Colombian Manufacturing Company Ledgers Preservation Project

Chamberlin Free Public Library is seeking $9,397 in funding for the conservation, microfilming and digitization of four of the ten existing hand-written ledgers of the Colombian Manufacturing Company, builders and owners of the earliest textile mills along the Souhegan River in Mason Village (now Greenville) and New Ipswich. Initially, these materials will be professionally stabilized, conserved, and microfilmed. The microfilm versions of the ledgers will then be scanned at a high resolution and converted to these standard electronic graphics standards: .jpg (Joint Photographic Expert Group); .tif (Tagged Information File); and 24-bit .bmp (Bitmap). The resultant files will be copied to both CD-ROM and DVD media. Each of these file formats has advantages in terms of file size, image quality and platform independency. This will allow the end-user to choose the best file format for their purpose. Additionally, these images will be converted (in-house) into Adobe PDF format. These end products will be made freely available through Chamberlin Free Public Library, its web site and other local libraries to anyone desiring to study these historical documents.

These ledgers contain detailed, hand-written accounts of the formation and daily operation of the Colombian Manufacturing Company, owners of the earliest textile mills in Mason Village (Greenville) and New Ipswich. Covering a period from the company’s inception in April, 1829, through October, 1890, these documents give a full accounting of the initial capitalization of the company, names of initial company shareholders, equipment costs, repair costs, improvements, supplies, profit and loss, and other general expenses. One of the account ledgers, #8, is indexed and contains transactions categorized by the name of the individual or company associated with that transaction. Ledger #7 contains accounts of all stock-on-hand from 1844 through 1891 and contains valuable information concerning textile production during the Civil War. Ledger #6 contains an enormous wealth of detailed information on a wide variety of operational areas. Listed are accounts by category of item, such as the indigo account, flour and starch accounts, fuel, taxes, rents, cash-on-hand, rail freight charges and payroll accounts. This ledger also includes records during the important Civil War years and provides a comparison between pre-war prices and war and post-war prices for the same materials, goods, services and wages. Also included in this ledger are unique records concerning the construction of Mill #6, the last mill erected by the company in 1873. The records contained in Ledger #10 are similar in nature to #6, but cover the period from 1839 up to June, 1861 – just after the start of the Civil War.

These mills were an important part of this region’s entry into the industrial revolution and were the primary source of the area’s economic, social, and cultural development throughout the nineteenth century and well into the twentieth century. By the mid 1850’s the Colombian mills in New Ipswich and Mason Village employed over four hundred people (slightly more than half
were women) and produced over four million yards of denim per year. The importance of the economic power wielded by the Colombian Manufacturing Company was such that it was, to a great degree, responsible for the location of the railroad terminus being placed in Mason Village.

The first of these mills was erected under the direction of Colombian Manufacturing Company agent Charles Barrett -- an important figure in the history of New Ipswich, NH and Boston. In addition to directing the building of the textiles mills along this part of the Souhegan River, he was responsible for the establishment of the bank in New Ipswich and was one of the founders of the Unitarian Church in the town. At one time, he was a business partner in Boston with Samuel Appleton, another prominent New Ipswich citizen and benefactor to the New Ipswich Academy, later-renamed Appleton Academy in his honor.

In addition to the employment opportunities offered by the Colombian Mills, they created a need for numbers of small, supporting businesses. Potash, necessary in the dyeing of cotton, was produced locally by burning the then-abundant hardwood supply. Blacksmiths were needed to provide iron works and repair items. Lumber and associated wood products were in constant demand – attested by entries in the ledgers. A wide variety of merchants was needed to support the employees and other town residents. On a smaller, though no less important, scale, numerous families and children earned cash by hand-cleaning the raw cotton shipped to the mills.

Socially, the mills were very important to the area. Early in the eighteenth century, the Colombian Manufacturing Company introduced many of the social reforms that would not be generally adopted in the rest of New England until the later decades of the century. Much of the housing occupied by the mill employees was constructed and maintained by the company. Health care was provided to all employees by the company nurse and cultural and religious activities were encouraged and supported by the company. The number of hours an employee could work per week was enumerated. The company was very aware of the need for maintaining decorum both on and off the job. All employees signed an agreement to the company’s regulations which stipulated terms of employment. Among other items, the regulations stated, “All persons in the employment of the Company are requested to attend public worship on the Sabbath, and are required to conduct themselves in a respectable and becoming manner, both in and out of the Mills”. It is important to note that more than fifty per cent of the employees were women. Beyond the economic impact of these mills, the demographics of the area were enormously affected by the Colombian Manufacturing Company. Immigrants were attracted to the town by the availability of employment and over the course of the eighteenth century, this influx of immigrants from various ethnic groups created a cultural diversity the area would not have otherwise experienced.
These ledgers have been in the possession of Chamberlin Free Public Library for a number of years. Marshall Buttrick, Chairman of the Greenville Historical Society and Library Trustee, believes the documents were given to the library sometime in the 1930's. At the time, there was no organized historical society and the donation of the ledgers fell to the library by an unknown benefactor. How these ledgers were transmitted to any former owners from the Colombian Manufacturing Company is also unknown.

While all ten of these original ledgers are in need of conservation, the four volumes in this grant request are in the most urgent need of preservation. The account ledger from August, 1839 through December 1849 (labeled #8) is in a state that precludes its use by anyone. The half leather and decorated paper binding is deteriorated. The boards are detached and are currently attached to the text block with cloth tape. The leather is powdery and peeling. The stitching is broken. The pages are dirty, discolored, and acidic (pH was tested at 4.5). Some folios are torn along the fold. Some tears have been mended and the repairs themselves have caused further damage.

The second volume, the Account of Stock (labeled #7) is in the same condition as ledger #8. The half leather pastepaper stationer's case is dirty and worn. The leather is powdery and there are losses from the leather, especially from the spine. The joints and internal hinges are broken. The stitching is broken in the first section. The paper is dirty and the pH was tested at 6.0.

Volume three, a journal from May 1829 through June 1861 is in somewhat better condition, but still needs immediate attention. The half leather and decorated paper binding is worn but generally stable. The front joint is partially broken. The paper is discolored, dirty, and acidic (pH was tested at 4.5).

The last of the four volumes, an account ledger from December, 1849 through October, 1890 (labeled #6) has some of the most serious condition problems. The half leather pastepaper stationer's case is worn. Areas of leather are lost from the corners and endcaps. Many folios near the back of the volume are at least partially split along the spine fold. The paper is very dirty and there are many flyspecks, especially in the gutter. The paper is discolored along the edges and it is acidic (pH was tested at 4.5).

Patrons have requested access to these ledgers on many occasions for historical study and for genealogical information. Primary source historical, cultural, and economic information on this area of New Hampshire is scarce and not particularly detailed. More specifically, the only available information about the owners and workers of the mills is contained in these ledgers. Many of the descendents of these people still live in the area and would like to share the information contained in these volumes. Also, any scholarly studies of the history this area would have to include information contained in these ledgers. Unfortunately, due to the delicate
condition and uniqueness of these materials, we have had to completely deny access to them. Any access to these irreplaceable materials would be unwise until they can be stabilized, repaired and digitally copied.

The four volumes will be professionally stabilized, repaired and microfilmed by the Northeast Document Conservation Center, Andover Massachusetts. Deborah Wender, Director of Book Conservation, and her associates have assessed these materials and have proposed treatments for each of the volumes. For each volume, the following measures will be taken: photographic documentation (high resolution .jpg on disk and reference prints) will be provided before and after any treatment; collation where necessary to assure completeness and correct pagination; surface cleaning of head, tail, and pages where necessary to remove loose dirt; measure pH before treatment; mend tears and guard folds where necessary with Japanese paper and starch paste; bind in cloth using a case structure, title according to instructions; construct a CMI phase box to dimensions of the volume and title. Additionally, each volume will receive specialized treatment for problems specific to that volume. These treatments include: disbanding, reassembling repaired folios and flattening, reinforcement of sewing, washing pages in water and ethanol to reduce the acidity of the paper, re-sewing using linen thread. Once these procedures have been performed, it will be possible to microfilm the documents, and to ultimately convert the microfilm into digital formats for use by the public. Until this restorative treatment is completed, public access to these documents is not possible. To preserve the restored original ledgers, they will be stored flat in archival-quality phase boxes placed within wooden boxes. They will be stored in a dark room where the temperature ranges from 60-70 degrees F with a relative humidity of between 45% and 60%.

Access to the original materials will be strictly controlled, as the digital versions will be readily available for casual study by the public. The ability to have access to the information contained in these ledgers will have an enormous benefit to the public. The highly detailed information in these documents has never, to our knowledge, been available to the public in any form. Any complete study of the region’s economic, social, and cultural history must include a thorough study of the information contained in these volumes. Many of these mill workers still have ancestors living in the Souhegan River area and those seeking scarce genealogical information will finally have access to the important records found in these volumes. They contain the work records and payroll signatures for hundreds of employees of the mills. Many of these mill workers still have ancestors living in the Souhegan River area.
Once the conservation portion of the project is complete, the Northeast Document Conservation Center will scan the pages of each ledger onto a master roll of 35mm microfilm. One duplicate negative and one duplicate positive will also be provided. One of the sets of microfilm will be delivered to the New Hampshire State Library for permanent storage. The other negative set and the positive set will be delivered to the New Hampshire State Archives. The positive microfilm set will maintained at Chamberlin Free Public Library after being sent to Inception Technologies, Manchester, New Hampshire for scanning (200 DPI resolution), conversion to .tiff files, and storage onto DVD-ROM. Copies from these digital masters will be duplicated in-house and distributed to the public upon request. Additionally, electronic copies will be placed on our servers, public web site and a copy will be sent to all public libraries, public secondary schools, and historical societies in the region. Off-site storage of the data will be accomplished by remote, online storage that is accessible to Chamberlin Free Public Library staff. Additional digital copies will be stored off-site on DVD-ROM and dedicated portable hard drives. As new storage technologies come into existence, these digital files will be converted into the new file formats and storage media. Funding for future data conversion will be included in the Chamberlin Free Public’s technology operating budget.
The total budget for this project is $9,447 and is based upon estimates (valid for six months) produced by the Northeast Document Conservation Center for the conservation treatment and microfilming of the ledgers and estimates for the microfilm scanning and conversion to .tiff files and DVD-ROM provided by Inception Technologies. These agencies are well-known and highly respected companies in the field of archival processing.

The treatment cost for each volume reflects the amount of restoration needed. In most cases, two treatment alternatives were proposed. Because of the high cost of professional restoration, we have chosen the less expensive approach in each instance. This will allow us to provide the most amount of data to those who need to use it and in a timely manner.

1. Restoration treatment - $6,845
   - Ledger #6 $1,915 (alternative treatment
   - Ledger #7 $1,725 (recommended treatment 1)
   - Ledger #8 $3,365
   - Ledger #10 $1,740

2. Microfilming - $2,452
   For the microfilming, there is a minimum charge of $475 for each master reel (one reel per volume). The cost for a duplicate negative reel is $59 and a positive reel is $54. Packing and shipping for each set of reels is $25.
   - Ledger #6 $613
   - Ledger #7 $613
   - Ledger #8 $613
   - Ledger #10 $613

3. Scanning of Microfilm to 200 DPI .tif files and creation of master data DVD - $100
   Estimate from Inception Technologies is based upon four 35mm microfilm reels containing approximately 600 microfilm images $100