

1996

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Recommended Citation

Michael, Rodney R. (1996) "Voluntary disclosure in a nineteenth century American corporation: The demise of managerial information as a significant element of financial reporting," *Accounting Historians Journal*: Vol. 23 : Iss. 2 , Article 2.

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VOLUNTARY DISCLOSURE IN A NINETEENTH CENTURY AMERICAN CORPORATION: THE DEMISE OF MANAGERIAL INFORMATION AS A SIGNIFICANT ELEMENT OF FINANCIAL REPORTING

Abstract: In a report issued in 1994, the Jenkins Committee advocated the integration of managerial statistics, which could be used to assess the efficiency and effectiveness of a firm's management, into financial statements. This study traces the development, and subsequent demise, of similar managerial information within the financial statements of the Quincy Mining Company in the nineteenth century. Two contemporary models for financial disclosure are developed for comparative purposes and it is concluded that the Quincy Mining Company intentionally restricted the information available to shareholders. By clarifying the disclosure practices of a single firm in an unregulated environment, this study provides insights to the origins of modern financial reporting.

The accounting profession in the United States is currently debating the basic premises of financial reporting. The all-embracing nature of the discussions is exemplified by the report issued by the AICPA Special Committee on Financial Reporting (Jenkins Committee), which included the recommendation that

high-level operating data and performance measurements—which help users understand the linkage between events and their financial impact on the company and the factors that create longer-term value—become an integral part of business reporting (AICPA, 1994, p. 6).

This study will show that, while innovative by modern standards, such disclosure was common in the nineteenth century. The annual reports issued by the Quincy Mining Company (QMC) between 1861 and 1900 are used to show that manage-

rial information, similar in nature to that recommended by the Jenkins Committee, emerged, evolved, then disappeared from the firm's financial statements.¹

Ansari and Euske (1995, p. 40) question whether the report of the Jenkins Committee may "imply a pending convergence of financial with managerial accounting." In contrast, this study clearly depicts the divergence of managerial and financial information within a single firm. Perhaps more importantly, it is argued that the elimination of managerial information as a significant component of financial disclosure may have been motivated by the desire to restrict the information available to shareholders.²

SIGNIFICANCE OF THE RESEARCH

This line of research is important for at least two reasons. First, by providing a comprehensive example of disclosure practices within a single firm, it may contribute to a better understanding of financial reporting practices in the nineteenth century. Second, this study explores, within the context of a single firm, the relationship between financial disclosure practices and the capital markets in the nineteenth century. The examination of the disclosure practices of the Quincy Mining Company will provide insights to the origins of modern financial reporting practices and may contribute to current discussions about the nature of financial disclosure.

SCOPE OF THE RESEARCH

In order to keep this study within manageable proportions, two limitations were imposed. First, the scope was limited to

¹ The financial information for QMC that is presented in this study is drawn from primary documents, including annual reports, journals, ledgers, and other accounting artifacts that are part of the historical collection of the Robert Van Pelt Library at Michigan Technological University.

² Merino and Neimark [1982, pp.35-37] discuss the implications of financial disclosure debates at the turn of the century relative to public policy. One perspective at that time was that full disclosure would weaken monopolistic practices by attracting competition to profitable markets. An argument put forth by businesses to discourage disclosure legislation was that their voluntary disclosure practices were sufficient and indicative of non-monopolistic intentions. In contrast, this study shows that, in the absence of regulation, the Quincy Mining Company eliminated the disclosure of information that would have allowed investors to more effectively assess the efficiency of the firm's management and operations.

financial disclosure practices within a single firm. Consequently, no comparisons are made with the financial statements issued by other contemporary firms. Second, the focus of the present study is the managerial information contained in the annual reports of the firm. The analysis of the informational content of the various financial statements is left to future research.

NINETEENTH CENTURY DISCLOSURE PRACTICES

From 1861 to 1878 the annual financial reports issued by the Quincy Mining Company to its shareholders included numerous engineering based efficiency measures and detailed operating costs for mining operations. But, in 1878, disclosure was curtailed and the focus of the annual reports was shifted to aggregate earnings and dividends.³

Since QMC had to compete with much larger enterprises, such as railroads, for investment capital, its financial disclosure practices appear to have been heavily influenced by contemporary norms and investor expectations. This study shows that the financial disclosure practices of the Quincy Mining Company in the nineteenth century are similar to what, for discursive purposes, could be referred to as the American Railroad and the British Secretive models of financial reporting. Each of these models, and the potential motivations for its use, is discussed in the following sections.

AMERICAN RAILROAD MODEL

The significance of the expansion of the railroad system in the United States during the nineteenth century, along with its effect upon the securities market, has been thoroughly documented [Johnson and Kaplan, 1987, pp. 34-38; Chandler, 1977, pp. 81-205]. Previt and Merino [1979, p. 80] express the importance of the railroads to an understanding of financial disclosure practices in the nineteenth century as follows:

To consider this era without focusing on railroads would be inappropriate and ineffective, for railroad se-

³ The Quincy Mining Company was formed in 1846, and incorporated in 1848, to mine copper in Michigan's Keweenaw Peninsula. By the end of the nineteenth century QMC had evolved from a small frontier mining operation into a large, and profitable corporation. QMC discontinued operations in 1968. Lankton and Hyde [1982] provide an excellent history of QMC and the Keweenaw mining communities.

curities were the dominant factor in the capital markets.

The literature surrounding the growth of the railroads provides two relevant insights for the present study. First, the specialized capital needs of the railroads led to what may be called the Railroad Model of financial reporting. Second, the heavy involvement of British investors provides a conceptual linkage to British financial reporting practices since

The British investor, having experienced the disclosures of the Companies Acts, would expect comparable disclosures and, in the absence of some, would perhaps exercise caution in investment [Previts and Merino, 1979, p. 45].⁴

The Railroad Model of financial reporting in the early part of the nineteenth century reflects a predominant concern for organizational efficiency. In discussing the railroads' commitment to efficiency measures, Johnson and Kaplan [1987, p. 38] posit

Once the decision was made to organize a railroad, little else remained but to build the road and to operate it as efficiently as possible. In designing management accounting information systems, therefore, the railroads were content to ask about nothing more than the efficiency of the firm's internally coordinated processes.

The railroads not only used efficiency information internally, but they also made at least some of the information public.⁵ For example, Johnson and Kaplan [1987, pp. 36-39] state that they frequently released

... public information, often audited, concerning oper-

⁴ The strong British influence upon American accounting practices is widely acknowledged. For example, Chandler [1977, pp. 89-93] and Sobel [1965, pp. 47-102] discuss the influx of British investors to American capital markets. Skousen [1987, p. 6], in discussing debate preceding securities legislation in the United States in 1933, states that one group "spoke for disclosure laws similar to the English Companies Act of 1900." This reference to British disclosure regulation suggests a philosophical linkage between British and American disclosure practices. Brief [1987, p. 30] discusses the British origins of American accounting firms. Edwards [1992, p. 59] contends that "British businessmen may be seen as the instigators of modern financial reporting", due to their nineteenth century responses to information demands from the capital markets.

⁵ Chandler [1977, pp. 89-109] provides a comprehensive discussion of the cost management practices of the nineteenth century railroads.

ating ratios and other financial performance. Their unique willingness to issue public reports arose from their heavy reliance on outside financial capital . . .

Similarly, Previts and Merino [1979, p. 55] describe early nineteenth century railroad reporting as "cash basis summaries with an overtone of *statistical operating information*" (emphasis added). Boockholdt [1978, p. 16] also describes railroad disclosure in the 1830's and 1840's as dealing primarily "with the sources and disposition of cash and with statistical measures of the flow of traffic." Boockholdt [1978, p. 20] concludes that by the mid-1850's "the annual reporting of receipts and expenditures along with numerous statistical tables was the prevalent practice in this country."

Vangermeersch [1979, pp. 318-321] discusses the disclosure practices of the Baltimore & Ohio (B&O) railroad between 1828 and 1850, and posits that in many respects the shareholders at that time received more useful information than their modern counterparts. For example, B&O routinely provided operating statistics such as the cost per mile of track construction, average cost per mile to transport a ton of freight on a given run, division of costs between passengers and freight, and a discussion of fixed and variable costs [Vangermeersch; 1979, pp. 318-321]. In addition, summary schedules provided further cost and activity measurements, including a comparison of the B&O railroad to seven other railroads in thirteen different categories.

The disclosure of operating information, which was conducive to the assessment of management's stewardship responsibility, is of particular relevance to this paper since the companies cited by Vangermeersch [1979] and Boockholdt [1978] are not isolated examples. In fact, there appears to be a consensus in the literature that, at least in the early part of the nineteenth century, the railroads attempted to provide useful managerial information to the shareholders in an attempt to induce capital investment.⁶ However, by the turn of the century there appears to

⁶ There are other potential explanations for the willingness of the railroads to disclose detailed operating information. For example, Lee [1994, p. 231] studied the annual reports issued by several British corporation between 1965 and 1988 and found evidence "consistent with the idea of the annual report as a means of creating and managing images of the reporting corporation's position in the economic community." In the context of the nineteenth century, Lee's findings suggest that the disclosure practices of the railroads may have been motivated by the need to promote a predetermined corporate image, rather than a desire to provide useful information to investors.

have been growing dissatisfaction with the financial disclosure practices of many railroads.⁷ For example, Boockholdt [1978, p. 24] states that by the late nineteenth century, despite "voluminous detailed tables of statistics concerning shipments, expenditures, receipts, and services provided, the quality of disclosure was generally considered to be inadequate." Citing an article in the *Railroad Gazette* from 1893, Boockholdt [1978, p. 24] suggests that the prevalent disclosure practices could have been designed to obscure, rather than clarify, the financial position of the railroads. Although the efficiency measurements presented in the annual reports were comprehensive, they may have been largely irrelevant to the determination of the financial condition of the firm.

Similarly, Previts and Merino [1979, pp. 80-81] discuss the limited disclosure practices of some firms and cite a government report from 1900 that specifically addresses the problems of corporate financial secrecy. Due to the lack of uniform reporting practices and the absence of disclosure regulation, the timing of the change is debateable. However, evidence suggests that by the beginning of the twentieth century corporate secrecy, and the minimization of financial disclosure, was a normal practice in both the railroads and other large companies [Previts and Merino, 1979, pp. 80-81; Boockholdt, 1978, p. 24].⁸

BRITISH SECRETIVE MODEL

The extensive literature exploring the complexities of British disclosure legislation and voluntary disclosure practices will not be repeated here.⁹ Instead this study will focus upon the

⁷ Boockholdt [1978, p. 24] argues that the "financial difficulty of many railroads during the Panic of 1893, and the failure of some major lines, emphasized the demand for better public disclosure."

⁸ Boockholdt [1978, p. 26] concluded that "modern corporations, like the nineteenth century railroads, can be expected to exploit their accounting records to achieve their own interests, and often these interests will conflict with those of the public in general."

⁹ Bryer [1993] traces the evolution of disclosure practices relative to investor needs. Morris [1984] compares nineteenth century Australian disclosure practices to their British counterparts. Jones and Aiken [1994] provide both a discussion of selected British Company Acts, and relevant insights to the Select Committee on Company Law Amendment (1877). Littleton [1933, pp. 288-304] discusses the objectives of the British Companies Acts and their relationship to the emergence of audited financial statements. Parker [1990] discusses financial disclosure practices in regulated industries in nineteenth century Britain.

British perspective of the nature and importance of financial disclosure. Nineteenth century British companies, like their American counterparts, faced the complex issues of financial disclosure. But, in contrast to the Railroad Model discussed previously, the British debate ignored the disclosure of operating and efficiency statistics and focused upon balance sheet and profit reporting.

Evidence suggests a long-standing British preference for minimal financial disclosure. For example, Stewart [1991, p. 38], discusses the "Cult of Privacy" that provided a context for British disclosure practices, and the debate surrounding proposed changes, in the mid-1920's. Although full financial disclosure was, in general, seen as conceptually desirable, the prevailing argument was that the interests of both shareholders and management were best served by restricting the flow of financial information to competitors and the public at large.

This perspective was also prevalent in the nineteenth century, as shown by Bryer [1993, p. 677], who states

The case for statutory regulation and disclosure of financial information was argued strongly many times during the nineteenth century, but was always defeated on the ground of 'confidentiality'.

Bryer's [1993] discussion of the report of the Select Committee of 1877 provides particularly relevant insights for the present study due its temporal proximity to the Quincy Mining Company's shift in disclosure practices.¹⁰ A large part of the testimony before the Committee addressed the appropriate characteristics of financial disclosure. But some testimony questioned the necessity of financial disclosure in any form. The primary argument against comprehensive balance sheet disclosure was exemplified by the statement that disclosure "would

¹⁰ The Select Committee of 1877 conducted hearings and gathered testimony on proposed changes to the Companies Acts of 1862 and 1867. See Edwards [1986, pp. 94-119] for selected testimony given to the Committee and Edwards [1980, pp. 24-29] for details of the disclosure requirement of the Companies Act of 1862, including a model balance sheet. Jones and Aiken [1994, p. 220] point out that although the Select Committee of 1877 addressed issues of financial disclosure, the report of the Committee did not result in regulatory legislation. Furthermore, the disclosure proposed by the Committee was minimal and pertained only to shareholders, not to the public at large. Jones and Aiken [1994, p. 221] concluded that "there is cause for believing that regulators sought to minimize financial disclosure to an acceptable minimum."

simply invite competition, and disclose trade secrets, which would be most injurious to them (the issuing company)" [Select Committee, 1877, p. 977 as cited by Bryer, 1993, p. 677].¹¹

Two additional arguments were made against extensive financial disclosure. First, Bryer [1993, p. 678] posits that financial disclosure, more specifically profit reporting, was viewed in the nineteenth century as having the potential to incite labor problems as workers sought increased wages. Second, some felt that financial disclosure was redundant since the records of the firm were available for review by the shareholders. For example, Parker [1990, p. 54] states

... it was commonly assumed that shareholders could and should look after themselves. Sir George Jessel (later Lord Jessel), Master of the Rolls, expressed this view in his evidence to the 1877 Company Law Amendment Committee. There was no reason he stated to compel directors to issue accounts (financial statements) to shareholders, since shareholders could call for them themselves if they wished.¹²

The primary benefit of this approach was that financial information would not be readily available to non-shareholders and competitors.

Although by modern standards full disclosure is a primary objective of financial reporting, Stewart [1991, p. 39] presents the argument that restricted disclosure could be construed as ethically sound since

... public disclosure of poor performance may precipitate the failure of the company with consequent loss to the investing public and the work force.

From this perspective the elimination of operating statistics and other managerial information from QMC's annual reports could be interpreted as an attempt to protect the company from external competition and to moderate the market effects of temporary swings in productivity.

¹¹ Brief [1987, p. 32] presents similar arguments made by American managers at the turn of the century.

¹² See Edwards [1986, Vol. II, p. 117] for a partial text of Jessel's testimony before the Committee.

QMC'S EXTERNAL FINANCIAL REPORTING PRACTICES IN 1861

The disclosure practices of the Quincy Mining Company during this period were similar to the American Railroad Model. Both are characterized by the inclusion of numerous operating statistics and detailed cost information.¹³ The remainder of this section first defines the financial schedules issued by the Quincy Mining Company in 1861, then examines subsequent changes to this basic model.

Figure 1 is a schematic of the schedules provided to the shareholders in the first annual report issued by the Quincy Mining Company. Each of the six schedules represented in Figure 1 provides detailed information for the five month period between March 1st and July 31st of 1861, and where appropriate, reports cumulative operations.¹⁴ The financial reports include two 'balance sheets' (Figure 1, Schedules 1 and 2), the equivalent of an income statement (Schedule 3), and a series of reports (Figure 1, Schedules 4, 5 and 6) that reflect both current and cumulative costs for the primary mining activities.¹⁵

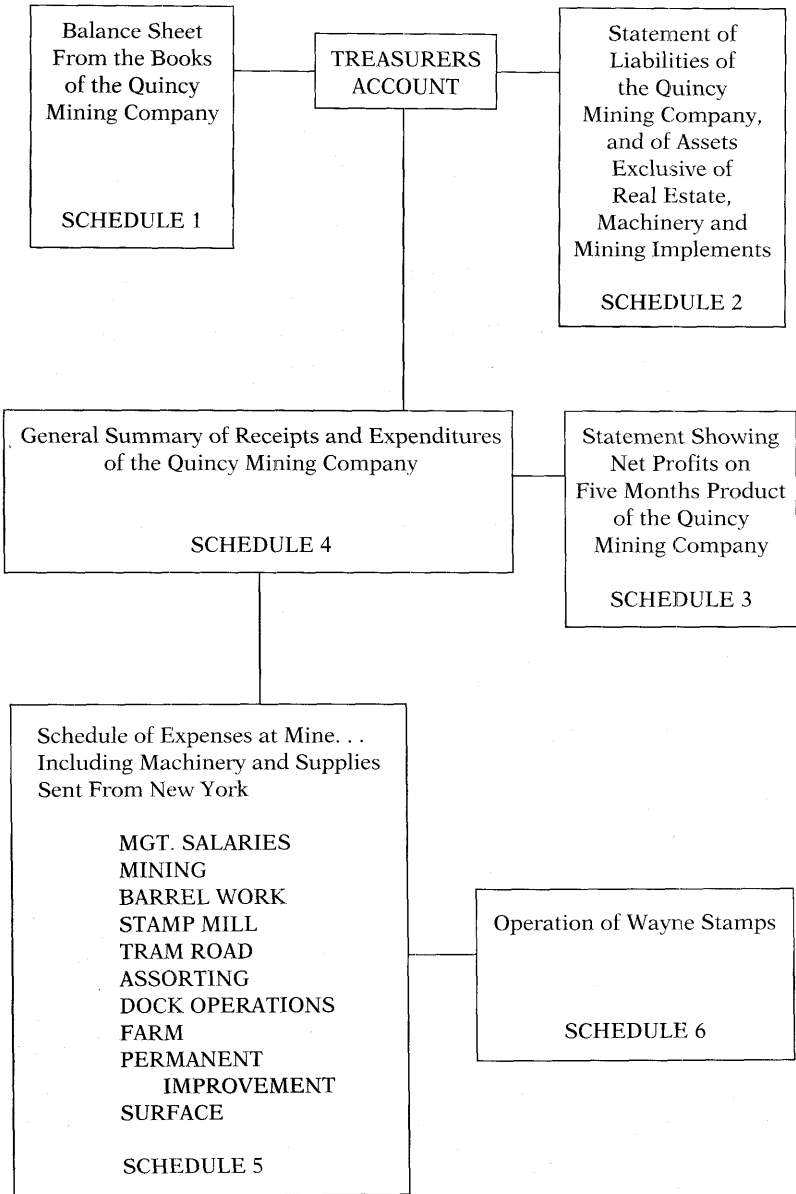
¹³ QMC was not subject to disclosure regulations or standards, thus its reporting practices were apparently voluntary. The New York Stock Exchange did not have disclosure requirements until the late 1890's [Previts and Merino, 1979, p. 87; Sobel, 1965, p. 177]. The Michigan Mining Laws of 1846, under which the firm operated, required only that the firm submit a report of annual production to the state for tax purposes and that the company keep "an accurate daily account of the debts and indebtedness [Chapter 33, paragraph 1304]", which was available for review by creditors. Companies were also required to provide the state an annual list of shareholders and the shares held by each.

¹⁴ The available evidence provides no explanation for the use of a five month reporting period.

¹⁵ The level of aggregation displayed in the financial schedules for 1861 reflected the managerial hierarchy at the mine, which in turn was based upon natural divisions in the mining process.

FIGURE 1

Schematic of Financial Schedules for 1861



Stamp Mill Costs

The report entitled "Operation of 64 Heads, Wayne Stamps for Five Months, Ending July 31, 1861" (Figure 2), discloses both the monthly costs of operating the stamp mill and the total costs for the reporting period.¹⁶ Two major categories, Running

FIGURE 2

Source: QMC annual report for 1861

OPERATION OF 64 HEADS, WAYNE STAMPS FOR FIVE MONTHS, ENDING JULY 31, 1861						
	March	April	May	June	July	Total
RUNNING EXPENSES						
Number of cords wood used for fuel	414.75	373.25	344	330	353	1815
Cost of wood consumed	\$1,059.45	951.19	882.75	847.50	911.62	\$4,652.51
Cords of wood used for heating	20	5	0	0	0	25
Cost of wood used for heating	\$47.50	11.87	0	0	0	\$59.37
Value of tallow and oil used for machinery	\$75.00	68.60	62.27	32.1	35.7	\$273.67
Value of oil used for lighting building	\$62.62	60.40	54.00	37.50	44.20	\$258.72
Cost of engineer, firemen, woodpassers and wood splitters	\$268.03	268.59	262.00	241.50	252.83	\$1,292.95
Cost of Superintendent and watchman	\$107.30	108.38	109.45	102.84	108.38	\$536.35
Cost of Stamp tenders	\$260.70	253.20	261.91	251.16	250.91	\$1,277.88
Cost of washers	\$1,573.94	1515.87	1415.20	1362.32	1360.98	\$7,228.31
Cost of cooper	\$31.37	32.00	33.23	30.76	32.00	\$159.36
COST OF REPAIRS						
Labor for repairs:						
Cost of machinist and blacksmith's labor on machinery	\$33.00	145.82	100.86	151.85	92.51	\$524.04
Cost of carpenters and laborers on machinery	\$215.37	170.80	165.64	119.10	98.25	\$769.16
Cost of carpenters and laborers on building	\$147.16	113.54	111.87	95.00	12.00	\$479.57
Materials:						
Cost of materials used repairing machinery and building	\$110.47	214.86	521.28	195.06	181.28	\$1,222.95
Total cost	\$3,991.91	3915.12	3980.46	3466.69	3380.66	\$18,734.84
Cost per ton of rock stamped	\$1.0275	1.0325	1.08	0.98	0.8475	
RESULTS						
No. of days run, 24 hrs. each day	26	26	27	25	26	
Average number of heads run per day	61	60.6	62	63.3	63.25	
Tons of rock stamped in a month	3,898	3,780	3,680	3,530	4,000	18,888
Tons of rock stamped per cord of wood	9.4	10.01	10.7	10.7	11.33	
No. of hours stopped for repairs	6.25	2	1	12.5	0	
Copper product, pound	183,704	207,605	195,807	185,285	182,995	955,396
Percentage of copper per ton of rock	2.34	2.74	2.66	2.62	2.38	

¹⁶ The information presented in Figure 2 is consistent with the original, but the format was changed to facilitate reproduction.

Expenses and Costs of Repairs, are each subdivided into various forms of labor and material, and a summary or results section provides data on production, downtime and copper yield.

Mine Operating Costs

The "Schedule of Expenses at Mine From March 1, 1861, to July 31, 1861 Including Machinery and Supplies Sent From New York" (Figure 3), provides the distribution of costs at the mine during the reporting period. It is apparent that QMC was willing

FIGURE 3

Source: QMC annual report for 1861

SCHEDULE OF EXPENSES AT MINE FROM MARCH 1, 1861 TO JULY 31, 1861, INCLUDING MACHINERY AND SUPPLIES SENT FROM NEW YORK	
Agent, clerks and Surface Agent	\$2,073.30
MINING COST	
Mining Captains and Timbermen	1,732.10
Miners on Company Account	5,618.42
Landers, Fillers and Laborers Underground	12,649.26
Mining Contracts	40,318.91
	60,318.69
Engineers and Firemen at Hoisting Engines	\$1,255.98
569 3/4 Cords Wood, at 18s.,	1,282.37
Repairs on Engine	101.75
	2,640.10
Oil and Tallow used for Machinery at Mine	155.70
Blacksmith Labor and Sharpening Drills	1,400.00
Change House	286.00
Watchman on Mine	202.11
Carpenter's Labor for Underground Work	335.75
Drawing Lift, No. 4 Shaft	498.18
	67909.83
734 Barrels for Barrel Work, at 65 c	\$477.10
Packing and Marking Barrel Work	170.75
Hauling 200 tons Copper to Lake, at 75 c.	150.00
	797.85
STAMP MILL - RUNNING EXPENSE AND REPAIRS	
18,888 tons Rock Stamped	18,734.84
Addition to Stamp Mill	281.49
659 Barrels for Packing Copper, at 60 c.	415.40
	19,431.73
Carried forward	\$88,139.41

FIGURE 3
(continued)

SCHEDULE OF EXPENSES AT MINE FROM MARCH 1, 1861 TO JULY 31, 1861, INCLUDING MACHINERY AND SUPPLIES SENT FROM NEW YORK	
Brought Forward	\$88,139.41
TRAM ROAD - RUNNING EXPENSES AND REPAIRS	
17,964 tons run over Road,	\$4,043.09
Construction, (Side Track)	205.00
	<u>4,248.09</u>
Running 18,888 tons Rock into Mill assorting at Burrows and at Kiln Houses	\$453.30
17964 tons Rock used, and 3,000 tons on hand	
20,964 tons	10,415.06
Breaking 15,619 tons Rock, and Dressing Barrel Work from same	3,071.60
Wood for Calcining 9,982 tons Rock, 843 3/4 cords, at \$2	1,687.50
	<u>15,627.46</u>
Expense at Lake, Receiving and Shipping Freight, Weighing Copper, Piling Wood, etc.	694.28
FARM	
Clearing Land	444.00
Fence	493.54
Seed	115.00
	<u>1,052.54</u>
PERMANENT IMPROVEMENTS	
Addition to Dock	\$580.00
1 Dwelling House, (unfinished)	650.00
4 Frame Houses	680.00
Addition to Brass Foundry	147.75
Entry Improvement	1,543.60
	<u>3,601.35</u>
General Surface Expenses, including Office Expense, Material and Supplies used in Mine, not specified above	6,033.79
	<u>\$119,396.92</u>

to disclose, in great detail, both the normal operating costs of the mine and expenditures related to the improvement or expansion of mining operations.¹⁷

¹⁷ Although the disclosure of this type of information may appear to be reduce any competitive advantage of the Quincy Mining Company, it is possible that the information was already available through local newspapers, trade journals and the local 'grapevine'.

Cumulative Receipts and Expenditures

The "General Summary of Receipts and Expenditures of the Quincy Mining Company, From its Organization up to August 1, 1861" (Figure 4), provides a highly aggregated overview of the cash position of the firm, with the difference between receipts and disbursements, which represents cash on hand at the mine, equal to the balance of the Treasurer's account.

FIGURE 4

Source: QMC Annual Report of 1861

GENERAL SUMMARY OF RECEIPTS AND EXPENDITURES OF THE QUINCY MINING COMPANY, FROM ITS ORGANIZATION UP TO AUGUST 1, 1861	
RECEIPTS	
From Capital Stock-fully paid	\$200,000.00
" Proceeds Copper sold	598,123.65
" Bills Payable	118,546.67
EXPENDITURES	
For Expenditures on Location previous to 1856	\$42,097.98
For Expenditures on Quincy Vein in 1858 (not now worked)	55,000.00
For Openings and Explorations on 3,800 feet "East" or Pewabic Vein, extending to Portage Lake, preparatory to future workings	11,500.00
For Real Estate and permanent improvements on same-including Dwelling-houses, Stamp Mill, Machinery, Steam Engines, Tram road, Dock, Warehouses and other buildings and roads. Cost since 1856 as per inventory	292,727.38
For Mining and Surface Labor, expense of Smelting and marketing Copper, and all incidental expenses	500,095.60
Cash on hand	15,249.36
	<hr/> \$916,670.32
	<hr/> \$916,670.32

Income Statement

The "Statement Showing Net Profits on Five Months' Product of the Quincy Mine, From March 1, to August 1, 1861" (Figure 5), represents the first income statement issued by the Quincy Mining Company. Revenue was recognized on a production basis, including both copper actually sold and the market value of unsold copper at the end of the period.

FIGURE 5

Source: QMC annual report for 1861

STATEMENT SHOWING NET PROFITS ON FIVE MONTHS' PRODUCT OF THE QUINCY MINE, FROM MARCH 1, TO AUGUST 1, 1861		
Mineral Product for five months, which yielded of Ingot Copper	1,486,496 lbs. 1,059,277 "	
Proceeds of which, by sales, (including Copper on hand unsold, valued at 18 c.) amount to		\$192,655.99
COST OF ABOVE		
Total Expenses at Mine for five months, as per foregoing Schedule	\$119,396.92	
Freight and Smelting on 743 496/2000 tons of Mineral, and Marketing 1,059,277 lbs. Ingot Copper, including Freights, Insurance, Interest, Commissions, Office Expenses and all other charges	29,130.11	
		148,527.03
Net Profits		\$ 44,128.96

Balance Sheets

The "Balance Sheet From the Books of Quincy Mining Company, August 1st, 1861" reported cumulative receipts from the issuance of capital stock, and both prior years' and current year's totals for revenues, expenditures and (after 1861) dividends. This format can be readily understood if the totals are summarized and rearranged into a more familiar pattern (Figure 6). However, many of the items included in a contemporary

FIGURE 6

Reformatted "Balance Sheet From the Books of Quincy Mining Company,
August 1st, 1861"

ASSETS		
Treasurer's Account		\$ 15,249.36
LIABILITIES AND EQUITY		
Liabilities:	Loans	108,700.00
	Acceptances	9,846.67
	Total Liabilities	<u>118,546.67</u>
Equity:	Capital Stock:	
	\$ 42,148.00	
	33,852.00	
	60,000.00	
	<u>64,000.00</u>	200,000.00
	Plus: Copper Sales	
	\$ 25,900.98	
	70,270.22	
	78,959.35	
	233,466.86	
	<u>189,526.24</u>	598,123.65
	Less: Expenditures	
	\$102,661.05	
	123,106.04	
	222,038.12	
	314,011.69	
	<u>139,604.06</u>	(901,420.96)
Total Liabilities and Equity		<u>\$ 15,249.36</u>

balance sheet are conspicuously absent. For example, there are no capital asset accounts since all expenditures were recorded as 'ordinary' costs of the period; nor did the Quincy Mining Company use a Retained Earnings account (or an equivalent) to summarize cumulative earnings and dividends. Some of the 'missing' information can be found in the "Statement of Liabilities of the Quincy Mining Company, and of Assets, Exclusive of Real Estate, Machinery and Mining Implements, August 1, 1861" (Figure 7), which provided totals for cash, copper and supplies inventories, receivables, and payables.

FIGURE 7

Source: QMC annual report for 1861

STATEMENT OF LIABILITIES OF THE QUINCY MINING COMPANY AND OF ASSETS, EXCLUSIVE OF REAL ESTATE, MACHINERY AND MINING IMPLEMENTS, AUGUST 1, 1861

LIABILITIES		ASSETS	
Notes Payable	\$118,546.67	Treasurer's account cash on hand	\$15,249.36
Drafts unpaid	17,639.95	copper on hand:	
Unpaid charges on Copper on hand	5,034.92	Product to Aug. 1st unsold 484,779 lbs	
Accounts payable at Mine	61,463.98	Ingots at 18c.	87,260.22
		Cash on hand at Mine	8,625.72
		Accounts receivable at mine	14,969.64
		Available Supplies, Mineral, &c. on hand at Mine per inventory on file	57,250.95
		Balance	19,329.63
	<u>\$202,685.52</u>		<u>\$202,685.52</u>
Estimated balance of Liabilities over assets	\$19,329.63		

CHANGES IN 1862

Although the financial schedules provided in the annual report of 1862 are similar in most respects to those provided in 1861, there are two noteworthy changes. First, the annual investment in plant and equipment was moved from the "Schedule of Working Expenses at the Mine For The Year Ending . . ." to a new report called "Additions to 'Permanent Investment' For the Year Ending December 31st 1862" (Figure 8). But the type of information provided did not change, nor did the ledger treatment of the expenditures. Although existing documentation does not explain the reasons for the creation of the new schedule, it

may represent an attempt to more clearly distinguish between expenditures for site improvements and routine operating costs.

FIGURE 8

Source: QMC annual report for 1862

ADDITIONS TO PERMANENT INVESTMENT FOR THE YEAR ENDING DECEMBER 31ST, 1862	
Stamp Mill	
Fitting up office and painting Mill	686.48
" " Stamps for dressing barrel work, ..	106.96
Putting Flues in Boilers	2,708.58
Wash-house and Sand-wheel	<u>4,204.72</u>
	\$7,706.74
Building Account	
Engine House at No. 6 shaft	766.90
Kiln-house "6 " " "	668.00
Four Log and two Board houses	440.00
Addition to the Carpenter-shop	196.09
Warehouse at Mine	290.27
Captain's Office	184.93
Shepherd's House	463.38
Zangerley's "	159.86
Scherman's "	958.97
Hudson's "	434.24
Cooper "	351.43
Change "	<u>1,981.37</u>
	\$6,895.54
Hoisting Engine at No. 2 Shaft	5,242.31
Railroad " " " "	214.71
Two Rock Receivers at Mine	225.08
Addition to Tramroad	495.07
Drill, Planing Machine, and Tools	<u>850.00</u>
	\$21,629.45

The second change was the discontinuance of the income statement and expansion of the Directors' Report to include a calculation of profit for the period. In contrast to the Directors' Report for 1861, which contained no financial information and merely summarized the history and potential of the mine, the Directors' Report for 1862 (Figure 9) included profit reporting, data on dividends declared during the period, copper and silver production volume, a brief summary of major undertakings

FIGURE 9

Source: QMC annual report for 1862

Directors' Report for 1862

The Directors herewith exhibit the operations of the Company for the past, and the condition of its affairs at the commencement of the present year.

The total shipment of the season, including the balance left over at the close of navigation of the previous year which was afterwards reduced to a higher percentage, was 2,719,960 pounds of mineral. This shipment was smelted at Detroit, and yielded 84.79 per cent., or 2,306,268 lbs. of Ingot Copper.

The product of the mine for the year 1862 as prepared for shipment, was 2,505,472 lbs., or 1252 1472/2000 tons of mineral of the following description, viz.,:

Stamp Copper	1,730,679 lbs.
Barrel "	614,724 "
Mass "	160,069 "
Total	2,505,472 lbs.

—the value of which, at the average price of past and present sales, is \$568,450.95. There has also been realized from sale of 32,052 lbs. of Tribute Copper, the further sum of \$9,368.51, making with \$517.16 from silver ore, the total gross value of \$578,336.62

The schedule of expenses at Mine for the year, attached hereto, amounting to \$323,833.27, includes an increase of mining supplies on hand of \$18,439.92, making the actual

Mining Expense	\$305,393.35
Other expenses, as per Treasurer's balance sheet	60,503.54
Total cost,	\$365,896.89
which deducted from the gross earnings	\$578,336.62
leaves the profits of the year's business	\$212,439.73

The permanent investment has been increased by the erection of a new hoisting engine at No. 2 shaft, and sundry building as hereinafter detailed, at a cost of \$21,629.45 for the year, making the aggregate amount of \$323,401.37.

On the 31st of July last a dividend of Three Dollars per share, or \$60,000, was paid, leaving an excess of \$180,681.62 of strictly available assets over all liabilities at the commencement of the present year. From this a further dividend of \$80,000 has since been declared, and the balance of One Hundred Thousand Dollars remains on hand as a working cash capital, furnishing the means for purchasing supplies on favorable terms, and conducting every department of the work at the lowest cost.

In order to provide against the gradually increasing cost of timber and fuel, your Directors have purchased sections 15 and 22 immediately adjoining our mining property, which will furnish an ample supply for years to come at a low rate.

For the month of December no report of product was made, as the stamp mill was closed for repairs and alterations in the boilers, which are now working with increased efficiency. And in judging of the future, this fact should especially be borne in mind, that the highly satisfactory result of the past year's business thus set forth, has been attained on eleven months' product, and an average rate of sales, and on extraordinary outlay required beyond usual working expenses, it may safely be inferred that his year will place the Quincy Mine in the front rank among the dividend paying mines of Lake Superior

during the period, and an appraisal of the prospects for the next year.¹⁸

CHANGES BETWEEN 1863-1871

A new schedule entitled "Return of Mining Cost for the Year Ending December 31st, 1863," was introduced in 1863 to disaggregate the cost of mining operations by providing monthly and annual totals for the costs of mining supplies, miscellaneous non-contract labor, and the labor costs of stoping, drifting and sinking shafts and winzes. The report also enhanced productivity measurements by giving the average monthly costs per fathom stoped, per foot drifted and per foot sunk on shafts and winzes. For mining costs other than the direct cost of drifting, stoping and sinking, the report provided annual totals for seven labor categories and for supplies. These costs were then summarized and carried into the "Return of Working Expenses at Mine" (Figure 10), which presented the costs incurred at the mine in 1863 by major categories.¹⁹

¹⁸ The Directors' Report was the first schedule presented in the annual report and may have been designed to provide a favorable first impression of the year's activities. In this context the Directors' Report appears to be a precursor to the President's letter in current annual reports.

¹⁹ The following labor statistics were included in the "Return of Working Expenses at Mine" in 1863: average force employed per year, average number of miners on contract, and average wages of miners on contract. In the following year two additional pieces of information were added: "Yield of mineral per fathom of ground broken" and "Yield of ingot copper per fathom of ground broken." The annual reports through 1871 contain these five items without additional modification; although in 1866 and 1867 they were temporarily moved to other schedules.

FIGURE 10

Source: QMC annual report for 1863

RETURN OF WORKING EXPENSES AT MINE FOR THE YEAR ENDING DECEMBER 31, 1863	
Mining Cost	
As per table on preceding page	\$238,906.58
Assorting, Breaking, and Calcining Rock	
Breaking 38,070 tons rock	\$22,187.97
Assorting 46,408 " "	3,474.78
Wood used for fuel,	102.92
	<u>25,765.67</u>
Tramming Rock To Mill	
Tramming 46,408 tons rock	
" " 1,685 " barrel-work	\$ 9,313.14
Supplies and materials used,	2,629.48
	<u>11,942.62</u>
Stamp Mill	
Stamping and dressing 48,985 tons rock	
" " " 1,685 " barrel-	
work	\$40,573.18
Supplies and materials used,	24,015.70
	<u>64,588.88</u>
Surface and General Expense	
Salaries of officers and general	
surface expense	\$35,577.68
Cost of tribute copper	2,943.28
Amount of taxes paid,	3,311.62
Freight on supplies up,	5,407.13
Expenses of improving farm,	342.30
	<u>\$47,582.01</u>
Cr. by profit on supplies,	2,810.51
	<u>44,771.50</u>
Total running expense,	\$385,975.25

In 1867 the annual report was expanded to include an additional summary schedule entitled "Cost of Product 1867" (Figure 11), which presented the calculation for the total cost per pound

FIGURE 11

Source: QMC annual report for 1867

Cost of Product of 1867	
Product of Mineral	2,248,279 lbs.
Mining Cost	\$306,556.62
or 13.63 cents per pound ready for smelting	
<hr/>	
Cost.	
Mining Cost	\$306,556.62
Smelting	20,696.18
Transportation	17,061.53
Copper Charges	9,265.43
Expense account	4,512.99
Insurance	3,666.18
Taxes	1,537.58
Interest	275.51
	<hr/>
	\$363,572.02
Making the total cost of production, conversion, and sale 20 cents per pound.	

of copper "production, conversion, and sale" during the year. Since this schedule merely consolidated information found elsewhere in the annual report, it may represent further evidence of management's intention to emphasize information that could be used in evaluating efficiency and cost control at the mine.

The expansion of cost and productivity information may have been an attempt to rationalize the absence of profits resulting from a severe disruption of the copper market following the Civil War (Michael and Lankton, 1994). This explanation would reflect an attempt by the Quincy Directors to create the image of an emerging firm that was well run, but not yet profitable.

A second potential explanation for the changes is related to the use of professional managers and engineers at the Quincy Mine after 1860; in contrast to the early years of the firm when the major stockholders were heavily involved in routine management activities. Although the major stockholders and directors still maintained close contact with the site managers after 1860, it became less important for them to participate in the day to day operating decisions. The growing tendency to accumulate and report summary data and input/output calculations in the annual report may reflect the need for new types of financial

information that could be used to evaluate the performance of the managers, given the separation of ownership and control.

CHANGES BETWEEN 1872-1877

The six year period between 1872 and 1877, a volatile period for the Quincy Mining Company, was characterized by hostile changes in ownership in 1872 and 1875. After the reorganization in 1872, the new directors made physical changes, such as moving the corporate headquarters from New York to Boston and replacing the top manager at the mine. But more importantly from an accounting perspective, they made two significant changes in the financial reporting practices that appear to reflect the emergence of a unified corporate entity.

Statement of Business

Perhaps the most important change in 1872 was the reintroduction of an income statement entitled "Statement of Business for Year Ending Dec. 31, 1872" (Figure 12), which presented the

FIGURE 12

Source: QMC annual report for 1872

STATEMENT OF BUSINESS FOR YEAR ENDING DEC. 31, 1872			
RECEIPTS.			
From	1,543,774 lbs. copper sold and delivered	.....	\$481,319.99
"	547,936 lbs. copper sold, not delivered	.....	185,072.91
	<u>2,060,870 lbs. copper (Average 32 1/3 cents per lb.)</u>		<u>\$666,392.90</u>
Add	215,438 lbs. copper estimated at 27 cts. per lb.		
	at mine	.....	58,168.26
	<u>2,276,308 lbs. copper total product for year</u>	.....	<u>\$724,561.16</u>
Add from sales of silver	.....		535.56
			<u>\$725,096.72</u>
EXPENDITURES			
Running expense at mine, as per detail	account herewith	.....	\$393,920.18
Expense, and copper charges	.....	\$11,977.98	
Transportation	.....	10,984.78	
Smelting	.....	29,073.99	
Insurance	.....	8,018.85	
Taxes	.....	903.57	
		60,959.17	\$454,879.35
			<u>\$270,217.37</u>
Add received from interest on loans	.....		10,422.67
" " "	sales of real estate, town of		
	Hancock, Mich	.....	131.28
Making profit per year over ordinary expenses	.....		<u>\$280,771.32</u>
Deducting amount paid for improvements on surface and	underground, as per vote of stockholders at		
	the adjourned annual meeting, held at Boston,		
	April 3, 1872 detail account herewith	.....	67,227.65
	Gives net result for year		<u>\$213,543.67</u>

current period's receipts and expenditures. The Directors' Report, which had presented the calculation of profit in prior years, was still found in the annual report, but the Statement of Business provided more detail (ie. it showed the quantities and values used to calculate gross earnings).

Statement of Assets and Liabilities

The second major change was the consolidation of the "Balance Sheet From the Books of the Quincy Mining Company" and the "Statement of Liabilities of the Quincy Mining Company, and of Assets, Exclusive of Real Estate, Machinery and Mining Implements" into the "Statement of Assets and Liabilities, Exclusive of Real Estate, Mine Plant, and Supplies in Use" (Figure 13).

FIGURE 13

Source: QMC annual report for 1872

STATEMENT OF ASSETS AND LIABILITIES, EXCLUSIVE OF REAL ESTATE, MINE PLANT, AND SUPPLIES IN USE	
Assets	
Loans on call	\$ 87,000.00
Cash in bank	4,546.71
Copper on hand (sold, but not delivered) 547,096 lbs.	185,072.91
Accounts receivable	17,528.00
Cash on hand at mine	16,779.13
	<u>\$310,926.75</u>
Liabilities	
Drafts unpaid, in transitu	\$7,210.61
Dividends unpaid	1,035.50
Accounts payable, "Boston"	2,943.06
" " " "at mine"	47,915.83
	<u>59,105.00</u>
Makes balance cash assets, immediately available	\$251,821.75
Add at mine, 269,298 lbs. mineral at 80 per cent makes 215,438 lbs. copper at 27 cts. per lb.	58,168.26
" " " supplies on hand, as per inventory on file	41,404.00
" " " Farm account, horses, wagons, &c.	12,566.82
" " " Accounts receivable	1,142.91
Gives total balance of assets	<u>\$365,103.74</u>
Less dividend payable Feb. 24, 1873, \$5.00 per share, or \$100,000.00.	

In summation, the financial schedules presented in the annual reports of the Quincy Mining Company between 1872 and 1877 were similar in most respects to those found in modern annual reports; the user had access to a balance sheet, an income statement and various supporting schedules. The information presented was consistent among the various schedules, and provided a reasonable means to evaluate the financial performance of the firm.

QMC'S EXTERNAL FINANCIAL REPORTING PRACTICES: 1878-1900

As shown in the previous section, the existence of informative and fully articulated financial statements evolved slowly within QMC, presumably in response to the perceived information demands of the marketplace. However, in 1878 financial data was virtually eliminated from the annual reports. Although financial data reappears in 1881, both the quantity and scope were significantly reduced. The detailed schedules of operating costs, and the efficiency measures found in the previous annual reports were permanently eliminated.

1878-1880

The annual report for 1878 provides only highly summarized financial information (Figure 14), essentially a condensed version of the Directors' Report from the previous years.²⁰ The

²⁰ Although the annual report did not include the normal financial schedules, data may have been provided to shareholders in a 'circular'. The annual report for 1878 states "... as already reported by circular to the stockholders, the charter under which the company has operated expired by limitation, March 30, 1878" The annual report for 1879 includes the statement "... the statement of assets and liabilities in our last report showed a balance of assets on hand as of date, January 1, 1879 as" These statements infer that financial schedules were available to the shareholders in 1878 even though the schedules were not included in the annual report for that year.

FIGURE 14

Source: QMC annual report for 1878

REPORT OF THE QUINCY MINING COMPANY FOR THE YEAR 1878

The shipment of the season was 3,554,210 pounds of mineral, which has been smelted and yielded about 84 14/100 per cent, or 2,991,950 pounds of refined copper.

The product for the past year has been 3,408,925 pounds, or 1,704 225/2000 tons, which has realized, estimating copper on hand in New York at 15 cents, and at the mine at 13 cents
 per pound \$447,510.50

The expenditures for the year are as follows:

Expenses at mine,	\$341,115.43	
Other expenses.	60,733.74	
		\$401,849.17

Leaving as mining profit	\$ 45,661.33
Add received from interest, etc.....	9,679.05
Giving as net result of the year's business	\$ 55,340.38

A dividend of \$1 per share, or \$40,000, payable February 10th, has been declared.

As already reported by circular to the stockholders, the charter under which the company has operated expired by limitation, March 30, 1878, and a new company, with the same corporate name has been organized under the general mining law of Michigan, with a capital, full paid of \$1,000,000, divided into 40,000 shares of \$25 each, to which all the rights, franchises and property have been transferred.

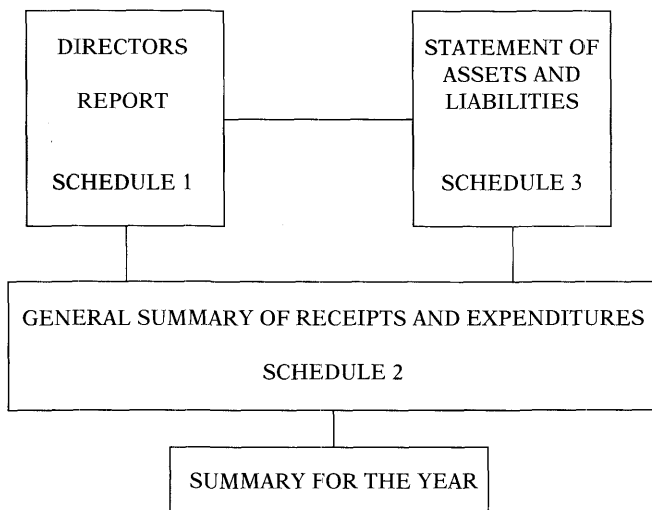
The condition of the mine is fully set forth in the agent's report, and attention is called to the important developments made in the north and south ends of the mine, from which the larger part of last year's product has been obtained. These openings continue to promise well for the future, and warrant the belief that the production of the present year will be a full average.

change in financial reporting practices coincides with the expiration of the corporate charter obtained by the Quincy Mining Company in 1848. Although the firm was reorganized under a new charter in 1878, there does not appear to have been any significant changes in management personnel, either at the company headquarters or at the mine. Nor does the reorganization appear to have changed financial reporting requirements. Thus, the changes appear to have been voluntary.²¹ During this period the financial reporting practices of the Quincy Mining Company reflect both the restricted disclosure of the British Secretive Model and similar motivations.

1881-1900

Figure 15, a schematic of the financial schedules included in the annual reports of the Quincy Mining Company between 1881 and 1900, clearly portrays the diminished scope of finan-

Figure 15
Schematic of Financial Schedules
Issued Between 1881 and 1900



²¹ The annual reports for 1879 and 1880 provide essentially the same information as in 1878 except for the addition of a calculation that adds "results of operations for the year" to the previous year's net asset balance and deducts dividends to arrive at the asset balance for January 1, of the next year.

cial reporting relative to previous years.²² The external reporting practices of the Quincy Mining Company between 1881 and 1900 display two dominant and interrelated characteristics. First, the longevity of the reporting formats used in 1881 suggests the financial reports adequately served the needs of the shareholders, consequently no changes were necessary. Since the firm was earning a profit (Figure 16) and paying substantial dividends (Figure 17), the Directors may have felt that it was no

FIGURE 16

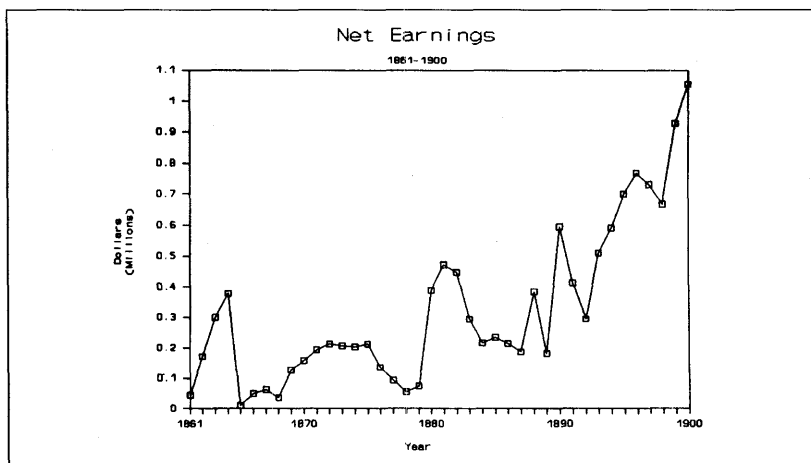
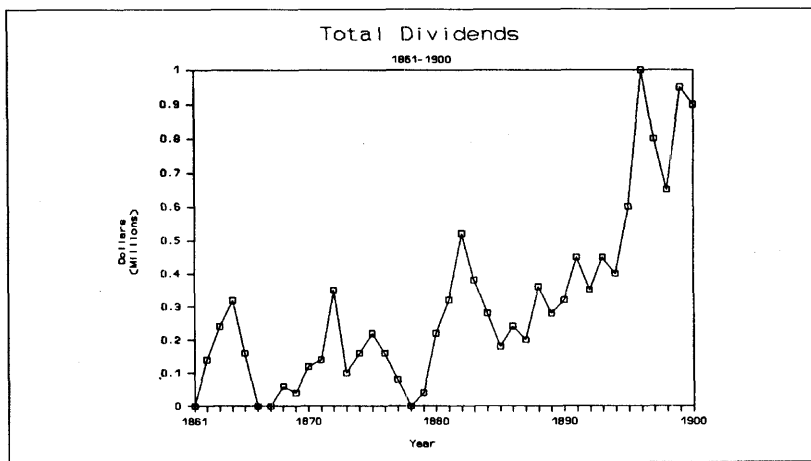


FIGURE 17



²² Since the formats of the schedules issued between 1881 and 1900 are virtually identical to those issued in 1877, they are not reproduced again at this

longer necessary to entice shareholder loyalty via demonstrations of efficiency and productivity. Their aggregation of financial information may lend credence to the claim that

creating a new pattern of organizational visibility, for instance, computational practices, can often significantly change organizational participants' perceptions of the problematic and the possible . . . Measures of efficiency, for instance, can create possibilities for new targets for managerial intervention and the bases of organizational rewards (Burchell, et al, 1980, p. 16).

Conversely, the elimination of these measures reduces the potential for shareholder intervention and focuses shareholder attention on areas more favorable to management.

The second characteristic is the elimination of all information related to the efficiency of the various mining processes. Although it is possible to find the total costs of mining, aggregation made it impossible to determine the costs of the individual operations at the mine (ie. stamp mill, surface operation, and mining operations). Consequently, external users could not evaluate operating efficiency.

The Quincy management appears to have been unwilling to provide the type of data found in the reports of earlier years that facilitated both internal and external comparisons. Instead, the emphasis of financial reporting was shifted to the earnings and net assets of the firm, which could be viewed as a change from an engineering (industrial) orientation to a financial perspective.

point. The Directors' Report provided the results of operations for the current year, including production quantities, gross earnings, expenses (subdivided into running expenses at the mine, building and construction and other) and miscellaneous income items. Net earnings for the year were reconciled to the net asset total at the end of the year. The "General Summary of Receipts and Expenditures of the Quincy Mining Company, From its Organization to . . ." presented cumulative and categorized earnings along with expenditures reduced by dividends paid. This total equaled the net assets at the end of the year. The "Statement of Assets and Liabilities, Exclusive of Real Estate, Mine Plant and Supplies in Use" provided a listing of the various asset and liability accounts, which when summarized, can be traced to the General Summary and the Directors' Report. The "Summary of the Year" provided two general types of information: the size and average wage of the work force, and various types of production quantity data. The only noteworthy exception to this general model occurred between 1895 and 1897 when the annual report included a "Trust Account Balance Sheet", which segregated the receipt and disbursement of funds received from stock issued to finance the acquisition of additional mining land.

SUMMARY AND CONCLUSIONS

Between 1861 and 1877 the financial schedules issued to the shareholders of the Quincy Mining Company reflected an engineering based reporting philosophy that emphasized efficiency measures and detailed operating costs for the various components of the mining operation. During this formative period the firm's financial reporting practices appear to reflect the dual nature of the management hierarchy, which divided responsibilities between the corporate headquarters and the site managers. In this sense, the external reporting was consistent with the firm's internal accounting practices. However, these reporting practices, which reflected both the physical reality of the management process and the cultural norms of the mining community, resulted in financial schedules that presented inconsistent information and did not articulate.

Between 1872 and 1877 the firm adopted revenue recognition criteria and expenditure reporting practices that resolved the inconsistencies and provided fully articulated financial schedules. In most respects the financial schedules issued by the Quincy Mining Company in 1877 were similar to their modern counterparts. However, the next three years (1878-1880) represent a transition period that was characterized by the virtual elimination of meaningful financial information from the annual reports. Subsequent financial schedules, issued between 1881 and 1900, reflect a dramatically different concept of the purpose of financial reporting. As the company's financial position improved and it became more attractive to the investment community, management no longer attempted to convince the individual shareholder that the mine was efficiently and effectively managed. Although the firm's accounting system still contained information that could be used to evaluate the operating efficiency of the various mine functions, this information was not available to the general public. Instead the shareholders were given only basic information on earnings and net assets, thereby forcing investors to make decisions based upon general market comparisons and dividend expectations.

REFERENCES

- American Institute of Certified Public Accountants, Inc. *Improving Business Reporting - A Customer Focus - Meeting the Information Needs of Investors and Creditors*. New Jersey: AICPA, 1994.

- Ansari, Shahid and K. J. Euske. "Breaking Down the Barriers Between Financial and Managerial Accounting: A Comment on the Jenkins Committee Report." *Accounting Horizons* 18, No. 2, (June 1995): 40-43.
- Boockholdt, James L. "Influence of Nineteenth and Early Twentieth Century Railroad Accounting On Development of Modern Accounting Theory." *The Accounting Historians Journal*. (Spring, 1978):9-28.
- Brief, Richard. "Corporate Financial Reporting at the Turn of the Century." *Journal of Accountancy* (May, 1987) :142, 144, 147-151, 154-157.
- Bryer, R. A. "The Late Nineteenth-Century Revolution in Financial Reporting: Accounting for the Rise of Investor or Managerial Capitalism." *Accounting Organizations and Society* 18 No. 7/8 (1993):649-690.
- Burchell, Stuart, Colin Clubb, Anthony Hopwood, John Hughes and Janine Nahapiet. "The Roles of Accounting in Organizations and Society." *Accounting Organizations and Society* 5, no. 1 (1980):5-27.
- Chandler, Alfred D. Jr. *The Visible Hand-The Managerial Revolution in American Business*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1977.
- Edwards, J. R. "Companies, Corporations and Accounting Change, 1835-1933: A Comparative Study." *Accounting and Business Research* 23, no. 89 (1992):59-73.
- _____, ed. *Legal Regulation of British Company Accounts 1836-1900*. New York: Garland Publishing, Inc., 1986.
- _____, ed. *British Company Legislation and Company Accounts, 1844-1976*. New York: Arno Press, 1980.
- Johnson, H. Thomas and Robert S Kaplan. *Relevance Lost*. Boston: Harvard Business School Press, 1987.
- Jones, Stewart and Max Aiken. "The Significance of the Profit and Loss Account in Nineteenth-Century Britain: A Reassessment." *Abacus* 30, No. (1994):196-230.
- Lankton, Larry D. and Charles K. Hyde. *Old Reliable*. Hancock Michigan: The Quincy Mine Hoist Association, 1982.
- Lee, Tom. "The Changing form of the Corporate Annual Report." *The Accounting Historians Journal* 21 No. 1 (June 1994):215-232.
- Littleton, A. C. *Accounting Evolution to 1900*. New York: Russell & Russell, 1933.
- Michael, Rodney R. and Larry D. Lankton. "Accounting Innovations: The Implications of a Firm's Response to Post Civil War Market Disruptions." *The Accounting Historians Journal* 21, No. 2 (1994):41-84.
- Merino, Barbara Dubis and Marilyn Dale Neimark. "Disclosure Regulation and Public Policy A Sociohistorical Reappraisal." *Journal of Accounting and Public Policy* 1 (1982):33-55.
- Morris, Richard D. "Corporate Disclosure in a Substantially Unregulated Environment." *Abacus* 20 No. 1 (1984):52-86.
- Parker, R. H. "Regulating British Corporate Financial Reporting in the Late Nineteenth Century." *Accounting, Business and Financial History* 1, No. 1 (1990):51-71.
- Previts, Gary John and Barbara Dubis Merino. *A History of Accounting in America: An Historical Interpretation of the Cultural Significance of Accounting*. New York: John Wiley & Sons, 1979.
- Sobel, Robert. *A History of the New York Stock Exchange*. New York: The Free Press, 1965.
- Skousen, K. Fred. *An Introduction to the SEC*. Cincinnati: South-Western Publishing Co. 1987.

Stewart, Ian C. "The Ethics of Disclosure in Company Financial Reporting In the United Kingdom 1925-1970." *The Accounting Historians Journal*. 18, No. 1 (June 1991):35-54.

Vangermeersch, Richard. "Comments on Accounting Disclosures In The Baltimore and Ohio Annual Reports From 1828 Through 1850." *Working Papers* 21-40. Academy of Accounting Historians (1979):318-337.