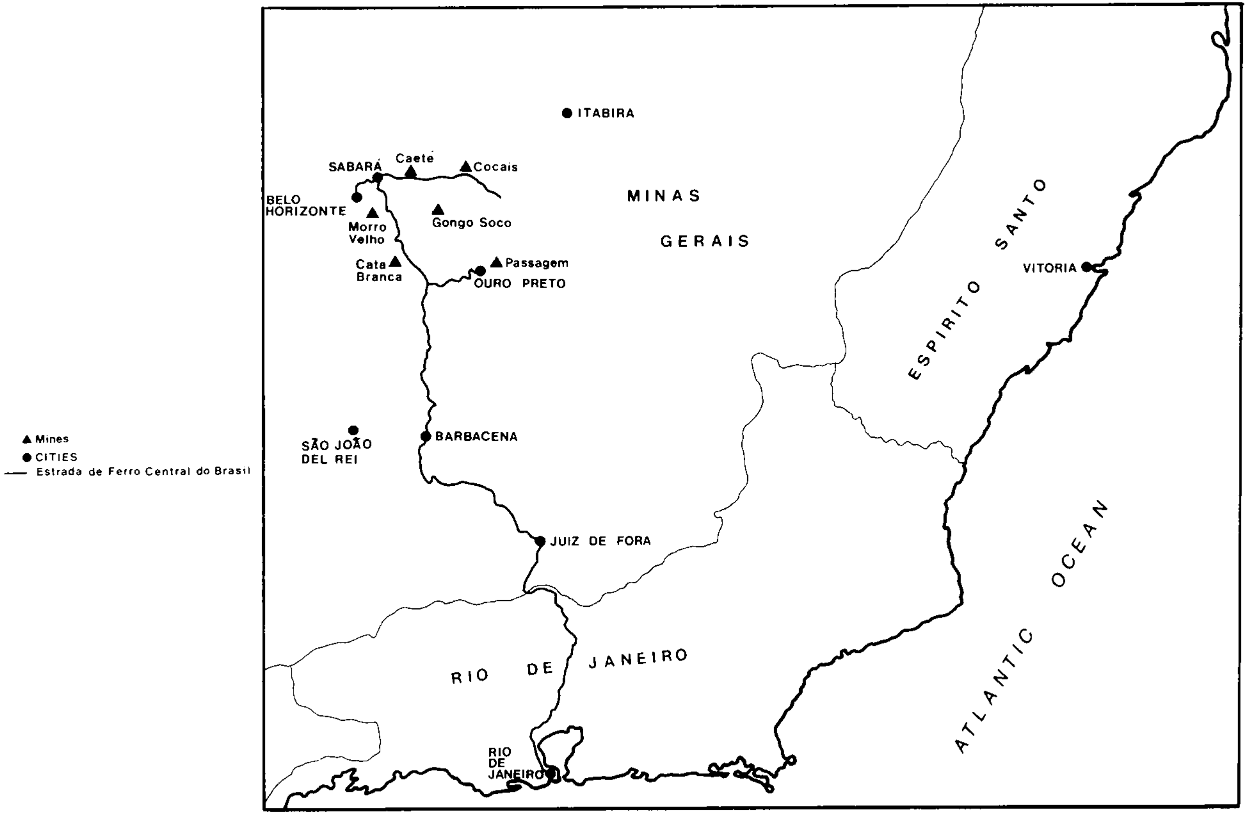
British companies moved into Minas Gerais with capital, advanced technology, and Cornish miners, reviving dozens of the abandoned and decaying eighteenth-century mines. The Imperial Brazilian Mining Association at Gongo Soco (1824–56) set the pattern which subsequent British companies were to follow. After issuing several hundred thousand pounds in capital stock, the company built a small British community of miners, managers, and their families who guided a slave labor force of several hundred, and a smaller free labor force.[22] The deep shaft techniques of the Cornish and the latest milling techniques from central Europe produced quick success at Gongo Soco and other British mines, if

19. Randall, *Real del Monte*, pp. 32–42; Leland Hamilton Jenks, *The Migration of British Capital to 1875* (New York, 1927), pp. 52–64; Benjamin Disraeli, *An Inquiry into the Plans, Progress, and Policy of American Mining Companies* (London, 1825); and Stone, "British Direct and Portfolio Investment," 692.

20. Marshall C. Eakin, "The Role of British Capital in the Development of Brazilian Gold Mining," in *Miners and Mining in the Americas*, Thomas Greaves and William Culver, eds. (Manchester, England, 1986), pp. 10–28.

21. Rippy, *British Investments*, p. 32; and Rippy, "The British Investment 'Boom' of the 1880's in Latin-American Mines," *Inter-American Economic Affairs*, 1:4 (Mar. 1948), 72–74.

22. George Gardner, *Travels in the Interior of Brazil* (London, 1846), pp. 490–495 gives a firsthand account of the Gongo Soco mine.



MAP 1: The Gold Mining Region, Minas Gerais, Brazil.

only for a brief period. The Imperial Brazilian was dissolved in the 1850s after the complete collapse of the mine. Thirty years' work produced nearly 13 million grams of gold and a profit of more than £300,000. British companies at Cata Branca, Cocais, and Caeté (to name a few) met a similar, if less lucrative fate (see Map 1). By the end of the century, the waves of British investment in Brazilian gold mining had passed, with but two companies surviving beyond 1905: the Ouro Preto Gold Mines Company operating the Passagem mine near Mariana until the 1920s, and the St. John d'el Rey Mining Company, Limited.[23] Two factors combined to set these companies apart from their less successful competitors: rich gold lodes and exceptional management.

Creation and Consolidation of the Enterprise

A handful of British investors met in the City of London Tavern on April 5, 1830 to organize the St. John d'el Rey Mining Company. They had previously signed a contract with agents in Brazil leasing a pair of mines in southern Minas Gerais near the city of São João d'El Rei (hence the name of the company) (see Map 1). The agents, three British merchants and a German physician educated at Oxford, had obtained an imperial decree in November 1828 to work these mines, and they transferred the concession to the London investors.[24] The founders of the new company were hardly newcomers to the American mining industry. John Diston Powles, the chairman, served on the board of the Anglo-Mexican Mining Association operating near Guanajuato, as well as an association for working silver mines in Colombia, both founded in 1824. One of the most important and visible of mining entrepreneurs in London, Powles also had a mining venture with Simón Bolívar, and employed the young Benjamin Disraeli to write investment brochures. James Vetch, another company founder, had been the first commissioner at the Real del Monte, and Charles Herring, Jr. served on the boards of mining companies in Mexico and Chile.[25] Herring and Powles also controlled a merchant house that had floated the first Colombian government loan in 1822.[26]

23. The principal sources on British mining company operations are: Othon Henry Leonardos, *Geociências no Brasil: A contribuição britânica* (Rio de Janeiro, 1970); Paul Ferrand, *L'or à Minas Geraes* (Belo Horizonte, 1913); and Eakin, "The Role of British Capital."

24. "Decrees and Statutes of Company," SJNL/P; "Contract for the Mines of San João d'el Rey and San José . . . ," SJUT; *Annual Report of the St. John d'el Rey Mining Company, Limited 1831* (hereafter *AR*); and Hollowood, *The Story of Morro Velho* describe the formation of the company.

25. Simón Bolívar, *Cartas del Libertador*, 12 vols. (New York and Caracas, 1929–59), XI, 318–319, 335–337, and 356–357; Disraeli, *An Inquiry*, pp. 7, 25, and 54; Robert Blake, *Disraeli* (New York, 1967), pp. 24–26. James Vetch's exploits in Mexico are described in Randall, *Real del Monte*, pp. 40–76.

26. Susan Berglund, "Mercantile Credit and Financing in Venezuela, 1830–1870," *Journal of Latin American Studies*, 17:2 (Nov. 1985), 377–379.

The company directors immediately announced an offering of £50,000 in stock to finance mining operations in Minas Gerais, and they dispatched a group of Cornish miners to Brazil under the direction of Herring. Initial optimism soon gave way to disillusionment, as legal problems over ownership rights and the creeping realization that the mines' value had been misrepresented compelled the company to shut down operations by mid-1832.[27] Herring proceeded to make a thorough search of the gold mining properties of central Minas Gerais, eventually focusing his attention on the Morro Velho mine a few miles south of Sabará alongside the village of Congonhas do Sabará (see Map 1). Apparently the deposit (*lavra*) had been worked since the early eighteenth century. In the early nineteenth century, a Catholic priest, Antônio Pereira de Freitas, worked the estate with primitive technology and about 100 slaves.[28] A group of British merchants in the area, and the former superintendent at Gongo Soco, had bought up the rights to the Morro Velho fazenda in the early 1830s. The board authorized Herring to purchase the estate for £56,434, and issued a call for more capital stock. By the end of 1834, the company had acquired legal ownership of what would become the most valuable gold deposit in Latin America. The estate covered nearly six square miles and included 136 slaves, as well as the existing mining equipment and the eighteenth-century *Casa Grande*.[29]

In addition to the purchase of the mine, the company had to raise funds to finance the construction of a modern mining operation with deep shafts, milling works, hauling equipment, aqueducts, and housing for company employees. Anxious investors had to wait nearly a decade for their investment to yield a return.[30] The company paid its first dividend in 1842, and would pay fairly regular dividends until the mid-1880s (see Figure 1). The growing prosperity of the mine stimulated the growth of the British community at Morro Velho, as the St. John sent out ever larger numbers of miners and their families. By the 1850s, the British at Morro Velho numbered around 150, approximately half of them employees of the company. The board of directors hired an Anglican clergyman and his wife to handle religious duties and to educate the more than 60 children of the British community. The company erected a chapel and a schoolhouse

27. "Extracts of Advices from Morro Velho," SJUT, contains the early correspondence from Charles Herring to the board of directors. Pastas históricas (SJNL/P) contain legal papers describing a suit brought in Rio de Janeiro against the original agents for breach of contract.

28. "Guardamoria, Datas de Terras e Aguas Minerais, Sabará, Raposos, Congonhas, Rio Acima, 1785–1795," pp. 40, 45–46, 177, 210–218, APM, Câmara Municipal de Sabará, Códice 77; Eschwege, *Pluto brasiliensis*, I, 46–47.

29. "Will of Anna Corrêa da Silva, 1829," Doc. 1A/1, SJNL/P; *AR 1835*, p. 23; Doc. 1/2C, SJNL/P, contains the original bill of sale as registered in the local cartório.

30. *AR 1837, 1842*.

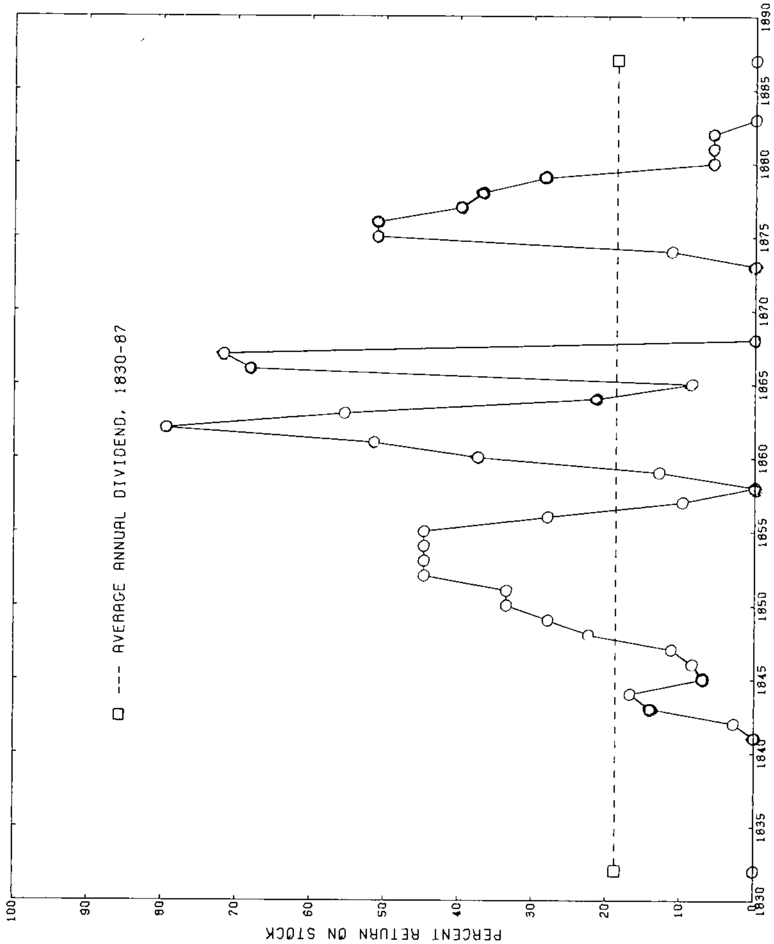


FIGURE 1: Dividends Paid by St. John d'el Rey Mining Company, Limited, 1830–87.
Source: *AR*.

near the *Casa Grande*, and successfully petitioned Pedro II for permission to lay out a cemetery for the Protestant English. In 1867, after lobbying by company directors, the British Parliament passed a special act legalizing marriages consecrated by Anglican clergy at Morro Velho. By the late 1860s, the English at Morro Velho could be born, baptized, married, and buried as easily as if they were in a parish in the English countryside.[31]

Another consequence of the growth of company operations was the development of a well-defined and differentiated organizational structure that would remain basically intact into the early twentieth century (see Figure 2). In London, the company maintained an office in the financial district with a small clerical staff. The board of directors (five to seven men), elected by the stockholders who met biannually, usually met bimonthly to discuss company business, set policy, and go over the latest reports from the mines. In the nineteenth century, the board consisted largely of merchants and financiers. In the twentieth century the chairman was nearly always a member of Parliament, and the other board members were powerful politicians, financiers, and executives. A managing director watched over the day-to-day operations of the office and acted as the contact between directors, office, and the mine. In Brazil, the company's chief officer was the superintendent who headed mining operations at Morro Velho. The fate of the company depended on the skills and decisions of this man more than any other company official. London could monitor and lay down policy, but the thousands of kilometers that separated the directors from Morro Velho, and the slow pace of communications, forced the board to place the brunt of responsibility on the shoulders of the superintendent at the mine. In the nineteenth century, the superintendent sent fortnightly reports to London. By the time he received a reply from the board, two to four months had passed.

Department heads at the mine made up the next level of management. Those in charge of the mine, reduction mill, mechanics' shops, hospital, store, cashier's office, and slave labor met with the superintendent on a daily basis to discuss problems and set the work agenda. As a rule, Europeans filled the positions of department heads. They also filled the supervisory positions below department heads leaving lower-level jobs and manual labor to slaves and free Brazilians whom they referred to as "blacks" and "natives." The St. John maintained a dual pay system reflecting this division, paying the Europeans in sterling (or the equivalent in milreis) and the "natives" in local currency.[32]

31. *AR 1852*, pp. 10–11; "An Act to Legalise Certain Marriages Solemnised at Morro Velho, in Brazil, 1867," *British Parliamentary Papers. General Index, 1852–1969*, 8 vols. (Shannon, 1968), IV, 447.

32. European Payroll and Cashier's Department Files, SJNL.

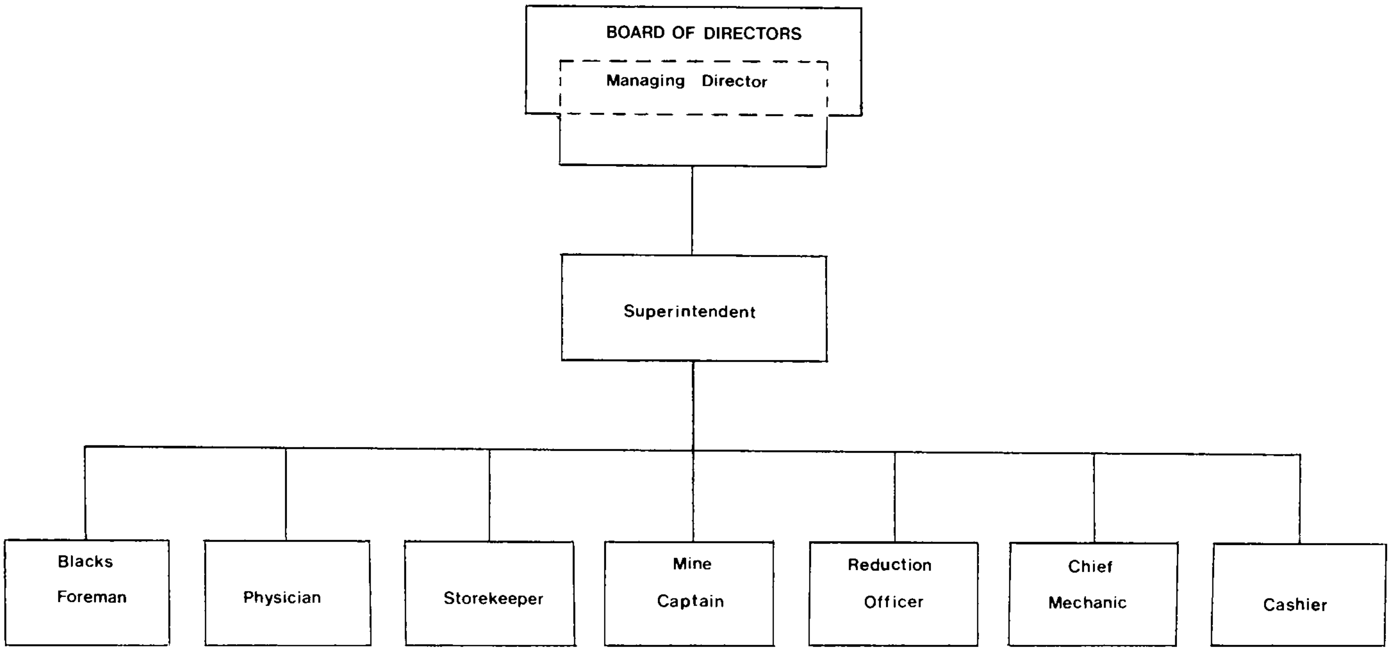


FIGURE 2: Organizational Structure of the St. John d'el Rey Mining Company, Limited (Midnineteenth Century).

With the expansion of operations, the company also acquired large numbers of slaves. Herring and his successors relied on slave labor guided by English miners to provide the company with a stable and secure work force. The company preferred free labor, but its needs far outstripped the meager and transient supply in the region. Unable to attract the free labor that it believed to be more productive, the company acquiesced reluctantly to the realities of local conditions.[33] By the 1860s, the St. John employed 1400 slaves in almost every aspect of its operations, and captive labor formed the vast majority of the work force (see Figure 3). The company was probably the single largest employer of slaves in Minas Gerais, the province with the largest slave population in Brazil.[34] In 1845, the British Parliament passed the Aberdeen Act which, among other things, prohibited British citizens, regardless of residence, from purchasing slaves. Throughout the nineteenth century, the British Foreign Office worked diligently to end slavery and the slave trade, and this act represented a major step in the struggle for abolition. The realities of the Brazilian labor market forced the St. John into confrontation with British foreign policy. The board of directors lobbied successfully to include a provision allowing British citizens to keep slaves purchased before the passage of the law. This effectively permitted the company to bypass the intent of the legislation by hiring slaves in the surrounding region.[35] Company slaveholding would continue to expand, and, ultimately, create enormous friction between this British firm and British diplomacy.

The St. John d'el Rey profited from the demise of British mining companies at Cata Branca, Cocais, and Gongo Soco, hiring nearly 1,000 slaves from the failing companies in the 1840s and 1850s. The St. John d'el Rey "rented" 385 slaves from the Brazilian Company of Cata Branca in 1845; 182 slaves from the National Brazilian Mining Association of Cocais in 1861; and approximately 400 slaves from the creditors of the Imperial Brazilian of Gongo Soco in the 1860s.[36] With its renting policy, the St. John was able to hire slaves in the peak of their productive years, and to discard them at no cost as they became less productive. From the company's perspective, this procedure contained the most attractive features

33. *AR 1849*, p. 29.

34. Robert Borges Martins, "Growing in Silence: The Slave Economy of Nineteenth-Century Minas Gerais, Brazil" (Ph.D. diss., Vanderbilt University, 1980), p. 65. Also Amilcar Martins Filho and Roberto B. Martins, "Slavery in a Nonexport Economy: Nineteenth-Century Minas Gerais Revisited," *HAHR*, 63:3 (Aug. 1983), 537–568; and Libby, *Trabalho escravo e capital estrangeiro no Brasil*.

35. David Brion Davis, *The Problem of Slavery in the Age of Revolution, 1770–1823* (Ithaca, 1975), p. 419; board minutes, vol. 2, June 16, 1843, and letter book 4, June 17, 1843, SJUT.

36. Superintendent's diary, Sept. 18, 1861, and June 17, 1877; John Hockin to Thomas Walker, May 8, 1857, and Hockin to Walker, Aug. 7, 1857, SJNL.

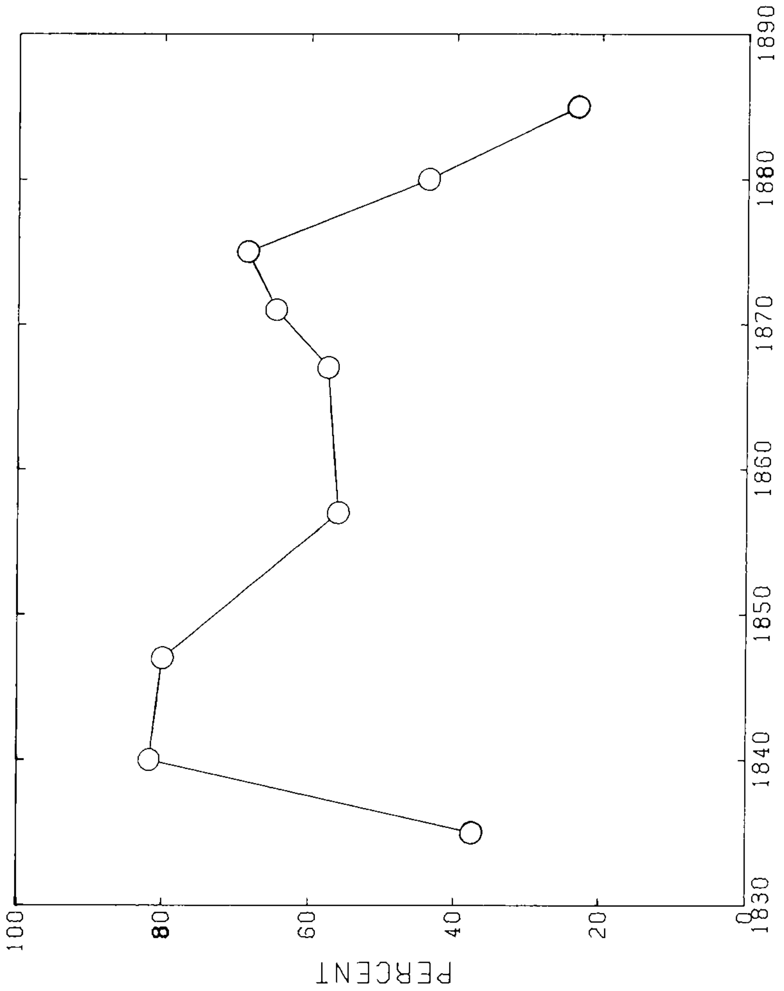


FIGURE 3: Percentage of Slaves in Labor Force (Morro Velho). Sources: *AR* and Burton, *Explorations*, I.

of the slave *and* free labor systems; it provided a captive labor force with minimal social obligations. Local conditions did not allow for the creation of a capitalist free wage labor force, so these British capitalists simply adapted their needs to local conditions.

The company protected its investment in captive labor with careful paternalism. The board hired a Catholic priest to minister to the spiritual needs of the slaves in a company-built church, while the resident British physician monitored the health of the labor force and cared for the sick in the company hospital. The superintendent dispensed gifts to couples who married, and to those who produced children, while an elaborate system rewarded "deserving" slaves with emancipation. Beginning in the 1850s, the directors set manumission "goals": to free ten slaves at Midsummer (St. John's Day), and another ten at Christmas. They rarely met their goals in times of labor shortages.

Several factors motivated the emancipation process. In the eyes of the board, gradual emancipation for "good behavior" resulted in more responsible freedmen. The desire to relieve the company of unproductive, elderly, and infirm slaves also guided manumission decisions.[37] As the abolition movement gained strength in the 1870s and 1880s, and as the price of hired slaves increased with the end of the Atlantic slave trade, two additional factors influenced the company's emancipation process. First, the board hoped that healthy and productive freedmen would stay on in their old jobs as free wage laborers, recognizing the "beneficence" of the company. By freeing trusted workers in their productive years, the company hoped to supply itself with skilled, cheap, wage labor, and to reduce overhead costs by no longer having to provide for slaves and their families. Second, in the two decades preceding abolition, the company pushed the emancipation process with one eye on potential social upheaval from slave rebellions, and the other eye on the perceived inevitability of abolition. The emancipation program served the St. John d'el Rey well, reducing potential social conflict, cutting costs, supplying new free laborers, and providing a convenient ideological salve for the consciences of the slave-owning Victorian English. The company freed 191 of its own slaves between 1830 and 1881, and 87 of the "rented" Cata Branca company slaves between 1845 and 1879. Some 50 of these 278 freed slaves partially or entirely paid for their freedom.[38]

37. Richard Francis Burton, *Explorations of the Highlands of Brazil*, 2 vols. (London, 1869), I, chapters 20–28, describes in great detail his one-month stay at Morro Velho and his reactions to the slave system the English employed. The manumission procedure is discussed in John Hockin to James Buchanan, July 22, 1882, SJNL.

38. Hockin to Pearson Morrison, Mar. 22, 1879; Hockin to Buchanan, July 22, 1882, SJNL.

The process of emancipation received a forceful push forward in 1879 by judicial action. Abolitionists publicized the case of the Cata Branca slaves, revealing that the company had failed to free the slaves in 1859 as the original rental contract (1845) had stipulated. Joaquim Nabuco denounced the St. John in the Brazilian Parliament, and the English-language press in Rio took up the cause. The British Foreign Office had pressured the St. John to free the slaves for years, and now sided with Brazilian critics of the company.[39] In 1882, Brazilian courts forced the company to free the remaining Cata Branca slaves and pay them back wages. Of the original 385 slaves rented from the Cata Branca mine, the company had freed 87, another 223 were freed by the courts, and the remainder had died.[40] The St. John freed its last 28 slaves the same year. For the six years remaining before abolition, a few dozen hired slaves formed an insignificant portion of the labor force. By 1888, the transition to a free labor system had effectively been completed, and the *Lei Aúrea* merely liberated a small number of hired slaves in the company's employ.[41] Rather than acting as a modernizing force promoting abolition and the growth of capitalist free labor, the company simply responded as best it could to the shifting slave and free labor markets and British diplomatic displeasure.

The Golden Years

Throughout the St. John's existence, labor was its principal problem, followed by the difficult geological and technical demands of deep shaft mining. Constant technological innovation and extraordinary management enabled the St. John d'el Rey to survive continual labor shortages, to surmount major technical and geological challenges, and to emerge at the forefront of the world of deep shaft mining. Twice in the nineteenth century, in 1867 and 1886, the mine collapsed in complete ruin, and on both occasions the vision of management led to the construction of newer and more sophisticated mining operations. In November 1867, a fire broke out in the lower reaches of the mine, and fueled by a subterranean forest of timber supports, brought the underground caverns crashing down in total ruin. The company's strong-willed Irish superintendent, James Newell Gordon, guided the reopening of the mine with the driving

39. "Papers Relating to Cata Branca Slaves," Foreign Office 131, Embassy and Consular Archives, [Miscellanea], Brazil, 1879–1881, vol. 18, Public Record Office, Great Britain (hereafter PRO); "Sessão em 26 de agosto de 1879," *Annaes do Parlamento Brazileiro, Câmara dos Srs. Deputados* (Rio de Janeiro, 1897), pp. 182–187; "Illegal Slavery," *The Rio News*, Sept. 5, 1879, pp. 182–184; and Livro de escripturas No. 3, pp. IV–7 (Aug. 4, 1882), and 13v.–15 (Oct. 13, 1882), Cartório de Paz e Registro Civil, Nova Lima.

40. Hockin to Buchanan, July 22, 1882, SJNL.

41. Superintendent's diary, Oct. 23, 1877, Nov. 3, 1879, and June 11, 1882, SJNL.

of two vertical shafts into the lode below the old works. After five years without dividends, and with numerous technical setbacks, Gordon re-opened the mine at what was then considered an exceptional depth (40 meters). The cost of the new shafts nearly equalled the purchase price of the original Morro Velho estate. With the reopening of the lode in the early 1870s, the company appeared to be once again on sound footing.[42] The 1870s and 1880s, however, were difficult times for the St. John, yielding erratic dividends and production levels. The new mine proved less productive than anticipated, and the board of directors discovered that Gordon had been engaging in unethical (and profitable) business dealings on the side. Firing Gordon in 1876, the company floundered through a series of weak and ineffective superintendents for the next eight years.[43]

In late 1884, the board hired a young civil engineer, George Chalmers, hoping to revive operations. Just shy of his 28th birthday, this Cornishman of Scottish descent would not only revitalize operations, he would completely rebuild the Morro Velho into one of the most famous gold mines in the world during his 40 years at the helm.[44] His initial efforts, however, were hindered by the outmoded mining methods followed by his predecessors. The large, underground caverns placed enormous pressure on timber supports increasing chances of cave-ins. Chalmers and the company paid the price of this antiquated approach when the mine once again collapsed in complete ruin in late 1886.[45] The board, stockholders, and mining experts concluded the company and the mine were finished. The dynamic young Chalmers disagreed, drew up plans for a new mine of unprecedented depth, and a new mill with modern processing technology. Chalmers won over the chairman of the board, and together they persuaded stockholders (against the advice of mining experts) to invest in a new mine. Chalmers purchased several thousand shares of the newly issued stock as proof to skeptics of his complete confidence in the plan. Eventually Chalmers would become the single largest stockholder with roughly £12,000 invested in the company.[46] The board liqui-

42. *AR 1868, 1874, 1890*. One of the company directors, Stonehewer Edward Illingworth, visited Morro Velho in 1871, and left a thorough description of the rebuilding process in an unpublished "Journal and Letter Book," Manuscript Department, Perkins Library, Duke University. I would like to thank Warren Dean for bringing this item to my attention.

43. Hockin to Morrison and Frederick J. Tendron, Apr. 21, 1877; Hockin to G. H. Oldham, Apr. 23, 1883; and Hockin to Morrison and Tendron, June 8, 1877, SJNL.

44. Hockin to Illingworth, Nov. 4, 1884, SJNL; board minutes, Oct. 15 and 30, 1884, SJUT.

45. Chalmers to board, Nov. 12 and 23, and Dec. 18, 1886, SJNL. The mine captain's account of the disaster has been preserved in a partially decomposed letter copybook, SJNL.

46. Chalmers to H. P. Harris, Apr. 28, 1926, SJNL.

dated the old company, called for new capital, and reorganized the St. John d'el Rey.[47] Chalmers returned to Brazil to bring his plan to life.

The technological advances of the Second Industrial Revolution made possible the rebuilding of the Morro Velho mine. Chalmers incorporated the technological advances of the late nineteenth century that revolutionized the mining world: dynamite, electricity, power drilling, and new discoveries in metallurgical chemistry. Built before the development of the great deep shaft mines of South Africa, the Chalmers mine was a technological marvel. The central aim in the design of mine and mill was to produce high output levels of the medium-grade ore found at Morro Velho. Stockholders could then expect consistent and steady dividends. Water, electricity, and cyanide provided the key ingredients in the new complex. The abundant waters of local streams powered a series of hydroelectric plants built in the surrounding region, and the electricity they generated provided lighting and power for hauling and drilling equipment.[48] Water also played a key role in the milling process, as the principal solvent for the crushed ore. By the 1930s, the mill consumed two million gallons of water a day! Finally, Chalmers eventually built the mill around the newly developed cyanide process that replaced the centuries-old amalgamation process in the gold mining industry at the beginning of the century. Cyanidation raised gold ore recovery rates to over 90 percent at Morro Velho, as compared with 70 percent in the old mill.[49]

By the turn of the century, Chalmers and his new mine and mill were in full operation. The old mine had rarely produced more than 200,000 tons of ore annually. By 1910, the new mine produced twice that. Further, productivity had increased with the new technology and organizational methods. Measured in tons per worker, it rose dramatically, particularly when one looks at just the underground mining force rather than the entire labor force (see Figure 4). Half-yearly dividends resumed in the late 1890s, and would continue without a lapse into the 1950s (see Figure 1). Chalmers followed a cautious policy of developing the lode in depth, working proven reserves while opening up and exploring new ones at ever

47. Chalmers first mentions his plan to reopen the mine in Chalmers to board, Jan. 19, and Feb. 28, 1887, SJNL. The liquidation process is described in the *Mining World and Engineering Record*, Jan. 22, 1887, and the *Mining Journal*, June 16, 1888, describes the planned works. *Memorandum and Articles of Association of the St. John d'el Rey Mining Company, Limited*, printed by the company, contains the St. John's new structure as reorganized and registered in London on July 24, 1888 (on file in Companies House, London).

48. Eakin, "Nova Lima: Life, Labor and Technology in an Anglo-Brazilian Mining Community, 1882–1934" (Ph.D. diss., UCLA, 1981), chap. 3, "The Technological System."

49. John Temple, *Mining: An International History* (New York, 1972), pp. 108–109; "Chart Showing Produce, Cost, Profit and Cost Per Long Ton Stamped at Morro Velho (Jan. 1911)," SJNL.

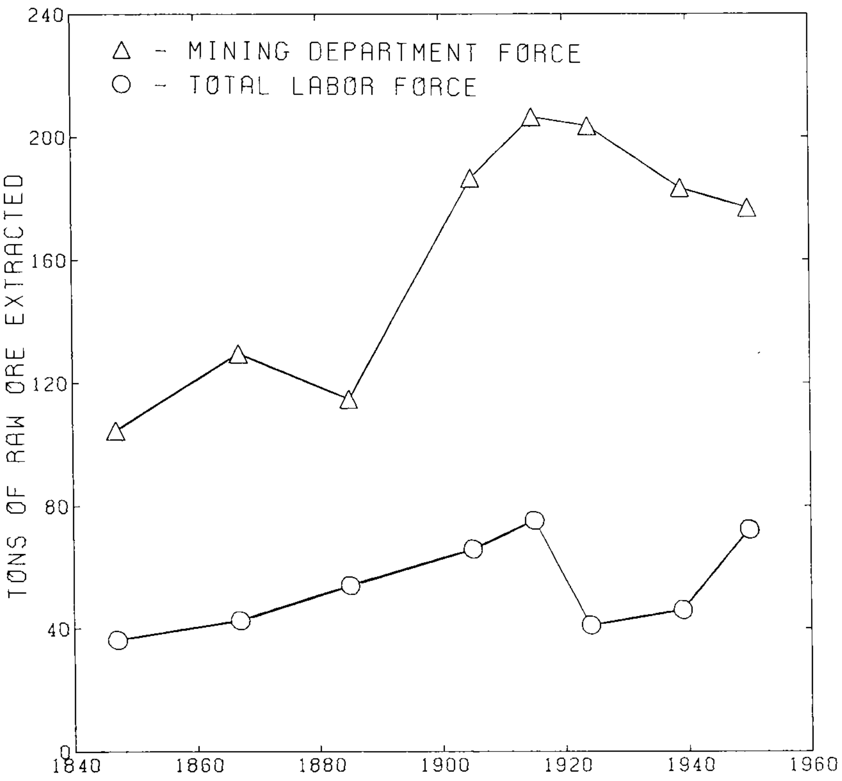


FIGURE 4: Productivity Per Worker Per Year (Morro Velho). Sources: *AR* and SJNL.

greater depths. By World War I, the Morro Velho had become the deepest mine in the world, reaching down 1,928 meters below the surface.[50] In conjunction with a young company engineer, Eric Davies, Chalmers developed the first refrigerated air system for a deep mine to combat the intolerable temperatures (above 50 degrees Celsius) confronted by miners at such tremendous depths.[51] Development in depth would continue into the mid-1930s, when the mine reached its current depth of 2,453 meters below the surface. The Morro Velho remained the deepest mine in the world until the late 1940s.[52]

50. T. A. Rickard, "The Deepest Mine," *Mining and Scientific Press*, Oct. 2, 1920, pp. 477–478.

51. Eric Davies, "The Air-Cooling Plant at the Morro Velho Mine of the St. John Del Rey Mining Company, Limited, Brazil," *Transactions of the Institution of Mining Engineers*, 43 (Aug. 1922), 326–341.

52. Millett to board, Sept. 17, 1937, SJNL.

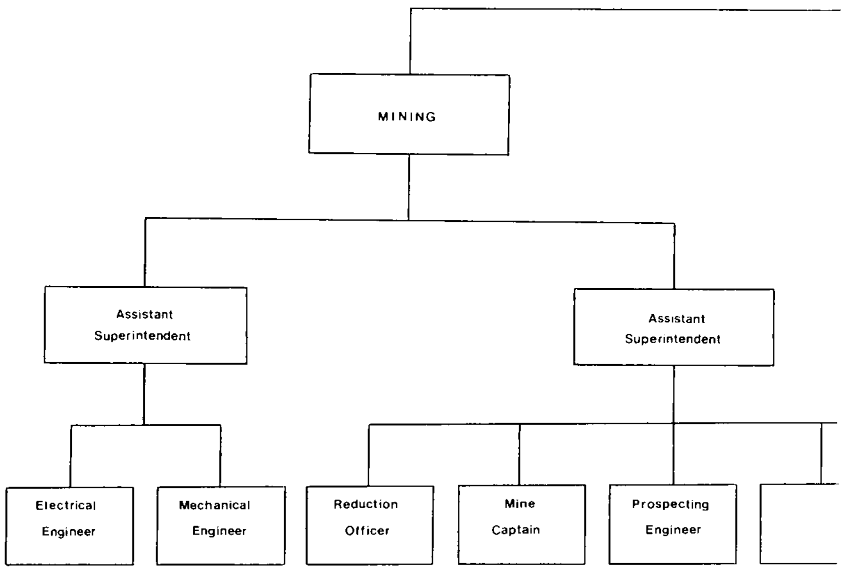
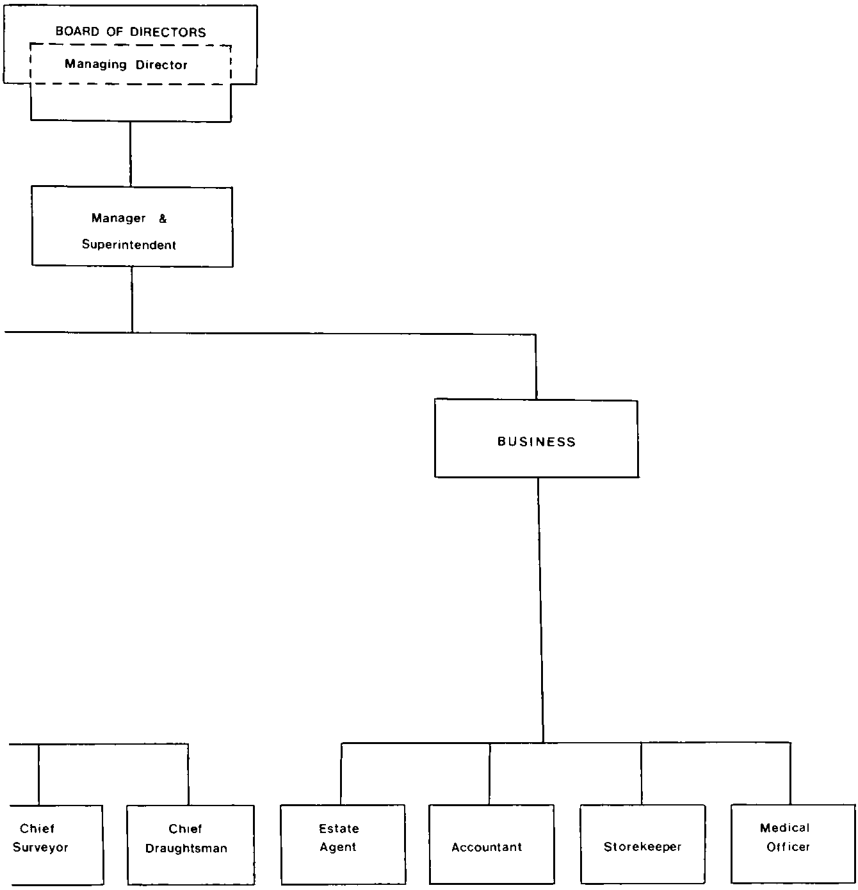


FIGURE 5: Organizational Structure of the St. John d'el Rey Mining Company, Limited (Midtwentieth Century).

Chalmers had truly visionary ideas that soon took him, and the St. John d'el Rey, into other areas of business, and made the company a business empire in central Minas Gerais. Real estate holdings expanded at a rapid pace after 1900, as the company purchased forests for wood and charcoal, watersheds to supply the mine and mill, and surrounding properties to avoid any claims conflicts. In addition, Chalmers constantly pressed management to purchase other promising mining properties in the area. His dream was to build an iron and steel complex using the vast iron ore reserves of central Minas Gerais. The company did purchase a number of major iron ore deposits (Mutuca, Itabirito), and carefully studied an immense deposit on the Serra do Curral (Aguas Claras) which fell within the



boundaries of the original Morro Velho estate.[53] The St. John attempted to interest several North American companies in developing the iron lands of Minas Gerais, among them Bethlehem Steel. Chalmers's dreams never materialized in his lifetime, yet he stands out as one of the pioneers in the development of Brazilian iron ore.[54] Leading the company into a wide array

53. "List of Documents by which the Company Acquired Its Several Properties," SJNL/P.

54. Chalmers to E. C. Harder, Jan. 6, 1920, and M. A. M'Call to Chalmers, May 14, 1908, SJNL; William Stuart Callaghan, "Obstacles to Industrialization: The Iron and Steel Industry in Brazil During the Old Republic" (Ph.D. diss., University of Texas, 1981), esp. chapter 4, "George Chalmers and the Iron Lands."

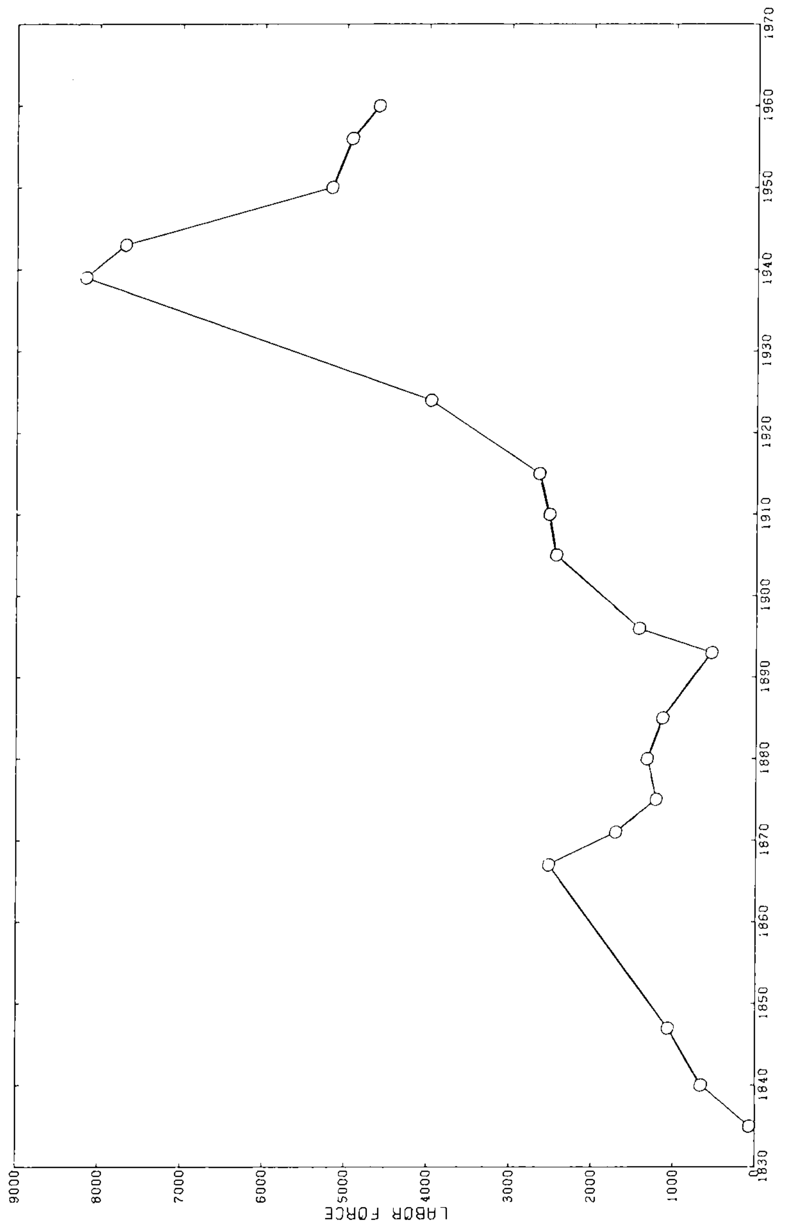


FIGURE 6: Labor Force (Morro Velho). Sources: *AR* and SJNL.

of auxiliary enterprises, Chalmers developed farms and dairies to supply the company employees, and constantly experimented with projects that would make the mine more self-sufficient. Perhaps his most successful project was the construction of an electric tramway between the mine and the Estrada de Ferro Central do Brasil, eight kilometers away in Raposos. The line solved a decades old transport problem, linked the community of Nova Lima with the rail network of the nation, and drew the community of Raposos into the orbit of the Morro Velho's operations.[55]

The technological revolution in the mining world that Chalmers brought to Morro Velho was accompanied by a parallel managerial transformation. In the first decades of the century, the company continually restructured and reorganized its operations to meet the demands of growth and diversification. The St. John d'el Rey, in short, became a more modern business enterprise (see Figure 5).[56] Increasingly, the company turned to highly skilled and university-trained professionals—mining engineers, electrical engineers, accountants, and chemists—to fill a growing number of positions in the supervisory hierarchy. This growth and diversification process intensified after 1930, as the number of company employees rose from about 2,500 in 1910 to more than 8,000 on the eve of World War II (see Figure 6).

The St. John directly employed 8,000 workers in a community of less than 30,000.[57] Most of those not on the company payroll either were dependents, or worked in service sectors that dealt with the company or its employees. The company provided local electricity and water, owned most of the buildings in the town, paid the limited local police force, and exerted strong influence over town government. Nova Lima thus grew and developed with the mine, becoming a single industry town. In the 1920s, the município ranked third in the state in the value of fixed capital investment, and second (behind Juiz de Fora) in the size of its industrial workforce.[58] The English, meanwhile, maintained their own exclusive company neighborhoods around the mine, complete with club and social life. Morro Velho became a vigorous British enclave of 200, even having its own vice-consulate.[59]

55. Decree No. 3,516 of Mar. 1912 published in Minas Gerais, Secretaria de Agricultura, *Relatório 1912*, pp. 170–172, APM. *AR 1915*, pp. 62–63; and *AR 1919*, pp. 52–54.

56. Alfred J. Chandler, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, MA, 1977) analyzes the rise of the modern business enterprise in the United States.

57. Instituto Brasileiro de Geografia e Estatística, *Recenseamento, 1940, Série Regional*, I, part 13, p. 54. The 30,000 took in the entire município. The town probably had around 20,000 inhabitants.

58. *Annuário estatístico de Minas Geraes*, 4 vols. (Belo Horizonte, 1926), IV, part 1, pp. 406 and 412.

59. "British Community at Morro Velho," Oct. 17, 1950, SJNL.

The 1920s were years of transition for the St. John d'el Rey and Brazil. As new forces began to emerge in Brazilian society and politics, George Chalmers carefully groomed his eldest son, A. G. N. Chalmers, to replace him as superintendent. Also educated as a civil engineer in England, A. G. N. returned to Morro Velho after military service in World War I, and gradually took over the day-to-day operations of the mine (with board approval).[60] In 1924, he became superintendent, and his father retired to consulting work on plans for a direct route to the deepest levels of the mine. The builder of Morro Velho died of heart failure in early 1928, shortly after returning to England for medical treatment.[61] With him passed an era of political peace and stability for Brazil, and for the St. John d'el Rey.

A. G. N. assumed his father's mantle, but could not live up to his remarkable achievements. Plagued by the worst labor shortage in the company's history, embittered by infighting and by mounting criticism of his managerial style, Chalmers resigned in 1930 and spent the remainder of his life developing his father's model fazenda (Jaguara) near Pedro Leopoldo.[62] The board chose the company's business manager, A. H. Millett, as the new superintendent, and divided mining and business operations among two assistant superintendents (see Figure 5). Millett took the helm at a critical juncture as Brazil entered into a new era of politics that would transform the nation and gradually bring an end to the British era at Morro Velho.[63]

Politics and the Rise of Nationalism

Although the prosperity of the St. John d'el Rey would continue for another 20 years, powerful new forces were emerging in Brazil and the international economy, making business operations more problematic and ultimately impossible. By 1930, the St. John had a full century of experience working within the political environment of Brazil. Throughout its history, the company had followed a careful policy of behind-the-scenes lobbying and avoidance of public involvement in politics: company sentiments always appeared in the form of "independent" statements by Brazilian political allies.[64] For most of the nineteenth century, the St. John

60. Harris to Chalmers, Oct. 7, 1920, SJNL; *AR 1925* and *AR 1927*.

61. "Chalmers Folder," SJNL, contains hundreds of telegrams and newspaper obituaries from all over Brazil sent to Morro Velho shortly after Chalmers died.

62. A. G. N. Chalmers to Millett, Jan. 1931, SJNL; personal interview, William Frederick Chalmers, Belo Horizonte, July 25, 1985.

63. Millett had come to Morro Velho in 1912 and rose to the position of business manager in the early 1920s. Personal interview, Mrs. A. H. Millett and Eileen Millett Nixson, Belo Horizonte, Mar. 22, 1980.

64. A good example is Theophilo Ribeiro, "Os grandes factores da riqueza nacional: Morro Velho," *Minas Geraes* (Belo Horizonte), Apr. 10, 1900, pp. 2–4.

d'el Rey operated with little government interference, and only an occasional need to become actively involved in political matters. The thinking that characterized the political and economic leaders of imperial Brazil favored foreign investment and respected the technical and economic competence of the British, whom the Brazilian elites sought to emulate in economics, politics, and social affairs with the hope of duplicating their successes.[65] This Anglophilia, however, did not blind the Brazilians to certain practical necessities, nor did it mean unquestioning aping of the British. The Brazilians would gradually learn to press the British and restrict their initial "open arms" policy. By the late imperial years, the Brazilian national and provincial governments had begun to assert themselves and place some demands on British capital. These efforts were small, but telling, evidence of a growing nationalism that would not fully manifest itself until the following century.

Throughout the imperial period, the major political issues that preoccupied the company were taxation and tariffs at the provincial and national levels. Although the English mining companies succeeded in lowering tax rates and tariffs under the empire, they never managed to lower them and keep them at levels they found acceptable. Independence opened the doors to foreign investment in mining but maintained the old Portuguese quinto as the rate of taxation, and the new English mining companies initially paid an additional 5 percent tax on production.[66] The British companies banded together in the 1830s and 1840s, and through numerous petitions to the emperor they reduced the production tax on gold to 5 percent by the early 1850s. Even that amount was phased out by the end of 1859 (a move that came too late for the Imperial Brazilian Company at Gongo Soco).[67] The imperial regime also often allowed the companies to import their equipment and supplies free of tariffs in order to stimulate the growth of the weak mining industry. Occasionally, Mineiro politicians attacked the tax exemptions of the British mining companies. The companies usually responded by emphasizing the low profits and exceptional costs of this nascent industry.[68]

The St. John d'el Rey cultivated a network of prominent Brazilians to present its views in political circles and in the provincial assembly. The company followed a policy of retaining prominent lawyers both for their legal advice and for their political connections. In the 1860s, the company retained a member of the powerful Vianna family of Sabará. In the 1870s, it employed Ignacio Ferreira da Fonseca of Ouro Preto to represent com-

65. Graham, *Britain and the Onset of Modernization*, passim.

66. Imperial decree of Sept. 16, 1824, conceding mining rights to Edward Oxenford; and imperial decree of Nov. 5, 1828, conceding mining rights to George Süch.

67. Imperial decree of Oct. 28, 1848; and *AR 1857*, p. 12.

68. *O Universal* (Ouro Preto), Sept. 1, 1837, pp. 2–3.

pany interests.[69] Perhaps the most powerful ally of the company was Commendador Francisco de Paula Santos, grandfather of Henrique Santos Dumont of aviation fame. Paula Santos had numerous landholdings and was the major creditor of the defunct Imperial Brazilian Company. He rented several hundred slaves to the St. John, supplied the mine with timber, and led the successful lobbying effort at the court to repeal the gold production tax in the 1850s.[70] In addition, the company tried to get Brazilian investors involved in mining, because managers and directors understood the advantages that a larger industry with more Brazilian participation would bring. The company could count on the Baron of Cocais, the Baron of Catas Altas, and the Count of Linhares, among others, to come to its aid as fellow mining entrepreneurs.[71] Unfortunately for the St. John, too few Brazilians became active in mining, making it more difficult for the industry to generate political support.

One important test of political influence arose not over taxes but over conscription of laborers. In the late 1860s, the demands of Brazil's war with Paraguay placed pressure on provincial authorities to conscript soldiers for the war effort. The company's friends had gained it an exemption for free laborers working for the company. With labor already difficult to come by, the St. John could ill afford losing workers to a draft. Ultimately, the jealousy of other British mining companies not exempted, and pressure of provincial authorities, forced the company to compromise and allow the conscription of a token few to give the impression that it was not receiving favored treatment. The superintendent personally arranged the compromise with the provincial president while they were traveling together from Rio de Janeiro to Juiz de Fora.[72]

The tax issue, however, was once again the central dilemma facing the St. John in the last years of the empire and early years of the republic, and it was one that demonstrated the limits of the company's power and influence. In 1867, the imperial government placed a 2 percent tax on gold production.[73] In 1875, the provincial assembly, after intense debate, imposed a 4 percent tax on gold exports, clearly aimed at the St. John d'el Rey, which by this time produced the vast majority of the nation's gold.[74] Unable to round up the votes to have the tax repealed, the St. John took the issue to the courts to have it declared unconstitutional, arguing that only imperial authorities had the right to levy export taxes. Despite em-

69. Superintendent's diary, Jan. 9, 1861; Hockin to Morrison, Aug. 3, 1877, SJNL.
70. Hockin to Morrison, Aug. 2, 1878, SJNL.
71. Leonardos, *As geociências*, pp. 60–63.
72. Superintendent's diary, Nov. 8, 1866, SJNL.
73. Imperial decree of Sept. 26, 1867.
74. Provincial decree of Nov. 25, 1875; Lord Salisbury to Mr. St. John, Jan. 17, 1879, Foreign Office 13/549, no. 1, Embassy and Consular Archives, Brazil, PRO.

ploying powerful local figures in its legal effort, the company ultimately failed in its efforts, and the precedent was set. While pursuing the legal battle in the courts, the St. John and other English mining companies also approached the Brazilian minister in London, the Baron of Penedo, to ask his support for the repeal of the law. The baron served as Brazil's minister in London for four decades and had very close relations with British investors and bankers.[75] The St. John also approached the baron's son-in-law with a generous offer of remuneration for helping to repeal the law. The mining companies argued that such legislation would frighten away potential British investment in Brazil.[76] The British Foreign Office refused to come to the aid of the St. John d'el Rey because of the company's refusal to release the Cata Branca slaves.[77] Although the tax was declared unconstitutional on several occasions by national authorities, the state government went ahead with its collection beginning in the 1880s.[78]

Despite its failure in this critical issue, by the 1880s the company had established friendships with key political figures and was a longstanding and productive enterprise well known to imperial authorities. Pedro I had visited the company's initial operations in São João d'El Rei, and his son had several interviews with company officials during his long reign.[79] While touring Minas Gerais in 1881, Pedro II spent a day at Morro Velho descending to the bottom of the mine with the empress. Superintendent Pearson Morrison fascinated the emperor with the marvels of deep shaft mining, while stressing the need for lower taxes and tariffs.[80] The company periodically entertained provincial presidents at the *Casa Grande*, attempting to demonstrate the benefits of foreign investment and making a case for lower taxation.[81] Indeed, the company hosted countless foreign travelers, politicians, and government officials, always accommodating requests for a tour of the mine and works. The political network in the late imperial years, however, was small and normally called on only in times of special dangers such as the imposition of new taxes. The construction of a broad, and carefully cultivated, political network would not come until the rebuilding of the mine during the heyday of the First Republic.

Chalmers's remarkable reign at Morro Velho coincided with the years of the First Republic (1889–1930). The company continued to profit from

75. Graham, *Britain and the Onset of Modernization in Brazil*, p. 101.

76. Hockin to Morrison, Sept. 23, 1878 and Jan. 8, 1879; Hockin to Baron Penedo, Oct. 20, 1881.

77. Foreign Office to Consul Ford, Nov. 1, 1880, Foreign Office 13/563, no. 8, Embassy and Consular Archives, PRO.

78. Hockin to George Chalmers, Nov. 8, 1884, SJNL.

79. Letter book 1, Jan. 20, 1831, SJUT.

80. Hélio Viana, ed., "Viagem à província de Minas Gerais em 1881," *Anuário do Museu Imperial*, 18 (1957), 80–83; and *AR 1881*, p. 83.

81. Superintendent's diary, Apr. 9, 1867, and July 23, 1873, SJNL.

Brazil's internal political stability, but found itself ever less isolated geographically and more involved in state and national politics. The rebuilding of the mine coincided with the construction of the new state capital, Belo Horizonte, just over the Serra do Curral (20 kilometers) from Morro Velho, and these two developments made the company increasingly visible in state and national political circles. A long line of prominent state and national political figures visited the mine, including Presidents Campos Salles, Rodrigues Alves, Afonso Pena, Wenceslau Braz, Delfim Moreira, Artur Bernardes, and Washington Luís. Getúlio Vargas knew Morro Velho well, having visited the mine on at least three occasions (1927, 1931, 1938).[82] Despite the inconvenience, the "Companhia do Morro Velho" (as the company was known in Brazil) rarely turned down requests for visits, fully understanding the importance of good public relations.

The so-called "politics of the governors" dominated by the "coffee and cream" alliance of Minas Gerais and São Paulo heightened the influence of Mineiro politicians, and drew the company into more active lobbying. Concomitantly, the rise of an increasingly interventionist state raised even more concerns over taxation and tariffs.[83] However, Chalmers's reputation as a builder, company lobbying, and the modernizing mentality of a European-oriented elite eased the St. John's potential conflicts with the Brazilian state. By the end of World War I, the company had assigned several employees to full-time public relations work (behind the scenes, of course). These key officials spent most of their time in Rio de Janeiro and Belo Horizonte wining and dining bureaucrats and politicians, and frequenting the corridors of power in key offices and ministries.[84]

By the 1920s, the company had a circle of powerful friends in high places in local, state, and national politics. These Brazilians were convinced of the contribution of the company to regional and national economic development, and they deeply admired British culture and technical competence. A brief sampling of the company's "friends" demonstrates its success in developing a political lobby. The St. John's chief legal officer, Flávio Fernandes dos Santos, was the *prefeito* of Belo Hori-

82. Viana, "Viagem à província de Minas Gerais em 1881," 80–83; Callaghan, "Obstacles to Industrialization," chapter 4; M'Call to George Chalmers, Mar. 30, 1899, and Aug. 11, 1904; A. H. Millett to Harris, May 14, 1926; A. G. N. Chalmers to board, Dec. 24, 1927; A. H. Millett to C. F. W. Kup, Feb. 23, 1931; and Davies to A. H. Millett, July 19, 1938, SJNL.

83. Amilcar Vianna Martins Filho, *A economia política do café com leite (1900–1930)* (Belo Horizonte, 1981); Steven Topik, "State Interventionism in a Liberal Regime: Brazil, 1889–1930," *HAHR*, 60:4 (Nov. 1980), 593–616; Topik, "The State's Contribution to the Development of Brazil's Internal Economy, 1850–1930," *HAHR*, 65:2 (May 1985), 203–228; and Annibal Villanova Villela and Wilson Suzigan, *Política do governo e crescimento da economia brasileira 1889–1945* (Rio de Janeiro, 1973).

84. J. S. Paris to Harris, Sept. 9, 1931, A. H. Millett to L. E. Langley, June 6, 1934, and Davies to board, Oct. 16, 1942, SJNL.

zonte in the 1920s.[85] One of the company's closest allies was the brilliant young lawyer, Daniel de Carvalho, who served as state secretary of agriculture in the 1920s and as minister of agriculture in the 1940s (among other positions). (The mining industry fell under the jurisdiction of the state Secretariat and the federal Ministry of Agriculture.)[86] Augusto de Lima, one of the most visible political and intellectual figures of the era (and a native of Nova Lima) diligently defended the company's interests as a state and federal deputy, as a newspaper editor, and in a wide variety of powerful posts.[87] Fernando Mello Viana, state president and then vice-president of Brazil in the 1920s, was a close personal friend of Chalmers, and had family ties to the St. John dating back to the midnineteenth century.[88] In short, the company built a network of friends which it constantly cultivated with favors, gifts, and remunerations. Although the company by no means faced smooth political sailing, its economic power and its political allies guaranteed Chalmers and his successors a careful hearing of company views—often in the governor's office, or the presidential palace in Rio.[89]

One striking episode demonstrates both the St. John's economic might and the limits of its political power in Minas Gerais under the republic. In the first decade of the century, the state government, unwilling to become any more dependent on the federal authorities, turned to the company for a loan to carry state finances through a difficult period. Although appalled by the request, company management reluctantly acceded, in order to maintain good relations with the state government and to avoid possible tax increases. The state borrowed £50,000 at 6 percent interest, to be credited to the company's tax account with the state. It also promised not to raise taxes on gold production while the loan was being repaid (1901–1908). In effect, the state leaned on the company and the St. John had little choice but to make the loan. Success in rebuilding the mine sometimes brought the company more visibility than it wanted.[90]

85. Obituary in *Minas Geraes* (Belo Horizonte), Feb. 16, 1939, p. 21.

86. Obituary, ibid., June 1, 1966, p. 13; Wirth, *Minas Gerais*, pp. 93–94, 251, and 256; and A. H. Millett to board, Aug. 15, 1930, SJNL. For an example of Carvalho's admiration and attachment to the English company and George Chalmers, see Daniel de Carvalho, *Novos estudos e depoimentos* (Rio de Janeiro, 1959), pp. 133–168.

87. José Augusto de Lima, *Augusto de Lima, seu tempo, seus ideais* (Rio de Janeiro, 1959); Augusto de Lima, "Um município de ouro," *Revista do Arquivo Público Mineiro*, 6 (1901), 321–364.

88. A. G. N. Chalmers to board, June 11, 1925; S. S. Tegner to A. H. Millett, Aug. 24, 1937; superintendent's diary, Feb. 12, 1859, SJNL; and Callaghan, "Obstacles to Industrialization," p. 224.

89. See, for example: A. H. Millett to board, Jan. 13, 1933, SJNL.

90. Antônio Luiz de Bessa, *História financiera de Minas Gerais em 70 anos de república*, 2 vols. (Belo Horizonte, 1981), II, 442; M'Call to George Chalmers, Oct. 13, 1904, SJNL.

The so-called Revolution of 1930 did not destroy this political influence, rather it altered the nature and terms of the national political system, and, thereby, the company's place in that system. Getúlio Vargas ushered in a new era characterized by the emergence of the working class as a political force and nationalism as a powerful ideology. Like Perón in Argentina and Cárdenas in Mexico, Vargas skillfully coopted the working class through labor unions organized by a newly created Ministry of Labor.[91] Vargas won over labor by providing workers with basic social benefits: minimum wage, maximum working hours, pensions, health insurance, and the right to organize. The new social legislation both helped and hindered the St. John d'el Rey. This government intervention, though bitterly resented by the company management, ironically helped solve one of the St. John's most pressing problems: a constant and often critical shortage of labor.

Labor shortages had plagued the St. John for a century. During the first half-century of operations, the company had reluctantly turned to slave labor to fill the shortage of free laborers. Like good British Victorians, the management of the St. John was convinced of the superiority of free over captive labor, even in the face of studies by the company demonstrating that the costs of slavery were lower than free labor until the early 1880s.[92] As abolition drew near, and spurred by rising rental prices, the company began a series of desperate experiments with imported foreign labor, for which a number of precedents already existed. The St. John imported Portuguese islanders (1850s), Germans (1850s), Cornish teenagers (1880s), Chinese (1880s), Spaniards (1890s), Italians (1890s), and Japanese (1910s).[93] The result was always the same. The few laborers the company could get to Morro Velho soon left, after 1880 generally for the coffee plantations of São Paulo. The reaction of foreign laborers paralleled that of Brazilians. Why work in the dangerous conditions underground when there was equal or better pay in the coffee fields of São Paulo?[94] The company had some success with Spaniards and Italians, employing labor agents in Europe at the turn of the century. The few hundred workers who did arrive at Morro Velho, however, soon organized and led the first strikes in company history (1897, 1898, 1900). George

91. Hobart A. Spalding, Jr., *Organized Labor in Latin America: Historical Case Studies of Workers in Dependent Societies* (New York, 1977), pp. 151–207.

92. Hockin to George Oldham, Dec. 22, 1883, SJNL; Libby, *Trabalho escravo e capital estrangeiro*.

93. J. Routh to G. D. Keogh, July 8, 1852; Hockin to J. N. Gordon, Jan. 7, 1860; Hockin to Oldham, May 23, 1883; Hockin to Oldham, June 23, 1883; M'Call to George Chalmers, Sept. 4, 1913; and Kup to George Chalmers, Mar. 5, 1914, SJNL.

94. George Chalmers to board, Nov. 24, 1925, SJNL.

Chalmers had his hands full breaking up strikes and running off union organizers.[95]

Parish registers and cartorial documents indicate that the vast majority of the Brazilian labor force came from the surrounding municípios of central Minas Gerais, a region of relative economic stagnation in the late nineteenth and early twentieth centuries.[96] Unlike the mines of South Africa or Australia, the Morro Velho operated in complete isolation and could not count on a supply of workers familiar with mining. It appears that most of the workers were subsistence farmers, who worked in the mine to supplement their income between planting and harvesting seasons. For decades, management complained about the seasonal work pattern of the labor force that left the company critically short of workers during planting and harvest seasons.[97] This pattern seems to indicate a relatively large free peasantry in the region moving between self-employment and wage labor at the mine.[98] It no doubt also hindered the formation of a working-class consciousness and a union movement.

Ironically, Vargas's labor policies, along with the Great Depression and the crisis in the coffee economy, helped solve the St. John's labor shortage (which had become particularly critical in the 1920s). At the same time, these policies created a new headache. Vargas's Ministry of Labor helped the miners organize a union in 1934, after last-ditch efforts by the St. John d'el Rey to form a counter-union controlled by "trustworthy" employees.[99] In the next two decades, this union would provide the miners with a powerful, unified voice challenging British management. The union and the new social legislation also provided workers with strong incentives to become full-time, year-round company employees, and thus gain access to social benefits and the advantages of accrued seniority. By 1940, 70 percent of the company's 2,250 underground workers had been on the payroll for at least five years, and 22 percent for more than a decade.[100] Unionization and social legislation stabilized the workforce and freed management from the fluctuations of the regional labor market. For

95. Board minutes, June 10, 1897, SJUT; Relatório do chefe da polícia, Secretaria do Interior, 1898, p. 95, and 1903, p. 112, APM; *Minas Geraes* (Belo Horizonte), July 15 and 16, 1900, p. 2; *O Operário* (Belo Horizonte), July 29, 1900, p. 3; and George Chalmers to board, Nov. 24, 1925; R. Robson to George Chalmers, Nov. 24, 1919, SJNL.

96. Wirth, *Minas Gerais*, pp. 31–64. The migration patterns are based on a sample taken from the Registros Paroquiais de Congonhas do Sabará, Nova Lima. See Eakin, "Nova Lima," p. 407.

97. See, for example, *Half-Yearly Report 1893*, p. 10; and George Chalmers to board, Nov. 14, 1924, SJNL.

98. Libby, *Trabalho escravo e capital estrangeiro*, pp. 137–139, argues this point well.

99. A. H. Millett to board, May 24, 1934, SJNL.

100. *AR 1940*.

the first time in over a century of operations, the company had a steady, trained, and adequate workforce.

Nationalism and the End of the British Era

Vargas also pursued a policy of strong economic nationalism. The Great Depression had shattered the coffee-export economy of the First Republic. Vargas turned to protectionism and fiscal restrictions and moved away from the more liberal economic policies of the republican era. These policies severely punished foreign companies that imported large quantities of essential materials, as did the St. John. Higher tariffs on vital supplies (chemicals, machinery, spare parts) drove up operating costs and forced the company to seek national suppliers.[101] The currency restrictions of the new regime struck an even more punishing blow. In order to stem the flow of profits to foreign investors, and to halt the outflow of hard currency, the Brazilian government began to limit exchange transactions and profit remittances. The government had begun to purchase the company's bullion during World War I, and had continued the practice into the 1930s. With the government controlling gold sales, the new restrictions created currency exchange problems for the company.[102] The St. John now found that the government would not allow more than one-third of its bullion to be converted into sterling. Company officials lobbied intensely to fight the measure, with no success. They achieved no more than a promise that they would be allowed the full one-third.[103] Vargas placed national needs above his favorable view of the company's work.

Fortunately for the St. John, this bold new intervention by the state coincided with an abrupt jump in the world price of gold from $20.67 to $35.00 an ounce in 1933–34.[104] Higher revenues from rising gold prices and an accumulating surplus of Brazilian currency that could not be converted to sterling created a peculiar situation at Morro Velho. The company was able to maintain previous profit and dividend levels, but it could not raise production to even higher levels without creating even larger surpluses, and at the same time risking further remittance difficulties with government fiscal authorities.[105] Profits continued to flow to England at a steady pace. The surplus currency, however, had to be put to use, and the

101. Davies to board, Dec. 12, 1941; and W. R. Russell to board, May 7, 1952, SJNL.

102. *AR 1920*, pp. 72–73; Villela and Suzigan, *Política do governo*, pp. 207–208 and 323–328.

103. A. H. Millett to board, Nov. 10, 1932, SJNL.

104. The 20.67 dollar standard (£3.17s.10.5d) had stood since 1717 when set by the master of the mint, Isaac Newton. Roy W. Jastram, *The Golden Constant: The English and American Experience 1560–1976* (New York, 1977), pp. 50–53.

105. Some of the problems the company faced when dealing with the bureaucracy and its shifting policies are detailed in Davies to board, Nov. 4, 1946, SJNL.

company embarked on a massive reinvestment program. (This reinvestment and the use of national suppliers, of course, were exactly what the protectionist economic policies had been designed to produce.) During the 1930s, the company began a number of construction projects which consumed the currency surplus and, at the same time, provided company and community with valuable capital improvements. The company began to reopen old mines in the surrounding area and began a second major mining operation in Raposos, some eight kilometers from Morro Velho. During these years, the St. John completed the final phase of George Chalmers's hydroelectric plan, building three huge dams on the Peixe River to the south of Nova Lima. Another major project was the construction of 2,000 housing units for Brazilian workers. The company naturally hoped that cheap, subsidized housing would attract workers to Nova Lima.[106]

The phenomenal expansion of the St. John d'el Rey during the Great Depression masked the domestic and international tensions that finally erupted in the 1940s shaking the foundations of the company. The first of these forces was the rise of a vocal and militant labor movement. The government-organized union gained strength in the 1930s, and in the 1940s began a series of long and costly strikes that would contribute to the demise of the British company. Rampant inflation in the postwar years drove up company costs and moved the workers to demand ever higher wages. The union gradually came under the influence of anti-imperialist, anticapitalist leaders, many drawn from the ranks of the Communist party of Brazil which had been building a base in Nova Lima since the early 1930s. With the growing strength of Brazilian nationalism and the disparity between foreign management and a Brazilian working class, the union leadership had little problem finding a means to galvanize the rank and file. In addition, nationalistic, prolabor government officials pressured the company to adopt stronger safety standards, better working conditions, and more comprehensive social services.[107]

In retrospect, it appears that the St. John made two costly mistakes. First, management failed to Brazilianize the staff in any significant way. Chalmers had argued for the need to integrate prominent Brazilians into positions of visibility, and to bring more Brazilians into positions of responsibility in company operations. Yet as late as the 1950s, the upper levels of the company management in Brazil (with the notable and logical exception of lawyers) were almost entirely British. The St. John did form an "advisory council" of prominent Brazilians, but not until the

106. *AR 1935*, p. 26; D. W. J. Grey to A. H. Millett, Nov. 9, 1937; A. H. Millett to Langley, Mar. 9, 1933, SJNL; *AR 1948*, p. 22.

107. Yonne de Souza Grossi, *Mina de Morro Velho*, esp. chapters 3–5.

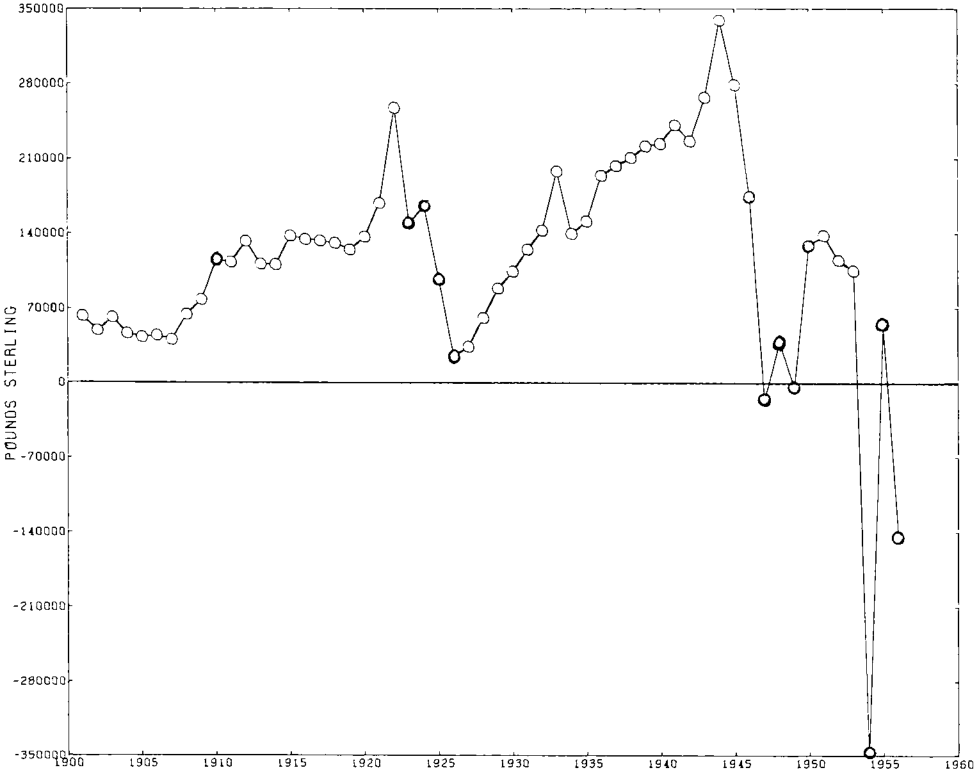


FIGURE 7: Profits and Losses, St. John d'el Rey Mining Company, Limited. Source: *AR*.

mid-1950s and then only to attempt to combat rising nationalism through lobbying.[108] Second, the company decided to fight the union and government regulations every step of the way, and confrontation soon became a way of life. Workers and nationalistic government officials continually criticized the St. John on issues of safety, health conditions, and social benefits, even as wages and operating costs rose dramatically. The average daily wage (including bonuses and overtime) rose over 400 percent between 1935 and 1950, while the cost of living in Nova Lima rose at approximately the same pace.[109] Company confrontation tactics resulted in long strikes and unfavorable publicity exacerbated by growing nationalism in Brazil. The strikes punished the company severely, shutting down production for weeks. Overall productivity per worker had begun a slow rise in the 1940s with the elimination of some auxiliary personnel, but productivity of the underground mine force had been declining (see Figure 4). Management could cut back on personnel aboveground, and thereby raise overall productivity, but the company's fate hinged on the ability of the underground force to get the ore out of the ground and to the surface. Underground productivity was the heart of operations and of profitability. Consequently, the time and income lost to strikes shook the financial stability of the St. John d'el Rey, producing the first yearly deficits in this century (see Figure 7). By the mid-1950s, the once stable investment had become a risky venture.

International forces further affected company operations. World War II had created supply problems and materials shortages as had World War I, but these hindrances had been temporary.[110] More far reaching and fundamental for the world gold mining industry was the international monetary system constructed at Bretton Woods after the war. International agreements froze the price of gold at 35.0875 dollars an ounce, where it would remain until the late 1960s. Income per unit of production now had a fixed ceiling, and few gold mines anywhere could operate keeping costs below that level.[111] Combined with inflation, and the wave of long strikes, the freezing of gold prices spelled the end of prosperity at Morro Velho. By the mid-1950s, only drastic measures could have kept the company operating at a profit.

Furthermore, the plant laid out by Chalmers at the turn of the century had become increasingly obsolete and in need of major renovation. The company desperately needed a new deep shaft to the lower levels of the mine to speed up the handling of ore and reduce wasted traveling

108. "Private and Confidential Correspondence," 1956, SJNL.
109. "Average Daily Wage," SJNL.
110. *AR 1918, 1944, 1945.*
111. Jastram, *Golden Constant*, p. 53; Temple, *Mining*, pp. 115–117.

time along the numerous shafts and horizons. (Workers spent a full hour traveling from the mine entrance to the lower levels of the mine!) Unfortunately, just at the time when the company most needed to renovate and to invest in new capital improvements, the St. John was also facing a severe financial crisis. Mounting problems compelled the board of directors to seek drastic management changes at the mine. After hiring several outside consultants to study the situation, the board hired a Canadian mining engineer, G. P. Wigle, who had revitalized several gold mines in Canada before coming to Morro Velho in 1946 as an assistant superintendent. Wigle became superintendent in 1953, began work on a new deep shaft to the bottom of the mine (nicknamed "*maracanã*"), and promptly sacked a large number of the topheavy British staff. He instituted a new labor policy which emphasized worker productivity and provided incentives for steady and efficient labor. The so-called "Canadian Plan" failed, however, as workers continued to battle management for benefits and higher wages, and as financial troubles forced the suspension of the new shaft. Wigle left Morro Velho frustrated and beaten after one year as superintendent. With him went the St. John's last chance for survival.[112]

The end of the British era at Morro Velho came suddenly and swiftly in the late 1950s. The decade-long financial crisis and labor troubles gradually eroded the value of company stock on the London stock exchange, and a group of astute North American investors bought controlling interest in the company in 1957.[113] The investors, led by New York stockbroker Leo Model, did not have the least interest in buying a failing gold mine. They had their eyes on the enormous and still undeveloped iron ore reserves that Chalmers had so intently pursued 50 years earlier. The world iron and steel industry had surged in the postwar years, and Model hoped to find a buyer for these immense reserves.[114] Model and his associates thus sold the iron lands to the Hanna Mining Company of Cleveland, Ohio in 1960, and the latter began a long battle with the Brazilian government to mine and export the ore. Eventually, Hanna and a Brazilian mining magnate, Azevedo Antunes, formed a multinational firm controlled through their ownership of the St. John d'el Rey's mining rights. In essence, the St. John d'el Rey became a paper company through which this Brazilian subsidiary of Hanna (Minerações Brasileiras Reunidas) now works the huge ore reserves at Aguas Claras, Mutuca, and Itabirito, all to

112. Leonardos, *Geociências no Brasil*, pp. 93–94; Davies to board, Nov. 14, 1946, superintendent to board, Jan. 28, 1953, and Lord Rathcavan to G. P. Wigle, Apr. 29, 1954, SJNL.

113. *The Financial Times* (London), Jan. 26, 1957.

114. A. L. Yarnell to H. C. Watson, Jan. 22, 1958, SJNL.

the south of Belo Horizonte.[115] Hanna closed the London office of the St. John and moved all the English operations to Cleveland, thus ending 130 years of British enterprise in Brazil.

In the late '50s and early '60s the Brazilian government provided subsidies (via their gold purchasing price) to keep the original Morro Velho enterprise afloat. Government officials did not want to see the demise of one of the most important economic forces in Minas Gerais, and they dreaded the social and economic disruption the mine closing would cause in a company town of 30,000 inhabitants.[116] Unwilling to take on the gigantic social and economic problems of a failing gold mine, Model and Hanna virtually gave it to a Brazilian mining engineer, Fernando Mello Viana.[117] The son of George Chalmers's close political ally in the 1920s, Mello Viana entered into a partnership with newspaper publisher Horacio de Carvalho and banking magnate Walter Moreira Salles in the mid-'60s. In the mid-'70s, the Brazilians sold 49 percent interest in the mine to Anglo American Corporation of South Africa, the world's largest gold mining company (De Beers of diamond mining fame is an affiliate).[118] In 1980, Siderúrgica Hime, S.A., jointly owned by Anglo American and Bozano, Simonsen of São Paulo, bought out the remaining stock from Carvalho and Moreira Salles. The high price of gold in the past decade has once again revitalized the Morro Velho, as the South African and Brazilian owners have reinvested 250 million dollars out of profits renovating the old mine, and reopening smaller mining properties in the surrounding region.[119]

The Financial Balance Sheet

The end of the British era at Morro Velho brought to a close one of the most successful foreign enterprises in modern Latin American history. During a century and a quarter, the St. John d'el Rey racked up profits totaling £8,024,495 (see Table I). Approximately one-fifth of this total was accrued before the collapse of the mine and reorganization of the company in the 1880s. The company accumulated the remaining four-fifths

115. Raymond F. Mikesell, "Hanna in Brazil: The Story of an Iron-Mining Venture," in *Foreign Investment in Mining Projects: Case Studies of Recent Experiments*, Raymond F. Mikesell, ed. (Cambridge, 1983), pp. 171–196.

116. João Pinheiro Filho, Conselho Nacional de Economia, to Lord Rathcavan, chairman of the board, June 3, 1955; and superintendent to Yarnell, May 9, 1956, SJNL.

117. *AR 1960*.

118. Leonardos, *Geociências no Brasil*, pp. 95–96; *Jornal do Brasil* (Rio de Janeiro), Feb. 8, 1980, p. 3; Lionel F. Gray, ed., *Jane's Major Companies of Europe, 1971 Edition* (London, 1970), pp. F191–192.

119. *Brasil Mineral*, 1:7 (June 1984), 14–15.

TABLE I: Profits of the St. John d'el Rey Mining Company, Limited, 1831–1956 (in Pounds Sterling)

Date	Profit	Annual Average
1831–1887	1,675,758	29,924
1887–1956	6,348,737	90,696
1831–1956	8,024,495	63,686

Source: *AR 1831–1957*

TABLE I: Profits of the St. John d'el Rey Mining Company, Limited, 1831–1956 (in Pounds Sterling).

between 1892 and 1957. On an annual average, this makes Chalmers's mine almost three times as profitable as the earlier mine(s). Taking into account good years and bad, and beginning with the formation of the company in 1830, the St. John d'el Rey annually averaged better than £60,000 in profit. The small venture of 1830 had blossomed from an initial capital stock of £50,000 to £800,000 by the early twentieth century. This capital stock growth had taken place in a series of steps. From the initial capital of £50,000 the amount rose to £135,000 by the 1840s, and to £175,000 by the time of the first major mine crush in 1867. The reconstruction of the mine raised the capital stock to £253,000, where it stood at the time of the crush in 1886. The reconstructed St. John d'el Rey carried a capital stock of £252,000 which rose in the 1890s to £600,000. In the first decade of this century, the company issued 200,000 shares of preferential stock at £1 each. (Preferential shares were nontaxable in England.) Total capital stock remained at £800,000 until the takeover in the late 1950s.[120] The St. John's assets and production levels placed it in a category of the large mines of the gold mining industry, but considerably below the larger companies of the Transvaal.[121]

The St. John d'el Rey had had its hard times with the two major crushes in the nineteenth century, but, in the long run, it proved a very wise investment with a good return. The company began to pay regular dividends in 1842 and continued to do so until the disaster of 1867 stopped dividends for seven years. Dividend payments resumed between 1874 and 1882, lapsing again until the Chalmers mine came into operation in the late 1890s. Rates of return fluctuated wildly throughout the nineteenth century, ranging from no payment to as high as 80 percent at their peak (see Figure 1). During the 58-year period from 1830 to 1887, the

120. After the takeover, the new board raised the capital stock to £1,300,000. *AR 1957*.
121. American Bureau of Metal Statistics, *Yearbook for 1960* (New York, 1961), pp. 106–107.

company made dividend payments in 35 years, or 60 percent of the time. Total dividends for the period (before taxes) came to £1,453,100 for an average of £25,053 per year. Average actual capital stock for the period came to £134,018, giving an average yearly return on investment of 18.7 percent (see Figure 1). The company did achieve "windfall" profits during certain years, but when these are averaged out with the lean years, the return of 18.7 percent is impressive, particularly in an industry where only three companies in a score survived more than a decade. Indeed, such a rate of return made the stock of the St. John d'el Rey one of the highest yielding investments of any British enterprise in Latin America or the overseas empire in the nineteenth century.[122] Despite the regularity of dividend payments and high earnings, the rate of return on stock in the twentieth century never achieved such heights. In general, both ordinary and preferential stock gave a 10 percent return.

When compared with other companies in Latin America for which data are available, the St. John's returns for the nineteenth century are again impressive, and the returns are comparable to the other firms for the twentieth century. The British-owned Rio Flour Mills, for example, produced returns between 10 and 15 percent in the first two decades of this century, while the Brazilian-owned Companhia Paulista de Estradas de Ferro averaged a 10 percent return during the last three decades of the nineteenth century. The most successful of the British-owned railways in Argentina normally returned 7 to 8 percent (1868–1914), while the British railways (as a whole) in the same time period averaged between 2.7 and 8 percent. The overall average return for the British companies studied in a recent volume edited by D. C. M. Platt was 6 to 7 percent. Platt estimates that British investors received an average of 5 to 6 percent on comparable domestic investments.[123] South African gold mining companies had just begun to emerge in the late nineteenth century, and a recent study puts their return at just over 5 percent between 1887 and 1913.[124]

Of course, the key to the financial success of the enterprise ultimately lay in the production of gold bullion. From initial figures of 100,000 to 300,000 grams in the 1840s, production rose steadily, reaching 1,000,000 grams annually by 1850 and 2,000,000 by the 1860s. These figures placed the Morro Velho in the first rank of deep shaft gold mines, although the

122. Rippy, "Most Profitable British Mining Investments," 46–50.

123. Graham, *Britain and the Onset of Modernization in Brazil*, p. 147; Robert H. Mattoon, Jr., "The Companhia Paulista de Estradas de Ferro, 1868–1900: A Local Railway Enterprise in São Paulo, Brazil" (Ph.D. diss., Yale University, 1971), p. 227; Colin M. Lewis, *British Railways in Argentina 1857–1914: A Case Study of Foreign Investment* (London, 1983), pp. 199, 218–219; Platt, *Business Imperialism*, p. 12.

124. Michael Edelstein, *Overseas Investment in the Age of High Imperialism: The United Kingdom, 1850–1914* (New York, 1982), p. 335.

numbers pale in comparison with the enormous placer production in the last half of the century in California, Alaska, Canada, and Australia.[125] The second mine in the 1870s achieved the 2,000,000 gram mark only briefly before production fell off drastically in the 1880s. The Chalmers mine surpassed the 2,000,000 gram mark soon after going into full production, and passed 3,000,000 grams per year by 1900. By World War I, annual gold production had passed 3,500,000 grams, and it hovered between 3,000,000 and 4,000,000 grams per year until the 1940s, when the mine reached an all-time high of over 4,700,000 grams at the end of World War II. Production remained relatively steady in the 3,000,000 to 4,000,000 grams range for the next decade, as company costs skyrocketed, dooming the St. John d'el Rey (see Figure 7).[126]

The St. John d'el Rey's success made it the most powerful private operation in Minas Gerais in the nineteenth and twentieth centuries, its revenues and expenditures rivaling those of the provincial government in the nineteenth century. The company's assets at Morro Velho reached £100,000 in the 1860s, rising to £340,000 by the 1880s. The rebuilding and expansion of the mine at the turn of the century raised assets to more than £1,000,000 by 1906, and £2,500,000 by the late 1930s. By 1950, the company's assets in Brazil were valued at nearly £3,500,000.[127] In the relatively backward Mineiro economy of the nineteenth century, the revenues of the company (£138,649 in 1860) nearly equalled the revenues of the provincial government (£143,594 in the same year). Even with the enormous growth of the Mineiro economy after World War I, the company's revenue continued to run at about one-fifth (£645,179 in 1935) of that of the state.[128]

The company pumped considerable amounts of money into the regional economy in central Minas Gerais in taxes, wages, slave hire, and purchases of foodstuffs and wood. Taxation (local, state, and national) seems to have run at about 5 to 7 percent of the value of annual gold production from the 1850s to the 1920s. As already noted, the St. John found itself in a constant tax struggle with the government, winning some battles and losing others. The overall effect was a gradual rise in total tax pay-

125. The California rush, for example, produced 83,600,000 grams per year during 1848–56, and Australia roughly the same during 1851–56. The large mines in the Transvaal produce from three to five times the output of the Morro Velho mine. Vilar, *History of Gold*, pp. 326–327.

126. Gold production at Morro Velho in 1983 stood at 4,200,000 grams. Paulo Sarmento, "Cento e cinqüenta anos de mineração em Morro Velho," *Mineração e Metalurgia*, 48:453 (May 1984), 18–32.

127. *AR 1861, 1884, 1906, 1937, 1951*.

128. *AR 1860, 1935*, and Minas Geraís, Secretaria da Agricultura, Serviço de Estatística Geral, *Annuário estatístico, anno II (1922–1925)* (Belo Horizonte, 1929), p. 1147.

ments. Although the combined rate of federal, state, and municipal taxes declined from about 9 percent (£46,000) in 1930 to less than 5 percent (£41,000) in 1937, the costs of the new government pension program alone effectively taxed the company another 7 percent (£60,000) by the latter year.[129] Ironically, in 1940 the St. John was paying far higher income taxes in England (£120,000) than it paid in taxes in Brazil (£50,000). (Although combined taxes and social welfare payments in Brazil came to around £100,000.) About 75 percent of the company's taxes went to the state of Minas Gerais.[130] Wages and slave hire, which also went essentially to Minas Gerais, regularly accounted for half of the company's expenses throughout its history. In addition, the St. John purchased enormous amounts of beans, rice, mamona oil, corn, and wood, accounting for another 25 to 35 percent of its annual expenditures.[131] Clearly, this British business was the most important economic force in Minas Gerais apart from the state government.

Conclusion

As these figures indicate, the St. John d'el Rey Mining Company, Limited stands out as a preeminently successful foreign enterprise in Brazil. Spanning 130 years of Brazilian history, from its inception in the City of London in 1830 until the Hanna Mining Company transferred corporate headquarters to the United States in 1960, the company owed its success—and ultimate failure—to a complex interaction of local, national, and international factors. The company benefited from the sheer luck of having located one of the richest and deepest gold deposits in the world. Luck, however, does not account for longevity and financial success. The exceptional management of the St. John, particularly under Chalmers, enabled the company to overcome crises. As Richard Graham has pointed out, the principal cause of the difficulties facing British companies in Brazil "was the gross mismanagement of their affairs by the directors and local managers."[132] The St. John management's willingness and ability to introduce technological innovation allowed them to surmount geological, technical, and social challenges. Finally, management at Morro Velho and in London developed a powerful and extensive political network in Brazil to protect and promote its interests. The history of the company demonstrates clearly the tremendous adaptability of capitalists and capitalism to local conditions.

129. *AR 1930, 1937, 1939.*

130. A. H. Millett to Langley, May 25, 1940, SJNL. Company accounting procedures make the precise tax figures difficult to ascertain from the *AR*.

131. *AR 1861, 1906, 1924, 1937, 1951.*

132. Graham, *Britain and the Onset of Modernization*, pp. 152–153.

Conversely, the company failed when it could no longer innovate and meet new challenges produced by geology, business, and politics. Ultimately, international market forces in the form of fixed gold prices, and national forces in the form of an inflation and wage spiral, brought the firm to financial collapse. Economic nationalism in Brazil, and labor militancy in Nova Lima, aggravated the company's problems, and its extensive, but battered political network could not salvage it. The St. John entered Brazil in the 1830s with key elements the mining industry desperately needed: capital, technology, and know-how. By the midtwentieth century, however, the company had overstayed its initial welcome and provided little that Brazilians could not manage by themselves. By the 1950s, the complex and constantly changing forces of the international economy, national development, and local society finally turned against the St. John d'el Rey, bringing to an end 130 years of British enterprise in Brazil.

One case study does not refute or confirm decades of theoretical model building, but the history of the St. John d'el Rey does indicate a need to reassess theories of business imperialism. First, this case confirms the fact that the interests of the British Foreign Office and British business sometimes diverged dramatically, as in the case of the St. John's slaveholding policies. One cannot assume a convergence of business and diplomatic interests. Second, although the company did achieve notable returns on investment for British investors, in this respect it represents a dramatic exception in an industry that saw much higher failure, and losses, than successes and profits. The strong profits of the St. John (especially in the nineteenth century) were exceptional returns in a high-risk, high-failure industry. Third, the political and economic power of the company was enormous at the local level as it dominated a company town, but its influence diminished with distance. The St. John influenced state politics and had the favor of powerful politicians, but often failed to shape the political system to its needs. At the national level, the company was a powerful interest, but it could not (even in the most favorable times) bend national politics to its will. Although the state was relatively weak and unassertive before World War I, the company faced constant intervention after midcentury, and increasingly found its ability to maneuver challenged. The St. John thus shows the political limits of British economic power in Brazil.

Finally, and most importantly, this article has shown the constraints placed on British business by market forces beyond the control of management. Political savvy and exceptional management were able to mitigate, but never control, market forces that constrained and, ultimately, brought down the company. Local labor markets compelled the company to utilize slave labor when it preferred free wage labor, and the chronic shortage of labor inhibited company operations for decades. The technological revolution of the late nineteenth century saved the company from ruin and made possible the rebuilding of the mine. The rise of militant labor, an activist state, and severe inflation began to constrain the company after 1940, and the international gold market then hit the St. John with the final, deadly blow in the postwar period. In evaluating the power and autonomy of foreign business, moreover, we need to recognize the varying power of different types of enterprise, in different sectors of the economy, and in very diverse nations. The success of a St. John d'el Rey in Brazil differs in many ways from the success of a United Fruit Company in Central America. In short, the history of St. John d'el Rey reinforces the recent trend toward a reassessment of the validity of theories of dependency and imperialism. Although it is clear that foreign business wielded power and shaped the history of Latin American nations during the past two centuries, we must develop more sophisticated views that continue to recognize that power but also acknowledge its limits. Only then will we be able to understand the complex interaction of internal and external forces that produces development and underdevelopment.