

Manuscripts of Technology and Industry: The “Golden Era” of Collecting at Smithsonian, 1954-1970

Erik Nordberg
Michigan Technological University
enordber@mtu.edu

Introduction/Methodology

In 1978, just two years after the United States’ bicentennial celebrations, the Smithsonian Institution published a small volume entitled *Guide to Manuscript Collections in the National Museum of History and Technology*. Known subsequently as “the green guide” due to the color of its soft-cover binding, the 143-page publication included a foreword by National Museum of History and Technology museum director Brooke Hindle describing the museum’s growing archival holdings:

Some relate directly to and describe the artifact collections while others, in some measure, substitute for them. Even with the most selective discrimination, it has been impossible to collect the largest objects or to provide satisfactory representation of real objects in many of our divisions. Increasingly it will become necessary to rely more heavily upon documentary collecting to preserve here the elements of historical and technological evolution (National Museum of History and Technology, 1978).

With this publication, the Smithsonian provided the first comprehensive listing of the archival collections held by its flagship historical museum. It also revealed that the national museum was part of a very small group of manuscript repositories with a special focus on industrial and technological history. At the time, however, the museum employed no archivists and had no dedicated archival storage facility.

An examination of archival collecting practice at the Smithsonian Institution’s National Museum of History and Technology reveals that a “golden era” of manuscript collecting occurred 1956-1970. For this paper, ethnographic methods, including interviews with surviving participants, augment historical research into institutional records of curators, administrators, and museum committees. This research indicates that archival collecting was led by curators with little formal curatorial or archival training. Material was gathered in a haphazard fashion with little deliberate collection development planning – occasionally to inform museum exhibits, but more often in support of the general research mission of the institution.

Manuscript collecting at the National Museum of History and Technology responded to curators’ research interest and exhibit needs, rather than the tenants to collect, organize, describe, and provide

access of more traditional library and archival programs. A better understanding of decision-making practice in case studies such as this will inform archivists in their future development of selection and appraisal practice, as well as historians, industrial archaeologists, and others whose research agendas include the history of American business and industry.

Technological History and Manuscript Collections at The Smithsonian Institution

The Smithsonian Institution’s National Museum of American History holds one of the nation’s most varied and significant collections of manuscript material in the history of industry and technology. This historical museum program developed as an independent entity in 1954 with Congressional authorization for a Museum of History and Technology. Previous research has reviewed aspects of the Smithsonian’s interest in industry and technology (Cohen 1983; Henson 1999; Molella 1991; Post 2001), but none has provided any detailed description of the museum’s archival holdings. Yet it was the unusual nature of the museum’s exhibit and research program which provided the impetus for much of its archival collecting practice.

Science and technology has had a central place in the evolution of a national history museum in the United States. As early as the 1830s, members of the National Institute for the Promotion of Science displayed American innovation through exhibits and displays, some of them in space secured in the U.S. Patent Office (Henson, 1999). Similar organizations, such as Philadelphia’s Franklin Institute, founded in 1824 as an industrial mechanics institute, coordinated international exhibitions of invention and technology and served as a testing and quasi-regulatory professional body (McMahon, 1977; Morris, 1987; Sinclair, 1974). The spirit of these early ventures was incorporated into Congressional discussion about how best to use the bequest of James Smithson “to found in Washington, an establishment, under the name of the Smithsonian Institution, for the increase and diffusion of knowledge.” The 1846 act creating the Smithsonian called for a collection of “all objects of art and foreign and curious research and all objects of natural history” (Henson, 1999). The Smithsonian’s first Secretary, Joseph Henry, debated the best ways to fulfill both Smithson’s bequest and the Congressional mandate, initially steering the institution away from

collecting and hoping to direct activity more toward international exchanges of scientific information, particularly in the natural sciences.

The 1876 Centennial Exposition in Philadelphia provided a turning point in the Smithsonian's growing collections, particularly those in science and technology (Molella, 1991). As part of Congressional support of the international gathering, the museum's staff gathered objects and produced a series of "government exhibits" for the exposition. At the conclusion of the event, Smithsonian staff convinced many of the exhibitors to donate their exhibits to the museum. Materials from 34 countries, filling dozens of boxcars, were delivered from Philadelphia to Washington, DC (Henson 1999; Post, 2001; Multhauf, 1965). The excitement of the nation's showing at the exhibition also encouraged Congressional funding for an additional building; the new National Museum of the Smithsonian Institution (later known as the Arts and Industries building) opened in 1881, filled with many new exhibits drawn from the exposition donations (Molella, 1991; Post, 2001).

Smithsonian curator George Brown Goode (1851-1896) extended the chronological limits of the anthropology collections to include the modern age and, as a result, the new building afforded space for exhibit of materials relating to contemporary technology and industry (Molella, 1991). Curators for these areas were often drawn from related fields of industry. This included John Elfreth Watkins (1852-1903), who was appointed as curator of transportation in 1885, the first curator in any discipline related to technology or industry (Vogel, 1965). Entering the museum via a successful railroad career, Watkins helped to secure and preserve artifacts such as the early steam locomotives *John Bull* and *Stourbridge Lion* (Taylor, 1946). George C. Maynard (1839-1919) had managed the District of Columbia telephone system and joined the museum as curator of the "section of electricity" in 1898. His association with Alexander Graham Bell and Gardner Greene Hubbard encouraged some of the earliest acquisitions in the fields of telegraphy, telephony, and aviation (Loomis, 2000; Taylor, 1946). The museum's object collection grew dramatically during this period, including large transfers of original patent models in 1908 (Multhauf, 1965). The few published notes about collecting during this period include reference to some archival material, including single blueprints and small sets of engineering drawings of early steam engines (Taylor & United States National Museum, 1939).

An initiative to develop a separate museum specifically for engineering and industrial history began under the leadership of Carl W. Mitman (1890-1958). Mitman became chief curator in 1918 and promoted the need for a strong national industrial

museum similar to Germany's Deutsches Museum, Britain's South Kensington Museum, and the Conservatoire des Arts et Métiers in France (Molella, 1991; Taylor, 1946). Although Mitman failed in his initial efforts during the 1920s, his protégé and successor Frank Taylor (1903-2007), took up the gauntlet for a museum of engineering and industry within the Smithsonian system (Frank Taylor: Founding Director, 2007; Frank Taylor: Influential Public Servant, 2007). By the 1950s, the two succeeded in attracting Congressional support for what would become the Museum of History and Technology. During this time – largely through the work of Mitman and Taylor – holdings of Smithsonian had become "in effect, the national museum of engineering and industry in the United States" and compared favorably with the national museums of science and industry abroad (Taylor 1939).

Although the museum hadn't amassed a significant amount of manuscript material prior to 1955, there are indications of some specific acquisitions. An early catalog of the mechanical collections of the museum's division of engineering includes references to sketches of a 1776 Watt pumping engine, drawings of Robert Fulton's early steamboats *Clermont* and *Chancellor Livingston*, and a series of blueprints of George Corliss steam engines and his 1876 Centennial engine which powered portions of the Philadelphia exhibition (Taylor, 1939). Watkins also acquired manuscript items during his tenure as curator. Popular for his acquisition of the locomotive *John Bull*, he spoke widely to professional groups and conventions seeking historical materials and impressing his former engineering colleagues about "the importance of preserving the artifacts of railway's youth" (Vogel, 1965). One of Watkins' finest acquisitions were records of the Baltimore and Ohio Railroad which included drawings and lithographs, as well as 1,500 photographs documenting bridge construction, stations, and roadbeds (John White, personal communication, April 5, 2010). Acquisitions in the field of rail history were the exceptions rather than the rule, however, and other disciplines were poorly represented by either object or archival material in the museum's collections into the middle of the twentieth century (Vogel, 1965; Robert Vogel, personal communication, May 30, 2009).

A "Golden Era" of Archival Collecting

Congressional authorization for the Museum of History and Technology in 1954 completed decades of work by dozens of curators, administrators, and supporters. Yet, there was little time for celebration – the new museum building required planning, new exhibits, and new collections. Taylor was given the responsibility for planning the new museum and

was formally appointed director in 1958. His reorganization of the museum resulted in a set of four divisions, with a supporting department/section structure. More significant than the thematic reorganization, however, was the hiring of curatorial staff in the new organization chart (Multhauf, 1965). From the standpoint of the museum's collection of manuscript archival material, several key figures began their employment with Smithsonian during this era.

Robert P. Multhauf (1919-2004) became a significant driving force behind the new museum project. He joined the Smithsonian staff as associate curator of engineering in 1954, coincident to Frank Taylor's final legislative push for the stand-alone Museum of History and Technology. Multhauf would ascend to oversee the division of science and technology and its numerous subunits, a venture which would be the primary focus of his work for more than 30 years (Finn, 2005).

Multhauf's most important decisions for the museum's program may have been hiring selections made for his new curatorial staff in the 1950s. Some of these individuals came from academia, while others came from engineering or industrial work:

When I came in, there were people like me who had a science or technical background and went back and took history courses ... [we may have been] internalists but nevertheless we were doing stuff related to the technology. [I]ncreasingly now you get people who are getting Ph.D.'s in the history of technology and science and never had a course in the technology. They're treating it as a social discipline. (Bernard Finn, personal communication, March 1, 2010)

Historian Pamela Henson claims that the change to "university-trained historians of science" occurred in the 1950s, but Robert Post disagrees, saying that "less than 20 percent" of the curators at the end of Multhauf's era were academically trained historians of science and that "many of the most productive had never been to graduate school" (Henson, 1999; Post, 2001). Regardless of educational background, few were hired from other museum organizations, and it is not clear if any arrived with training in curatorial work. Both Multhauf and Frank Taylor were convinced of the need for the museum to function more like a university, with exhibits based on serious scholarship (and an awareness of changes in historical interpretation), exhibit design handled by a separate exhibits staff, and an expectation that curators would publish their research in scholarly journals.

Three of Multhauf's hires would play pivotal roles in the development of manuscript holdings in the museum: Robert M. Vogel (1930-), John "Jack" White (1933-), and Bernard S. "Barney" Finn (1932 -).

Vogel was the first to arrive, joining the Smithsonian staff in 1957. A collector with a budding interest in history throughout his childhood in Philadelphia and Baltimore, Vogel made regular visits to museums including the Smithsonian. He completed a bachelor's degree in architecture at the University of Michigan in 1954, but spent much of his college years distracted with trips to the Henry Ford Museum, studying the history of steam engines as prime movers, and taking summer jobs at places like an isolated lumber camp in Idaho ("whole place run by steam; main saw driven by a large, elderly Corliss engine...Heavenly place; time warp") (The Life and Times of Robert Vogel, 1988). Following graduation, he worked as an architect for a large East Coast contractor, but his thoughts turned more and more to museum work. The timing of his blind application letter to the Smithsonian "offering one with a solid appreciation of the technological past" could not have been better; Multhauf was looking for someone to help refurbish galleries for mechanical and civil engineering:

The only reason that they hired me, I'm quite certain, was that I had done as a term paper in my last year at the University of Michigan, a term paper titled "Factory Prime Movers of the Nineteenth Century." It was ... heavily illustrated with Nineteenth Century woodcuts and engravings of steam engines, water turbines, motors and that sort of thing. And I brought that with me, and I had it bound, which is something fairly unusual for a term paper and I laid that on Multhauf's desk and he took that and I think he kept it for a while, passed it around in the administration of the museum, and that I'm absolutely convinced is the only reason they hired me. Had it not been for that term paper, I would not have been hired, I'm quite certain of that. (Robert Vogel, personal communication, May 30, 2009)

Vogel was hired as a curator of heavy machinery and civil engineering in 1957 and remained in this general area of the museum until his retirement in 1988 (The Life and Times of Robert Vogel, 1988).

White, who arrived at Smithsonian initially as a summer intern in 1958, had spent his youth riding streetcars, hanging around machine shops and engine rooms in Cincinnati, and building working models of various machines (Post, 1990). His study for a bachelor's degree in history from Miami University in Ohio introduced him to some of the early literature on the history of transportation and technology. White also worked on an assembly line at a small manufacturing plant and held summer jobs creating scale drawings in a drafting room, instilling

a hands-on appreciation of technology. Responding to an interviewer in 1990, White indicated that balance between practical knowledge and college training was important:

Certainly, an engineering background is going to impart insight that a straight historian probably won't have, but the crucial hands-on aspect may still be lacking. And engineers who haven't studied history are notoriously terrible historians. My argument is that practical experience and formal training are both essential to the making of a good technical historian (Post, 1990).

White interned under curator Howard Chappelle in the design of three new galleries for the fledgling Museum of History and Technology. Chappelle took responsibility for marine transportation, while White was tasked with producing exhibits on automotive and locomotive history. White ascended to Chappelle's position as curator of transportation in 1967 and transitioned to the title of senior historian in 1986 before his full retirement from the Smithsonian in 1990.

Barney Finn was hired by Multhauf as a curator of the museum's electrical collections in August 1962. He completed a bachelor's degree in engineering physics from Cornell University in 1955 and worked as an experimental physicist in the nuclear power field. Pursuing an interest in the history of science, Finn returned to graduate school and worked under Irwin Hebert at the University of Wisconsin to complete a Ph.D. in history of science. At the Museum of History and Technology, Finn remained responsible for electrical collections throughout his career and also served several periods as chair of multi-unit administrative departments within the institution. He retired in 2005 and transitioned to the position of curator emeritus (Bernard Finn, personal communication, March 1, 2010; *Powering a Generation: Finn Biography*, Undated).

Archival Collections: What to Collect and How to Collect It

As these curators arrived at the institution, they faced some very immediate concerns. Some initial exhibit concepts were tried in temporary installations in the Arts and Industries building in the late 1950s, but most efforts were focused on the new purpose-built facility to be opened in 1964. Developing exhibits for the new building, included a push to locate and acquire new objects and support material and the Smithsonian became a formidable collector. In addition to historical artifacts, Multhauf, Vogel, Finn, and White gathered large amounts of archival material. The late 1950s were the ideal moment for an emerging museum of industry and technology, a

period Vogel referred to as a time "of ferment, funding, new concepts, hope – a golden era" (*The Life and Times of Robert M. Vogel*, 1988).

Curators struggled with how best to represent technical themes, how to interpret the operation and impact of machines and engines, and how to educate the museum's visitors about innovations over time. Some topical areas were more difficult than others and the representation of large objects from civil and mechanical engineering became a particular challenge. Vogel addressed the problem in a 1965 article:

Despite its importance in man's adaptation to his surroundings, the field of civil engineering has, until the recent past, received hardly more than token treatment in technical museums anywhere. This deficiency is plainly a result of the size of the objects created by civil engineering. A bridge or dam does not respond to the format of a conventional museum exhibit with the same facility as a collection of rare coins, or an early surveying instrument, or even, for that matter, a locomotive (Vogel, 1965).

Historically, the museum made use of models for interpretation of large objects; Frank Taylor's 1939 catalog of objects in the museum's mechanical collections is largely a listing of models – some original patent models constructed and submitted by companies in support of patent applications, other models donated by companies directly to the museum, and still others "made in museum" for use in earlier interpretive exhibits (Taylor, 1939).

Multhauf's attempts at gathering systematic collections of automobiles, planes, steam locomotives, and streetcars in the 1950s encountered obvious storage problems. "The preservation of an adequate record of the history of a device as crucial to American history as the steam locomotive is a problem worthy of attention. It is analogous, however, to the problem of the sailing ship, whose preservation was never undertaken on a systematic basis" (Multhauf, 1965). As a result, "about the only point that was absolutely clear from the outset of planning" for the new museum "was that models would form the very foundation of the exhibits" (Vogel, 1965). In turn, the construction of accurate models was dependent upon reliable source material. "There was an enormous variation in the amount of data which could be located on the subject structures," noted Vogel in connection to the museum's exhibit on bridge design, "ranging from the thinnest sort of fourth-hand account of a bridge's appearance, to full sets of original drawings" (Vogel, 1965).

In cases where a model was either bulky or insufficiently detailed, curators turned to illustrations

as a substitute, some from manuscript engineering drawings and others from earlier published accounts (Vogel, 1965). Multhauf understood the importance of this background material to the success of a research-based museum institution:

The objective of our collection is the most accurate and complete record possible of the mechanical as well as the cultural history of transportation, which requires a degree of care in restoration and model construction not always apparent to the casual visitor. It requires as well a documentary collection of drawings, trade literature, and component parts, much of which remains largely in “reference collections,” available to the public but used primarily in the production of exhibits rather than in the exhibits themselves (Multhauf, 1965).

Although some of the manuscript items entering the museum were employed to illustrate exhibits or to inform the creation of models, most of them were not formally accessioned to the museum's holdings, and archival material was rarely included as part of an exhibit. The vast majority of manuscript material was gathered for the sake of recording and documenting a given industry. “It was obvious that steam engines were becoming an obsolete form of machinery,” recalled Vogel, “so when I went to Erie or to Milwaukee ... I was gathering stuff that I knew was going to record an eventually obsolete form of technology, the stationary steam engine” (Robert Vogel, personal communication, May 30, 2009). Similarly, Multhauf did not feel the museum's new hall of electricity represented the “totality of our concern with electricity,” referring readers to the museum's reference collections “where the bulk of the collections in telegraphy, telephony, and radio are maintained” (Multhauf, 1965).

Generous funding for exhibits for the new 1964 museum building increased the curators' research, artifact purchase, and archival collecting. Curators used a variety of techniques to locate and solicit manuscript collections, “The Smithsonian had a lot of prestige,” recalled White. “Most people had at least heard of it [and most] people had a pretty good opinion of it. So that did open a number of doors” (John White, personal communication, April 5, 2010). Firms had produced heavy machinery and engines were approached about historical records, as were municipal agencies that purchased and maintained engines for water and sewer systems. Some were told the “museum's archival function is a major aspect of our activities, assuring the collections under our care of proper indexing, preservation treatment, and permanent preservation in fire-proof, air conditioned surroundings” (Vogel, 1965, November 19).

Curators also distributed special printed solicitations to members of the American Society of Civil Engineers (ASCE) and the Institute of Electrical and Electronics Engineers (IEEE) “as a means of extracting material of historical value” from their membership (Vogel, 1965, August 4). The brochures were illustrated with manuscript items from the museum's growing archival holdings, including Thomas Edison's early 1883 sketches of light bulbs, photographs of early Niagara power lines, reproductions of illustrations from trade literature and manufacturers' catalogs, and a set of 1873 drawings for an early pumping station on the Chesapeake and Ohio Canal. Excerpts from these brochures indicate the directness of their call for donations:

Raw material for the history of electrical science and technology is to be found scattered throughout notebooks, photographs, catalogs, patent records, motion picture films, audio tapes, and artifacts. But unless these resources are identified and gathered together in appropriate centralized locations they are virtually useless to historians, and the danger of their being destroyed is greatly increased... If you know of appropriate manuscripts, notebooks, catalogs, photographs, artifacts, please write to the Division of Electricity, National Museum of History and Technology (An Archive for the History of Electrical Science and Technology, Undated).

The U.S. National Museum invites submissions of records, plans, photographs, trade catalogs, journals and diaries, correspondence and personal papers as well as artifacts that are either relevant to the history of civil engineering or that are contemporary to earlier periods of history and relate to some phase of civil engineering (Archival Collections in the History of Civil Engineering, Undated).

More than 50,000 copies of the ASCE brochure were circulated with a reasonable good return on the cost of the mailing. “A lot of stuff came in” according to Vogel. “There was a little concern, I think, on the part of our museum's administration that we would be flooded with this stuff; we were not. It came in reasonable quantities and we were selective.” (Robert Vogel, personal communication, March 5, 2010)

The museum also purchased collections from private collectors and at public auctions. Of these, the Warshaw Collection of Business Americana was certainly the most significant. Comprising more than 1,000 cubic feet, the collection was amassed by Isadore Warshaw, a New York amateur

historian and scrap paper dealer, and included business ephemera such as advertising cards, posters, trade catalogs, and handbills (Warshaw Collection of Business Americana, 2010). The material was brought to Jack White's attention in the early 1960s:

I was just overwhelmed by the material. [A] lot of it was early Nineteenth Century or middle Nineteenth Century...he was a scrap paper dealer, that's how he started collecting. And he thought some of this material was so marvelous that it shouldn't be turned into paper pulp, it should be preserved ... I think it's magnificent. I mean, its ephemera. There's not George Washington's letters or notebooks or that, but it was everyday life represented in just any category you can think of. (John White, personal communication, April 5, 2010)

White convinced Vogel to make a follow-up visit and he was equally impressed with the collection, particularly the 35,000 trade catalogs. "The great bulk of the catalogs were prior to 1875 with a large body of them in the period 1850-1865," Vogel reported to Multhauf. "It is important to realize the uniqueness of this collection," he continued, "There is, quite simply, nothing like it, anywhere, and can never really be again" (Vogel, 1966, May 2). With his curators' assurance that this was a one-of-a-kind opportunity, Multhauf convinced Smithsonian Secretary S. Dillon Ripley to allow an unprecedented \$100,000 purchase of the collection in August 1967 (Warshaw Collection of Business Americana, 2010).

Yet curators were not always successful with their attempts at new acquisitions. Many companies weren't yet willing to give up their collections. Vogel distributed printed cards to be inserted into selected files: "This collection has historical value; if it is of no longer of use to this firm, would you kindly notify the Smithsonian Institution" (Robert Vogel, personal communication, March 5, 2010). It was often a disheartening journey. Many firms that had once built engines and heavy equipment had destroyed their drawing files decades earlier as the repair parts business dwindled and space was needed for other purposes (Vogel, 1967). In some cases, it was literally only a matter of weeks:

One that comes immediately to mind was the collection of glass negatives from the Pelton Water Turbine Company in San Francisco...I was in this guy's office and I said I believe you have a large collection of photographs and glass negatives of your various water turbines. And he said „Oh dear, you should have been here two weeks ago.“ You know, the old story that the curator hates to hear: „If you'd only been here last

week when we sent ... something like three dump-trucks full of glass negatives to the dump.“ (Robert Vogel, personal communication, May 30, 2009)

Yet many of the direct solicitations proved successful, like a collection of 500 drawings of Corliss engines acquired from the Sun Shipbuilding and Dry Dock Company of Chester, Pennsylvania. Representing much of the firm's work from 1872 to 1900, Vogel remarked that "collections of mechanical drawings from such an early period have rarely survived in so complete a form" (Vogel, 1967).

Curatorial staff also scoured older laboratories at universities and colleges for artifacts and documents. "You'd find the janitor or the head of the physics department or whoever might be around and you say „have you got any old stuff,“" recalled Barney Finn (Bernard Finn, personal communication, March 1, 2010). Many institutions with heat engine laboratories in mechanical engineering and structural laboratories in civil engineering were changing emphasis in the 1950s and 1960s and discarding obsolete machinery, Vogel recalled:

It was just sheer dumb luck that at that time this transition was occurring at institutions of higher learning. I can't think of the number of universities and colleges that I myself visited. Yale, Harvard, MIT, Lehigh, every major college and university, mostly in the eastern U.S., that had a heat engine lab, and we got engines and records ... Faculty in these areas were delighted to see these curators coming on to their campuses ... They hated the thought of disposing of this stuff. (Robert Vogel, personal communication, May 30, 2009)

Curators refer to this era as the "golden era," when funding for the new museum included significant amounts of money for "travel, money for collecting, and money for almost everything" (Robert Vogel, personal communication, May 30, 2009).

That said, most of the curators agreed that there was very little coordination or deliberation in this work. "I think it's fair to say that our archival collecting efforts before 1980 were conducted largely without plan or with any good notion of what we were going to do with the material once we got it," reported Barney Finn. "Our experience with objects led us to believe a) that we had a well-founded sense of what was important, b) that if we didn't take it when we found it there might not be a second chance, and c) that space would be created in response to the collecting effort" (Bernard Finn, personal communication, February 15, 2010).

Conclusions

Following the completion of exhibits for the new building in 1965, curators found themselves responsible for large amounts of archival material. Lacking any deliberate or comprehensive archival policy, significant collecting continued through the 1970s. Some basic procedures developed in response to limits of storage space, demands for intellectual control over collections, and from increasing pressure by external researchers for information about and access to manuscript material. Yet, it wasn't until 1979 that curators and museum administrators finally established a formal manuscript collection policy and set aside space for an archival facility within the museum. The new facility, to be called the "Archives Center of the National Museum of American History," began operation in 1982 and the museum hired its first professionally-trained archivist the following year.

It is clear that the Smithsonian Institution did not enter into manuscript collecting deliberately. The museum's growing interest in manuscript material during the "golden era" often related to exhibit research and publication and archival material became a necessity in understanding and documenting large objects and structures. This was particularly true in topical areas such as transportation, mechanical engineering, and civil engineering; other disciplines within the museum collected very few manuscript items. Collecting activity was not specifically directed toward exhibit installations, nor were archival items regularly utilized as material culture objects in displays. Manuscript collections supported general research needs and many acquisitions were made with an awareness of the importance of preserving items which might otherwise be destroyed. Most professionals associated with acquiring archival material in the Museum of History and Technology were historian-curators. Although some had advanced degrees, others were drawn from relevant fields of professional practice. Few had any formal curatorial training and there is little indication of any awareness of developing professional archival practice.

Regardless of the nontraditional development of this manuscripts program, significant industrial collections were acquired by the Smithsonian during the "golden era" of collecting and curators felt a genuine commitment to preserving unique and important archival materials that nobody else wanted. Through the continued preservation and provision of access to these rich collections the Smithsonian Institution will endure as one of the leading manuscript repositories documenting American business and industrial history.

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