Family Matters -- An Examination of Worcester's Woodbury and Co. and its Contribution to the Printing Industry

Jacob M. Varney

Worcester Polytechnic Institute

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FAMILY MATTERS: AN EXAMINATION OF WORCESTER'S WOODBURY AND CO. AND ITS CONTRIBUTIONS TO THE PRINTING INDUSTRY

An Interactive Qualifying Project Report

submitted to the Faculty

of the

WORCESTER POLYTECHNIC INSTITUTE

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Degree of Bachelor of Science

by

Jacob M. Varney

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Professor Kent P. Ljunghquist, Advisor

Professor James P. Hanlan, Advisor
Abstract

This project is an interpretation and analysis of WPI's archived material on Woodbury and Company. This interpretation addresses the topics of family company dynamics, Worcester industrial history, and technological growth. Finally, it suggests areas of the collection for which more research can be done. The methodology used for this project was principally primary document analysis and the interviewing of company officials in order to supplement the collection with some oral history materials.
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Introduction

In 1917, Charles G. Washburn published *Industrial Worcester* in which he stated: “Worcester has developed from a country town to a great manufacturing city in less than ninety years … the causes of Worcester's prosperity are found within and not without” (Washburn 318). When Washburn offered this claim, Worcester was a booming mid-sized industrial city, with varied industries and a diverse population. Worcester had successful industries in the fields of wire, machine tool development, textiles, shoe making, carpet manufacturing, printing and a number of other product areas. In the field of printing, Worcester had what was, and still is, known as the ‘Printers Building’. This building, located at 50 Portland Street, housed a number of companies associated with various aspects of printing as far back as the end of the nineteenth century. Some of the early companies that were housed there, such as Davis Press, still exist today.

Worcester also had a number of universities and colleges, such as Assumption College, Clark University, Holy Cross and the Worcester County Free Institute of Industrial Science (also known as “Worcester Tech”, and now known as Worcester Polytechnic Institute or WPI). Many of the people who graduated from these schools started businesses in the Worcester area. One of these graduates was John C. Woodbury, who graduated class valedictorian from “Worcester Tech” in 1876. Woodbury and his friend John F. Kyes started the engraving company Kyes and Woodbury, which later developed into Woodbury and Company. For over a century, this company prospered, until the end of the twentieth century, when the company closed. Throughout the subsequent company’s tenure, it was able to find a number of technical niches through
which it could keep itself in successful operation. For a variety of reasons, the history of Woodbury and Co. is a valuable area of study as it gives insight into the history of Worcester’s industrial growth, and the influence of a family on a small business in an important medium-sized industrial city.

In 2002, Kimball Woodbury, former president of Woodbury and Co., donated archival material from the company’s collection to the WPI Archives and Special Collections of Gordon Library. These items include company work samples, company photographs, a company history, and other company materials. This project will serve to interpret WPI’s archived material on Woodbury and Company. Furthermore, it will address some aspects of Worcester’s industrial history in order to place the Woodbury Company into an interpretive context, as well as discuss an example of the influence of family on a small business. This project will offer only a partial analysis of the extensive and diverse archived material of Woodbury and Co., as such; it will also suggest areas for further research. With this focus in mind, this project’s main audience is persons interested in researching Woodbury and Co. in the WPI archives, including students of industrial history and local historians.

The methodology used for this project was principally primary document analysis and interviewing company officials and workers in order to supplement the collection with some oral history materials. Secondary sources include, but are not limited to, Charles Nutt’s *History of Worcester and its People* (1919), Donald Tulloch’s *Worcester: City of Prosperity* (1914), Roy Rosenzweig’s *Eight Hours for What We Will* (1983), and Charles Washburn’s *Industrial Worcester* (1917).
History of Worcester: A Brief Prologue

The area now known as Worcester was first settled in 1673, under the Indian name of Quinsigamond. With the start of King Philip's War, the few settlers who inhabited the area abandoned their homes when Indians began to invade the area. A second attempt was made in 1685, this time renaming the settlement Worcester, which meant "war castle". This settlement was, for all intents and purposes, abandoned in 1701, again due to invading Indians. Jonas Rice, who constructed a home on what is now known as Union Hill, started the third, and lasting, settlement in 1713. Over the next 10 years, settlers slowly trickled into the small town and, by 1722, there were 200 citizens. Quickly enough, though, the town grew, and by 1790 there were some 2,095 citizens (Tulloch 31). Worcester was large enough that, in 1775, it was able to send 110 men to fight in the Revolutionary War, despite the fact that many prominent Worcesterites were well known Loyalists. It is also interesting to note that the first Massachusetts reading of the Declaration of Independence occurred in Worcester on July 14th, 1776, when the document was being transported to Boston from Philadelphia. (Rosenzweig 11-12; Tulloch 21-31; Washburn 9-10)

Worcester remained a relatively small town until the early decades of the nineteenth century, when the population grew from 4,172 in 1830 and to 17,049 in 1850 (Tulloch 31); and "the value of the city's manufactured product leapt from $1 million to $5.5 million" during the same period (Rosenzweig 11). This boom in industry and population can be attributed to a couple of significant developments. First, Worcester's connections to other cities via railroads were extended during the period from 1835-1847,
greatly increasing the types of materials available for Worcester's citizens and businesses. Secondly, the introduction of steam power in 1840 gave industries the ability to grow beyond levels allowed by Worcester's limited waterpower (which prior to that was the primary power source for many industries). After being incorporated as a town in only 1722, Worcester became a city in 1848, and by 1870, Worcester was the second largest city in Massachusetts.

Industrial growth in Worcester was far different from other New England industrial cities, as Worcester boasted a number of varied industries. Worcester became well known for its metal producers, machines and machinery, textiles, envelopes, belting, carpets, and many other products. A good example of this diversity in industry can be seen by looking at where most of Worcester's workforce was employed. In 1880, 83% of Fall River's workforce worked in the cotton mills, and in Lynn 82% of the workers labored at boot and shoe companies. On the other hand, Worcester's three leading industries combined only accounted for 41% of the workforce. (Rosenzweig 12) In addition, unlike other one or two industry cities, Worcesters' leading industries changed significantly. In the 1870's, the boot and shoe industry was the leading industry, with more than 20% of Worcester's workforce; but just ten to twenty years later, "metals and metallic goods" and "machines and machinery" predominated (Rosenzweig 12). Of the metal industries, wire manufacturing was the largest, with Washburn and Moen Wire Manufacturing (which later merged into US Steel Corporation) employing the highest number of workers of any single local company by 1899.

During the same period, a number of colleges and universities emerged in Worcester, such as Assumption College (1904), Clark University (1889), Holy Cross
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(1843), and Worcester Polytechnic Institute (1865). These schools boasted a number of important graduates; in fact, "a 1914 survey counted seventy-two WPI graduates in ownership or top executive positions in Worcester metal trade shops" (Rosenzweig 15). WPI became the main contributor of industrial workers/owners, while the other universities chiefly sent their graduates into non-technical fields.

One of these WPI graduates was John C. Woodbury, who, with his friend John F. Kyes, started Kyes and Woodbury Engraving Company in or around 1879. They specialized in hand-making wood etchings, which businesses often used to print advertisements for their company. They quickly prospered in the midst of Worcester's varied industrial growth, as they were able to print for many different companies that were also struggling to grow.
Oral History and its Application to this Study

Oral history is defined as "Historical information, usually tape-recorded or videotaped, obtained in interviews with persons having firsthand knowledge" (The American Heritage® Dictionary of the English Language). Oral history can be traced as far back as ancient China, some three thousand years ago, where scribes collected people’s sayings for court historians (Ritchie 1-2). Nowadays, the processes of obtaining oral history is more advanced, as tape/video recorders can be used to maintain an exact account of the interview. Oral history’s importance lies in the fact that certain historical information cannot be obtained from written accounts, so this information must be obtained and recorded via oral history, lest the information be forgotten or lost.

One of oral history’s greatest strengths is that an exact recollection of an event(s) can be obtained from an eyewitness. Furthermore, oral history gives historians the ability to see the more personal side of an event, as interviewees can convey their opinions of how the event(s) affected them. This view of a person’s reactions is something that is often missed from a general historical record of an event(s). For this reason, oral history is often used for local history research, as historians are then able to see how ordinary citizens viewed their surroundings, and the effects that an event or circumstance had on them.

While oral history has a number of positive aspects, there are also a number of potential shortcomings. One of these shortcomings is that, often, people make mistakes when recounting the past. The reasons for mistakes can occur due to forgetfulness, opinionating or lack of forthrightness, and so oral history accounts should be viewed with
a degree of skepticism. However, the same shortcoming may also apply to written historical accounts, as often authors do not mention items that go against their argument, and such, readers should also view books with a small degree of skepticism. Thus to obtain a deeper understanding of history, historians and researchers use a balance of both techniques, relying on the positive aspects and mitigating the shortcomings (Ritchie 85-102; Allen & Montell; Davis, Back & MacLean 1-17).

In this project, oral history was used so that a fuller account of Woodbury and Co. could be obtained. Furthermore, I decided to videotape the interview(s), as via this technique there will be an exact record of the interview(s), so that any further research will be able to view the interviews and get a full understanding of what information was obtained. These interviews were used in conjunction with archival and other written sources to obtain the fullest view possible, as the written sources were able to put the information from the interview(s) into context. One of these written sources is the unpublished company history, *Notes on the History of Woodbury and Company*, by Harold D. Woodbury. The company history not only provides the opportunity to put the oral history into context; it also gives an inside view to the company’s operation during the nineteenth and twentieth centuries.
History of Woodbury and Co.

Founded in 1876 in Worcester Massachusetts, Woodbury and Co. lasted over a century. Throughout its lifetime, not only was it able to survive changing economic and social climates, it was also able to prosper. Furthermore, Woodbury and Co. is most likely best known for its work in the area of engraving, especially those technologies which it developed itself, such as *Woodbury Photogravure* (Terms listed in this fashion have a fuller description in the Glossary of Terms) and the *Sky Camera*. With this in mind, Woodbury and Co. is worth study, as in addition to the developments mentioned above, the company is also a shining example of what it meant to be a true family company.

It is worthwhile to note that the following history is primarily drawn from interviews with members of the family, local newspaper articles, and the aforementioned *Notes on the History of Woodbury and Company* by Harold D. Woodbury, which can be found in the WPI archives.

The Start of the Company

As has already been mentioned, John C. Woodbury graduated valedictorian from Worcester County Free Institute of Industrial Science (the “Tech”) in 1876. Woodbury’s education at the “Tech” had centered on the use of free hand technical drawings; after graduation, his work used this skill. He attempted at working by designing carpets at Whittall Carpet Mills, but that was not to his liking, and so he quickly left that job to attempt to become a commercial artist in New York. After being employed as an artist for a number
of months, he returned to Worcester and, along with his friend John F. Kyes, opened the firm of Kyes and Woodbury studios. K&W specialized in doing free hand drawings for *Wood Engraving*, preparing designs for wood engravers to actually make the engraving. One of Woodbury and Co.’s later successes, factory drawings, started in 1882, the date on which John Woodbury’s first factory drawing was recorded. As K&W could not actually do the physical *Wood Engravings*, the company sent its drawings to a separate Worcester firm, Corliss and Emerson, to have the engravings done. Within a short time of K&W using them to do engravings, Corliss and Emerson developed a disagreement, and the two decided to split the firm. A deal was made, in which Kyes and Woodbury purchased Corliss and Emerson’s business, and agreed to hire Mr. Corliss to work for them. This merger made K&W a much stronger company, as it gave K&W a number of new clients, as well as a greater range in what the company could do.

Kyes and Woodbury continued to prosper into the 1880’s, but in the late 1880’s half-tone printing was developed, and immediately it almost completely replaced *Wood Engraving*. This meant that firms like K&W, which had specialized in *Wood Engravings*, had to learn the new process and put it into use. To make this change, it required that a department be opened to make the half-tones, as well as one for taking photographs and one for zinc etchings. These new departments required more room, and so K&W was forced to move from its downtown studio to a new building on Park Avenue. During the 1890’s the firm was
very successful, and it employed 10 or more persons, and Kyes and Woodbury was able to collect 2,500 dollars every year from the company. In the last years of the nineteenth century, John Kyes began to have serious health problems, and so he decided it be best to retire. After 19 years of operation, John C. Woodbury bought Kyes portion of the firm, and in December of 1898, renamed the company Woodbury and Company.

As the company entered the twentieth century, Woodbury and Co. began to be known as a respectable “photo-engraving shop”, as well as a producer of “Bird’s eye views” (Woodbury 5). These hand-drawn bird’s eye views became popular with businesses, but if a business wanted a large copy of one of these pictures, it was forced to go elsewhere to get them. In fact, these large prints were so popular that

Almost every good-sized factory felt it to be an essential part of their operations to distribute large copies of their factory-picture to all their friends and customers. For a decade or more, before and after 1900, if you were to enter either a factory office, or a sales office in Boston or New York, you would find the walls literally covered with large pictures of factories. And many of these pictures would show, in the lower right corner, the signature of Kyes & Woodbury, or Woodbury & Co. (Woodbury 5)

Woodbury & Co. regretted the lost revenue in not being able to produce these large prints, so Woodbury and Co. purchased a Mr. Herbert Carlton’s firm in Gardner. Mr. Carlton was moved to Worcester and put in charge of making the large factory prints, using the Gelatine Process, in which he was an expert. With Carlton’s absorption into the firm, the Company name once again changed, and it became Woodbury-Carlton Company. This company did not last more than a few years, as an unknown dispute caused Mr. Carlton to become fed up with the company. Mr. Carlton abandoned the company, and started a competing Worcester business, naming it Carlton Engraving
Company. Following Mr. Carlton’s departure, the company returned to being known as Woodbury & Co., and the business continued.

Woodbury and Co. at this time was divided into three major departments: the ‘Process Department’, run by Alfred Wesson; the ‘Art Department’, run by Arthur Howard; and the ‘Perspective Department’ headed by John C. Woodbury. At about this time that John C. Woodbury began to show an interest in the relatively new Photogravure process, an interest that no doubt cost the company money. For this and other factors, John C. Woodbury’s ‘Process Department’ began to become less profitable than before, but the other two departments were growing fast. This led to a clash between the three men, and eventually in 1907, the three decided a split of the company would be in order. As such, Howard and Wesson took their respective departments and started the Howard Wesson Company, while Woodbury and Co. shrank to include only the so-called ‘Perspective Department’. It is interesting to note that following the split, both companies stayed in the exact same location that they were before, and so both companies remained located at 4 Walnut Street.

With the departure of Howard and Wesson, Woodbury & Co. was able to produce a much smaller range of products. The company could still produce the Bird’s-Eye-Views, and it was also able to do some basic commercial photographic work. The company was also able to make use of the Photogravure process which John C. Woodbury had been researching, but the process, while attractive, was time-consuming and very expensive for Woodbury’s customers.

Figure 4: John Edward Woodbury
In 1908, John C. Woodbury's son, John Edward Woodbury, graduated from the "Tech". John E. Woodbury majored in 'General Science', a degree which gave him a background in the fields of Chemical, Civil, Mechanical and Electrical engineering. This varied background was an immense help to him when he began to work for Woodbury & Co., as he was called on to improve the fledgling Photogravure process. John E. Woodbury's work on this process proved immensely helpful to the company, as he "Took this artistic process of engraved Photogravure ... and he adapted that to a commercial process ... he refined it to a point so that we [Woodbury and Co.] could do it commercially" (Kimball Woodbury).

The Development of Photogravure

John C. Woodbury had a strong interest in the technique of Photogravure, as it had a far higher quality than any other method of printing pictures at the time. To obtain this quality, however the price of making the print increased dramatically. This price impact held back Photogravure from being immediately successful, as only a few companies were willing to pay the high costs. So, in order for Photogravure to be successful, John E. Woodbury and the rest of the company had to develop a process by which Photogravure could be done on a cheaper, easier, and faster basis. The first step was to replace the dust method previously used to make the etchings with a screen. The screen's regular pattern, as opposed to the random dust method, gave the etching the ability to better resist wear. Moreover, use of the screen made touch-ups easier, as there were predefined grooves from which the engraver could work in. Another aspect of Photogravure that needed attention was the fact that it needed to be done meticulously by
hand, with employees having to pre-moisten the paper, do one press at a time, then re-press the whole paper to put the paper back into its original state after being soaked and crushed.

Since this process was time-consuming and expensive, a machine was invented to help automate this process. The machine created for this task was the wetting machine. The wetting machine was responsible for wetting only the area of the paper that was to be printed, as opposed to soaking the whole sheet. This change greatly increased productivity, as the paper did not need to be reconstituted after it was soaked. With these inventions, the rate of printing was up to about 1,200 sheets per hour.

The Sky Camera

Around the same time, another invention was developed which would prove to be important to the company. This invention was the Sky Camera, which was developed by John C. and John E. Woodbury. Before its invention, so called “Bird’s-Eye Views” were drawn by hand, with the artist guessing as to what the factory would look like from above. While this gave the artist the ability to make the factory more visually appealing, it suffered from the fact that it wasn’t fully accurate. The obvious solution was to take a photograph of the factory, as photographs were seen as being correct. The only problem was that often the correct “Bird’s-Eye View” could not be obtained, as there may have not been a vantage point in the area high enough to see down upon factories that were three or four stories high.

As a result, it was decided that a cheap, portable structure was needed that could be used
to take a photograph some 75 feet high (or even higher). John E. Woodbury decided to meet this task, by making what was known as the “Sky Camera”. First designs of the structure called for the use of telescoping brass tubes, but upon testing this design in the field where the current Salisbury Apartments now stand, the structure collapsed into a pile of broken metal. A second design, which used extending wooden poles, also failed, but the third design worked like a charm. The third design used wooden triangular frames, each of which was larger than the one above it, such that each frame fit inside of the one below it. This new design was very strong, compact, and portable. This design was so strong, that it was able to extend, without a problem, to a 120ft height, which was used on at least one occasion.

But in the end, the Sky Camera was labeled by the company as a failure.

Although the Sky Camera worked magnificently, and was a technical success, it was
recorded as unprofitable. In fact, it was said that “It is impossible to sell enough pictures
taken by the Sky Camera at a profit-making price” (Woodbury, Harold D. 38).

A New Venture

By the beginning of 1910, Woodbury and Co. had decided to commit itself fully
to producing Photogravure letterheads. There was a major drawback to this decision, as
companies only needed letterheads made every couple of years, and so the field of initial
customers was quite small. Furthermore, it was expensive for Woodbury and Co. to go
and convince new customers to buy their letterheads, so expensive that “…the cost of
selling a new customer is so great that the first order for such a new account produces a
net loss. It is only after one, or possibly two repeat orders have been received that the
customer produces a profit for the company” (Woodbury, Harold D. 60).

It follows that, during this time, the profit shown by the company was very small;
and so a bank loan was needed. After renewing the loan a number of times, eventually
the time came when the loan was finally due, and so the bank handed the case over to a
lawyer, Mr. Charles M. Thayer, head of a local collection firm. To prevent bankruptcy,
John C. Woodbury called the lawyer and told him, “You can put us into bankruptcy if
you call the note; and that way you will not get much of anything, for we are insolvent at
this time … However, I am confident that if you do not take this action, you will
eventually get all your money” (Woodbury, Harold D. 62). Apparently this confidence
impressed the lawyer, as he recommended further delay with no action; and Woodbury
and Co. eventually paid off the loan.
An interesting offer was made to Woodbury and Co. in 1912. This offer was made by a Mr. Hammond, who offered to lend the company $10,000 if it would employ him. Since money was tight at the time, the company decided to hire him. To the company’s dismay, however, it was quickly learned that he was not an effective employee. He was moved around, and eventually he was working on ‘the routine handling of shipments’, since he was only able to work in limited capacities of this kind. As a result, it was decided that he had to go. With considerable burden, Woodbury and Co. repaid the $10,000 which it had borrowed from Mr. Hammond. During this period the company was able to show a small profit, but it still needed money badly. After asking banks in Worcester and Boston, it was found that no one would loan the company money, and so it was forced to go without a loan.

Figure 8: Engraved Press room as seen in 1917

Fires at the Chase Trust Buildings

At this time, the Woodbury and Co. was located in a loft building owned by the Day Trust. Unfortunately for Woodbury, the set of buildings owned by the Trust was notorious for fires in their buildings. On one occasion, a fire tore through the ‘Day
Building', and to the dismay of Harold Woodbury (who was working sales at the time), he found that Woodbury was listed in the paper as one of the buildings listed as having been burned out. Luckily enough for the company, though, the part of the complex which they occupied wasn’t burned. But a number of years later, Woodbury and Co. was not so lucky. A fire raged through the building in which they were located, the fire heating the presses and burning the wooden platforms and shelves around them. But miraculously, the eastern wall was able to withstand the fire, as, had it collapsed it would have sent all the presses in that building into the basement. Had something like that happened, it most likely would have cost too much to get these presses back into operation, and would have caused a closure of the company.

Harold D. Woodbury

John C. Woodbury’s other son, Harold, began to work for the company during his high school years. Upon his graduation in 1910, Harold became bookkeeper for Woodbury and Co for two years until he entered Clark. Upon graduation from Clark, he returned to doing bookkeeping for a short while, before his two year departure to serve in World War I. With his return from Europe, Harold became the Assistant Treasurer for the company, and started his tenure in the administrative portion of the company.
Shortages during World War I

The introduction of a stoppage on all German imports marked the start of World War I, and engravers and specialized printers quickly felt the pinch. Prior to the war, the ink used in *Photogravure* was almost a monopoly of German ink makers. The ink makers in Germany had achieved “the right combination of tintorial power...with an oil base which was correct, smoothness ... ability to dry in a reasonable time, etc.” It was believed that one of the reasons for German ink superiority was because “inks [were] made on the basis of charcoal made from grapevines grown in the Rhine valley” (Woodbury, Harold D. 67).

In order to cope with the lack of imports, American ink was used to replace the missing German ink. American ink, however, did not have the quality of the German ink, and a number of attendant problems arose. Among the problems that Woodbury and Co encountered, sometimes the ink was too greasy, or it didn’t dry with a smooth surface. By far, the greatest problem that the company encountered was that of drying. With the old German ink, allowing the engravings to dry for ten hours overnight was sufficient, but the new American ink was still not dry in that same amount of time. Consequently, Woodbury and Co. set up a stack of vats 5 feet square and two inches deep, into which calcium chloride crystals were sprinkled, in order to absorb the water from the air. Then, at night the pressroom was heated to temperatures as high as 125 degrees. This high heat and artificial dryness sped the time for which the engravings needed to dry, such that it gave the ability for the prints to dry overnight.
Prosperity in the 1920’s

With the war over, and the shortages it brought gone, Woodbury and Co. was on the rise. By 1920, the annual volume of the company was $165,000. After a quick slump in 1921, the company continued to rise, and its pictorial letterheads had assumed a significant niche in the printing market. In the early 1920’s, a development won the company greater acceptance. This development was the idea that the pictorial letterheads didn’t have to be ‘Bird’s-Eye Views’ of the factories, but rather could be engravings of a “local landmark, a statue or a tree, or a bridge... and industrial prospects were often sold on a picture of their product...the list was endless” (Woodbury, Harold D. 71). Popular customers during this period were banks, and they often did pictures of their building as this was the “Greek Temple” period of bank construction. Banks were so popular, in fact, that Kimball Woodbury said, “Every little town had banks, a commercial bank and a savings bank, and that was our [Woodbury and Co.] market. We did maybe half the banks in NY and New England” (Kimball Woodbury Interview).

Figure 10: Typical bank pictorial letterhead, as produced by Woodbury and Co.
As the century progressed, Woodbury and Co. began to be overwhelmed with new orders, so many that the company began to fall behind on orders. The company was constantly increasing its production capabilities, but still the orders piled up undelivered. One of the means by which the company increased its production capabilities was to build a new building, at 24 Chadwick Square. This new building was built in 1924 with 14,000 square feet of space, and with a number of renovations and expansions, remained the company’s home until its close some 75 years later. Within five years of construction, there were two new additions put onto the building. With this new building and a general growth in American Business, Woodbury and Co. celebrated its 50th Birthday with “billings [that] almost reached $500,000” (Woodbury 72).

Figure 11: New Building at 24 Chadwick Square as seen in 1924

The Depression Years

With the stock market crash in the fall of 1929, and the following Great Depression, Woodbury and Co. quickly felt the pinch of the depression. Woodbury and Co.'s total sales of about $475,000 in 1929 fell to a low of $168,000 in 1933. This rapid drop in sales caused the company to make a number of drastic changes in order to
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survive. One of these changes was to make two different wage cuts around 1931. These wage cuts were for 10% each, although the company made the provision that if the second pay cut dropped an individual's pay under $10 per week, then the cut was ignored. Surprisingly enough, though, the employees nearly welcomed the pay cuts, as they knew it was needed to keep the company in operation. This determination by the employees carried over into another one of the changes that was made. This modification was to put workers on the street trying to sell the idea of letterheads to anyone who would listen. Although this wasn't overly helpful, it did help to show and strengthen the resolve of the company's employees.

Another move Woodbury and Co. made was to develop the difference between the Gravure specification and the 'Woodbury Photogravure' specification. The major difference between the two was price, as the Gravure specification was some 20% cheaper than the other. The reason for the development of the second Gravure specification was to justify lowering the price to better compete with other engraving companies. Originally the Gravure specification was to be of lower quality, and it lacked the guarantee of quality that 'Woodbury Photogravure' held. Over time, however, the two specifications blended together, and it wasn't until 1965 that the Gravure specification was dropped, and 'Woodbury Photogravure' took on the price that Gravure had previously cost.

In the early part of the '30's, the federal government set up the NRA (National Recovery Administration) to address economic changes and to get businesses up and rolling again. With this effort, the NRA called for each industry to have a “Code Authority” with power to issue price lists, control wages, and so forth. Harold Woodbury
was appointed among one of the five appointees in the nation for the Engravers Code Authority. This was interesting work for Harold, and it elevated him to a leadership role in the Engraving industry.

**Start of the Lithograph Department**

Another move Woodbury and Co. made to try to cope with the Great Depression was the establishment of the Lithograph Department. This move was spurred by Harold D. Woodbury’s insistence to John E. Woodbury that “(1) Lithographic competition was getting serious, and (2) [John E.] had through his brilliant work on *Photogravure* ... made [Woodbury and Co.’s] *Photogravure* successful and acknowledged by all to be the ‘standard of quality’”. Furthermore, Harold suggested “…the time had come for [Woodbury and Co.] to apply [its] expertise on pictorial letterheads ... to the field of photolithography and its application to letterheads” (Woodbury, Harold D. 78). The idea was that the cheaper Photo-Lithography, or “Rotograph” as it was later known by the company, could salvage some accounts that had customers who could not afford the price of ‘Woodbury *Photogravure*’.

After the purchase of a “Multilith” to work out a process by which to print Lithographic photographs, quickly enough the company was able to produce beautiful Lithographic Letterheads. The Lithographic Department grew quickly, and after a number of years, it was the size of the *Photogravure* department.
Scrip for Bank Closing

Towards the end of 1932, it appeared to many that the worst of the Great Depression had passed, but in early spring, a large Detroit bank closed its doors. This closing sent fear through the banks of the country, so much so that when President Roosevelt was inaugurated he decided to close all of the country’s banks. Suddenly, cities across the country began to fear that their banks would not reopen, and this fear led them to look for a means to conduct transactions without the use of banks. The main problem in using the money already physically in circulation was that most business pay their employees via a company check, and with the banks out of operation, there was no means by which to pay a city’s workers. In Worcester, a committee was set up to consider what they could, and Woodbury and Co. offered its services in making a local currency, or ‘scrip’. Woodbury’s pitch to the committee relied on “two points: 1) That engraving was the best method of foiling attempts at counterfeiting, and 2) We would include in the design an oval patch on which we would develop a “moiré” effect, which we would make counterfeiting impossible” (Woodbury, Harold D. 79). Shortly following the company’s pitch, Worcester called for Woodbury and Co. to make a temporary scrip for the city, in order for the cities workers to be able to get some sort of payment for work.

The city called for the company to make in total one million dollars worth of money; in denominations of one, five and twenty. The sheer number of bills to be made required that the presses be run overnight, and so the company went into 24-hour operation to get the job done. After a couple of days, the company completed the job, and handed the scrip over to the city. Despite all the company’s hard work, the scrip was
never used, as the Federal Government allowed banks in good standing to reopen after ten days. Despite this fact, the production of the scrip gave Woodbury and Co. a large amount of positive publicity in Worcester and the surrounding areas, as potential customers saw that not only was the company dedicated to its city, it was also able to do more than just function under pressure, but it was able to excel.

Death of the Founder, John C. Woodbury

Following an illness of about six months, John C. Woodbury passed away in 1931. Born in 1856 in Charlton, Massachusetts, John C. was an unwavering force behind the company throughout his life; in fact, he always "encouraged everybody to create something beautiful" (Kimball Woodbury Interview). Another important aspect of John C. Woodbury's character was that his business ethics were "strict and undeviating" and "he never preached about it; he simply did things the right way. There were some instances where this cost him money ... but he never wavered in the belief that the right principles were to be followed; and the consequences would take care of themselves" (Woodbury, Harold D. 78). These beliefs were passed down through the generations, and the benefits to the company of such practices are immeasurable.

First Day Covers

In 1939, one of Woodbury and Co.'s more successful ventures began, and that was the production of First Day Covers (see the Glossary of Terms for information). First Day Covers proved to be quite useful to the company, as they were something that lasted up until the company's closure. The First Day Covers that Woodbury and Co.
made were very similar to that of the engraved letterheads that it produced, as both engraved products often incorporated the use of various "Woodbury Photogravure" techniques. After being started on the suggestion of the company's Northern New Jersey representative, Mr. W. E. Decker, First Day Covers were produced by the company until its close in the mid 1990's. In fact, Woodbury and Co. made First Day Covers "for every US stamp for 50 Years...about 3,000 [different stamps]". First Day Covers quickly became fiscally important to the company, as annually, they equated to somewhere "between 10-12% of overall sales" (Kimball Woodbury Interview). In addition to the monetary benefits, First Day Covers gave national recognition to Woodbury and Co, as the company sent these to collectors across the country, collectors who were often potential customers.

World War II

With the onset of World War II, a new set of problems confronted Woodbury and Co. First, many of the company's employees were drafted or volunteered for service, a service that lasted 3-5 years. One of these was Harold Woodbury, who volunteered to be an administrative officer in the Air Force. In addition to the lack of regular employees, there was a problem with obtaining proper supplies. One of these supplies was copper, which the company needed to use for its printing plates. In addition to having a difficulty finding new copper, the government in its stockpiling of all scrap metal to bolster wartime resources, called

Figure 12: Kimball Woodbury
for all engravers to hand in their copper plates. This would have decimated engraving companies like Woodbury and Co., as they would have had no proper means by which to produce the required printing plates. Seeing this, the Engravers Association stepped forward and told the government what type of detrimental effect this would have on the engravers, and it was able to obtain an injunction that allowed engravers to keep their copper. Despite the many problems encountered, Woodbury and Co. was able to maintain a static volume throughout the war and it exited WWII looking to expand.

It was in 1944 that Harold's son, Kimball Woodbury, was slated to graduate from WPI, but he was serving in the Air Force until 1945. After his discharge in 1945, he resumed his studies at the "Tech", and graduated in 1947 with a degree in Mechanical Engineering. Following his graduation, he began working for Woodbury and Co., and, after moving around the company and working in various departments for two years, he became Production Manager.

**Death of John E. Woodbury**

In 1949, after a lingering illness, John Edward Woodbury passed away. During his lifelong tenure working for Woodbury and Co., he was able to tackle such things as **Photogravure** and Lithography, as well as the **Sky Camera** and the problems of engraved letterheads. Furthermore, his 'technical genius' gave him the ability to constantly make and improve various technologies to "strengthen ... the company for the benefit of all" (Woodbury, Harold D. 89). Following John E. Woodbury's death, Harold Woodbury became president and head of the company.
Woodbury enters the 1950’s

Following the death of John E. Woodbury, Woodbury and Co. was left without the man who had created most of the company’s technological successes. The dilemma created was articulated as follows: “Could the company survive with its great variety of technical procedures, without the guiding hand of the man originated most of it?” (Woodbury, Harold D. 90) Quickly, though, the company discovered that not only could it survive, but it could also grow and prosper. For instance, it was in the 1950’s that the idea of automatically feeding envelopes into the press was put into action. Woodbury and Co. was able to make the necessary technical modifications for auto-feeding envelopes, and it proved immensely helpful, as it gave the ability to increase the speed at which the company produced First Day Covers, a product that had grown to be a significant portion of the company’s workload. In addition to the technical success, it was also a personal victory as it “proved that [Woodbury and Co.] could do something without the help and guidance of John E. Woodbury” (Woodbury, Harold D. 92).

Another important event that occurred in the 1950’s was the reorganization and development of the Personnel Department. The first change was to work out a job structure which showed all the jobs and what the job required and entailed. This job structure gave the company the ability to determine labor grades, so that people of higher skill could receive the pay they deserved. Secondly, the company set up a method by which to increase each employee’s pay by a small percentage every five years, so that older employees

Figure 13: Engraved Press Room in 1963
would have something to look forward to in the future. Thirdly, a 'retirement income plan' was set to ensure the company's long time employees were looked after. Lastly, the company decided that it would not institute a retirement age, as they felt that no one should be “asked to stop work merely for calendar age” (Woodbury, Harold D. 93). So, any individual who reached retirement age could decide to continue work if they wanted, and if so, then Woodbury and Co. would find something for them to do.

It was also during this decade that the 'annual Service Awards Dinner' was started, in order to honor those employees who contributed most to the company. In addition, the employee's paper, the *Eagle's Eye*, was started, and this paper proved to keep going a good line of communication throughout the company.

Finally, John E. Woodbury's son, John Clark Woodbury, was added to the company, where after his stint at Harvard, was placed in charge of the advertising section of the Sales Department. He quickly succeeded in his work, and with the help of the rest of the company, an annual volume of approximately $1,250,000 in 1960 was achieved.

![Figure 14: Factory in 1965](image)

**A New President**

In 1967, with the company still on the rise, Harold Woodbury was moved to a higher position, and Kimball Woodbury was installed as president. As Executive Vice-President, Kimball had been performing many of the Presidential duties, so when the change came, it was primarily just a change in title.
By the 1970's, sales of both engraved letterheads and lithographic letterheads began to drop. The decline in sales of both techniques to decline stemmed from several unfortunate events. Engraved Letterheads began to drop in sales as many of the larger companies began to move away from using engraved letterheads, as the prestige that the letterheads carried began to erode, and "salespeople had to sell a need for engraving as well as sell the product" (Kimball Woodbury Interview). Furthermore, the companies that bought Engraved Letterheads began more and more to be small concerns looking for "the purchase of prestige, and, at least the appearance, of established success" (Woodbury, Harold D. 104). These smaller concerns bought far less then their larger counterparts, and so Engraved Letterhead sales dropped. On the other hand, Lithographic letterheads dropped in sales for a different reason, the reason being that many companies were purchasing their own lithographic printing machines, and therefore no longer needed the use of companies like Woodbury. As a result, "sales of engraved letterheads fell from a peak reached in 1967, by over 40% as measured in impressions" (Woodbury, Harold D. 105).

On the positive side, the successful sale of First Day Covers gave Woodbury and Co. a growing acceptance in the printing world, and so the company received more and more sales in the 'stamp-related and other collectables' area. This growth helped the company combat the falling volume in Engraved Letterheads and Lithography.

**Woodbury and Co. reaches the end**

As the company entered the 1970’s, sales of engraved letterheads continued to decline. In addition to the aforementioned reasons, engraved letterheads began to drop in importance as companies began to use geometric designs instead of photographs.
Although Woodbury and Co. was able to create these designs, there was already a lot of competition in this market, and many of the competitors already had a good handhold on how best to make these engraved letterheads. The introduction of the fax machine in the 1980's was another big hit, as companies began to use the fax machine as a means to pass information across distances rather than sending a letter on the company stationary.

Woodbury and Co. struggled on still doing what it did best, but the introduction and acceptance of e-mail was the proverbial last straw. Email quickly began to be used to send information between companies, and so the need for engraved letterheads declined even further. Despite the fact that there was still some orders coming in, the fact that there were so few and for so small amounts made it "Harder and harder to break even" so much so that "When the bank account gets down to zero, [it] gets your attention real fast" (Kimball Woodbury Interview). After assessing what other products the company could possibly make, they "could have spent a ton of money investing in state of the art machinery and processes, but there was an awful lot of other people already in business" (David Woodbury Interview) and so competition would be too thick to be able to start anew. When an offer came in to purchase the property, Woodbury and Co. decided to take the offer and sell the property to an outside source for development. Sadly, this marked the end of a century old family company, a company that was able to produce a beautiful product during its tenure, and was able to help the City of Worcester develop during times of need.
What it meant to be a ‘Family Company’

A true family company is more than just a business run by a group of family members. It is a company that ‘adopts’ every employee into their family, and treats them as such. Moreover, while a family company’s leadership may be passed down through the generations, its job is not merely a figurehead position; these individuals led the company in a similar fashion to how it had been run by generations past. Woodbury and Co. is one of these companies. As the company was passed down through four generations of the Woodbury family, efforts were made by each generation to remain true to the principles of the preceding generation. In addition, the company treated its employees as members of the family and "it was really kind of been the employer relationship" (Kimball Woodbury Interview). Woodbury and Co. is not the only family company that started in the Worcester area, and among others, one of the most visible is the Norton Company, which was run for most of its existence by the Higgins and Jeppson families. This company has since become a ‘Modern Multinational’, and full analysis of the change can be seen in Charles W. Cheape’s book *Family Firm to Modern Multinational*. As noted in Cheape’s book, many of the company dynamics changed, for instance company polices changed from looking out for the families best interest to ensuring that the company prospered despite any certain person(s) needs.

At Woodbury and Co. one of the most important considerations for the company’s owners was the employees. For instance, rather than to focus on specific benefit packages, the company instead focused on the fact that “Employees knew that we cared about them as individuals” (Kimball Woodbury Interview), and that the company
would be willing to accommodate to the needs of its employees. Woodbury and Co., like many Worcester Manufacturers, “recruited their work force in an already established industrial city where unionization was weak” (Cheape 4); furthermore, one of the Company’s presidents, Kimball Woodbury, believed that if they (he and the rest of the management) treated their employees fairly well, then there would be no need for unions. In fact, “In times of crisis [Woodbury and Co.] would always lean over to the employees’ side of the ledger” (David Woodbury Interview), which always ensured that employees knew that they were well cared for.

Another important idea that Woodbury and Co. stressed, which many other family firms also adhered to, was a need for community service. It was the “fundamental idea that [Harold Woodbury] taught everyone” (Kimball Woodbury Interview), and many of the employees worked doing various aspects of community service, because “if you want a better community, invest in it” (David Woodbury Interview). In fact, Kimball Woodbury himself served on the Memorial Hospital Board, Worcester County Institute for Savings, and at the Greendale YMCA at which he “did just about every job” (Kimball Woodbury Interview).

In conclusion, a company like Woodbury and Co. is more than a company run by a family; it is a family on its own that cares for each member and the community at large. This was so much so, that one of the company’s presidents said that his greatest achievement was to make “a contribution to the people who worked [at Woodbury and Co.] and the community . . . WPI being part of that community” (Kimball Woodbury Interview).
Areas for Further Research

Because of the size and scope of the Woodbury collection in the archives, it is difficult to give a full analysis of its contents. However, in the preparation of this project, a number of possible areas for further research and study were encountered, based either completely on the archived collection, or with the help of similar outside sources.

First, further research could be done on the family company dynamic, and the role that it played in the development of the company. In addition to the archived material and the material contained in this project, analysis could involve the use of employee interviews, as well as comparison to other notable family companies, such as the Norton Company.

Secondly, analysis could be done on the technologies created by Woodbury and Co., such that a fuller view could be obtained of their effectiveness and influence on the printing and engraving industry. Again in addition to the archived material and the material contained in this project, oral history could be used to examine what views engravers (possibly both inside and outside of the company) had on the technology that was created.

Third, with the help of the archived material, material contained in this project and outside information; a in-depth analysis could be produced that noted the changes in the printing industry and/or Worcester that have caused companies like Woodbury and Co. to close in recent years. Specifically, research could be done on the Worcester’s printing and engraving industry. and how it has changed since Worcester became an industrialized city. This research could tie in various topics related to how Worcester has
changed over the last decade.

In addition, an exhibit, website, or even a book could be produced which displays the type of work that the Company produced. Furthermore, this item could help to display some of the more notable photographs and engravings located in the archives.

Also, an examination could be done of the inner workings of day to day business at a family company. The archives could be used to further this research, as there are many examples of day-to-day company memos, notes and speeches produced by the company’s employees.

Lastly, with the archived material, material contained in this project, and outside sources, a comparative analysis could be developed between a family company like Woodbury and Co. and a modern conglomerate. Furthermore, examination could focus on what dynamics are at work when a company changes from a family company into a large corporation. This study could draw upon Charles Cheape’s analysis of the Norton Company in his book *Family Firm to Modern Multinational*. 
Glossary of Terms

**Art Department:** In the early 1900's, the department that Alfred Wesson managed. As Wesson was a budding artist, it was the department that dealt with various aspects of commercial art. But, the *Bird’s-Eye-Views* were left to the 'Perspective Department'.

**Bird’s-Eye-Views:** These views are pictures of factories and various other objects, viewed from above, such as what a bird flying overhead would see. During the latter part of the 19th century and the start of the 20th century, Woodbury and Co. did a lot of work producing these pictures based upon what the artist thought the view should look like if viewed from that location, as opposed to what actually was there. It wasn’t until 1908 that Woodbury and Co. began to use actual cameras to produce these pictures (see *Sky Camera*). *Bird’s-Eye-Views* also were an opportune subject to being printed by the *Photogravure* process and the *Gelatine Process* (see respective indices for more information), a fact which Woodbury and Co. took full advantage of.

**First Day Covers:** When the United States starts to issue a new commemorative stamp, it at first sells that stamp in one location, a location that is closely associated with the stamp’s subject. Because of the historical significance involved with the release of a new stamp, collectors want to get something which notes the creation of the stamp. Hence, it has become customary for a
company to create a postcard, postmark it with the place and date of first issue, and send it to interested stamp collectors. Prior to 1939, these ‘First Day Covers’ were only decorated with a “crude rubber stamp impression” (Woodbury, Harold D. 38), and so Woodbury and Co. contacted the First Day Cover creators, Washington Press, to tell them of Woodbury’s ability to create much higher quality engraving using the Photogravure process. Despite cost concerns, the two companies agreed to market test the idea, with Woodbury being set to forfeit the cost, should the idea have failed. But the test proved very successful, and Woodbury began to make First Day Covers. In January 1967, Woodbury had already produced some 850 ‘First Day Covers’.

**Gelatine Process**: Process which is used for the reproduction and printing of photographs. This process is relatively economical, and more importantly for Woodbury and Co., is appropriate for use in creating larger works. This process was used by Woodbury and Co. to produce large prints of the Bird’s-Eye-Views it produced, supplementing the printing done by other techniques, namely Photogravure.

**Localized Electroplating**: Relatively unique to Woodbury and Co., this process was used when something small, like a name, needed to be changed on a plate. Previously, a new plate was made every time any change needed to be made, but this obviously was quite expensive. So, the idea was dreamed
up that the name could be shaved off of the plate, and have the copper pushed forward to even out what was to be printed. Doing this though, left an indentation at the back of the plate, which would break under the stress of printing. After trying various other fillers, it was decided to use copper to fill the hole. This copper was used to fill the space by electrically fusing to the plate, then shaving off any excess. This process gave Woodbury and Co. the ability to sell plates which they could “change the plate for much less than it would to start fresh with a new engraving”

**Perspective Department:** In the early 1900’s, the department that John C. Woodbury was in charge of. It created the company’s perspective drawings, namely **Bird’s-Eye-Views**, which later were used to make prints.

**Process Department:** In the early 1900’s, the department that Arthur Howard was in charge of. It was responsible for making the physical engravings, namely the half-tones and the zinc etchings.

**Photogravure:** Process by which a photograph is transferred to a plate for printing. This is done, if one describes simply a complex process, by first transferring the negative of the image onto a carbon sheet, which can be etched onto a copper plate by putting acid on the carbon paper and copper plate. This acid slowly eats through the paper and begins to etch the copper. In the places where the carbon paper is the thinnest, the copper is etched the
deepest, as the acid eats through the paper fastest there. So, when printed, the deepest parts of the copper plate will contain the most ink, and be the darkest.

**Sky Camera:** Created in the early part of the 20th century, this product is a timed camera set upon a tower (80 feet high or more) to take *Bird's-Eye-Views.* Designed and created by John E. Woodbury, the *Sky Camera* tower was first assembled on the ground and then later hoisted into the desired vertical position where it was held by a number of guy wires. Woodbury and Co. used it to great advantage to produce factory photographs and engravings.

**Steel and Chromium Facing:** Due to the nature of the chemical process used in *Photogravure,* the plates used were often made out of copper. Copper though, is not entirely suitable for use as a press, as its softness does not bode well for the high-pressure needed for *Photogravure* engraving. So, a coat of iron was electroplated onto the copper, so that press would last far longer. But, even with this coat, only about 5,000 sheets were able to be made before another coat of iron was needed. So, when the government released the relatively new technique of chromium plating, John E. Woodbury jumped on the opportunity to make use of it. Although the technique was originally only used only to place chromium on iron, John E. Woodbury was able to apply the process to copper. This application of chromium directly to copper was a completely new, and it gave the
presses the ability to print almost 50,000 prints before restoration of the plate was needed.

**Thermography:** Also known as Virkotype, this process consisted of scattering powdered rosin on the ink of a letterpress impression, while it is still wet enough to make the powdered rosin stick to it; and then pass the sheet through an oven, thus melting the rosin. The result is a lump of rosin over the lettering that was printed on the paper. This gave the impression that the printing was engraved, when it really was not.

**Wood Engraving:** Done By Kyes and Woodbury primarily during the 1870’s+80’s, this process was use to make wood plates for use in printing. Kyes and Woodbury both did the drawing portion of the process, which meant that they drew, in reverse, what was to later be printed. This negative was then cut into the wood via a skilled wood worker, who cut away wood in areas where print was not desired. The reason that the whole process was done in reverse from left to right was because of the nature of printing, and the same thing has to be done when printing regular type. White strokes from the artist in the finished printed product are a sign that **Wood Engraving** was used.
Interview with Kimball Woodbury

1) Schooling :15
   a. Worcester academy + WPI started class on '44 but was postponed until '47 because of spending time in the service. ME.
   b. Kimball said it “taught me how to think”  1:47
   c. John C. Woodbury (1875) artistic genius, son John E. Woodbury ('08) was more of a technical genius.
   d. Kimball tried to maintain the technical basis for the company, but bring it into the new age

2) Notable Clients 2:46
   b. At the height of the company “Every little town had banks, A commercial bank and a savings bank, and that was our [Woodbury and Co.] market.
   c. We did maybe half the banks in NY and New England”

3) Supplies 4:00
   a. Woodbury did not use a lot of ink; they bought in relatively small amounts.
   b. Woodbury received the high quality paper it needed from mills in the Connecticut valley.

4) Family Structure 5:12
   a. John C – Founder – WPI 1875
   b. John Edwards – WPI '08 – made hand engraved Photogravure into something that could be marketed commercially “Took this artistic process of engraved Photogravure,… and he adapted that to commercial process…he refined it to a point so that we[Woodbury and Co.] could do it commercially”
   c. John C. – Harvard
      i. Benjamin – Computers
      ii. Tom – Computers
   d. Harold – Clark
      i. Kimball – WPI – production
         1. David – President
         2. Peter – Production Manager

5) Family in day-to-day work 10:05
   a. “He[John C] encouraged everybody to create something beautiful”
   b. “three or for sisters, husbands and wives, guys would meet girls there, marry them…their kids would join us” “It was really kind of a unique employer relationship” “We laughed together, we cried together we suffered together, we celebrated together” 10:30
   c. Had about 125 people
   d. “I worked doing something I loved all my life, and I got paid for it”11:00

6) Where they got workers 12:00
a. Take people from Worcester Boys Trade or Worcester Vocational High School...they had some printing classes, but they produced really good commercial artists
   b. Talent and Character...They thought them everything else

7) Community 14:30
   a. "After we did our work, to have enough time experience and gumption to be left over to give to the community
   b. Kimball did Greendale YMCA “I did just about every job in the YMCA” 15:30
   c. Memorial Hospital Board, Worcester County Institute for Savings
   d. “Fundamental idea that my father taught everyone”

8) Other companies 17:45
   a. Central Mass. Employers Association – Father knew all of the members by name
      i. “He applied the Large business philosophies to small business” 18:30
   b. All of the Worcester companies worked together
      i. Local industries were run by local people who cared about the community, and pushed for it’s success

9) Benefits for workers 19:30
   a. They felt it was important to maintain the standard benefits
   b. Very large on retirement benefits
   c. They were always up with other companies, they kept competitive wages
   d. Rather than focus on benefit specifics, the focuses on the fact that “Employees knew that they we cared about them as individuals”
   e. No retirement age (whenever worked best for the employee)
   f. Never had a union, Kimball believed that if they (him and the rest of the management) did their jobs well, there would be no need.

10) First Day Covers 23:47
   a. “Did that for every US stamp for 50 Years...about 3,000” 27:00
   b. Very important...”varied between 10-12% of overall sales”
   c. There were “two or three other significant companies” who did the same thing 28:00
   d. Enhanced reputation

11) Sky cam 30:00

12) Closure 34:00
   a. Pictorial Letterheads fell out of favor
      i. Companies began to use geometric designs for engraved letterheads, instead of factory photographs. While Woodbury and Co. could do this, there was a lot of competition in this area of engraving, were they had a good portion of the market for pictorial engraving
   b. Romance of Letterhead...for the last 15-20 years “salespeople had to sell a need for engraving as well as sell the product” 37:00
   c. Fax + E-mail
      i. 38:47 quote about email being inter-office only
d. While companies and executives did still use some engraved materials, it was only a small amount and not enough to keep Woodbury and Co. in operation.

e. Got an offer for the property, so they purchased a smaller place, but they realized that that would not help

f. "When the bank account gets down to zero that gets your attention real fast" 41:00

g. "Harder and harder to break even" 49:30

h. There was not much else they could do, any new ideas that Woodbury could do (greeting cards, invitations, etc.) was already being done by someone else.

i. Started a real-estate company to hold onto the profit from selling the property; bought some commercial real estate with it
   i. 50% tax would have been applied had they not continued the company following the sale of the property
   ii. Sold items and customers to a friendly company, Artcraft

13) Greatest achievement 45:00
   a. “The satisfaction of making a contribution to the people who worked here and the community...WPI being part of that community” 45:15

14) Other people to talk to 46:30
   a. Son David Woodbury
   b. Former treasurer Earl Barry
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IQP/MQP SCANNING PROJECT
Interview with David Woodbury

- View as a child
  - Knew about the business
  - Didn’t think about what the company meant until he worked there
  - Started Working there
  - Summer jobs in High School
    - ‘Supervised camp’
    - Goal was to get introduced to things that occur in the real world
    - More values oriented

- College
  - Hillsdale College
  - Business and Administration major

- How College helped
  - Learning how to think, live on your own, etc.

- After College
  - Got a job, married, and joined the Army Reserve
  - First Job at the shop
    - Spent three or four months in each department
    - “Most importantly that was getting know people [and] building relationships”
  - Became president after Kimball retired in ‘87
    - Easier after spending “time in sales and the HR side of it”

- Goals as president
  - Wanted to “have a harmonious workforce”
  - “In times of crisis we would always lean over to the employees side of the ledger”
  - “At the end of the day felt like they[the employees] got something out of it”
  - “Run the company in a decent, humane fashion where people enjoyed going to work”

- Chief Product
  - “For a hundred years it was basic business correspondence”
  - “From probably 1910 to 1985 it was the primary method of correspondence” “The only competition was the telephone”

- Closure
  - “We could have spent a ton of money investing in state of the art machinery and processes, but there was an awful lot of other people already in business”
  - Competition was too thick in the possible new areas
  - “We did the best we could for our employees on our way out”

- Proudest Accomplishment
  - Tremendous admiration and respect for his dad
  - Got involved with the industry association
  - Enjoyed partnering with other companies
  - By being in the association, it probably “breathed another 8-10 years into the company”
- "Having room to get out and start a new business"

- Reasons for failure
  - Didn’t keep up with the technology as they should have.
    - The niche they were in prevented them from looking outside of where they were
  - So, they “had lots of catch up” to do in the 90’s

- Community Service
  - Kimball encouraged it by “allowing [David] time to do [community service]”
  - “This community has been good to us for a hundred years, and it’s a way to give back”
  - “If you want a better community, invest in it”
  - Hospital, United Way, YMCA
  - Friendships and relationships built in community service was able to help him when the company started anew as a commercial real estate company instead of a commercial printing business

- New Business
  - Commercial Real-Estate
  - Replaced income for the family
  - Didn’t have any debt, so they were able to easily move on from commercial printing to Real-Estate
Bibliography


Worcester Polytechnic Institute Archives: Woodbury and Co. Collection (For a fuller description see the Woodbury and Co. collection finding guide)

- Various Nostalgia Photographs
- Company Product Samples
- Local Worcester Area Newspaper Clippings
- Company Daily Memos
- Company Newsletter, *Eagle’s Eye*