

Working Through the Records: Using Business Records to Study Workers and the Management of Labour

by JOHN C. RUMM

The workaday world. Do you comprehend it, oh my brother. Do you know what it means to rise with the sun and earlier, to hasten away with your little basket or bucket and to enter a dull shop, where nothing is in evidence save the implements of labor — machines, tools, and darksome oil stained walls and floors, and work, work, the live-long day, week after week, month after month, year after year. Do you know what it means to witness the best of your strength, the keenness of your intelligence going into the manufacture of something, the use of which you never have; the display of which you never see; the comfort of which you never feel.¹

Theodore Dreiser, a struggling young author who would later become a famous novelist, penned these words in 1903 while employed as a day labourer on the New York Central Railroad. His observations underscore a key problem confronting those who seek to study workers: understanding what it was like for those whose lives were shaped by their daily experiences in the workplace.

How are we to understand the experience of workers of earlier generations, those whose working lives were directly affected by the coming of industrialization and the shift from small shops and mills to giant factories and corporate enterprises? Workers' writings — letters, diaries, and recollections — are possible sources, though their quantities are limited, while many workers were illiterate or kept few written records. Contemporary observers, including proponents or opponents of industrialization and the coming of big business, generated a vast quantity of literature on the conditions of workers and on the nature of work. Although their books, articles, pamphlets, and public speeches are readily available, they are frequently contradictory, self-serving, or propagandistic. Testimony given by managers, workers, or contemporary observers before governmental investigatory commissions suffers from similar biases and limitations.² Census returns, reports prepared by bureaus of labour or industrial statistics, industrial directories, and trade-sponsored publications, provide considerable information regarding wages, hours, and working conditions. Such information, however, may be fragmentary, error-ridden, ambiguous, distorted, or difficult to interpret, so that its usefulness may be limited, and it sheds little light on individual workers.³

Thanks to the increasing interest and attention given by archivists in the United States and Canada in the years since the Second World War, important sources of information regarding the historical experiences of workers in the workplace have been acquired, described, and made available to researchers. These sources are the business records generated by the firms and companies that employed these workers. These records include correspondence between employers and workers, minutes of meetings, reports and other internal written communications, account books, payrolls, time books, and employee records. Ray Ginger, one of the first scholars to make extensive use of business records for studying workers, wrote in 1954:

These records have many advantages for the historian. Whereas pamphlets and newspapers are vague and generalized, business records are specific and often quantitative. Whereas public documents are often meant to mislead the audience, the internal records of a firm are intended to give accurate information. Payrolls, ledgers, intrafirm memoranda and correspondence, can be made to yield up much reliable evidence on [the condition of workers].⁴

Business records may be utilized to document a number of themes: the organization of work and the nature of production technologies; wages, hours, and working conditions; the demographic and occupational composition of the workforce; the attitudes of managers towards their employees; the development of company labour policies and strategies for recruiting, training, disciplining, and compensating workers; the expectations and values that workers brought with them to the workplace; the impact of industrialization, mechanization, and managerial actions upon workers; and workers' efforts to maintain or reassert autonomy and control over their work.

This article reviews some of the specific types of business records that can provide information on workers and on the management of labour. Historians and archivists alike have, in the past, surveyed archival holdings or made reference to current research trends in calling attention to the potential value of business records as source materials for documenting labour.⁵ This essay attempts to advance the discussion beyond these surveys and suggestions. Clark Elliott, writing in the *American Archivist* in 1981, has called for "use-studies" that would "attempt to relate types of use and users to the characteristics of the documentation itself, in order to determine how different categories of records series relate to the needs of different groups."⁶ In keeping with that recommendation, references will be made to specific recent articles and monographs written by scholars who have actually utilized business records as sources for studying labour.⁷ These illustrations will, it is hoped, serve two purposes: first, to show not only how business records *may* be used to study labour, but also how they *have* been used for this purpose; and second, to show how archivists might keep abreast of current research trends and interests as they formulate strategies for acquiring, appraising, and describing business records.

Interest in collecting and preserving business records developed slowly in the United States and Canada. While companies safeguarded administrative records such as minutes, legal files, contracts, and stockholders' papers, they placed little

emphasis upon preserving older or inactive records. Companies that *did* take steps to retain these records typically relegated them to warehouses, where neglect, fire, vermin, vandalism, and the ravages of time all took their toll. Moreover, prior to the Second World War, relatively few archival repositories endeavored to acquire business records. While some historical societies and university libraries acquired papers of businessmen and entrepreneurs or the records of local firms, no systematic efforts were made to collect business records.⁸

The emergence of the field of business history during the early decades of the twentieth century stimulated greater interest in the preservation of business records. In the United States, Harvard University's Graduate School of Business Administration, established in 1908, provided much of the impetus behind this effort. The Business School adopted a historical "case study" method of instruction, through which students analyzed how selected companies had resolved problems in business administration. In keeping with this approach, school officials undertook "a systematic and serious attempt to collect unprinted documents relating to business."⁹ By the early 1920s, the school's business archives included the records of several prominent early New England textile, banking, insurance, and machinery-building companies. The opening of Baker Library at Harvard in 1927 provided a larger repository for the business archives; by 1950 the archives held the records of nearly seven hundred firms in over one hundred and fifty industries.¹⁰ Efforts to acquire records intensified with the formation in 1925 of the Business Historical Society. Its members actively promoted the collection, appraisal, arrangement, and description of business records, and, through articles in its *Bulletin* and monographic histories of individual companies, demonstrated the potential of these records as sources for writing the history of business.¹¹

During the 1920s and 1930s, other repositories in the United States began following the lead of Baker Library and the Business Historical Society in collecting business records. Several historical societies endeavored more systematically to acquire records of local businesses. The State Historical Society of Wisconsin, for example, acquired large bodies of records of the McCormick Reaper, International Harvester, and Singer Sewing Machine companies; the State Historical Society of Colorado obtained records of several Western companies, including those of the Denver & Rio Grande Railroad; the Historical Society of Pennsylvania collected records of several nationally prominent banking, iron, railroad and machinery-building companies. Many university archives and libraries, including the University of Virginia, West Virginia University, the University of Missouri, Duke University, and the University of Alabama, also built up extensive holdings of business records.¹²

The bulk of these collecting efforts were aimed at the acquisition of records of eighteenth- and nineteenth-century firms. Few repositories possessed sufficient staff, space, or resources to collect, process, and describe the voluminous records of large twentieth-century corporations. One obvious solution was to encourage companies to establish their own records management programs. Beginning in the late 1930s, the Business Historical Society and the Business Archives committee of the Society of American Archivists collaborated in such a campaign, whose purpose was to persuade business executives of the value of preserving their company records. By 1950 a number of leading companies had established corporate

archives, including Firestone Tire and Rubber, the Insurance Company of North America, Armstrong Cork, Ford, Alcoa, Eastman Kodak, and Texaco.¹³

Efforts to collect and preserve business records gained greater momentum after the Second World War. More historical societies and university libraries joined the ranks of those repositories that had previously acquired business records, while the numbers of companies that established corporate archives and records management centres also increased.¹⁴ Several independent research libraries also began actively to collect company records. Since its establishment in 1961, for example, the Eleutherian Mills Historical Library (now known as the Hagley Library) in Wilmington, Delaware, has acquired the records of some five hundred firms, ranging from small rural textile mills and iron forges to records of such nationally-prominent corporate enterprises as the Du Pont Company, Sun Oil, Bethlehem Steel, the Pennsylvania Railroad, and Sperry-Univac. The Museum of American Textile History (formerly the Merrimack Valley Textile Museum) in North Andover, Massachusetts, has acquired the records of scores of textile, machinery-building, and engineering firms, mostly from the New England region, although including some national companies.¹⁵

In Canada, efforts to collect and preserve business records paralleled, yet lagged behind, the steps undertaken in the United States. From the late nineteenth century through the 1950s, the Public Archives of Canada, the provincial archives, local historical societies, and some university archives all collected business records. For the most part, however, the efforts were neither systematic nor consistent. Businesses, for their part, took little interest in preserving their own records. With few exceptions — the most notable being the Hudson's Bay Company and the Canadian Pacific Railway — little progress was made towards the establishment of corporate records centres.¹⁶

In large measure, the collection of business records lagged in Canada due to the lack of direction. There existed no Canadian organization comparable to the Harvard Business School, Baker Library, or the Business Historical Society, to promote the study and writing of business history or the collection of business records. As recently as 1984, a leading Canadian historian observed: "[business history] has not yet become an academic specialty in Canada. There are no journals, no academic associations, and almost no conferences dedicated to its systematic study."¹⁷

Developments in the 1960s and 1970s gave new impetus to Canadian efforts to collect and preserve business records. Representatives from the archival profession, the scholarly community, and industry formed a Business Archives Council of Canada in 1968, patterned upon the Business Historical Society. Although the council never lived up to the hopes of its organizers and ceased operations in 1973, it did serve to increase awareness of the need to acquire and preserve the records of manufacturing, industrial, and transportation companies. Indeed, by the early 1970s, great strides had been taken in this direction by many Canadian repositories. A survey published in 1973, *Primary Sources in Canadian Working Class History 1860-1930*, for example, lists scores of company records, representing firms in the iron and steel, railroad, electrical power, mining, chemical, machinery, ship-building, textile, and paper industries.¹⁸ Moreover, following the Symons Report's

recommendation in 1975 that companies should “preserve, arrange, and increase access to their historical records wherever this is appropriate,” a number of Canadian firms deposited records in independent repositories or established in-house records programs.¹⁹

In both the United States and Canada, the greater interest shown in collecting and preserving business records that developed after 1950 coincided with changing research interests of historians and other scholars. The “New Labour History” which emerged during the 1960s shifted the focus from the institutional development of the labour movement, to the lives, values, communities, and culture of workers themselves.²⁰ Some examined correspondence, reports, minutes, and other company records in order to describe employer labour policies and techniques for managing workers.²¹ Influenced by the quantitative methods developed by practitioners of the “New Social History,” labour historians also began making greater use of computers to analyze information about workers contained in payrolls, time books, employee files, and other business records.²²

The interests of business historians also shifted. Until the 1960s, business historians primarily wrote case histories of individual firms in which entrepreneurs, financiers, and senior executives received far more attention than did those who worked within these companies.²³ During the past two decades, however, business historians have begun considering broader themes.²⁴ The seminal studies of Alfred D. Chandler, Jr., have traced the emergence of new corporate administrative structures and managerial hierarchies in large enterprises.²⁵ Following Chandler’s lead, some business historians have begun to explore the relationships between markets, firm growth, and the development of bureaucratic employment systems.²⁶ Other authors have examined how managerial attitudes towards labour have shaped the development of corporate labour policies and programs.²⁷ Others, including several radical historians and economists, have studied the emergence of the factory system and the efforts made by managers to devise methods for controlling workers.²⁸ Yet another approach has been developed recently by historians who are interested in studying “corporate culture” — the beliefs, assumptions, and symbols that are “embedded in the daily practices and organizational structures” of the firm — and the manner in which that culture shaped the relationship between managers and workers.²⁹

As labour and business historians became increasingly interested in themes relating to the history of work and the experiences of workers, they began to make greater use of company records as source materials. Recognizing the informational value of business records, archivists have made considerable progress in collecting, arranging, and describing their holdings for researchers.

Company records are as varied in their nature and quality as are the companies that created them. A world of difference exists between the few cubic feet of records produced by the traditional small rural firm whose proprietor employed a handful of workers, and the tons and tons of records generated by the huge diversified bureaucratic enterprises that employ thousands of workers in plants and factories scattered throughout the country. Despite the many differences, however, certain record types common to both small and large companies are likely to contain information about workers and the management of labour. The following

discussion of records is intended to suggest the main types of records that have been used as sources for documenting labour.

Minutes

Minutes provide a record of the issues discussed and the actions taken at meetings, whether by the board of directors, by departmental or plant managers, or by managers and workers in committee. Gerald White has observed, "Minutes can be quite helpful in indicating the more pressing problems at various times and the steps taken for their solution."³⁰ Three types of minutes document workers and the management of labour: executive-level meetings, lower-level meetings, and union-employer meetings.

Board or executive committee minutes are most useful for dating key events in the history of the firm's labour-management relations, such as strikes, layoffs or plant closings, changes in wage or salary scales, or the inception of new policies or programs. Historians studying labour in early New England textile mills have used directors' minute books to document wage cuts and layoffs made necessary by the recession of the early 1840s.³¹ Minutes of meetings of the directors and executive committee of Buckeye Steel Castings Company record company-wide wage increases and the establishment of safety work and welfare programs.³²

Executive-level minutes, however, often report little more than the barest details of what transpired at a meeting, and seldom provide information on why particular actions were taken or decisions were made. They also furnish little sense of managerial disagreements and debates over policies and strategies. Correspondence, memoranda, reports, and other supporting documentation submitted to the board or executive committee may establish the context for particular decisions or actions. Executives' papers may include copies of notes taken at meetings or diary entries that stage the tone of a meeting. Gerald G. Eggert, for example, has relied on notes, memoranda of meetings, and diary entries recorded by William B. Dickson, a vice-president of U.S. Steel Corporation and Midvale Steel & Ordnance Company, to document the often acrimonious debates over wage increases, working hours, pension plans, employee representation plans, and other labour matters that took place during executive committee meetings.³³

Minutes of meetings held among heads of departments, plant managers, or supervisory personnel are much more likely to contain detailed information regarding managerial actions towards labour than are minutes of board or executive committee meetings. This fact reflects the division of responsibilities within larger companies: senior executives were chiefly concerned with company-wide policies and strategies, while lower-level officers dealt with day-to-day operating matters and the implementation of policies and procedures. As a result, minutes of meetings held by lower-level managers provide much more detail relating to specific problems involving workers and company labour policies than do executive-level meetings.

Minutes of meetings held by Du Pont's Executive Committee during the First World War, for example, contain little information on the serious labour problems which the company confronted when its workforce rose from five thousand to nearly ninety thousand employees. Senior executives considered department heads and

plant managers to be responsible for resolving those problems. Minutes of weekly meetings held among managers and supervisory personnel at several larger company plants during the war detail these labour-management problems and the efforts made at the local level to resolve them. Among the topics contained in these minutes are strikes and labour unrest over wages, hours, and work loads; shortages of labourers and skilled workers; the introduction of labour-saving machinery and the recruitment of women, Blacks, Mexicans, and immigrants from southern and eastern Europe to deal with the scarcity of labour; efforts to reduce high rates of turnover and absenteeism; the need to provide housing, medical care, food, education, and recreation facilities for thousands of workers and their families; and the progress of Americanization programs among immigrant workers. The minutes also include tabulations of employment levels, turnover, numbers of employees living in company-owned housing, and reasons why workers were leaving the workforce.³⁴

The usefulness of minutes of meetings between employers and representatives of employees' unions largely depends upon whether the union was company-dominated or an independent outside organization. Representatives of national unions insisted upon keeping their own minutes so that issues of dispute in collective bargaining negotiations were fully documented, as were the complaints and grievances of workers. Tamara Hareven, for example, has drawn extensively upon the Adjustment Files in the Amoskeag Manufacturing Company records for her study of workers in the company's textile mills. These files contain minutes and transcripts of hearings held to resolve grievances filed on behalf of employees by the United Textile Workers of America. Hareven notes that they describe workers' concerns over pay adjustments, piece-work rates, work paces and work loads, conditions in the workplace, transfers and promotions, job discrimination, overtime, and company efforts to curtail union-organizing activities. Using the information contained in these records, Hareven has been able to reconstruct the activities and operations of different workrooms in the textile factory and the dynamics of manager-worker relationships. In her words, the files "allow not only a reconstruction of the official relations between capital and labor, but also an exploration of the texture of daily relations within the workplace."³⁵

On the other hand, if the union were a company-sponsored "works council" (or a "company union," as labour organizers labelled such organizations), the company controlled the agenda and supplied the secretary; the minutes, not surprisingly, omitted information that management wished to exclude, such as workers' protests or grievances. Consequently, their value lies more in revealing managerial efforts to maintain control, rather than in depicting workers' concerns. Bruce Scott, in his study of the Industrial Works Council at the Toronto plant of Massey-Harris, provides an excellent critical analysis of the council's minutes in which he concludes that the council "proved to be primarily a tool of public relations for the company's management."³⁶ Organized during the 1920s, as were many other works councils or "employee representation plans," the council was ostensibly designed to introduce "industrial democracy" into the factory and to give managers and workers an equal voice in discussing matters of mutual concern such as safety, working conditions, or productivity levels. However, these meetings were most useful as forums through which the company unilaterally announced wage increases

or changes in company policies or decisions without any discussion or input from employee representatives. Scott concludes that the minutes contain little reliable information relating to workers' shop floor concerns or their attitudes towards managerial policies.

Correspondence

The term "correspondence" refers to incoming and outgoing letters, whether loose or copied into volumes. Two sub-series of correspondence may be found among company records: letters written by officers, and letters written by workers. The former generally comprise the bulk of the correspondence. Company officers wrote to partners, superiors, or subordinates; to family members and friends; to customers; and to their counterparts in other firms. Letters written by company officers document a variety of themes relating to labour and to the management of workers. They often provide insight into managerial attitudes regarding workers and reveal how managers responded to issues like union recognition, job security, safety and working conditions, arbitrary treatment, and other concerns raised by employees. They may also suggest the underlying motives and objectives that led to the development of company labour policies. Letters may trace the inception and implementation of actions and procedures for recruiting, hiring, training, supervising, disciplining, promoting, and compensating employees, and the nature of measures taken to counter union activities and labour unrest among employees. Letters written by workers to company officers, though less common, may also survive among the records of the firm. At whatever level correspondence was generated within the firm — on the factory floor, in the plant office, in the departmental headquarters, or in the executive suite — letters constitute basic sources for historical research on labour. Few other sources provide the immediacy, frankness, and detail available through correspondence.³⁷

To attempt to generalize about correspondence is difficult, given the marked variations between companies. No correspondence might survive for one older company, while thousands and thousands of letters may be extant for another. The correspondence preserved from a twentieth-century corporation may range from the files of executive officers that have been so weeded as to contain virtually no informative letters, to large runs of richly detailed letters written by lower-level officers. Despite this wide variation, some general observations may be stated.

First, letters written by executives are more likely to contain information relating to workers if these executives were active in family-owned and -managed companies. Family ownership and control characterized many nineteenth-century manufacturing concerns, particularly smaller firms whose operations were conducted in one location. Family members who held managerial positions personally supervised their employees and interacted with them on a daily basis. Letters written by these managers to other family members, friends, customers, and business associates, were often revealing about the company's workers and about actions taken in managing employees. Bess Beatty, who has examined letters written by members of the Edwin Holt family, the most extensive builders of textile mills in North Carolina, writes that in their correspondence "the industrialists ... drop[ped] the facade and portray[ed] realistically their economic priorities and the conflicts they had with employees." Beatty demonstrates that the public image of the Holts as

“benevolent paternalists” differed markedly from the hard-headed economic rationalism and rigid control over workers that emerged in their private letters to family members and other textile manufacturers.³⁸ Similarly, letters written by Henry W. Sage, the owner of one of the largest lumber mills in Michigan’s Saginaw Valley, to his sons and to company agents, display his conviction that workers should remain subservient to economic laws governing wages, hours, and working conditions.³⁹ Correspondence addressed by Charles Huston & Sons, a small iron-rolling firm in eastern Pennsylvania, to relatives and customers, recounts the family’s determination to uphold a paternalistic labour system during a period of worker unrest.⁴⁰

Family ownership and control persisted in many companies until well into the twentieth century. Even in some large corporations, such as the Du Pont Company or the McCormick Harvesting Machine Company, family members continued to exert active control as owners and managers. Alfred D. Chandler, Jr., writing in *The Visible Hand*, states: “The owner-managers prided themselves on their knowledge of a business they had done so much to build. They continued to be absorbed in the details of day-to-day operations.”⁴¹ Letters written by these family members document their continuing involvement in the management of labour. For example, correspondence sent during the 1870s and 1880s by Cyrus H. McCormick, president of the McCormick Company, directed the superintendent and other lower-level officials at a Chicago reaper factory to take various actions against striking iron molders and foundry workers, including firing union members, hiring strikebreakers, and installing molding machines.⁴² Similarly, letters written by Alfred I. Du Pont in 1906 to assistant managers and plant superintendents during a strike by workers at the company’s “home plant,” reveal the extent to which the Du Pont Company was willing to go to preserve its traditional paternalistic relationship with its workers: evicting striking workers from company-owned houses, bringing in strikebreakers and undercover detectives, and raising the wages of “loyal” employees.⁴³ The correspondence of George F. Johnson, Charles F. Johnson, Jr., and other members of the Johnson family, owners and managers of the Endicott-Johnson Company until the 1950s, documents their efforts to promote the ideology of a “square deal” between managers and workers through welfare plans, recreational outings, and pamphlets addressed to employees.⁴⁴

Family ownership and control, however, did not characterize all nineteenth-century companies. Large textile mills, iron forges, paper-making factories, and other concerns were established during the early decades of the century by groups of merchants and entrepreneurs who pooled their resources. The directors and officers of such companies hired resident superintendents or agents to oversee the day-to-day operations of the factory.⁴⁵ These officials regularly wrote to the company president or treasurer to keep them informed about operations and problems, including the management of workers. For example, letters written during the early 1800s by Samuel Slater, the mill agent in the first textile factory established in the United States, to William Moses and Almy Brown, the owners of the company, discuss the problems he encountered in recruiting, retaining, and disciplining workers, and preventing them from stealing company property.⁴⁶ The monthly letters sent by the agent of the Antietam Woolen Mill, a textile factory in western Maryland, to the company’s directors, describe the layout of production and the nature of work performed by employees, efforts to mechanize hand operations

to reduce the need for skilled workers, and the formulation of work rules to discipline employees.⁴⁷

Within larger railroad companies, the first “big businesses” to emerge in North America, the complexity of operations and problems created in the coordination of activities and train movements over a wide geographical area, led to the emergence of hierarchical organizational structures whose senior officials consisted of the president, the treasurer, the secretary, and the directors. Beneath these senior executives, in the middle level of management, were the general manager or general superintendent, and the divisional managers. These middle-level managers, in turn, supervised the operations of lower-level departmental and shop managers down to the ranks of foremen and supervisors. Lower-level officers sent a steady stream of letters upward through the hierarchy to keep middle-level managers apprised of problems and developments, and, in turn, received directives and instructions from above regarding company policies and procedures.⁴⁸ Many of the matters treated in this routine, day-to-day correspondence never came to the attention of those in the highest levels of the organization. It is not surprising, therefore, as Walter Licht has observed, that “the letters and memoranda of the first two generations of American railroad managers reveal that they devoted little formal attention to labor-related matters.... A view from the top thus offers a critical but only partial insight into the new world that the first two generations of American railway workers entered.”⁴⁹

It is primarily through the surviving letters exchanged between middle- and lower-level personnel, rather than through the letters of railway company executives, therefore, that most information on working conditions, the organization of work, and the management of workers will be located. For example, the general managers’ files of the Northern Pacific Railroad contain hundreds of letters from the 1870s to the 1890s concerning wages and salaries, work rules, the supply of labour, pension plans, strikes, and the company’s efforts to block the organization of its workers by the Railroad Brotherhoods and the American Railway Union.⁵⁰ Letters sent by engineers and crew foremen to the general manager of the Great Northern Railroad trace the recruitment and hiring of Japanese, Mexican, and Black unskilled labourers for construction work during the late nineteenth and early twentieth centuries.⁵¹

By the late nineteenth and early twentieth centuries, the hierarchical structure that had emerged within the railroad industry had spread to giant enterprises engaged in production. As the operations conducted by these companies became more complex and as they commanded ever-larger capital resources, owners became divorced from direct control, and professionally-trained career managers replaced family members in top- and middle-level management. In the years after the First World War, these corporate enterprises began to diversify their operations beyond their original product lines. To resolve the problems which developed in the administration of diversified enterprises, these companies adopted a decentralized, multidivisional corporate structure organized by product lines. Each division operated autonomously, as if it were a separate company; senior executives at the head of the corporation played no direct role in the administration of these divisions, but instead confined themselves to formulating company-wide policies and overseeing the financial resources of the entire enterprise.⁵²

The coming of the decentralized multidivisional corporate structure had profound implications for the nature of correspondence written by managers within different levels of the organization. Senior executives' correspondence increasingly related primarily to issues such as company finances, diversification, research and development, and sales and marketing. As a rule, labour was only treated in their correspondence when it became a company-wide concern, such as during the formulation of corporate labour policies, during periods of extensive strikes and worker unrest, when extended severe economic conditions resulted in plant closings, layoffs, high turnover, or shortages of workers, or when corporate takeovers or structural reorganizations forced the examination of corporate labour policies or programs. The rest of the time, labour was held to be an "operational" concern to be dealt with by department heads, plant managers, supervisors, and foremen.

Moreover, because of the nature of communications within the modern corporation, executives normally received only the most general information — and then only in summarized form — regarding operations and problems that occurred in lower levels of the organization. As JoAnne Yates has observed in her recent article on the development of internal communications systems within business, much information which flows upward through the hierarchy of the large firm never reaches the top, either by accident or intention. Because senior executives "needed and wanted only enough information to make the most general policy decisions," a "screening process" worked to summarize, analyze, and digest much of the correspondence flowing upward from lower levels before it reached the top level. This screening process kept virtually all first-hand information regarding operating matters and problems from coming to the attention of senior executives.⁵³

More direct and detailed information about workers and the management of labour exists in correspondence originating below the level of the senior executives. One source is letters written by specialists within the company's employee relations or personnel department. These specialists functioned in an advisory capacity to the operating or manufacturing departments. They kept abreast of national trends in employment, wages, hours, and benefits, administered company-wide employee magazines, recreation programs, and benefits plans, monitored the activities of national unions, provided assistance to departments experiencing labour problems, and conducted supervisory training and personnel research programs. Another source is the correspondence of middle- and lower-level managers, from the divisional managers down to plant managers and foremen. With few exceptions, however, these two sources — correspondence of the employee relations department, or of lower-level officers — are not preserved among the records of large corporations. Until these sources are available, researchers will have to rely upon the letters written by these departments and divisions that exist among the surviving files of executive officers.⁵⁴

Letters written by company officials provide one source of information regarding labour. Workers' letters which survive in company files are another key form of documentation. They supply direct, immediate, first-hand information regarding workers' values and aspirations. Workers wrote to companies to apply for employment, to seek information about job security, wages, and working conditions, or to protest unfair treatment. Historians who have studied early nineteenth-century textile, iron, and paper mill workers have relied upon letters written by employees

seeking jobs, to uncover workers' concerns regarding regular employment and steady earnings, to illustrate how these workers attempted to obtain higher wages, and to define the conditions of their employment on more favourable terms.⁵⁵ Letters written by job applicants also enable historians to trace how employers drew upon workers' ties of kinship and friendship to recruit new employees.⁵⁶

Employees' letters may also reveal workers' expectations and beliefs regarding their jobs, their fellow workers, and their employers. Judith McGaw notes in her recent study of the nineteenth-century Berkshire paper industry that letters written by workers to current and prospective employers "reverberate" with sentiments of pride and satisfaction in their work and abilities. Paper workers' letters also convey employees' notions of "manliness," "temperance", "equality", and other character traits and reveal how these workers assessed and responded to the actions of owners and managers according to these ideals.⁵⁷ Tamara Hareven observes in her study of workers employed in the mills of the Amoskeag Manufacturing Company that letters written by immigrant employees to overseers and agents "reveal their perception of the bosses as paternalistic figures and their own position as obedient 'children.'"⁵⁸

Internal Communications Documents

As company organizations became more hierarchical, newer and more structured kinds of written internal communication began to supplant or replace correspondence. The various types of documents devised to facilitate internal communications carried information downward, upward, or laterally within the organization.⁵⁹

Downward internal communications documents conveyed instructions, directives, or information from managers in higher levels of the organization to subordinates in lower levels. These documents include circulars, which gave directions of a semi-permanent nature to a large number of people; orders, which stated specific rules, directives, or requests to a single individual or a small group; memoranda, generally brief informal communications advising or giving information on a specific topic, that were sent within one office or between departments; bulletins, official notices of a semi-permanent nature, often summarizing reports or discussions relating to company procedures; manuals or handbooks, distributed to a select group, summarizing information on procedures and policies for ready reference; and newsletters, informal notices issued on a regular basis that contained information relating to company activities, events, and news of personnel.

Other documents carried information upward through the organization to keep managers at higher levels abreast of developments and occurrences relating to plant, departmental, or company operations. These include reports, submitted either on a regular basis (daily, weekly, monthly), or to meet special situations or circumstances, which presented information in narrative or statistical form or in a combination of both, and statements, also either of a regular or a special nature, which conveyed statistical information such as forecasts, estimates, or summaries of accounts.

All of these different forms of internal communications may contain information relating to workers. Statements, for example, may summarize plant or departmental employment figures, turnover levels, wage changes, or payroll costs; manuals may

detail a company's labour policies and their objectives; orders may convey plant managers' instructions to foremen regarding the organization of work or the hiring, firing, or disciplining of workers. Among the most important and widely used sources of documentation about workers and the management of labour is the report. Four sub-categories of reports that may be found among company records are likely to contain such information: those written by industrial engineers, by undercover detectives, by welfare workers, and by personnel managers.

As factories expanded and their operations became more complex during the late nineteenth century, leading industrial engineers promoted management techniques designed to systematize control over the factory, rationalize production processes, and increase productivity and labour efficiency. The most famous promoter of such reforms in factory administration was Frederick Taylor, the "father of scientific management." These industrial engineers devised standard production methods, reorganized the flow of work, conducted time and motion studies of workers to determine "scientifically" how long it should take to complete a task, and how the work should be performed, and developed incentive wage or bonus payment systems to reward workers who finished their tasks in or before a predetermined span of time.⁶⁰

The reports written by industrial engineers document the layout and organization of work within the factory, the nature of tasks performed by employees, and the reactions of workers to their efforts to increase labour efficiency.⁶¹ The archives of the Weyerhaeuser Company, for example, contain reports prepared by engineers of the Charles E. Bedaux Company, a consulting engineering firm. These reports present considerable information on the jobs and work loads of workers, on time and motion studies of workers' tasks, and on the development and implementation of bonus pay plans. These reports also detail workers' resistance to managerial efforts to strip them of their control and autonomy over their work.⁶² Observations of female mill spinners contained in reports written by an industrial engineer hired by the Amoskeag Manufacturing Company in 1911, document workers' collective efforts to establish their own production quotas and to restrict their output.⁶³

Manufacturers often relied upon networks of foremen and loyal workers to obtain informal, verbal reports on the activities of other employees. Beginning in the 1860s, however, this process of industrial espionage became formalized when companies began utilizing the services of private detectives employed by the famed Pinkerton's National Detective Agency or other firms. Brought in during strikes and periods of labour unrest, these undercover operatives took jobs in factories and mines, or as members of railroad crews, observing workers and submitting daily reports.⁶⁴ These reports must be used with care, given the biases of the investigators and their tendency to highlight "trouble-makers." Nevertheless, they provide a unique source of documentation regarding work processes, working conditions, and workers' attitudes. Charles K. Hyde has used detectives' reports in the files of the Quincy Copper Mining Company to obtain information on the organization of work, underground working conditions, and miners' sentiments towards their employers.⁶⁵ Reports prepared for the Ford Motor Company by agents of the American Protective League during and immediately after the First World War document the Automobile Workers' Union's efforts to organize workers at the com-

pany's Highland Plant in Detroit. Stephen Meyer relies upon these reports in *The Five Dollar Day*, a study of labour-management relations and paternalism at Ford, stating that they "identified the most active leaders and agitators [and noted] incidents of soldiering and output restriction, weak foremen and lapses of shop discipline, infractions of Ford rules (such as smoking, eating, or gambling during working hours), and workmen with sympathies toward Bolshevism, socialism, or even trade unionism."⁶⁶

In some instances, undercover agents went outside the workplace to gather information about workers in their homes, union lodges, social halls, or saloons. These reports offer a unique glimpse of workers' lives and communities. Du Pont Company records, for example, contain scores of reports prepared during the early 1890s by three undercover operatives from the Wilkinson Detective Agency, who had been retained to locate information regarding acts of arson against company property. Two male detectives spent much of their time conversing with workers in taverns located near the powder yards. A female detective, agent "E.N." (Emily Noble), disguised herself as a seamstress and went door-to-door offering sewing lessons in order to gain entry to workers' homes to speak with them or with members of their families. The reports prepared by these detectives shed light on workers' home lives and domestic furnishings, and record their views and attitudes towards Du Pont's paternalistic labour policies.⁶⁷

During the late nineteenth and early twentieth centuries, a number of firms established special "welfare" or "sociological" departments staffed by social and settlement workers, nurses, teachers, or other specialists. These welfare workers visited employees and their families in their homes, observed their living conditions and family relationships, treated illnesses, and proffered advice and instruction.⁶⁸ Some companies also relied upon these welfare workers to organize "Americanization" classes to teach English to newly-arrived immigrant workers and to promote middle-class values and habits. Reports produced by company welfare workers document paternalistic efforts to improve and reform working-class families. They provide information on workers' values, customs, lives, and culture. For example, reports prepared by nurses employed in the Amoskeag Manufacturing Company's Charity Department describe visits to workers' homes to provide coal, food, and medical care to infants, the sick, and the elderly, and to instruct mothers in housekeeping, cooking, and child-rearing.⁶⁹ Similar information is presented in reports written by the investigators and educators of the Ford Motor Company's Sociological Department; these reports also include case studies of attempts to improve the home life, spending and saving habits, and morality of individual workers, and summarize the results of Americanization work among immigrants who attended the Ford English School.⁷⁰

During the First World War, a number of companies established employment or "service" departments to deal with problems such as the scarcity of skilled labour and high rates of turnover and absenteeism among factory workers. Staffed by professionally trained personnel managers, these new departments assumed control over many of the paternalistic activities formerly performed by welfare workers. The new departments also stripped foremen of much of their authority over workers and rationalized company personnel functions, including setting wage

rates, standardizing employment forms and procedures, and training, promoting, disciplining, and discharging employees.⁷¹ Reports prepared by employment managers document the development and implementation of these functions and the administration of company towns, medical and safety programs, benefit and pension plans, credit unions, and employee magazines. For example, reports written by the Labor Department of the REO Motor Car Company summarize efforts to reduce turnover and strip foremen of their authority to hire and fire workers. They also trace the development of company programs designed to instill "REO Family Spirit" among workers, including a company magazine, recreation activities, and apprenticeship training classes. Personnel managers' reports may also provide statistical data on the composition of the workforce. Annual reports prepared by REO's Labor Department contain censuses on the nationalities of company employees.⁷² Reports and memoranda prepared by the Scovil Manufacturing Company's Employment Department during World War I contain data on the ethnicity, nationality, and rates of literacy of workers, the composition of the workforce by departments, and tabulations of the reasons why employees were discharged or left the company's service.⁷³

Works Diaries

In rural nineteenth-century iron forges, textile mills, and other firms, superintendents or overseers were often instructed by company directors to maintain a "works diary," similar to ships' logs or to the journals kept by some Southern plantation-masters. These works diaries were kept in order to provide a daily record of all matters pertaining to production and operations.⁷⁴ J.W. Lozier notes that the diaries kept by N.B. Gordon, superintendent and agent of the Mansfield Union Cotton and Woolen Manufactory in Mansfield, Massachusetts, constitute "an unusually good source" of information regarding breakdowns of machinery that caused interruptions in production, the recruitment of workers and their origins, Gordon's efforts to discipline the workforce, and his paternalistic labour practices.⁷⁵ Works diaries may also document factory and working-class life, including the daily routines of workers, their work habits, and traditions. The diary maintained by the clerk of Martha Furnace from 1808 to 1815, for example, contains entries describing the workers' drinking sprees and "frolics" at the conclusion of the furnace blast, their riots to protest the poor quality of food they received in the company's kitchen, and the weddings, picnics, quilting bees, and other social activities which wove together the fabric of a rural iron plantation.⁷⁶

Work Rules

The records of textile companies, railroads, engineering firms, and other companies often contain printed work regulations. These rules were posted in mills or distributed to employees when they were hired. Surviving rules document the structure of authority within the factory and reveal how manufacturers sought to establish work routines in order to increase the productivity of workers. They also show how mill owners and managers promoted habits of industriousness, discipline, and temperance among workers.⁷⁷

By the latter part of the nineteenth century, work regulations were often compiled into rule books which were printed and distributed to new employees.

Railroad companies, for example, prepared separate rule books for each occupational group among the workforce. These books set forth minutely detailed rules relating to the conduct and duties of employees. They may be used to reconstruct the nature of the tasks performed by employees within each occupational group. Paul Craven and Tom Traves, who have studied printed rule books from the 1850s in the records of Canadian National Railways, state that these sources provided “frequently the best available approximations to a description of the work processes for various occupations during this period.”⁷⁸

Discipline Records

While printed rules and rule books indicate how employers sought to discipline their workers, they do not reveal the extent to which these rules were enforced. As Walter Licht cautions in *Working for the Railroad*, rule books may only “provide a partial, surface view of ... the behavior expected of railway employees by their employers.”⁷⁹ Other records must be utilized to determine how managers enforced discipline. In earlier companies this information was usually not contained in separate records but appeared in records such as time sheets which showed docked time or lost wages for violations, or in ledger books which itemized fines levied against workers’ accounts. By the latter part of the nineteenth century, however, larger employers in railroad, iron and steel, and other companies began compiling dismissal lists or registers. These records identified employees who had been dismissed and stated the cause of their dismissal — for example, striking, insubordination, or intoxication. The information was circulated throughout the company to prevent the re-employment of discharged or troublesome individuals.⁸⁰ As Irene Du Pont, the assistant general manager of the Du Pont Company, observed in 1913, “It is essential that we have a list of men who have been discharged for a cause sufficiently grave to preclude our employing them at any other plant.”⁸¹ These records may be used to tabulate the number and percentages of fired workers and to rank the different causes for dismissals. However, their usefulness for measuring the extent to which employers enforced discipline is somewhat limited, since the records identify only those employees who had been released from the company’s service and do not include other workers who had been reprimanded, demoted, suspended, or fined. Getting a sense of the extent to which employers took action against workers for lesser violations, therefore, is often difficult. Walter Licht, who has studied dismissal registers compiled during the 1870s by the general superintendents of the Erie Railroad and the Chicago, Burlington & Quincy Railroad, concludes that such records “render little sense of how many derelictions were overlooked by local supervisors or were unseen.”⁸² Some companies maintained other types of records which make it possible to examine the enforcement of discipline for lesser infractions. For example, prior to 1913 the Du Pont Company kept employee work record cards that indicated every infraction of the rules, together with the nature of the violation; “green cards” were prepared for discharged employees.⁸³

Account Books

Account books may contain useful information about workers, particularly in the period before companies began recording payroll data in separate books. Companies which did not segregate payroll data maintained accounts for individual

employees in the company ledger. The bookkeeper credited a worker's account with his or her accumulated earnings at the end of a pay period, and debited from the account any expenditures for board, rent, purchases of groceries and supplies, fines, and other charges incurred by the employee. Workers received the balance of their accounts at the end of the year or when they left the company's service; their accounts were cleared and they received any surplus.⁸⁴ Using company account books, historians have traced workers' earnings and employer's paternalistic practices. Using the ledgers and cashbooks of some twenty Mid-Atlantic textile, iron, and gunpowder companies, Donald Adams, Jr., has compiled data on the earnings, standards of living, and economic status of workers during the early period of industrialization. J.W. Lozier has surveyed the surviving account books of a number of small rural textile mills in the New England and Mid-Atlantic regions to study mill-owners' provisions of housing, room and board, groceries, and other services to employees.⁸⁵

Account books may also contain information relating to working conditions, the organization of work, and efforts to discipline workers. Mary McConaghy, for example, has relied upon an extensive run of daybooks and other account books of the Whitaker Mill, a small woolen factory established near Philadelphia in 1813, to "reconstruct the composition and history of the labor force as well as the business and technological history of the mill." She found entries relating to the purchase of machinery for the factory, payments of piece-rates to weavers, and fines imposed upon workers. Using the information in these account books she was also able to make inferences about working conditions and the organization of the production process within the mill, and about the occupations and skills of workers employed in various rooms.⁸⁶ Similarly, Anthony Wallace has studied the daybook of Parkmount Factory, a small spinning mill in Chester County, Pennsylvania, from the early 1830s. He has used this single volume — the only extant business record of the company from that period — to reconstruct the organization of production, the composition of the workforce, and the regulation of conduct within the mill.⁸⁷

Larger textile, coal-mining, railroad, iron and steel, and other companies often kept specialized account book series recording the provision of housing, benefits, and services to workers. These account books include ledgers, cashbooks, and journals documenting the operations of company stores, boarding houses and tenements, and employees' benevolent associations or benefit societies. Joseph Walker, for example, has studied company store account books among the records of Hopewell Furnace, an early nineteenth-century rural Pennsylvania iron forge, to document employees' monthly purchases of food, clothing, and supplies; he has used the data obtained from these records to reconstruct the lifestyles and consumption patterns of workers.⁸⁸

Payrolls

Beginning in the early decades of the nineteenth century, larger textile mills, iron furnaces, railroads, and other companies began to maintain separate payroll books to record the amounts of money workers received for their services. These volumes contained entries broken down by pay periods, stating the worker's name, occupation, rate of pay, hours worked, and total earnings. Piece-rate books were also used in some factories to record the production and wages of workers whose

earnings were determined by their output⁸⁹ The information contained in the payroll and piece-rate books was regularly totalled up and tabulated on aggregate payroll distribution sheets.

Payroll records are frequently voluminous and bulky. However, they lend themselves to the systematic tracking of names through a sequence of volumes because entries for workers tend to appear in roughly the same location (although names were often misspelled by bookkeepers from one volume to the next). Payrolls are basic sources of information about individual workers' occupations, rates of pay, and earnings. Because many employers required employees to sign their names or place an "x" next to their account to show that they received their pay, the payroll entry may also indicate whether a worker was literate.⁹⁰ Payrolls also provide aggregate data relating to the composition of the workforce, its breakdown by occupation and skill level, and the ranges of pay and earnings within different occupational groups. Even fragmentary sets of payroll volumes or individual payroll sheets may furnish sufficient information to obtain an overview of a company's or plant's workforce and wage scales at a given point in time. For example, Paul Craven and Tom Traves have utilized a set of payroll sheets from 1854-55, covering machinists, millwrights, car builders, and other shopcraft employees, in the records of the Great Western Railway. Despite the limited time span covered by these sheets, Craven and Traves describe them as "a rich source of information" about the composition of the shops workforce, the rates of pay, and the pay differentials between various occupations and skill levels.⁹¹

Where extended chronological runs or sequences of payroll sheets or volumes survive, the data they contain may be extracted and used to create time series showing changes in wage movements, employment levels, turnover, and the composition of the workforce over periods of time. Robert Ozanne, for example, has utilized payroll books of the Chicago plant of the McCormick Company from 1848 to 1849 and from 1858 to 1960, to construct "wage profiles" showing significant increases or reductions in aggregate plant wages. He related the causes of these wage movements to strikes, unionism, labour market conditions, turnover levels, and other effects. Ozanne has also created wage chronologies showing changes in labourers' and skilled workers' pay rates and earnings over long periods of time.⁹² Historians have also used payroll data to trace the careers of individual workers over time in order to produce detailed analyses of turnover rates, the degree of workers' persistence or attachment to their jobs, and the extent of occupational mobility. Howard Gitelman, who has studied a fairly complete series of payroll volumes of the Waltham Watch Company for the period 1850-1890, writes that "payroll data ... permit an examination of occupational mobility at a level never before attempted, and one which is quite impossible using census records alone."⁹³ Using payroll records of some eighty railroad companies, Walter Licht has generated "longitudinal data" relating rates of turnover and occupational mobility among railroad employees to variables such as their length of service, their skill levels, their occupations when they entered and left employment, and their average daily earnings.⁹⁴

Time and Attendance Records

Employers utilized a variety of records to keep track of workers' time and attendance at work, including time books or time sheets covering a group of workers in a

department or mill, and time cards for individual workers. These records document the number of hours an employee worked or was absent from work each day; they sometimes include notations relating to disciplinary actions taken against employees, such as the docking of a day's wages, or statements of the reasons why workers were absent, quit or were fired. Like payroll records, time and attendance records are often bulky and may appear to have little research value. Indeed, in the past they have often been accorded low priority for retention. One archivist has asserted, for example, that too often "masses of old time sheets ... have been allowed to accumulate unnecessarily."⁹⁵ Another has written that "their potential yield to scholars is less than that of almost any other kind of document."⁹⁶

In recent years, however, time and attendance records have provided grist for a number of studies. Historians have studied them to gain insight into workers' customs, work habits, and values.⁹⁷ By tabulating the actual hours worked by employees and comparing the figures against a mill's total hours of operation to determine workers' rates of attendance or absence, historians have assessed the degree to which workers believed that companies met their desire for secure and stable employment.⁹⁸ Notations in these records relating to workers' infractions of work rules and to the reasons for their absence make it possible to evaluate the extent to which factory managers rigidly enforced discipline or levied fines for violations of work rules, or relaxed their enforcement in order to provide a more attractive work environment for employees.⁹⁹ One historian who utilized a mid-nineteenth-century mill time book to study Southern textile mill owners' efforts to discipline workers and to uncover the responses of employees to managerial authority, has written that few sources are "as richly descriptive of internal mill relations."¹⁰⁰

Employee Records

As company workforces swelled in size and company organizations became increasingly bureaucratic, standardized forms were devised for recording information on individual workers. Increasingly, too, external factors, such as unionization of a company's workforce or the enactment of workmen's compensation laws, forced companies to develop standardized employee records. These records included employment applications, personnel files, registers of employees' dates of entry and departure, union dues check-off cards, and pension or accident compensation registers.

These employee records document the increasingly bureaucratized nature of large corporations, and the emergence of centralized employment management. Collectively, because these records identify employees by name, they make it possible to link various types of information about individual workers from a variety of sources. Employment applications may recount a worker's prior experience and education and may also indicate his or her nativity, religion, marital status and dependents, and employed relatives; accident registers may show whether the worker or dependents received compensation for an injury; union dues check-off lists may reveal that he or she belonged to a union; personnel files may contain letters of recommendation, performance appraisals, records of disciplinary violations, and information relating to promotions, transfers, and changes in wage rates. While some of the information contained in such records may overlap, tracing an

employee's name through several records should fill in the gaps and provide much more information than could be obtained through a single source. For example, payrolls identify workers by name and give information about their occupations, rates of pay, and monthly or annual earnings; however, these records typically do not state employees' addresses. Employment applications, personnel files, or company housing registers should furnish this information.

Data derived from employee records may also be linked to information obtained from other sources. For example, knowledge of workers' places of residence facilitates searching through manuscript census returns, city directories, tax rolls, and other sources to uncover additional information about these employees. Links can be made with information in demographic or vital sources such as birth, marriage, and death certificates, obituaries, genealogical registers and family histories, inventories, wills, and probate records, baptism and church records, union, fraternal, and benevolent association membership records, savings bank records, insurance files, and company- or employee-sponsored magazines and newspapers.

The data-storage and manipulative capabilities of the computer have enabled social historians to link information derived from employee records and demographic or vital sources to create increasingly sophisticated career profiles of individual workers and their experiences. Thomas Dublin's elegant *Women at Work*, a detailed account of the backgrounds and experiences of nineteenth-century female textile mill workers in Lowell, Massachusetts, is a model of the type of study being produced by these new social historians. The starting-point for Dublin's study was the records of the Hamilton Manufacturing Company at Harvard University's Baker Library. These records included a nearly continuous series of payroll volumes from 1834 to 1900, together with rental ledgers containing entries for residents of company-owned dormitories, and employee registers which showed a worker's entry and departure dates, the room in which he or she worked, the place of residence in Lowell, and the worker's place of origin. Dublin sampled these volumes to generate preliminary information about some 1100 women who worked at the Hamilton mills. Having identified these workers, Dublin then traced them through Lowell city directories, manuscript census returns, church records, tax inventories, marriage, birth, and other vital records, and local histories and genealogies, to gather further information about their social origins. The resulting body of data has enabled him to examine the process of rural-urban migration and to determine how mill employment fitted into the career decisions and life cycles of the young women who came to the mills.¹⁰¹

Tamara Hareven's *Family Time and Industrial Time*, a study of workers' experiences at the Amoskeag Manufacturing Company, a textile factory in Manchester, New Hampshire, during the late nineteenth and early twentieth centuries, represents another example of the possibilities afforded by applying techniques of the new social history in the use of company records. Hareven has utilized some 73,000 employee files to "chart the rhythms of careers over workers' entire lives and under the impact of changing industrial and economic conditions." These employee files contain workers' hire and separation slips which furnish information on the gender, age, marital status, number of children and dependents, and nationality of workers, their dates of hire and separation, their job(s) and rates of pay, the reasons they left the company, and performance ratings. Hareven has sampled these to

analyze labour turnover and the decisions that workers made about their occupational mobility and career advancements. She has also examined city directories, church records, insurance records, and census returns, combining information from these sources with the data from the employee files to trace networks of kinship ties among the French Canadians who comprised the bulk of the company's workforce, and to create "work histories" of workers and their families. Hareven's findings have also formed the basis for extensive oral interviews with former company employees.¹⁰²

Conclusions

The variety of approaches to the study of labour undertaken by the "New Labour Historians" demonstrates the value of collecting and preserving business records. These records provide information, often not attainable through other sources, about workers and their experiences under industrialization, and about managers' continuing efforts to extend and enhance their authority and control over the workforce. Business records will not furnish all of the answers, but they will enable researchers to gain insights into and comprehension of what Theodore Dreiser termed "the workaday world."

Although it is not the purpose of this article to discuss issues relating to the acquisition, retention, and appraisal of business records, some remarks are in order. First, as has been implicitly argued, the value of business records for documenting labour warrants their acquisition and retention. Archivists at all levels, from the local to the federal, should actively strive to collect business records. They should also advise companies on the procedures to be followed in developing and implementing records retention and records management programs.

In acquiring the archives of larger companies, archivists should endeavour to collect not only executive-level minutes, correspondence, and policy-making documents, but also lower-level records that indicate how a firm's labour policies were implemented and show how workers responded to these policies. Most of the appraisal strategies that archives have developed to reduce the voluminous records of large enterprises to a manageable whole do not provide sufficiently for the retention of such lower-level records. Under the "time capsule" or "tip-of-the-iceberg" approach, developed at the Baker Library during the 1950s and still followed by many repositories today, archivists identify certain categories of "important" records which contain information presumed most likely to be of use to the company or to the business historian.¹⁰³ This model recommends the preservation of all executive-level records, together with other records which provide summary data or aggregate information on various functions such as production, personnel, sales, engineering, and public relations. The decision to retain these records is based on the assumptions that "all important decisions and policies are made at the top," and that all essential information pertaining to lower-level operations ultimately reached the upper level of the corporate hierarchy in summary form.¹⁰⁴ Using this approach, only about two to five percent of the records are retained.¹⁰⁵

While such "tip-of-the-iceberg" approaches may enable archivists to meet the criterion of "sav[ing] the maximum amount of information consistent with the smallest physical bulk," they also may greatly reduce or destroy some of the most

valuable records for documenting labour.¹⁰⁶ Personnel files, employees' time cards, and payroll volumes — all of which may occupy considerable space — are too often relegated to the scrap pile. To be sure, some of the information contained in these records may be available in summary or aggregate form through other records; for example, payroll analyses or recapitulations will document company, plant, or departmental wage bills. But these records may provide insufficient information for studying changes in wage rates, the composition of the workforce, or the nature and extent of labour turnover within the firm. Discarding records that identify employees by name may also prevent researchers from tracing individual employees and creating linkages to census returns, birth and marriage certificates, city directories, and other types of vital or demographic records.

Until recently, archivists have tended to assess the significance of business records in terms of the level at which these records were created. In doing so, they took their cue from business historians, who relied upon minutes of executive-level meetings, corporate officials' working files, and legal documents in studying the development of modern administrative methods and in writing histories of individual enterprises. Laurence Burnette's comments illustrate how the predilections of business historians who studied the development of administration within large companies have shaped archivists' decisions regarding the appraisal of corporate records. Observing that "it is [the files of the executive office] which will prove most productive for an understanding of the managerial development of the enterprise," Burnette identifies "key people" in the executive office of the modern corporation "who produce records of greatest historical significance." He includes among these officers the members of the board of directors and executive committee, the treasurer, the secretary, the counsel, and the vice-presidents responsible for sales, manufacturing, and research and development.¹⁰⁷

It is the office files of these senior executives, together with minutes of directors' and executive committee meetings, policy statements and manuals, and other forms of administrative records, which are the records that tend to be retained by repositories which have followed "tip-of-the-iceberg" approaches in appraising large industrial or corporate collections. What do not tend to survive, however, are the correspondence, memoranda, minutes, and other records generated at the level of the department or the individual plant that would document the implementation of company labour policies and the nature of the day-to-day interactions between managers and workers. Howell Harris, whose study *The Right to Manage* describes the nature of corporate labour relations in the 1940s, observes in a recent essay that "the business of getting, training, motivating, disciplining, and keeping workers" was not "the enduring, central problem of management in American manufacturing firms." Instead, he writes, "most of the time, for most firms, these matters are routine and unproblematic."¹⁰⁸ But our knowledge of how this "routine," yet critical, aspect of the modern corporation developed during the twentieth century is still very limited.¹⁰⁹ It is likely to remain so unless archivists make greater efforts to acquire and preserve the letters, reports, and other records generated by plant managers and foremen that document it.

In keeping with this desideratum, archivists should endeavour to work more closely with the records managers within corporate archives who are developing retention schedules for company records. Archivists may thus be in a position to

acquire records such as lower-level correspondence files or employees' time cards that records managers might recommend for destruction because they hold no inherent value for the company. A few years ago, the writer attended a session at an archives conference on the appraisal and retention of business records. Most of the people attending the session were corporate records managers. We were given a list of fifty document categories, ranging from minutes to press releases, representing the records of a hypothetical company, and were asked to identify the ten records series we would retain. As both a historian and an archivist, I selected records that in my opinion would offer the greatest potential for research: plant managers' correspondence files, managers' minutes, payrolls, time cards, personnel files. The records managers generally opted to retain press releases, advertisements, annual reports, proxies, prospectuses, and financial statements. I am not suggesting that any of the choices was wrong, but rather that the insights of archivists and historians may help to preserve records of potentially rich informational value that otherwise might be destroyed.

Repositories should not only attempt to acquire older records from companies, but they should also negotiate for current or on-going records that document labour, especially personnel files. To ensure privacy and protect the confidential nature of these records, repositories may be able to acquire them from companies by agreeing to place them under time seals — perhaps by using as a model the 70-year time seal used by the U.S. National Archives in making manuscript census returns available for historical research.

These remarks apply not only to the larger, nationally-prominent companies which operate in the United States and Canada, but also to the thousands of small- and middle-sized concerns, particularly those located on the periphery of the economy. Such marginal companies rarely adopted new managerial practices; instead their proprietors exploited the unskilled or under-skilled workers, including undocumented aliens, women, and teenagers, who comprised the workforce, paying them low wages, forcing them to work long hours, offering little or no fringe benefits and few guarantees of steady employment, and doing little to improve working conditions. Archivists should make an effort to acquire the records of these companies as they become bankrupt or go out of business, so that more attention can be given to the history of workers and the management of labour within these firms.

Finally, in acquiring business records, archivists should not measure the value of these records simply in terms of the space they occupy. To be sure, some companies have generated tons and tons of payroll volumes, personnel files, lower-level correspondence, and other records, and few institutions possess either the space or the staff to adequately collect, appraise, and store these voluminous records. As my remarks have suggested, however, historians have made increasing use of these types of records in studying workers and the management of labour. Archivists should devote greater attention to the development of techniques for preserving the information within these records micrographically or through such new technologies as optical-disk systems, or for sampling them scientifically to reduce their numbers while retaining sufficient coverage to make them useful for researchers. At the same time, archivists should not be deterred from preserving records simply because they are fragmentary in nature. Even in fragmentary form, many business records may still provide useful information about labour, particularly if these

records identify workers by name so that the information can be linked to vital and demographic records.

Business records have been used in a variety of ways to document the history of workers and the management of labour. The opportunities for further research in company records are many; the need to collect additional business records and make them available to researchers is great.

Notes

- * The author wishes to acknowledge with gratitude the assistance of Carolyn Stallings, and the comments made by Rod Young and three anonymous referees on a preliminary draft of this article.
- 1 Theodore Dreiser, *An Amateur Laborer*, ed. Richard W. Dowell *et al.* (Philadelphia, 1983), pp. 176-77.
 - 2 Ray Ginger, "Labor in a Massachusetts Cotton Mill, 1853-60," *Business History Review* 28 (1954), pp. 67-73; Bess Beatty, "Textile Labor in the North Carolina Piedmont: Mill Owner Images and Mill Worker Response, 1830-1900," *Labor History* 25 (1984), pp. 485-490; Daniel Nelson, *Managers and Workers: Origins of the New Factory System in the United States, 1880-1920* (Madison, 1975), p. 86.
 - 3 Beatty, "Textile Labor," p. 490; Nelson, *Managers and Workers*, pp. 127-28, and 198, note 33; Alexander Keyssar, *Out of Work: The First Century of Unemployment in Massachusetts* (Cambridge, England, 1986), pp. 1-5, 342-58, 362, note 1, and 363, note 15; William Wylie, "Nebulous Substance: The Portrayal of Iron and Steel Employment in the Printed Census Reports of British North America, 1851-1891," *Archivaria* 19 (Winter 1984-85), pp. 122-33.
 - 4 Ginger, "Labor in a Massachusetts Cotton Mill," p. 67.
 - 5 See, for example, T.D. Clark, "Records of Little Businesses as Sources of Social and Economic History," *Bulletin of the Business Historical Society* 19 (November 1945), pp. 151-58; W.H. Chaloner, "Business Records as a Source of Economic History," *Journal of Documentation* 4 (June 1948), pp. 4-12; J.M. Skaggs, "Social Science Sources in Business Records," *Rocky Mountain Social Sciences Journal* 7 (October 1970), pp. 137-42; George Sayers Bain and Gillian B. Woolven, "The Primary Materials of British Industrial Relations," *British Journal of Industrial Relations* 9 (1971), pp. 395-98; Edwin Green, "Business History, Management Education and Business Archives," *Business Archives* n.s. 2:5 (December 1973), pp. 19-20; Russell G. Hann and Gregory S. Kealey, "Documenting Working-Class History: North American Traditions and New Approaches," *Archivaria* 4 (Summer 1977), pp. 109-110; Richard Croucher, "Business and Labour History," *Bulletin of the Society for the Study of Labour History* 40 (Spring 1980), pp. 58-61; Walter Licht, "Labor Economics and the Labor Historian," *International Labor and Working Class History* 21 (Spring 1982), pp. 59-60; Anthony Slaven, "The Uses of Business Records: Some Research Trends in British Business History," *Business Archives*, n.s. 5:1 (November 1984), pp. 25-26; and Howard F. Gospel, "A Note on the Personnel Archives of Selected American Firms," *Business Archives* 51 (November 1985), pp. 41-44.
 - 6 Clark Elliott, "Citation Patterns and Documentation for the History of Science: Some Methodological Considerations," *American Archivist* 44 (Spring 1981), p. 132.
 - 7 I will also offer some examples derived from my own extensive research in the records of E.I. du Pont de Nemours & Company in the Hagley Library, Wilmington, Delaware, for my doctoral dissertation at the University of Delaware, the tentative title of which is "Managing Labor at Du Pont, 1802-1921."
 - 8 Francis X. Blouin, Jr., "An Agenda for the Appraisal of Business Records," in Nancy E. Pease, ed., *Archival Choices: Managing the Historical Record in an Age of Abundance* (Lexington, 1984), pp. 62-63; O. Laurence Burnette, Jr., *Beneath the Footnote: A Guide to the Use and Preservation of American Historical Sources* (Madison, 1969), pp. 104-105, 112-14; Christopher L. Hives, "History, Business Records, and Corporate Archives in North America," *Archivaria* 22 (Summer 1986), pp. 40-42, 48-49; John H. Archer, "Business Records: The Canadian Scene," in David

- S. Macmillan, ed., *Canadian Business History: Selected Studies, 1947-1971* (Toronto, 1971), pp. 288-90; T.H.B. Symons, *To Know Ourselves: The Report of the Commission on Canadian Studies*, 2 vols. (Ottawa, 1975), 2: 78-79.
- 9 Minutes of Harvard Business School Visiting Committee, January 11, 1909, quoted in Florence Bartoshesky, "Business Records at the Harvard Business School," *Business History Review* 59 (Autumn 1985), p. 476. See also Hives, "History, Business Records, and Corporate Archives," p. 42, and Alan Wilson, "Problems and Traditions of Business History: Past Examples and Canadian Prospects," in Macmillan, *Canadian Business History*, p. 306.
 - 10 Bartoshesky, "Business Records at Harvard," pp. 476-83; Hives, "History, Business Records, and Corporate Archives," pp. 42-43.
 - 11 Bartoshesky, "Business Records at Harvard," pp. 477-79; Blouin, "Agenda for the Appraisal of Business Records," pp. 62-66; Wilson, "Problems and Traditions of Business History," pp. 306, 309-10; Richard S. Tedlow, "Business History in the United States: Past Accomplishments and Future Directions," *Annali di Storia dell' Impresa* 1 (1985), pp. 391-92.
 - 12 Blouin, "Agenda for the Appraisal of Business Records," p. 69; Burnette, *Beneath the Footnote*, pp. 112-13; Philip M. Hamer, ed., *A Guide to Manuscripts and Archives in the United States* (New York, 1961); Library of Congress, United States, *The National Union Catalog of Manuscript Collections, 1959-1961* (Ann Arbor, 1962).
 - 13 Blouin, "An Agenda for the Appraisal of Business Records," pp. 66-67 and p. 78, note 21; Hives, "History, Business Records, and Corporate Archives," pp. 46-48; David R. Smith, "A Historical Look at Corporate Archives," *American Archivist* 32 (1969), pp. 247-48.
 - 14 Burnette, *Beneath the Footnote*, pp. 113-14; Robert W. Lovett, *American Economic and Business History: A Guide to Information Sources* (Detroit, 1971), p. 77; Julia Niebuhr Eulenberg, "The Corporate Archives: Management Tool and Historical Resource," *The Public Historian* 6 (Winter 1984), pp. 21-37; George David Smith and Laurence E. Steadman, "Present Value of Corporate History," *Harvard Business Review* 59:6 (November-December 1981), pp. 164-73. In recent years, cost-cutting measures undertaken by corporate executives have resulted in the elimination of some records centres. At the same time, however, other repositories have moved to acquire and preserve these companies' records. See, for example, the discussion of efforts made by the University of Akron to acquire the records of Firestone, and by Duke University to acquire the J. Walter Thompson archive, in Frederick Rose, "In Wake of Cost Cuts, Many Firms Sweep Their History Out the Door," *Wall Street Journal*, 11 December 1987.
 - 15 John Beverly Riggs, *A Guide to Manuscript Collections in the Eleutherian Mills Historical Library* (Wilmington, 1970); Riggs, *A Supplement to the Guide to Manuscript Collections at the Eleutherian Mills Historical Library* (Wilmington, 1975); Michael Nash, "Business History at the Hagley Museum and Library," *Business History Review* 60 (Spring 1986), pp. 104-20; Helena E. Wright, *The Merrimack Valley Textile Museum: A Guide to the Manuscript Collections* (New York, 1983); Thomas Dublin, "The Merrimack Valley Textile Museum — An Appreciation," *Labor History* 25 (Spring 1984), pp. 240-42; Dorothy Truman, "The Museum of American Textile History: Archival Sources for Business History," *ibid.* (Winter 1986), pp. 641-50.
 - 16 Hives, "History, Business Records, and Corporate Archives," pp. 49-50; Archer, "Business Records: The Canadian Scene," pp. 288-89, 293-94, 299-301; Wilson, "Problems and Traditions of Business History," pp. 313-15; Symons, *To Know Ourselves*, 2: 78-79; Consultative Group on Canadian Archives, Social Sciences and Humanities Research Council of Canada, *Canadian Archives* (Ottawa, 1980), p. 92; Christian Norman, "Business Archives and Business History," *The History and Social Science Teacher* 18 (December 1982), pp. 91-92; Tom Traves, ed., *Essays in Canadian Business History* (Toronto, 1984), pp. 5-11.
 - 17 Traves, *Essays in Canadian Business History*, p. 5.
 - 18 Russel G. Hann, Gregory S. Kealey, Linda Kealey, and Peter Warrian, *Primary Sources in Canadian Working Class History, 1860-1930* (Kitchener, 1973); see also the listing of records in Archer, "Business Records: The Canadian Scene," pp. 299-302.
 - 19 Symons, *To Know Ourselves*, 2: 79; Hives, "History, Business Records, and Corporate Archives," pp. 49-57; Norman, "Business Archives and Business History," pp. 92-98.
 - 20 Representative studies in the "new labor history" by U.S. historians include David Montgomery's *Workers' Control in America: Studies in the History of Work, Technology, and Labor Struggles* (Cambridge, England, 1979), and *The Fall of the House of Labor: The Workplace, the State, and American Labor Activism, 1865-1925* (Cambridge, England, 1987); David Brody's *Steelworkers in America: The Nonunion Era* (Cambridge, Massachusetts, 1960), and *Workers in Industrial America: Essays on the Twentieth Century Struggle* (Oxford, 1980); Herbert Gutman's *Work,*

- Culture & Society in Industrializing America* (New York, 1976) and the posthumously published collection of his essays, *Power and Culture: Essays on the American Working Class* (New York, 1987), edited by Ira Berlin. Representative studies written by Canadian scholars include Bryan Palmer's *A Culture in Conflict: Skilled Workers and Industrial Capitalism in Hamilton, Ontario, 1880-1900* (Cambridge, England, 1979), and *Working-Class Experience: The Rise and Reconstitution of Canadian Labour, 1880-1980* (Toronto, 1983), and Craig Heron and Robert Storey, eds., *On the Job: Confronting the Labour Process in Canada* (Kingston and Montreal, 1986).
- 21 See, for example, Stanley Buder, *Pullman: An Experiment in Industrial Order and Community Planning, 1860-1930* (New York, 1967); Gerald G. Eggert, *Steelmasters and Labor Reform: 1886-1923* (Pittsburgh, 1981); and Stephen Meyer III, *The Five Dollar Day: Labor Management and Social Control in the Ford Motor Company, 1908-1921* (Albany, 1981).
 - 22 Representative works here include Howard M. Gitelman, *Workingmen of Waltham: Mobility in American Urban Industrial Development* (Baltimore, 1974); Thomas Dublin, *Women at Work: The Transformation of Work and Community in Lowell, Massachusetts, 1826-1860* (New York, 1979); Tamara K. Hareven, *Family Time and Industrial Time: The Relationship between the Family and Work in a New England Industrial Community* (Cambridge, England, 1982); Jonathan Prude, *The Coming of Industrial Order: Town and Factory Life in Rural Massachusetts, 1810-1860* (Cambridge, Massachusetts, 1983); Walter Licht, *Working for the Railroad: The Organization of Work in the Nineteenth Century* (Princeton, 1983); and Gerald Zahavi, *Workers, Managers, and Welfare Capitalism: The Shoeworkers and Tanners of Endicott Johnson, 1890-1950* (Urbana, 1988). Concerning the "new social history" and its relevance to archival collecting, see Dale C. Mayer, "The New Social History: Implications for Archivists," *American Archivist* 48 (Fall 1985), pp. 388-99, and Tom Nesmith, "Archives from the Bottom Up: Social History and Archival Scholarship," *Archivaria* 14 (Summer 1982), pp. 5-26.
 - 23 Business historians continue to write histories of individual firms, of course, and in recent years some of them have produced more balanced accounts which give greater attention to workers and the management of labour than did authors who wrote typical company histories before the 1960s. See, for example, Charles W. Cheape, *Family Firm to Modern Multi-National: Norton Company, a New England Enterprise* (Cambridge, Massachusetts, 1985), and Howell Harris's review of Cheape's study in "Give Us Some Less of that Old-Time Corporate History," *Labor History* 28 (Winter 1987), pp. 83-88.
 - 24 Tedlow, "Business History," pp. 387-408; Ralph S. Hidy, "Business History: Present Status and Future Needs," *Business History Review* 44 (1967), pp. 483-98.
 - 25 Alfred D. Chandler, Jr., *Strategy and Structure: Chapters in the History of the American Business Enterprise* (Cambridge, Massachusetts, 1962); Chandler, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, Massachusetts, 1977). Concerning Chandler's influence upon the historiography of American business, see Tedlow, "Business History in the United States," pp. 394-97, 401-402, and Thomas K. McCraw, "The Challenge of Alfred D. Chandler, Jr.: Retrospect and Prospect," *Reviews in American History* 15 (March 1987), pp. 160-178. Francis X. Blouin, Jr., reviewed *The Visible Hand* and suggested how it might influence the appraisal of business records in "A New Perspective on the Appraisal of Business Records," *American Archivist* 42 (July 1979), pp. 312-20.
 - 26 Howard F. Gospel, "Managerial Structures and Strategies: An Introduction," in Gospel and Craig Littler, eds., *Managerial Strategies and Industrial Relations* (London, 1983), pp. 1-24; Sanford M. Jacoby, *Managers, Unions, and the Transformation of Work in American Industry, 1900-1945* (New York, 1985).
 - 27 Examples include Stephen J. Scheinberg, "The Development of Corporation Labor Policy, 1900-1940" (Ph.D. diss., University of Wisconsin, 1966); Michael Bliss, *A Living Profit: Studies in the Social History of Canadian Business, 1863-1911* (Toronto, 1974); Stuart D. Brandes, *American Welfare Capitalism, 1880-1940* (Chicago, 1976); Howell J. Harris, *The Right to Manage: Industrial Relations Policies of American Business in the 1940s* (Madison, 1982); and Howard M. Gitelman, *Legacy of the Ludlow Massacre: A Chapter in American Industrial Relations* (Philadelphia, 1988).
 - 28 Representative works include Harry Braverman, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century* (New York, 1974); Daniel Nelson, *Managers and Workers: Origins of the New Factory System in the United States, 1880-1920* (Madison, 1975); David F. Noble, *America by Design: Science, Technology, and the Rise of Corporate Capitalism* (New York, 1977); Richard Edwards, *Contested Terrain: The Transformation of the Workplace in the*

- Twentieth Century* (New York, 1979); Dan Clawson, *Bureaucracy and the Labor Process: The Transformation of U.S. Industry, 1860-1920* (New York, 1980); and David M. Gordon, Richard Edwards, and Michael Reich, *Segmented Work, Divided Workers: The Historical Transformation of Labor in the United States* (Cambridge, England, 1982).
- 29 Charles Dellheim, "Business in Time: the Historian and Corporate Culture," *The Public Historian* 8 (Spring 1986), pp. 9-22, quote at p. 13; Dellheim, "The Creation of a Corporate Culture: Cadburys, 1861-1931," *American Historical Review* 92 (February 1987), pp. 13-44; Robert Storey, "Unionization Versus Corporate Welfare: The 'Dofasco Way'," *Labour/Le Travailleur* 12 (Fall 1983), pp. 7-42; Gerald Zahavi, "'Negotiated Loyalty': Welfare Capitalism and the Shoemakers of Endicott-Johnson," *Journal of American History* 70 (March 1983), pp. 602-20; and David E. Nye, *Image Worlds: Corporate Identities at General Electric, 1890-1930* (Cambridge, Massachusetts, 1985).
 - 30 Gerald T. White, "The Business Historian and His Sources," *American Archivist* 30 (June 1967), p. 27.
 - 31 Dublin, *Women at Work*, p. 108; William Sisson, "Studies of Labor Management and Conflict: The Case of the Textile Industry, 1800-1880" (paper presented at the Duquesne History Forum, Pittsburgh, 1983; copy in author's possession), pp. 9-10 and 43, note 13.
 - 32 Mansel G. Blackford, *A Portrait Cast in Steel: Buckeye International and Columbus, Ohio, 1881-1980* (Westport, Connecticut, 1982).
 - 33 Eggert, *Steelmasters and Labor Reform*.
 - 34 Minutes of meetings of Du Pont's Executive Committee are located at the company's headquarters in Wilmington and are not available to scholars; however, typescript extracts and summaries are found among the papers of senior executives which have been deposited in the Hagley Library. Minutes of meetings held among managers and supervisors at Du Pont plants in Carney's Point, Haskell, and Parlin, New Jersey, and in Hopewell, Virginia, 1917-18, are contained in Hagley Library, Accession 500, Series II (Post-1902 Records of the Du Pont Company), Part 2, Boxes 134-37.
 - 35 Hareven, *Family Time and Industrial Time*, p. 288.
 - 36 Bruce Scott, "'A Place in the Sun': The Industrial Council at Massey-Harris, 1919-1920," *Labour/Le Travailleur* 1 (1976), pp. 158-92, quote at p. 183. Other studies based upon minutes of works councils include Robert Ozanne, *A Century of Labor-Management Relations at McCormick and International Harvester* (Madison, 1967), and Daniel Nelson, "The Company Union Movement: A Reexamination," *Business History Review* 56 (Autumn 1982), pp. 335-57.
 - 37 Beatty, "Textile Labor," p. 488; White, "The Business Historian and His Sources," p. 26; Philip C. Brooks, *Research in Archives: The Use of Unpublished Primary Sources* (Chicago, 1969), pp. 8-10, 100-101.
 - 38 Beatty, "Textile Labor," pp. 490-96, quote on p. 490.
 - 39 Anita Shafer Goodstein, "Labor Relations in the Saginaw Valley Lumber Industry," *Bulletin of the Business Historical Society* 26 (1953), pp. 193-221.
 - 40 Julian C. Skaggs and Richard L. Ehrlich, "Profits, Paternalism, and Rebellion: A Case Study in Industrial Strife," *Business History Review* 54 (Summer 1980), pp. 155-74.
 - 41 Chandler, *The Visible Hand*, p. 414.
 - 42 Ozanne, *A Century of Labor-Management Relations*, chapter 2.
 - 43 Hagley Museum and Library, Wilmington, Delaware, Accession 1599 (Papers of Eugene Du Pont), Box 1, letters between Alfred I. du Pont and Frank Connable, 1906.
 - 44 Zahavi, *Workers, Managers, and Welfare Capitalism*; Zahavi, "Negotiated Loyalty," pp. 602-20.
 - 45 Chandler, *The Visible Hand*, pp. 67-72.
 - 46 Prude, *The Coming of Industrial Order*, pp. 40-49.
 - 47 William Sisson, "From Farm to Factory: Work Values and Discipline in Two Early Delaware and Maryland Textile Mills," *Delaware History* 21 (Spring-Summer 1984), pp. 31-52; Betsy Bahr, "The Antietam Woolen Manufacturing Company: A Case Study in American Industrial Beginnings," *Working Papers from the Regional Economic History Research Center* 4:4 (1981), pp. 28-46.
 - 48 Chandler, *The Visible Hand*, pp. 94-109.
 - 49 Licht, *Working for the Railroad*, pp. 25, 30.
 - 50 Shelton Stromquist, *A Generation of Boomers: The Pattern of Railroad Labor Conflict in Nineteenth-Century America* (Urbana, 1987).
 - 51 W. Thomas White, "Race, Ethnicity, and Gender in the Railroad Work Force: The Case of the Far Northwest, 1883-1918," *Western Historical Quarterly* 16 (July 1985), pp. 265-83.
 - 52 Chandler, *The Visible Hand*; Chandler, *Strategy and Structure*.

- 53 JoAnne Yates, "Internal Communications Systems in American Business: A Framework to Aid Appraisal," *American Archivist* 48 (Spring 1985), pp. 151-54, quote on p. 151.
- 54 Several recently-acquisitioned collections in the Hagley Library suggest the potential richness of the correspondence of lower-level managers and personnel departments for documenting labour. The office files of Willis F. Harrington, 1931-45, trace his roles as vice-president of the Du Pont Company and as the liaison between Du Pont's Executive Committee and the Service Department, the forerunner of the Employee Relations Department. In that capacity, Harrington received copies of hundreds of letters and memoranda exchanged between Service Department officials, division heads, and plant managers, relating to topics such as wage increases, industrial relations plans, layoffs, employee magazines, training programs, and the unionization of employees. The files of the Employee Relations Department of Pennsylvania Water & Power Company, spanning the 1940s and 1950s, contained in the records of Pennsylvania Power & Light Company, similarly contain numerous letters to and from lower-level supervisory personnel relating to the postwar unionization efforts of company workers, wage rates, and efforts to reduce turnover. Several hundred cubic feet of correspondence, memoranda, and other records of the Pennsylvania Railroad's "Wage Bureau" from the 1910s through the 1940s detail changes in wage structures, the employment of skilled artisans, women, Blacks, and immigrants, the development of company personnel policies to reduce labour turnover, and negotiations with railroad trade and craft unions.
- 55 Joseph E. Walker, *Hopewell Village: A Social and Economic History of an Iron-Making Community* (Philadelphia, 1966), pp. 280-83; Sisson, "From Farm to Factory," pp. 42-44; Prude, *The Coming of Industrial Order*, pp. 134-35, 146-50; Judith A. McGaw, *Most Wonderful Machine: Mechanization and Social Change in Berkshire Paper Making, 1801-1885* (Princeton, 1987), pp. 318-20, 324-33.
- 56 Prude, *The Coming of Industrial Order*, pp. 88-92, 211-12; J.W. Lozier, "The Forgotten Industry: Small and Medium Sized Cotton Mills South of Boston," *Working Papers from the Regional Economic History Research Center* 2:4 (1979), p. 114; Lozier, "Rural Textile Mill Communities and the Transition to Industrialism in America," *ibid.* 4:4 (1981), pp. 82-83.
- 57 McGaw, *Most Wonderful Machine*, pp. 282-84, 318-26.
- 58 Hareven, *Family Time and Industrial Time*, pp. 51-53, quote on p. 53.
- 59 Yates, "Internal Communications Systems," pp. 145-54, discusses each of these types of documents in more detail, as does T.R. Schellenberg, *Modern Archives: Principles and Techniques* (Chicago, 1956), pp. 46-50, 145-46. See also Chandler, *The Visible Hand*, pp. 103-21; Graham S. Lowe, "The Enormous File: The Evolution of the Modern Office in Early Twentieth-Century Canada," *Archivaria* 19 (Winter 1984-85), pp. 137-51.
- 60 Chandler, *The Visible Hand*, pp. 272-78; Nelson, *Managers and Workers*, pp. 48-78; Jacoby, *Employing Bureaucracy*, pp. 40-47.
- 61 See, for example, Steven W. Usselman, "Scientific Management without Taylor: Management Innovations at Bancroft," *Working Papers from the Regional Economic History Research Center* 4:4 (1981), pp. 47-77; Donald R. Stabile, "The Du Pont Experiments in Scientific Management: Efficiency and Safety, 1911-1919," *Business History Review* 61 (Autumn 1987), pp. 365-86.
- 62 Jeremy R. Egoft, "The Limits of Shop Floor Struggles: Workers vs. The Bedaux System at Willapa Harbor Lumber Mills, 1933-35," *Labor History* 26 (Spring 1985), pp. 195-229.
- 63 Hareven, *Family Time and Industrial Time*, pp. 138-48.
- 64 Robert P. Weiss, "Private Detective Agencies and Labour Discipline in the United States, 1855-1946," *Historical Journal* 29 (March 1986), pp. 87-107.
- 65 Charles K. Hyde, "Undercover and Underground: Labor Spies and Mine Management in the Early Twentieth Century," *Business History Review* 60 (Spring 1986), pp. 1-27. In this article Hyde also discusses some of the problems inherent in these sources, such as the biases and prejudices of undercover detectives.
- 66 Meyer, *The Five Dollar Day*, p. 188.
- 67 Carolyn M. Stallings, "Workers' Homes and Furnishings in Du Pont's Banks, 1870-1920" (seminar paper, University of Delaware, 1981; copy in Research Files, Hagley Museum); Glenn Pryor, "Workers' Lives at the Du Pont Powder Mills, 1877-1912" (Master's thesis, University of Delaware, 1977), pp. 50-63; Norman B. Wilkinson, "The Brandywine Barn Burners," *Delaware Today*, June-July 1964, pp. 10-14.
- 68 Nelson, *Managers and Workers*, pp. 106-20; Brandes, *American Welfare Capitalism*, pp. 111-18; Jacoby, *Employing Bureaucracy*, pp. 49-55.
- 69 Hareven, *Family Time and Industrial Time*, pp. 48-49 and p. 415, note 8.

- 70 Meyer, *The Five Dollar Day*, chapter 6, "The Ford Sociological Investigations," and chapter 7, "Assembly-Line Americanization."
- 71 *Ibid.*, pp. 101-106, 176, 199; Nelson, *Managers and Workers*, pp. 148-56; Jacoby, *Employing Bureaucracy*, pp. 109-32, 137-59.
- 72 Peter I. Berg, "Welfare Capitalism at the REO Motor Car Company," *Michigan History* 69:2 (November-December 1985), pp. 37-44.
- 73 Ferdinando Fasce, "Freedom in the Workplace? Immigrants at the Scovil Manufacturing Company, 1919-21," in M. Debouzy, ed., *In the Shadow of the Statue of Liberty: Immigrant Workers in the American Republic, 1850-1930* (Vincennes, France, in press).
- 74 Chandler, *The Visible Hand*, pp. 65-66; J.H. Sims, "The Records of Engineering Firms and Their Treatment in the Scottish Record Office," *Archives* 26 (April 1983), p. 64; Anthony F.C. Wallace, *Rockdale: The Growth of an American Village in the Early Industrial Revolution* (New York, 1978), p. 171.
- 75 J.W. Lozier, "Rural Textile Mill Communities", pp. 81-82, 87, and p. 94, note 32 (quote).
- 76 Walker, *Hopewell Village*, pp. 94, 150, 381, 385, 389. See also "The Martha Furnace Diary," in A.D. Pierce, *Iron in the Pines* (New Brunswick, New Jersey, 1957), pp. 96-105.
- 77 Sisson, "From Farm to Factory," pp. 38-39; Wallace, *Rockdale*, pp. 326-31; Lozier, "Rural Textile Mill Communities," p. 85; Dublin, *Women at Work*, pp. 59-61.
- 78 Paul Craven and Tom Traves, "Dimensions of Paternalism: Discipline and Culture in Canadian Railway Operations in the 1850's," in Craig Heron and Robert Storey, eds., *On the Job: Confronting the Labour Process in Canada* (Kingston and Montreal, 1986), p. 71, note 13; see also Licht, *Working for the Railroad*, p. 81.
- 79 Licht, *Working for the Railroad*, p. 104.
- 80 *Ibid.*, pp. 106-111; Stromquist, *A Generation of Boomers*, pp. 238-40; Paul V. Black, "An Experiment in Bureaucratic Centralization: Employee Blacklisting on the Burlington Railroad," *Business History Review* 51 (Winter 1977), pp. 444-59.
- 81 Hagley Museum and Library, Wilmington, Delaware, Du Pont Company Records, Accession 500, Series II, Part 2, Box 1003-A, Irene Du Pont to Walter G. Ramsay, Copy, June 18, 1913.
- 82 Licht, *Working for the Railroad*, pp. 104-11, quote at p. 108.
- 83 Irene Du Pont to Walter G. Ramsay, June 18, 1913. Approximately 15,000 employees' work record cards, covering the years 1902-1914, are found among the Du Pont Company records at the Hagley Library.
- 84 J.W. Lozier, "The Forgotten Industry: Small and Medium Sized Cotton Mills South of Boston," *Working Papers from the Regional Economic History Research Center* 2:4 (1979), pp. 108-109.
- 85 Lozier, "Rural Textile Mill Communities," pp. 82-88; Donald R. Adams, Jr., "Workers on the Brandywine: The Response to Early Industrialization," *Working Papers from the Regional Economic History Research Center* 3:4 (1980), pp. 2-37.
- 86 Mary McConaghy, "The Whitaker Mill, 1813-1843: A Case Study of Workers, Technology and Community in Early Industrial Philadelphia," *Pennsylvania History* 51 (January 1984), pp. 30-63, quote on p. 31.
- 87 Wallace, *Rockdale*, pp. 164-83.
- 88 Walker, *Hopewell Village*, pp. 185-205, 429-64.
- 89 Dublin, *Women at Work*, pp. 209-11; Ginger, "Labor in a Massachusetts Cotton Mill," pp. 82-84; Chandler, *The Visible Hand*, p. 69; McConaghy, "The Whitaker Mill," pp. 46-48, 60, note 50, and 61, notes 71, 76.
- 90 See, e.g., Dublin, *Women at Work*, pp. 210-11.
- 91 Craven and Traves, "Dimensions of Paternalism," pp. 53-55, quote on p. 53.
- 92 Robert Ozanne, *Wages in Practice and Theory: McCormick and International Harvester, 1860-1960* (Madison, 1968).
- 93 Gitelman, *Workingmen of Waltham*, p. 68.
- 94 Licht, *Working for the Railroad*, pp. 64-65, 73-75, 158-60, 275-82. The term "longitudinal data" was used by Licht in discussing analyses of payroll records in his article "Labor Economics and the Labor Historian," *International and Working Class History*, 21 (Spring 1982), p. 59.
- 95 Sims, "The Records of Engineering Firms," p. 65.
- 96 David L. Lewis, "Appraisal Criteria for Retention of and Disposal of Business Records," *American Archivist* 32 (1969), p. 23. See also Jack King, "Collecting Business Records," *American Archivist* 27 (1964), p. 389.

- 97 See, for example, Beatty, "Textile Labor," pp. 498-99; Walker, *Hopewell Village*, pp. 267-68; Sisson, "From Field to Factory," pp. 38-45; Harold Hancock, "The Industrial Worker Along the Brandywine, 1800-1840," (unpublished research study, 1956; copy in Hagley Museum research files), p. 120.
- 98 Sisson, "From Field to Factory," pp. 44-45; Sisson, "Studies of Labor Management and Conflict," pp. 19, 26, 52, note 28, and 53-54, note 38; Lozier, "Rural Textile Mill Communities," p. 83; Prude, *The Coming of Industrial Order*, pp. 89, 130-31, 135, and 311, note 5.
- 99 Beatty, "Textile Labor," p. 499. See also G. Wright, *The Merrimack Valley Textile Museum*, p. xxiii.
- 100 Beatty, "Textile Labor," p. 498.
- 101 Dublin, *Women at Work*. In a set of appendices at the end of his study, Dublin describes the company records, the techniques he used to sample them and build up a list of workers' names, the searches he performed in demographic sources, and the possible biases in these different sources.
- 102 Hareven, *Family Time and Industrial Time*, quote on p. 223. Hareven described the construction of the "work histories" in appendix C of her study, pp. 385-87. For other examples of social and demographic studies of workers based on employee records, see Wallace, *Rockdale*, pp. 171-77; Zahavi, *Workers, Managers, and Welfare Capitalism*; Hyde, "Undercover and Underground"; Fasce, "Freedom in the Workplace?" and Janice L. Reiff and Susan Hirsch, "Reconstructing Work Histories by Computer: The Pullman Shop Workers, 1890-1967," *Historical Methods* 15 (Summer 1982), pp. 139-42.
- 103 Yates, "Internal Communications Systems," pp. 155-56; Blouin, "An Agenda for Appraisal," pp. 62-68; Burnette, *Beneath the Footnote*, pp. 115-23; T.R. Schellenberg, *Modern Archives*, pp. 143-46; Ralph M. Hower, *The Preservation of Business Records* (Boston, 1941). A sample "time capsule" appears in "The Public Archives of Canada — Business Records," in Committee on Business Archives, International Council on Archives, *Business Archives: Studies on International Practices* (Munich, New York, London, and Paris, 1983), appendix 2, pp. 110-15.
- 104 Yates, "Internal Communication Systems," p. 156.
- 105 "The Public Archives of Canada — Business Records," p. 109.
- 106 Burnette, *Beneath the Footnote*, p. 15.
- 107 *Ibid*, pp. 108-109, quote at p. 108.
- 108 Harris, "Give Us Some Less of That Old-Time Corporate History," p. 79.
- 109 Among the few studies to date which deal with this aspect of the modern corporation are Jacoby, *Employing Bureaucracy*, and Gospel, "Managerial Structures and Strategies."