

**Counting on Customers:
John Campbell, 1806-1891,
Middlesex County Handloom Weaver**

by

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ABSTRACT

COUNTING ON CUSTOMERS: JOHN CAMPBELL, 1806-1891, MIDDLESEX COUNTY HANDLOOM WEAVER

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John Campbell (1806-1891) was one of about 370 Scottish handloom weavers who brought his technical and professional skills to Ontario in the mid- to late-nineteenth century. From 1859 to 1885, Campbell recorded customer orders for close to 54,000 yards of cloth in a 302-page account book, a document which reveals the relationship between producers and consumers in nineteenth-century rural Ontario.

This thesis is a quantitative and qualitative examination of Campbell's inputs and outputs using his account book, looms and textiles. The analysis of Campbell goes beyond the current historiography of handloom weavers by utilizing evidence from documentary sources and material culture contributing to the larger understanding of a self-employed artisan's production. The case study of one weaver with this level of detail has not been performed to date and provides an important link for the partnership between handloom weavers and their customers. While Campbell's customers provided a necessary infrastructure for him to operate by participating in pre- and post-weaving production, Campbell's presence satisfied his customers' needs not only for cloth, but a way of life that maintained economic and social stability for men and women in south-western Ontario. This thesis conveys the layers of complexity of weaver, technology and customers at the end of an era for handloom weaving in Ontario.

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I would like to thank Dr. Douglas McCalla for meeting with me to discuss my research and provide important context to this topic within the wider theme of Ontario history. His own research using account books as primary sources, provided direction for my methodology giving me a foundation to interpret the account book.

I am appreciative of the assistance I received from Jenny Marvin at the Data Resource Centre. Her help was essential in the creation of my map of Campbell's customers. She walked me through many complicated steps of the ArcGIS program and helped me to find appropriate resources.

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CHAPTER ONE

INTRODUCTION

*Was the labour of man esteemed as it ought to be,
according to its usefulness, the weaver would hold
a high claim for honour.¹*

The relationship between handloom weaver, John Campbell and his customers in nineteenth-century rural south-western Ontario is a model of the social and economic interdependence of rural communities. The following study addresses the essence of that relationship: Campbell's production and his customers' consumption of hand-woven cloth. The unassuming exchange of cloth for capital might be viewed solely as a business transaction between producer and consumer: the customer needed cloth, the weaver needed a livelihood. Due to the multi-stepped nature of pre-industrial textile production and Campbell's expertise as a weaver, the relationship was far from simple and far from single-purposed. The role of producer and consumer crossed boundaries, as Campbell depended on the dyeing, spinning and rag sewing by his customers and his customers depended on Campbell to transform their homespun into a skillful end-product.²

In nineteenth-century Britain and North America, handloom weavers like Campbell persisted parallel to factory-produced cloth because of the appealing nature of the work of the handloom weaver, the independence that it afforded them and the continuing demand for hand-woven cloth from the customer.³ Motivations and means for handloom weavers like John Campbell were fairly basic – they needed to make a living, they had a skill and they had a market

¹ *Weaver's magazine and literary companion*. Volume II, no. 7. Jan. 1819 (Paisley, Scotland: John Neilson, 1819), 84.

² Gail F. Mohanty, *Labor and Laborers of the Loom: Mechanization and Handloom Weavers, 1780-1840* (New York: Routledge, 2006), 43.

³ Cloth was being woven in factories such as the Rosamond Mill in Almonte, Ontario in 1857. Richard Reid, "The Rosamond Woollen Company of Almonte: Industrial Development in a Rural Setting," *Ontario History* 75 (1983): 266-89. Cloth was woven on power looms at Frasher & Crashaws in Cobourg in 1849 and Andrew Paton's woollen mill in Galt in 1855. Sedley Anthony Cudmore, *Economics* (Toronto, The Shaw Correspondence School, 1912), 14.

			Kilworth			1862
1			Samuel Sutton Kilworth			4 35
2	Feb 4	Paid	Jan 11 30 yards Ship's scales at 1/2			2 50
			Feb 11 20 yards cotton Sweol at 1/2			10
3			Mr. Livingston Homoko			2 16
4	May 17	Paid	Jan 18 16 yards Plaid 3 colour at 1/2			2 74
			22 2 1/2 yards Ship's at 1/2			
5			John Gray Solo			2 83
6	March 28 1864	Paid	Jan 23 21 yards Ship's 3 colour at 1/2			3 11
			24 2 1/2 yards Tweed at 1/2			
7			Neil Graham Solo			2 32
8	Nov 28 1864	Paid	2 6 Jan 31 16 yards Ship's 4 colour at 1/2			37
			cotton			
9			Gilbert Harris Delaware			1 94
10	Nov 15 1862	By one quarter Real	1 12 Feb 13 15 1/2 yards Tweed Ship's at 1/2			1 37
	25	Paid Balance	2 31 May 6 11 yards Ray carpet at 1/2			3 31
11			Archd McVicar Solo			2 87
12	Feb 25	Paid	Feb 18 23 yards Blankets at 1/2			2 81
			5 6 " 22 1/2 yards full cloth at 1/2			5 88
13	Feb 28	Paid	Thos. Fitzpatrick Homoko			1 55
14			1 58 Feb 25 14 yards 6 at 1/2 and 8 at 10 cents			
15			Donald Graham Solo			5 62
16	March 5	Paid	5 61 March 3 30 yards wool Carpet at 1/6			
17	June 3	By Cash	4 01 " Archd Mrs Guggan Caradoc			4 56
		Paid Balance	91 March 8 26 1/2 yards wool Carpet at 1/6			
18			John Smith Adelaide			3 00
19	March 26	Paid	3 11 March 8 2 Single coverlets at 1/2			
20	Feb 25	Paid	Henry Fordon N. Dorchester			11 25
			11 28 March 25 5 Carpet Coverlets at 18p			
21	Sept 29	Paid	Herz Mc Kinzie London			3 68
			3 61 Nov 27 27 1/2 yards Ray Carpet at 1/2			
22	Aug 10	Paid	George Hopkins Westminster			5 00
			5 01 March 31 2 Carpet Coverlets 2 colour at 20p			

Figure 1: Page 41 and 42, January 11, 1862 to March 31, 1862 of John Campbell's Account Book, 1859-1885. In the Ontario Science Centre Archives, Toronto.

for their product. The central point of the historiography of handloom weaving delves into persistence in this trade from the handloom weaver's perspective. The customer of hand-woven cloth, in contrast, has been absent from the inquiry, as historians have lacked primary source material which explains the consumer's point of view. What better voice for understanding the value of a product in a free market than the consumer?

Granted the customer had a need for cloth, but why was hand-woven cloth valued by some people above alternatives widely available in the mid- to late-nineteenth century, such as factory-produced cloth or even their own domestically-produced hand-woven cloth? In Ontario, opportunities to purchase hand-woven cloth were made possible by the presence of approximately 2,000 weavers (Appendix 1.01). Purchasing hand-woven cloth entailed a lengthy pre- and post-weaving household production, skills and equipment on the part of the customer. Why did some households choose this form of production above other forms? Another layer of understanding about the persistence of handloom weaving is perhaps hidden in the customers' purchases – thus making the account book kept by John Campbell, though a product of the weaver's hand, the voice of the customer too. Campbell was there, ready and willing to persist in his trade, but the customer, why did they continue to buy?

John Campbell's mid- to late-nineteenth century account book provides understanding of the hidden and subtle infrastructure of the rural economy. The account book can be envisioned as a sound bite between Campbell and customer in the weaver's shop. Missing but imagined conversations between Campbell and one of his customers might have included catching up on news from people in their circle of mutual acquaintances, as many of his customers were neighbours, attended the same church and had ties of kinship. Getting down to business, Campbell, perhaps his wife or one of his two children, would have discussed the specifics of the

cloth with the customer such as thread count, width, length, fibre, weave structure, pattern, colour, purpose, payment and date of completion as a give-and-take negotiation of what the customer could afford and what Campbell could produce and still make a living. In this imaginary recording, the sound quality is audible enough to hear the customer's name and what they ordered, but the nitty gritty of production, the motivation for purchasing and the ultimate purpose for the cloth are the crackly parts of the recording requiring conjecture and corroboration from other primary sources.

In the age of factory-cloth production, the survival of skilled handloom weavers like Campbell depended on their ability to distance themselves from centres of mechanized cloth production.⁴ French, Dutch and Belgian handloom weavers were pulled to Scotland in the seventeenth and eighteenth centuries to enrich the domestic Scottish weaving industry. Scottish handloom weavers, now overpopulated in the mid-nineteenth century due to the successes of their industry, were pushed and pulled in the early-nineteenth century to regions with an underdeveloped textile tradition such as the United States and Canada, where handloom weaving, if it existed, was often pared down to the basics.⁵ As with all specialized crafts, weaving in its complex state requires a cohort of specialists who disseminate knowledge, master

⁴ Mohanty, *Labor and Laborers of the Loom*, 166.

⁵ In Chapter Three, I discuss the two divisions of North American handloom weavers: the skilled artisan who wove as part of their livelihood and the less technically accomplished weaver who mostly wove for their own household consumption. In some regions such as New York State, there were fewer skilled artisans and as such most handloom weaving was done by semi-skilled weavers. An exception to this is in Pennsylvania, where a large concentration of trained immigrant German weavers kept the tradition strong and resembling the tradition in Germany with a stratified system of male weavers and female spinners and finishers. See Adrienne Hood, *The Weaver's Craft: Cloth, Commerce and Industry in Early Pennsylvania* (Philadelphia: University of Pennsylvania Press, 2003), 106.

to apprentice.⁶ An influx of immigrant tradesmen weavers enriched some North American communities with their expertise.⁷

The skilled handloom weaver needed a specialized market of consumer/producers who provided the pre- and post-weaving services that kept their business thriving and mutually beneficial for both parties. In the nineteenth century, textile production was a continuum from the housewife weaving a few yards of coarse plain weave for her family to a textile mill producing thousands of yards of cloth a day. Campbell's work as a "country customer weaver" fit somewhere between the two extremes: simple to mechanized; production for the household to factory production; local to international, sharing something of both, but also exclusive of both.⁸ His proficiency as a skilled tradesman allowed him to produce the simplest cloth, flannel produced on the humblest of looms, to the most complex of weave structures, figured cloth, only practicable on mechanized looms in the 1850s.⁹ I argue that Campbell's wide variety of cloth production, his organization, his efficiency and his availability to weave twelve months out of the year, contributed to his longevity and livelihood as a handloom weaver.¹⁰

⁶ Ibid., 155.

⁷ Many regions in Ontario such as Leeds County had a large proportion of immigrant weavers. Inwood and Grant, "Gender and Organization in the Canadian Cloth Industry, 1870," 28. Hood did a comparison between the less agriculturally fertile New York State which did not attract skilled immigrant weavers and the more agriculturally fertile, Pennsylvania which did. Adrienne Hood, "The Gender Division of Labor in the Production of Textiles in Eighteenth-Century Rural Pennsylvania (Rethinking the New England Model)," *Journal of Social History* 27 (Spring, 1994): 539.

⁸ Scottish textile worker, William Thomson referred to Scottish immigrant weavers in North America as 'country customer weavers' because of where they worked and who they worked for. A discussion of this term follows in Chapter Three. William Thomson, *A Tradesman's Travels in the United States and Canada: In the Years 1840, 41 & 42* (Oliver & Boyd, 1842), 109, 144, 147.

⁹ The ability to weave a wide variety of fabrics ensured employment for handloom weavers even during difficult economic times. A silk weaver from England, Mr. Thomas Heath reported that he could find employment weaving plain cloth when work was not available in the more specialized silk weaving. *Reports from Commissioner: Three volumes: Criminal Law; Factories; Handloom Weavers*. Session 26 January – 22 June 1841, Vol. X. (London: Her Majesty's Stationery Office, 1841), page 41 in Handloom Weavers. Adrienne Hood, "Industrial Opportunism: From Hand Weaving to Mill Production, 1700-1830," in *Textiles in Early New England: Design, Production and Consumption*, ed. Peter Benes (Boston: Boston University Press, 1999), 135.

¹⁰ In the early-nineteenth century, handloom weaver Samantha Barrett from Connecticut remained productive even when handloom weaving work had been reduced by factory production by varying the type of textiles which she produced to meet customer demand. Mohanty, *Labor and Laborers of the Loom*, 171.

Although not supported by documentary evidence, I believe that Campbell received his training in his place of birth, Scotland as his abilities and productivity in Middlesex County strongly suggest this level of preparation. In Chapter Two, I establish the context for a weaver raised in the Scottish handloom weaving tradition. Beginning in the mid-eighteenth century, the Scottish Industrial Revolution had its foundation in handloom weaving. Mechanization and an over-abundance of handloom weavers in the 1830s eventually pushed handloom weavers from their once important status.¹¹ Handloom weavers like Campbell, born in the early-nineteenth century, either stayed in Scotland and submitted to increased poverty, or moved onto greener pastures like North America. Scotland was the largest provider of handloom weavers to Ontario in the nineteenth century (Appendix 1.01). As important players in the Industrial Revolution in Britain, Scottish weavers, although underappreciated in the mechanized world of nineteenth-century Britain, were a cut above the domestic weavers of Ontario who mainly produced flannel.¹² The presence of Campbell, a tradesman with technical skills familiar to a Scottish cohort was most likely one reason why 52% of his customers were Scottish and first-generation Canadian of Scottish heritage (Appendix 1.02).

Campbell matches the profile of the handloom weaver in Scotland and North America who chose to remain independent with the added advantage that he possessed the skills to weave a multitude of fabrics (Appendix 1.03).¹³ Although Campbell's inner thoughts are lost to time, the major events of his life recorded in official documents, suggest that he attempted to prolong

¹¹ Norman Murray, *The Scottish Hand Loom Weavers, 1790-1850: A Social History* (Edinburgh: John Donald Publishers, 1978), 47.

¹² I did a sample of handloom weavers in the Schedule 6 of the 1871 census and found that the most commonly indicated cloth was flannel (Appendix 1.04).

¹³ Campbell's success and versatility is based on a study of John Campbell's account book using the following twelve years: 1860, 1861, 1862, 1863, 1867, 1869, 1871, 1875, 1877, 1881, 1883, 1885. Methodology follows in Chapter Three.

his occupation as an independent handloom weaver – a pattern played out by many in his trade.¹⁴ During his brief stay in New York State from 1841 to 1854, Campbell worked as a weaver and purchased a figured head attachment which allowed him to hand weave a complex type of cloth, figured cloth, which was still not commonly woven on power looms.¹⁵ Campbell's final move to south-western Ontario with its more recent date of settlement than New York State allowed him to extend his occupation as a handloom weaver for an additional thirty-six years.¹⁶

In Chapter Three, I concentrate on production of cloth primarily from the perspective of the weaver using Campbell's account book to follow trends in his production and prosperity. I build a case for the degree of Campbell's expertise by examining his efficiency and organization. The chief discussion of this chapter will involve his outputs, the variety and quantity of cloth, from simple flannel to complex figured cloth, that he produced by analyzing the data from the account book and evidence from the material record, that is his looms, textiles and equipment from contemporary handloom weavers. To understand Campbell's productivity and prosperity, I conducted an initial analysis of the account book where I counted Campbell's annual accounts.¹⁷ I then chose twelve years that reflected a low, medium and high number of accounts and which were interspersed throughout the twenty-six years of the account book.¹⁸ To provide context for Campbell as a handloom weaver in south-western Ontario, I situated him within his trade by

¹⁴ Mohanty, *Labor and Laborers of the Loom*, 61. Murray, *The Scottish Hand Loom Weavers*, 46.

¹⁵ Scottish handloom weavers were able to maintain a place in cloth production into the early-nineteenth century despite many economic hardships. However, by 1840, the handloom industry was in such a state of decline that new weavers did not enter the trade past 1840. In Murray, *The Scottish Hand Loom Weavers*, 47. Clarita Anderson and Steven M. Spivak, "Nineteenth Century License Agreements for Fancy Weaving Machines," *Ars Textrina* 8 (1987), 67. Mohanty, *Labor and Laborers of the Loom*, 162.

¹⁶ Ebenezer Allan was granted 2,000 acres of land in 1793 in what is today Delaware Township, Middlesex County for his role in the American Revolutionary War. The next two families to settle in Delaware were the Springers in 1797 and the Woodhulls in 1798. Thomas Talbot from Ireland obtained 700,000 acres on the shores of Lake Erie including Middlesex to the north. In 1818, London which was still called the Forks was still a First Nations encampment. *History of the County of Middlesex, Canada* (Toronto and London: W.A. & C.L. Goodspeed Publishers, 1889), 29-40.

¹⁷ An annual account is a listing of cloth orders, often for a calendar year.

¹⁸ The twelve year study includes the following years: 1860, 1861, 1862, 1863, 1867, 1869, 1871, 1875, 1879, 1881, 1883, 1885. A more detailed discussion of methodology follows in Chapter Three.

comparing him to other nineteenth-century handloom weavers. I used evidence of his inputs from the material record, namely his looms and equipment from contemporary weavers with the account book to discern whether Campbell worked alone or needed an assistant. The work of producing cloth from start to finish was never the work of one person, but a community effort starting with the production of the fibre, followed by the processing of the fibre into thread, weaving and then the various stages of finishing depending on the textile. The commercial weaver like Campbell participated in just the weaving, leaving the pre- and post-weaving production to his customers which will be discussed in Chapter Four.

In Chapter Four, I demonstrate that Campbell and his customers formed a symbiotic partnership of individual and shared needs. The examination of customers necessitated a methodology to create a list of nonrepeating names from the 1,918 total of recorded names. I performed a ‘data cleaning’ to remove names without adequate information and to standardize spellings.¹⁹ I used the nonrepeating list of 963 customers to consider patterns in customer attributes and behaviours. I determined that the majority of Campbell’s customers were Scottish, born between 1806 and 1820 and from Lobo Township. Campbell’s customers had access to a full-time, adaptable and resourceful weaver who could satisfy needs, preferences and traditions for a community.²⁰ In nineteenth-century rural Ontario, one of the needs might be that production at home made sense to families who were short on cash and were accustomed to producing much of the necessities of life. Preference involved one’s sense of aesthetics and expectations for the wear and feel of the cloth. Tradition was the manner in which mundane activities such as the household production of goods for the family were achieved and these

¹⁹ A more detailed discussion of methodology follows in Chapter Four.

²⁰ A handloom weaver from Rhode Island William Rose showed adaptability by altering his production and the fibre which he worked with to remain viable to his customers. Mohanty, *Labor and Laborers of the Loom*, 173.

skills handed down without question or change from generation-to-generation.²¹ Within the steps of textile production, Campbell's part of the process was fairly minimal. He simply wove, as reflected in the payment for labour in the account book. He depended on his customers to supply the fibre and all of the pre-weaving inputs: raising the sheep, shearing, spinning, dying, purchasing cotton and sewing rags; and the post-weaving finishing: hemming, fringing and sewing the centre seam of panels. Later in the account book, customers' fulfillment of pre-weaving tasks decreased, providing evidence for a shift in consumption patterns.

Campbell's Weaving Shop – Rarity and Relevance

At the age of 85, John Campbell died, but his weaving workshop did not remain idle, for his daughter Janet continued to weave for an additional nine years. Janet and her mother lived together in the family house at Huron Avenue and Delaware Street in Komoka until 1901, when Mrs. Campbell died at the age of 84; on her death registration was "weaver's wife" as her occupation (Figure 2: Map of Komoka, Chapter Two).²² In 1911, Janet and her brother William lived in the family house without any evidence of weaving. William was listed as a railroad worker and Janet as having no occupation.²³ When William died in 1929 his death registration described him as a "retired weaver."²⁴ Janet died in 1932, with the occupation "housework."²⁵ In 1948, John Campbell's grandsons, John and William, living in the family house in Komoka

²¹ Dorothy Burnham theorized that the manner of constructing garments as late as the nineteenth century had links to garment construction from animal skins, suggesting a cultural tendency to carry forward traditions that might not appear to be currently relevant but are a part of a culture's traditions. Dorothy Burnham, *Cut My Cote* (Toronto: Royal Ontario Museum, 1973), 20.

²² Janet Campbell's death registration from 1901, sometimes referred to as Jessie. *Registrations of Deaths, 1869-1938*. Series: MS935; Reel: 102. Archives of Ontario, Toronto, Ontario, Canada.

²³ *Census of Canada, 1911*. Canada: Library and Archives Canada. Year: 1911; Census Place: Lobo, Middlesex North, Ontario. Page 4, Family No: 49.

²⁴ William Campbell's death registration from 1929. *Registrations of Deaths, 1869-1938*. MS 935, reels 373. Archives of Ontario, Toronto, Ontario, Canada.

²⁵ When Janet died in 1932, thirty-two years had passed since she had woven for customers. Janet appeared for the last time as a weaver in the 1900 Middlesex Directory. After this year, she does not appear in any later directory and in the 1901 census, she is listed without an occupation. *Foster's London City and Middlesex County Directory*, Toronto: J.G. Foster & Co. Publishers, 1900: 428.



Figure: 3 - John Campbell's loom in Komoka, 1949. (London Free Press).



Figure: 4 - John Campbell's loom in the Ontario Science Centre, 2012.

with the long abandoned weaving workshop in one wing of the house, donated the loom to the University of Western Ontario (Appendix 2.01).²⁶ Wilfrid Jury, curator of the University of Western Ontario artifact collection took part in the acquisition of Campbell's collection, which subsequently was transferred to the Ontario Science Centre, where it currently resides (Figure 3 and 4).²⁷

Census of Canada, 1901. Statistics Canada Fonds. Microfilm reels: T-6428 to T-6556. Ottawa, Ontario, Canada. Place: Lobo, Middlesex (south/sud), Ontario; Page: 9; Family No: 100. Statistics Canada Fonds. Microfilm reels: T-6428 to T-6556. Janet Campbell's death registration from 1932. *Registrations of Deaths, 1869-1938*. MS 935, reels 445. Archives of Ontario, Toronto, Ontario, Canada.

²⁶ Lobo Township Heritage Group. *The Heritage of Lobo, 1820-1990* (Ilderton, Ontario: Lobo Township Heritage Group, 1990), 159. Harold & Dorothy Burnham, *Keep Me Warm One Night: Early Handweaving in Eastern Canada* (University of Toronto Press, 1972), 323.

²⁷ The transfer of the looms and contents of Campbell's workshop is discussed in correspondence between Albert Colucci, Artifact Officer at the Ontario Centennial '67 Project and Dr. Wilfrid Jury from the University of Western Ontario, in the file on John Campbell at the Ontario Museum of Archaeology, London, Ontario.

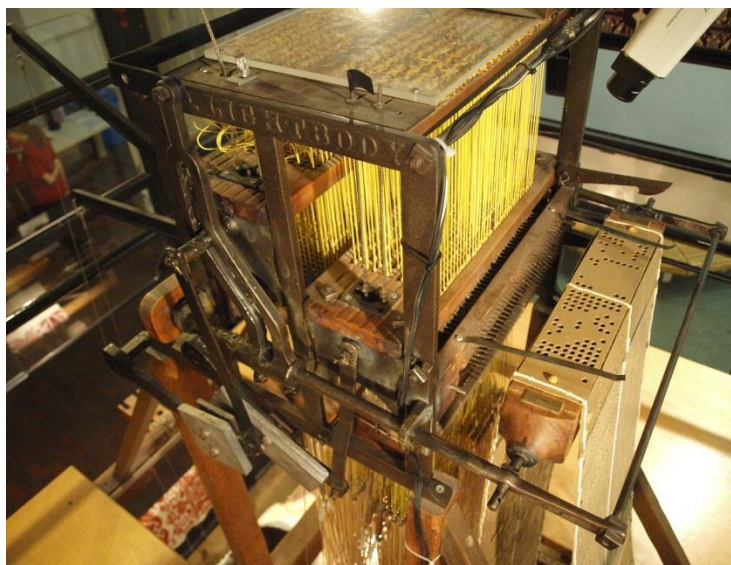


Figure 5 - Campbell's carpet coverlet head mounted 34" above the loom. This image shows the back corner of the loom where the rotating cylinder holds the punch cards. Contact between the punch cards and the needles occurs when the rotating cylinder moves the cards in place against the needles allowing the needles to read the holes and blanks which produce the figured textile.

John Campbell's Carpet Coverlet Loom.
The Ontario Science Centre, Toronto.

The surviving items from Campbell's weaving workshop included an account book, a figured coverlet loom, two sets of punch cards, a shaft loom, shuttles, pirns and coverlets.²⁸ This is a preeminent collection that is unsurpassed in nineteenth-century Canadian textiles.

Campbell's assemblage contains many of the items that would be typically found in a weaver's shop with the exception of: a warping frame or mill, reeds, a raddle, pattern books and drafts.²⁹

Although most Canadian textile equipment remains anonymous, museums contain a few important collections such as Lincoln County, Ontario weaver, Samuel Fry whose account and pattern book and several textiles are in the Royal Ontario Museum. His collection would have rivalled Campbell's, but that one of his looms was destroyed in a fire, and the whereabouts of the second is unknown.³⁰

Campbell's figured coverlet loom deserves additional explanation as it is the earliest working figured head using punch-card technology still attached to its original handloom

²⁸ See Glossary for a definition of the terms. See Appendix 2.02 – Punch cards, Appendix 2.13 – One of Campbell's shuttles and Appendix 2.14 – One of Campbell's coverlets.

²⁹ Fortunately, these missing items from Campbell's workshop can be found in other weavers' collections and I refer to them to provide evidence about Campbell's production. See Glossary for a definition of a draft.

³⁰ Burnham and Burnham, *Keep Me Warm One Night*, 12.

surviving in North America (Figure 5).³¹ Most writers of Canadian and American textiles refer to figured coverlets as Jacquard coverlets. The connection between Campbell's head, manufactured by James Lightbody in New Jersey in the 1840s, and a Jacquard head is most likely due to the punch-card system that create the patterns; however the technology for communicating pattern to loom by punch cards and perforated paper was in use at least by 1725 in France.³² Other than the use of punch cards, the two heads function differently, use different parts, and produce different weave structures. The lineage between the two heads is not definitive and requires further research involving patent descriptions, diagrams and extant heads.³³ In light of the need for more research, I believe that the two technologies should maintain a degree of distinction and I refer to Campbell's head either by its manufacturer's name: James Lightbody, by Campbell's own term, and that of many other contemporaries: a carpet coverlet head or by the larger class of heads which produce figured textiles, which includes Jacquard: a figured head.³⁴

The claim that the Burnhams made in 1972 that Campbell's figured head and loom, was the only nineteenth-century example still intact may be challenged by the recent restoration of the Samuel Lowry loom from Peterborough County, Ontario.³⁵ Lowry's head shares many features with Campbell's head such as the double-lifter board which makes it different from a

³¹ Ibid., 323.

³² Rabbit Goody observed that the difference between figured heads such as Campbell's Lightbody head which weave double cloth is different enough from the looms used to weave silk damask to suggest that they were parallel inventions and that the double cloth head does not evolve from the damask head. She also made the observation that the mechanism that lifts the threads, the double-lifter board is similar to the mechanism used for ingrain carpet looms in Scotland. Susan Rabbit Goody, *Woven History: The Technology and Innovation of Long Island Coverlets, 1800-1860* (Long Island: The Society for the Preservation of Long Island Antiquities, 1993), 24. Jean-Michel Tuchscherer described the Jacquard mechanism in "Woven Textiles," in *French Textiles from the Middle Ages through the Second Empire*, ed. Marianne Carlano and Larry Salmon (Hartford, Connecticut: Wadsworth Atheneum, 1985), 37. Alfred Barlow discusses the use of perforated cards by Jacquard's predecessors. Barlow, *The History and Principles of Weaving by Hand and by Power*, 141.

³³ There is an almost identical head to Campbell's, however without a maker's mark, in the New York State Historical Association at Cooperstown, New York. Goody, *Woven History: The Technology and Innovation of Long Island Coverlets*, 24.

³⁴ See Glossary for a definition of carpet coverlet head and figured head.

³⁵ Samuel Lowry's loom is in the collection of Lang Pioneer Village, Peterborough County, Ontario.

Jacquard head.³⁶ Lowry advertised that he wove ingrain carpets in 1894 in the *Peterborough Examiner*, however, as none of Lowry's ingrain carpets are extant, there is no tangible evidence to prove that he indeed wove ingrains.³⁷ However with Campbell, his loom was practically operational with a set of cards in place when it was donated to the Ontario Museum of Archaeology in 1948 after it remained unused for at least half a century (Figure 3).³⁸

Campbell's figured coverlet head and loom while impressive and highly complicated was singular in its purpose – it only wove figured coverlets.³⁹ The figured head involved a lengthy and complicated set-up involving 1,180 harness cords operated by 272 needles.⁴⁰ The interaction of the needles with the punch cards produces the figured designs which can be changed simply by putting another set of punch cards on the rotating cylinder section of the head. Although this technology was widely used in the antebellum United States, it was fairly rare in Canada, and only found in Ontario.⁴¹

³⁶ The Jacquard head is composed of ten major components, half of which are not part of Campbell's head. To create the patterns with a Jacquard head, the necking cords which are in the head are lifted by knives in the griffe. The griffe is like a bar that holds the knives that engage hooks. The hooks lift the threads to create the figured patterns. Springs in the head compress against the needle board when the card has a blank and release when there is a hole in the card. Posselt, *The Jacquard Machine Analyzed and Explained*, 10-11. Campbell's head has two lifter boards that contain necking cords. One board contains half of the necking cords and the other board, the other half. The necking cords have knots placed just slightly above the lifter boards that get trapped in the keyhole shaped holes in the lifter board which operate the lifting of the threads. James M. Ham, *Operation of the John Campbell Jacquard Loom* (Toronto: Ontario Science Centre), 1995.

³⁷ See the Glossary for a definition of ingrain carpets. The earlier construction of ingrain carpets used a double weave like the construction produced by Campbell's carpet coverlet head with the exception of materials and the balance of the weave. Ingrain carpets are made from a wool warp and weft using a balanced plain weave for pattern and background unlike Campbell's coverlets which use balanced plain weave in the background and an unbalanced, weft-faced plain weave for the pattern. Jane Fawcett, *Historic Floors: Their History and Conservation* (Oxford; Boston, Mass.: Butterworth-Heinemann, 1998), 162. Lowry had three Jacquard heads in various states of repair. Watson and Corrigan stated that the heads were manufactured in Scotland in the mid-nineteenth century. Lois Watson and Joe Corrigan believe that two of the heads were used only for parts and that only one of the heads functioned. In Lois Watson and Joe Corrigan, "Building our Future from the Fabric of Our Past: The Samuel Lowry Weaver's Shop and Jacquard Loom Exhibit at Lang Pioneer Village Museum," *Fibre Focus* (Summer, 2009): 28-31.

³⁸ The Burnhams determined that the loom had not been used since Campbell's death. In Burnham and Burnham, *Keep Me Warm One Night*, 323. However, Campbell's daughter Janet was listed as a carpet weaver in a Middlesex Directory as late as 1900. She was most likely weaving rag carpets on the shaft loom and possibly carpet coverlets on the figured head loom. *Foster's London City and Middlesex County Directory* (1900), 429.

³⁹ Campbell's head and the Jacquard head derive from a family of punch card operated figured heads. Further discussion of figured heads follow in Chapter Three.

⁴⁰ A technical description of the head can be found in Ham, *Operation of the John Campbell Jacquard Loom*, 8-9.

⁴¹ Dorothy Burnham, *The Comfortable Arts: Traditional Spinning and Weaving in Canada* (Ottawa: National Gallery of Canada, 1981), 171.

Campbell had a second loom, similar to a domestic weaver's loom, for weaving all of his other orders from satinette to rag carpets.⁴² This loom, although simple in its construction, provided the greatest opportunity for versatility because it could weave a wide variety of cloth. Although looms of this type might appear fairly rudimentary, there is a difference in the use of a shaft loom by a weaver producing cloth for their household, and a highly trained Scottish weaver who was trained to set up a handloom in a complex variety of ways.⁴³ Depending on the textile, weavers might set up different sets of harnesses from three to sixteen, whereas a domestic weaver would probably use only two or four harnesses.⁴⁴ In the hands of a trained weaver, a multitude of weave structures could be achieved with a simple shaft loom.⁴⁵

The most important item for the historian from Campbell's workshop is his account book, which provides information about cloth and customer purchases. His account book spans twenty-six years of textile production, 1859 to 1885; an invaluable contribution to artisan-customer relations in nineteenth-century rural Ontario. Curiously, Campbell did not write his name in the account book. There is no reference to who did the weaving, who did the

⁴² See Glossary for a definition of satinette.

⁴³ John Murphy described twills or tweels using 3 to 5 harnesses, or leaves. John Murphy, *A Treatise on the Art of Weaving* (Glasgow: Blackie & Son and A. Fullarton & Co., 1831), 23-25.

⁴⁴ An additional set-up of jacks or countermarches would be needed for set-ups exceeding eight harnesses. Manuals for handloom weavers such as Murphy's, *A Treatise on the Art of Weaving* and John Duncan's, *Practical and Descriptive Essays on the Art of Weaving* (Glasgow, 1807) provided directions for mounting harnesses for various weave structures. The simplest loom set-up uses a system which balances equal numbers of harnesses against one another. The harnesses are attached to 'horses' from above which are short pieces of wood, about six inches wide by one inch in diameter and have a drilled hole at the two ends and one in the centre. A cord hangs from the top of the loom and is attached to the centre hole of each horse. For two-harness weaving, two horses are suspended from their centre point above the harnesses. Cords are attached from the two ends of the horses to the harnesses. The harnesses are attached to two treadles below. When one treadle is depressed with the foot, the opposing harness is tipped upward by the horse and a shed is created for the shuttle to pass through. Sixteen-shaft hand-woven textiles required an elaborate system which was thought only to have been used in Canada, in Ontario by male, professionally-trained German weavers. Although there are many examples of sixteen-shaft textiles in Pennsylvania and Ontario, there is only one known sixteen-harness loom extant in North America. This loom is currently located at the Milton Country Heritage Park in Milton Ontario where it is in storage. Rabbit Goody attempted to restore this loom to working order in 1988. Rabbit Goody, "Finding the Thread: Restoration of a Professional Weaver's Loom," *Ars Textrina* 9 (1988): 125-156.

⁴⁵ The harnesses, shafts or leaves of nineteenth-century handlooms were merely long sticks attached to the loom with pulleys and horses and put in place or taken away with ease.

accounting; the cost of his equipment or where the fibres used for weaving came from – only the customers, their orders and payment.⁴⁶

The pages of John Campbell's account book are filled with accounts from 963 customers, from eight counties, for 102 different cloth types (Appendix 1.03 and Appendix 3.01).⁴⁷ The work of interpreting his account book enlisted perspectives from many diverse disciplines including: genealogy, geography, statistics, economics, design and textile technology. Any account book is challenging to decode because of the specialized language and required background knowledge in the profession. In Campbell's case, a thorough knowledge of historic textile production and tools was necessary to perform the requisite deciphering and inferring of the language of cloth and production.

My methodology while interdisciplinary is firmly situated in my background in historic textiles including their reproduction, research, restoration and conservation using period equipment. At the Ontario College of Art and Design, I received technical and aesthetic training in woven textiles. While at OCAD, I learned the fundamentals of historic textile conservation in a one-year internship at the Royal Ontario Museum. My exposure to historic looms, equipment and Ontario textiles was broadened at Black Creek Pioneer Village, where I began reproducing nineteenth-century Canadian textiles. Much of my practical knowledge and training in weaving historic textiles and operating historic equipment emanate from authorities in the field of hand-

⁴⁶ The account book and the contents of Campbell's workshop are connected to Campbell by provenance.

⁴⁷ The maps in Appendices 3 were created using ArcGIS 10.0. With assistance from Jenny Marvin at the Data Resource Centre, University of Guelph, I created a map of the eight counties where Campbell had customers. I used a map supplied by the University of Toronto from the Canada Century Research Infrastructure dated to 1911. This was the earliest map that could be linked with coordinates in the GIS software. I used all customers with reliable location data which totaled 1,843 customers. As some entries in the account book only provided township location, I treated all locations as township. I located the centre of each township by using a centroid feature in the ArcGIS program. Customers' locations in the maps in Appendices 3 are based on the centre point of townships not their actual location.

woven textiles such as Susan Rabbit Goody, Kate Smith and Norman Kennedy.⁴⁸ Textual sources used by nineteenth-century weavers such as weaving manuals, drafts and pattern books provide me with insight into the technical sophistication of nineteenth-century weavers. I currently volunteer at the Ontario Science Centre, where I weave on John Campbell's loom and interpret its significance to the public.

As a historian using an account book, technical grounding in the discipline of one's subject allows for glimpses behind the curtain to provide a depth of understanding in the seemingly patternless entries. My interpretation of John Campbell's account book benefits from theory and practice. Examining and reproducing extant nineteenth-century cloth using historic tools and techniques passed down in a continuum informs my understanding of the parameters of a weaver's production and strengthens my reading of Campbell's account book.

Textiles with provenance to Campbell can be found in several public and private collections. With weavers of figured patterns, once the elements of the design are recognized, other coverlets with the same design can usually be attributed to a known weaver. Four figured patterns are associated with Campbell by provenance making the attribution of other coverlets with the same designs possible. The Royal Ontario Museum has six coverlets in total woven by Campbell. Two of the coverlets were donated directly by one of Campbell's grandsons;⁴⁹ the

⁴⁸ In addition to publishing, consulting and lecturing on historic textiles, Susan Rabbit Goody operates a textile mill in New York State, Thistle Hill Weavers, where she reproduces historical textiles. Kate Smith reproduces historical textiles on period equipment in Vermont and teaches these methods at her weaving school, the Marshfield School of Weaving. Norman Kennedy, originally from Aberdeen, Scotland, founded the Marshfield School of Weaving in 1976. He continues to share his experiences and technical knowledge from working with traditional weavers in Scotland at the Marshfield School.

⁴⁹ John Campbell's grandson donated a fragment of a single coverlet and a carpet coverlet in 1949. The Royal Ontario Museum used the term 'overshot' and 'Jacquard' instead of 'single' and 'carpet coverlet' the terms used by John Campbell and other nineteenth-century weavers. The two single coverlets are in Appendix 2.15, ROM 949.154.2 and Appendix 2.16: Coverlet ROM 969.219 and the carpet coverlet is in Appendix 2.09, ROM 949.154.1, collection of the Royal Ontario Museum, Toronto.

other five have a provenance that connects the donor to the original customer.⁵⁰ Other than the figured coverlets which have a distinct pattern which can be linked to Campbell and two single coverlets, the only other textile of which I am aware is a warp-faced, striped, eight-colour, wool floor carpet which was on the floor in two rooms in the Campbell's family house in Komoka.⁵¹ There is an image of this carpet in the Royal Ontario Museum archives, from when it was viewed but not collected by the Burnhams in 1949.⁵²

Historiography

The nature of John Campbell's production and skill warrants a survey of literature about handloom weavers from many regions in North America. Although Campbell worked in a domestic setting, that is at home, he does not fit in with the most current research about Ontarian weavers which emphasizes production for the household by female weavers. As such, I draw from the historiography of American weavers, albeit from an earlier time period than Campbell, to provide perspective regarding Campbell's work as a commercial weaver.

⁵⁰ The following unpublished accounts are contained in the files of the Royal Ontario Museum. The donor informed the Royal Ontario Museum that ROM 970.299 was passed down to her by her grandmother, Mrs. Angus Graham, née Johnson. The Burnhams connected the coverlet with an entry in the account book dated to January 5, 1869 by Alexander Johnston. Johnston is in the account book but I was not able to connect his descendants with Mrs. Angus Graham who I assumed was his daughter. See Appendix 2.11: Coverlet 970.296.2 – Tulip. The donor of coverlet ROM 984.132.1 stated that this coverlet was woven for Nancy Brown who married Godfrey McGugan, Caradoc Township. Nancy Brown purchased one carpet coverlet in 1867 with a name. See Appendix 2.12: Coverlet 984.132.1 - Single Rose. The donor of coverlet ROM 962.75 stated that this coverlet was one of a pair of coverlets originally belonging to Sarah Kilbourne. Campbell had several Kilbourne customers, but not one named Sarah. One of Campbell's repeat customers, Burley Kilbourne purchased four carpet coverlets in 1884. He had a daughter, Sarah, who would have been 16 years old in 1884 and who married in 1897. See Appendix 2.08: Coverlet 962.75 – Rose and Stars. The donor informed the Royal Ontario Museum that coverlet ROM 969.219 "belonged to her maternal grandmother, Godfrey McGugan [inconsistent gender] who was married on February 13th, 1873." See Appendix 2.12: Coverlet ROM 969.219 – Single Coverlet. Godfrey McGugan, the husband of Nancy Brown above does not appear as a customer in the account book. In 1866, John McGuggan, Caradoc purchased one carpet coverlet but not a single coverlet. John McGuggan born in 1805 was the father of Godfrey McGuggan.

⁵¹ See Glossary for a definition of single coverlets.

⁵² The wool carpet is from a descriptive and photographic collection of Canadian textiles that Harold and Dorothy Burnham examined during their field work beginning in 1948. Many of the textiles in this collection were subsequently donated to the Royal Ontario Museum, while others like this carpet were kept in a private collection. The carpet's designation in the collection is: OT 49.121. Ontario Textiles, Collection of the Royal Ontario Museum, Toronto.

The most important contribution to Canadian textile history originated with the work of Harold and Dorothy Burnham, who were textile curators at the Royal Ontario Museum. When they began collecting Canadian textiles in the 1940s, they recorded family knowledge of many of these textiles, making their work ethnographic in approach. Other writers of nineteenth-century Canadian textiles were inspired by the formation of outdoor living history museums and central to their discussion was the acquisition of textiles and tools to create a narrative to explain Canadian settlement history.⁵³

The Burnhams published numerous articles and books on nineteenth-century Canadian textiles, including their most important, *Keep Me Warm One Night: Early Handweaving in Eastern Canada* (1972). A major contribution to the field of textiles, it provides a compendium for those unfamiliar with the appearance, variety and quality of hand-woven cloth. The chapters, arranged according to cloth construction, begin with a description of the cloth and some historical context. The pages that follow have photographs illustrating the particular type of cloth, with a description of the provenance of the textile, technical information and a weaving draft, further demonstrating the tendency toward technology and material culture in the literature of this period. The Burnhams' opus is essential reading to any student of Canadian and American textiles, and their command of material culture was astounding, however, the text was not footnoted and contains an unsatisfactory consideration of documentary sources.⁵⁴

⁵³ Research into handloom weaving also coincided with the establishment of living history museums such as Black Creek Pioneer Village, Toronto and Upper Canada Village, Morrisburg in the 1950s and 1960s. The following articles have a material culture/ethnographical perspective. Audrey Spencer, *Spinning and Weaving at Upper Canada Village* (Toronto: Ryerson Press), 1964. Jeanne Hughes and Russell Cooper, "Weaver's Shop," *Canadian Antiques Collector* 9, no. 3 (May-June 1973): 37-39. Mary Burnett, "Handwoven and Homespun," *Canadian Antiques Collector* 8, no. 2 (May-Apr. 1973): 20-23.

⁵⁴ Burnham and Burnham, *Keep Me Warm One Night* is frequently cited in books and articles in Canada and the United States. Google Scholar listed 341 citations in the Social Sciences, Arts and Humanities.

In the 1980s, economic historians, Kris Inwood, Phyllis Wagg and Janine Grant contextualized handloom weavers in the rural Canadian economy. Using information from Canadian censuses recently entered into computerized databases and applying an economic model, Inwood, Wagg and Grant devised a quantitative examination of documentary sources to investigate the economic viability of handloom weaving in a period of increasing mechanization and factory-produced imports.⁵⁵

The shift in the 1990s from material culture to the weaver within the rural economy brought to the fore unexamined themes such as the balance of gender in handloom weavers, the effects of immigrant weavers and the place of the weaver in the local economy. Foremost in the inquiry was why handloom weaving persisted in the age of mechanization using a regional perspective. Much of the research was dependent on the study of demographics using digitized official documents such as the census.

Beginning in 2001, Béatrice Craig's study of the local economies of Argenteuil, Québec and Madawaska territory and Charlotte County, New Brunswick demonstrated that the content and strength of available sources help to determine the direction of research. Due to the amount of detail relating to handloom weaving in the 1851 and 1861 New Brunswick census, Craig was able to correlate handloom weaving with other factors such as gender, family size and composition and hence comment on the importance of handloom weaving within the rural household economy.⁵⁶ Although the weavers examined by Craig were not as commercially

⁵⁵ Inwood and Grant, "Gender and organization in the Canadian Cloth Industry, 1870," 17-32. Kris Inwood and Janine Grant, "Labouring at the Loom: A Case Study of Rural Manufacturing in Leeds County, 1870." *Canadian Papers in Rural History* Vol. VII (1990): 215-236. Kris Inwood and Phyllis Wagg, "The Survival of Handloom Weaving in Rural Canada circa 1870," *Journal of Economic History* 54, no. 2 (June 1993): 346-358.

⁵⁶ The New Brunswick 1851 and 1861 census lists loom and cloth ownership. The 1871 census has information about cloth production in three separate schedules. In Béatrice Craig, *Backwood Consumers and Homespun Capitalists: The Rise of a Market Culture in Eastern Canada* (Toronto: University of Toronto Press, 2009), 244.

oriented as Campbell, their production and motivations informs my understanding of the household production of Campbell's customers.

Historians such as Douglas McCalla expanded the source and scope of handloom weaving and textile availability by including it within the wider context of Ontario's history. McCalla used an array of sources that emanated from the provincial and the local to provide a view of artisans within the framework of Ontario's dual role of being linked to export but also having a vigorous local economy.⁵⁷ He established that not all rural dwellers made their livelihood from farming and that a local economy developed around villages and towns serving as markets for the outlying areas.

In the 1990s, Adrienne Hood, a historian specializing in handloom weavers from Pennsylvania, contributed to the historiography of handloom weaving by reincorporating the material culture position into the discussion with the prevailing trend to set handloom weaving within the economic model. Her research, set in Chester County, Pennsylvania used account books and probate wills to situate handloom weaving as a rational economic strategy, not as an attempt at self-sufficiency.⁵⁸

The use of business documents by Hood moved the debate deeper into the individual production of the handloom weaver and away from aggregated data produced by external sources.⁵⁹ Craig's use of general store account books examined consumption patterns of weavers tracing their purchases both of warp thread and factory-made cloth. She also advanced the topic

⁵⁷ Douglas McCalla, *Planting the Province: The Economic History of Upper Canada, 1780-1870* (Toronto, Buffalo, London: Ontario Historical Studies Series, 1993).

⁵⁸ Hood, *The Weaver's Craft*.

⁵⁹ *Ibid.*, 117.

by shifting the focus from the weaver to the consumer.⁶⁰ McCalla's examination of textile purchases in general store account books provided a context for the sale of factory-made cloth, an important consideration as hand-woven and factory-made cloth had a parallel existence in nineteenth-century Canada.⁶¹

In the handloom weaving historiography since the 1980s, women and gender studies have revealed the sometimes hidden contributions of women in society. Several historians have examined the role of women as active participants in weaving disproving the claim made by the Burnhams that handloom weaving in Canada was dominated by men.⁶² Inwood and Grant dispelled this myth in their research using Schedule 6 of the 1871 census which revealed the largest proportion of weavers in Leeds County were women.⁶³

Historians strove to explain why some regions predominated with male weavers and others female. David-Thierry Ruddel's research in Québec indicated that during early French settlement a minority of males wove, but that they were replaced by females whose textile production increased farm subsistence during British rule.⁶⁴ Hood conducted an important study of New York State and Pennsylvanian weavers in the late-eighteenth century, where she discovered a correlation between poor agricultural productivity, low immigrant influx and female 'homespun production' in opposition to rich agricultural productivity, high immigrant weaver

⁶⁰ Craig, *Backwood Consumers and Homespun Capitalists*, 217.

⁶¹ Douglas McCalla, "Textile Purchases by Some Ordinary Upper Canadians, 1806-1861," *Material History Review* 53 (Spring-Summer 2001): 4-27.

⁶² Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 354.

⁶³ Although women handloom weavers were more numerous than men, the output of men exceeded women. Inwood and Grant suggested that women's reduced production was due to other taxing duties such as child rearing that prevented the higher output of their male counterparts. Inwood and Grant, "Gender and organization in the Canadian Cloth Industry, 1870," 17-32. And in Inwood and Grant, "Labouring at the Loom," 215-236.

⁶⁴ David-Thierry Ruddel, "The Domestic Textile Industry in the Region and City of Quebec, 1792-1835," *Material History Bulletin* 17 (Spring, 1983), 44.

population and male 'domestic industry.'⁶⁵ Craig found that women on medium-surplus farms produced hand-woven cloth as a highly valued commercial commodity.⁶⁶ Craig's study of Madawaska, New Brunswick and Inwood and Grant's study of Leeds County, Ontario revealed that handloom weaving provided females with a much preferred, indoor, clean employment.⁶⁷ The presence of male, immigrant weavers provided an interesting point of contrast between Leeds County and Madawaska revealing the importance of using a regional focus to further understand the complexity of the topic.

In Québec, as land clearing mostly came to an end in the early-nineteenth century, an increased number of looms and spinning wheels appeared in inventories coinciding with female dominated weaving.⁶⁸ Laurel Thatcher Ulrich, Ruddell and Hood noted that immigrant handloom weavers came from a stratified system of textiles, with men as weavers. Women came to dominate weaving when immigration becomes less significant and more physically-demanding work occupied the male population.⁶⁹

In the rural landscape, because the home was a place of production, the two themes of production and consumption are imbedded within each other and for that reason, detecting where one stops and the other begins can be murky. The history of consumption which developed in the 1970s became an important focus for the handloom weaving literature because of its inter-relationship with production. Whether cloth is produced at home, for home use, trade or sale, it was an asset that the producer either did not have to purchase or a commodity that could be sold

⁶⁵ Hood, "Industrial Opportunism," 135-52.

⁶⁶ Craig, *Backwood Consumers and Homespun Capitalists*, 183.

⁶⁷ Craig, *Backwood Consumers and Homespun Capitalists*, 197. Inwood and Grant, "Labouring at the Loom," 225.

⁶⁸ David-Thiery Ruddell, "Consumer Trends, Clothing, Textile and Equipment in the Montreal Area 1792-1835," *Material History Bulletin/Bulletin d'histoire de la culture matérielle* 32 (Fall, 1990): 53. Hood, "Industrial Opportunism," 135-52.

⁶⁹ Laurel Thatcher Ulrich, "Wheels, Looms and the Gender Division of Labour in Eighteenth-Century New England," *The William and Mary Quarterly*, Third Series, Vol. 55, No. 1 (Jan., 1998): 6.

or exchanged for trade or currency. Many of the more recent sources for hand-woven cloth such as Ruddell, Craig, Hood and Ulrich discuss textiles as consumables, further advancing the topic. In Québec, Ruddell observed consumer trends such as increased investments in movable assets: furniture, textiles, tableware, beginning in the 1820s and 1830s by both rural and urban people.⁷⁰

McCalla, Inwood and Wagg connected the role of carding and fulling mill infrastructure in enhancing home production of textiles. McCalla noted that mills were small, located within a reasonable distance from villages and towns, and operated seasonally to conform to the agricultural calendar.⁷¹ Inwood and Wagg related the mechanization of carding and fulling by local mills with a decrease in overall production time for textiles, revealing a shift in time spent by families on textile home production.⁷²

An appreciation for mechanization and technological innovations has been absent from the Canadian handloom weaving historiography since the work of the Burnhams. Gail Fowler Mohanty's discussion of technology and mechanization in handloom weaving and early factory settings in New England is a useful reference for the Canadian context. Her research examined the use of technology during the period of transition between pre-industry and industry. Mohanty explored the existence of the handloom weaver parallel to mechanization.⁷³

Although Ontario handloom weaving has received excellent economic analysis, a thorough examination of cloth production using an individual weaver as a case study is absent. Research has focused on the role of the domestic weaver: the weaver who wove for their own family in a subsistence model. Tradesmen weavers were the focus of museum collections and

⁷⁰ Ruddell, "Consumer Trends, Clothing, Textile and Equipment in the Montreal Area," 48.

⁷¹ McCalla, *Planting the Province*, 135.

⁷² Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 346-358.

⁷³ Mohanty, *Labor and Laborers of the Loom*.

early research efforts because of the wealth of material remains from their weaving workshops and extant textiles. These weavers slipped from scholarly attention in the 1990s, when the focus shifted to the domestic weavers, census data and issues of gender, labour industrialization and the household economy. The importance of the consumer of hand-woven cloth has been ignored throughout all of this historiography.

My principal source, John Campbell's account book, focuses on the weaver and the relationship between producer and consumer, as the 1,918 customer accounts elevate the voice of the consumer. Because the account book tells the story of Campbell's customer's contribution to production, this thesis contributes to the ongoing investigation of the role of household production advanced by Elizabeth Mancke and Marjorie Griffin Cohen.⁷⁴ Campbell also fits into a larger discussion of the self-employed skilled artisan as developed by David Burley, Steve Maynard and Robert Kristofferson.⁷⁵ My interpretation of the entries in John Campbell's account book contributes to the understanding of the layers of complexity of weaver, technology and customers at the end of an era for handloom weaving in Ontario.

⁷⁴ Elizabeth Mancke, "At the Counter of the General Store: Women and the Economy in Eighteenth-Century Horton, Nova Scotia," in *Intimate Relations: Family and Community in Planter Nova Scotia, 1759-1800*, ed. Margaret Conrad (Fredericton: Acadiensis Press, 1995). Marjorie Griffin Cohen, *Women's Work, Markets and Economic Development in Nineteenth Century Ontario* (Toronto: University of Toronto Press), 1988.

⁷⁵ David Burley, *A Particular Condition in Life Self-Employment and Social Mobility in Mid-Victorian Brantford, Ontario* (Kingston: McGill-Queen's University Press), 1994. Steve Maynard, "Between Farm and Factory: The Productive Household and the Capitalist Transformation of the Maritime Countryside, Hopewell, Nova Scotia, 1869-1890," in *Contested Countryside: Rural Workers and Modern Society in Atlantic Canada, 1800-1950*, ed. Daniel Samson (Fredericton: Acadiensis Press, 1994). Robert B. Kristofferson, "Craftworkers and Canada's First Industrial Revolution: Reassessing the Context," *Journal of the Canadian Historical Association/Revue de la Société Historique du Canada* 16, no. 1 (2005): 101-137.

CHAPTER TWO
JOHN CAMPBELL: THE LIFE OF A SCOTTISH WEAVER

*The weavers commonly train their sons to their own occupation;
The boys are set to the loom at a very early age;
Their apprenticeships are short;
And, by the time they are fifteen or sixteen years old,
they are as expert at their business as their fathers.¹*

John Campbell, skilled artisan, was one out of hundreds of Scottish immigrant weavers who settled in Ontario in the mid- to late-nineteenth century. Indeed in 1881, 18% of immigrant weavers in Ontario were Scottish born. They were the highest proportion of immigrant weavers in Ontario (Appendix 1.01).² The Scottish influence increases to 31%, if handloom weavers born in Ontario of Scottish descent are included. Immigrant Scottish handloom weavers brought with them a history and tradition, strongly connected to Scotland's post-Union prosperity, that informed their abilities and attitudes to this trade. Campbell's life was probably not dissimilar to the many thousands of other Scottish weavers who were born during the shift to mechanization. Although not as in demand as they had once been, handloom weavers had skills that provided them with choice, and one of those choices was to be mobile. Campbell, like many others, sought opportunities across the ocean that facilitated the retention of his occupation as a handloom weaver until his death at the age of eighty-five in 1891.³

Campbell did not leave behind a record of why he made his decisions; his movements from place to place over the course of his life are recorded in government records such as censuses, birth, death and marriage registrations and his account book. By consulting the

¹ *The New Statistical Account of Scotland: Perth* (Edinburgh and London: W. Blackwood and Sons, 1845), 508.

² This table shows the breakdown of weavers in the 1881 census according to ethnic background. The 1881 census lists 368 weavers of Scottish birth out of 2,022.

³ John Campbell's death was registered in 1891. *Registrations of Deaths, 1869-1938*. MS 935, reels 61. Archives of Ontario, Toronto, Ontario, Canada.

literature about Scottish handloom weavers in Scotland, and immigrant weavers in the United States and Canada, I provide context for Campbell's life. Understanding the conditions of Scottish handloom weavers and their diaspora is an important component to understanding Campbell and other Scottish handloom weavers in Ontario. The linkage between countries of birth of handloom weavers to countries of immigration is important to the history of handloom weaving and has not been thoroughly examined in the literature.

The earliest documentary evidence confirming that Campbell was a weaver dates to a textile produced by Campbell in New York State in 1842 followed by the 1850 New York census, where he is listed as a forty-four year old weaver.⁴ Based on circumstantial evidence, I believe that his life as a weaver began long before 1842, in his country of origin, Scotland, where he might have apprenticed for up to seven years.⁵ His capacity to weave a wide range of cloth types, his impressive yardage output as seen in the pages of his account book, his ability to operate the complicated loom used to produce figured textiles, or as he called them, 'carpet coverlets' and make the necessary adjustments and repairs, support the theory that he was a skilled Scottish handloom weaver.

Handloom weaving in Scotland

Using Campbell's documented dates – his birth, marriage and emigration – as points of reference, I describe the world from which a weaver of Campbell's age existed. Although Campbell was not a key player in events of history, he was a member of a substantial workforce.

⁴ Clarita Anderson, *American Coverlets and Their Weavers: Coverlets from the Collection of Foster and Muriel McCarl Including a Dictionary of more than 700 Weavers* (Williamsburg, Va.: The Colonial Williamsburg Foundation, 2002), 140. Seventh Census of the United States, 1850; (National Archives Microfilm Publication M432, 1009 rolls); Records of the Bureau of the Census, Record Group 29; National Archives, Washington, D.C. Year: 1850; Census Place: Caledonia, Livingston, New York; Roll: M432_524; Page: 344A; Image: 87.

⁵ *Reports from Commissioner*, page 40 in Hand-loom Weavers.

In 1820, around the time that he might have entered his trade, there were 78,000 other handloom weavers in Scotland.⁶ Handloom weavers, while important to the Scottish economy in the mid-eighteenth to early-nineteenth centuries, became increasingly redundant as mechanization and economic depressions reduced their demand. Despite the reduced opportunities, sons of weavers and Irish and Scottish Highland migrants continued to join the trade up to the mid-nineteenth century.⁷

John Campbell was born January 27, 1806 in Glasgow.⁸ The early-nineteenth century was still a period of intermittent prosperity for handloom weavers, especially woollen and fancy weavers where technology had not altered the trade significantly.⁹ If Campbell was born into a weaving family, his father William probably became a weaver in the 1780s, during a time of prosperity, and like many other handloom weavers, trained his son from whence he was a lad and encouraged John to follow him in his trade.¹⁰

Before the huge impact of mechanization post-1820, and despite fluctuations in the profession which were dependent on large economic cycles, handloom weavers experienced a ‘Golden Age’ from 1788 to 1803, or so nineteenth-century historiography contends.¹¹ Campbell’s birth coincided with the tail end of this period of prosperity. To understand the

⁶ Murray, *The Scottish Hand Loom Weavers*, 23.

⁷ Low agricultural yields in Scotland contributed to a weakened economy between 1839 and 1842 which affected the consumption of cloth. In 1838, 30% of the handloom weavers in Scotland were born in Ireland. Ibid., 58 and 33.

⁸ Campbell’s parents were William Campbell and Margaret Fergus according to Old Parish Records, 644/01/0200/0297, ScotlandsPeople.org.uk.

⁹ Woollens were the first fabrics produced at the outset of the Industrial Revolution and this type of weaving was least affected by wage fluctuations due to the lack of mechanization used with this type of weaving. Fancy is a term used to describe textiles produced on complex handlooms. Although fancy weavers received the highest wage, their cloth was sensitive to fluctuations in the economy. Murray, *The Scottish Hand Loom Weavers*, 91, 27. Handloom weavers producing coarse and heavy woollen fabrics maintained high wages and steady work. *Reports from Commissioner*, page 17 and 24 in Hand-loom Weavers.

¹⁰ Financial incentives to receive the necessary burgh certification encouraged weavers to follow in their father’s footsteps. Cleland, *The Rise and Progress of the City of Glasgow*, 38. Mr. Samuel Sully outlined the type of work that the son of a weaver would do starting at the age of five years old. *The Sessional Papers of the House of Lords in the Session 1840*, (e & 4 Victoria) Volume XXXVII, Subject of this volume: Handloom Weavers, 1840: 236.

¹¹ William Radcliffe, *Origin of the New System of Manufacture* (J. Lomax, 1828), 63.

contributing factors that fostered this time of plenty, one must step back to Campbell's great, great grandfather's day – the late-seventeenth century, when events were transpiring to transform Scotland into an industrial nation.

In the late-seventeenth century, the Scottish textile industry was in a state of decline, producing a coarse grade of fabric which did not meet standards set decades earlier.¹² It was within this context that England and Scotland joined parliaments in the Act of Union in 1707. The Scottish elite were mainly motivated to join forces with England to take advantage of access to larger markets and the Scottish textile industry would prove to be both a beneficiary of, and benefit to, the union.¹³

Many criticisms were directed toward Scottish textile production in the early-eighteenth century, but confidence in the potential of this industry can be seen in the inclusion of monetary allowances in the Act of Union for Scotland to improve the state of its textile production.¹⁴ Many eighteenth and nineteenth century initiatives linked the importance of the Scottish textile industry to national prosperity in a consistent message that Scotland had a weaving tradition that was worth exploiting but in dire need of improvement.¹⁵

The strong position of the Scottish textile industry developed from the arrival of various waves of weavers who enriched the knowledge and proficiency of Scottish weavers. Thousands

¹² In 1692, the Convention of Royal Burghs appealed to the Privy Council to reinstate standards stipulated by the existing Linen Acts. John Hamilton, *The Industrial Revolution in Scotland* (London: Frank Cass, 1966), 77.

¹³ Maxine Berg, *The Age of Manufacturers: Industry, Innovation and work in Britain, 1700-1820* (Oxford: Basil Blackwell, 1985), 35.

¹⁴ The Act of Union, Article XV, cited in Hamilton *The Industrial Revolution in Scotland*, 78.

¹⁵ Patrick Lindsay, *The Interest of Scotland Considered with Regard to its Police in employing of the Poor, its Agriculture, its Trade, its Manufacturers, and Fisheries* (Edinburgh: R. Fleming and Company, 1733). Richard Bradley, *A Treatise concerning the Manner of Fallowing of Ground, Raising of Grass-Seeds and Training Lint and Hemp for the Increase and Improvement of the Linnen-Manufactories in Scotland* (Edinburgh: Honourable Society for Improving in the Knowledge of Agriculture, 1724). *His Majesty's Patent for Improving Fisheries and Manufactures in Scotland*. Commissioners and Trustees for Improving Fisheries and Manufactures in Scotland, Great Britain. (The Trustees, 1727). *Rules for Propagating and Dressing of Lint and Hemp and for Bleaching and Whitening of Linnen Cloth*. The Honourable Society for improving in the Knowledge of Agriculture. (Glasgow, 1725). John Wilson, *General View of the Agriculture of Renfrewshire: With Observations on the Means of its Improvement; and an Account of its Commerce and Manufactures* (London: G. & W. Nicol, 1812).

of highly skilled weavers from weaving centres in the Low Countries and France came to Scotland, to infuse the Scottish weaving industry which only produced coarse woollens, not for export.¹⁶ In addition to improving Scottish weaving skills, attention to their equipment was advanced as commentators frequently complained about the poor quality of looms in early-eighteenth century Scotland.¹⁷ The local Scottish loom, used predominantly for woollen weaving, was not adequate to the challenge of the newly proposed linen production.¹⁸

Scotland's textile industry in the eighteenth century, a product of much intervention over the century, became so effective that handloom weaving became the premiere participant in the Scottish Industrial Revolution. With the various encouragements made to the textile industry in the early-eighteenth century, employment and wages were on the increase as this trade took on an air of prosperity and status amongst trades.¹⁹

Prior to 1751, incorporations or guilds in Scotland maintained control over those entering the weaving trade and their length of apprenticeship.²⁰ In the *Act for Explaining, Regulating etc. the Linen Manufacture*, of 1751, the weavers' guild was dismantled so that weavers could "...exercise the said respective Trades...in Scotland, without any let or hindrance..."²¹ From that time, apprenticeship fees and indenture were applied inconsistently. When apprenticeships were initiated, apprentices sometimes abandoned their master after they had obtained basic

¹⁶ Murphy *A Treatise on the Art of Weaving*, vi & viii.

¹⁷ Bradley, *A Treatise Concerning the Manner of Following of Ground*, 97-98.

¹⁸ Bradley described the Dutch loom, the Estille loom and the French loom. He endorsed these looms because of their performance for weaving fine linens. He wrote that the Scottish loom has a wide width between front and back beams and that they are built with thin beams suitable for weaving woollen or worsted, but not linen.

¹⁹ Skilled weavers earned respectable wages in the late eighteenth to early nineteenth century period. In 1782 a weaver made £65 per year. Murray, *The Scottish Hand Loom Weavers*, 40-41.

²⁰ Alastair Durie, *The Scottish Linen Industry in the Eighteenth Century* (Edinburgh: John Donald Publishers Ltd., 1979), 78-79.

²¹ Durie, *The Scottish Linen Industry in the Eighteenth Century*, 78-80. Durie quotes from 'Act for explaining, regulating etc. the linen manufacture.' 24 Geo II c. XXXI, s. 23. From On the Petition of Manufacturers of, and Traders and Dealers in the Linen Manufactory, 23 April, 1751 (Vol. 2).

skills.²² In the nineteenth century, there was a range of opinions regarding the length of time required to learn how to weave from merely sitting at a loom and throwing a shuttle to seven years apprenticeship to learn every aspect of weaving from start to finish. One informant remarked that “one morning 30 Irishmen came into the town, each proposed to become a weaver. They got friends and got work. They had never worked as weavers before.”²³ Fathers generally instructed their sons in textile production from a young age, indeed weavers depended heavily on the labours of their family.²⁴ According to one master weaver, to become “a good weaver, a boy must be put to quilling at eight years old, and by the time he is 21 he will make a good workman; but if a lad (who is not a weaver’s son) be taken at 14, he will require to serve seven years’ apprenticeship, and unless he had done so he would not employ him.”²⁵ In the case of William Watson who was indentured for three years in 1777 to master weaver, John Liddel in Bathgate, Scotland about forty kilometres east of Glasgow, the contract between master and apprentice emphasized not just the skills that would be attained, but the respectable deportment expected of a handloom weaver during apprenticeship.²⁶ Liddel specified that Watson should not be out “walking and rambling on the streets and all sorts of gaiming [sic] at cards, dice or other vilious and idle diversions and shall not frequent ale houses with bad and evil company.” Watson’s

²² Murray, *The Scottish Hand Loom Weavers*, 29.

²³ *Reports from Commissioner*, page 39 in *Hand-loom Weavers*.

²⁴ *Ibid.*, page 15 in *Hand-loom Weavers*.

²⁵ See Glossary for a definition of quill. *Ibid.*, page 40 in *Handloom Weavers*.

²⁶ References to the work of weaving in the contract are vague. The master weaver Liddel, only made general statements about actual weaving such as “William Watson with consent foresaid binds and obliges himself carefull faithfully and honestly to attend upon and serve the said John Liddell his master in his said art and Trade of a weaver.” *Indentures Between John Liddel and William Waston, 1771. Weaver's articles, dated at Bathgate, West Lothian, Scotland, 10th November, 1777 binding William Watson, apprentice and servant to John Liddel, weaver, Bathgate. 1771.* University of Guelph Archives, Scottish Collection.

remuneration consisted of one half of the wages from the cloth he produced but from that pay he was obliged to supply half of the candles that he used while weaving.²⁷

By 1820, however, there was a sense that handloom weavers were not part of the brave new Scotland. Handloom weavers were described pejoratively by James Cleland, Superintendent of Public Works in Glasgow. Cleland stated that “hanking of handspun yarn, and hawking it from fair to fair, under the fostering hand of the Convention, has been replaced by the Jenny, and the Power Loom. The benefits which were supposed to arise to the Burghs, and to the trade of the country at large, under the paternal care of the Convention, could not be effected without some expense.”²⁸ I would suggest that the expense, to which Cleland referred, was the declining fortunes of the handloom weaver.

John Campbell, therefore, was born at a time when the industry was becoming increasingly commercialized; the markets that handloom weavers could access independently were dying off by the early 1800s. As a result, weavers needed to rely more on the merchants who organized handloom weaving for the export market.²⁹ In 1836, the *New Statistical Account* recorded that thirteen manufacturers controlled all of the independent handloom weavers in Fifeshire, leaving little room for independent operators.³⁰ Despite the fact that the weaver was bound to the merchant, he wove on his own loom, on his own schedule. This independence of place and schedule was a priority for Scottish handloom weavers and made them reluctant to

²⁷ Indentures Between John Liddel and William Waston, 1771. Weaver's articles, dated at Bathgate, West Lothian, Scotland, 10th November, 1777 binding William Waston, apprentice and servant to John Liddel, weaver, Bathgate. 1771. University of Guelph Archives, Scottish Collection.

²⁸ James Cleland is remembered for his work in municipal statistics collection in Glasgow allowing for urban planning. Thomas Devine, *Glasgow. Vol. 1, Beginnings to 1830*. (Manchester: Manchester University Press; New York: St. Martin's Press, 1995), 245. Cleland, *The Rise and Progress of the City of Glasgow*, 45.

²⁹ Hamilton *The Industrial Revolution in Scotland*, 102. Murray, *The Scottish Hand Loom Weavers*, 15.

³⁰ *New Statistical Account ix, 12* (Edinburgh: W. Blackwood, 1836), 75-6.

enter the burgeoning weaving factories.³¹ A persistent objective of handloom weavers and indeed most skilled artisans was to maintain their independence and this desire can be traced over the successive decades of the nineteenth century and across the ocean to the U.S. and Canada.³²

If John Campbell entered the trade as an adolescent, by 1820 he would have found that the weaving industry was paying less for cloth, forcing weavers to increase their production to make a living.³³ The wages of handloom weavers had declined since the early-nineteenth century due to competition between small-scale British manufacturers which could not absorb market fluctuations and reduced prices on the market by cutting weavers' wages to stay competitive.³⁴ Because of the appeal of handloom weaving and the intermittent periods of prosperity, in the 1830s, many continued to turn to handloom weaving increasing the workforce when the demand continued to fluctuate leaving many weavers with little work.³⁵ Skilled handloom weavers faced minimal competition from the power loom which, up to the 1820s, still could not replicate the full range of cloth, especially fine or complex cloth.³⁶ This edge was eventually eroded between 1820 and 1850, as improvements to the power loom allowed for an increasing number of cloth types, putting handloom weavers in direct competition with the

³¹ Factory weaving was unskilled work and generally done by women and children. Some handloom weavers who could not secure weaving work found employment in the collieries and the railroad instead of taking factory work weaving. *Reports from Commissioner*, page 10 in *Hand-loom Weavers*.

³² Thomas Cowherd, tinsmith who immigrated to Canada in 1837 wrote a memoir that provides an interior view of an artisan. He discussed the importance of independence and self-employment for artisans. He suggested that an artisan would rather move away from his community than give up his independence and pride and work in a factory. Burley, *A Particular Condition in Life*, 16.

³³ Weavers increased their output by working longer hours and enlisting family members to weave. Murray, *The Scottish Hand Loom Weavers*, 69.

³⁴ *Ibid.*, 67.

³⁵ In 1830, there were 78,000 handloom weavers, an increase of 12,000 from 1810. In 1840, handloom weavers had increased to 84,560. Murray, *The Scottish Hand Loom Weavers*, 23. *Reports from Commissioner*, page 40 in *Hand-loom Weavers*.

³⁶ Berg, *The Age of Manufacturers*, 249. There was no difference in price between cloth produced on a power loom and cloth produced on the handloom despite the difference in labour. *Reports from Commissioner*, page 24-25 in *Hand-loom Weavers*. Reports from Committees. Vol. IX. Handloom Weavers; Corn Trade; Goldsworthy Gurney. Session 19 February – 10 September. (London: House of Commons, 1835), 6.

power loom.³⁷ To this end, in the 1820s, the majority of handloom weavers had abandoned their traditional mix of weaving and agriculture which provided them with a diversified income, resorting to full-time weaving, becoming further dependent on the merchants for their employment.³⁸

Despite the problems facing the handloom-weaving trade, beginning in the early-nineteenth century, new handloom weavers continued to enter the work force even as high unemployment and power looms dominated the industry.³⁹ The last of the handloom weavers to enter the trade was in the early 1840s. As a demonstration of their tenacity, by the 1870s, a handful of elderly handloom weavers in Ayrshire were still weaving, thirty years older than they were when they entered the workforce in the 1840s.⁴⁰

In 1839, Campbell at the age of thirty-three married silk weaver, Janet Robertson, aged twenty-two in Paisley.⁴¹ The next year, 1840, the Campbell's had their first child, William, coinciding with the last of the handloom weavers entering the trade in Scotland.⁴² The young couple had to make a choice whether to remain in Scotland or emigrate. At this point, handloom weaving showed little sign of recovery. Undoubtedly, this would have informed Campbell's

³⁷ Investment in mechanization tended to coincide with higher wages for handloom weavers. Manufacturers had little incentive to invest in mechanization when wages were low. Murray, *The Scottish Hand Loom Weavers*, 65.

³⁸ Berg, *The Age of Manufacturers*, 14.

³⁹ Unemployment in several weaving centres in 1841 and 1842 affected cotton fancy and linen weaving. Murray, *The Scottish Hand Loom Weavers*, 138.

⁴⁰ Matthew Fowlds, the last handloom weaver in Ayrshire, died in 1907. Ibid., 14 and 75.

⁴¹ *The Heritage of Lobo* stated that Janet was a silk weaver in Paisley. *The Heritage of Lobo, 1820-1990*, 158. Also, note that Campbell's wife Janet has many variant spelling, e.g., Jenett and is later referred to as Jessie, perhaps to differentiate her from her daughter who was also named Janet, also with several variant spellings. Old Parish Record Marriages 573/01 0040 0177, Paisley High Church accessed from ScotlandsPeople.com Regarding Campbell's age of marriage at thirty-three, perhaps there is an analogy with tinsmith, Thomas Cowherd who immigrated to Canada in 1837 and commented that he delayed marriage until he had enough money to support a family. Burley, *A Particular Condition in Life*, 4.

⁴² Seventh Census of the United States, 1850, and Census of Canada, 1911. Statistics Canada Fonds. Microfilm reels T-20326 to T-20460. Year: 1911; Census Place: Lobo, Middlesex North, Ontario. Page 4, Family No: 49.

thinking as he prepared to emigrate with his wife, son and mother-in-law.⁴³ The Campbells departed from Scotland at the beginning of a peak period for emigration from Britain. Ironically, this was a time when Britain emerged from economic hardships and was in need of workers, skilled or unskilled, who were buying into the American dream of equality, opportunity and prosperity.⁴⁴

Handloom Weaving in New York State

The date of the Campbells' immigration was recorded as 1841 although the family's settlement in the town of Caledonia, Livingston County, New York, approximately forty kilometres south-west of Rochester, cannot be confirmed until the 1850 New York State census.⁴⁵ The population of Caledonia was about 1,985 in 1842.⁴⁶ Campbell, like most of the immigrant textile workers who came to the United States from Britain, was a handloom weaver and older than most other immigrants. These pre-industrial skilled workers had entered the workforce before power looms took over and preferred to emigrate rather than take up unskilled factory work.⁴⁷

A study of twenty-three textile workers who emigrated in the 1840s and 1850s

⁴³ Jannett Robinson listed in Campbell's household was probably a mishearing of Robertson who was listed as a 67 year old female, probably Janet Campbell's mother. In Seventh Census of the United States, 1850. Eleven years later, in the 1861, Province of Ontario census, a death is recorded for a 79 year old who died of old age, most likely Jannett (Robinson) Robertson. *Canada West. Census returns for 1861*. Year: 1861; Census Place: Delaware, Middlesex, Canada West; Roll: C-1049-1050; Page: 16. Library and Archives Canada, Ottawa.

⁴⁴ William Van Vugt posited that many of the emigrants during the 1840s were textile workers, ironworkers and skilled tradesmen who had lost employment due to mechanization. William Van Vugt, *Britain to America: Mid-Nineteenth Century Immigrants to the United States* (Urbana and Chicago: University of Illinois Press, 1999), 10.

⁴⁵ In the 1901 census, in the column for date of immigration to Canada, Campbell's daughter Janet indicated that she immigrated to Canada in 1854, while Campbell's wife Janet indicated 1841. This is obviously a misunderstanding of the question, as wife Janet did not immigrate to Canada thirteen years before the rest of the family, especially as daughter Janet was born in 1849. Therefore, my understanding of the immigration date of 1841 was the Campbells immigration to the U.S. from Scotland, thus providing a date for emigration from Scotland. This is consistent with other documents such as William Campbell's date of birth, 1840 in Scotland and the date of the first textile produced by Campbell in 1842. *Census of Canada, 1901*. Place: Lobo, Middlesex (south/sud), Ontario; Page: 9; Family No: 100. Library and Archives Canada. Microfilm reels: T-6428 to T-6556.

⁴⁶ John Warner Barber and Henry Howe, *Historical Collections of the State of New York: Containing a General Collection of the Most Interesting Facts, Traditions, Biographical Sketches, Anecdotes, &c. Relating to Its History and Antiquities, with Geographical Descriptions of Every Township in the State* (New York: S. Tuttle, 1842), 244.

⁴⁷ Van Vugt, *Britain to America*, 63. David Jeremy, *Transatlantic Revolution: The Diffusion of Textile Technologies between Britain and America, 1790-1830s* (Cambridge, Massachusetts: The MIT Press, 1981), 150.

demonstrates that they were not hapless fatalities of mechanization. Everyone in this group came to America with skills, little capital and a dream – in the words of emigrant handloom weaver John Schofield, to “do better” and try their “fortunes in the United States.”⁴⁸ Textile workers sought out opportunities to further their well-being and used their trade as a stepping stone, even if they did not remain in the trade. About half became farmers, and in a sense retained the independence so consistently sought after by handloom weavers.⁴⁹

Campbell’s destination, New York State, was a place which provided minimal opportunities for handloom weavers who wanted to remain in their trade as 94% of all fabric produced in New York came from factories by 1814.⁵⁰ In addition to factory-produced textiles, the population of New York State had been producing textiles within the household for more than a century when the Campbells arrived in 1841. Weaving, what little of it was done by male artisans in New York State in the seventeenth century, had shifted to household production of plain undyed cloth by women in the eighteenth century.⁵¹ Although the opportunities for handloom weavers in New York State would have been small, they did exist and in the early- to mid-nineteenth century New York State still had a few production-handloom weavers producing fancy work as demonstrated in the presence of hand woven figured and single coverlets produced in New York State in the material record.⁵²

⁴⁸ Van Vugt, *Britain to America*, 64.

⁴⁹ *Ibid.*, 64-65.

⁵⁰ Ulrich, “Wheels, Looms and the Gender Division of Labour in Eighteenth-Century New England,” 23. Pennsylvania was the more common destination for immigrant handloom weavers who wanted to continue in their trade, at least in the short term, until they had enough capital to farm. Van Vugt, *Britain to America*, 63. In 1833, textile production in the United States was equal and in some cases superior to that of Britain. *Reports from Commissioner*, page 29 in *Hand-loom Weavers*.

⁵¹ Ulrich, “Wheels, Looms and the Gender Division of Labour in Eighteenth-Century New England,” 12.

⁵² There are several documented figured coverlet weavers in New York State, including John Campbell. Anderson, *American Coverlets and Their Weavers*. Elmey Sammis was a customer weaver and a tailor who kept an account book where she recorded weaving a variety of textiles including single coverlets. She wove in Cayuga County, New York State, about 120 kilometres to the east of Livingston County before she married and moved to Ohio. Patricia Cunningham, “Elmey Sammis Trimmer: Tailoress and



Figure 6 - John Campbell's carpet coverlet loom, including the head is 350.5 cm tall by 152.4 cm wide (11'6" by 71 1/2"). The head which is 45.7 cm high by 43.2 cm wide by 33 cm deep (18" by 17" by 13") sits 86.4 cm (34") above the loom frame. The loom is located in the Ontario Science Centre, Toronto.

Soon after his arrival and establishment in New York State, Campbell began weaving in 1842 as evinced by a coverlet with provenance to Campbell.⁵³ The figured loom that Campbell invested in allowed him to weave cloth that was in demand and still not fully mechanized until

Weaver." *Making the American Home: Middle-class Women and Domestic Material Culture, 1840-1940*. Edited by Marilyn Ferris Motz and Pat Browne, 140-157. (Bowling Green, Ohio: Bowling Green State University Popular Press: 1988).

⁵³ Anderson, *American Coverlets and Their Weavers*, 141.

the mid-nineteenth century, securing a small portion of the 6% production of hand woven cloth in New York State.⁵⁴ William Thomson, a Scottish textile worker travelling in the U.S. and Canada in the 1840s, noted that many handloom weavers were able to improve their prosperity by immigrating to North America. Indeed, he wrote that a weaver was a sought after member of the community and often received enticements to settle.⁵⁵

Campbell's purchase of the figured head mechanism produced by James Lightbody, soon after his arrival to New York State in 1841 was possibly an attempt to stay ahead of mechanization, and demonstrates Campbell's ability to seek out opportunities that might have been familiar from his training in Scotland.⁵⁶ Figured textiles were not, as of this time, produced efficiently on power looms.⁵⁷ Manufacturers like James Lightbody supplied attachments like Campbell's which were made of cast iron and wood and sat about a metre above the loom, at a height sufficient to accommodate the cords used to lift the threads and the hundreds of punch cards. To operate the loom, the weaver alternates between two treadles that position the punch cards against the needles, allowing the needles to read the cards using the binary system of holes and blanks (Appendix 2.02).⁵⁸ Obtaining a figured head mechanism was a way a weaver could forestall the effects of mechanization and remain viable in his profession.⁵⁹

⁵⁴ Anderson, *American Coverlets and Their Weavers*, 1. In 1814, factory weaving comprised 94% of cloth produced in New York State. Ulrich, "Wheels, Looms and the Gender Division of Labour in Eighteenth-Century New England," 23. Although 94% is a substantial portion of the textile market, I wondered what 6% of non-factory weaving would total. I related this to Ontario where cloth factories had an output of \$2,223,621. in 1870. 6% of non-factory cloth would equal \$134,172. providing a net income of \$141 to 946 handloom weavers. Inwood and Grant, "Gender and organization in the Canadian Cloth Industry, 1870," Ontario factory output of \$2,223,621 on page 21; net income for male and female Ontarian weavers averaged at \$141.8 on page 25.

⁵⁵ Thomson, *A Tradesman's Travels in the United States and Canada*, 129.

⁵⁶ James Lightbody was a Scottish-born machinist who produced figured head attachments in New Jersey. See Chapter Three for a further discussion of Lightbody.

⁵⁷ As early as the 1820s, power weaving was taking hold in Massachusetts and Rhode Island putting pressure on handloom weavers. In Gail Fowler Mohanty, "Putting up with putting-out: Power-loom diffusion and outwork for Rhode Island Mills, 1821-1829," *Journal of the Early Republic* 9, No. 2 (Summer, 1989), 191.

⁵⁸ Ham, *Operation of the John Campbell Jacquard Loom*, 1995.

⁵⁹ It was estimated that there were only thirty weavers who operated looms with these mechanisms in Canada, and only in Ontario. In Burnham and Burnham, *Keep Me Warm One Night*, 371. David Jeremy wrote that in 1815 handloom weavers were surviving by

The extent of Campbell's prosperity in New York State is less certain than his business in Ontario due to the absence of known business documentation. One thing is certain, in 1849, the Campbells had another mouth to feed, as John and Janet had their second child, Janet.⁶⁰ New York State was not to be the Campbell's final destination, for, after thirteen years, the family made another major decision, in 1854 to pack up and move 350 kilometres north across the border to Canada West.⁶¹ Perhaps New York State was never intended as Campbell's final destination, but a stopover to purchase technology which could not be exported legally from Britain until 1843.⁶² If we accept that Campbell was a trained weaver in Scotland, he probably knew about figured mechanisms from ingrain carpet weaving.⁶³ He might have also known that figured mechanisms were being produced in the U.S. by Scottish expatriates such as James Lightbody.⁶⁴

Figured heads and dobbies, attachments for handlooms, were in demand because figured or 'fancy' patterns, as they were called in the nineteenth century, could not be produced on power looms.⁶⁵ Operating a loom with a figured attachment was an investment in space and time. As in the case of Campbell's loom, it stands over three metres in height and the complicated head requires an elaborate initial set up involving 272 needles with corresponding necking cords which are triggered by the punch cards. The necking cords are each clasped to

weaving fancy cloth that could not be produced on a power loom, with an emphasis on satin weaves and figured fabrics. Jeremy, *Transatlantic Revolution*, 165.

⁶⁰ Janet's death registration records August 11, 1849 as her birth date. See: *Registrations of Deaths, 1869-1938*. MS 935, reel 445. Archives of Ontario, Toronto, Ontario, Canada. Jenett (sometimes Janet) Campbell's death registration. Janet is listed as 1 year old in the Seventh Census of the United States, 1850.

⁶¹ See footnote above where I explain my proof for the date of emigration from New York State to Ontario in 1854.

⁶² The Machinery Exportation bill was passed in 1843 which lifted the ban against exporting British machinery. David J. Jeremy, "Damming the Flood: British Government Efforts to Check the Outflow of Technicians and Machinery, 1780-1843," *The Business History Review* 51, No. 1 (Spring, 1977), 32.

⁶³ Goody, *Woven History: The Technology and Innovation of Long Island Coverlets*, 20. Fawcett, *Historic Floors*, 162.

⁶⁴ *U.S. Federal Census*. Year 1850; Census Place: Jersey, Hudson, New Jersey; Roll M432-452; Page 377B; Image 407.

⁶⁵ See Glossary for a definition of a dobby loom. David Jeremy, "Innovation in American Textile Technology during the Early 19th Century." *Technology and Culture* 14, No. 1 (Jan., 1973), 62.

four harness cords by an 'eye' or clasp. The harness cords are distributed in the comber board, horizontal bars directly in front of the weaver, to create the correct repeat in the pattern.⁶⁶

William Thomson remarked that Canadian mills got their machinery from the United States.⁶⁷

This is further corroborated by some Ontario weavers, like Campbell, who obtained their figured heads from the United States.⁶⁸ In the much larger market of the United States, manufacturers such as Lightbody supplied specialty handloom attachments to meet the demand of the hundreds of known figured coverlet weavers.⁶⁹ Interestingly, there are four documented cases of figured coverlet weavers who brought their equipment from the U.S. to Canada: John Campbell; Aaron Zelner who was born in the U.S. and came to Canada in the 1840s, who produced figured coverlets in Pennsylvania and Ontario (Haldimand County and Waterloo County);⁷⁰ John Beatty Stroud, who travelled to the United States to obtain equipment wove figured coverlets in Simcoe County;⁷¹ and William Weirlich from Waterloo County, who obtained a figured head and a wide loom in the United States close to the end of the Civil War.⁷²

Campbell's move to Middlesex County might have been encouraged by news of the bustling economy of Canada West. A flourishing railway construction occurred between 1852 and 1859 flooding Canada West with capital.⁷³ Other reasons for the move might have been that business in New York State was not as brisk as Campbell had hoped as mechanization continued

⁶⁶ Ham, *Operation of the John Campbell Jacquard Loom*, 8-9.

⁶⁷ Thomson, *A Tradesman's Travels in the United States and Canada*, 141.

⁶⁸ Burnham and Burnham, *Keep Me Warm One Night*, 371.

⁶⁹ Anderson, *American Coverlets and Their Weavers*.

⁷⁰ Burnham and Burnham, *Keep Me Warm One Night*, 319. Aaron Zelner appeared in the 1851 census as a forty year old weaver. *Census for Canada West*. Year: 1851; Census Place: Cayuga, Haldimand County; Schedule: A; Roll: C-11725; Page: 1; Line: 28.

⁷¹ In the Ontario Textile Record Binders at the Royal Ontario Museum. OT. 48.83.

⁷² Burnham and Burnham, *Keep Me Warm One Night*, 360.

⁷³ Campbell's move to Middlesex County in 1854 possibly coincided with the economic vitality of Canada West due to Railway construction between 1852 and 1859. McCalla, *Planting the Province*, 203.

to decrease the demand for handloom weaving.⁷⁴

Canada West and Middlesex County

When the Campbells made their next move in 1854, travel between New York State and Canada West followed a well-worn path, and the traveller had choices depending on finances and the quantity of goods that they wanted to transport.⁷⁵ A letter from Joseph Carruthers in Westminster Township, Middlesex County in 1856 to his brother in Ireland indicated that in the previous year the “rail road [was] in full operation from London to New York.”⁷⁶ Whether Campbell, by this time forty-eight, and his family were able to take advantage of the railroad from Niagara to London or whether they took a schooner over to Port Stanley, a sense of progress and prosperity in south-western Ontario would have greeted them.⁷⁷

The Campbells first home in Middlesex County was in the village of Kilworth, Delaware Township, which had population of two hundred in 1851, a much reduced population compared to his previous home in Caledonia, Livingston County which had a population of approximately 2,000.⁷⁸ An 1857 source stated that Kilworth was a small village with a postmaster, a saw mill, a grist mill and a carding machine, perhaps a determining factor in locating in Kilworth.⁷⁹

⁷⁴ Improvements to power looms made them more efficient and versatile. Factories located in more populated areas while handloom weavers continued to exist in rural areas. After 1840, only a small number of handloom weavers were able to continue to weave custom work of a specialized nature. Mohanty, *Labor and Laborers of the Loom*, 166, 174.

⁷⁵ A letter sent from Nathaniel Carrothers to his mother-in-law travelling from Ireland to Middlesex County. Carrothers recommends an economical passage from Québec to London by avoiding the use of the stage coach from Hamilton to London. Cecil J. Houston and William J. Smyth, *Irish Emigration and Canadian Settlement: Patterns, Links, and Letters* (Toronto and Buffalo: University of Toronto Press, 1990), 256. Campbell would have needed to secure safe transportation for his carpet coverlet head, his looms and other items from his workshop.

⁷⁶ Houston and Smyth, *Irish Emigration and Canadian Settlement*, 277.

⁷⁷ The rural economy was benefitting from the Reciprocity Treaty of 1854. Terry Crowley, “Rural Labour,” in *Labouring Lives: Work and Workers in Nineteenth-century Ontario*, ed. Paul Craven (Toronto; Buffalo: University of Toronto Press, 1995), 43.

⁷⁸ *History of the County of Middlesex*, 483.

⁷⁹ The carding mill was operated by J.C. Comfort. Campbell recorded purchases from three individuals with the surname Comfort from Middlesex County, and one from Elgin County, but not J.C. Comfort otherwise known as Josiah Comfort. *The Canada Directory for 1857-58: Containing Names of Professional and Business Men and of the Principal Inhabitants in the Cities, Towns and Villages Throughout the Province...Throughout Canada*. (Corrected to November, 1857) (Montreal: John Lovell, 1857), 220. There are seventeen people with the surname Comfort listed consecutively on two consecutive pages: 51 and 53 of the 1851

Figure 7: Map of Kilworth, Delaware Township and Komoka, Lobo Township



Komoka is clearly a more substantial settlement than Kilworth. Komoka, spelled Kamoka on the map is highlighted in yellow and Kilworth is highlighted in blue. Source: Tremaine's 1862 Map of the County of Middlesex, Canada West.

Source: Tremaine's 1862 Map of the County of Middlesex, Canada West.

Campbell documented his location in the village of Kilworth in Delaware Township in his account book two years before the 1861 census (Figure 7).⁸⁰ Campbell appeared in the 1861 census in Delaware Township in a two-storey frame house, where Campbell and his son William, twenty-one years old, worked as weavers.⁸¹ A death in the family is recorded, a 79-year-old who died of old age, quite possibly the Janet (Robinson) Robertson, 67-years-old from

census. The 1851 census specifies family divisions and marital status in an informal manner, by placing an X in column 5, 'Residence if out of City Limits.' Josiah's father, William J., is a 54 year old clothier, also father to Stephen, also listed as a clothier. Stephen had two sons, Elias and Wallace, two of Campbell's customers. There appears to be two families enumerated with the surname Comfort, the first head of the household was William J. Comfort, Clothier, 54 years of age; the second was Stephen Comfort, 42. Josiah, possibly J.C. Comfort, 23, is under William J. Comfort's household. *Census for Canada West*. Year: 1851; Census Place: Delaware, Middlesex County; Schedule: A; Roll: C-11738; Page: 51; Line: 38-50 & Page: 53, Line: 1 to 4.

⁸⁰ Although, I am uncertain whether Campbell was an owner or tenant while in Kilworth, he was a tenant in Komoka, until 1878 (the town he moved to after living in Kilworth for ten years). *Census for Canada*. Schedule: 3; Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1 Ontario; Roll: C-9903; Page: 56; Family No: 203, Line: 3.

⁸¹ Campbell needed a building that had the capacity for the great height of his figured head loom which stands at a height of 3.5 metres. *Canada West Census returns for 1861*. Year: 1861; Census Place: Delaware, Middlesex, Canada West; Roll: C-1049-1050; Page: 16. Library and Archives Canada, Ottawa. John Campbell's Account Book begins July, 1859, the first job was delivered September, 1859.

the 1850 New York State census.

The earliest written documentation of Campbell's work as a weaver in Middlesex County appeared in his account book on July 9, 1859, when he took his first order for 24 yards of tweeled blankets.⁸² The question remains: if Campbell moved to Middlesex County in 1854, what was he doing between 1854 and 1859 to make a living for himself and his family? There is evidence to prove that Campbell's work as a weaver lasted six years after the last date in the account book, 1885, so perhaps an earlier account book for the 1854 to 1859 period is missing.⁸³ To estimate the time required to set up his weaving establishment in Kilworth after the move from Caledonia, New York State, I used the lapse in orders between Kilworth, Delaware Township and Komoka, Lobo Township in 1864 as an indication (Appendix 2.03 and 2.04).⁸⁴ Campbell dated his last order in Kilworth to February 13, 1864 and his first order in Komoka to May 31, 1864 – an interval of three months, two weeks. Although the move from Kilworth to Komoka was not as arduous as his move from Livingston County, New York State to Delaware Township, Middlesex County, the lapse in which he does not take orders is a reference point for the time it would take to re-establish his business on a local level. Also, based on the evidence of the first textile with provenance in New York State, a year after his documented arrival in the U.S., Campbell should have been weaving within a year of arrival. Most likely, it took Campbell a longer period of time to set up his carpet coverlet loom in Middlesex because he lacked the

⁸² See Glossary for a definition of tweeled.

⁸³ The second last page of the account book ends on December 31, 1885 with the date of last payment May 30, 1886 providing the first piece of evidence that Campbell worked past 1885. The Burnhams and Anderson stated that Campbell's death date was 1885. Burnham and Burnham, *Keep Me Warm One Night*, 371. Anderson, *American Coverlets and Their Weavers*, 41. Campbell was in three directories: 1886-7, 1889 and 1890 and he appeared in the 1891 census as a weaver, the same year of his death 1891. John Campbell's death registration in 1891. *Registrations of Deaths, 1869-1938*. MS 935, reel 61. Archives of Ontario, Toronto, Ontario, Canada.

⁸⁴ Campbell documented his move from Kilworth to Komoka by changing the heading in his account book from Kilworth to Komoka on page 61 & 62 for the last page in Kilworth and page 63 & 64 for the first page in Komoka. See Appendix 2.03 which shows the last date in Kilworth and Appendix 2.04 for the first date in Komoka.

support that he probably received in New York State from the manufacturer of the carpet coverlet head, a service provided by manufacturers of figured heads.⁸⁵

Ten years after settling in Kilworth, in 1864, the Campbells moved four kilometres from Kilworth to the larger village of Komoka.⁸⁶ Although Kilworth and Komoka could have been very similar in size when Campbell moved to Middlesex in 1854, by 1862, Komoka was clearly a much more substantial settlement. In 1878, Komoka has a grid of streets approximately twelve by seven blocks and two railway lines running through the town (Figure 2). According to two sources, Komoka was established in 1854 or 1855, and by 1860, had a population of 500. The Great Western Railroad Company and the London and Port Sarnia Great Western Railway Company brought investment, settlement and work to south-western Ontario.⁸⁷ Between 1852 and 1856, railways generated over \$10 million in Canada West. This extra revenue found its way to the local economy as demonstrated by an increase in money spent by farmers between 1851 and 1861.⁸⁸ In 1887, Middlesex County was ranked third in the province for its amount of cleared land.⁸⁹

⁸⁵ There is a coverlet with provenance to Campbell dated to 1842 in New York, one year after arriving in the U.S. It took Campbell close to three years to set-up his loom after moving from Kilworth to Komoka. In the same town Campbell lived in while in New York State, Caledonia, Josiah Sherman advertised a machine used for weaving fancy coverlets in 1836 where he set the loom up for the customer. Perhaps, Lightbody or his agents provided a similar service. Anderson and Spivak, "Nineteenth Century License Agreements," 72.

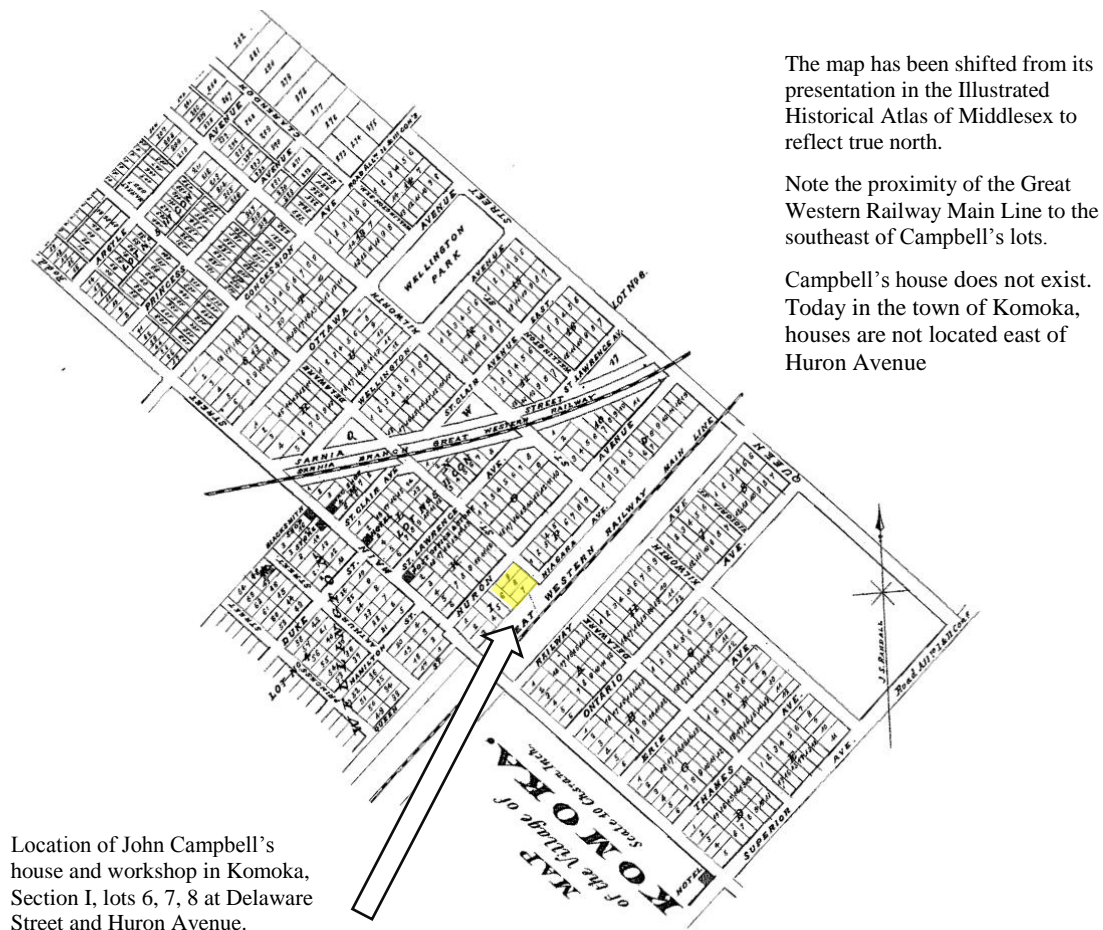
⁸⁶ In 1869, Komoka had a population of 400. Kilworth's population is not listed, perhaps indicating its small size. In H. McEvoy (ed. & compiler) *The Province of Ontario Gazetteer & Directory* (Toronto: Robertson & Cook Publishers, 1869), 257.

⁸⁷ *History of the County of Middlesex*, 196.

⁸⁸ McCalla, *Planting the Province*, 205.

⁸⁹ *History of the County of Middlesex*, 212. In 1887, Middlesex County had 514,563 acres of cleared land. *Sessional papers – Legislature of the Province of Ontario*. Vol. XXI, Part IX, Third Session of Sixth Legislature of the Province of Ontario, Session 1889. In Table No. IX, A. 1889, (Toronto, 1889), 75.

Figure 2: Map of Komoka, showing the location of John Campbell's house and workshop



Source: Map of Komoka. H.R.Page, & Co. *Illustrated Historical Atlas of the County of Middlesex, Ontario*. Toronto, 1878.

Middlesex, while mainly an agriculturally based economy, also attracted industry. There were several carding and fulling mills which supported handloom weaving in Middlesex, such as the one owned by the Comforts and another owned by the Woodhulls both in Kilworth, both customers of Campbell.⁹⁰ In Lobo Township, a woollen mill was incorporated into an existing

⁹⁰ *History of the County of Middlesex*, 484.

grist mill which was initially established in 1832 by the Siddalls.⁹¹ In Strathroy, Adam Van operated a carder and cloth-dresser in 1857, about 20 kilometres from both Kilworth and Komoka.⁹² In the mid-nineteenth century, J.M. Dufton ran a woollen mill in London where he employed twenty people and shipped goods as far away as eastern Ontario.⁹³ Carding and fulling mills were important to handloom weaving as they removed two time consuming tasks previously done by hand in household production reducing workload, and according to Inwood and Grant, extending the survival of handloom weaving.⁹⁴

Given the prosperity of Middlesex, it is not hard to see why Campbell made his move: after all, he was accustomed to mobility (Appendix 1.05).⁹⁵ The move from Kilworth to Komoka is difficult to determine for Campbell, in 1864 at the age of fifty-eight, but perhaps it was to be closer to his customers (Appendix 1.06 and Appendix 1.07). Repeat customers from all localities who Campbell established while in Kilworth and then maintained even after settling in Komoka amounted to 31%, demonstrating that he developed a strong following during his establishing years in Kilworth.⁹⁶ Repeat customers from Delaware Township made during his years in Kilworth (Kilworth is in Delaware Township) only accounted for 18% of his repeat customers, while repeat customers from Lobo Township (Komoka, the town that he relocated to in 1863, is in Lobo Township) established during his years in Kilworth, totalled 49% of repeat customers, indicating that Campbell might have moved to be closer to his strong customer

⁹¹ *History of the County of Middlesex*, 509. From information supplied by the University of Western Ontario Archives regarding the Joseph Siddall Family Fonds, AFC 66. http://www.lib.uwo.ca/files/archives/archives%20finding%20aids/AFC_66_-_Siddall_Family_fonds.pdf : 3.

⁹² *Ibid.*, 416.

⁹³ *Ibid.*, 379.

⁹⁴ Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 350.

⁹⁵ Crowley demonstrated that rural Ontarians were extremely mobile. Crowley, "Rural Labour," 18.

⁹⁶ I calculated that Campbell had 290 customers who made repeat purchases over the twenty-six years of the account book. Ninety of those customers had their first purchase with Campbell before his move to Komoka.

base.⁹⁷ Another motivation might have been to move to a more suitable house, given that house and workshop were one in the same.⁹⁸ Perhaps the move was intended to accommodate Campbell's son William's growing family as William, his wife and two sons were living in the family house in Komoka in 1871. Although William was not recorded as a weaver in the 1871 Personal Schedule, he did have a weaving establishment in the 1871 Industrial Schedule.

The move took its toll on the family's income as the Campbells experienced financial strain in 1863, with only 49 customer accounts rather than their average 74 accounts per year (Appendix 1.08).⁹⁹ One can observe further hardships from moving by the absence of any carpet coverlet orders between August 3, 1863 and April 11, 1866 – a period of just over two years and eight months. The inactivity of the loom was probably due to the complicated set-up of his carpet coverlet head on the loom, which would have been completely disassembled into beams and detached from the head containing over 1,088 harness cords which connected the head to the mails.¹⁰⁰ Perhaps Campbell understood the potential for financial adversities; he had moved

⁹⁷ Although the Campbells moved to Middlesex County in 1854 and Campbell was most likely weaving soon after that time, his account book does not begin until 1859. The customers documented in Kilworth from 1859 to 1863 might have been customers five years previous to 1859.

⁹⁸ In the 1871 census, Campbell's son William, with wife and two sons lived in the same household as his mother, father and sister Library and Archives Canada, Ottawa. Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1 Ontario; Roll: C-9903; Page: 56; Family No: 203, Line: 3.

⁹⁹ In 1863, customers order \$244 or 1,670.5 yards of cloth. Over twenty-five years of the account book the average number of annual accounts was 74 per year. I did not include the 1859 total in this average as 1859 was a partial year of business. An annual account refers to a customer entry in the account book regardless of the quantity of the order. After the financial crisis of 1857, the economy began to improve in 1863 and improved at a rate of 7% per year till the end of 1870. Crowley, "Rural Labour," 43.

¹⁰⁰ See the Glossary for a definition of mail. Campbell probably kept as much of the figured mechanism assembled as possible during the move. I believe that he would have removed the head and the comber boards, which would have been secured together as a unit before they were removed from the loom. Next, he would have disassembled the barn frame loom which is a straightforward procedure as the loom fits together by mortise and tenon joins and can be taken down to straight beams. The threading of the necking cords through the lifter boards which are housed in the head would have been retained if possible. The lifter boards are responsible for lifting the threads to make the shed. The harness cords which are attached to the necking cords would have also retained their threading through the comber boards. The comber boards are the horizontal beams that lift the threads to make the shed for weaving. Below the comber boards, the mails hang freely, weighted with lead lingoes. I believe that Campbell would have carefully packed the head and the comber boards, on a horizontal surface, with the attached cords, probably securing the more than 1,000 cords so that they would not tangle. However, if there was an unforeseen accident or problem in keeping these two parts intact, a great deal of set-up and rethreading would be necessary. Another potential problem which might have delayed the use of the loom was if the necking and harness cords had experienced wear from use between his purchase of the head in 1842 and his move to Komoka in 1864, after 22 years of use. At the Ontario Science Centre, Campbell's loom has been in weekly use by volunteers since 1982, 30 years ago. The necking cords which run from the top of the head to the eyes, or metal clasps which

before, weighed his options and decided that the more vigorous Komoka would benefit his business.¹⁰¹ Campbell's figured loom was in operation in April 1866 and he proceeded to have a profitable year of business between 1867 and 1869 (Appendix 1.09).

In 1871, Campbell was a tenant on five lots in the town of Komoka where he kept a garden.¹⁰² Campbell's business thrived into 1871, when he recorded annual accounts for 74 customers (Appendix 1.08). It is interesting to speculate whether Campbell's cloth production was higher because less Canadian wool was being shipped to the U.S. due to the repeal of the Reciprocity Treaty in 1866, which put a high duty on Canadian wool.¹⁰³ Including himself, Campbell declared in Schedule 6 of the 1871 census that two people were employed at weaving with an income \$460 per year from his weaving establishment.¹⁰⁴ Campbell's son, now with a family, was still living in the family house in Komoka with his father, mother and sister. William was not listed as a weaver in Schedule 1 of the 1871 census, but as a railroad employee, and it initially appeared that William had left the occupation of weaving, until I consulted Schedule 6 and found William listed as a handloom weaver for four months out of the year in Williams East Township, perhaps doing outwork for his father.¹⁰⁵ Although Campbell's wife, Janet or daughter, Janet were not listed in the census as weavers, Schedule 6 of the 1871 census

join with the harness cords are made from the synthetic Dacron and are still in excellent condition, however, the harness cords are made from linen are beginning to break and require replacement.

¹⁰¹ Komoka had a wide array of businesses and services as well as two railway lines, the Main Line and the Sarnia Line of the Great Western Railway running through the centre of town. Daniel Brock, ed. *History of the County of Middlesex, Canada, from the Earliest Time to the Present*. (1889; Canadiana reprint, 1972), 504.

¹⁰² 1871 Schedule 4 – Return of Cultivated Land, of Field Products and of Plants and Fruits, Page 3 of District No. 8, North Middlesex, Sub-District, Lobo, Enumeration division no. 1, line 13. Handloom weavers fit into the profile for artisans who did custom work. Maynard explained that artisans lived on small farms and their work was not destined for the export market. Maynard, "Between Farm and Factory," 74.

¹⁰³ Inwood and Grant, "Gender and organization in the Canadian Cloth Industry, 1870," footnote 28, page 31.

¹⁰⁴ G.T. Bloomfield & Elizabeth Bloomfield. *Middlesex County Industries, 1871 Index to Manuscript Census*. Ontario County Series #18. G.T. Bloomfield, series editor, (University of Guelph, 1991), 43.

¹⁰⁵ *Census of 1871, Province of Ontario*. District No. 8 North Middlesex, Sub-District E. Williams, Division No. 2, Page 1, Schedule No. 6 – Return of Industrial Establishments; Roll: C-9903; Page: 1. The value of William's work is much higher than his father's. William was listed as earning \$600 from the production of 800 yards of flannel which was 75 cents per yard, an unlikely price, unless his price included materials as his father was selling flannel at 1/- or 12 ½ cents per yard.

indicated that Campbell did have a second weaver. Perhaps his wife or daughter who was 22 years of age in 1871 was the second weaver.¹⁰⁶ In 1878, Campbell appeared for the first time on a Voters Registration List where he was listed as an owner of three lots in Komoka, most likely having purchased three of the five lots he leased in 1871, demonstrating his ability to do well on a weaver's income (Figure 2).¹⁰⁷

The account book stops abruptly in 1885, Campbell at the age of 79-years old having filled the blank account book cover to cover.¹⁰⁸ Without the account book, Campbell's weaving records are nonexistent between 1885 and his death in 1891.¹⁰⁹ Campbell appeared on several voters' lists confirming his existence and place of address on block I, lots 6, 7 and 8 in Komoka.¹¹⁰ Campbell's productivity might have slowed down due to his age, but he most likely continued to weave as he continued to list his weaving business in various south-western Ontario directories between 1875 and 1890.¹¹¹ In 1891 census, Campbell and his daughter are listed as weavers. His son had been living in Windsor working as a machinist but was back in Lobo Township by 1891 as a farmer with his wife, two sons and a daughter and was perhaps weaving

¹⁰⁶ I was unable to locate John Campbell's entry in the 1871 Industrial Schedule and as such consulted: Bloomfield and Bloomfield, *Middlesex County Industries*, 43.

¹⁰⁷ Polling Sub-Division No. 2, Part: 1. 1878 Voter Registration List from: Various Voter Registration Lists from Ontario, 1867-1900, collected by Canadiana.org. Ancestry.com. *Ontario, Canada Voter Lists, 1867-1900* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2008.

¹⁰⁸ A second account book has been suggested in Anderson, *American Coverlets and Their Weavers*, 238. Correspondence between Dr. Wilfrid Jury, University of Western Ontario and Albert Colucci, Artifacts Officers, Ontario Centennial '67 Project, dated December 15, 1965.

¹⁰⁹ There are nine slips of paper in a back pocket of the account book with a variety of information sometimes including customer names, orders, locations and prices, but without any dates. Two separate slips of paper correspond to an order dating to 1868 for three carpet coverlets and the other dating to 1874 for four carpet coverlets. Two other slips with carpet coverlet orders do not correspond with orders in the account book, perhaps indicating that these were orders after the account book ended in 1885.

¹¹⁰ 1886 Voter Registration List from: Various Voter Registration Lists from Ontario, 1867-1900, collected by Canadiana.org. Ancestry.com. *Ontario, Canada Voter Lists, 1867-1900*.

¹¹¹ *McAlpine's London City and county of Middlesex Directory*, 1875: 320; *Ontario Business Directory and Gazetteer, 1886-1887*: 545; *Farmers and Business Directory for the Counties of Elgin, Middlesex and Oxford*, 1889: A40; *The London City and Middlesex County Directory*, 1890: 327.

as well, although there is no proof to support this claim.¹¹² John Campbell died in 1891 at eighty-five years old, leaving behind his daughter and wife in the family home in Komoka.

After John Campbell's death it would appear that all connection with weaving disappeared for the Campbells, except that Campbell's unmarried daughter, Janet appeared in several directories between 1892 and 1900 as a carpet weaver.¹¹³ Campbell's wife, Janet, sometimes referred to as Jessie, and daughter Janet were in the 1891 census without listed occupations. Janet died in 1901 at the age of 84 with the occupation of "weaver's wife" on her death registry.¹¹⁴

Campbell's daughter Janet never married, and by 1911, his son William, now a widower, lived in the family house in Komoka with Janet as head of the family but without an occupation, and William listed as a labourer.¹¹⁵ An indication of William's sense of identity came from his death registration in 1929 where he is listed as a "retired weaver."¹¹⁶ Janet died in 1932 with her occupation listed as housework and no visible connection to her life as a weaver except by the name of the informant, Miss Isabel Waugh, the granddaughter of one of Campbell's customers seventy years previous.¹¹⁷

¹¹² William, his wife and two sons lived in Windsor where William worked as a machinist. *Census of Ontario*. Year: 1881; Census Place: Windsor, Essex, Ontario; Roll: C 13281; Page: 52; Family No: 260.

¹¹³ There is no proof to establish exactly what Janet was weaving. However, by examining trends from her father's account book, it is likely that Janet would have been weaving mostly floor carpeting as supported by her listing in the directories as a carpet weaver. It is possible that she continued to weave carpet coverlets, but I believe that she would have listed herself as a coverlet weaver in that case. *Farmers and Business Directory for the Counties of Elgin, Middlesex and Oxford*, 1892: A28; *Ontario Directory and Gazetteer*, 1892-1893: 1465; *The London City and Middlesex County Directory*, 1895: 399; *Foster's London City and Middlesex County Directory*, 1898-1899: 414; *Foster's London City and Middlesex County Directory*, 1900: 428

¹¹⁴ Janet Campbell's death registration in 1901. *Registrations of Deaths, 1869-1938*. MS 935, reel 102. Archives of Ontario, Toronto, Ontario, Canada.

¹¹⁵ *Census of Canada*. Year: 1911; Census Place: Lobo, Middlesex North, Ontario. Page 4, Family No: 49.

¹¹⁶ William and family do not appear in the 1901 census. William Campbell's death registration in 1929. *Registrations of Deaths, 1869-1938*. MS 935, reel 373. Archives of Ontario, Toronto, Ontario, Canada.

¹¹⁷ Janet Campbell's death registration in 1932. *Registrations of Deaths, 1869-1938*. MS 935, reels 1-615. Archives of Ontario, Toronto, Ontario, Canada. Archives of Ontario, Series MS935, Reel 445. Jenett (sometimes Janet) Campbell's death registration.

Conclusion

John Campbell was one of thousands of Scottish handloom weavers who struggled with diminished prosperity beginning in the early-nineteenth century. Within one hundred years of building an export economy on the foundation of handloom weaving, Scottish textile production was changing direction, leaving these tradesmen to either stay the course in Scotland or seek new opportunities at home or abroad. Campbell demonstrated his ability to adapt to changes in his trade by immigrating to New York State and then to Ontario. Ever adjusting and refining his choices, Campbell acquired a figured loom attachment to give himself an edge over the competition and set up shop in three locations in North America, perhaps in search of the ideal setting. He correctly picked a location, on the periphery of the textile diaspora, Middlesex County, that would sustain him in his trade beyond that which was possible in the core, Scotland. Campbell did not persevere in an outmoded trade as an isolated craftsman but as a co-producer in a place that was growing and modernizing, providing him with a livelihood in a rural economy.

CHAPTER THREE

CAMPBELL'S CLOTH PRODUCTION

*The Industrious will always go where Industry is most encouraged,
and where he may carry on his Business with the greatest Freedom,
without any Restraint or Incumbrance.¹*

Campbell's strategy for success was making himself available and willing to weave practically anything even if it was only once.² The adage of the old-world weaver was diversification in employment. Campbell took the spirit of that adage and instead of branching out into other forms of employment like agriculture, he expanded the types of cloth woven and when he would weave them. With no distractions, John Campbell's production calendar operated for twelve months out of the year: January to December; all days of the week: Monday to Sunday and every day of the year even Hogmanay.³ Campbell's business location, in his home, probably also meant that his customers would drop by when it was convenient for them, hoping that they would catch one of the Campbells at home to place an order. His technical abilities which ranged from producing simple to complex cloth kept him working and in demand throughout the year (Appendix 1.10).⁴ In Campbell's early years of business, he wove over forty varieties of cloth in one year. A general store would have been hard pressed to stock that range of cloth. Campbell produced 102 varieties of cloth over twenty-six years (Appendix 1.03) while

¹ Lindsay, *The Interest of Scotland Considered*, 52.

² After 1820, weavers in Rhode Island diversified their product by changing from cotton to wool and changing what they wove to suit their customers. Mohanty, *Labor and Laborers of the Loom*, 169.

³ Although it is difficult to know what might be a significant day for Campbell, I was surprised to see that he took orders on any day in the calendar whether: November 30, St. Andrew's Day; December 24, Sowans Nicht; December 25, Christmas; December 31, Hogmanay; January 1, First Footing or May 24, Victoria Day.

⁴ The graph in Appendix 1.10 demonstrates that Campbell took orders fairly consistently over the calendar year with greater concentrations from November to January when 40% of his orders occurred. Crowley wrote that farmers did not make many purchases "after the beginning of the year and most were jammed in the fall and early winter, when the farms output was sold." Crowley, "Rural Labour," 26.

Hugh McRae, Merchant and Postmaster, in Ekfrid Township to the west of Lobo Township only sold 45 varieties of cloth during twenty-six years between 1853 and 1879 (Appendix 1.11).⁵

In this chapter, I examine John Campbell as a producer of cloth in south-western Ontario using his account book as my central source. While my discussion of Campbell's production provides context for contemporary cloth production of his handloom-weaving peers, those colleagues in turn inform our understanding of Campbell. Evidence from his handloom weaving colleagues imparts information about Campbell's production while offering insight into the mostly anonymous world of his fellow weavers.

Methodology

A thorough examination of Campbell's account book is made efficient by the use of searchable spreadsheets. Using the format of columns that Campbell used to organize customer information, I inputted all data into a computer spreadsheet divided into eleven fields.⁶ For the most part, Campbell structured orders of cloth by grouping them into annual customer accounts, and therefore I began my analysis by counting the number of annual accounts per year to begin my analysis of his business (Appendix 1.08).⁷ Since a detailed study of all twenty-six years was not feasible, I used the initial tally of annual accounts to guide my selection to the high, medium and low years of his business. As seen in Appendix 1.08, the following twelve years also

⁵ One of the reasons why Campbell had so many types of fabrics was that some of the fabrics have slight variations which can be achieved by changing shuttles or treadling patterns. In Douglas McCalla's study of textile purchases in Upper Canada between 1808-1861 for ten general stores, he found a range of between 18 and 41 varieties sold in each general store. In McCalla, "Textile Purchases by Some Ordinary Upper Canadians," 8. I sampled the cloth varieties found in Hugh McRae's general store account books. Hugh McRae, Merchant and Postmaster, Strathburn, Ekfrid Township, B4068, X1668-73, 1854-1873, University of Western Ontario Archives.

⁶ The eleven fields are grouped from the left-side to the right-side of the opened account book. Left-side: Date of payment; Year; Method of Payment. Right-side: Date of order; Year; Customer and location; Order; Price of Order; Location of Workshop; (my addition) Page in account book; (my addition) Annual Account and Order Count.

⁷ A customer account is the name of the person on the right hand side of the open book with a list of their purchases over the year. In Appendix 1.12, I referenced totals for yards from the twelve year study to the annual account totals to ascertain whether using annual accounts was a good measure of prosperity. I found that actual totals and annual account totals generally correlated as seen in Appendix 1.12. To make the totals for the annual accounts and the yards compatible, I treated the largest total in each category as 100% and then calculated the other numbers as a percent of the highest number.

represent a range of business activity at the beginning, middle and end of the account book: 1860, 1861, 1862, 1863, 1867, 1869, 1871, 1875, 1879, 1881, 1883 and 1885.⁸ I created spreadsheets for each of the twelve years organized by month of order, cloth category, cloth sub-category, yards, price, yards per month and dollars per month.⁹ From these studies, I was able to determine trends in purchasing, prosperity and cloth preferences, which then prompted further studies used in this chapter and in Chapter Four. Methodology for specific studies will be explained as the topics are introduced.

Some clarification about cloth categories is necessary as Campbell's descriptions are not standardized and as such, I needed to devise a method for categorizing cloth by making assumptions about his approach to production, based on my knowledge of historic handloom weaving practices and equipment.¹⁰ My thinking is based on the constraints of the loom and time management of the weaver.¹¹

The initial set-up of a loom involves a considerable outlay of time and fibre resources that can be recouped when spread over multiple yards of cloth and multiple orders. Some of the tasks required before weaving begins follow: thread is wound onto multiple spools, the warp is wound, the warp is beamed onto the loom, the heddles are threaded or new threads are tied onto

⁸ The spreadsheets for the twelve year study included: cloth purchase, yards and price by month, by cloth sub-category and by cloth category.

⁹ I performed a test on three years: 1875, 1879 and 1881 to ascertain whether there was a pattern for final payment for cloth orders. I found that dates of final payment for cloth categories mirrored the order dates by an approximately two week to three month delay. Initially, I expected to see the order dates to be unclustered and the final payment dates to be clustered. The clustering of orders raises questions about how Campbell achieved this organization. Did Campbell use a day book and transfer dates which I assumed were orders but were really production dates or did Campbell communicate with his customers about months in which he was taking specific orders?

¹⁰ I compiled a list of all fabrics found in the account book in Appendix 1.03 retaining all varieties despite their similarities as the slight differences could indicate a difference in the cloth or demonstrate that Campbell's cloth descriptions are not standardized.

¹¹ See Chapter One for a description of my technical background which informs my understanding of textile production. I also referred to techniques described in contemporary weaving manuals such as Duncan, *Practical and Descriptive Essays on the Art of Weaving*. J. & R. Bronson, *The Domestic Manufacturer's Assistant and Family Directory in the Arts of Weaving and Dyeing*, Utica: William Williams, 1817. Alexander Peddie, *The Linen Manufacturer, Weaver and Warper's Assistant* (Glasgow: W. Sommerville, A. Fullarton, J. Blackie & Co., 1817). Barlow, *The History and Principles of Weaving by Hand and by Power*. Clinton G. Gilroy, *The Art of Weaving by Hand and by Power with an Introductory Account of its Rise and Progress in Ancient and Modern Times* (New York: G.D. Baldwin, 1845).

old threads, the thread is sleyed through the reed, and the warp is tied onto the cloth beam.¹²

There is approximately one yard of wasted thread per warp from tying onto the cloth beam, plus the thread at the end of the warp that cannot be woven because of the space taken up by the harnesses. This yard of wastage is multiplied by the number of threads across the warp, which in the case of Campbell's coverlet loom equals over 1,000 threads times one yard. As such, longer warps divided between several customers help to reduce warp or loom wastage.¹³ In addition, the work involved in putting a 60 yard warp on the loom, about three days, is similar to the time needed for putting on a 20 yard warp, as most of the time is devoted to threading and sleying. I suggest that Campbell would have organized the orders on his loom so that he could weave a minimum of 60 yards, remove the total length from the loom and then divide it according to customer orders.¹⁴ Setting up and cutting off each order on an individual basis would be an inefficient use of time and resources. This theory, which I consider throughout this study on Campbell furthers our understanding of Campbell as a highly efficient and trained production weaver – a weaver who had skills to weave a wide array of cloth, keep a methodical, unswerving account book and organize orders in the way of a small-scale industry.

Because Campbell's workshop was small-scale and I believe staffed by himself and family members, he did not require standardized terminology. In Campbell's account book,

¹² See Glossary for a definition of sleyed. Duncan Murphy and Clinton G. Gilroy described the process of using a warping mill. John Duncan, *Practical and Descriptive Essays on the Art of Weaving*, 259. Gilroy, *The Art of Weaving by Hand and by Power*, 69-72. When weavers want to retain a threading for the next warp, instead of removing the threads from the heddles after cutting off the textile, the weaver secures the threads behind the heddles, winds the new warp onto the back beam and then ties each thread from the previous warp to the new warp with an overhand knot. I have seen examples of nineteenth century harnesses with approximately one yard of warp threads that retain the threading by securing the threads on the front and back of the harnesses. As such, the weaver can put a set of harnesses with a particular threading on the loom and tie the new warp onto the threading that was preserved. Alfred Barlow described the process in, Barlow, *The History and Principles of Weaving by Hand and by Power*, 67-74.

¹³ If Campbell had three orders of 20 yards from one 60 yard warp, the loom wastage would be 12" per order equaling 1.7 % wastage rather than one yard for one order of 20 yards which equals 5% wastage.

¹⁴ A recommended warp length in *The Domestic Manufacturer's Assistant and Family Directory in the Arts of Weaving and Dyeing* by J. and R. Bronson is 60 yards. Bronson, *The Domestic Manufacturer's Assistant*, 35.

descriptions are based on six variables that are sometimes, but not always all present in every description: length, width, cloth construction, fibre, price per yard and colour. For example, on November 25, 1864, Campbell took an order from Donald McKinlay from Lobo for “24 ½ yards, 5/4, Tweeled, full cloth at 1/.”¹⁵ Coordination of orders would have been daunting. A typical page in the account book might contain as many cloth types as customers. For example, on pages 71 and 72 of the account book, December 5, 1864 to January 16, 1865, Campbell took orders for 14 different cloth types from eleven different customers (Appendix 2.05). Over the twelve year study, I collected 102 cloth descriptions, five of which Campbell only produced once in the account book, an indication of his weaving competency (Appendix 1.03).¹⁶ Variations such as plain cloth at 10 cents and plain cloth at 1/- shilling or 12 ½ cents most likely reflect a difference in width. Variations of cotton & wool at 10 cents and flannel at 10 cents reflect variations in the written, nonstandardized language of the account book not in weave structure or fibre.¹⁷ In the twelve year study, I recorded all variations in cloth type even if it appeared that the differences reflected Campbell’s nonstandardized terminology and not aesthetic or structural differences in the cloth itself.¹⁸

Although retaining all variations is important to maximize understanding of the scope of cloth available to the consumer, the number of cloth types was too large and the orders within each, too small to appreciate their importance as larger trends. Although I cannot be sure of the technical specifications of all of Campbell’s cloth, I made some informed decisions about

¹⁵ Note that the variable of colour is absent from this order. John Campbell’s Account Book, 1859 to 1885, Ontario Science Centre. Page 67 and 68.

¹⁶ Campbell produced six of the fabrics from this list only once as recorded in the account book: kersey in 1861, shepherd’s plaid in 1862, diaper in 1862, linen in 1862 and quilt in 1883.

¹⁷ When referring to the cloth in Campbell’s account book recorded as cotton & wool (recorded with the ampersand), I use this format to distinguish it from cotton and wool not referenced to the account book.

¹⁸ These varieties were retained in the event that they proved important in light of future findings.

grouping the cloth according to production and created fourteen categories for the 102 cloth types. These 102 cloth types, I refer to from now on as sub-categories. For example, the eight sub-categories for the carpet coverlet category are: carpet coverlet at 18/-, 19/-, 20/-, 22/-, 24/-, 26/-, 28/- and 25 cents.¹⁹ For production purposes, all of these coverlets could be warped together and therefore, I have placed them in the same category. Campbell did not explicitly state the purpose for the variety of prices, but I believe that the different prices reflect additional shuttles for colours and the work of punching cards for a customer's name, both of which did not require a different warp, but more shuttles and the addition of seven cards per name which slowed down production and therefore was compensated with a higher price. As such, Campbell could easily weave a coverlet for one customer at 18/- followed by a coverlet at 28/-, not needing to re-warp his loom, facilitating production and efficiency.

For other cloths in the account book, I grouped sub-categories into categories according to weave structure and fibre.²⁰ For example, cotton & wool tweeled and cotton & wool plain weave could use the same warp given the width, colour and fibre were the same. Campbell could simply change the cloth by changing the treadling from 1, 3 and 2, 4 for plain weave to 1, 2; 2, 3; 3, 4; 4, 1, for tweeled or twill.²¹ I assembled cotton & wool striped with striped cloth, as Campbell needed a striped warp for both fabrics as long as the striped cloth also had a cotton warp. Campbell could use the same warp using wool or cotton in the shuttle as the customer

¹⁹ The carpet coverlet was Campbell's most expensive textile ranging from 45 cents to 75 cents a yard. These bed coverings were produced on Campbell's specialized, figured loom and had recognizable or figured designs.

²⁰ Peddie described ways to change the appearance of cloth by introducing a different weft or changing the treadling. Peddie, *The Linen Manufacturer, Weaver and Warper's Assistant*, 417.

²¹ Treadles are depressed by the feet to move the harnesses. Weaving manuals provided detailed instructions for weavers including the most efficient arrangement of treadles to increase productivity. Gilroy, *The Art of Weaving by Hand and by Power*, 103. The numbers provided for plain weave and twill relate to the harnesses that are lifted to create a shed or opening, for the shuttle to pass through. Thus for plain weave, harnesses 1 and 3 are picked up lifting every other thread. The weft is put in place by the shuttle, beat back and then harnesses 2 and 4 are picked up lifting the alternate threads, the weft is put in place, thus completing one repeat of 1, 3 and 2, 4. Duncan describes the structural differences between plain cloth and twill in Duncan, *Practical and Descriptive Essays on the Art of Weaving*, 86.

specified.²² Indeed a striped warp could even be adapted for use for a check or plaid cloth by repeating the colour pattern in the warp stripes while weaving the weft.²³

Placing sub-categories into categories based on weave structure, fibre and the need for longer warps to improve efficiency was corroborated by the placement of orders on the spreadsheet where cloths were clustered by date: both by date of order and final payment. For example, between August and December, 1861, Campbell took orders for a total of 531¼ yards of full cloth (Appendix 1.13). When consulting the final payment date, a concentration of final payments for full cloth in November for 161 yards and March for 101½ yards emerged, approximately three month after the orders were placed. A comment about the dates on the left and right side of the account book is necessary. I am not confident about the exact function of these dates as they could reflect customer needs or production needs. The right side of the account book either reflected the date in which the customer made the order, or the date of production. The date on the left side likely reflected one, or perhaps a combination of the following three considerations: the time that Campbell needed to produce the textile; coordinating orders of the same cloth type with different customers that could be woven on the same warp and then cut off together; and when the customer required the cloth, and could pay for it. I also suspect that in some cases final payment was made before the customer received their cloth as there are cases when the date of order and final payment are either identical or a few days apart. As I cannot be sure which need was given priority, customer needs or production, I will regard the two dates as the date of order and the date of final payment.

²² Additional colours would mean that extra shuttles would be used, thus slowing down the production of cloth. From a weaving ticket used by the Blackstone Manufacturing Company, Massachusetts for their outwork weavers, the company pays “one cent per yard... for every shuttle over one.” G.F. Mohanty, “Handloom Outwork and Outwork Weaving in Rural Rhode Island 1810-1821,” *American Studies* 30 (Fall, 1989): 53.

²³ Duncan, *Practical and Descriptive Essays on the Art of Weaving*, 84.

Evidence from Material Culture

The use of material culture is often viewed with scepticism by historians.²⁴ Material culture, like archaeology, is the tangible remains of a culture. In both disciplines, the items which remain depend on a host of factors which can mislead one about the value placed on the object by the original culture. The problem arises from objects that were used least, perhaps because they were cherished or disliked, as they are the ones that survive often times in the best condition. With Campbell, the documentary evidence from his account book is enhanced by the use of material culture from his extant looms and textiles. Measurements of textiles and equipment can be used to establish quantitative data such as cost of material and length of time for production. The only textiles that survive from Campbell are his carpet coverlets and two single coverlets.²⁵ To gain an understanding of the appearance and purpose of his other fabrics, I consulted contemporary textiles.

The purpose and appearance of some of the cloth recorded in Campbell's account book such as cotton & wool, full cloth and blankets can be ascertained by consulting extant cloth examples from museum collections and contemporary descriptions. Campbell produced on average 145 yards of cotton & wool or flannel a year between 1860 and 1885 (Appendix 1.14).²⁶ Cotton and wool was woven with a cotton warp and a hand spun woollen weft. This cloth ranged from 10 cents to 12 ½ cents per yard and was suitable for garments or as a light weight

²⁴ McCalla discusses some of the dangers associated with relying too heavily on evidence from material culture in McCalla, "Textile Purchases by Some Ordinary Upper Canadians," 5-7. Adrienne Hood and David-Thiery Ruddel advocate the use of textiles in historical inquiry when used judiciously. Adrienne D. Hood, and David-Thiery Ruddel. "Artifacts and Documents in the History of Quebec Textiles." *Living in a Material World: Canadian and American Approaches to Material Culture*, editor Gerald L. Pocius, 55-91. St. John's, Newfoundland: Institute of Social and Economic Research, 1991

²⁵ The Royal Ontario Museum has six John Campbell coverlets. There images can be seen in Appendices 2.05, 2.07, 2.08, 2.09, 2.10 and 2.11.

²⁶ Using the totals organized by cloth category in the twelve year study, I averaged the total yards produced for specified years. The drop in production of cotton & wool and full cloth will be discussed in further detail later in this chapter.

blanket. A mid-nineteenth century dress from Dunbarton, Ontario County used about five yards of cotton and wool cloth.²⁷ Men's shirts and trousers were also made from cotton and wool. Petticoats were often sewn from homespun as in a cotton and red wool example from Welland County.²⁸ Another cloth found in nineteenth-century garments was fulled cloth. Campbell produced on average 198 yards of full cloth annually between 1860 and 1885 (Appendix 1.14). In the nineteenth century, fulled cloth was used to make trousers, winter coats and jackets.²⁹ Between 1860 and 1885 Campbell wove 136 yards per year of blankets on average. A sketch by Anne Langton from Sturgeon Lake, Ontario depicted her brother wearing a blanket coat. Langton commented in a letter that these blanket coats were bulky and occupied much space in their small cabin. People also wore very large scarves in the winter, as in one example which measured fifty-five inches by three and a half yards long.³⁰

Historians trained to subject their primary sources to a rigorous scrutiny for their validity and bias, rightfully distrust artifacts which end up in museum collections and provide an imbalanced view of history. However, with Campbell, historians are fortunate to have his account book, which provides a historical check and balance regarding items remaining in the material record and those that disappeared due to over-use or loss of provenance. Moreover, Campbell's looms and textiles provide benchmarks for the technology, quality and aesthetics of

²⁷ Accession Number: ROM 959.272. Burnham and Burnham, *Keep Me Warm One Night*, no. 87 – Cotton and wool woman's dress on page 71.

²⁸ Accession Number: ROM 964.56. Burnham and Burnham, *Keep Me Warm One Night*, 76.

²⁹ Katharine Brett, "Country Clothing in Nineteenth-century Ontario," in *Proceedings of the Fourth Annual Agricultural History of Ontario Seminar*, ed. Alan Brookes (Guelph: University School of Part-time Studies and Continuing Education, University of Guelph, 1979): 44.

³⁰ Campbell's loom could weave a maximum width of 45" and as such, if he had an order for a wider cloth, it would have to be woven in panels and sewn together. The 55" scarf referred to here would have been considerably wider when woven on the loom. As wool is very elastic, the draw-in at the reed and shrinkage after fulling would have reduced the scarf by approximately 35% (as much as 15% while being woven and 20% after fulling). Therefore, a scarf that is 55" wide would have to be woven at a width of about 80", which would be two panels of 40". Brett, "Country Clothing in Nineteenth-century Ontario," 52.

Campbell's output informing the historian's understanding of small industry and the decorative arts of nineteenth-century Ontario.

John Campbell, Rural Industrialist

John Campbell lived and worked first in a village of about two hundred, and then a small town of about five hundred in south-western Ontario until his death in 1891. Kilworth and Komoka provided services, like cloth production, blacksmithing and milling to the surrounding farms of different sizes, with prosperity matching and usually exceeding provincial standards (Appendix 1.05).³¹ Both Kilworth and Komoka were approximately fifteen kilometres west of London and were linked to other parts of Canada by rail, as the lines continued to expand to points south, west and north.³² Komoka in particular was conveniently located for rail transportation with two railway lines, the Great Western Railway Main Line and the Sarnia Branch crossing through town. Campbell most certainly would have heard and felt the rattle of the Great Western Railway Main Line, a stone's throw away to the east of his town lots situated at Delaware Street to the north and Huron Avenue to the west (Figure 2, Chapter Two).

Campbell, like many other nineteenth-century weavers appeared both in Schedules 1 and 6 of the 1871 census. To the enumerator, Campbell must have defined what Canadian rural industry was all about.³³ He worked at home but in a distinct part of the house.³⁴ He worked for twelve months of the year with an assistant, kept business records and made an income

³¹ 1878 Middlesex County Atlas shows the sizes of farms in Middlesex. H.R. Page, & Co. *Illustrated Historical Atlas of the County of Middlesex, Ontario*. Toronto, 1878.

³² A discussion of the expansion of railway lines across Canada can be found in *Canada: Statistical Abstract and Record, 1886*. Ottawa: Department of Agriculture, 1886: 154.

³³ Kris Inwood, "The Representation of Industry in the Canadian Census, 1871-91," *Histoire sociale/Social History* 28 no. 56 (November 1995): 349.

³⁴ *The Heritage of Lobo, 1820-1990*, 159.

comparable to a factory weaver.³⁵ But Campbell was no factory weaver: he was a weaver who displayed great versatility in his skills, producing custom textiles that ranged from the simplest flannel to cloth not readily producible by the home weaver on a piece of equipment that was and still is intriguing today, a machine standing eleven and a half feet tall that reads binary information from punch cards.³⁶

Although the account book is a rich source of data, it does not specify how production in the workshop was allocated. A local history from Lobo Township, suggested that Campbell's wife, Janet, sometimes referred to as Jessie, was a silk weaver in Paisley, Scotland and wove blankets after the Campbells moved to North America.³⁷ Whether this is true, she probably assisted her husband in several aspects of his production, as was the case for weavers' wives in Britain.³⁸ Documentary evidence identified Campbell's son and daughter as weavers.³⁹ As such, there were four potential Campbells who could have recorded the accounts, wound warps, woven on the two looms and transacted business with customers.⁴⁰ As I am uncertain about how the Campbells divided the duties for production, accounting and customer interactions, for general discussions, all tasks will be identified as Campbell, with the implication that his wife, daughter

³⁵ Bloomfield and Bloomfield, *Middlesex County Industries*, 43. U.S. Bureau of Foreign Commerce, *Consular Reports, Labour in Foreign Countries*, 1884 vol. I (Washington: GPO, 1885), pp. 10, 18-19, 23-26, 28, 35-38, 42, 50, 54, 57-59, 70, 85, 95, 97). Wages are for a 60 hour week.

³⁶ Handloom weavers in the U.S. wove custom work as a way to separate the work that they did from factory cloth. Mohanty, *Labor and Laborers of the Loom*, 173.

³⁷ *The Heritage of Lobo, 1820-1990*, 159. A sense of Janet's identity can be interpreted from her death registration where she was listed as a weaver's wife. *Registrations of Deaths, 1869-1938*. MS 935, reel 102. Archives of Ontario, Toronto, Ontario, Canada.

³⁸ "Winding...is usually done by the wife of the weaver, who can more easily blend it with her domestic labours than any other work. *Reports from Commissioner*, page 5 in Hand-loom Weavers.

³⁹ *Canada West Census returns for 1861*. Library and Archives Canada, Ottawa. Year: 1861; Census Place: Delaware, Middlesex, Canada West; Roll: C-1049-1050; Page: 16. *Census of Canada*. Year: 1891; Census Place: Lobo, Middlesex South, Ontario. Roll: T-6353, Family No: 177. "A weaver's children are more valuable to him at the loom at an early age than they could possibly be at any other trade." *Reports from Commissioner*, page 45 in Hand-loom Weavers.

⁴⁰ In a report from 1841, the duties of a weaver's family are detailed: "The families of hand-loom weavers are variously occupied; but by far the most ordinary employment is that of weaving, winding the pirns." *Reports from Commissioner*, page 5 in Hand-loom Weavers.

and son could have been involved.⁴¹ The lack of acknowledgement toward individual members of Campbell's family in the account book and in the census is in keeping with nineteenth-century attitudes to labour which placed all production, even if it was shared, under the head of the household, usually an actively working male.⁴²

Despite the lack of detail about who was recording orders in the account book, weaving, beaming warps or filling pirns, I used the totals for yards woven per year to establish the number of hands needed in the workshop. Furthermore, Campbell had two looms which could be operated, the carpet coverlet loom and the shaft loom and indeed there were many tasks that an extra person in the shop could accomplish such as filling spools and setting up the loom. To determine the number of workers producing cloth, I used Campbell's output and then cross-referenced this information with other sources which cite yards of cloth one weaver was likely to produce.

I began by determining the idle time on Campbell's looms; when a warp was wound and beamed onto the loom, a process which would take about three days, plus an additional day for pirn filling, totalling four days not weaving.⁴³ Using the average number of yards Campbell produced in one year, 2,000 and a warp length of 72 yards from a contemporary warping mill, from Mount Charles, Peel County, I calculated that Campbell would have needed to put 28

⁴¹ Campbell's wife Janet is described as a weaver from Paisley, Scotland who wove blankets in New York State and Middlesex County. In *The Heritage of Lobo, 1820-1990*, 158. Campbell's son, William appeared in the 1861 census as a weaver: *Canada West Census returns*. Year: 1861; Census Place: Delaware, Middlesex, Canada West; Roll: C-1049-1050; Page: 16; in the 1871 Schedule 6, Industrial Census for Williams East: 1871 Industrial Census. Year: 1871; Census Place: East Williams, Middlesex North, Ontario; Roll: C-9903; Page: 1, East Williams; Schedule No. 6; and in his death registration: *Registrations of Deaths, 1869-1938*. MS935, Reel 373. Campbell's daughter Janet appeared as a weaver in the 1891 census: *Census of Canada*. Year: 1891; Census Place: Lobo, Middlesex South, Ontario. Roll: T-6353, Family No: 177. Janet appeared in various Middlesex Directories: *Farmers and Business Directory for the Counties of Elgin, Middlesex and Oxford*, 1892, *Ontario Directory and Gazetteer*, 1892-1893, *The London City and Middlesex County Directory*, 1895, *Foster's London City and Middlesex County Directory*, 1898-1899, *Foster's London City and Middlesex County Directory*, 1900.

⁴² Mohanty, *Labor and Laborers of the Loom*, 107.

⁴³ An 1841 report on handloom weavers references the idle time when the weaver is: "beaming the warps of the new webs, and drawing or passing them through the heddles and reed...all these, and other minutia, which cannot be correctly termed weaving, occupy a considerable portion of the 70 hours" of a weaver's work week. *Reports from Commissioner*, page 6 in *Hand-loom Weavers*.

warps on his looms per year multiplied by four days of set-up to accomplish 2,000 yards per year.⁴⁴ Using a 72 yard warp as a standard suggests that Campbell had 112 days of downtime per year for a production of 2,000 yards of cloth.⁴⁵ If Campbell worked six days per week, 312 work days were left in a year for production.⁴⁶ I removed 112 days of weaving downtime plus 10 days for miscellaneous days for administration or repairs leaving 190 potential days to weave. Of course this number does not incorporate other reasons why a weaver could not work such as illness. Given this schedule, Campbell would have needed to weave 10½ yards per day, 190 days a year to produce the 2,000 yards that was his annual average.

The average yardage production for weavers from the 1870-71 Industrial Schedule was 1,805 yards of cloth for twelve months of work.⁴⁷ A weaver in Chester County, Pennsylvania, Joseph Eldridge produced at most 950 yards of cloth in a year.⁴⁸ Granted, Eldridge was also farming and he might have been producing more complicated or finer cloth. In Massachusetts, early-nineteenth-century weaving shed operators Almy and Brown contracted their weavers to produce five yards per day, a goal to which many were not able to adhere, because they generally

⁴⁴ Campbell's equipment for warping is not extant and it is not known whether he used a warping mill or board. Also, out of necessity, he might have varied the length of his warps due to customers' orders thus altering my calculations. If he had a board like handloom weaver Samuel Pentland's, which is in the Royal Ontario Museum, he could wind a warp of just over one hundred yards long. ROM 947.62.7 – Burnham and Burnham, *Keep Me Warm One Night*, 44-45. Another contemporary weaver, Charles Irvin, from Mount Charles, Peel County had an elaborate warping mill. The circumference of the mill is just over six yards (230 ¼"). Each revolution of the mill adds six yards to the warp. In my opinion, the maximum number of revolutions on that mill would be twelve producing a warp of 72 yards. Irvin's loom and warping mill are on display at Black Creek Pioneer Village, Toronto. Thank you to Jim Hunter, Collections Registrar at Black Creek Pioneer Village for measuring the mill for me. Hughes and Cooper discuss the acquisition of the Irvin warping mill. Hughes and Cooper. "Weaver's Shop," 37-39.

⁴⁵ Of course, if Campbell wound longer or shorter warps on average than my speculation of 72 yards, my calculations would need alteration.

⁴⁶ A typical work week was six days in the 1880s. *Sessional papers. Legislature of the Province of Ontario, Vol. XXI, Part IX, Third Session of Sixth Legislature of the Province of Ontario*, Session 1889. Annual Report of the Bureau of Industries of the Province of Ontario, 1888. Part IV – Wages and Cost of Living. Toronto, 1889: 52. In 1841, in Britain, a handloom weaver worked 70 hours per week, 12 to 13 hours, five days a week, part of the day of Saturday and Monday for setting up the loom. *Reports from Commissioner*, page 5 in Hand-loom Weavers.

⁴⁷ I calculated the data in Inwood and Wagg's table of 1,008 yards for male weavers over a 6.7 month period to reflect 12 months in keeping with Campbell's work year. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 355.

⁴⁸ Hood, *The Weaver's Craft*, 129.

hired minimally skilled weavers.⁴⁹ From a seventeenth century court trial in Ipswich, Massachusetts, a weaver claimed that he wove 10 yards per day.⁵⁰ William Thomson, Scottish traveller in the U.S. stated that a handloom weaver wove ten to twelve yards per day in the U.S. in the 1840s.⁵¹

Based on this evidence, Campbell could potentially have woven all 2,000 yards by himself without assistance; however this would be an extremely tight production schedule that would not allow for potential problems, not to mention the physical exhaustion and concentration of handloom weaving or even the time required to deal with orders with customers that could compete against the production of 2,000 yards of cloth per year.⁵² Having an extra person or two like his daughter, his wife or son to insure that he did not fall behind schedule, keep the books, take customer orders and later order supplies of cotton warp would have been essential. Perhaps Campbell's daughter Janet's contribution to the business came gradually, and his acknowledgement of her role, possibly grudgingly, as suggested by her late official recognition as a weaver in the 1891 census, at the age of 43, at the end of Campbell's life when Janet most likely needed to take on more responsibilities as her father's health deteriorated.⁵³

⁴⁹ Almy and Brown had difficulty retaining skilled handloom weavers as they preferred to work independently on their own equipment. The weavers that tended to work for them were the less skilled female weavers. Mohanty, "Handloom Outwork and Outwork Weaving in Rural Rhode Island 1810-1821," 47.

⁵⁰ Ouelette does not provide a definite date for this trial and the information in the footnote does not cite the bibliographic entry which relates to this case. However, I assume that the trial is part of the records cited in the bibliography entitled: Ipswich Town Records, 1634-1662. From Salem, Massachusetts. Susan Ouelette, *U.S. Textile Production in Historical Perspective: A Case Study from Massachusetts*. New York: Routledge, 2007: 68. Ouelette's reference to a weaver's output of 60 yards per week is sound. However, she made an error when she extrapolated from the evidence that a weaver working 180 days or 30 weeks a year would produce 140,000 yards of cloth per year instead of the more realistic 1,800 yards per year.

⁵¹ Thomson, *A Tradesman's Travels in the United States and Canada*, 130.

⁵² Actual orders amounted to approximately 3000 over twenty-six years. If Campbell spent on average one quarter of an hour with each customer, he would have spent approximately 29 hours with customers per year.

⁵³ *Census of Canada, 1891*. Library and Archives Ottawa, Ontario, Canada: Library and Archives Canada, 2009. Year: 1891; Census Place: Lobo, Middlesex South, Ontario. Roll: T-6353, Family No: 177. John Campbell's cause of death was 'paralyses,' which lasted for one week before he died. *Registrations of Deaths, 1869-1938*. Archives of Ontario, Toronto, Ontario, Canada. Series MS935, Reel 61.

Although 2,000 yards per year would keep one weaver busy and probably in need of an assistant, it was not enough work or income for two heads of households – that is Campbell and his son William. An examination of production in the twelve year study revealed that 1861 was the Campbells' busiest year, with 2,705 yards of cloth ordered (Appendix 1.09). In 1861, William was listed in the census as a weaver, a year which would give two weavers 9 yards per day each, easily accomplished given my calculations.⁵⁴ In 1862, Campbell experienced an 18% drop in production perhaps due to consumer uncertainty in connection with the American Civil War.⁵⁵ Business did not pick up again until 1867, after relocating to Komoka, when production grew again to reach close to the 1861 standard (Appendix 1.12). It was perhaps during these lean years that William found work with the railroad which he kept up while continuing to work as a weaver for four months of the year. In the 1871 Industrial Schedule, William declared 800 yards of cloth in four months, equivalent to 2,400 yards if he worked twelve months per year (Appendix 1.15). The question remains whether William could have generated enough business to weave twelve months a year or whether he reasoned that the wage of a railroad employee was too favourable to decline. Another theory is that Campbell's workshop was not large enough to maintain production for two full-time weavers and Campbell and his son's maximum output, 2,705 yards was too intense for his workshop which was after all part of the family house.⁵⁶ In 1871, William located his workshop in Williams East Township, suggesting an issue regarding

⁵⁴ This boom in business for the Campbell's corresponds to a peak in wheat exports from the province in 1861. McCalla, *Planting the Province*, 221.

⁵⁵ Perhaps the American Civil War created a poor consumer market as prices for cotton would have increased and many of Campbell's fabrics were produced with cotton. Roger L. Ransom and Richard Sutch. *One Kind of Freedom: The Economic Consequences of Emancipation* (Cambridge: Cambridge University Press, 2001), 190. In 1862, British troops came to London to prepare for an American invasion. In 1866, there were fears that the Fenians would invade Canada. Middlesex County enrolled 9,759 men to be on alert for the invasion. *History of the County of Middlesex*, 155-158. McCalla stated that associating the Civil War with economic changes in Canada is misleading because the changes to the economy are associated with larger economic trends which occurred before the Civil War began and continued after it ended. McCalla, *Planting the Province*, 240.

⁵⁶ In reference to production weaving, Hood referred to the work of a weaver as a "noisy and dirty occupation, especially if more than one person worked at a time." Hood, "The Gender Division of Labor in the Production of Textiles," 550.

his situation in Komoka with his father or William's desire to find his own market niche. It is noteworthy that 1871, the year that William appeared as a weaver in the Industrial Schedule was one of Campbell's lowest years in business at 1,393 yards, a 30% drop from the 2,000 yards a year average, perhaps inferring that some of Campbell's customers left him to do business with his son (Appendix 1.09).

As Campbell's account book recorded labour, it is a good indicator of earnings; however these earnings must be understood without the consideration of costs incurred for equipment and his workshop as Campbell did not include these items in his bookkeeping.⁵⁷ I determined Campbell's average annual earning as \$377 by referring to his earnings over the twelve-year-study period and then calculated his average earnings over twenty-six years. In the Sherbrooke Paton's Woolen Mill in 1884, male weavers made \$7.25 per week on average or \$326.25 over forty-five weeks while female weavers made \$4.50 per week on average or \$202.50 over forty-five weeks.⁵⁸ Weavers were the second highest paid employees at the Paton's Woolen Mill after patternmakers who made on average \$8.68 per week. Compared to other occupations, the wage of a weaver at \$7.25 per week was similar to the average earnings of a store clerk in Port Hope at \$7.50. Put in another way, Campbell's earnings of \$377 fit between the wage of a male country school teacher at \$420 and a female country school teacher at \$300 per year.⁵⁹

⁵⁷ Craig et al. stated that weavers in New Brunswick did not account for equipment and use of space when establishing the price of their goods. Béatrice Craig, Judith Rygiel and Elizabeth Turcotte, "Survival or adaptation? Domestic Rural Textile Production in Eastern Canada in the Later part of the Nineteenth Century," *Agricultural History Review* 49, no. 2, (2001), 161. The cost of Campbell's workshop would have been a percentage of his living expenses as his workshop was a wing of his house. The cost of Campbell's equipment is covered below in the discussion about Campbell's fellow weavers.

⁵⁸ U.S. Bureau of Foreign Commerce, Consular Reports, *Labour in Foreign Countries*. Wages are for a week of 60 hours. Kindly provided by Professor Kris Inwood. I based these workers' annual income from a government document that suggested that people generally worked six days a week, 270 days per year, equaling 45 weeks. *Sessional papers*. Legislature of the Province of Ontario, Vol. XXI, Part IX, Third Session of Sixth Legislature of the Province of Ontario, Session 1889. (Toronto, 1889, Part IV), 59.

⁵⁹ U.S. Bureau of Foreign Commerce, Consular Reports, *Labour in Foreign Countries*.

Campbell established his business in a location well-suited to his needs as a small-scale businessman. His income demonstrated that he was making a living comparable to other textile workers. Campbell's advantage was that he retained the independence that allowed him to organize his schedule to meet his needs. Campbell also provided employment in the form of household production work for his family. The account book does not explicitly state the manner in which he produced cloth or organized his workshop, but calling on my experience with historic textiles and equipment combined with evidence from the account book, I conjecture that Campbell was successful, efficient and in demand.

Campbell in Perspective as a Nineteenth-Century Ontario Handloom Weaver

The challenge of comparing Campbell to other weavers arises from having so much detailed information about Campbell from his account book and so little about other weavers, moreover from external sources. Yet putting Campbell into perspective with his weaving peers is essential to deepening our understanding of him and shedding light on the study of less documented weavers. Campbell's account book brings strength to historical analysis due to the quantity of entries that were repeated over and over. The same can be said about the thousands of entries of weavers in the census; the volume of census data provides some understanding about the demographics of weavers useful in contextualizing Campbell's work.

The time period that Campbell lived in Middlesex County, 1854 to 1891, was still a period of demand for the handloom weaver. Campbell was one of at least 2,022 weavers in Ontario in 1881 (Appendix 1.01). The inhabitants of many counties throughout Ontario had choices when it came to obtaining cloth. They could produce hand-woven cloth at home or

acquire it from a skilled tradesman like Campbell, or purchase factory-produced cloth from a variety of merchants and even from mills producing cloth in Ontario (Appendix 1.15).⁶⁰ Despite the fact that inhabitants of Ontario had access to cheaper, factory-made cloth, they continued to patronise weavers like Campbell, or produce cloth in their own homes and in some cases both.⁶¹ Some weavers like Campbell were able to make a full-time living as handloom weavers, some were part-time weavers as in the case of Campbell's son William.⁶²

The 1871 census contains evidence for weavers in three locations: Schedule 1: Personal; Schedule 5: Livestock, Animal Products, Home-made Fabrics and Furs and Schedule 6: Return of Industrial Establishments. There has been much discussion on the reliability of these sources for the correct placement of weavers or their absence due to enumerator interpretation.⁶³ The Personal Schedule provided important demographic information about individuals, including their age, place of birth, family members and occupations. Due to the seasonal participation of most handloom weavers, who combined weaving with another occupation such as farming, they might not be listed as weavers if they were performing their other occupation when the enumerator visited.⁶⁴ Schedule 5 recorded household production of home-made cloth and did not indicate who was individually responsible. In my survey of households in Schedule 5, I did not find any corresponding individual weavers from a household, listed as a weaver in the

⁶⁰ Appendix 1.15 is a sample of weavers from Middlesex County and Lambton County. See Douglas McCalla's study: McCalla, "Textile Purchases by Some Ordinary Upper Canadians," 4-27 and the account book of Hugh McRae, Strathburn in Appendix 1.11.

⁶¹ The rationality of home production of cloth depending on market participation is explained in Inwood and Grant, "Labouring at the Loom," 220-222.

⁶² 1871 *Industrial Census*. Year: 1871; Census Place: East Williams, Middlesex North, Ontario; Roll: C-9903; Page: 1, East Williams; Schedule No. 6 & Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1 Ontario; Roll: C-9903; Page: 56; Family No: 203, Line: 3.

⁶³ Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 348. Inwood, "The Representation of Industry in the Canadian Census, 1871-91," 354. Kris Inwood and Richard Reid, "Gender and Occupational Identity in a Canadian Census," *Historical Methods* 34, no. 2 (Spring 2001): 57.

⁶⁴ The seasonal tendency for weaving might be the reason that there is an inconsistency with occupations in Schedule 1 and 6. For example, Campbell's son is listed as a railroad employee in Schedule 1, but has a weaving establishment in Schedule 6.

Personal Schedule – a positive sign, showing that the enumerator followed Schedule 5 instructions for placing home-made fabric in its correct location. Probably the most problematic schedule is Schedule 6 as many enumerators experienced difficulties in judging whether a weaver produced for home use or commercially, something which continues to bedevil the historiography of handloom weaving. The literature does not always agree about the division between weaving for home use and commercial use as the sources are inadequate on three important points of distinction: destination of cloth after production, percentage of income derived from weaving and the technical proficiency of the weaver.⁶⁵

The literature on handloom weaving classifies weavers inconsistently. The Burnhams used the term ‘professional’ to label immigrant, apprenticed, male weavers and ‘domestic’ to classify less proficient weavers who produced cloth for home consumption.⁶⁶ Inwood and Grant used the term ‘domestic’ to include all weavers in their study of Leeds County which used data from Schedule 6. They stated that the term ‘professional,’ used by the Burnhams, was not appropriate to their study as their findings indicated that weavers were making only a small portion of their livelihood from weaving. Their use of the term ‘domestic’ collapses the division that existed in Ontario between weavers who produced for customers, like John Campbell, and those who wove for their own families. The term ‘domestic’ is problematic as it implies a home setting, the setting for commercial and non-commercial handloom weaving, but it also implies national manufacture which included mill-produced cloth as opposed to imported cloth. To avoid this confusion, I reserve ‘domestic’ for all textiles of Canadian manufacture, bringing

⁶⁵ Although regulations for period of apprenticeship were becoming lax by Campbell’s day, a common period of apprenticeship was five to seven years in Britain. Durie, *The Scottish Linen Industry in the Eighteenth Century*, 78. Basic skills in weaving could be attained in three to six weeks. Jeremy, *Transatlantic Revolution*, 150.

⁶⁶ Burnham and Burnham, *Keep Me Warm One Night*, 179.

handloom and mill weaving into the same discussion when appropriate and ‘domestic handloom’ weaving to describe both commercial and non-commercial handloom weaving.

The terminology used for the different types of weavers holds great importance to my study of John Campbell. Weaving was unique in that it was something that could be done by women along with their other multitude of household duties.⁶⁷ It was easy to interrupt weaving so as to tend to children, an overflowing pot, a stray hen etc., and vital to the ‘ladder climbing’ of agricultural families.⁶⁸ Conversely, as a trade, weaving could be highly technical and physically demanding.⁶⁹ Hood, recognizing the division between weavers, adapted terminology used in an earlier study.⁷⁰ In her study of Pennsylvanian and New York State handloom weavers, she advocated the terms, ‘homespun production’ for women producing for their own use and ‘household industry’ for skilled weavers who wove for customers.⁷¹ In my opinion, the use of ‘homespun’ and ‘household’ are confusing, as both weaving for the household and customers relied on homespun and both types of weavers worked largely in households. Gail Fowler Mohanty attempted to distinguish between types of weavers by using the descriptive but unhistorical labels: ‘semi-skilled home weaver’ and ‘craft trained handloom weaver.’⁷²

I surveyed historical terminology from several British sources. A publication from 1750, the only source I found which considers weaving for the household, divided weavers based on their training and purpose: ‘apprentices/journeymen’ and ‘housewives.’⁷³ Weaving manual

⁶⁷ Crowley, “Rural Labour,” 65.

⁶⁸ Christopher B. Barrett, Michael R. Carter and C. Peter Timmer, “A Century-Long Perspective on Agricultural Development,” *American Journal of Agricultural Economics* 92, no. 2 (April, 2010): 449-50. Crowley, “Rural Labour,” 35.

⁶⁹ A trained weaver could set up his loom in a variety of configurations depending on the weave structure required. Gilroy, *The Art of Weaving by Hand and by Power*, 77.

⁷⁰ Victor Selden Clark, *History of Manufactures in the United States, from 1608 to 1860* (Philadelphia: Edward Young & Co.; London S. Low, Son & Co., 1864).

⁷¹ Hood, “Industrial Opportunism,” 136.

⁷² Mohanty, *Labor and Laborers of the Loom*, 96.

⁷³ David Ramsay, *The Weaver and Housewife’s Pocket-book: Containing rules for the right making of linen cloth*, (Edinburgh, 1750), ii.

writer John Duncan referred to weavers as ‘professionals’ and ‘tradesmen,’ perhaps directing us to the source of the Burnhams’ term ‘professional.’⁷⁴ In 1817, Alexander Peddie labelled weavers as ‘household customary weavers.’⁷⁵ A report presented to the House of Commons in London in 1841 used the term ‘customer weavers’ for independent weavers.⁷⁶ William Thomson, a Scottish factory spinner, visiting the United States to improve his health in the 1840s used ‘country customer weavers’ and ‘tradesmen’ in reference to Scottish immigrant weavers consistent with Peddie and the House of Commons report on handloom weavers.⁷⁷ When characterizing a weaver like Campbell who wove specialized cloth for customers, there are two apt designations: ‘tradesman weaver’ and ‘country customer weaver’ both provided by Thomson. Unfortunately, Thomson did not include weavers who produced for their own household probably because he was a tradesman who naturally gravitated towards other tradesmen. In reference to weavers who produced at home, I suggest the 1750 term: ‘housewives’ as in ‘housewife’ weaver. This term succeeds as not all weavers who wove commercially were men, but evidence suggests that weavers who wove for their families were primarily women.⁷⁸ Although this term would appear to leave out unmarried women, the etymology of wife is woman as retained in the word ‘midwife,’ also not necessarily a married woman.⁷⁹ I propose the

⁷⁴ Duncan, *Practical and Descriptive Essays on the Art of Weaving*, v.

⁷⁵ Peddie, *The Linen Manufacturer, Weaver and Warper's Assistant*, 1.

⁷⁶ *Reports from Commissioner*, page 2 in *Hand-loom Weavers*.

⁷⁷ Thomson, *A Tradesman's Travels in the United States and Canada*, 147.

⁷⁸ I do not believe that men would have woven unless it had a commercial purpose. Although handloom weaving was a trade for men, and some forms of weaving required a great deal of physical strength, there is evidence that weaving was not considered as manly as other trades because of its more sedentary nature. In 1733, weavers in Scotland were described as being “in the greatest Contempt, as their Employments were more sedentary, and themselves reckon'd less fit for War, in which all were obliged to serve, when the Exigencies of the Country demanded their Attendance.” Lindsay, *The Interest of Scotland Considered*, 82. The 1841 report on handloom weavers suggests that weavers are not healthy due to the position of their bodies required when weaving and were prone to ailments. *Reports from Commissioner*, page 241 in *Hand-loom Weavers*. Therefore, while weaving for commercial purposes was acceptable for a man, I believe that weaving for one's home would not be.

⁷⁹ The nature of nineteenth-century law identified women in relationship to their spouse. As such, in rural society, while men were considered farmers, women were considered farm wives. David B. Danborn, *Born in the Country: A History of Rural America*,

use of ‘tradesman weaver’ or ‘country customer weaver’ and ‘housewife weaver’ to differentiate the two types of weavers when differentiation is necessary.

In Middlesex County, Campbell had 80 weaver colleagues who were recorded on Schedule 1 and 6 of the 1871 census. The greatest concentrations were in the townships of Biddulph with 19 weavers; McGillivray with 10 and Lobo with 8 (Appendix 1.16). I arrived at this total by cross referencing Schedules 1 and 6 and removing duplicate weavers.⁸⁰ Weavers who appeared in both Schedules 1 and 6, including John Campbell, amounted to twenty-two or 37% of the total. The majority of weavers in Schedule 1 were men, 69%, while the majority of weavers in Schedule 6 were women, 65%.⁸¹ When combining Schedules 1 and 6, males were the majority at 56%.⁸² The average age of Middlesex weavers was 51 years old – Campbell was 65 in 1871.⁸³ In Middlesex County, weavers in Schedule 1, born outside of Canada accounted for 83%, while 38% were born in Scotland, higher than the provincial total of 18% for immigrant Scottish weavers (Appendix 1.01). Evidence from Middlesex supports the traditional belief in the literature that tradesmen or country customer weavers were male, immigrant and although there is no evidence to prove this, perhaps also apprenticed.⁸⁴ It would be interesting to discern

(Baltimore: The Johns Hopkins University Press, Revised Edition, 2006), 88. Nancy Grey Osterud, *Bonds of Community: The Lives of Farm Women in Nineteenth-Century New York*, (Ithaca: Cornell University Press, 1996), 12.

⁸⁰ In Middlesex County Schedule 1, there were 59 weavers, Schedule 6 recorded 52 industrial textile establishments, ranging from handloom weavers to woollen mills. Forty-six of the listings appeared to be handloom weavers with descriptions such as: weaving, handloom, weaving shop, weaving loom, weaving factory, cloth manufacturer and weaver. Although I speculated whether all of these descriptions meant handloom weaving, they contained similar data suggesting similar output. For example, Thomas S. Murray’s weaving factory had one employee and he had an income of \$350 consistent with the other entries. I used the list of Textile Producers from Bloomfield and Bloomfield, *Middlesex County Industries*, 43. Using census linkage, I was able to clarify some of the names that were unclear and incorrectly transcribed by the Bloomfields, e.g., Adam Auto is Adam Auld; James Anderson is James Auterson; Mrs. M.J. Rumohs who was listed with a question mark was located in the census with this spelling.

⁸¹ Forty-two weavers out of 60 were male in Schedule 1. 30 out of 46 weavers were women in Schedule 6.

⁸² Forty-five out of 80 weavers were men from Schedule 1 and 6 combined.

⁸³ Take note that Campbell’s age is incorrect in the 1861 census by three years, in the 1871 census by four years, but correct in the 1881 and 1891 censuses contributing to the confusion about Campbell in all secondary sources. Campbell’s actual age is documented on his death registration in *Registrations of Deaths, 1869-1938*. MS 935, reels 1-615. Archives of Ontario, Toronto, Ontario, Canada. Archives of Ontario, Series MS935, Reel 61. Campbell’s birth certificate also confirms his date of birth: Old Parish Records from Glasgow City, 644/01 0200 0297.

⁸⁴ Burnham and Burnham, *Keep Me Warm One Night*, 11, 179.

whether there was a correlation between weavers with formal training and full-time weaving as with Campbell.

As Schedule 6 of the 1871 Ontario census provides a rich source of information about handloom weavers, I sampled 35 weavers from Middlesex and Lambton County (Appendix 1.15).⁸⁵ Campbell had 77 annual accounts from Lambton County customers, his largest area of customer concentration next to Middlesex (Appendix 3.02). Since Lambton County customers were fairly significant, I included them in this sample. I found that the Middlesex/Lambton sample was consistent with Inwood and Grant's study of Leeds County and Ontario in the average number of months worked and the average yards of cloth woven (Appendix 1.17). The differences were in the fixed capital and the aggregate value of products. Weaver Martha Ann McSherry of Lambton County inflated the fixed capital with her loom which was valued at \$90 and was described as a 'patent loom.' (Appendix 1.15).⁸⁶ The aggregated value of products was increased in the Middlesex/Lambton sample by higher total prices, mostly from the Lambton County weavers, who declared a rate of about 55 cents per yard.

The inconsistencies in the aggregated figures and the lower outputs in comparison to Campbell prompted me to conduct a closer examination of two weavers, from the Middlesex/Lambton sample, who worked an equivalent amount of time per year, produced a comparable amount of yards and made a similar amount of money as Campbell: one from Middlesex County the other from Lambton County (Appendix 1.18).

⁸⁵ I collected information about 35 weavers from Schedule 6 of the 1871 census. I refer to the data that I collected on the 35 weavers from Middlesex and Lambton Counties as the Middlesex/Lambton Sample from this point forward in Appendix 1.15. Appendix 1.17 compares the Middlesex/Lambton Sample to data collected by Kris Inwood and Janet Roelens-Grant in Inwood and Grant, "Labouring at the Loom."

⁸⁶ The description of this loom is important as it might be like the figured head loom Campbell used and will be discussed in further detail below.

James Auterson from Biddulph Township, division 3, Middlesex County, wove for twelve months out of the year and produced 800 yards of flannel and cloth for \$80 at a rate of 10 cents per yard. The enumerator noted that Auterson “wove about 800 yards last year at 8 cents per yard.” Auterson was an Irish born, fifty year old weaver, with a wife, two daughters and a son between the ages of ten and fourteen.⁸⁷

Andrew Maitland of Sarnia Township, Lambton County was a fifty year old, Irish born, unmarried weaver, who worked for eight months out of the year and produced 2,000 yards of cloth, earning \$980. Maitland’s income and yardages show that he charged 49 cents a yard which is higher than most of Campbell’s cloth, with the exception of his carpet coverlets for which he charged between 45 and 70 cents per yard. As well as weaving blankets, Maitland produced cloth not represented in the Middlesex Industrial Schedule but common in Lambton County: tweed, satinette, and drugget.

A comparison between Campbell’s information from his account book and information in the industrial schedule reveal problems and discrepancies inherent in records which are filtered through a second party who probably did not understand the business of weaving and therefore recorded information in a generalized perhaps unrealistic manner. For example, was there a misunderstanding between the enumerator and Auterson regarding his totals, as \$80 for annual earnings is quite low for the number of months worked per year? Also, Maitland’s high rate per yard of 49 cents also indicates problems with enumerator recording.

⁸⁷ *Census for Ontario*. Year: 1871; Census Place: Biddulph, Middlesex North, Division 3, Ontario; Roll: C-9903; Page: 30; Family No: 98. Interestingly, Auterson lived close to another weaver in the Industrial Schedule, Margaret O’Meara, a thirty-seven year old weaver who was widowed, had three daughters and a son between the ages of nine and thirteen and who wove for twelve months out of the year. Unfortunately, data was not recorded for O’Meara as the enumerator noted that she “just got started – couldn’t give any particulars.” This information can be found in Appendix 1.15.

Furthermore, the terminology used by enumerators reveals complications in trusting this source, because of their objective, in my opinion, to impose uniformity onto weaving establishments. In most cases, enumerators recorded two cloth types in the product column, e.g., flannel & cloth; flannel & blankets; cloth & drugget (Appendix 1.04).⁸⁸ In the column for aggregate value in dollars for the finished product, enumerators provided an amount not differentiated by cloth type. One of the chief uncertainties brought to my attention when examining this schedule was the incompatibility in unit price as attained by dividing the quantity of yards into the total earnings. In the case of Charlotte Scilly in Biddulph Township and Rose Ann in Williams East Township, they charged 80 cents a yard for flannel and home-made cloth while Kate Ryan and James Auterson both from Biddulph charged 10 cents a yard for flannel and cloth (Appendix 1.15). This inconsistency indicates a problem for historians in approaching this data, supposing that the data refers to one product when it actually refers to two different products (cloth with the cost of material included, that is, the weaver's labour plus the cost of the fibre and cloth without the cost of material, only the weaver's labour, in the manner which Campbell recorded his cloth).⁸⁹

Returning to the enumerator's attempt to impose standardized terminology on handloom weaving, I became suspicious about the consistency of regional fabric descriptions and questioned whether this was a product of regional market demand or production for a particular type of cloth or whether the enumerators added their own interpretation during recording. A trend in the description of the cloth emerged when examining the Middlesex/Lambton sample (Appendix 1.15). Out of the 35 entries sampled, flannel was the most frequently cited cloth with

⁸⁸ I am speculating that flannel refers to cotton and wool and cloth refers to wool, sometimes known as fulled cloth.

⁸⁹ Other parts of textile production such as carding, spinning and fulling contribute to the overall cost of a yard of cloth. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 351.

28 entries, showing the abundance and familiarity of flannel in all regions. The more underrepresented cloths were over-represented in certain townships: home-made cloth appeared in four out of five entries, only in Williams East, division 2; flannel & blankets together occurred seven times in McGillivray; cloth & flannel as a unit show up nine times in Biddulph, division 2 and division 3 and either satinette or drugget appeared in every entry in Sarnia, division 1 of Lambton County. The least common type of cloth was tweed and rag carpet (Appendix .04). I believe that the consistency of cloth in regions was a result of the enumerator standardizing information and might be further proved by examining similar patterns in other industries recorded in Schedule 6.

Campbell produced most of the fabrics from the sample list, with the exception of ‘tweed,’ ‘drugget’ and ‘jute cloth.’ The least commonly produced fabric in the Middlesex/Lambton sample, rag carpet, was Campbell’s most commonly produced cloth at 25% over the twelve year study (Appendix 1.19).⁹⁰ The lack of evidence for rag carpets in Schedule 6 is interesting in light of the fact that Campbell produced such a large quantity of rag carpets especially in the mid-1860s onward (Appendix 1.14). Rag carpets survive in the material record, although not in great abundance, suggesting that they were generally used for their intended purpose, floor covering, worn out and discarded. Their presence in nineteenth-century Canada is confirmed in references in contemporary textual sources by Catharine Parr Traill and Samson Howell.⁹¹ Although a more comprehensive search for rag carpets in Schedule 6 is warranted, the lack of their representation indicates that they were a textile produced in great quantity by a

⁹⁰ There were two entries in the sample for carpet which were probably rag carpets.

⁹¹ Catharine Parr Traill, *Canadian Settlers Guide*, (Toronto, 1855), 182. Indeed there are some examples in the Royal Ontario Museum which are very attractively arranged using chevron patterns. Burnham and Burnham, *Keep Me Warm One Night*, 97. Handwritten diary and ledger of the Howell family, Carlow, Ont., ca. 1844-1872. In the University of Guelph Archives.

small number of weavers perhaps with looms fitted with a heavy beater to pack the rags firmly during the weaving process.⁹² It is interesting that the textiles not produced by Campbell are coarse cloth, in the case of drugget and jute for the floor and tweed for outerwear.⁹³ Technically, Campbell could have produced these fabrics, but instead he produced rag and wool carpets for floor coverings, perhaps textiles which had a greater degree of refinement and aesthetic appeal.⁹⁴ Although we do not have an example of Maitland's or even Campbell's carpets, Maitland's price of 49 cents per yard indicates that he included materials in his price, suggesting a cost of 29 to 39 cents per yard in material if we use Campbell's price for rag carpet at between 10 cents and 15 cents a yard and wool carpet between 13 cents and 20 cents a yard as a comparison.⁹⁵

Andrew Maitland's data raises suspicions about the accuracy of earnings because of the high cost per yard, 49 cents, for "blanketing, satinette, tweed and drugget." (Appendix 1.15). Campbell charged 15 and 18 cents for satinette and between 10 cents and 1/- or 12 ½ cents for blankets. Drugget and tweed, coarse fabrics would be comparable in price to Campbell's rag and wool carpets and full cloth. It is noteworthy that the six weavers in Sarnia Township charged about 55 cents per yard for their cloth. Perhaps, the Sarnia Township weavers included materials in their totals or the enumerator provided instructions to the weavers to include materials in their totals.

⁹² Rag carpets are constructed using plain weave and can be woven on a minimum of two harnesses. As such, rag carpets are not complicated, however, to weave a hard-wearing, densely packed rag carpet which will stand up to foot traffic, the wefts made of rags must be beaten firmly requiring considerable force. A sturdy loom with a heavy beater would be ideal to perform this work properly. Professor Catharine Wilson, my thesis advisor, University of Guelph, has two nineteenth-century rag carpets which illustrate this point: one is densely and uniformly woven; the other carpet is somewhat loose with an area of inadequate density. These two examples illustrate the variety of finished products that can result from different weavers and looms.

⁹³ Probably the closest cloth to tweed in Campbell's account book is a cloth called 'kersey' a thick, twill-based cloth used for outerwear. Campbell has one order for 10 yards of kersey in 1864. Another comparable cloth could be full cloth.

⁹⁴ I saw a photograph of a wool carpet produced by Campbell in the ROM archives. It was a warp-faced striped carpet sometimes referred to as Venetian carpets. Ontario Textile Records at the Royal Ontario Museum, OT 49.121.

⁹⁵ Weaving coarse cloth for the floor required strength and in Britain weavers were compensated for the amount of strength exerted to weave. *Reports from Commissioner*, page 14 in *Hand-loom Weavers*.

Although Maitland and Auterson, like Campbell, might have also kept account books, their records have either not surfaced, survived or existed. Examining these weavers provides perspective and balance for Campbell who was a handloom weaver similar to Andrew Maitland and James Auterson and 2,000 other weavers in Ontario.⁹⁶ The enumerator recorded their existence in two schedules of the 1871 Census, an important source for studying the work of handloom weavers. The process of comparing Campbell with other weavers in Schedule 6 is important because the two sources, Campbell's account book and the 1871 census, have their own strengths and weaknesses which stimulate questions helping to advance the topic. An understanding of Campbell's inputs can be furthered by looking at weavers who charged a higher rate per yard than Campbell suggesting that they included the price of materials in the total. I picked Maitland and Auterson because they wove most of the year like Campbell. They provide the context for understanding the work of an immigrant, full-time weaver, who might have been apprenticed, thus directing us to further define the two types of weavers, country customer weavers and housewife weavers who existed in some regions of Ontario.

Inputs: Weaving Equipment and Materials

Although Campbell's looms, shuttles and textiles are extant, the account book provides little information about the value of the equipment that he needed to operate his business, or the fibres used to weave. The cost of his loom, the down-time required when repairs were required, even the cost of his figured head are not known. In 1871, when Campbell regularly began supplying cotton warp, there are clues to calculate material costs (Appendix 1.20). I draw from

⁹⁶ I did not include the qualifier, 'handloom' with weaver here as I am not certain whether the count includes factory-weavers, despite my attempt to remove them. See my explanation in a previous footnote where I explained how I arrived at 2,022 weavers using the searchable data base for the 1881 Personal Census on the Library and Archives Canada website, <http://www.collectionscanada.gc.ca/databases/census-1881/index-e.html>.

other sources to support theories about Campbell's inputs due to his lack of commentary on this topic.

The loom frame Campbell used for his figured weaving is a typical barn frame loom that could easily have been used for shaft weaving.⁹⁷ The advantage of the figured head attachment was that it could be mounted onto any sturdy loom.⁹⁸ Beam to beam, Campbell's loom is 71 ½ inches wide, with a width of 50 inches for actual weaving making the action of throwing the shuttle within arm reach and feasible for one weaver. The majority of looms and in fact textiles produced in Ontario are this width or less – not the broadloom which required two weavers, unless fitted with a flying shuttle.⁹⁹ The disadvantage to owning a 5/4 loom or a loom that weaves 45" wide cloth was that blankets for a double bed had to be woven twice, that is, the weaver produced two mirror image panels that were subsequently sewn down a centre seam.¹⁰⁰ Another disadvantage was that if the textile had a pattern, it needed to be matched, requiring the weaving to beat the weft with identical strength on both panels so that the patterns could be matched after woven. It took skill to achieve two equally matched panels, not an issue for Campbell or many other weavers, as can be seen from many extant coverlets in museum collections. However, for others, for example, the housewife weaver, it was an obstacle and

⁹⁷ See Glossary for a definition of barn-frame loom.

⁹⁸ With the exception of a cantilevered loom. A cantilevered loom does not have the vertical beams at the front corners of the loom that would support the uppermost beams on the sides that would hold the weight of the figured head.

⁹⁹ Examinations of nineteenth-century Canadian textiles with selvages in the Royal Ontario museum suggest a 5/4 weaving width. As such, many nineteenth century Canadian coverlets, blankets and tablecloths were made with two panels because of the constraints of the loom. See Burnham and Burnham, *Keep Me Warm One Night*. In Britain, nineteenth century broadlooms wove up to 100" in width. Berg, *The Age of Manufacturers*, 212. A nineteenth-century handloom weaver from Rhode Island, William Rose, wove on a 60" broadloom. Mohanty, *Labor and Laborers of the Loom*, 173.

¹⁰⁰ The width of cloth is based on 9" intervals. Cloth that is designated 3/4 is 27" wide; 4/4 is 36" wide and 5/4 is 45" wide. Campbell's loom provides a 50" maximum weaving width allowing for the approximately 10% drawing in which occurs when weaving, resulting in a finished width of 45". Campbell specified 5/4 width, 29 times in the account book and 4/4 width, 2 times. I speculate later in this chapter that Campbell indicated width in the account book by differentiating prices. John Gould, an eighteenth century weaver from Massachusetts wove in three widths which he provided terms: 45" in width was listed as ellwide; 36" in width was listed as yardwide and 27" was listed as three-quarters. Benno M. Forman, "The Account Book of John Gould, Weaver, of Topsfield, Massachusetts: 1697-1724," *Essex Institute Historical Collections*, CV (1969): 39.

perhaps a reason for these less skilled weavers, indeed housewife weavers with divided attentions, to avoid textiles with patterns which needed matching.¹⁰¹ Two advantages to weaving on a 5/4 loom was that the weaver only had to thread and sley half of the width of the finished textile and the loom had a smaller footprint than a loom that wove cloth at 100" wide.

Heads for weaving figured cloth were available in the United States as early as 1811. Jacob Hake advertised a patent dated to 1811 in Ohio for an attachment for: "any common loom for weaving double or single work, with only one pair of treddles."¹⁰² The description is reminiscent of Campbell's loom, which has a mechanism for weaving double cloth mounted on a regular loom frame with two treadles. Although the manner in which Hakes's mechanism operated is unknown, even if it was a punch card operated loom, the date of 1811 is significant because the Jacquard mechanism from France connected with all figured weaving in North America by most textile historians was not practical and not in production until the 1820s.¹⁰³

In 1837 Josiah Sherman advertised in Livingston County, New York State, the county that Campbell lived in from 1841 to 1854, that: "All persons wishing to purchase rights for patent weaving in the towns of York Caledonia, Avon, Lima, Livonia, and Springwater, are informed that the subscriber will furnish the machines and set them up and give a fair proportion of the profits accruing from their use."¹⁰⁴ The description in this advertisement is noteworthy, as one can see how a weaver might receive assistance in setting up operating a complex loom, allowing them to start selling immediately.

¹⁰¹ See coverlet no. 263 in *Keep Me Warm* for an example of several threading and treadling errors indicating the work of an inexperienced, perhaps housewife weaver attempting a more challenging textile than her skill level. Burnham and Burnham, *Keep Me Warm One Night*, 204.

¹⁰² Anderson, *American Coverlets and Their Weavers*, 72-73.

¹⁰³ Tuchscherer, "Woven Textiles," 37. Rita J. Adrosko, "The Invention of the Jacquard Mechanism," in *Bulletin de Liaison du Centre International d'Étude des Textiles Anciens* 1-2, no. 55-56, Lyons: Centre International d'Étude des Textiles Anciens, 1982: 105. Goody, *Woven History: The Technology and Innovation of Long Island Coverlets*, 24.

¹⁰⁴ Anderson, *American Coverlets and Their Weavers*, 74.



Figure 8: From the weaver's view, right side of the head, showing the manufacturer's name, Jas. Lightbody. John Campbell's carpet coverlet loom, the Ontario Science Centre, Toronto.

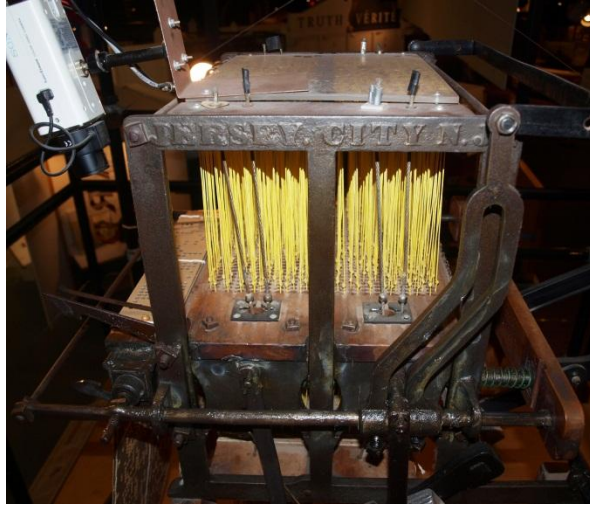


Figure 9: From the weaver's view, left side of the head, showing the location of manufacture, Jersey City, N.J. John Campbell's carpet coverlet loom, the Ontario Science Centre, Toronto.

Campbell's figured head has the manufacturer's name James Lightbody, New Jersey, cast into the iron frame (Figure 8 and 9). James Lightbody appeared in the 1850 New Jersey census as a forty-year-old machinist from Scotland.¹⁰⁵ Lightbody's invention assisted the handloom weaver in producing figured cloth efficiently prolonging the work of a skilled handloom weaver. Handloom weavers of figured cloth remained viable because power looms were not able to weave figured cloth until the 1850s. Between 1841 and 1850, Lightbody received several awards for his carpet machine at the Annual Fair at the American Institute.¹⁰⁶

Campbell's carpet coverlet head used punch cards containing information to create the figured images. The head contained needles which read the cards and triggered the lifting of the threads thus creating the design. Unfortunately, no definitive evidence suggesting the manner in

¹⁰⁵ *U.S. Federal Census*. Year 1850; Census Place Jersey, Hudson, New Jersey; Roll M432_452; Page 377B; Image 407.

¹⁰⁶ *Documents of the Senate of the State of New York*, Sixty-fifth Session, Vol. IV, No. 83, Albany, 1842: [101] 92. *Annual Report of the American Institute of the city of New York, made to the Legislature*, March 25, Albany, 1848, [No. 216] 97. *Transactions of the American Institute of the City of New York for the Year 1850*, Albany, 1851, 62.

which these cards were produced or who produced them is extant.¹⁰⁷ Clarita Anderson and the Burnhams speculated that weavers punched their own cards; however, the impracticality of a weaver punching hundreds of holes into hundreds of cards makes this highly questionable.¹⁰⁸ In the case of Campbell's loom, four cards are equivalent to one quarter of an inch of cloth and one unpeated sequence can span fifteen inches, requiring over two hundred cards.¹⁰⁹ The work of designing a pattern on point paper, to match the specifications of the loom and then transferring the dots and blanks onto the cards was a tedious job that required specialized equipment and skills (Appendix 2.02 and 2.06).¹¹⁰ Weavers certainly punched cards in small quantities, the number needed to weave a customer's name and date in the bottom corner for an additional fee as Campbell did.¹¹¹ Although the designs of Canadian and American coverlets are not as sophisticated as the beautifully-designed silk damasks of eighteenth-century France, further research is needed to establish whether there was a similar division between pattern designers, card punchers and weavers as suggested in a group of card cutters, pattern makers and weavers in Passaic, New Jersey in 1880.¹¹²

Determining the cost of a loom can be estimated by studying fixed capital invested in the 1871 Industrial schedule. In the Middlesex/Lambton sample, weavers' fixed capital ranged from

¹⁰⁷ Although I could not find a reference to a card puncher or cutter in the Canadian census, I found several references in the U.S. 1880 census. On one page in particular, *U.S. Federal Census*. Year: 1880; Census Place: Paterson, Passaic, New Jersey; Roll: 796; Family History Film: 1254796; Page: 205D; Enumeration District: 159; Image: 0194. I found several references to card cutters, silk weavers, pattern makers and working in a silk mill.

¹⁰⁸ Anderson believes that "weavers punched their own cards from purchased paper designs." Anderson, *American Coverlets and Their Weavers*, 1. The Burnhams claimed that figured coverlet weavers punched their own cards. Burnham and Burnham, *Keep Me Warm One Night*, 325-326.

¹⁰⁹ John Campbell's head uses two identical cards consecutively to create a decoupe of two which is the number of consecutive wefts before there is a change in the design.

¹¹⁰ A device that could punch multiple holes at one time would be useful when producing a set of cards. There is an example of a jacquard card puncher, a substantial and complicated piece of equipment at the Berlin Technological Museum.

¹¹¹ Campbell needed to punch seven cards as seen in the example used to weave the name Nancy Carmichael discovered by the Burnhams when they examined the punch cards found with Campbell's loom. Burnham, *The Comfortable Arts*, 173.

¹¹² Card cutters, silk weavers, pattern makers and workers in a silk mill were enumerated on the same census page in Paterson, Passaic, New Jersey. *U.S. Federal Census*. Year: 1880; Census Place: Paterson, Passaic, New Jersey; Roll: 796; Family History Film: 1254796; Page: 205D; Enumeration District: 159; Image: 0194. –

\$4 to \$90 with an average of \$27 (Appendix 1.15). John Campbell had a fixed capital of \$40, higher than most, although weavers like Mary Ann Frier from Biddulph Township declared \$50 and produced flannel.¹¹³ The entry of \$90 for Martha Ann McSherry from Sarnia Township is noteworthy as the enumerator wrote a notation beside her entry: “Patent Loom for Custom Work.” When heads used for fancy work first appear in 1811, they are described using the terms, ‘patent,’ ‘fancy,’ ‘carpet,’ and ‘figured,’ never Jacquard. The use of the term ‘patent’ derived from the patents that were issued for these inventions. In 1828, Horace Baker, advertised his ‘Patent Fancy Loom.’¹¹⁴ Archibald Davidson in Ithaca, New York advertised the weaving of “carpet coverlets of any pattern or figured” on a patent loom.¹¹⁵ Although Martha Ann McSherry’s production was not vastly different from the other weavers in Sarnia Township – she wove satinette and drugget just as Mr. W. Nash – her equipment valued at \$90 greatly exceeded that of Nash’s at \$18. It is curious that the value of her equipment would be so high and that her income so low if she indeed operated a figured head loom, perhaps pointing to enumerator error or perhaps an atypical year of her output and earnings. Nevertheless, the appearance of a patent loom in her entry is intriguing and could be an indication that Martha Ann McSherry was an unidentified figured coverlet weaver defying the theory that only men operated looms with figured heads.¹¹⁶ William Weirlich from Preston Township, Waterloo County, purchased a broad loom and a figured attachment around the end of the American Civil War and declared a fixed capital of \$130 in Schedule 6, possibly providing a current value for a figured coverlet loom and a broadloom, a loom which could weave double width unlike Campbell’s 5/4

¹¹³ Bloomfield and Bloomfield, *Middlesex County Industries*, 43.

¹¹⁴ Anderson and Spivak, “Nineteenth Century License Agreements,” 73.

¹¹⁵ *Ibid.*, 83.

¹¹⁶ Burnham, *The Comfortable Arts*, xiv.

width loom.¹¹⁷ Comparing Campbell to McSherry and Weirlich might indicate the depreciated value of Campbell's equipment purchased in 1842 at a value of \$40, almost three decades previous.

As discussed previously, the account book indicated prices for weaving labour. In 1867, Campbell began to list additional services including hems, warp, rags, dyeing, measuring length, reeling and twisting providing an opportunity to determine the costs of inputs (Appendix 1.21). Campbell indicated when an additional service was required by adding another line, either above or below the order with the additional cost in the price column or he included it with the main description.¹¹⁸ These additional costs are not price increases, but extra costs and are additional proof that the price per yard in the account book refers to the labour of weaving only. In addition to discovering the cost of materials, "supplying cotton" in Campbell's words, was a task largely done by customers until 1871 when Campbell began "supplying cotton" for some customers (Appendix 1.20).

Fortunately, Campbell left a key to understanding his pricing on the back inside cover of the account book where he made notations about the measurements of cotton warp.¹¹⁹ He wrote that no. 20, probably referring to the size of the cotton, has "24 ½ nots in a bunch."¹²⁰ Campbell used a skein measurement used by British weavers where 80 yards equal one knot.¹²¹

¹¹⁷ Burnham and Burnham, *Keep Me Warm One Night*, 360. *Census for Ontario*. Year 1871; Census Place: Preston, Waterloo South, Ontario; Roll C-9943; Schedule 6, page 8. Weirlich's widest coverlet in *Keep Me Warm* is 199 cm or 78" indicating the minimum width of his loom.

¹¹⁸ When including the extra services in the main description, Campbell does not always separate the extra cost from the price of the cloth. In 1869 Jacob Ferguson of Caradoc Township ordered "50 yards of rag carpet at 12 ½ cents & hems - \$7.25" combining the cost of the carpet and the hem. By establishing that 50 yards of rag carpet at 12 ½ cents cost \$6.25, I ascertained the cost of hems was \$1.00.

¹¹⁹ Peddie provided directions for the weaver for calculating the amount of warp required to produce a specified length of cloth. Peddie, *The Linen Manufacturer, Weaver and Warper's Assistant*, 380.

¹²⁰ Campbell consistently spells knot as not.

¹²¹ 7 knots are in a skein or 560 yards per skein. This measurement is derived from a wool winding reel which has a circumference of 2 yards. Forty turns of a reel is one knot. Many wool winders have a counting mechanism that clicks after 40 turns signalling one

Campbell's measurement of 24 ½ knots in a bunch, meant that a bunch was equal to 1,960 yards.¹²² This formula implies that Campbell was working with cotton that measured 3,920 yards per pound.¹²³ Campbell's lowest charge for cotton to a customer was in 1862 when he charged 31 cents.¹²⁴ The price for warp in the other cases ranged from 42 cents in 1871 to 60 cents in 1881, which might indicate that Campbell was increasing the price of warp to make a profit beginning in 1871. In 1871, the price for warp was 40 cents a pound in Madawaska, New Brunswick and in Ontario according to a listing of goods subject to tariffs in *Lovell's Ontario Directory* of 1871.¹²⁵ I speculate that the price charged in 1861 of 31 cents, was priced without a mark-up and in 1871, with a minimal mark-up, as Campbell was not yet in the habit of supplying warp to his customers. If Campbell was making a profit from the sale of cotton, the additional price for cotton can be perceived as not just covering costs but an additional income.

In 1879, Campbell charged Mrs. Godfrey of Delaware two dollars for "supplying warp and twining" for a 30 yard rag carpet.¹²⁶ Twisting or twining the warp most likely referred to plying two singles to make a two-ply thread, requiring a spinning wheel for the plying. Because the cost of the rag carpet and twining are added together it is more difficult to determine the

knot. David Jeremy, "British and American Yarn Count Systems: An Historical Analysis," *The Business History Review* 45, no. 3 (Autumn, 1971): 353.

¹²² Campbell wrote on the next line that "245 in the five pound bundle" indicating that a bundle was ten times the size of a bunch or half a pound. He does not specify the measurement associated with 245, but presumably it was knots suggesting that 19,600 yards were in a five pound bundle.

¹²³ Photo in Appendix 2.17 shows a magnification of one of Campbell's carpet coverlets showing the two-ply cotton. Campbell noted no. 20 as the size of cotton, indicating that he used a single ply, however, all Campbell coverlets I have examined are two-ply. The no. 20 probably referred to the weight of the two threads plied or a 2/10 which is equal to a no. 20. Interestingly the weight to yardage ratio is close to the cotton currently used on Campbell's loom in the Ontario Science Centre, a 2/8 cotton which equals 3,360 yards per pound. A 2/10 is slightly finer than a 2/8 supporting the notion that Campbell's cotton contained more yards per pound. The fineness of yarn is an inverse measurement, as such a no. 20 is finer than a no. 16. The single strand measurement relates to weight (a higher number has more yards per pound).

¹²⁴ Interestingly, the date of this purchase falls within the beginning of the American Civil War which increased the price of cotton Ransom and Sutch, *One Kind of Freedom*, 190.

¹²⁵ Craig et al., "Survival or adaptation?" 161. *Lovell's Ontario Directory*, 1871.

¹²⁶ I believe that Campbell's use of 'twisting the warp' and 'twining the warp' mean the same thing, which is to take two single threads and ply them into a two-ply thread. John Campbell's account book. Page 241 & 242, August 8, 1879.

charge for this service.¹²⁷ If Campbell charged Mrs. Godfrey the same price that he charged Mr. Crawford in 1877, 35 cents per pound for cotton, the cotton would cost \$1.40, leaving 60 cents extra for twining consistent with the 75 cents that Campbell charged Mrs. Godfrey in 1881 also for twisting the cotton for a rag carpet.

Excluding the 1862 isolated reference to selling cotton, the earliest extra service provided by Campbell was for hems (Appendix 1.22). The account book was not specific about what hems meant, but this service was only associated with rag carpets. It could mean that Campbell hemmed the carpets, that is doubled over the ends of the cloth and sewed them or that he wove an extra five or six inches of plain weave in cotton that the customer sewed as a hem. I am not inclined to believe that customers would pay for sewing hems when this task would be well in the skill range of even a child and did not require specialized equipment, only a needle and thread. However, a woven hem provided a nice finish to a rag carpet and probably added to the durability of the edge supporting its increased popularity in the account book. Hems ranged in cost from an additional fifty cents to one dollar. Hems did not occur for the first eight years in the account book or fifty orders of rag carpets. The first reference to hems occurred in 1867 for Jeremiah Edwards of Lobo who paid one dollar extra to get ‘extra breadth at hems.’ In 1867, 12.5% of rag carpets sold had hems. In 1869, Campbell produced the highest proportion of rag carpets with hems, 47% out of the twelve year study, compared to the average number of carpets with hems over the twelve year study at 21%. In both 1879 and 1880, 41% of rag carpets had hems. Rag carpets increased in popularity as seen in Appendix 1.22 while the addition of hems increase almost at the same rate.

¹²⁷ A 30 yard warp for a rag carpet would require just over four pounds of warp. Based on a rag carpet that is 45 inches wide, 12 threads per inch in density, the warp would be 16,200 yards.

To offer perspective about the additional cost placed on the rag carpet by the hem surcharge, it is necessary to examine the price of the hem relative to the rag carpet. In 1873, Mrs. McKellar from Glencoe ordered a 57 yard rag carpet that cost \$6.62 with a 50 cent charge for hems increasing the cost of the item by 7.5%, perhaps considered a reasonable increase for durability. However, the \$1 charge for hems on the 22 yard rag carpet ordered by John Reid, Strathroy in 1877 increased the cost from \$2.75 to \$3.18, a 64% increase. There was an increased appreciation for this service that would provide an additional polish to the appearance of the carpet and the expendable money available to pay for it.

In four cases, Campbell supplied the rags to customers for rag carpets. The first incident was in 1873 for Neil Love of Tempo. The infrequency of this service indicates that Campbell's customers were in the practice of supplying their own rags. Catharine Parr Traill wrote that children could be trained to cut and join rags for rag carpets. She wrote that rag carpets while not found in upper class houses were found in the houses of the most well-to-do settlers and the carpets were very attractive when the colours were appealingly arranged.¹²⁸ In an account book/diary from South Dumfries, farmer Samson Howell made two references on April 4 and 5, 1868 to his family, including him, sewing rags so they could be ready for the weaver.¹²⁹ On April 17, 1868 Howell indicated more warp needed to be taken to the weaver and "George took some carpet warp to Mrs. Holcombes to finish the carpet with." On April 27 the carpet was

¹²⁸ Traill, *Canadian Settlers Guide*, 182. Indeed there are some examples in the Royal Ontario Museum which are very attractively arranged using chevron patterns. Burnham and Burnham, *Keep Me Warm One Night*, 97.

¹²⁹ Handwritten diary and ledger of the Howell family, Carlow, Ont., ca. 1844-1872. In the University of Guelph Archives. Thank you to Professor Catharine Wilson for alerting me to this diary reference.

finished and Howell wrote that he went to “St. George & to the weavers after some carpet in afternoon.”¹³⁰

Although wool was an important input, there is no reference to it in the account book as found with cotton warp and rags. The absence of any reference to wool is an indication that the customer was entirely responsible for providing wool, which would be primarily produced by females on spinning wheels.¹³¹ Campbell produced some cloth in the account book such as blankets and full cloth entirely of wool. Others such as cotton & wool, flannel, single and carpet coverlets were a combination of cotton and wool. Campbell wove rag carpets on a cotton warp with rags of approximately a half an inch wide. My inspection of coverlets in private and public collections produced by John Campbell confirms that they were produced using hand spun wool, thus an indication of home production which I discuss in Chapter IV.¹³²

Outputs: Coverlets and 91 Other Types of Cloth¹³³

Campbell set up his account book as a single entry ledger with credit on the right side and debit on the left side.¹³⁴ There is no extant day book which recorded orders chronologically followed by a ledger which grouped the orders into accounts. It is possible that Campbell combined the function of a day book with a ledger as was the case with many small businesses and artisans.¹³⁵ He might have also recorded customer orders on slips of paper, as found in a

¹³⁰ Handwritten diary and ledger of the Howell family, Carlow, Ont., ca. 1844-1872. In the University of Guelph Archives. The 1871 Personal Schedule listed Elisabeth Holcomb born in 1811 in the United States as a weaver. *Ontario Census*. Year: 1871; Census Place: *South Dumfries, Brant North, Ontario*; Roll: C-9915; Page: 13; Family No: 54.

¹³¹ Inwood and Grant, “Labouring at the Loom,” 217.

¹³² Crowley, “Rural Labour,” 34-35.

¹³³ Campbell produced eight types of carpet coverlets, three types of single coverlets and 91 other types of cloth for a total of 102 types of cloth as seen in Appendix 1.03.

¹³⁴ Although not in the case of Campbell’s account book, this common accounting format sometimes is accompanied with Cr on the top of the credit or right hand side of the page and Dr for debit or the left side of the page as found in the Howell Account Book Diary found in the archives at the University of Guelph.

¹³⁵ Ledgers devote one page per customer and are transferred from another book called a daybook which records daily transactions. In Douglas McCalla, “Accounting Records and Everyday Economic Life in Upper Canada, 1790-1850,” *Archivaria* 21 (Winter 1985-

pocket at the back of the account book, which he wrote into the account book to reflect date of production.¹³⁶ Customer accounts list orders, with the customer's name, location, a description of the textile, price per yard, price and method of payment over the course of a few months until they settled with a final payment. Campbell used two systems of bookkeeping currency for his unit rates – a system introduced to British North America in 1859, the decimal system, and New York or York currency which was still being used in the United States for bookkeeping in the nineteenth century.¹³⁷ The use of the older bookkeeping currency, York, is an indication of the facility that small businessmen had with mathematical computation between shillings and decimals and perhaps a reflection of Campbell's customers, 52% of whom were born between 1806 and 1820 and comfortable with the system of pounds and shillings (Appendix 1.23).¹³⁸

From my annual account study and the detailed annual study over twelve years, I noted that Campbell provided a wide variety of cloth types which decreased over twenty-six years of record keeping (Appendix 1.24). His yardage output and dollar input declined, while the number of extra services, for which Campbell charged an additional fee, increased (Appendix 1.21). These two trends suggest a change in behaviour of the customer. In Chapter Four, I suggest that this is due to the customer withdrawing from household production.

There is also a shift from producing cloth suitable for garments to cloth for the household – a theme that I explore in greater depth in Chapter Four. In the first decade of Campbell's

86): 150. Christopher Densmore, "Understanding and Using Early Nineteenth Century Account Books," *The Midwestern Archivist* V, no. 1, 1980: 10.

¹³⁶ This theory is supported by the fact that the slips of paper do not have dates and that Campbell disregarded the date of order and made date of production the priority. This could explain why dates on the left side of the account book, which I have been regarding as date of order, are clustered according to cloth type.

¹³⁷ New York currency was used for bookkeeping purposes. Its origins date to pre-Revolutionary New York. In the nineteenth century, the rate of exchange fixed at £1 New York = \$2.50. In Alan Bruce McCullough, *Money and exchange in Canada to 1900*. 156.

New York State weaver Elmey Sammis used York Currency in her account book. Cunningham, "Elmey Sammis Trimmer," 1988.

¹³⁸ This percentage does not come from his entire customer base but a sample of 60 customers.

production, he produced a greater quantity of cloth suitable for garments, e.g., plaid, stripe, cotton & wool. In the second and third decade, the balance shifted to producing more cloth for household use, for example, carpets and coverlets (Appendix 1.14).¹³⁹ This trend in consumption changed the production of cloth that Campbell specialized in from lighter weight cloth for garments to more substantial and expensive cloth for the household.

A cloth in the account book that confounds my understanding is full cloth, as I am unclear about what Campbell means by “full.” If it referred to the fulling process, that is something which occurs after weaving, this is a post-weaving process done at a fulling mill. If it referred to full width, why did he also use the description 5/4 for the full weaving width of his loom? The price of full cloth is always 1/- or 12 ½ cents and he does not indicate any additional processing as he charges 1/- for plain cloth as well. I wonder whether full cloth referred to the fibre, wool in the warp and weft that can be fullled and that is woven with the “intent” to full it. For example, it might have a lower thread count to allow for shrinkage. It is also interesting and perhaps coincidental that the sharp decrease in full cloth production coincided with the destruction of the Siddall woollen mill in Lobo in 1867.¹⁴⁰

Full cloth was Campbell’s most highly produced cloth in 1860 at 669 ¼ yards or 26% of total yards produced (Appendix 1.14).¹⁴¹ This cloth steadily declined in popularity from 1867 (Appendix 1.25). It is interesting to note that it makes a fairly even decline from 1860 to 1867 and then dropped drastically in 1869 to 2% of the total. The sharp and sustained decline of full

¹³⁹ On this graph, I organized the cloth categories so that the top seven cloths would be those suitable for garments while the second half would be most suitable for household use.

¹⁴⁰ Fortunately, an account book from the Siddall mill dating from 1850 to 1854 contains records of this mill’s activity. Although this account book does not overlap in dates with Campbell’s account book, some customers might be linked where both records have name and location. J. Siddall A/C book 1850-1854, B4066-7, Sub-series 2.3 – Siddall family mill account books. The Joseph Siddall Family Fonds, AFC66, University of Western Ontario Archives. *History of the County of Middlesex*, 509.

¹⁴¹ For a discussion of the term full cloth see above in this chapter.

cloth production, indeed some years, 1871, 1881 and 1885 without any full cloth production, points to either a decrease in consumer demand for this cloth or that the fulling mills were not in adequate production after 1867 in Middlesex County.¹⁴² Interestingly, the decline of full cloth in Campbell's account book in the late 1860s and early 1870s coincided with an increase in the production of cloth for the household like carpet coverlets, indicating a change in market demand (Appendix 1.14).¹⁴³ Another speculation about the reduction in full cloth production connects with customers reducing their participation in household production as full cloth required wool in the warp and the weft. Carpet coverlets used less wool and as such customers were able to reduce their production of hand spun wool.¹⁴⁴ It might also reflect consumer demand for patterned instead of unpatterned cloth. The general trend for sales of full cloth went from 23% of total sales for 1860 to practically nothing in 1885 (Appendix 1.25). His downturn in full cloth is balanced by the upturn in carpet, both wool and rag. In 1879, Campbell produced 329 yards of wool carpet and 660 yards of rag carpet – not to mention his carpet coverlets: 425 yards at \$230 (Appendix 1.14).

Campbell was one of about thirty weavers of figured coverlets in Canada, all of whom were situated in Ontario.¹⁴⁵ The presence of these handloom weavers in Ontario suggests the presence of a customer base willing to purchase these specialized and more expensive textiles and the weavers skilled enough to operate the equipment. Campbell, like other figured coverlet weavers, also produced single coverlets. Single coverlets like figured coverlets were the

¹⁴² Inwood connects the changing fortunes of fulling and carding mills to fluctuations in farm income. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 353.

¹⁴³ Between 1860 and 1867, Campbell produced on average 158 yards of carpet coverlets per year. Between 1869 and 1885, he produced on average 304 yards of carpet coverlets per year.

¹⁴⁴ Craig et al., "Survival or adaptation?" 144.

¹⁴⁵ Dorothy Burnham is vague on this point. She wrote that there was "probably not more than thirty weavers." In Burnham, *The Comfortable Arts*, 171.

decorative top covering of a bed, but with a much simpler construction, produced on a minimum of four harnesses and costing between \$1.50 and \$1.75 each or 30 to 35 cents per yard. Single coverlets, although less expensive than carpet coverlets, that ranged from \$2.25 and \$3.50 or 45 to 70 cents per yard, were the second highest priced cloth woven by Campbell. A housewife weaver at the top of her skill level could produce a single coverlet, making these coverlets more common than the carpet coverlet with their recognizable figured imagery, which had the appeal of being rare and stylistically comparable to other consumer items such as dishes, wallpaper and printed textiles.¹⁴⁶ Whether the customer chose carpet or single coverlets, they were choosing the most costly cloth produced by Campbell. Campbell produced 1,265 carpet coverlets and 114 single coverlets, the equivalent of 6,895 yards of cloth.¹⁴⁷ To understand what the earning from coverlets meant to John Campbell's business where he produced about 54,000 yards of cloth and earned just over \$10,000 in 26 years – carpet coverlets comprised about 34% of his income but only 12% of the yards (Appendix 1.26).¹⁴⁸ Carpet coverlets were clearly the driving force of the business.

The Burnhams identified two main constructions used to weave figured coverlets: double weave and damask.¹⁴⁹ Most figured coverlets in Ontario are the double cloth construction which in itself has many variations. Campbell used the 4:1 double weave construction used by some figured coverlet weavers in Ontario such as William Weirlich, August Ploethner and David

¹⁴⁶ Producing single coverlets required skill in warping, threading and treadling. Mohanty, *Labor and Laborers of the Loom*, 172.

¹⁴⁷ I calculated based on the average size of a John Campbell coverlet in *Keep Me Warm*, that each coverlet was 5 yards, 2 ½ yards for each panel.

¹⁴⁸ Campbell sold \$10,013.93 in cloth over the duration of the account book.

¹⁴⁹ Dorothy Burnham describes the figured cloth constructions in Dorothy K. Burnham, "Constructions Used by Jacquard Coverlet Weavers in Ontario," in *Studies in Textile History: In Memory of Harold B. Burnham*, ed. Veronika Gervers, (Toronto: Royal Ontario Museum, 1977). Alexander Peddie referred to the weaving of double cloth by carpet weavers and also "Customary weavers for bed-covers." Peddie, *The Linen Manufacturer, Weaver and Warper's Assistant*, 460.

Knetchel.¹⁵⁰ All of Campbell's coverlets use the free double cloth, 4:1 construction, with the exception of one coverlet in the Royal Ontario Museum perhaps woven in Caledonia, New York State (Appendix 2.09).¹⁵¹

Campbell's double cloth differed from the double cloth figured coverlets that were initially produced in the United States and in Canada.¹⁵² The early figured coverlets had two layers of double cloth with balanced densities of plain weave.¹⁵³ With this construction, the colour of the warp determined the colour of the design for every coverlet using that warp. The gauge of the wool warp matched the gauge of the cotton, 2/10 or no. 20. With the 4:1 construction used by Campbell, the colour of the coverlet was not determined in the warp but in the weft, making it easy to change colour or add colours to suit the tastes of the customer.¹⁵⁴ The important innovation of this cloth was that the weaver could change the colour of the coverlet as easily as he could change the shuttle, because both layers of the warp were white and did not determine the colour of the patterned area. It also meant that spinners could spin a

¹⁵⁰ Double cloth is a reversible cloth that uses two layers of cloth to delineate the design. Some weavers like Campbell used a 4:1 proportion while others used a 2:1 proportion. The two numbers in the ratio refer to the relationship between threads in the two layers of cloth. The wool layer of cloth is woven with cotton warp threads that are separated by four threads used to weave the white cotton layer which comprises the background (on the right-side). The warp that creates the figured layer of cloth is woven with a thicker, two-ply wool which mostly covers up the warp threads in a weft-faced weave (Appendix 2.17 shows how the wool weft mostly covers the white cotton warp). The earlier double weave construction used by coverlet weavers used 1:1 warp threads for the two layers of cloth and the two layers of cloth have a balanced density. The Burnhams wrote that Weirlich, Ploethner and Knetchel used the 4:1, with a decoupe of 4 (page 326). However, they refer to Weirlich (page 360), Ploethner (page 362) and Knetchel's (page 368) construction later in the text as tied double cloth, mixing up terminology. Campbell used a 4:1 construction with a decoupe of 2. The Burnhams stated that this construction was common in Waterloo County after the 1870s, yet it is a construction used by Wilhelm Armbrust, the first figured coverlet weaver in Ontario according to the Burnhams. The Burnhams do not connect the construction used by the above three weavers with Campbell. Indeed, in *Keep Me Warm*, they referred to Campbell's construction as 2:1 (page 326, 371 and 372) but in "Constructions used by Jacquard Coverlet Weavers," Dorothy Burnham stated that Campbell's construction was 4:1 (page 34). My inspections of Campbell's coverlets reveal that the proportion is 4:1 with a decoupe of 2.

¹⁵¹ This coverlet was a donation by Campbell's grandson, John Campbell to the Royal Ontario Museum, Accession number: ROM 949.154.1. Anderson, *American Coverlets and Their Weavers*, 140.

¹⁵² Burnham, "Constructions Used by Jacquard Coverlet Weavers in Ontario," 32-33.

¹⁵³ Balance refers to the number of warps (vertical threads) and wefts (horizontal threads) per inch. A balanced cloth will have approximately the same number of warp threads per inch as weft threads per inch. 1/1 refers to the weave structure where one warp thread crosses one weft thread, otherwise known as plain weave. For an explanation of the various kinds of constructions used by figured coverlet weavers, see: Burnham, "Constructions Used by Jacquard Coverlet Weavers in Ontario," 33.

¹⁵⁴ Unbalanced weaves can be either warp or weft faced. In this case, the threads that predominant are the heavy wool weft. As with the cotton warp and weft background, the weave structure is 1/1 plain weave.

thicker weight of wool thus speeding up spinning and weaving and the increased quantity of factory spun cotton allowed customers to further withdraw from the household production of wool.

Campbell did not weave the variety of textiles on his figured head loom that he wove on his shaft loom, as he was limited by the sets of patterns he owned. There are four patterns with provenance to Campbell. Two sets of punch cards were found with the loom and transferred from punch cards to point paper by the Burnhams (Appendix 2.06). Although the Burnhams wrote that they located the names for the designs in the account book, the account book does not contain the separate names of his coverlets, only their construction: carpet and single.¹⁵⁵ The references to the names of the coverlets come only from slips of paper that were saved in a back pocket of the account book (Appendix 2.07). From the slips of paper at the back of the account book, I found the following coverlet names: Rose & Stars, Tulip, Single Rose, Noah's Ark, Love Not [sic] and Single. One of the two sets of cards found in Campbell's workshop clearly connects to the name on one of the slips of paper: 'Rose and Stars' (Appendix 2.08 and Appendix 2.07). The other set of cards found in the workshop does not have an extant coverlet woven by Campbell, but is reproduced by volunteer weavers at the Ontario Science Centre (Appendix 2.10). The name, 'Garland' used by the Burnhams has no documentation on the slips of paper in Campbell's account book.¹⁵⁶ The set of cards referred to as 'Garland' by the Burnhams might have been purchased close to the time of Campbell's death and as such, few were woven. The two possible names for this pattern are 'Noah's Ark' and 'Love Knot' (Appendix 2.07). Based on the appearance of the coverlet, I would suggest the name 'Love

¹⁵⁵ A single coverlet has a construction used by weavers in Canada and the US. For a discussion of the derivation of this term, refer to Chapter One.

¹⁵⁶ Burnham and Burnham, *Keep Me Warm One Night*, 372.

Knot', as stylistically it shares a circular motif similar to a 'single' pattern named 'Lover's Knot'.¹⁵⁷ I do not believe that Noah's Ark was a name of this figured coverlet, because of the absence of ark imagery in a coverlet. The other three coverlets: Rose & Star, (Appendix 2.08), Tulip (Appendix 2.11), and Single Rose (Appendix 2.12) all resemble the imagery on the coverlets. As an aside, perhaps Noah's Ark is the name of an unknown fifth coverlet pattern.

When examining the figured coverlets of Ontario, one sees a repetition in themes. One of the most popular motifs is the cluster of four roses found in Campbell's Rose and Stars coverlet. The anonymous weaver that the Burnhams refer to as the 'heart lying on its side' weaver' used the four roses in a lattice work design.¹⁵⁸ An interesting feature of the six coverlets in the Royal Ontario Museum attributed to the 'heart lying on its side' weaver is that the design components in each coverlet repeat in different configurations on his other coverlets. One of the designs is composed of rather awkward, malformed motifs. The interchangeability of the designs suggests that the weaver either punched his own cards or that he had a good source for manufactured cards that provided much variation. Although the significance of the interchangeability of the designs would appear to be decorative, it also points to a potential technical difference between Campbell's figured head and the 'heart lying on its side' weaver's head. Switching border and field would be impractical on Campbell's loom and system of punch cards. If Campbell wanted to weave a border from one coverlet with the main body of the design from another, an entire set of punch cards would need to be cut. Therefore, it begs the question whether the 'heart lying on its side' weaver was using a different system which allowed border and main design to be used

¹⁵⁷ This slip of paper indicates that Shipley purchased Love Knot in addition to three single coverlets and two coverlets called 'Noah's Ark.'

¹⁵⁸ Where the Burnhams cannot attach a name to a weaver, they sometimes use an identifying feature as with this weaver who used a heart lying on its side in the cartouche with the customer's name and date. Coverlet ROM 967.305.1 in Burnham and Burnham, *Keep Me Warm One Night*, 344.

modularly. Because there are so few heads in existence, one can only speculate whether a head was invented that could accommodate this feature. One thing is certain though; inventors were constantly coming up with new improvements and registering patents.¹⁵⁹

The coverlets in *Keep Me Warm* along with Campbell's designs reveal common themes and designs: flowers, leaves and birds. Decorative designs such as wallpaper, dishware and printed textiles use similar imagery.¹⁶⁰ The finest, most expensive woven textiles had been employing recognizable imagery for centuries using draw-loom.¹⁶¹ Thirteen of the sixty-six coverlets in the Jacquard chapter in *Keep Me Warm* have the four roses in a cluster motif. No coverlet has the willow tree pattern seen in the inner border of Rose and Stars – indeed, this motif is reminiscent of nineteenth-century gravestone imagery.¹⁶² There is a coverlet woven in New York State, in 1841, by an unidentified weaver with many of the same components as Campbell's Rose and Stars coverlet, including the willow tree.¹⁶³ Although not exactly the same, the Tulip coverlet shares some similarities with a coverlet pattern from Pennsylvania.¹⁶⁴ Campbell's two other designs Single Rose and Love Knot, are unique in my opinion, not comparable to the design of any Canadian or American coverlet that I have seen.

¹⁵⁹ Anderson and Spivak, "Nineteenth Century License Agreements."

¹⁶⁰ The Burnhams referred to the designs on some figured coverlets as coming from: "the general repertory of northern European folk art, and are found on ceramics, painted chests and furniture," 329; designs found in Scottish ingrain carpets, 367; and designs similar to contemporary wallpaper designs, 375. Burnham and Burnham, *Keep Me Warm One Night*. (pages are cited with the description)

¹⁶¹ Draw-loom were very slow to operate and required the skills of a master weaver and assistants at the top of the loom to pull cords to make a shed for passing the shuttle and weaving. When this type of weaving became available to the wider public it must have been very exciting and novel. Jean-Michel Tuchscherer, "The Art of Silk," in *French Textiles from the Middle Ages through the Second Empire*, ed. Marianne Carlano and Larry Salmon, (Hartford, Connecticut: Wadsworth Atheneum, 1985): 47. Tuchscherer, "Woven Textiles," 37.

¹⁶² Blanche M.G. Linden, *Silent City on a Hill: Picturesque Landscapes of Memory and Boston's Mount Auburn Cemetery*, (Amherst: University of Massachusetts Press in Association with Library of American Landscape History, 2007), 83.

¹⁶³ Anderson, *American Coverlets and Their Weavers*, 18-19.

¹⁶⁴ *Ibid.*, 50-51.

Campbell had a shaft loom which might have been built by Campbell while he lived in New York State.¹⁶⁵ The shaft loom was responsible for the greatest diversity he could produce in weave structure, fibre and width.¹⁶⁶ This loom also created the greatest scheduling challenges as he wove, at the most, 43 cloth sub-categories in one year in 1862. The theory discussed in the methodology section is that Campbell would weave a type of cloth when he received enough orders in that category with compatible weave structure, colour, fibre and width. Clustering of orders by date in the account book raises questions about how Campbell organized his workshop and his account book (Appendix 1.27). Did his customers know that he generally took orders for rag carpets from March to April, striped and plaid cloth in January? Or did Campbell write the orders in the account book to reflect his production schedule? Perhaps customers placed their orders at their convenience, and therefore, one would expect to see the orders showing up randomly on the calendar, but they do not.¹⁶⁷ Orders in 1875 for striped and plaid are in January, tweeled in February, rag carpets are clustered from March to July, carpet coverlets July to September and plain cloth in October and December. Delivery dates are offset by about one to three months. Did news travel word of mouth that Campbell was weaving rag carpets in March? After all many of his customers were connected by proximity and kinship. In the table in Appendix 1.27, cloth categories have periods of concentration during the year. Indeed, there is a trend from the 1862 graph for rag carpet orders in March which was generally repeated over the

¹⁶⁵ The figured head has the manufacturer, James Lightbody from New Jersey moulded onto the side of the frame. Also documented in *Ibid.*, 140.

¹⁶⁶ A silk weaver from England, Mr. Thomas Heath demonstrated that being able to weave a wide variety of cloth allowed him to stay employed. He stated that, "I took to figured work and have been at it ever since, excepting that I have occasionally done a plain piece of work when no figured work was to be had." *Reports from Commissioner*, page 41 in *Hand-loom Weavers*.

¹⁶⁷ McCalla demonstrated that carding and fulling mills followed a calendar of operation. Carding was generally done between mid-May and to October and fulling mid-September to mid-March. McCalla, *Planting the Province*, 101-102.

following years, although becoming somewhat obscured by 1885 when rag carpet orders comprised 38% of his business.

How does category clustering work on an individual basis? Donald Graham from Lobo Township opened his account on February 21, 1861 with the purchase of 27 yards of bordered blankets. Eight months later, on October 11 he made another order for 22 ½ yards of full cloth. Both orders were paid in full on March 5, 1862. Donald Graham's order for 22 ½ yards of full cloth in 1861 was the fifth of 30 orders for full cloth. Between August 8, 1861 and December 30, 1861, Campbell took orders for 536 ½ yards of full cloth which were mostly paid in full between February and March of 1862 (Appendix 1.13).¹⁶⁸ Repeat customer Sylvester Campbell from Lobo Township began his 1861 account on July 2, 1861 by ordering two carpet coverlets. His account still open, he returned in November and then December to make two orders for full cloth and then closed his account on February 8, 1862 on the same day that he ordered 28 yards of 4-colour stripe. In any case, I believe that orders for full cloth and other types of cloth were clustered around a specific time period, not by accident but by design, most likely pointing to production schedule that was efficient for Campbell and kept costs down for customers.

Campbell produced some cloth that only appeared once or very few times in the account book. The following six types of cloth were only produced once: shepherd's plaid, kersey, diaper, linen, quilt and scarlet flannel.¹⁶⁹ From a technical point of view, these textiles are interesting to consider, and confirm Campbell's versatility as a weaver and his willingness to meet his customers' needs but do not show the major trends of his production. These more

¹⁶⁸ In a minority of cases, the date of final payment does not appear to fit this pattern. For example, Malcolm McKeller, Caradoc Township ordered full cloth November 6, 1861 and made final payment on November 15. Mrs. Carrey, Delaware Township ordered full cloth on November 7, 1861 and made final payment on November 18, 1861.

¹⁶⁹ See the Glossary for a definition of these fabrics.

unusual fabrics occurred primarily in the first decade of Campbell's business, perhaps as he was developing a clientele. The one-time appearance of these fabrics perhaps indicated that his customers were becoming less discerning or that Campbell was less willing to put a warp on his loom and thread it just for twelve yards of diaper. These cloths clearly lacked demand from his customer base; nevertheless it is important to note that Campbell was capable and willing to fill these orders.

Two types of cloth that require additional mention are the diaper, produced once by Campbell, and satinette which he produced five times. Campbell wove 12 yards of diaper at 15 cents per yard in 1862 for John B. Campbell. A few days earlier, he took an order from Fred Dutchman for 28 yards of linen at 12 ½ cents. Normally, I would not hesitate in combining these two orders, as diaper is considered a linen weave, except for the difference in unit price. It is possible that the two orders were woven on the same warp and the difference in price per yard could be due to shuttles, treadling or for rethreading the loom.¹⁷⁰ Campbell took five orders for satinette which are never clustered but occur alone in 1859, 1861, 1863, 1872 and 1875. The interesting point about diaper and satinette is that these types of cloth are often woven with five or more shafts.¹⁷¹ Diaper is sometimes misconstrued as simply an absorbent cloth; however technically, diaper is a specific weave structure that requires a minimum of five and many times eight harnesses.¹⁷² If there is evidence to suggest that Campbell was weaving five shaft weaves, it is further proof of his training and sophistication as a weaver. John Duncan, a Scottish

¹⁷⁰ An explanation of how changing the treadling sequence changes the weave structure. Peddie, *The Linen Manufacturer, Weaver and Warper's Assistant*, 421.

¹⁷¹ Two weavers from Prince Edward County, Ontario, Hester and Rosanna Young recorded drafts for three diaper patterns kept in the Abercrombie Collection in the Royal Ontario Museum archives. ROM 952.148.33, Abercrombie Collection – A Draft for Diaper, five shafts, Abercrombie Collection; ROM 954.148.34, Abercrombie Collection – Diaper Draft; ROM 954.148.35, Abercrombie Collection, the Royal Ontario Museum.

¹⁷² Murphy *A Treatise on the Art of Weaving*, 66.

weaving manual writer, devoted an entire chapter on tweeling and satins, demonstrating the complexity of weaving in Scotland in the eighteenth and nineteenth century.¹⁷³ Another Scottish weaving manual writer, John Murphy provided set-ups for several satinette tweel using four to sixteen shafts depending on the smoothness required for the surface of the cloth.¹⁷⁴ He included a pattern for diced satinet on eight shafts perhaps structurally similar to the diced plaid woven by Campbell in 1866 and 1869.¹⁷⁵

Conclusion

The analysis of Campbell's account in this thesis is the first comprehensive study of a Canadian handloom weaver.¹⁷⁶ My findings have increased significance because of the use of sources associated directly with Campbell: his account book, looms and coverlets. Evidence from the account book demonstrates that he was a handloom weaver who provided not only necessary textiles for life, but also a rural aesthetic for approximately 1,000 households in eight counties of south-western Ontario. Campbell's output and earnings show that he made a good living, enough to purchase three town lots, support a family and retain the independence of self-employment sought by handloom weavers. Campbell, who had the skills to organize the production of 2,000 yards of cloth per year on two looms, had the versatility to meet customer demands to weave flannel to quilt and follow customer trends as his business evolved from producing cloth for garments to producing cloth for the household. His account book remained consistent in format and handwriting from 1859 to 1885, even despite downturns in production when one might expect to find evidence in the account book for Campbell dabbling in other

¹⁷³ Ibid., 85.

¹⁷⁴ Ibid., 27.

¹⁷⁵ Ibid., 45.

¹⁷⁶ The Burnhams refer to Campbell's account book but did not carry out a complete study in Burnham and Burnham, *Keep Me Warm One Night* and Burnham, *The Comfortable Arts*.

ventures as his son William did when he became a railroad employee.¹⁷⁷ The study of his work as a weaver furthers our understanding of the lives of other Ontarian weavers: in terms of abilities, outputs, inputs and earnings. Campbell's account book presents historians with data which demonstrates that he adapted to the declining demand for hand-woven cloth by changing his production to primarily cloth for the household.

¹⁷⁷ Handloom weaver, Samuel Fry's account book contains a mixture of weaving orders and agricultural business. Samuel Fry's account book, Lincoln County, Ontario, 1843-1878, in the Royal Ontario Museum.

CHAPTER FOUR

CAMPBELL'S CUSTOMERS AND THE CONSUMPTION OF CLOTH

*The weaver, in common with all the rest of mankind,
shares in the blessings which flow from the invention of this art.*¹

Consumer behaviour toward hand-woven cloth changed in rural Middlesex over the twenty-six years of Campbell's account book. In Chapter Three, I examined how Campbell's production changed to meet the demands of the customer. In this chapter, I reveal that the source of the change was his customers' household production and purchasing habits. Regarded as an aggregated whole, Campbell's customers were primarily Scottish, Presbyterian, 52 to 66 years of age and from Lobo Township. Their consumer behaviour can be summarized in three main points: 1) they demonstrated a discerning attraction to a wide variety of cloth, 2) they shifted to purchasing higher priced fabrics for the household and 3) they delegated more of the pre-weaving production to Campbell. Just as I had considered the customer as the force behind Campbell's production, I wondered about the influences that might have affected his customers' purchases of hand-woven cloth. Although, just a humble handloom weaver's account book, I suggest that it is a lens which captured larger societal issues affecting rural society.

Campbell's customers comprised 1% of the population of Middlesex in 1871.² However, a much more substantial proportion appreciated hand-woven cloth, as revealed by the evidence for country customer weavers like Campbell in Schedule 6 of the 1871 census, and housewife weavers in Schedule 5.³ Campbell's producer/consumers were the perfect complement to his skills. Campbell's customers were textile producers in their own right, even housewife weavers,

¹ *Weaver's Magazine and Literary Companion*. Volume II, no. 7. Jan. 1819. Paisley, Scotland: John Neilson, 1819: 84.

² The population of Middlesex in 1871 was 82,595. *Census of Canada*. 1870-71. Volume I. Ottawa: 1873: 4-5. Campbell had 856 customers from Middlesex County. I explain how I arrived at this count in the methodology section of this chapter.

³ This number is further inflated by customers of other country customer weavers and housewife weavers to which a comprehensive study is needed.

purchasing a range of fabrics from plain to fancy cloth.⁴ Customers who did pre- and post-production for the cloth they purchased from Campbell gained access to textiles which were more refined than their own production capabilities and provided a decorative element to their homes. As 91% of Campbell's customers were from Middlesex County, the influence of textile purchases in neighbourhood clusters, families and in some cases over two generations contributed to a distinctive local aesthetic for garments and household textiles. Campbell's cloth had a quality that made him sought after in Middlesex County and seven other surrounding counties, even from customers as distant as 150 kilometres (Appendix 3.01).⁵

An entry in John Campbell's account book represented an interaction between producer and consumer, whether it was face-to-face or by written correspondence.⁶ Hidden within the thousands of entries are patterns of purchasing which I use to provide insight into the everyday needs and desires of the customers. And who were the customers? They were a diverse group composed of widows like Mrs. Fisher, who purchased 226 yards of cloth between 1859 and 1871; Dugald McMurphy, a customer who purchased cloth in 1860 and whose son began purchasing from Campbell in 1865, the same year he married; James Sherlock, an American-born sewing machine agent living in Oxford County, who purchased seven carpet coverlets between 1866 and 1883; and Alexander Johnson, a Scottish born farmer living in Lobo Township, who purchased 841 ½ yards of cloth over fourteen years and was either trading in

⁴ I will discuss Campbell's customers' declared cloth production from Schedule 5 of the 1871 census.

⁵ Appendix 3.01. Campbell had seven accounts from five customers who came from Windsor, Ontario. The ArcGIS software measure distances as the crow flies. This distances that I calculated are based on the location from the centre of the customers' township to the centre of Lobo Township, Campbell's location.

⁶ Although Campbell did not leave any evidence about how or where customer interaction took place, weaving manual writer Alexander Peddie provided an example of a visit from a country housewife to the weaver's shop. He explained that the weaver needed to be able to calculate the amount of cloth that could be woven from the material that she brought to the weaver. Peddie, *The Linen Manufacturer, Weaver and Warper's Assistant*, 457.

cloth or meeting the textile needs of his family almost entirely in hand woven.⁷

In this chapter, I use the account book as the voice of all interested parties, even the countless wives and daughters whose presence was underrepresented because purchases were recorded primarily by the head of the household. Beyond the surface of the 302 pages of the account book, 963 men and women have a submerged life as families and neighbours who appreciated hand-woven cloth perhaps for its durability, its appearance or the role that it played in their household economy. As discussed in Chapter Three, Campbell's customers were producer/consumers, and as such their role had two sides grounded in necessity and practicality. Campbell's fabrics were not fragile, luxury items, neither were they coarse and dreadful, but handsome, functional and suited to the life of a rural population.⁸ The hours spent spinning wool and sewing rags were not frivolous or joyous past-times, but work that had value – work that was part of the expected duties of a housewife.⁹ In attempting to understand the dual role of consumer/producers, I consider both the need for cloth with specific qualities and the need to produce for one's livelihood.

The patterns of purchasing that I followed in the account book explore the consumers: who they were, where they were located, what they bought, how they paid, how they used the

⁷ I based Duncan and Catherine McMurphy's date of marriage on the age of their eldest child, a five year old son in the 1871 census. *Ontario Census*. Year: 1871; Census Place: Lobo, Middlesex North, Ontario; Roll: C-9903; Page: 20; Family No: 72. As cloth was valuable and a necessity, cloth was traded as documented in account books. Cohen, *Women's Work, Markets and Economic Development in Nineteenth Century Ontario*, 67. Craig et al suggested that there was a need for 7 ½ yards of cloth per capita per year. Béatrice Craig, Judith Rygiel and Elizabeth Turcotte, "The Homespun Paradox: Market-Orientated Production of Cloth in Eastern Canada in the Nineteenth Century," *Agricultural History* 76, no. 1 (2002): 34. Johnson had seven individuals, including himself living in his household in 1861 and 1871. *Canada West Census*. Year: 1861; Census Place: Lobo, Middlesex, Canada West; Roll: C-1049-1050; Page: 18. *Ontario Census*. Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 33; Family No: 118, Line: 11.

⁸ Craig et al., "The Homespun Paradox: Market-Orientated Production of Cloth in Eastern Canada in the Nineteenth Century," 50. Traill, *Canadian Settlers Guide*, 247.

⁹ Judith Rygiel, "Thread in her hands, cash in her pockets: Women and Domestic Textile Production in 19th century New Brunswick," *Acadiensis* 30, no. 2 (Spring, 2001): 70. Inwood and Grant refer to the value in the form of carding, spinning and fulling that was added onto a yard of hand woven cloth. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 351. Cohen, *Women's Work, Markets and Economic Development in Nineteenth Century Ontario*, 87.

cloth and how they participated in the infrastructure of cloth production. Although there are many ways to categorize Campbell's customers, my research pointed me to three groups that reveal insights into rural society, economy and business. One of the three types of customers that I consider came from outside the boundaries of Middlesex and increased in numbers beginning in the late 1860s, perhaps indicating a sign of customer migration or even the beginnings of market saturation in Middlesex County of Campbell's textiles. The second group, women, only held 10% of the annual accounts in the twenty-six years of the account book, but they appear in increasing numbers beginning in the late-1860s, coinciding with the gradual decline of Campbell's productivity. His third customer group was men – consumers of their wives' household production and the weaver's textiles. I provide evidence for this highly unexpected customer by linking fathers and sons in the account book using the census. I suggest that men had the greatest investment in this form of household production and thus were unwitting agents in extending the tradition of textile household production.¹⁰ Pervasive amongst many of the customers was a relationship based on kinship and neighbourhood networks that assisted in expanding Campbell's business.

After defining the customer, I consider the important trends that their behaviour underwent. In the 1860s, the first decade of the account book, household involvement in pre- and post-weaving production was firmly in place.¹¹ Later, Campbell took on a greater role in

¹⁰ Pre- and post-weaving production of textiles was analogous to a housewife weaver's production with the exception of the loom. In an 1841 British report on handloom weavers, one weaver commented that handloom weaving in the home was important because, "it concentrates the family under one roof; gives to each member of it a common interest; leaves the children under the watchful eye of the parent; and the fate of one being the fate of all." *Reports from Commissioner*, page 38 in *Handloom Weavers*. Self-employed artisanal craftsmen recognized that preserving household production by wives and children was important to maintaining success and stability. In Joshua R. Greenberg, *Advocating the Man: Masculinity, Organized Labor, and the Household in New York, 1800-1840*. Columbia University Press, 2009: 25.

¹¹ I base this assertion on payments in the account book for weaving labour suggesting that his customers supplied the prepared fibre and then performed the finishing. Part of customer contribution involved tasks with reduced hands-on participation such as taking their wool to the carding mill, taking their wool cloth to a fulling mill and purchasing cotton for warp.

tasks previously the responsibility of his customers indicating a shift from a fully-involved producer/consumer to a less-involved producer. In addition to more services, the customer altered their purchases so that they purchased a higher proportion of cloth for the household, that is carpets and coverlets, beginning in the mid-1860s (Appendix 1.14). On the surface, Campbell's accounts are primarily with men, heads of the household. However, imbedded between the entries, the presence of women is perceived by the vital pre- and post-weaving tasks which made Campbell's business viable and gave women status in the household.¹² Purchasing large numbers of carpet coverlets was connected with men who had daughters in their teens and 20s and with young women, perhaps because they were treating the carpet coverlet as a commodity in which they added value with spinning and dyeing wool, sewing together the panels and then re-selling it.

Campbell was part of an infrastructure that suited his needs and provided him with a living. His customers' needs were larger than the mere acquisition of cloth. Consuming textiles provided opportunities for household production whether the end product was destined for the home or sold to someone else's home.¹³ Household production had a twofold effect on the economic and social life of its rural inhabitants by providing security and a measure of advancement for men and women.

¹² Neth argued that women earned respect in the household for their participation in work where their work could be witnessed in gender-integrated settings such as preparing meals for threshings. The production of textiles, which I argue was something promoted by men by the continued purchase of cloth from Campbell by the sons of customers, was 1) endorsed by men and 2) a tangible that was in constant use and view by all members of the family and indeed visitors to the house. Mary Neth, *Preserving the Family Farm: Women, Community and the Foundations of Agribusiness in the Midwest, 1900-1940* (Baltimore: Johns Hopkins University Press, 1995), 159.

¹³ Although I do not have proof that women were re-selling coverlets, as I discuss below, large purchases of coverlets beyond what I perceive were the needs of a family, suggest that these customers had a market for finished coverlets. The implications of this theory are that a portion of the customers of hand-woven textiles had no involvement in the production of the textile as was previously assumed in the literature, but were only consumers.

Methodology

To gain an understanding of the near to 2,000 names in the account book, I subjected the entries to a process of data cleaning based on completeness of information in the entry, standardization of spelling and whether the name could be located in another official source. Campbell recorded 1,918 names in the account book, using a maximum of four pieces of information which were present in many of the cases: title, given name, surname, location. For example: title: Mr.; given name: Jacob; surname: Fergusson; location: Lobo.¹⁴ In this section, I explain the methodology used to create a list of nonrepeating names.

A small percentage of entries, 9.3% out of the total 1,918 were not usable due to their incompleteness as recorded in the account book.¹⁵ In twenty-five entries, Campbell did not provide customer locations; in eleven entries, I could not locate the place-name in contemporary atlases, maps or directories from south-western Ontario.¹⁶ In seventeen entries Campbell recorded Mr. and only their surname; in one hundred and twenty-nine entries, he used Mrs. without a given name and in twenty-six entries, he used Miss without a given name making the linkage of those customers challenging.¹⁷

¹⁴ Some account books such as Joseph Siddall's carding and fulling account book also used occupation as an identifier. J. Siddall A/C book 1850-1854.

¹⁵ The entries with incomplete information equal 179. However, for the purposes of mapping customer locations, I used all complete locations, including locations with customers with incomplete names which equaled 1,893 entries. For studies which did not include locations such as the twelve year study of cloth types, incomplete customer information was not relevant as I was concerned with cloth purchases from aggregated customers.

¹⁶ Place-names I was not able to locate: Reper or Raper, two entries; Ettrick, two entries; Town Line, one entry; Maple Lodge, one entry; Glen Walker, one entry; Suspension Bridge, two entries and Magdala, two entries, totaling eleven.

¹⁷ In the case of Mr. McIntyre, Lobo, Campbell had five customers with the surname McIntyre from Lobo: Peter, Neil, John C., John and Malcolm. Ascertaining which McIntyre Campbell referred to as Mr. McIntyre is not possible and therefore Mr. McIntyre must remain detached from the other McIntyre customers. Some customers fell into two unusable categories, e.g., Mr. Peckham from Suspension Bridge was unusable because of the absence of a given name and an unknown place-name. All of the unusable categories were cross-referenced to eliminate placement in more than one category for my totals. In some cases, Campbell entered a name without a given name which could be linked with another entry which had the same title, surname and location, such as Miss Wilson, Byron and Miss Elizabeth Wilson, Byron, providing some evidence that this is the same individual or at least sisters from the same household.

The entries with complete information, that is, customers with given name, surname and a known location amounted to 1,739. These entries were reduced by conflating them with other account book entries with identical names and locations. The next step involved data cleaning of names that had variant spellings. While creating my master spreadsheet for the account book, I transcribed Campbell's exact spelling, but then added a standard spelling in square brackets that I used to link spelling variants, once I confirmed that they were indeed variants. I used official documents such as the census, marriage and death registrations to link variant spellings. For example, the surname 'Alway' appeared fifteen times in the account book and nine times as 'Allway.' After confirmation in the census it was clear that the two spellings were variants that could be combined.¹⁸

The familial connection between individuals with the same surname established the presence of rural networking and suggested an influence which families might exert in purchasing. To explain methodology, I used the Alway family, as they encompass many issues found in the data cleaning of Campbell's customers. I started by counting the number of accounts associated with each given name and surname, using the census closest to the date of

¹⁸ Three other surnames with spelling variations follow: 'Zavitz' appeared thirteen times spelled in three spelling variations: Zavitz, Zavits, and Zivits. 'Kilburn' appeared twenty-three times in four variations: Kilburn, Kilbourn, Kilburne and Kelburn. Another name that proved challenging because of the variant spellings was Campbell's entries for Norman Lamont, Norman Limont, Norman Laymon and Norman Lymon, who were all from Lobo Township. I located Norman Lymont in 1851, and Norman Lamont in the 1861, 1871 and 1881 census, all with similar data providing evidence that the three variant spellings in Campbell's account book were the same customer *Canada West Census*. Year: 1851; Census Place: Lobo, Middlesex County, Canada West (Ontario); Schedule: A; Roll: C_11737; Page: 11; Line: 10. *Canada West Census*. Year: 1861; Census Place: Lobo, Middlesex, Canada West; Roll: C-1049-1050; Page: 33. *Ontario Census*. Year: 1871; Census Place: Lobo, Middlesex North, Ontario; Roll: C-9903; Page: 9; Family No: 33. *Ontario Census*. Year: 1881; Census Place: Strathroy, Middlesex West, Ontario; Roll: C_13269; Page: 4; Family No: 18. Norman Lamont was of particular interest because he also raised nine sheep, produced 36 pounds of wool and 40 yards of wool cloth on this farm. Schedule 5, Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 9; Family No: 33, Line: 16. Norman Lamont's year of birth varies from 1851: 1799; 1861: 1797; 1871: 1794 and 1881: 1792. However, all Norman Lamont's are Baptist, married to Flora, also with a variety of birth dates ranging from 1804 to 1809, and with the same children.

purchase.¹⁹ In the 1861 census, I found three George Always in three households: George Alway, born 1800, the second was George Alway, born 1833 and the third was George Alway, born 1859.²⁰ In some cases, the use of censuses earlier than the date of purchase allowed me to determine the customer's parents.²¹ I merged George Alway, 1833 with George C. Alway using his marriage and death registry – Campbell recorded one account for George C. Alway. I located James Always, also a son of George Alway, born 1800 and brother of George C. Alway, born 1833 showing second generation and sibling purchasing. George Alway (1800) died in 1879, after which his wife, Mrs. Alway continued purchasing, providing evidence for a pattern observed in the account book, that widows persisted with hand-woven cloth after the death of their husbands. Therefore out of fifteen accounts, I reduced the names to three individuals: George Alway, George C. Alway and James Alway and established a two-generation purchasing pattern through the male line, a purchase by a widow and that all fifteen accounts came from the same two-generation family beginning in 1861 and ending in 1881. In the case of George Alway and George C. Alway, the additional middle initial revealed Campbell's regular and mostly reliable clue for separating the identity of similarly named customers in the account book.²²

Some repeat names such as George Fonger were differentiated by place name. One George Fonger was from Westminster Township, one from Delaware Township and the third

¹⁹ There were two purchases for a Mr. Alway, Lobo, nine for George Alway, Lobo, one for George C. Alway, one for James Alway and two for Mrs. George Alway, Lobo. The first date of purchase for Mr. Alway, Lobo was 1861.

²⁰ Some possibilities can be eliminated by evaluating whether their age is appropriate: clearly the two-year old George Alway found in the census was not purchasing cloth.

²¹ I consulted the 1851 census and determined that George Alway, born 1833 was the son of George Alway, born 1800. George Alway, born 1859 was the son of Thomas R. Alway who was the next household on the census page after George Alway, 1800, suggesting a relationship.

²² As in the case of the George C. Alway, John B. Campbell from Lobo and John D. Campbell, also from Lobo are kept distinct by their middle initials in the account book. In the case of Campbell's many Campbell customers, he had four customers with the first name John who lived in Lobo. Campbell separated them with the use of the initial of their middle name and by using the name of their village. This pattern can be seen in several examples such as two customers, both from Mount Brydges, Caradoc Township which Campbell differentiates by recording them as J.D. Bateman and John C. Bateman.

from Kilworth, Delaware Township. In this case, Campbell could be distinguishing between two people with the same name living in different parts of the same township or he could be recording a customer with two place-name variations. Using the census, I established that there was only one George Fonger in Delaware, and thus the Kilworth and Delaware entries were combined as one person.

From the total 1,918 names, I determined which names were repeated due to multiple orders and I created a list of 963 names which form the basis of my analysis. These 963 customers made 3,060 orders which equalled \$10,013.93 in sales over twenty-six years.²³ Campbell's 963 customers purchased just under 54,000 yards of cloth which equalled about 2,000 yards per year (Appendix 1.09).²⁴ On average, per person, Campbell's 963 customers consumed 56 yards of cloth per customer over 26 years. Comparing this amount to yearly cloth requirements per person, suggested by other scholars, 56 yards per person would provide an individual with 7 ½ years of one's cloth needs.²⁵

The Customers

Who were these people, 1% of the Middlesex population, who purchased hand-woven cloth from John Campbell and participated in household production? To begin, I present a broad representation of Campbell's customers by using aggregated numbers from the account book combined with evidence from official documentation. This guided my analysis about customer motivations for purchasing cloth from Campbell.

²³ I arrived at this total by counting the individual orders and adding the orders in the account book.

²⁴ I averaged yards produced and dollars earned in Appendix 1.09. I also did an exact count of dollars earned by adding all orders.

²⁵ Craig et al estimated that 7 ½ yards of cloth were required annually per capita. Craig et al., "The Homespun Paradox: Market-Orientated Production of Cloth in Eastern Canada in the Nineteenth Century," 34.

A consistent piece of information Campbell included about his customers was their location. In over 98% of the annual accounts, Campbell recorded the customer's location, in some cases, providing the village or town that they lived in or close by, in others just the township.²⁶ In this inquiry about location, I counted the number of purchases which emanated from townships and then counties, without conflating repeat purchases.²⁷ Campbell attracted customers from eight counties in total. Understandably, 91% of his orders came from Middlesex County and radiated out to the other seven adjacent counties. Within Middlesex County, Lobo Township was the location of close to half of his orders at 46%. His Lobo Township orders were also pronounced overall as they comprised 42% of orders out of all eight counties (Appendix 3.01).

Campbell's first two years of business came exclusively from Middlesex customers (Appendix 3.03). In 1861, he had his first order from outside of Middlesex, in Southwold Township, Elgin County, about 48 kilometres south of Lobo Township, on April 25, 1861 from Archibald Brown. Brown returned to Campbell two weeks later when he ordered two carpet coverlets. Less than a week later, another customer from Southwold Township, Mr. McCormick ordered two carpet coverlets. Brown and McCormick share the same date of final payment on June 7, 1861, suggesting that they and Campbell coordinated their pick-up. There is an increase in customers from the seven other counties in particular in 1869, 1871, 1875 and 1880 (Appendix 1.28, 3.04 and 3.05). This increase might be due to market saturation in Middlesex

²⁶ I excluded the 25 entries without any location but retained the 11 locations which I was not able to locate on a map leaving 1,893 entries with locations. I used townships as they were the most consistent place reference. As such, if Campbell provided a specific location, such as Komoka, I changed the location to the less specific Lobo Township. In this way, I was able to include all entries with the exception of the entries deemed unusable in the methodology section.

²⁷ Because repeat customers made orders in varying quantities in the account book, they would become a variable which would skew location totals.

and/or connections that residents of Middlesex had with residents of other counties perhaps due to migration.

From the 963 list of nonrepeating names from the account book, I separated 290 customers who made two or more purchases, who I refer to as repeat customers. In total Campbell's repeat customers held 955 annual accounts out of a total of 1,918. Campbell organized cloth orders for approximately one calendar year under one heading, containing the customer's name and location, referred to as an annual account. His 290 repeat customers made 2,097 orders averaging 7.2 orders per customer. Although Campbell's 290 repeat customers may seem insignificant as they only comprised 30% of his customers, they were responsible for 50% of his annual accounts or 69% of the individual orders.²⁸

Repeat customers made a variety of purchases. For example, repeat customer, Alexander Johnson, who had a long-term relationship with Campbell, purchased 841 ½ yards of cloth primarily for garments over fourteen years, suggesting that he and his family of seven children, wore hand woven cloth. Johnson also purchased four carpet coverlets in 1869, but the rest of his household cloth purchases were for the more utilitarian bordered blankets and sheeting (Appendix 1.29).²⁹

It was through the process of linking the repeat customers to the census that I discovered kinship and proximal connections between customers. Several surnames from the nonrepeating list of names were prevalent including forty-one Campbells; twenty-two McKellers and twenty-one McIntyres. Although I do not suggest that all of these customers are related, many of the

²⁸ An order refers to a single purchase of cloth, not to be confused with an annual account which is comprised of several orders over the course of the year.

²⁹ In 1871, Johnson's daughter Elizabeth, born in 1846, is no longer living in the Johnson household. I was not able to track her whereabouts, but the four carpet coverlets might have been purchased on her behalf.

customers I researched using official documentation had links which suggest the presence of networks which might have motivated customers to choose Campbell's cloth. Perhaps neighbours or relatives saw Campbell's textiles when they made social calls and wanted to purchase similar items for their homes. Benefits could be had by purchasing within a network such as sharing transportation and fibre resources. Customer loyalty was valued in a rural economy where maintaining social relationships was important.³⁰ Kinship networks suggest a collective sense of identity within families. I would argue that in this system, where identity was based on the collective not the individual, purchases by the adult children of a customer might have been the norm, which was an advantage to Campbell.³¹ Campbell's business with a family, in some cases, lasted as long as the account book because the purchases made by the surviving family members carried on after the initial customer was deceased.

Campbell's customers also demonstrated networking in their appearance in the account book in location clusters. In August and September of 1859, Campbell's first seven entries for full cloth total 169 yards and all originated from Lobo Township, perhaps representing orders which could be combined into two warps. He took four orders in October, 1859 for 91 yards of full cloth from customers from Delaware Township. Not in every case, but in a few, customers with similar locations appear consecutively in the account book. William Buttery from Adelaide Township made an order on November 5 for 22 yards of full cloth. Ten days later, Sam Stevens, Ben Stevens, John Ogden and Ben Woodhull, all from Adelaide, made orders for full cloth within one week of each other, however all with very different final payment dates. The

³⁰ Craig described customers who conducted business in a manner which enhanced social relationships as utility maximizers while customers who transacted business primarily for capital gains as profit maximizers. Craig, *Backwood Consumers and Homespun Capitalists*, 18.

³¹ David Danborn suggested that in rural America individuality was suppressed by a code of norms imposed by social exclusion of those who did not conform. Danborn, *Born in the Country*, 91.

collective order from Adelaide Township equalled 106 ¼ yards, perhaps implying that the orders could have been brought to Campbell and then later picked up and paid for in a coordinated effort.³²

To further delineate Campbell's customers, I chose sixty names from the account book with reliable information that could be linked to the census. I found that the majority of these sixty customers were either born in Scotland or born elsewhere and claimed Scottish ethnic origin in the census, 52% of the total. This is especially interesting as only 24% of the population of Middlesex were of Scottish background, signifying that the ratio of Campbell's Scottish customers to Scottish inhabitants of Middlesex County was 220:100 (Appendix 1.30).³³ German customers' purchases also showed a higher representation than their population. German customers comprised 12% of the orders, while they only comprised 4% of the Middlesex population or a ratio of 300:100. The Welsh population of Middlesex County was small, less than 1% and made 3% of the purchases in this sample.³⁴ The English customers' purchases most closely matched their numbers in the Middlesex population at a ratio of 76:100. The ethnic group who had the fewest purchases in comparison to their presence in Middlesex was the Irish who comprised 29% of the Middlesex population, but only made 8% of the purchases from this sample. These totals suggest that pre- and post- weaving household production held an important place within these ethnicities, particularly in the case of the Scottish and German population. A consideration which might have decreased the acquisition of Campbell's cloth was how household production was conducted in various ethnic groups. For example, the lack

³² These quantities might suggest the actual size of Campbell's warping mill or frame.

³³ My findings for Appendix 1.30 and 1.31 are derived from the online searchable database for the 1881 census found in the Library and Archives Canada website, <http://www.collectionscanada.gc.ca/databases/census-1881/index-e.html>. I used the fields for ethnicity, country of birth and religion to arrive at the totals.

³⁴ A larger sample would be necessary to determine whether this was reflected in the account book.

of Irish customers in the account book, but large proportion of Irish weavers in Schedules 1 and 6, might suggest that the Irish maintained not just pre- and post-weaving, but also weaving in their household production (Appendix 1.16).³⁵ I suggest that the Scottish and German customers were strong participants in pre- and post-weaving production, while the Irish still maintained housewife weaving, alluding to their decreased representation in this sample. Only further study will clarify this assertion.

Campbell's customers were also primarily Presbyterian and Methodist (Appendix 1.31).³⁶ An examination of population totals for Presbyterians and Methodists within Middlesex reveals a lower percentage of Presbyterians at 28% than Methodists at 38%.³⁷ In the account book, Presbyterians purchased at a higher rate than their Middlesex population at a ratio of 12:10, while the Methodists purchased at a rate of 7:10 of the Middlesex population. Members of other denominations who purchased at a higher ratio than their population were from the following churches: Baptist, Free Church of Scotland, Church of Scotland, Lutheran, Disciple and Mennonite. Customers from denominations with a larger representation in the population of Middlesex than in the account book were Baptist and Church of England. I suggest that the division in representation by religious denomination correlates with ethnicity as Campbell's largest ethnic group of customers were Scottish who primarily would have attended Presbyterian, Free Church of Scotland and Church of Scotland churches.

Examining the ages of customers from the sample revealed that the largest consumers of textiles were parents of young adults (Appendix 1.23). The largest proportion of textile

³⁵ 20% of the Schedule 1 weavers in 1871 were born in Ireland; 18.6% were born in England; 37.2% were born in Scotland; 1.7% were born in the U.S.; 1.7% were born in Wales and 18.6% born in Ontario. A closer examination of Ontario born weavers' ethnicity would increase these findings.

³⁶ Although the census recorded denominations in a variety of ways, for example, C. Presbyterian, Can. Presbyterian and Presbyterian, I combined the sub-divisions into one category, Presbyterian.

³⁷ These percentages are derived from the nine denominations that I sampled, not other denominations that were recorded in the census.

consumers were born between 1806 and 1820, signifying that they would have been between 52 and 66 years old during the median year of the account book, 1872.³⁸ The second highest age group was born between 1836 and 1850. These customers would have been between 22 and 36 during the median year of the account book. Increased consumption by the 52 to 66 year olds suggests that parents might have been assisting their offspring. The second group, the 22 to 36 year olds, embodies the group who were purchasing to establish their own households.

Next I considered the gender representation in the account book. I discovered that 90% of cloth in yards was ordered by men (Appendix 1.32). In nineteenth-century Canada, this imbalance is in keeping with societal practices for many reasons, legal and customary, and unfortunately, obfuscates the decision-making process that might have existed in the household.³⁹ As I discuss later, evidence suggests that men promoted the continuation of pre- and post-weaving household production, but once that production was in place, textiles were the responsibility of women. Was the purchase of textiles guided by the wife, but carried out by her husband due to his freedom to travel into town? In most cases, women only had accounts with Campbell when they were widows. However, in a few cases, women had accounts with Campbell while their husbands were still alive.⁴⁰ For this reason, I do not believe that Campbell was reluctant to make an account under a woman's name, and I propose that Campbell recorded

³⁸ Customers ages are based on the most consistent results from the censuses as dates of birth as recorded in the census can fluctuate between a few years. Because Campbell's customers purchased over twenty-six years, I chose the median year, 1872 as the year to assign an age for the age range categories. I chose the earliest, 1791 and latest date of birth, 1865 for the range and then grouped the categories into 5, 14 year intervals: 1791-1805; 1806-1820; 1821-1835; 1836-1850 and 1851-1865.

³⁹ Nineteenth-century common law contained a principle referred to as coverture which delegated a wife's legal rights to her husband. Danborn, *Born in the Country*, 88.

⁴⁰ Mrs. Mary McMurphy appeared in the account book in 1875 after her husband Dugald McMurphy died between 1861 and 1871. *Ontario Census*. Year: 1871; Census Place: Caradoc, Middlesex West, Ontario; Roll: C-9901; Page: 13; Family No: 47. Mrs. Mariah Woodhull first appeared in the account book in 1869 after her husband John Woodhull died between 1861 and 1871. Year: 1871; Census Place: Delaware, Middlesex West, Ontario; Roll: C-9902; Page: 62; Family No: 228. Mrs. Ulrick of Kilworth had two accounts, followed by one account by her husband, Mr. Ulrick of Kilworth. Mrs. McArthur, Lobo and Colin McArthur, Lobo had simultaneous accounts. Mrs. Armstrong, Komoka had an account followed by Mr. Armstrong, Komoka.

the name of the individual who was present in the workshop making the order, indicating that men had greater physical mobility.⁴¹ I am not inclined to believe that Campbell would have recorded the name of the head of the household, if his wife had travelled into Komoka to make the order. Furthermore, I believe that the rare presence of women in the account book suggests that Campbell was not travelling to his customers, or else the presence of women in the account book would have been greater.

Unmarried female customers, as I discuss in further detail below, do appear in the accounts. Their numbers, however might be underrepresented as some men with daughters held accounts with Campbell and these fathers might have purchased for their daughter's benefit when passing through Komoka. I would argue that there is a hidden presence of unmarried and newly married women as represented by purchases made by heads of households with daughters and young wives.

Despite the large representation of accounts by men, there was a trend toward more frequent accounts by women beginning in 1867 (Appendix 1.33). Purchases by men are on a moderate decline while purchases by women increased. This could be due to Campbell's customers aging and the presence of more widows, but it is also the presence of young, single women who appeared in increasing numbers after 1867. Although men comprise a greater portion of the accounts, the presence of women is made clear behind the scenes in their participation in household production necessary for Campbell's business.

⁴¹ Although this may have not been the accounting practice of Campbell, some account books indicate the account holder's name and who conducted the business. In Hugh McRae's account book, when the account holder did not conduct the business at the store, their name was recorded with a notation which identified the person who made the purchase. For example, there are cases where the account was in a woman's name and with a notation that her husband made the transaction. For example, on December 2, 1864, McRae recorded a purchase from John Allan for wife. Account Books of Hugh McRae, Merchant and Postmaster, Strathburn, Ekfrid Township, B4068,X1668-73, 1854-1866, University of Western Ontario Archives.

Case Studies

In this section, I examine case studies of Campbell's customers to attempt to discern motivations for purchasing hand-woven cloth and participating in household production. Many repeat customers were related by kinship (siblings, spouses, offspring) and proximity. Families who made purchases over two generations raise questions about the transmission of skills, textile equipment, habits and a way of life which retained the household production of textiles.⁴² The selection of specific fabrics and the quantity in which they are purchased not only suggest the end-product, but also whether the cloth is intended for home use or to be re-sold. Although I lack corroboration from other sources, I believe that customers who ordered large quantities of plain cloth and flannel purchased for their personal use while customers who ordered large quantities of Campbell's highest priced cloth purchased to re-sell with the added value of their production included.

Purchases by Women

Within the household, married women balanced their roles of raising, feeding, clothing their families with small-scale participation in the local economy which provided insurance amidst the capricious external market.⁴³ Unmarried women, many of them without opportunities to participate in the external market had an even more delicate role to fill within the household with even less equality to the head of the household than a married woman. In rare cases unmarried and widowed women held the responsibility of head of the household themselves.⁴⁴ The desire to participate in the market is noted by single women's eagerness to perform nonfarm

⁴² Using probate wills in Middlesex County might provide confirmation regarding textile equipment.

⁴³ Cohen, *Women's Work, Markets and Economic Development in Nineteenth Century Ontario*, 119. Crowley, "Rural Labour," 72.

⁴⁴ Campbell's daughter Janet is listed as the head of the household in 1911 when she lived in the family house in Komoka with her brother. *Census of Canada*. Year: 1911; Census Place: Lobo, Middlesex North, Ontario. Page 4, Family No: 49.

related work such as spinning to attain some financial independence from their parents.⁴⁵ They also engaged in waged labour and shifted to a more lucrative form of home production than textiles as soon as the opportunity arose.⁴⁶

The textiles that women were most willing to work with as household producers were Campbell's most expensive textiles, the carpet coverlet and the wool carpet (Appendix 1.34).⁴⁷ Because of the figured designs, the carpet coverlet was something that a woman could not produce on her own simple household production loom. The warp-faced wool floor carpet, sometimes referred to as Venetian, needed to be woven on a very sturdy loom requiring a great amount of physical strength making them also unsuitable for the housewife weaver.⁴⁸ Housewife weavers might have allocated some of the textile-related workload to other family members in the household. The housewife weaver with an eye on simplicity and efficiency would avoid warping multiple colours, complex threading, unusual treadling and handling multiple shuttles so that the skill required would accommodate the least-skilled worker weaving on the loom. This type of production would have stayed away from plaid, check and stripe in twill which might have been beyond some of her junior weavers' comfort level. Every layer of complexity added

⁴⁵ Mohanty, *Labor and Laborers of the Loom*, 110.

⁴⁶ Cohen, *Women's Work, Markets and Economic Development in Nineteenth Century Ontario*, 120. Baskerville argued that because young rural women lacked financial and social opportunities on their family farms, they moved in higher proportions than men to urban areas to seek opportunities. Peter Baskerville, "If ye want girls on the farm, ye must be after making the farm more attractive:" Rural Middle Class formation and Women's status in Ontario, Canada, 1869-1930." Unpublished paper (used with permission by author) presented to: Historical Inequality and Mobility: New Perspectives in the Digital Era, Workshop held May 25 to 27, 2012 at the University of Guelph, Ontario: 25.

⁴⁷ In Appendix 1.34, I converted the yards ordered in the account book into ratios. Women's purchases were given a consistent value of 1. Plaid and full cloth and sheeting have the lowest proportion of female purchases while carpet coverlets, carpets and plain cloth have the highest proportion of female purchases.

⁴⁸ I base my identification of wool carpets in the account book on a photograph of a warp-faced, striped wool carpet in the Royal Ontario Museum, Ontario Textile Records, OT 49.121. This type of carpet is very densely packed requiring a loom with sturdy beams, including a heavily weighted beater to beat the weft in place. The structure of this carpet is plain weave with closely spaced warps, hence the term, warp-faced. A good deal of lower body strength is required to lift the harnesses because of the densely spaced warps. When weaving a row, half of the warp threads are picked up at one time, while the other half stay down the reason for the difficulty in lifting the harnesses with the treadles. Also, the warp which is made out of wool has a tendency to stick together making it necessary to frequently clear the shed with a weaving sword, requiring upper body strength. The upper and lower body strength required to weave this type of carpet would make it too difficult to be woven by a housewife weaver.

time and potential problems onto a cloth that protected the wearer from the elements whether complex or simple.

I have discussed Campbell's carpet coverlets in every chapter in this thesis due to their importance, technically, decoratively, financially and perhaps socially (Appendix 1.26).⁴⁹ These textiles are of particular interest to the historian because of their uniqueness within handloom weaving production. Coverlets with figured designs were produced in Canada and America in great quantities as seen in the material record, and in Campbell's account book, which can be used as a model for a carpet coverlet weaver's production. In the U.S., the period of production of figured coverlets began in the 1820s and ended around the time of the Civil War.⁵⁰ In Canada the period started in the 1830s and extended to 1910.⁵¹ The figured patterns created by the punch cards reflect the decorative arts of the nineteenth century.⁵² Campbell's four patterns (Rose and Stars, Tulip, Single Rose and Love Knot) display flora and fauna which were comparable to contemporary patterns on dish sets, wallpaper and printed textiles.⁵³ The ability to own textiles with recognizable designs must have been like a breath of fresh air to people accustomed to blankets and coverlets that were composed of checks, plaids, stripes and geometric patterns or had no design at all. Even early quilts, initially made from wholecloth, followed by patchwork

⁴⁹ The graph in Appendix 1.26 shows the profitability of producing carpet coverlets in comparison to all other textiles. In my opinion, once the carpet coverlet loom is set up, the coverlets are considerably less complicated to weave than a single coverlet which is woven on four harnesses, but using six treadles in a variety of combinations. Campbell was most likely able to receive the much higher price for the carpet coverlets because of the rarity in their production and their aesthetic appeal.

⁵⁰ Anderson, *American Coverlets and Their Weavers*, xii-xiii. Goody, *Woven History: The Technology and Innovation of Long Island Coverlets*, 11.

⁵¹ Burnham and Burnham, *Keep Me Warm One Night*, 329 & 377.

⁵² See Chapter Three for my discussion of the coverlet name, Love Knot. The Burnhams claimed that Campbell named the coverlet patterns from evidence found in the account book. However, this is untrue as Campbell only used the term, 'Carpet Coverlet.' On small slips of paper, found in a pocket at the back of the account book, Campbell identifies five patterns: Rose and Stars, Tulip, Single Rose, Love Not [sic] and Noah's Ark. See Appendix 2.07 which shows the slips of paper from the back of Campbell's account book.

⁵³ The Burnhams referred to the designs on some figured coverlets as coming from: "the general repertory of northern European folk art, and are found on ceramics, painted chests and furniture," (page 329); designs found in Scottish ingrain carpets, (page 367); and designs similar to contemporary wallpaper designs, (page 375). Burnham and Burnham, *Keep Me Warm One Night*.

quilts of worn-out hand woven flannel or sheeting, had geometric designs.⁵⁴ With the introduction of printed cloth and the use of the highly decorative appliqué technique, quilts also adopted figured designs like the woven coverlet.⁵⁵ If a woman wanted the most decorative and fashionable textile to decorate her farmhouse, it was the carpet coverlet.

Figured heads programmed with punch cards and other parallel technologies increased the speed of this type of textile production that had been previously produced on draw looms and exclusively accessible to the rich.⁵⁶ Campbell's presence in Middlesex provided the opportunity for customers such as Charles H. Edwards to purchase the Tulip (Appendix 2.11 and Appendix 2.07) coverlet and Mr. Shipley to purchase the Love Knot (Appendix 2.10 and Appendix 2.07) coverlet – bed coverings with recognizable motifs that added a sense of style and beauty to the rural house.

In museum collections, a very common nineteenth-century textile is the coverlet, whether figured or single.⁵⁷ The quantity of these textiles in the material record points to both their popularity and the manner in which they were maintained and passed down from generation to generation. Campbell produced 1,265 carpet coverlets and 114 single coverlets from the account book, the equivalent of 6,895 yards of cloth or 13% of the total (Appendix 1.14 and 1.19).⁵⁸ The value that customers placed on John Campbell's coverlets can be suggested by the condition and prevalence of these coverlets in public and private collections. Many of the Campbell coverlets

⁵⁴ A wholecloth quilt was made with two layers of cloth with batting in the centre. Ruth McKendry, *Quilts and other Bed Coverings in the Canadian Tradition*. Toronto, New York, Cincinnati, London, Melbourne: Van Nostrand Reinhold Ltd., 1972: 80 and 85.

⁵⁵ McKendry provides images of appliqué quilts but does not provide dates when this style of quilt became popular. I wonder whether the graphic, all-over design of the appliqué quilt coincided with the availability of carpet coverlets after the 1830s. *Ibid.*, 93-94.

⁵⁶ See Chapter Three for a discussion of figured mechanisms. The use of looms that used punch card technology as with Lightbody's mechanism and Jacquard's sped up weaving of patterned textiles making them more accessible to a wider demographic. Tuchscherer, "Woven Textiles," 39.

⁵⁷ For a complete representation of the various kinds of coverlets produced in nineteenth century Canada, including: 'Summer and Winter' and 'Point Twill,' see Burnham and Burnham, *Keep Me Warm One Night*. Burnham, *The Comfortable Arts*.

⁵⁸ I calculated the coverlet's length based on the average size of a John Campbell coverlet in *Keep Me Warm*, that each two-panel coverlet was 5 yards in total, 2 ½ yards per panel.

that I have seen are in very good condition; indeed some are pristine although many have slight wear, especially on the top edge as if they were used and enjoyed, but not worn to shreds. Common wear patterns on the top edge conjure an image of the owners tugging on the coverlet to keep themselves snug and warm. Their condition suggests that they were purchased for display on the bed and gently used.

To bring women into the discussion about carpet coverlets and other fabrics produced by Campbell, I made some observations about their purchases based on accounts in women's names (Appendix 1.34). Unfortunately, using women's annual accounts as a measure of their purchasing contains flaws, because it suggests that women's annual accounts are a better reflection of a woman's choices than men's annual accounts, which were most likely overseen by wives and daughters. Despite the apparent imbalance and flaws inherent in the use of annual accounts, the graph in Appendix 1.33 demonstrates that as men's purchases decreased, women's increased indicating that women were becoming at least more mobile and making the trip to the weaver's shop.

The account book shows that 14% of all purchases of coverlets came from women, a constant throughout the account book. These purchases suggest that women recognized the value of the carpet coverlet since their first appearance in 1860. The majority of the time, women bought coverlets at the three lowest rates per coverlet: \$2.25, \$2.50 and \$2.75. In seven cases, they bought coverlets at \$3.00 but never at \$3.50, the highest rate. Out of 67 women customers, 34 women only purchased carpet coverlets and no other woven cloth. Twenty-one of the accounts were for unmarried women with the title 'Miss.' Thirty-eight had the title 'Mrs.' leaving 116 without a title. I have not confirmed the marital status of this group of 116, but I suggest that the absence of a title is most likely an indication of single status indicating that

young women wanted carpet coverlets perhaps for themselves or perhaps to generate extra money by re-selling the finished product. In some cases they may have been preparing for marriage.

When analyzing Campbell's customers for carpet coverlets a few high volume customers emerged. Out of the 499 accounts containing 1,265 coverlets, 57 customers bought two or more coverlets. The top buyer of carpet coverlets was Anthony C. Hughes, a farmer living in Ilderton, London Township, who purchased twenty-one coverlets within two years (1884 and 1885) and two purchases.⁵⁹ Hughes' knowledge of Campbell's textiles might have originated from neighbour, George Patrick also from Ilderton, concession XI, lot 22, who purchased six carpet coverlets in 1883, perhaps influencing his neighbour at concession XI, lot 21, who purchased one year later.⁶⁰ The Hughes' had a close connection with textile production. In 1871, they had 27 sheep, produced 175 pounds of wool and wove 436 yards of flannel.⁶¹ The Hughes' clearly surpassed the 7 ½ yard per capita requirement for cloth with 436 yards of flannel.⁶² Their purchase of twenty-one coverlets also indicates an excessive quantity of carpet coverlets for a family of four.

Hughes was married with four daughters and a son.⁶³ Why Hughes purchased twenty-one coverlets is a mystery. Most customers of coverlets purchased 2 ½ coverlets on average – twenty-one is a large number for one family, making me suspicious that Hughes, or perhaps

⁵⁹ Year: 1871; Census Place: London, Middlesex East, Ontario; Roll: C-9905; Page: 41; Family No: 133, Line: 9.

Year: 1881; Census Place: London, Middlesex East, Ontario; Roll: C-13268; Page: 14; Family No: 58. Year: 1891; Census Place: London, Middlesex East, Ontario; Roll: T-6352; Family No: 148.

⁶⁰ The lapse of one year between George Patrick's purchase and Anthony Hughes' purchase is interesting as it would take approximately one year for the women in Hughes' family to spin enough wool for ten coverlets. Page, *Illustrated Historical Atlas of the County of Middlesex*.

⁶¹ Schedule 6, page: 7 of the 1871 London, Middlesex East, Ontario Roll: C-9905. Schedule 1, Year: 1871; Census Place: London, Middlesex East, Ontario; Roll: C-9905; Page: 41; Family No: 133, Line: 9.

⁶² Craig et al., "The Homespun Paradox: Market-Orientated Production of Cloth in Eastern Canada in the Nineteenth Century," 34.

⁶³ In 1881, his son and one of his daughters were married and living in their own households. Year: 1881; Census Place: London, Middlesex East, Ontario; Roll: C-13268; Page: 14; Family No: 58.

more specifically, the Hughes' women spun and dyed the wool, finished the coverlets and re-sold them. In 1884, the date of his first purchase, his wife, Mary Ann, was 65 and he had two daughters living in the household: Ellenor Jane who was 27 years old and Mary Ann who was 23.⁶⁴ Hughes had a married daughter, Rachele who was 32 and without children, and a daughter-in-law Margaret Jane who was 26, both of whom might have shared in the household production of the coverlets, considering the large quantity purchased by Hughes.⁶⁵

Hughes made his first order February 27, 1884 for ten coverlets. Curiously, his final payment was two days later, February 29. Using the calculations for time required to weave a coverlet in Chapter Three, Campbell could not have completed the order in two days.⁶⁶ I speculated whether Campbell might have given Hughes coverlets produced for other customers who had not claimed their coverlets yet. I consulted the account book and found that earlier orders for carpet coverlets in the account book had a final date before Hughes' order, indicating that orders for other customers were already claimed and that Hughes had simply pre-paid for his coverlets and then received them after the date of final payment.

The second highest customer of carpet coverlets was Miss Margaret L. Shipley.⁶⁷ Miss Shipley made her first order in August of 1870 for eight carpet coverlets and four single coverlets. In 1871, the Shipleys declared two sheep and 50 pounds of wool and they produced

⁶⁴ Ellenor married in 1887: Archives of Ontario; Series: MS932; Reel: 57. Mary Ann married around 1891: Year: 1901; Census Place: London, Middlesex (east/est), Ontario; Page: 9; Family No: 100.

⁶⁵ In 1881, Rachele who had been married to Joseph Needham for nine years and living in Nissouri West, did not have any children. Year: 1881; Census Place: Nissouri West, Middlesex East, Ontario; Roll: C_13269; Page: 25; Family No: 108.

⁶⁶ Each coverlet would take approximately fourteen hours just for weaving. Ten coverlets would require 140 hours of weaving making it impossible for Campbell to produce ten coverlets even if he had all three days to work despite the fact that weavers were accustomed to working long hours, 16 or 18 hours when work needed to get done in a rush. *Reports from Commissioner*, page 15 in Hand-loom Weavers.

⁶⁷ In 1871, Margaret L.'s father Lionel Shipley, his wife, Ann, two children with different surnames (perhaps adopted children), an elderly man with the same surname as wife Ann's maiden name, Dodd and Margaret L. lived on 98 acres, concession XI, lot 21 in Lobo Township, close to the village of Greystead. Ann (Dodd) Shipley's maiden name is on her death registration in 1873. Archives of Ontario; Series: MS935; Reel: 5.

300 pounds of butter, work associated with women's household production.⁶⁸ In 1875, Margaret L. made an order of five carpet coverlets.⁶⁹ In 1866, Campbell received an order from Mr. Shipley of Lobo for three carpet coverlets.⁷⁰ Margaret L. would have been twenty-one years old in 1866, and possibly responsible for the purchases made by her father and therefore could have purchased sixteen carpet coverlets and four single coverlets. Another potential purchase for the Shipleys comes from the slips of paper at the back of the account book.⁷¹ The slip of paper headed with Shipley contains three single coverlets, two Noah's Ark and one Love Knot (Appendix 2.07).⁷² As with the purchases by Anthony C. Hughes, one wonders about the motivation for purchasing so many coverlets. As Margaret's family in 1871 was fairly small, was she spinning wool for coverlets to then re-sell the finished product to her own customers?

Campbell's third largest customer for carpet coverlets was Neil Ross, Brucefield, Tuckersmith Township, Huron County.⁷³ In addition to purchasing a large number of coverlets – twelve (seven in 1877 and five in 1880) he was responsible for two of the 5% of annual accounts outside of Middlesex County (Appendix 3.01). The Ross' kept 24 sheep, produced 70

⁶⁸ L. Shipley is in the 1851 census at concession XI, lot 22 had 195 acres of land listed with twenty-nine sheep Year: 1851; Census Place: Lobo, Middlesex County, Canada West (Ontario); Schedule: B; Roll: C_11737; Page: 113; Line: 20. Year: 1871; Census Place: Lobo, Middlesex North, Ontario; Roll: C-9903; Page: 31; Family No: 109.

⁶⁹ Campbell recorded Margaret Shipley as living in East Williams, however, when searching for Margaret Shipley in the census, I found Shipley's in Williams East Township but no single females by the name of Margaret – indeed all of the single females in Shipley households in Williams East were less than eight years old. I found a Margaret Shipley, born in 1845 living in Lobo in 1871. Year: 1871; Census Place: Lobo, Middlesex North, Ontario; Roll: C-9903; Page: 31; Family No: 109. Interestingly, I located a Margaret L. Shipley as was recorded in Campbell's account book with the middle initial L., with same date of birth and parents, marrying William Beverly Robson in 1879, providing some corroborating evidence that Campbell's East Williams Shipley is the same person who appeared in the 1871 census from Lobo. Archives of Ontario; Series: MS932; Reel: 30.

⁷⁰ Mr. Shipley purchased three coverlets with names, which contradicts the theory that bulk purchasers did not personalize their coverlets.

⁷¹ As discussed above, these slips of paper are of particular interest because they contain the only evidence for the names of the coverlets.

⁷² It is interesting that this order does not appear to be in the account book meaning that it was either not filled or it dates to before or after the dates of the account book. I speculated in Chapter Three whether Noah's Ark is a fifth pattern that has not been discovered or attributed to Campbell. At any rate, Love Knot and Noah's Ark could be potentially three more coverlets that could be attributed to the Shipley's.

⁷³ Year: 1871; Census Place: Tuckersmith, Huron South, Div.: 2, Ontario; Roll: C-9929; Page: 30; Family No: 89, Line: 14.

pounds of wool and wove 15 yards of linen.⁷⁴ The Ross' had a connection to Middlesex County through Mrs. Margaret Ross who was born there.⁷⁵ In 1877 the first year that Ross bought coverlets, his wife Margaret was 65 and they had five single daughters: Margaret who was 36; Caroline who was 34; Racheal who was 29; Jane who was 25 and Eliza who was 22.⁷⁶ Perhaps the purchase of these decorative coverlets, especially in Huron County where no evidence exists for figured coverlet weavers, would have been a way to make money in the re-selling of coverlets with added value.

To understand the monetary implications of household production in the above case studies, I attempted to calculate the amount of yarn and the length of time required for a coverlet. I estimated that one coverlet would require 4,500 yards of worsted weight yarn which an experienced spinner could spin in approximately 45 hours.⁷⁷ As such, twenty-one coverlets such as the Hughes's family purchased would require a minimum of 945 hours just for spinning. If the work was divided amongst the five Hughes women, each woman would have had 189 hours of spinning. If a spinner had other duties and only had one hour of uninterrupted time per day, five days per week, it would take approximately ten months to complete the yarn for the coverlet – just enough time between neighbour George Patrick's purchase in 1883 and Hughes' first order

⁷⁴ Curiously, the enumerator crossed out 100 yards of flannel and replaced it with 15 yards of linen. Linen production was extremely unusual in Ontario in 1871. Schedule 6, 1871 census for Tuckersmith, Huron South, page: 5. Year: 1871; Census Place: Tuckersmith, Huron South, Div.: 2, Ontario; Roll: C-9929; Page: 30; Family No: 89, Line: 14.

⁷⁵ I was not able to trace Margaret Ross' family in Middlesex without evidence of her surname. A clue to her surname and family in Middlesex came from the two witnesses at her marriage, Hugh Barclay and Hugh Fraser. Although I could not link Margaret Ross to either Hugh Barclay or Hugh Fraser in other sources, a hint to her connection with Barclay or Fraser might be derived from Campbell's account book. Campbell had a customer name John Barclay from London who purchased six coverlets and two customers named Alexander Fraser, one from Williams East and the other from London Township who purchased coverlets. Although I cannot connect John Barclay conclusively to Margaret Ross, he had a son name Hugh, which might be an indication of a name that ran in the family. Archives of Ontario; Series: MS248; Reel: 3. Year: 1871; Census Place: London, Middlesex East, Div: 1, Ontario; Roll: C-9905; Page: 54; Family No: 196, Line: 17. Connecting Margaret Ross to her Middlesex family would also be useful in establishing second-generation purchasing by daughters.

⁷⁶ I was able to track Ross' daughter Jane to marriage to Robert Cavers in 1882 at the age of 29, however, they were not customers of Campbell.

⁷⁷ There are approximately 1,000 yards of worsted weight yarn per pound. An experienced spinner can spin about 100 yards of two-ply worsted weight per hour. Jeremy, "British and American Yarn Count Systems," 349.

in 1884.⁷⁸ It is interesting to note that wages and employment options for women were very low thus making household production a viable option for additional income given they had a product that the women could re-sell.⁷⁹ Household production was typical of women using surplus materials to create a product. Women's work was typically time consuming and never destined for the outside market, or was it?⁸⁰

I attempted to determine the payment that a spinner would receive for producing yarn for a coverlet. To determine the cost of hand-spun wool in a worsted weight, the weight used for Campbell's coverlets, I used the price for a figured coverlet listed in the Schedule 6 entry for William Weirlich from Preston Township, Waterloo County.⁸¹ Fortunately, the enumerator had a separate entry for Weirlich's coverlets, and stated that he produced 50 coverlets for \$300 or \$6 per coverlet.⁸² I used the known costs for producing a coverlet from Campbell's account book and other sources: weaving labour - \$2.25,⁸³ cotton - \$1.40,⁸⁴ wool - \$1.30⁸⁵ carding - 41 cents⁸⁶ totalling \$5.36 with a remainder of 64 cents for spinning the wool for five yards of cloth.

⁷⁸ Crowley wrote that for women, "the greater part of the work had to be done after baby was put to bed for the night and while her "lord and master" was snoozing away the evening in the chimney corner." In the case of families with mature daughters, they would have had their duties, but perhaps had more time to devote to their own pursuits. Crowley, "Rural Labour," 35.

⁷⁹ In 1887, a domestic servant with board received \$6.22 per month in Middlesex. This source does not provide the cost of board, but based on the difference between the wage of a farm labourer with board and without in the same table, board is between \$8 and \$9 a month. *Sessional papers. Legislature of the Province of Ontario, Vol. XXI, Part IX, Third Session of Sixth Legislature of the Province of Ontario, Session 1889. Annual Report of the Bureau of Industries of the Province of Ontario, 1888. Part III: Farm Wages and Labour, 171. Cohen, Women's Work, Markets and Economic Development in Nineteenth Century Ontario, 87.*

⁸⁰ Cohen, *Women's Work, Markets and Economic Development in Nineteenth Century Ontario*, 88.

⁸¹ Preston Township, Schedule 6, page 8, William Weirlich; Year 1871; Census Place Preston, Waterloo South, Ontario; Roll C-9943; Page 56; Family No 203, Line 9.

⁸² I assume that the \$6 in Weirlich's Schedule 6 entry included all costs: weaving, cotton, wool, spinning. My calculations below suggest that this is correct as after totalling known prices, the cost for spinning the wool is consistent with Béatrice Craig's findings.

⁸³ In this case, I chose the least expensive coverlet out of Campbell's rates.

⁸⁴ I am not using Campbell's rate of 57 cents per pound of warp, but 40 cents which was suggested by *Lovell's Ontario Directory*, 1871, assuming that Campbell put a mark-up on his cotton.

⁸⁵ There is approximately 4 ½ pounds of worsted weight wool in a coverlet. Inwood and Wagg, state that raw wool cost 29 cents per pound. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 351. In 1887, the average price for a fleece of wool in Middlesex County was \$1.36. This source does not provide the weight of a fleece. If a fleece weighed five pounds, a fleece costing \$1.36 would be 27 cents a pound. *Sessional papers. Legislature of the Province of Ontario, Vol. XXI, Part IX, Third Session of Sixth Legislature of the Province of Ontario, Session 1889. Annual Report of the Bureau of Industries of the Province of Ontario, 1888. Part III: Farm Wages and Labour, 170.*

⁸⁶ I included the cost of carding the wool at 9 cents per pound. In 1871, one pound of wool cost 9 cents to card and oil. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 351. In 1851, the cost of carding six pounds of wool equalled 16

I calculated that a coverlet would require about 4 ½ pounds of hand spun worsted weight wool which would take 45 hours to spin. A spinner would receive 14 cents per pound to spin wool for a coverlet or just over 1 cent per hour consistent with the rate of pay of a Madawaskan spinner.⁸⁷ To put this into perspective, a domestic servant with board in Middlesex received a wage of \$6.22 per month in 1887.⁸⁸ A spinner would have to produce enough wool for 9.7 coverlets to equal \$6.22, the wage of a domestic or work 436 ½ hours or 48.5 days at 9 hours per day, putting the spinner at a serious monetary disadvantage.⁸⁹

If the spinner had access to wool, however, which the top carpet coverlet purchasers did, they could eliminate the cost of wool, which was \$1.30. A spinner would have \$1.94 as payment for her spinning equalling 43 cents per pound or just over 4 cents per hour.⁹⁰ In this case a spinner would need to spin enough wool for 3.2 coverlets to earn the wage of a domestic servant, \$6.22. It would take 144 hours, or the equivalent of 16 days at 9 hour per day to produce 3.2 coverlets, making the work of a spinner better than a domestic, only if the spinner had access to free wool.

It is interesting to note that the three top customers of carpet coverlets did not purchase other types of cloth, only coverlets; indeed the majority of carpet coverlet purchases came from

cents or approximately 3 cents per pound. J. Siddall A/C book 1850-1854. In 1842, the cost of carding six pounds of wool equalled 1/- shilling or 12 ½ cents or 2 cents a pound, if rated in York currency. Caradoc Mill Fonds – woollen mill ledger 1843-1879 AFC 113-1-3. University of Western Ontario Archives.

⁸⁷ Béatrice Craig discovered that a hand spinner received fifteen cents a pound for spinning which would mean that a spinner would receive 68 cents per coverlet for spinning the worsted weight yarn. From the Robert Harvie Doak Account Book 1873-1920. Doak family papers, MC 1055 MS 8FI, Provincial Archives of New Brunswick. Cited in Craig et al., “The Homespun Paradox: Market-Orientated Production of Cloth in Eastern Canada in the Nineteenth Century,” 39.

⁸⁸ *Sessional papers. Legislature of the Province of Ontario*, Vol. XXI, Part IX, Third Session of Sixth Legislature of the Province of Ontario, Session 1889. Annual Report of the Bureau of Industries of the Province of Ontario, 1888. Part III: Farm Wages and Labour, 170.

⁸⁹ The rate of 64 cents per coverlet or 14 cents per pound of wool is similar to Craig et al’s rate of 15 cents per yard in New Brunswick and Québec for a spinner. In Craig et al., “The Homespun Paradox: Market-Orientated Production of Cloth in Eastern Canada in the Nineteenth Century,” 39.

⁹⁰ I estimated that one coverlet would require 4,500 yards of worsted weight yarn which an experienced spinner could spin in approximately 45 hours. An experienced spinner could spin about 100 yards of two-ply worsted weight yarn per hour. Jeremy, “British and American Yarn Count Systems,” 349.

customers who purchased carpet coverlets exclusively. In all three cases, these customers raised sheep, negating the need to purchase wool from an external source. The Hugheses and the Rosses produced their own cloth, meaning that they did not require uncomplicated cloth such as flannel from Campbell. They were important customers because their few purchases generated a relatively high proportion of income for Campbell as was the case with the sale of carpet coverlets (Appendix 1.26).⁹¹ Anthony C. Hughes spent \$52.50; Miss Shipley spent \$32.50 (\$40.50 if one includes her father's purchases and possibly \$48 if one includes the purchase on the slip of paper for the Shipley's) and Neil Ross spent \$30. From the customers' perspective, the payment for weaving and supplies was an investment that they added to with their pre- and post-weaving production, if they indeed re-sold the carpet coverlets. If the Hughes sold twenty-one coverlets at \$6 each as suggested by William Weirlich, they would have grossed \$126, for which they would have profited between \$13.44 (if they needed to purchase wool) and \$40.74 (if they had wool) amounting to a return of between 11% and 32% on their investment.

In a few cases, customers who purchased other fabrics bought a carpet coverlet but one or two, not twenty. In contrast, Campbell's major repeat customers purchased large quantities of plain cloth such as flannel and full cloth. Alexander Johnson who purchased 841 ¼ yards of cloth and Sylvester Campbell who purchased 375 ½ yards of cloth made four or less purchases of carpet coverlets.⁹² Other repeat customers such as Norman Lamont and Aaron Bratt purchased hundreds of yards of utilitarian cloth, but did not purchase any carpet coverlets.⁹³ I suggest that the customer purchasing hundreds of yards of plain cloth and the customer

⁹¹ These purchases are important when one considers that Campbell made 34% of his overall earnings from carpet coverlets and that they comprised only 12% of the yards. Full cloth provided him with 7% of his earnings for 10% of the yards. (Appendix 1.26).

⁹² Alexander Johnson purchased cloth between 1859 and 1873. Sylvester Campbell purchased cloth between 1859 and 1876. His wife continued purchasing cloth from Campbell after her husband's death until 1883.

⁹³ Norman Lamont ordered 540 ½ yards of cloth between 1861 and 1880. His wife continued to purchase cloth from Campbell after her husband's death until 1884. Aaron Bratt purchased 391 ¼ yards of cloth between 1859 and 1877.

purchasing multiple carpet coverlets were different consumer/producers with different expectations.

Second Generation Purchases by Sons

I was alerted to the intriguing and unexpected pattern of purchases by second-generation purchases by sons during the compilation of customers with the same surnames. One reason behind the proliferation of these connections must be attributed to the ease of tracking males in the account book and other primary sources due to their shared surname and that they tended to remain in the same township, indeed on the same farm as their parents, and thus had continued access to John Campbell as their weaver of choice. I successfully tracked many married daughters using marriage registrations, but established no second-generation purchasing of Campbell's textiles by married daughters.⁹⁴ In some cases, the daughters were moving out of their communities after marriage, perhaps even establishing new connections with other weavers. In other cases, however, I followed daughters who stayed in the same township – indeed some who lived on the same farm with their husband and widowed mother, but they made no purchases from Campbell, suggesting that they were marrying into families who either did not participate in household production of woven textiles or who had access to another weaver. It is understandable that men would make most purchases as they probably were more mobile than their wives, but why did purchases continue with sons and not sons-in-law?

Although I found leads for other cases of second generation purchases by sons, I followed four families in particular: Christopher Waugh and two sons; Benjamin Woodhull and

⁹⁴ Lydia, daughter of John and Maria Woodhull did not purchase hand-woven textiles from Campbell after her marriage to Thomas A. McConnel, in approximately 1874. *Census of Canada*. Year: 1881; Census Place: Delaware, Middlesex West, Ontario; Roll: C_13269; Page: 43; Family No: 202. Neither did Catherine, daughter of Hugh and Sarah McPhail who did not purchase textiles from Campbell after her marriage to Dugald McPhail in approximately 1871. *Census of Canada*. Year: 1871; Census Place: Caradoc, Middlesex West, Div.: 2, Ontario; Roll: C-9901; Page: 5; Family No: 15, Line: 2.

one son; John Woodhull and three sons; and Dugald McMurphy and two sons. Although I write sons, all sources agree that the household production of textiles was done by women, so daughters-in-law should also be included as the household pre- and post-weaving production was their domain.⁹⁵

Why did sons maintain a business relationship with Campbell? Men had important roles at certain phases of textile production by way of keeping and shearing sheep, taking the wool to the carding and fulling mill.⁹⁶ Pre-weaving and post-weaving production remained a female-dominated task, indeed women were filling the roles of country customer weavers and housewife weavers in several regions of North America.⁹⁷ Was the household production of textiles important in the eyes of farmers? It was the practice for handloom weavers in Britain to engage members of the family in the production of their cloth.⁹⁸ According to a report on handloom weavers, the maintenance of this family workforce was important to the weaver's household because, "it concentrates the family under one roof; gives to each member of it a common interest; leaves the children under the watchful eye of the parent; and the fate of one being the fate of all, it is borne, be it harsh or otherwise."⁹⁹ In his study of the formation of trade unions

⁹⁵ Carole Shammas, "How Self-Sufficient Was Early America?" *Journal of Interdisciplinary History* 13 (1982): 253. Béatrice Craig, & Judith Rygiel, "Femmes, marches et production textile au Nouveau-Brunswick au cours du XIX^e siècle," *Histoire & Mesure*, XV-1/2(2000), 83. Hood, "The Gender Division of Labor in the Production of Textiles," 538. Hood, "Industrial Opportunism," 141. Marjorie Griffin Cohen, *Women's Work, Markets and Economic Development in Nineteenth-Century Ontario*. Toronto: University of Toronto Press, 1988: 8.

⁹⁶ Most accounts in the Caradoc and Siddall Carding and Fulling Mill Account book are for men. Caradoc Mill Fonds. J. Siddall A/C book 1850-1854.

⁹⁷ Inwood and Grant, "Gender and organization in the Canadian Cloth Industry, 1870," 17. Hood, "The Gender Division of Labor in the Production of Textiles," 538-539. Crowley, "Rural Labour," 35. In Samson Howell's diary he wrote that he took part in sewing rags for a carpet on Wednesday, April 5, 1868 and Thursday, April 17, 1868. I speculate that sewing rags did not have the same female-dominated cultural resonance as wool-working and therefore was deemed acceptable to Howell. Another theory is that Howell who was unwell and often bed-ridden sewed rags to compensate for his reduced outdoor workload. In support of the gender separation of wool-working, Samson Howell seemed to draw the line at wool production, for he observed that "Mrs. Cole was a picking wool all day" but he did not take part. Handwritten diary and ledger of the Howell family, Carlow, Ont., ca. 1844-1872. University of Guelph Archives.

⁹⁸ The 1841 report on handloom weavers stated that "a weaver's children are more valuable to him at the loom at an early age than they could be possibly be at any other trade." *Reports from Commissioner*, page 45 in Hand-loom Weavers.

⁹⁹ *Ibid.*, page 38 in Hand-loom Weavers.

from artisan-tradesmen in early-nineteenth century New York, Joshua Greenberg suggested that the maintenance of interconnected spheres of work performed by family members and home was a sign of the ultimate success.¹⁰⁰ I suggest that the son of a farmer would continue to promote a practice that he watched his mother and sister performing throughout his childhood. Realizing its value, as advanced by the British weavers and the New York artisans, this young farmer would encourage his new wife to continue its existence as I illustrate in the following case studies.¹⁰¹

Between 1864 and 1885, three members of the Waugh family made seven purchases: Christopher and two of his sons John and Edward. In 1864, Christopher purchased a 23 yard wool floor carpet. John and Edward who grew up with this carpet in their family farm house purchased carpets from Campbell a decade later, after they married.¹⁰² Although neither John nor Edward raised sheep, they lived close to sheep farms (Appendix .35).

The relationship between the Waughs and the Campbells was lengthy. Christopher's first purchase dated to 1864 and his sons, John and Edward continued the relationship with Campbell, collectively making six purchases between 1873 and 1885. However, evidence suggests that the relationship extended 47 years beyond 1885. Edward's daughter Isabella was too young to appear in the account book, but grew up walking on rag and wool carpets made by the Campbells

¹⁰⁰ Greenberg, *Advocating the Man*, 25.

¹⁰¹ I made a connection between farmers and self-employed artisans as they appeared to have shared the values of independence. Van Vugt stated that handloom weavers chose farming when possible because of their quest for independence in their work. Van Vugt, *Britain to America*, 64-65. Crowley also suggested the importance of independence for farmers. Crowley, "Rural Labour," 69.

¹⁰² In 1861, Christopher Waugh from London Township was a 69 year old Scottish born farmer, married with nine children. *Canada West Census*. Year: 1861; Census Place: London, Middlesex, Canada West; Roll: C-1050-1051; Page: 130. John Woodhull purchased a total of 37 ½ yards of rag carpets in 1873, 1881 and 1885 for his farm house on concession VIII, lot 7, Coldstream where he lived with his wife and seven children. Edward Woodhull was married with four children and purchased a total of 114 ¼ yards of wool carpet in 1877, rag carpets in 1881 and 1885 for his farmhouse close to Komoka, concession III, lot 8. *Census of Canada*. Year: 1891; Census Place: Lobo, Middlesex South, Ontario; Roll: T-6353; Family No: 58.

in the farm house that she grew up in and in the house of her uncle, John.¹⁰³ Beyond the dates of the account book, Isabella was a friend of Campbell's daughter until Janet's death in 1932.¹⁰⁴ A relationship that began with the purchase of a wool carpet by Isabella's grandfather in 1864 continued between Isabella and Janet until Janet's death sixty-eight years later.¹⁰⁵ The longevity of this relationship, spanning three generations implies a loyalty even beyond what can be perceived in Campbell's other purchases by members of the same family.

Second-generation purchasing occurred in one of Middlesex County's founding families, the Woodhulls.¹⁰⁶ Nine members of the Woodhull family held twenty-three accounts with Campbell between 1860 and 1885. Benjamin Woodhull who was 47 years old in 1860, when he was recorded in the account book for the first time, was listed in the 1851 and 1861 census as a miller. Benjamin Woodhull lived in Lobo and ran a carding and fulling mill in Kilworth, Delaware Township.¹⁰⁷ Carding and fulling mills were small-scale industries which were an important part of the infrastructure of rural handloom weaving.¹⁰⁸ I confirmed second-generation purchasing by sons in two Woodhull families: Benjamin and Lucinda Woodhull and their son Benjamin; and John and Mariah Woodhull and their sons, Benjamin, Abraham and Samuel. Mrs. John Woodhull purchased after her husband's death as a widow. Amongst the

¹⁰³ I believe that Isabella's grandfather, Christopher died between 1878 and 1881 as he appeared in the 1878 Middlesex County Atlas but he was not listed in the 1881 census.

¹⁰⁴ Isabella Waugh was two years old in 1885, the last year of the account book. *Census of Canada*. Year: 1891; Census Place: Lobo, Middlesex South, Ontario; Roll: T-6353; Family No: 58. Isabella Waugh was a stenographer living in London Census of Canada, *Census of Canada*. Year: 1911; Census Place: London City, Ontario; Page: 14; Family No: 183.

¹⁰⁵ Edward's Isabella who was born in 1883 was two years old during the last year of the account book and seventeen during Campbell's daughter Janet's last official year of business in 1900. Isabella's was the informant on Janet's death registration, listed as "a friend." *Registrations of Deaths, 1869-1938*, Series MS935, Reel 445.

¹⁰⁶ The Woodhull's were one of the first families to settle in Middlesex County in 1798. *History of the County of Middlesex*, 29.

¹⁰⁷ Ibid., 484. This is most likely the Benjamin Woodhull associated with the carding and fulling mill. *Canada West Census*. Year: 1851; Census Place: Lobo, Middlesex County, Canada West (Ontario); Schedule: A; Roll: C-11737; Page: 5; Line: 8. *Canada West Census*. Year: 1861; Census Place, Middlesex, Canada West; Roll: C-1049-1050; Page:1.

¹⁰⁸ Douglas McCalla provided a comprehensive account of the operation and business of carding and fulling mills. McCalla, *Planting the Province*, 101-102. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 650.

nine individuals, I proved that some were related, while the others, I suspect, were related based on their proximal appearances in the account book.

In 1860, Charles Woodhull, aged 42, made the first purchase by a Woodhull for full cloth.¹⁰⁹ Indeed one would expect full cloth to be an important cloth, given the Woodhull's ownership of a carding and fulling mill.¹¹⁰ Not only did the Woodhulls have access to carding and fulling but to wool. Charles Woodhull raised sheep on his 281 acre farm in 1871 (Appendix .35). The Woodhull entries in Campbell's account book often appeared in clusters, suggesting relationships and perhaps coordination of pre- and post-weaving tasks between this family.¹¹¹ The purchase of full cloth by Charles Woodhull on October 16, 1860 is followed seven days later by a purchase made by Ben Woodhull, Lobo.¹¹² Although establishing family links before the 1851 census for Charles, John and Ben Woodhull was not possible, the account book provides unconfirmed, but possible family relations perhaps alluding to family coordination of resources in planning purchases with Campbell.

The third case of second-generation purchases by sons comes from the McMurphy's from Caradoc. Dugald McMurphy, born in 1809 had four accounts with Campbell: 1860, 1862, 1863 and 1865 where he bought flannel and full cloth and the equivalent of eight bordered blankets enough for the beds of each of his five daughters and three sons.¹¹³ Two of his sons, Duncan,

¹⁰⁹ There is a reference to Charles A. Woodhull, born 1819 in *History of the County of Middlesex*, 484. *Canada West Census*. Year: 1851; Census Place: Lobo, Middlesex County, Canada West (Ontario); Schedule: A; Roll: C-11737; Page: 3; Line: 39.

¹¹⁰ Full cloth amounted to 24% of the 518 ¼ yards of cloth purchased by the Woodhull's. Source: John Campbell's Account Book, 1859-1885. The Ontario Science Centre.

¹¹¹ In the majority of cases, an entry for a Woodhull on a page in the account book was accompanied by a second, even a third Woodhull entry. Source: John Campbell's Account Book, 1859-1885. The Ontario Science Centre.

¹¹² Ben Woodhull was the owner of the carding and fulling mill in Kilworth. It is interesting to note that Ben Woodhull's second account in 1860 was preceded by an account four days previous by Elis Comfort, Lobo, who was also an owner of a carding and fulling mill in Kilworth. *History of the County of Middlesex*, 484.

¹¹³ Campbell sold blankets by the yard. Using measurements from blankets in the Royal Ontario Museum, a typical blanket is about 2 yards square, therefore 33 yards would provide 8 blankets. One blanket of particular note in the Royal Ontario Museum is ROM 969.246.1, page 111, number 139, Burnham and Burnham, *Keep Me Warm One Night*. The Burnhams describe this blanket which has borders on the sides not the ends as being particularly Scottish because of the type of beds, typical in Scotland, the box bed

born in 1838, and Archibald, born in 1852, held accounts with Campbell after they married. I believe that McMurphy died between 1871 and 1875 as his wife Mary made her first purchases in 1875 before appearing as a widow in the 1881 census.¹¹⁴

While Dugald McMurphy's purchases were for flannel, full cloth and blankets, his two sons Duncan and Archibald included other varieties of cloth such as tweeled, plain cloth and rag carpets. Duncan McMurphy made his first purchase for full cloth in 1865, probably the first year of his marriage.¹¹⁵ In 1871, he was married with three children, living in Lobo and working as a railroad worker.¹¹⁶ Duncan's brother, Archibald married about 1877 and made his first purchase with Campbell in 1880. In 1881, Archibald appeared in the Lobo census working as a farm labourer, married with two children. Eight years later, in 1889, Archibald was listed in a Middlesex directory as a merchant.¹¹⁷ Although he could have continued his purchases after the end of the account book in 1885, his wife and children's time was probably directed away from household production of textiles to their new lives assisting Archibald as a merchant.¹¹⁸

Why did sons continue to purchase and daughters did not? Although men were not the ones involved in the most time-consuming portion of the production, there were societal factors

where the sides were displayed by the ends were tucked in and therefore unadorned. Perhaps it is this type of blanket that Campbell produced when he referred to 'bordered blankets.'

¹¹⁴ Mary McMurphy lived with four of their children in 1881: John, Isabella, Elisabeth and Jane. *Census of Canada*. Year: 1881; Census Place: Caradoc, Middlesex West, Ontario; Roll: C-13269; Page: 23; Family No: 113.

¹¹⁵ Duncan McMurphy's first purchase for full cloth was in 1865. Judging by the age of his children, Duncan was married in 1865 to Catherine. He made two more purchases in 1875 and 1883 for rag carpets with hems and enough material for about 11 bordered blankets. *Census of Canada*. Year: 1871; Census Place: Lobo, Middlesex North, Ontario; Roll: C-9903; Page: 20; Family No: 72.

¹¹⁶ Campbell's son William was also a railroad worker in the 1871 census.

¹¹⁷ McMurphy appeared on the same page as Campbell in the directory. *The Union Publishing Co's (of Ingersoll) Farmers' and Business Directory for the Counties of Lambton, Middlesex, Norfolk and Oxford*, Vol. V (Ingersoll: Union Publishing Company of Ingersoll, 1889), A40.

¹¹⁸ Archibald made four purchases from 1880 to 1885 for rag carpet, plain cloth and tweeled cloth. In the 1891 census Archibald McMurphy made a change from farmer to merchant of dry goods and groceries. At this time, he had three children. Archibald McMurphy appeared in two directories, the previously mentioned one in 1889 and the other in 1892 as running a general store in Komoka. *The Union Publishing Co's (of Ingersoll) Farmers' and Business Directory for the Counties of Middlesex, Oxford and Perth*. Vol. VII (Ingersoll: Union Publishing Company of Ingersoll: 1892), A28. Campbell's daughter Janet is listed on the same page as a carpet weaver.

that made the value in this mode of production by their wives important to men.¹¹⁹ A parallel exists in Béatrice Craig's study of Madawaskan weavers, who produced uncomplicated cloth, and the household producers in Ontario, some of whom wove and some of whom only took part in pre- and post-weaving production. In Madawaska, Craig speculated that men did not weave so that women could take part in a lucrative, clean, household activity.¹²⁰ Similarly, did men in Middlesex see the value of a lucrative form of textile production which was indoors, in the protective confines of the home and encourage its presence? Furthermore, did Campbell's expertise make household production of textiles even more attractive because of the quality of his weaving?

In this period, as head of the household, men had legal control of the family property.¹²¹ Although we do not know who made the decision to purchase Campbell's textiles, men likely controlled the money of the rural household.¹²² If that included the decision to purchase hand woven textiles because household production was desired, men inadvertently set an aesthetic and supported the handloom weaving trade.¹²³ Given the choice, what would women have chosen – hand woven which was extremely labour intensive or the no strings attached, factory-made cloth?¹²⁴ The relationship of women and textiles was complex – while women were associated

¹¹⁹ Most accounts in the Caradoc and Siddall carding and fulling mill account book are for men. Caradoc Mill Fonds. J. Siddall A/C book 1850-1854.

¹²⁰ Craig, *Backwood Consumers and Homespun Capitalists*, 193.

¹²¹ Cohen, *Women's Work, Markets and Economic Development in Nineteenth Century Ontario*, 7, 43-4. Crowley, "Rural Labour," 35.

¹²² In an examination of inheritance by women in rural Perth County, Peter Baskerville stated that women had few rights and "rural Ontario was a man's world." Peter Baskerville, "If ye want girls on the farm, ye must be after making the farm more attractive:" Rural Middle Class formation and Women's status in Ontario, Canada, 1869-1930." Unpublished paper (used with permission by author) presented to: Historical Inequality and Mobility: New Perspectives in the Digital Era, Workshop held May 25 to 27 at the University of Guelph, Ontario: 14.

¹²³ Although when all costs are included, Campbell's hand woven flannel was 23% more expensive than factory-produced flannel, the customer only paid Campbell 10 cents per yard in weaving labour, incurring the other costs: the price of cotton, wool, carding and spinning themselves. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 351. Factory-produced flannel was 40 cents per yard in Hugh McRae's general store. Account Books of Hugh McRae.

¹²⁴ Given the workload of women, they probably would have opted for anything that would ease their burdens. Crowley, "Rural Labour," 35.

with this work, when more profitable and less time-consuming work became available, women abandoned labour-intensive textile production.¹²⁵ Is it possible that the different points of view of men and women are demonstrated in the persistence of pre- and post-weaving household production? Did men perceive textile production in the household as supporting the productivity of the family farm, the work that keeps stability from the vagaries of the external market, while women perceived it as another chore that could be replaced given the opportunity?¹²⁶ I argue that women's participation in textile production was governed by the will and tradition of her husband. I am uncertain about the degree of choice or desire that Mrs. John Woodhull, Mrs. Edward Waugh, Mrs. Benjamin Woodhull, Mrs. Abraham Woodhull, Mrs. Duncan McMurphy or Mrs. Archibald McMurphy had in household pre- and post-weaving production. However, if choice was not an option and textile production was the way of life for some wives and daughters, how did women negotiate within that framework? Customers of Campbell were in a unique position of having access to a cloth beyond the technical reach of 98.5% of the weavers in Ontario.¹²⁷ Given the rarity of carpet coverlets, did young women perceive an opportunity to prepare wool yarn for the more expensive textiles, the carpet coverlets and use them as a commodity?

¹²⁵ Craig et al., "Survival or adaptation?" 142. Craig, and Rygiel, "Femmes, marches et production textile au Nouveau-Brunswick," 103. This is in contrast with the tradesman weaver who had a commitment to handloom weaving in time and training. Handloom weavers remained attached to their trade and displayed a reluctance to shift to factory weaving, which of course made way for women workers to do mechanized textile work requiring minimal skill and commitment.

¹²⁶ Craig et al., "Survival or adaptation?" 144.

¹²⁷ I refer to the 2,022 weavers from Ontario as calculated in Appendix 1.01 and the 30 known figured coverlet weavers in Ontario. Burnham, *The Comfortable Arts*, 171.

Household Production

Every handloom weaver knew that they worked in a network of other textile workers and their existence was dependent on an infrastructure to supply fibre and finish for their cloth.¹²⁸ The Scottish handloom weavers of the nineteenth century had evolved to a place where their infrastructure was supplied by the commercialized putting-out system where pre- and post-production was done on increasingly complex machines by an unskilled workforce. Campbell travelled over 5,000 kilometres from his home in Glasgow, Scotland to Middlesex County, Canada, to find a much different infrastructure – household production in the local economy. In a pre-industrial society, like Middlesex County, infrastructure was contained in the household using specialized, but simple tools by semi-skilled people.¹²⁹ The exchange between weaver and customer was more complex than a simple exchange for goods – it was the infrastructure. The pre- and post-production work done by the customers or the infrastructure was an added value to the textile which contributed to the household economy.¹³⁰

Consumer knowledge about processing fibre was mandatory for the relationship between weaver and customer to function. The household production of textiles and the carding and fulling mills found in rural Ontario were part of the physical and economic infrastructure necessary to support the work of a handloom weaver. Without this infrastructure handloom

¹²⁸ Barlow provided a breakdown for the number of textile workers needed to keep a weaver employed in a setting with an established infrastructure. He wrote that “every hundred weavers required the services of other trades as follow: weavers, 100; wool sorter, 4; wool pickers, 10; wool combers, 20; spinners, 900; throwers, 4; turners of the throwing mill, 4; thread makers, 4; doublers, 50; bobbin winders, 12; back-throw winders, 12; quill boys, 50; warpers, 5; dyers, 6; pressers, 6.” Barlow, *The History and Principles of Weaving by Hand and by Power*, 32-33.

¹²⁹ Based on a discussion with Rabbit Goody about the transmission of textile technology from Britain to the United States. In the early industrial period in Britain, simple machinery was operated by skilled artisans. These simple machines were not successful in the United States because they lacked the numbers of skilled artisans to operate the machine. The emphasis in the United States was to produce more complex machinery which did most of the operations and could be operated by an unskilled workforce.

¹³⁰ Inwood and Wagg, “The Survival of Handloom Weaving in Rural Canada,” 351.

weaving was not sustainable.¹³¹ Campbell's customers might have hand carded their wool, but most likely they would have taken their wool to one of the many carding mills in their township where payment could be made in cash or in wool.¹³² After carding, dyeing, spinning and plying before the wool was brought to Campbell.

Over time, customers relied more on Campbell to provide inputs as they withdrew from household production. Customers also withdrew from household production in the purchases that they made as they purchased cloth with a higher cotton content, a fibre which involved less household production than the labour intensive wool. Although there was one instance of Campbell selling cotton for warp in 1862, purchases of extra services such as hemming, reeling, twisting and dyeing began with more regularity in 1867 and then increased while Campbell's overall profits decreased (Appendix 1.21). One of the services, supplying cotton for warp, began with customers purchasing a small portion of the total needed from Campbell, suggesting that the customer was still involved in this task, but perhaps not acting as diligently as to purchase the full amount required. Later, Campbell provided a greater portion of the warp or in some cases, all of it.

Preparing cotton at home involved a much different process than wool preparation. Cotton has a very short staple making the production of thread difficult on a spinning wheel. In the late-eighteenth century factories began mechanically spinning cotton which had strength suitable for warp thread, thus increasing the use of cotton in handloom weaving and then later in power loom weaving.¹³³ Cotton used in Canada was primarily spun and shipped from the U.S.

¹³¹ Ibid., 350.

¹³² J. Siddall A/C book 1850-1854.

¹³³ Berg, *The Age of Manufacturers*, 30.

Cotton often came in skeins in singles or plyed in doubles.¹³⁴ If the customer purchased single cotton, they would have to ply the singles on a spinning wheel to increase the strength of the thread to be used for warp, another necessary task before the thread came to the weaver.¹³⁵ On April 8, 1881, Campbell charged Mrs. Godfrey, Delaware Township, seventy-five cents for twisting the warp.¹³⁶ Catharine Parr Traill noted that the weaver charged extra for twisting the warp, something that she suggested could be done at home on a spinning wheel, which she highly recommended.¹³⁷ Although Campbell only twines or twists the warp on two occasions and reels the yarn also two times, it was significant because they occurred at the end of the account book hinting at a change in customer behaviour of withdrawing from household production that was signalled first by Campbell supplying cotton and which might have increased post-1885.¹³⁸

Because of the lack of references to dyeing, I assume that this was not a common task for Campbell. Indeed, women would probably be quite accustomed to dyeing fibres in small batches as demonstrated by the popularity in the sale of dye stuffs at the general store in Ekfrid Township.¹³⁹ In 1877, he dyed a warp at a cost of fifty cents for D.N. Mitchel.¹⁴⁰ In 1881 there

¹³⁴ Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 351.

¹³⁵ Some Canadian textiles were woven from linen and cotton singles in the nineteenth century. See page 126 for two examples of cloth made from linen singles and page 127 for two examples of cloth made from cotton singles in Burnham and Burnham, *Keep Me Warm One Night*. However, singles require sizing to eliminate breakage and increase the strength of the fibre during weaving (a coating from a cooked formula of flour common in many nineteenth century weaving manuals such as Peddie, *The Linen Manufacturer, Weaver and Warper's Assistant*, 289. As such, many Canadian textiles were produced with plyed wool which avoided the need for the process of sizing.

¹³⁶ I interpret twisting the warp to be plying two singles into a double.

¹³⁷ Traill, *Canadian Settlers Guide*, 182.

¹³⁸ On May 7, 1885, Campbell charged Angus McTaggart of Mayfair, Ekfrid Township an additional fifty cents to reel the warp. A weaver cannot wind a warp from skeins, so the skeins would have to be wound onto spools if the cotton was brought to Campbell in skeins. The spools of cotton would be set up on a skarn, a large frame that holds the spools and then the weaver could wind the warp onto a warping mill or warping board. Another service provided by Campbell was something he referred to as 'measuring the length.' It could mean that the customer had not provided the fibre in a specified quantity and Campbell needed to measure the quantity so that he could return the surplus to the customer.

¹³⁹ Account Books of Hugh McRae.

¹⁴⁰ John Campbell's Account book. Page 215 & 216, May 22, 1877.

is a reference to ‘coulering blue’ for a rag carpet for Mr. Hawkins of Longwoods.¹⁴¹ In 1883, he indicated that he had an order for “9 yards of cotton & wool coulourd at 12 ½ cents” for John Melville of Fernhill.¹⁴²

From Cloth for Garments to Cloth for the Household

As people became more settled, their homes became larger and more prosperous. Farmers built additions onto the original log house or replaced it with a frame wood or brick house. The division between interior and exterior space was accentuated by decorating the home with textiles, enhancing the comfort and warmth with decorative carpets, drapes and bed coverings. Farmers had always needed utilitarian cloth for clothing and blankets, but their new homes dictated a greater need for a cloth in which they could invest for the long-term. There was a parallel trend in consumer habits in seventeenth-century New England and nineteenth-century Quebec toward creating more comfortable interiors with an increase in purchases of household linens and beddings.¹⁴³ Carole Shammas perceived the appearance of increased cloth in the household as being a sign of a change in the role of the household as it became more refined and a female-created space.¹⁴⁴

In Campbell’s account book, customers increasingly spent more money on textiles for interiors, decorative textiles which tended to be more expensive than cloth for garments. Cloth used for garments such as cotton & wool or flannel ranged from 10 cents to 12 ½ cents a yard and plaid, a higher priced cloth because of the multiple colour changes, ranged from 12 ½ to 14 cents per yard. Cloth for the household, for example blankets, ranged from 12 ½ cents to 15

¹⁴¹ John Campbell’s Account book. Page 259 & 260, May 6, 1881.

¹⁴² John Campbell’s Account book. Page 263 & 264, May 26, 1881.

¹⁴³ Ruddell, “Consumer Trends, Clothing, Textile and Equipment in the Montreal Area,” 48.

¹⁴⁴ Carole Shammas, *The Pre-Industrial Consumer in England and America* (Oxford: Clarendon Press, 1990), 298.

cents per yard and carpet coverlets from 45 cents to 70 cents per yard (Appendix 1.03). The shift to interior cloth was a shift to a more expensive cloth per unit and was most likely seen as an investment that would last many decades. Cloth for garments may have been changing course to factory-made cloth as a way to offset the cost of the more expensive cloth of the household.¹⁴⁵ Customers could also have welcomed a change in cloth that had printed patterns, were lighter weight, novel and could be purchased without delay. General stores supplied a wide variety of cloth such as calico, check, cotton, fustian and muslin.¹⁴⁶ Although I am not certain about the quantity of factory cloth purchased by Campbell's customers in the 1870s and 1880s, they would need to meet their cloth requirements from somewhere, and the evidence from the account book indicates that Campbell was no longer their highly-favoured source.¹⁴⁷ His customers were purchasing their cloth for garments elsewhere while remaining active in household textile production and consumption for household cloth such as carpet coverlets and floor carpets (Appendix 1.14).¹⁴⁸ There is an analogy between the purchasing habits of Campbell's consumer-producers and the Madawaskan weavers who also satisfied their needs for cloth by both home production and purchasing factory-made cloth.¹⁴⁹

Campbell's rate per yard did not increase from the first year of the account book, but his emphasis on higher priced textiles and additional revenue from services made his textiles more

¹⁴⁵ Hugh McRae sold flannel in 1870 for 40 cents a yard. Account Books of Hugh McRae. McCalla, "Textile Purchases by Some Ordinary Upper Canadians," 4-27.

¹⁴⁶ McCalla provided a listing of cloth available in general stores from 1808-61. McCalla, "Textile Purchases by Some Ordinary Upper Canadians," 12-13.

¹⁴⁷ Inwood suggests that the shift to factory cloth shows the change in consumption that was stimulated by increased incomes. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 353.

¹⁴⁸ Although when all costs required to produce a yard of cloth are considered, that is weaving, spinning, carding, fulling, dyeing, the price that Campbell's customers paid to him for flannel was cheaper than what they paid at the general store, 40 cents per yard at Hugh McRae's. However, customers had a finite amount of time for household production of textiles and therefore had to choose whether to devote their time to cloth for garments or cloth for the household. Inwood and Wagg, "The Survival of Handloom Weaving in Rural Canada," 351. Account Books of Hugh McRae.

¹⁴⁹ Craig et al., "The Homespun Paradox: Market-Orientated Production of Cloth in Eastern Canada in the Nineteenth Century," 38.

expensive. Campbell was becoming more specialized, whether this was being dictated by his own production needs or his customers, the account book does not say. In 1860, Campbell's customers purchased a wide variety of cloth types relative to the number of dollars spent until 1869.¹⁵⁰ More cloth varieties relative to dollars meant less efficiency for Campbell because he had to make many changes to keep up with different types of cloth. Because Campbell was able to weave this variety, it probably kept him in demand, albeit less efficient (Appendix 1.24).¹⁵¹ In 1869, customers purchased fewer cloth types, but paid the highest total in one year. The reason for this increase was that 51% of purchases derived from his most expensive cloth: carpet coverlets, single coverlets and wool carpets which comprised 77% of payments in that year. As long as his loom was occupied with these more expensive textiles, customers could not purchase other fabrics, and his customers needed to find their cloth from the readily available supplies in general stores or from other handloom weavers. The reduction in types of cloth might have been an attempt to streamline or simplify the business or it might have been due to evolving customer demand for his best-known and best-loved cloth.¹⁵² Campbell's customers purchased fewer types of cloth relative to payment indicating a successful strategy for Campbell in 1869.

By using a longer lens to examine his earnings, it is evident that he made less money than when he was producing the abundance of cloth from his prime years in the 1860s. For four years out of the twelve year study, customers paid a higher proportion of dollars to yards as a result of

¹⁵⁰ In the methodology section of Chapter Three, I discussed the 102 types of cloth that Campbell produced, referred to as sub-categories. Sub-category cloths might have minor differences that might involve adding colour, by adding another shuttle or changing a treadling sequence from plain weave to twill. Based on technical considerations, I created 14 categories that I believe would encompass the 102 cloth types.

¹⁵¹ A discussion of sub-categories and categories can be found in Chapter Three. To summarize, a sub-category reflects all of the cloth descriptions in the account book which show minor changes that could be achieved by changing a shuttle or a treadling sequence, e.g., cotton & wool at 10 cents and cotton & wool at 11 cents. The category is the larger group in which the variations fit.

¹⁵² I would also suggest that his customers' demands for cloth simplified as his younger customers became more removed in time from handloom weaving at its peak of importance and complexity. Also, perhaps as Campbell increased in years he became less productive and needed to rely more heavily on his daughter who may not have been as proficient as her father.

increased production of the higher priced interior textiles occurring after 1869 (Appendix 1.14). The addition of payment for services such as supplying cotton warp and hemming also added to his earnings. Despite the fact that customers paid a higher proportion of dollars to yards, there was a parallel trend toward decreased types of cloth produced and decreased dollars spent (Appendix 1.36). I suggest that this was a result of the consumer shifting toward more expensive textiles that required less frequent replacement and a gradual decrease in the demand for the partnership of handloom weaver and customer.

Conclusion

In a fitting way, Campbell's customers were a reflection of him. The majority of them were Scottish, Presbyterian, born between 1806 and 1820 and lived in Lobo Township. Although the Scottish population did not predominate in Middlesex, they composed Campbell's greatest supporters in their new homes across the sea. Campbell's customers were also largely farmers, and as such had an appreciation for independence and household production. While Campbell's customers were his infrastructure, he was their source for the household production that was important enough to endure for two generations in some families. Women were an important part of the household production, but their loyalty to the household production of textiles was tempered by their need to be practical. Women purchased the most expensive of Campbell's textiles – perhaps to improve the comfort and refinement of their homes and their own income. The purchases for the higher priced textiles in the second half of the account book show that Middlesex was becoming settled and the inhabitants in need of cloth that displayed their success.

CHAPTER FIVE

CONCLUSION

John Campbell was part of a continuum of handloom weaving first brought to Canada by French and then British settlers. Some of the handloom weavers were skilled immigrant tradesmen such as Campbell, while others were Canadian-born women contributing to their family's household production. For the housewife weaver, producing cloth for household consumption, weaving was a straightforward process using a simply fashioned four-beam barn-frame loom, producing the most rudimentary of cloth, one over, one under, plain weave. In official documentation or even in account books, textiles produced by country-customer weavers like Campbell and the housewife weaver appear deceptively similar. However, a systematic study of Campbell's account book proves that although his equipment might have appeared similar, his four-beam barn-frame loom was sturdy enough to weave approximately 200 yards of warp-faced wool carpet per year and his technical abilities allowed for an increased range of weave structures, treadling sequences, warping and harness set-ups, allowing him to weave over one hundred types of cloth in the twenty-six years of the account book. Furthermore, Campbell was one of about thirty handloom weavers in Ontario who produced the most technically sophisticated textiles in nineteenth-century Canada, the figured coverlet on a punch-card system mounted on top of the loom, to a height of eleven and a half feet.

This thesis demonstrates that the manufacture of textiles by Campbell operated within the layers of producer/consumer relationships, using the 1,918 accounts as evidence. Handloom weaving, even in its most unpretentious form, is a multi-step, labour intensive process which begins far before the actual process of sitting at the loom and throwing the shuttle ever commences. Campbell's part in the process, weaving cloth, was the relatively brief, middle

stage that was dependent on the pre- and post-weaving infrastructure supplied by his close to 1,000 customers.

I suggest that Campbell had staying power as a weaver because of his ability to use his looms to their best advantage and to make himself available to take orders and weave twelve months a year, a schedule not generally followed by his handloom weaving contemporaries. Household pre- and post- weaving production of textiles by his customers was important to him because it allowed him to remain viable in his profession for half a century in North America. Campbell, one of tens of thousands of Scottish handloom weavers who left Scotland at a time of decline in the handloom weaving industry, acquired the technology to produce a textile, the carpet coverlet, which would provide him with 34% of his earnings for only 12% of the weaving (Appendix 1.26). His professionalism is demonstrated by the consistently formatted records in the account book and his steady pace of production. His ability to take on challenges and seek opportunities to expand his production can be seen in his purchase of a figured head and the set-up of this highly complicated mechanism in three places: Caledonia, Kilworth and Komoka. Campbell's success lay in his ability to adapt to the needs of his customers by shifting his production from the less expensive cloth used primarily for garments to the most expensive cloth used to decorate the household. That ability came from his training in the adaptable looms, from simple to complex, that Scottish weavers had been trained to use and continued to operate when they immigrated to North America in large numbers in the nineteenth century.¹

The account book brings historians closer to understanding nineteenth-century motivations for choosing household production in a period of growth and change in the life of

¹ Van Vugt, *Britain to America*, 63.

rural Ontarians. John Campbell's account book is an important record of producer/consumer relations because it shows his customers' choices and his efficiency. Detailed information about what Campbell produced and for whom provides evidence for choices people made for their cloth requirements in a submerged narrative of visits to the weaver's shop. Purchases by family members of customers and by neighbours of customers indicate that Campbell was a decent person whom people wanted to transact business with, but it also conveys something about the population who wanted to preserve this household production juxtaposed to those who did not.

This study of Campbell offers insight into the potential technical training, abilities and efficiency of the 368 weavers recorded in the 1881 Ontario census who were born in Scotland and the thirty figured coverlet weavers from Ontario who did not leave behind account books. His proficiency as a weaver provides an understanding of the complex landscape of handloom weaving, providing scholars with evidence about the importance of range in a handloom weaver's abilities from simple to complex. The prevailing question in the historiography has been to ask why the handloom weaver persisted. Campbell's sources, his account book, looms and textiles provide the opportunity to ask many more questions than just why and not just to the weaver but also to his customers. Although this case study mostly delves into the individual, perhaps idiosyncratic business practices of one weaver, these findings are an essential component in interpreting the larger place of the self-employed-skilled artisan in nineteenth-century rural Ontario.

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GLOSSARY

Barn Frame Loom – the pre-industrial construction of a handloom where the joins of the outer posts of the loom are similar in construction to the frame of a barn, hence the term ‘barn-frame’ loom.

Carpet Coverlet – the term that Campbell used in his account book to describe one of the four patterns of figured coverlets he produced. Sources such as the Burnhams referred to these coverlets as ‘Jacquard,’ although figured coverlet weavers such as Campbell did not use this term. The use of the term carpet is interesting as it connects this type of cloth with ingrain carpets, produced in Scotland which use the same weave structure, double cloth. The difference between a carpet coverlet and an ingrain carpet is fibre and the balance in the plain weave. Ingrain carpets are made entirely of wool and both layers of cloth are balanced plain weave. Campbell’s carpet coverlets have a cotton warp. The back ground of the design is a balanced weave in cotton while the design is a weft-faced plain weave with a wool weft.

Diaper – a weave structure based on twill or satin which uses the harnesses in two or more groups to create blocks of pattern by juxtaposing two surface textures created by the weave structure. The two surface textures are the right-side and wrong-side of the twill or satin weave.

Dobby – invented in the 1850s, is an attachment placed on a handloom which simplified the weaving of multi-harness patterns by using a number of bars, with pegs which trigger the dobbie mechanism to pick up the appropriate harnesses to weave the pattern.¹

Drafts - directions for the weaver for threading the loom. Nineteenth century weavers would have used a short-hand version which grouped the threads in logical divisions based on the weave structure as in the drafts of mid-nineteenth century Prince Edward County, Ontario drafts of Hester and Rosanna Young in the Royal Ontario Museum Archives. ROM 954.148. Alexander Peddie provided instructions for drawing drafts.²

Drugget – a coarse woven fabric used to make floor coverings. The origin of the word ‘drugget’ derives from the mid-sixteenth century: from French drouguet, from drogue in the sense ‘poor-quality article.’³

Figured cloth – A cloth that has recognizable animate or inanimate designs as part of the woven structure. These textiles can be produced on draw looms or punch-card operated looms.

Figured Mechanism or Head – an attachment placed on the top of a handloom which produces cloth with recognizable animate or inanimate designs. The designs can be created by punch cards or pulleys or a barrel system.

Flannel – often referred to as cotton & wool. This cloth is made with factory-produced cotton in the warp and hand spun wool in the weft. This cloth has a naturally forming nap because the wool weft does not get caught by wool fibres in the warp and therefore springs up to form the nap.

Ingrain – a technique of figured flat woven carpet. Initially these carpets were double cloth, however, later carpets became more complex and had more layers. The pattern is created by the interaction of the two layers of cloth, switching from top layer to bottom layer. Ingrain carpets were woven primarily in in Scotland, Yorkshire and Lancashire, initially on handlooms, and were made of wool.

¹ Geoffrey Timmins, *The Last shift: The Decline of Handloom Weaving in Nineteenth-century Lancashire*, (Manchester; New York: Manchester University Press, 1993), 232. Benson included a photograph of a nineteenth century Scottish handloom with a dobbie attachment on page 8. Anna Benson, *Textile Machines*. Princes Risborough, Buckinghamshire: Shire Publications, 1983, 2002 (reprint): 31.

² Alexander Peddie, *The Linen manufacturer, Weaver and Warper's Assistant*, 420.

³ Summarized from the Oxford Dictionary.

Jute – a rough fibre made from the stems of the *Corchorus* plant to make rope or woven into sacking or matting: origin: mid-18th century from Bengali ‘matted hair.’⁴

Kersey – is a coarse woollen cloth in twill. It is woven by treadling an unbalanced followed by a balanced twill so that the cloth is woven as a dense cloth with two overlapping layers. This cloth is usually full to bring up the nap to increase its density.

Linen – is a fibre produced from flax. Flax and linen production was not prevalent in Middlesex County or in Ontario in 1871. Cloth made from linen is rare in the material record in Ontario from the mid-nineteenth century onward as it was replaced by factory-produced cotton. There are many weaves that were suitable for linen which Campbell might have used.

Mail – an eye, like the eye of a needle which holds the individual threads. The mails hang from the comberboards and are weighted by pieces of lead called lingoes.

Pattern books – a book of patterns, perhaps drawn out while an apprentice. Weaving constructions such as single, summer and winter and twill diaper are applied to the patterns.

Plain weave – the simplest weave structure which can be woven on two or four harnesses. If woven on two harnesses, the threads alternate between the first harness and the second harness. The cloth is woven by treadling 1 followed by 2 and then repeated. The advantage to threading the loom for plain weave on four harnesses is that the weaver could weave a yardage of plain weave followed by a yardage of twill just by changing the order of treadling.

Plaid – a term used to describe the pattern of colours in the warp and weft, usually in plain weave or twill. The arrangement of colours in the warp are grouped in varying numbers of threads per stripe which is repeated to create a mirror image of the colours. The colours are repeated in the same order in the weft.

Pirn – used to hold thread in an end feed shuttle. It is a tapered cylindrically shaped piece of wood, approximately fifteen centimetres long with a hole at the widest end for fixing onto a peg in a shuttle.

Punch card – a card used in a sequence of several cards to provide pattern information to a loom with a figured head attachment. Information for a pattern is transferred to the punch card by using the nonrepeating portion of the design. Needles in the figured head either project through the holes or get stopped by the punch card as in binary numbers.

Quill – a cylindrical shaped piece of wood which is housed in a shuttle and used to hold thread.

Quilt - a double weave construction also referred to as Marseilles and woven on a minimum of 6 harnesses.⁵

Raddle – like a raddle, but with ½” to 1” intervals used to space the warp as the warp is beamed onto the loom.

Reed – a small frame about 5” in height by a width to be determined by the width of the loom. Set into the beater, the reed holds the threads establishing the correct number of threads per inch. Reeds were historically made from cane, but later made from metal.

Reeling – is performed on a reel which is a stand that holds two sticks that form a cross with pegs at the end and which turns on an axis. Yarn is wound onto the reel to make skeins. A reel usually has the circumference of two yards. There is 560 yards or seven knots in a skein which is accomplished by turning the reel 280 times.

⁴ Summarized from the Oxford Dictionary.

⁵ Gilroy, *The Art of Weaving by Hand and by Power*, 118.

Satinette – a cloth with a predominately warp-faced side and a weft-faced side with the intention of creating a smooth surface. The minimum number of harnesses required to weave a satin is five, however, more harnesses create a smoother surface.

Shaft –sometimes referred to as a harness or a leaf. One shaft or harness is composed of two sticks hung horizontally, directly behind the beater as one sits at the loom. The two sticks hold several heddles, strings with an eye-loop in the middle which hold the thread in the middle of the shaft. When the weaver steps on the treadle with their foot, which is attached to the shafts, the threads on that shaft are depressed while the threads on the opposing shaft lift up, thus creating an opening or shed. Nineteenth century weavers primarily used a system of horses or pulleys to which they would attach the shafts allowing the shafts to work in opposition to each other, i.e., when one shaft is up, the opposing shaft is down

Shepherd's plaid – a small check, usually in a dark colour like black or brown and white in a 2/2 twill usually associated with the borders of Scotland.

Single Coverlet – a term used by Campbell and other handloom weavers to describe a weave structure commonly used for bed coverlets. Single coverlets use a weave construction common to Canada and the US using a minimum of four harnesses. These geometric coverlets use a cotton warp and alternating rows of cotton weft in plain weave and dyed wool weft, approximately four times the weight of the cotton for the pattern. Most modern sources, including the Burnhams refer to this type of textile construction as 'overshot' while nineteenth century weavers used several terms such as floatwork, draft and Chinee, including the one used by Campbell, 'single.' The first twentieth century reference, I located, to 'overshot' is from a 1931 article on coverlet weaving. See R. F. Hartz, "Variations in Overshot Weaving" *Handicrafter*, Vol.3, no. 1 (1931): 26-28. References to this type of weaving before this date, consistently referred to the technique as "coverlet" weaving. In Frances Goodrich, *Allanstand Cottage Industries*. Allanstand, North Carolina: Woman's Board of Home Missions of the Presbyterian Church, 1902, the author described this structure as 'shotover designs.' The local weavers who she used as informants used the term 'double draft.' A rather romanticized and patriotic book on coverlet weaving: Eliza Calvert Hall, *A Book of Hand-woven Coverlets*. Boston: Little, Brown and Company, 1912 does not use the term overshot. She consistently referred to all decorative blankets, whether figured or four-harness, as coverlets. However, one of her informants, Mrs. Hill of Berea, used the term 'single' for this construction.

Skarn – a frame with removable rods that hold spools of thread. The weaver draws the thread from spools on the skarn to wind the warp.

Sleying – after the threads have been drawn through the heddles, they are sleyed through the openings in the reed providing the threads per inch count.

Tweed – a rough-surfaced woollen cloth, typically of mixed flecked colours originally produced in Scotland: origin: mid-19th century, originally a misreading of tweel, Scots word of 'twill' influenced by association with the River Tweed.⁶

Tweeled – also referred to as twill. Twill is often used for blankets. The simplest twill is produced with three harnesses, but is most commonly woven with four harnesses. The threading for a four harness twill is repeated on harnesses, 1, 2, 3, 4. A twill has noticeable diagonal line formed by treadling 1, 2, 3, 4 for a weft-faced weave on one side and a warp-faced weave on the opposite side or 1/2, 2/3, 3/4, 4/1 for a balanced twill weave.

Warp – the thread which is wound onto a warping mill or frame before being beamed onto the loom. The threads are lifted by shafts or harnesses in the weaving process.

Weft – the thread which is introduced into the opening of the warp threads during the weaving process.

⁶ Summarized from the Oxford Dictionary.

Warping Frame or Mill – used to measure the threads for the warp. The correct number of threads for the width of the warp are wound so as to create the desired length. A warping frame is a frame with pegs placed at intervals around the edge of the frame. The warp threads are wound from side to side securing them around the peg to achieve the intended length. A warping mill is a round, multi-sided or square frame that revolves on an axis. The threads are wound around the number of revolutions necessary to attain the desired length.

APPENDICES

Appendix 1.01: 1881 Ontario Population of Weavers Based on Ethnicity

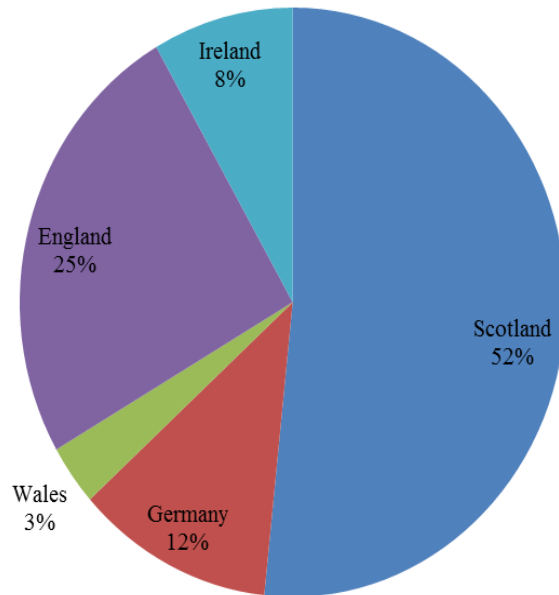
Calculated from a total of 2,022 Ontario weavers

Country	Total immigrant weavers	Percent of specified immigrant weavers from total	Total weavers born in Ontario of specified ethnic origin	Total immigrant and Ontario-born weavers from same ethnic origin	Percent of specified immigrant and Ontario-born weavers from same ethnic origin
Scotland	368	18%	258	626	31%
Ireland	330	16%	254	584	29%
England	208	10%	161	369	18%
Germany	145	7%	95	240	12%
U.S.	61	3%	11	72	4%
Other	910	46%	1,243	131	6%

Source: The 1881 Personal Census on the Library and Archives Canada website, <http://www.collectionscanada.gc.ca/databases/census-1881/index-e.html>. I searched the database for occupation using weav* for the variants: weaver, weaving. For province, I specified Ontario. Using occupation and province, I obtained 2,035 weavers in Ontario. The problem of separating handloom weavers from operators of mechanized power looms is difficult as the enumerator might have listed all who wove whether by handloom or power loom as weavers. I found that my search included factory weavers, who might be power loom operators and as such, I removed 'factory' from weav,* which amounted to twelve entries, leaving 2,022 weavers in Ontario. I cannot be certain whether 2,022 accounts for handloom weavers exclusively, and this number would have to be tested against other sources. In fact, there is only one weaver in the 1881 Ontario census listed as a handloom weaver, others, confirmed handloom weavers such as John Campbell are listed as 'weaver.'

Appendix 1.02

**Sample of Sixty of John Campbells Customers'
Ethnicity (Born in Country of Ethnicity and North
America, Combined)**



Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario . 1881 census from the Library and Archives Canada website, <http://www.collectionscanada.gc.ca/databases/census-1881/index-e.html>

Appendix 1.03

Master List of Fabrics - 102 in total					
single coverlets at 12/-	rag carpet, 9 colors at 15 cts.	bordered blankets at 1/- or 12 1/2 cts.	flannel at 10 cts.	4/4 plain at 10 cts.	checked shirt at 1/-
single coverlet at 13/-	rag carpet at 14 cts.	horse blankets at 1/-	scarlet flannel at 11 cts.	plain at 1/- or 12 1/2 cts.	robed dress
single coverlet at 14/-	rag carpet at 1/- or 12 1/2 cts.	tweeled blankets at 1/- or 12 1/2 cts.	flannel at 12 ½ cents	plain at 11 cts.	tweeled checked full cloth at 1/1
carpet coverlet at 18/-	mixed rag carpet at 10 cts.	5/4 checked blankets at 15 cts.	cotton & wool at 10 cts.	plain at 1/1	tweeled check at 1/1
carpet coverlet at 19/-	hit & mix carpet at 11 cts.	check blankets at 1/- or 12 1/2 cts.	5/4 cotton & wool at 11 cts	plain at 14 cts.	tweeled plaid at 12 ½ cts.
carpet coverlet at 20/-	wool carpet at 15 cts	stripe 5 colours at 14 cts.	cotton & wool at 1/-	plain at ½	tweeled stripe at 1/-
carpet coverlet at 22/-	wool carpet at 18 cts.	stripe 5 colors at 15 cts.	5/4 cotton & wool flannel at 1/-	plain at 15 cts.	tweeled & striped at 12 ½ cts.
carpet coverlet at 24/- or \$3.00 ea.	wool carpet at 20 cts.	checked full cloth at 1/1	plaid 3 or 4 colors at 1/1	plain at 10 cts.	broken tweel at 1/-
carpet coverlet at 26/-	wool carpet at 2/-	checked full cloth at 12 ½ cts.	plaid 4 colors at 12 ½	full cloth at 1/- or 12 1/2 cts.	cotton & wool tweeled at 1/- or 12 1/2 cts.
carpet coverlet at 28/-	stair carpet at 15 cts.	checked full cloth at 14 cents	plaid 3 colours at 14 cts.	plaid 2 colours at 1/-	tweeled cotton & wool at 11 cts.
carpet coverlet at .25 c.	hall carpet at 12 ½ cts.	check at 1/-	plaid 6 & 6 at 1/-	tweeled full cloth at 1/- or 12 1/2 cts.	5/4 tweeled at 12 ½ cts.
sheetting at 10 cts.	wool carpet at 16 cts.	checked plaid at 14 cts.	plaid 4 & 4 at 14 cts.	stripe at 1/-	5/4 3 colours tweeled at 15 cts.
tweeled sheetting at 1/-	wool carpet at 1/3	plaid at 12 ½ cts.	cotton & wool plaid at 1/-	stripe 2 colours at 12 ½ cts.	tweeled at 1/-
tweeled sheetting at 11 cts.	wool carpet at 1/6	plaid at 12 cts.	coloured cotton & wool at 11 cts.	5/4 plain & stripe at 12 ½ cts.	tweeled at 12 ½ cts.
striped blankets at 1/-	sattenet & plain at 12 ½ cts.	shepherds check at 6/-	diced plaid at 20 cts.	stripe 3 colors at 1/1	tweeled 4 & 4 at 15 cents
blankets at 1/-	diaper at 15 cts.	skirts at 12 ½ cts.	kersay at 1/-	stripe 4 colours at 1/2	tweeled 6 & 6 at 1/1
blankets at 12 ½ cts.	linen at 1/-	shirts 4 & 2 at 14 cents	cotton & wool stripe at 12 cts.	cotton & wool stripe at 1/-	dress at 12 ½ cts.
Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario Science Centre, Toronto.					

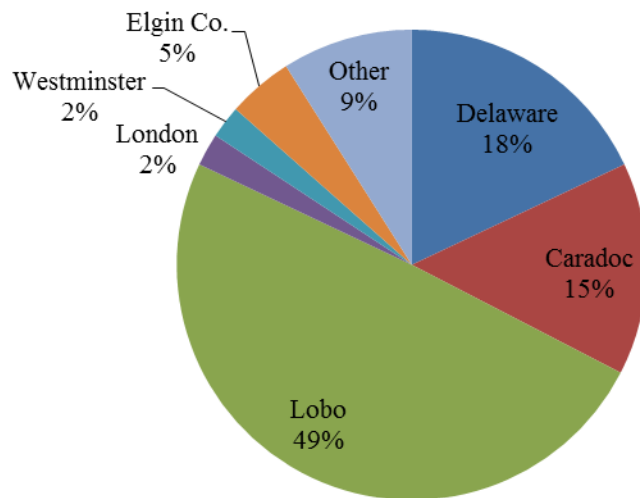
Appendix 1.04

List of Fabrics in the Sample from Middlesex and Lambton Counties Taken from the 1871 Industrial Schedule	
Cloth	Occurrence in Sample
flannel	28
home-made cloth/cloth	17
blankets	15
drugget	5
satinet	4
carpets	2
full cloth	2
jute cloth	2
tweed	1
rag carpet	1
Source: 1871 Industrial Schedule, Middlesex and Lambton Counties.	

Appendix 1.05

A Comparison of Agricultural Statistics between Middlesex County and Ontario		
Agricultural product/service	Middlesex County	Provincial Average
Fine Wool, yearly average in pounds, 1882-8	29,316.00	20,965.00
Coarse and Fine Woolled Sheep, totals, 1884	72,194.00	42,016.00
Horses, totals, 1884	25,066.00	11,910.00
Cattle, totals, 1884	113,868.00	42,793.00
Value of farmland per acre, average from 1882-8 in dollars	\$50.44	\$29.43
Value of farm property, land, buildings and implements, average from 1882-8 in dollars	\$55,781,205.00	\$2,126,405.00
Fall Wheat, average value per acre 1882-8 in dollars	\$17.79	\$17.60
Spring Wheat, average value per acre 1882-8 in dollars	\$12.30	\$13.97
Wheat to Pease, aggregate market value for wheat, barley, oats, rye and pease, average value per acre 1882-8 in dollars	\$15.43	\$14.26
Corn to Turnips, aggregate market value for corn, buckwheat, beans, hay, potatoes, carrots and turnips, average value per acre 1882-8 in dollars	\$19.15	\$19.73
Farm Labourers Wage, without board, average per year 1882-8 in dollars	\$166.00	\$163.00
Information for this table comes from Part II: Livestock and Part III: Values, Rents and Farm Wages from Sessional papers. Legislature of the Province of Ontario, Vol. XXI, Part IX, Third Session of Sixth Legislature of the Province of Ontario, Session 1889. Toronto, 1889.		

**Locations of Repeat Customers from
John Campbell's Account Book Established
in Kilworth**



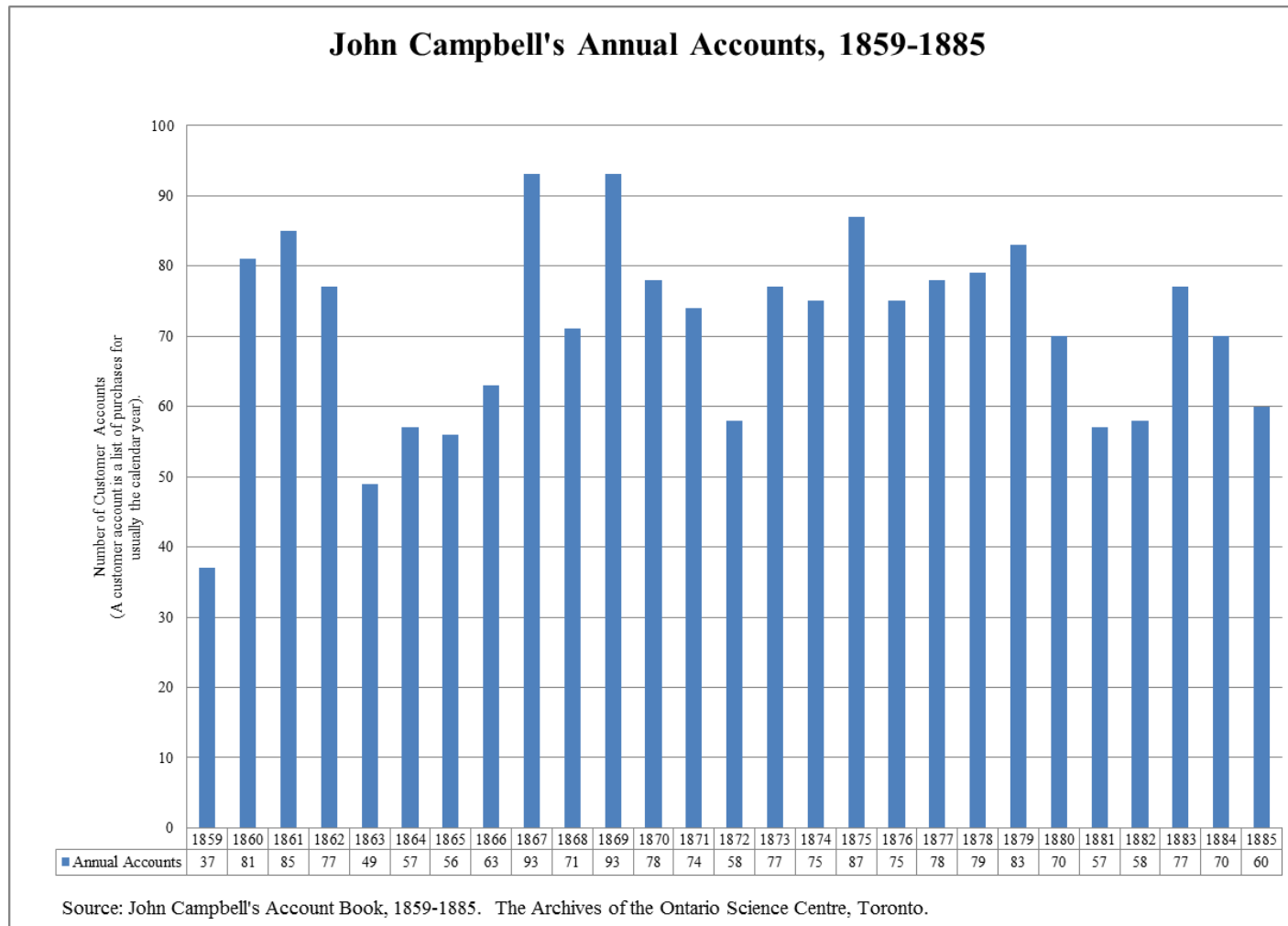
Source: John Campbell's Account Book, 1859-1885. Archives of the Ontario Science Centre, Toronto.

Appendix 1.07: List of John Campbell's Customers Established in Kilworth, Delaware Township

Name	first visit	last visit	number of years	customer accounts	Delaware	Caradoc	Lobo	London	Westminster	Elgin	Other
Alway, Mr. & Mrs. George Lobo Twp.	May 13, 1861	May 26, 1881	10	12			\				
Armstrong, Mr. & Mrs., Komoka, Lobo Twp.	Nov. 22, 1860	Dec. 21, 1867	7	2			\				
Beckwith, Mr. Wm. Komoka, Lobo Twp.	Apr. 16, 1861	Apr. 19, 1865	4	2			\				
Blain, John, Delaware	Sept. 20, 1861	July, 17, 1865	4	3	\						
Bratt, Arron, Delaware	Nov. 8, 1859	Feb. 12, 1877	18	13	\						
Brown, Archd., Iona, Southwold, Elgin Co.	Apr. 25, 1861	Feb. 21, 1871	10	4						\	
Brown, Mr. & Mrs. John, Komoka, Lobo Twp.	Nov. 29, 1859	Aug. 6, 1884	25	3			\				
Buttery, William, Strathroy, Adelaide Twp.	Nov. 5, 1861	Aug. 21, 1877	16	2							\
Campbell, Archd., Caradoc Twp.	Aug. 24, 1859	Sept. 29, 1870	11	5		\					
Campbell, John B., Lobo Twp.	Aug. 26, 1859	Sept. 26, 1873	14	12			\				
Campbell, Mr. & Mrs. Sylvester, Komoka, Lobo Twp.	Nov. 26, 1860	Dec. 19, 1883	23	11			\				
Carrey, Mrs. & Mrs. Edward, Delaware	Nov. 7, 1861	Dec. 19, 1863	2	2	\						
Clark, Mr. & Mrs. Nathaniel, Mount Brydges, Caradoc	Oct. 25, 1861	Nov. 7, 1884	23	9		\					
Colvin, William, Lobo Twp.	Sept. 3, 1861	May. 28, 1884	23	2			\				
Comfort, Elis, Lobo Twp.	Nov. 17, 1860	Aug. 28, 1867	7	2			\				
Crawford, Archd. B., Lobo Twp.	Jan. 31, 1861	Sept. 14, 1883	22	2			\				
Crawford, James, Fernhill, Lobo Twp.	Aug. 19, 1862	Aug. 23, 1884	22	5			\				
Cutlar, Elias, Lobo Twp.	June. 22, 1860	Oct. 26, 1860	<1	2			\				
Dewar, Mr. Donald, Komoka, Lobo Twp.	Apr. 16, 1863	July. 18, 1871	8	2			\				
Edwards, Jeremiah, Lobo Twp.	Apr. 18, 1860	Apr. 28, 1881	21	13			\				
Edwards, John, Komoka, Lobo Twp.	May. 7, 1860	Oct. 22, 1880	20	4			\				
Edwards, Richard W., Lobo Twp.	Nov. 13, 1861	May. 24, 1880	19	3			\				
Fisher, Mrs., Lobo Twp.	Aug. 8, 1859	Nov. 25, 1871	12	8			\				
Fonger, George, Kilworth, Delaware Twp.	Oct. 19, 1860	Mar. 31, 1885	15	2	\						
Fonger, Henry, Delaware	Dec. 12, 1861	Feb. 17, 1868	7	8	\						
Fonger, Mr. & Mrs. Ben, Delaware	Oct. 17, 1860	Nov. 9, 1865	5	5	\						
Glover, Frank, Westminster Twp.	Aug. 28, 1860	Aug. 16, 1862	2	3					\		
Graham, Alexr., Lobo Twp.	Oct. 15, 1859	Oct. 30, 1884	25	13			\				
Graham, Donald, Lobo Twp.	Dec. 28, 1861	Oct. 19, 1874	13	9			\				
Graham, Duncan, Komoka, Lobo Twp.	Nov. 7, 1860	July. 28, 1885	15	20			\				
Graham, Neil, Lobo Twp.	Dec. 15, 1859	Oct. 15, 1881	22	5			\				
Gray, Mr. & Mrs. John, Lobo Twp.	Jan. 23, 1862	Dec. 28, 1883	21	5			\				
Hanson, Dr., Hyde Park, London Twp.	Aug. 16, 1860	Oct. 15, 1878	18	5				\			
Harris, Gilbert, Delaware	Oct. 7, 1859	May. 1, 1874	15	8	\						
Johnston, Alexr., Lobo Twp.	Apr. 23, 1859	Oct. 3, 1873	14	12			\				
Johnston, Daniel, Lobo Twp.	Oct. 7, 1859	Sept. 1, 1862	3	4			\				
Johnston, John, Lobo Twp.	Oct. 2, 1860	Sept. 18, 1874	14	11			\				
Jones, Mr., McGillivray Twp.	Feb. 9, 1863	Sept. 29, 1868	5	4							\
Justin, Mr. & Mrs., London	Apr. 10, 1861	May. 28, 1870	9	4				\			
Kilbourn, Robert [Kilburn], Kilworth, Delaware Twp.	Sept. 24, 1859	Feb. 17, 1877	18	6	\						
Kilburn, Harvey, Delaware	Feb. 12, 1861	Sept. 9, 1863	2	2	\						
Lamont, [Layman, Lyman] Norman, Lobo Twp.	Feb. 1, 1861	Aug. 14, 1879	18	11			\				
Livingston, Mr. Angus, Komoka, Lobo Twp.	Oct. 19, 1860	Oct. 28, 1865	5	4			\				
Luce, Defois, Delaware	Oct. 18, 1861	Feb. 12, 1876	15	4	\						
McArthur, Mrs. A., Lobo Twp.	Aug. 24, 1860	Nov. 25, 1866	6	2			\				
McArthur, Colin, Lobo Twp.	Aug. 15, 1860	Sept. 25, 1865	5	4			\				
McCormick, Donald, Fingal, Southwold, Elgin Co.	May. 15, 1861	Oct. 11, 1869	8	2						\	
McDougal, Dan, Komoka, Lobo Twp.	Sept. 7, 1859	Nov. 14, 1883	24	7			\				
McDougal, John, Lobo Twp.	Nov. 13, 1860	Sept. 14, 1880	20	6			\				
McDougall, Archd., Ekfrid Twp.	Dec. 5, 1859	May. 13, 1870	11	2							\
McDougall, John, Komoka, Lobo Twp.	Nov. 13, 1860	Sept. 14, 1880	20	6			\				
McFarlan, Duncan, Nairn, East Williams	July. 15, 1862	May. 13, 1872	10	2							\
McGregor, A., Lobo Twp.	March. 25, 1860	Oct. 13, 1866	6	5			\				
McGregor, James, Caradoc Twp.	Jan. 23, 1864	July. 9, 1870	6	6		\					
McGuggan, John, Caradoc Twp.	Dec. 17, 1859	Apr. 11, 1866	7	4		\					
McGuggan, Archd., Caradoc Twp.	Mar. 8, 1862	Sept. 28, 1868	6	3		\					
McIntyre, John C., Strathroy, Adelaide Twp.	June. 13, 1860	Feb. 27, 1873	13	3							\
McIntyre, John, Lobo Twp.	July. 30, 1862	Mar. 24, 1870	8	2			\				

McIntyre, Peter, Caradoc Twp.	Dec. 15, 1860	Nov. 24, 1879	19	10		\						
McKeith, John D., Lobo Twp.	Nov. 29, 1859	Oct. 15, 1869	10	2			\					
McKeller, Malcolm, Caradoc Twp.	July. 9, 1859	Oct. 23, 1863	4	5		\						
McKinlay, Donald, Lobo Twp.	Nov. 16, 1859	Jan. 5, 1877	18	6			\					
McLauchlan, John, Lobo Twp.	Sept. 3, 1859	July. 12, 1879	20	15			\					
McLellan, Archd., Caradoc Twp.	Dec. 24, 1861	Feb. 5, 1868	7	8		\						
McMillan, Thos., Caradoc Twp.	Jan. 13, 1860	Feb. 14, 1867	7	6		\						
McMurphy, Dugald, Caradoc Twp.	Dec. 12, 1860	Dec. 14, 1865	5	4		\						
McPherson, Alexr., Lobo Twp.	Nov. 27, 1860	Nov. 21, 1862	2	3			\					
McRoberts, John, Caradoc Twp.	Nov. 11, 1859	Sept. 12, 1866	7	7		\						
McTaggart, Angus, Ekfrid Twp.	Oct. 17, 1859	May. 7, 1885	26	4							\	
McVicar, Archd., Lobo Twp.	Feb. 18, 1862	Nov. 26, 1864	2	3			\					
Myers, Mr. & Mrs. Wm., Kilworth, Delaware Twp.	Oct. 17, 1861	Sept. 29, 1873	12	5	\							
Nixon, George, London Twp.	Aug. 17, 1861	Nov. 8, 1870	9	2				\				
Norris, Jos., Kilworth, Delaware Twp.	Oct. 4, 1861	Sept. 12, 1864	3	3	\							
Ogden, John, Adelaide Twp.	Sept. 5, 1860	Sept. 19, 1862	2	4							\	
Oliver, George, Delaware Twp.	Dec. 27, 1862	Nov. 13, 1863	1	2	\							
Ormond, Meredith, Westminster Twp.	Sept. 17, 1861	Nov. 10, 1863	2	5					\			
Sinclair, Duncan, Caradoc Twp.	Mar. 9, 1860	Feb. 25, 1875	15	4		\						
Small, Andrew, Caradoc Twp.	Oct. 12, 1859	Nov. 23, 1868	9	12		\						
Smith, Henry, Lobo Twp.	Oct. 10, 1860	July. 1, 1869	9	5			\					
Smith, John, Adelaide Twp.	May. 29, 1861	June. 14, 1876	15	4							\	
Smith, Tim, Westminster Twp.	Sept. 21, 1861	Nov. 7, 1863	2	2						\		
Stewart, Alexr., Lobo Twp.	Nov. 10, 1859	Sept. 26, 1867	8	2			\					
Sutton, Samuel, Kilworth, Delaware Twp.	Apr. 30, 1861	Jan. 11, 1862	1	2	\							
Tunks, James, Westminster Twp.	Dec. 3, 1862	Aug. 15, 1863	1	2						\		
Ulrick, Mr. & Mrs., Kilworth, Delaware Twp.	Jan. 4, 1860	Nov. 28, 1862	2	3	\							
Whyte, Mrs. Wm, Lobo Twp.	Sept. 12, 1861	Jan. 16, 1867	6	4			\					
Woodhull, Ben, Lobo Twp.	Oct. 23, 1860	Nov. 14, 1862	2	3			\					
Woodhull, Charles Senr., Lobo Twp.	Oct. 16, 1860	Mar. 26, 1869	9	6			\					
Woodhull, Mr. & Mrs. John, Delaware Twp.	June. 1, 1861	Mar. 22, 1869	8	4	\							
Zavits, Benj., Lobo Twp.	May. 2, 1860	Nov. 11, 1867	7	3			\					
					16	13	44	2	2	4	8	
Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario Science Centre, Toronto.												

Appendix 1.08

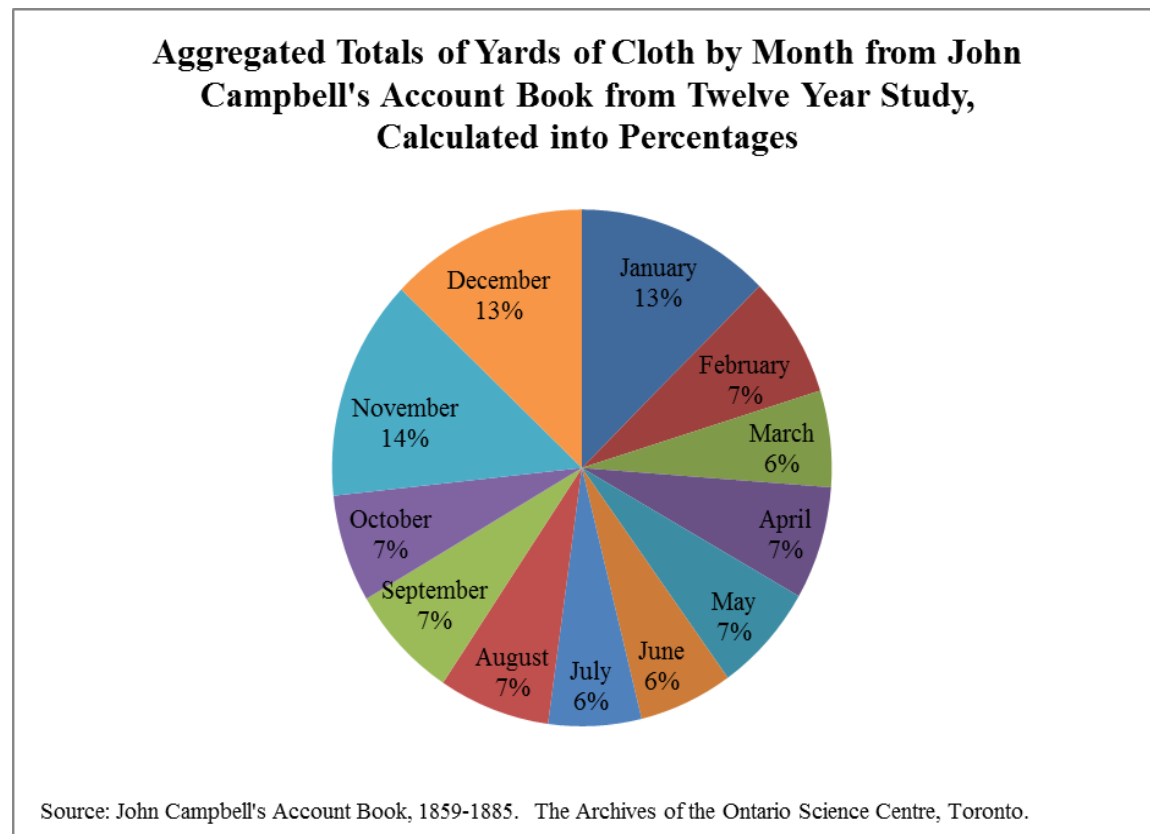


Campbell organized the entries in the account book by headings of the customer's name and location which I refer to as an annual account. An annual account can be several orders of cloth over a year's duration. The average number of annual accounts is 74.

Appendix 1.09

Aggregated Dollars and Yards from John Campbell's Account Book for Twelve Year Study		
	dollars	Yards
1860	\$362.90	2,526.00
1861	\$432.30	2,705.00
1862	\$381.38	2,246.75
1863	\$244.00	1,670.50
1867	\$427.58	2,536.50
1869	\$527.72	2,011.00
1871	\$352.15	1,393.00
1875	\$381.22	2,240.25
1879	\$445.34	1,879.00
1881	\$259.09	1,466.00
1883	\$391.92	2,085.75
1885	\$317.44	1,937.50
Total	\$4,523.04	24,697.25
Average	\$376.92	2,058.10
Source: John Campbell's Account Book, 1859-1885. The Ontario Science Centre, Toronto.		

Appendix 1.10



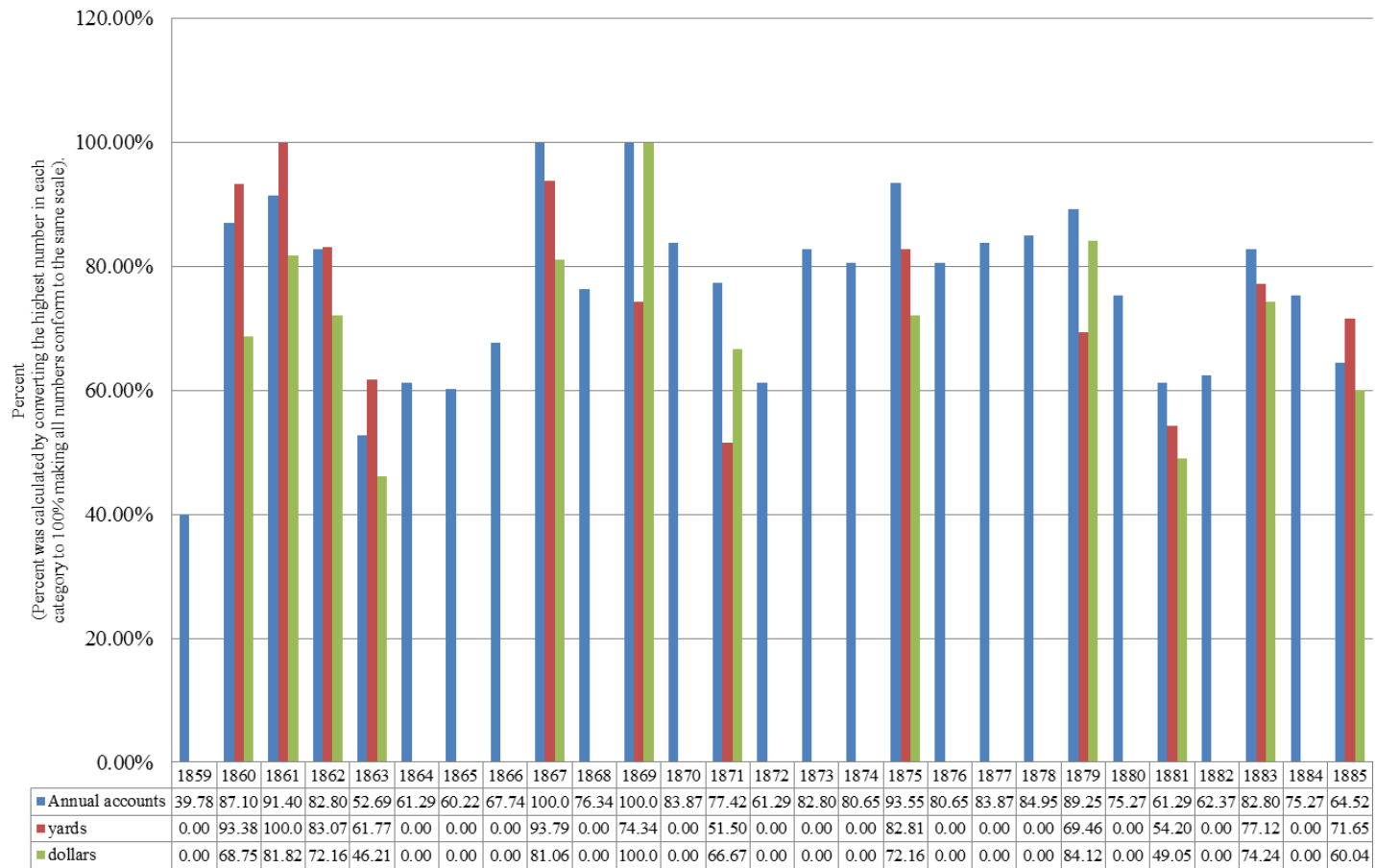
Note that 40% of Campbell's orders occurred between November and January, perhaps coinciding with increased money from his rural customers, post-harvest.

Appendix 1.11

A Sample of textile and related purchases from Hugh McRae, Strathburn, Ekfrid Township					
Customer	Date	Cloth	price per yard	Quantity	Price
Samuel Bartlet's wife	Feb. 25, 1865	flannel	62 1/2	5.00	\$3.44
Robert Stirling	Feb. 27, 1865	cotton	0.30	2.00	\$0.60
Malcolm McAlpine Sr.'s wife	April 15, 1865	print	72/26	2.75	\$0.72
James Murray	May, 11, 1865	cotton	0.25	3.00	\$0.75
"		print	0.25	4.00	\$1.00
Peter Hyndman for self	Sept. 28, 1865	indigo		1/2 "	\$1.50
Duncan McColl	Sept. 28, 1865	madder	0.25	5"	\$1.25
"		alum	0.81	2 1/2 "	\$0.80
"		logwood	0.25	4"	\$1.00
Chr. Paul	Sept. 30, 1865	logwood	0.25	1/2"	\$0.50
Christopher Pool	Feb. 21, 1866	indigo		1/2"	\$1.50
Archy McEachern per Ann	Apr. 27, 1867	print	0.2	3.00	\$0.60
Malcolm McIntyre	May 7, 1867	print	40/20	2.00	\$0.40
Robert Hickey	May 7, 1867	print	0.20	1.00	\$0.20
Wallace Lockwood	May 7, 1867	Holland	0.28	5.00	\$1.40
Robert Hickey	May 8, 1867	print	0.20	7.00	\$1.40
George Currie per Susan	May 9, 1867	gingham	0.20	10.00	\$2.00
"		f. cotton	0.20	2.00	\$0.40
"		print	0.20	3.50	\$0.70
"		muslin	0.2	4.00	\$0.80
Malcolm McIntyre	April 5, 1870	flannel	0.4	2.50	\$1.00
"		plaid	37 1/2	0.75	\$0.28
Source: Hugh McRae, Merchant and Postmaster, Strathburn, Ekfrid Township, B4068,X1668-73, 1854-1873, University of Western Ontario Archives.					

Appendix 1.12

A Comparison of Annual Account Totals, 1859-1885 and Actual Totals for Yards and Dollars from the Twelve Year Study from John Campbell's Account Book



Appendix 1.13

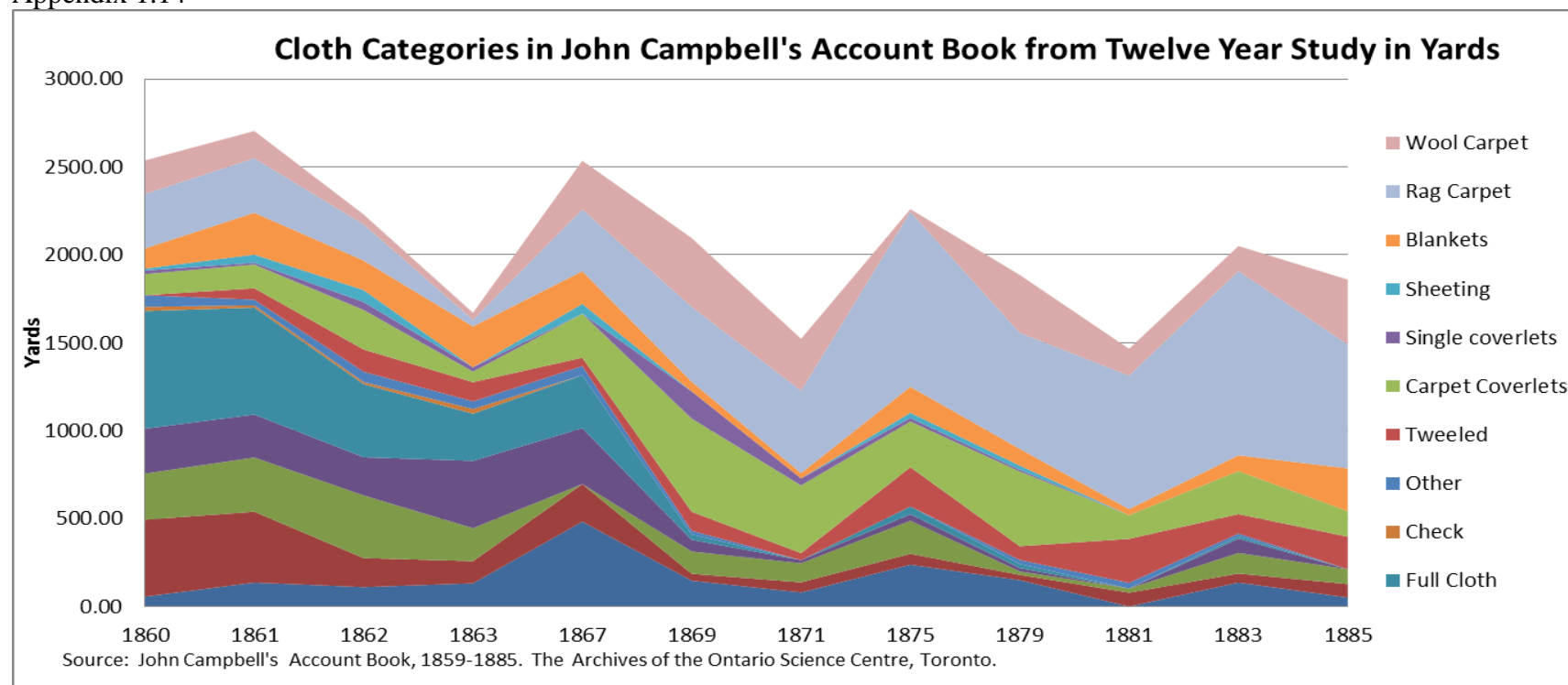
Full Cloth Orders in 1861		
Month	Number of orders	Total Yardage
Aug., 1861	1	15.00
Sept., 1861	3	46.50
Oct., 1861	3	96.50
Nov., 1861	14	214.50
Dec., 1861	7	158.75
Total	28	531.25

Final Payment of Full Cloth Ordered in 1861		
Month	Number of orders	Total Yardage
Sept., 1861	3	39.00
Oct., 1861	1	41.00
Nov., 1861	5	161.00
Dec., 1861	3	42.75
Jan., 1862	2	39.00
Feb., 1862	2	41.50
Mar., 1862	5	101.50
Apr., 1862	1	23.00
May, 1862	1	18.50
July, 1862	1	24.00
Total	24	531.25

Note that the discrepancy in the total number of orders taken and finalized is due to customers paying for more than one order in a final payment.

Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario Science Centre, Toronto.

Appendix 1.14



Cloth Categories in John Campbell's Account Book from Twelve Year Study in Yards														
	1860	1861	1862	1863	1867	1869	1871	1875	1879	1881	1883	1885	Average	Total
Plain	56.50	136.00	110.50	132.00	483.00	147.00	80.00	238.00	150.00	0.00	136.50	51.00	143.00	1,720.50
Cotton & Wool/ Flannel	437.25	403.50	165.00	126.50	213.50	39.50	57.50	62.50	30.00	79.00	51.50	76.50	145.19	1,742.25
Stripe	262.75	308.50	356.50	187.25	0.00	126.50	108.50	187.50	20.00	24.00	117.00	85.00	148.63	1,783.50
Plaid	255.00	244.50	217.50	383.00	318.50	66.50	18.00	37.00	19.00	0.00	81.00	0.00	136.67	1,640.00
Full Cloth	669.25	608.25	415.20	268.00	301.25	31.00	0.00	44.00	23.00	0.00	14.00	0.00	197.83	2,373.95
Check	24.00	13.00	12.50	27.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.38	76.50
Other	66.50	31.75	58.50	43.00	51.50	20.50	0.00	0.00	23.00	32.00	15.00	0.00	28.48	341.75
Tweeled	0.00	65.00	126.50	109.50	47.50	108.00	40.00	223.50	78.00	250.00	110.50	185.00	111.96	1,343.50
Carpet Coverlets	120.00	135.00	225.00	60.00	250.00	530.00	385.00	260.00	425.00	135.00	245.00	145.00	242.92	2,915.00
Single coverlets	20.00	10.00	45.00	25.00	0.00	155.00	40.00	20.00	10.00	0.00	0.00	0.00	27.08	325.00
Sheeting	11.00	46.50	68.00	0.00	56.50	0.00	0.00	30.00	24.00	0.00	0.00	0.00	19.67	236.00
Blankets	115.00	238.00	168.00	232.25	185.50	55.00	30.00	147.50	95.00	34.00	89.75	243.50	136.13	1,633.50
Rag Carpet	309.75	310.00	205.50	37.50	351.00	426.00	468.50	995.25	660.00	759.00	1048.50	705.00	523.00	6,276.00
Wool Carpet	190.50	155.00	56.50	40.00	278.00	391.00	295.50	15.00	329.00	153.00	142.00	368.50	207.17	2,414.00

The first seven categories of cloth were primarily used for garments while the bottom seven were used for household textiles.

Note that from 1860 and 1867, most cloth produced was for garments. From 1869 to 1885, most cloth produced was for the household

Appendix 1.15

1871 Industrial Census - Handloom weavers - Williams East Twp., Division 2, North Middlesex									
Name	Fixed capital invested	mos. worked per year	Employees	Raw Material	Quantity	Aggregate Value in \$	Product	Quantity	Aggregate Value in \$ of Product
William Campbell *enumerator writes that he pays wages as per work*	\$10	4	1	yarn	800 lbs.	\$24	Flannel	800 yards	\$600
Adam Auld	\$4	4	1	yarn	400 lbs.	\$180	Home-made Cloth	400 yards	\$250
Rose Ann	\$18	8	1	yarn	500 lbs.	\$200	Home-made Cloth	500 yards	\$400
Betsy McRay	\$5	4	1	yarn	160 lbs.	\$60	Home-made Cloth	160 yards	\$120

1871 Census - Williams East Twp., Div. 2 - Personal Schedule				
Occupation	Country of Birth	Marital Status	Children	Age
RR Employee	Scotland	married	2 boys	31
Weaver	Scotland	widowed	2 girls, 1 boy	65
cannot locate				
cannot locate				

1871 Industrial Census - Handloom weavers - McGillivray Twp., Division 1, North Middlesex									
Name	Fixed capital invested	mos. worked per year	Employees	Raw Material	Quantity	Aggregate Value in \$	Product	Quantity	Aggregate Value in \$ of Product
Catherine & Alison Craig?	\$30	1	1	Woollen yarn	unknown	\$40	Rag carpet, jute cloth and flannel	150 yds	\$60.00
John McEwan	\$25	2	1	Woollen & Cotton Yarn	40 lbs.	\$20	Flannel & Blankets	140 yds	\$70
Mrs. M.J. Rumohs	\$20	1	1	Woollen & Cotton Yarn	40 lbs.	\$20	Blankets & Flannel	50 yds	\$38
Lily Campbell	\$26	2	1	Woollen & Cotton yarn	150 lbs.	\$75	Flannels, Blankets	200 yds	\$150
Christina McLellan	\$10	2	1	Woollen & Cotton yarn	160 lbs.	\$80	Flannels, Blankets	200 yds	\$150
Mary Ann Cameron	\$40	3	1	Woollen & Cotton yarn	360 lbs.	\$180	Flannels, Jute, Cloths, Blankets	600 yds	\$450
Maria Baker	\$20	3	1	Woollen & Cotton yarn	200 lbs.	\$75	Carpets, Flannels	200 yds	\$100
Jane Erskins	\$42	6	1	Woollen & Cotton Yarn	840 lbs.	\$400	Flannels, Full Cloth, Blankets	1200 yds	\$750
Sarah Robinson	\$30	2	1	Woollen & Cotton Yarn	300 lbs.	\$140	Flannels, Full Cloth	500 yds	\$325
Mary Hannah	\$30	3	1	Coollen & Cotton Yarn	200 lbs.	\$90	Flannels, Blankets	500 yds	\$180

1871 Census - McGillivray Twp., Div. 2 - Personal Schedule				
Occupation	Country of Birth	Marital Status	Children	Age
Weaver	Ontario	Single	mother is widowed, 1 sister, 1 brother	19
brother Peter is listed as a Weaver	Ontario	Single	1 sister, 4 brothers	John is 16, Peter is 18
none given	Ontario	widowed	1 boy	54
Weaver	Scotland	widowed	5 girls, 2 boys	34
cannot confirm				
Weaver	Ireland	widowed	1 girl, 3 boys	34
Weaver	Ontario	unknown	lives with John Scott, 5 yrs old	26
Weaver	Scotland	Married to a farmer	5 girls, 2 boys	54
Weaver	Ireland	married to a farmer	3 girls, 4 boys	41
Weaver	Ireland	married to a farmer	3 girls, 4 boys	41

1871 Industrial Census - Handloom weavers - Biddulph Twp., Division 1, North Middlesex									
Name	Fixed capital invested	mos. worked per year	Employees	Raw Material	Quantity	Aggregate Value in \$	Product	Quantity	Aggregate Value in \$ of Product
Cathrine Harrigan	\$30	6	2	yarn	400 lbs.	\$200	Cotton & Woollen flannels	800 yds	\$400
Joseph Langford	\$20	5	1	cotton & wool	800 lbs.	\$250	cloth	1200 yds	\$600

1871 Industrial Census - Handloom weavers - Biddulph Twp., Division 2, North Middlesex									
Name	Fixed capital invested	mos. worked per year	Employees	Raw Material	Quantity	Aggregate Value in \$	Product	Quantity	Aggregate Value in \$ of Product
Mary Ann Frier	\$50	5	1	yarns	200 lbs.	\$100	cloth & flannel of various kinds	2000 yds	\$500
Sarah Meads	\$35	12	1	yarns of various kinds	-	-	Cloth & Flannel	115 yds	\$75
Sarah Ann Hodgins	\$20	2	1	yarn of various kinds	-	\$12	Cloth, Flannel & Blankets	55 yds	\$20
Charlotte Scilly	\$40	2	1	yarns of various kinds	60 lbs.	\$23	Cloth & Flannel	50 yds	\$40
Catherine Ann Ryan	\$20	1	1	yarns of various kinds	30 lbs.	\$15	Flannel	30 yds	\$18
Kate Ryan	\$30	2	1	yarns of various kinds	151 lbs.	\$88	Cloth & Flannel	10 yds	\$1
Elizabeth ?	\$50	2	1	yarns of various kinds	200 lbs.	\$100	Cloth, Flannel & Carpetting	200 yds	\$25
Ellen Stanley	\$20	2	1	yarns of various kinds	95 lbs.	\$47	Cloth & Flannel	115 yds	\$60
Elizabeth Atkinson	\$32	2	1	yarn of various kinds	150 lbs.	\$75	Flannel & Blankets	330 yds	\$170
Elizabeth ?	\$22	2	1	yarns of various kinds	100 lbs.	\$50	Cloth, Flannel & Blankets	275 yds	\$150
Eliza Young	\$29	2	1	yarns of various kinds	175 lbs.	\$85	Cloth, Flannel & Blankets	200 yds	\$100

1871 Census - Biddulph Twp., Div. 1 - Personal Schedule				
Occupation	Country of birth	Marital Status	Children	Age
Weaver	Ontario	Widowed	2 girls	29
cannot confirm				

1871 Census - Biddulph Twp., Div. 2 - Personal Schedule				
Occupation	Country of birth	Marital Status	Children	Age
Weaver	Ireland	married to a laborer	3 girls, 1 boy	55
Weaver	Ontario	married to a carpenter	no children	45
could not verify - a Sarah Ann Hodgins on same page as Charlotte Scilly				
none given	Ireland	married to a farmer	no children	60
could not verify				
Weaver	Ontario	single	4 sisters, 4 brothers	21
not enough information				
Weaver	Ontario	single	4 sisters, 6 brothers	20
cannot confirm				
not enough information				
cannot confirm				

1871 Industrial Census - Handloom weavers - Biddulph Twp., Division 3, North Middlesex									
Name	Fixed capital invested	mos. worked per year	Employees	Raw Material	Quantity	Aggregate Value in \$	Product	Quantity	Aggregate Value in \$ of Product
Margaret O'Meara *enumerator noted that she 'just got started couldn't give any particulars'	\$30	12	-	Wool & Cotton	-	-	Flannel and Cloth	-	-
James Auterson *enumerator notes that 'he wove about 800 yds last year at 8 c. per yard'	\$15	12	-	Wool & Cotton	-	-	Flannel and Cloth	800 yds	\$80

1871 Industrial Census - Handloom weavers - Ekfrid Twp., Division 3, Middlesex									
Name	Fixed capital invested	mos. worked per year	Employees	Raw Material	Quantity	Aggregate Value in \$	Product	Quantity	Aggregate Value in \$ of Product
John McMillan	\$20	3	-	Wool & Cotton	700 lbs.	\$75	Cloth Blankets	-	\$300

1871 Industrial Census - Handloom weavers - Sarnia Twp., Division 1, Lambton County									
Name	Fixed capital invested	mos. worked per year	Employees	Raw Material	Quantity	Aggregate Value in \$	Product	Quantity	Aggregate Value in \$ of Product
Andrew Maitland	\$30	8	-	Woolen & Cotton yarn	abt. 1400 lbs.	\$746	Blanketing, Satinet, Tweed, drugget	2000 yds	\$980
James Brown	\$40	3	-	Woolen & Cotton yarn	abt. 150 lbs.	\$85	Flannel, Satinet, Blankets	200 yds	\$120
Martha Ann McSherry *Patent Loom for Custom Work	\$90	4	-	Woolen & Cotton yarn	abt. 300 lbs.	\$165	Satinet & Drugget	440 yds	\$220
William Cowan	\$20	4	-	Woolen & Cotton yarn	abt. 200 lbs.	\$110	Cloth, drugget	300 yds	\$150
John Miller	\$20	2	-	Woolen & Cotton yarn	abt. 100 lbs.	\$55	Drugget & Blankets	140 yds	\$80
Mr. W. Nash	\$18	2	-	Woolen & Cotton yarn	abt. 80 lbs.	\$44	Satinet & Drugget	120 yds	\$65

1871 Industrial Census - Handloom weavers - Westminster Twp., Division 1, Middlesex									
Name	Fixed capital invested	mos. worked per year	Employees	Raw Material	Quantity	Aggregate Value in \$	Product	Quantity	Aggregate Value in \$ of Product
Francis Adair	\$10	3	-	Wool and Cotton	150 lbs.	\$75	Flannel	300 yds	\$125
John McArthur	\$30	-	-	Wool and Cotton	-	-	-	-	-

1871 Census - Biddulph Twp., Div. 3 - Personal Schedule				
Occupation	Country of birth	Marital Status	Children	Age
Weaver	Ireland	Widowed	3 girls, 1 boy	37
Weaver	Ireland	Married	2 girls, 1 boy	50

1871 Census - Ekfrid Twp., Div. 3 - Personal Schedule				
Occupation	Country of birth	Marital Status	Children	Age
could not find				

1871 Census - Sarnia Twp., Div. 1 - Personal Schedule				
Occupation	Country of birth	Marital Status	Children	Age
Weaver	Ireland	not married - possibly living with brother, his wife and two sons		50
Weaver	Scotland	Widowed	3 daughters, 3 sons	63
no occupation	England	Married to a farmer	no children	37
Weaver	Ireland	Married	1 son	64
Three possible matches, but could not verify based on occupation.				
Could not locate				

1871 Census - Westminster Twp., Div. 1 - Personal Schedule				
Occupation	Country of birth	Marital Status	Children	Age
Clothier	Ontario	Married	no children	25
Weaver	Scotland	Married	2 girls, 1 boy	45

Appendix 1.16

Weavers in the 1871 Census, Personal Schedule Cross-referenced with the Industrial Schedule						
Surname	Given Name	Age	Place of Birth	District	Sub-district	Listed in Sched. 6
ADAIR	FRANCIS	25	ONTARIO	MIDDLESEX EAST	Westminster	yes
ARMSTRONG	WILLIAM	80	IRELAND	MIDDLESEX WEST	Mosa	
ASHTON	JOHN	68	ENGLAND	MIDDLESEX EAST	London Township	
AULD	ADUM	65	SCOTLAND	MIDDLESEX NORTH	Williams East	yes
AUTERSON	JAMES	50	IRELAND	MIDDLESEX NORTH	Biddulph	yes
BAILY	JOHN	50	SCOTLAND	MIDDLESEX NORTH	Williams East	
BAIN	JOHN	34	SCOTLAND	MIDDLESEX WEST	Delaware	
BAKER	MARIA	26	ONTARIO	MIDDLESEX NORTH	McGillivray	yes
BARTLETT	EXPERIENCE	72	US	MIDDLESEX WEST	Ekfrid	
BICKNELL	BENJAMIN	56	ENGLAND	MIDDLESEX WEST	Metcalfe	yes
BROOKS	ELLEN	22	ONTARIO	MIDDLESEX NORTH	Adelaide	
BROWN	SAMUEL	71	IRELAND	MIDDLESEX NORTH	Biddulph	
BRYANS	WILLIAM	67	SCOTLAND	MIDDLESEX NORTH	Williams East	
BURRESS	MARGRET	34	ONTARIO	MIDDLESEX WEST	Delaware	
CACEY	HENRY	60	IRELAND	MIDDLESEX NORTH	Biddulph	
CAMERON	MARY	34	IRELAND	MIDDLESEX NORTH	McGillivray	yes
CAMPBELL	JOHN	55	SCOTLAND	MIDDLESEX EAST	Nissouri West	
CAMPBELL	JOHN	75	SCOTLAND	MIDDLESEX NORTH	Lobo	
CAMPBELL	JOHN	61	SCOTLAND	MIDDLESEX NORTH	Lobo	yes
CAMPBELL	LILY	34	SCOTLAND	MIDDLESEX NORTH	McGillivray	yes
CHARLES	JOHN	64	ENGLAND	MIDDLESEX EAST	Westminster	
CRAIG	CATHERINE	19	ONTARIO	MIDDLESEX NORTH	McGillivray	yes
CRAWFORD	JAMES	52	SCOTLAND	MIDDLESEX WEST	Strathroy Villa	
ERSKINS	JANE	54	SCOTLAND	MIDDLESEX NORTH	McGillivray	yes
EVANS	DAVID	55	WALES	MIDDLESEX NORTH	Lobo	
GOFF	MARY	35	ONTARIO	MIDDLESEX WEST	Ekfrid	
FRIERS	MARY ANN	55	IRELAND	MIDDLESEX NORTH	Biddulph	yes
HAGERTY	CAROLINE	60	ENGLAND	MIDDLESEX WEST	Metcalfe	
HAMILTON	DUNCAN	67	SCOTLAND	MIDDLESEX WEST	Ekfrid	
HANNAH	MARY	41	IRELAND	MIDDLESEX NORTH	McGillivray	yes
HARRIGAN	CATHRINE	29	ONTARIO	MIDDLESEX NORTH	Biddulph	yes
HUMPHRIES	RALPH	73	ENGLAND	MIDDLESEX WEST	Mosa	
KAY	JAMES	68	SCOTLAND	MIDDLESEX WEST	Delaware	
LANCASTER	GEORGE	34	ENGLAND	MIDDLESEX WEST	Strathroy Villa	
MCALISTER	ALEXANDER	64	SCOTLAND	MIDDLESEX NORTH	Lobo	
MCCARTHUR	JOHN	45	SCOTLAND	MIDDLESEX EAST	Westminster	yes
MCBEAN	WILLIAM	63	SCOTLAND	MIDDLESEX NORTH	Lobo	
MCEWAN	JOHN	16	ONTARIO	MIDDLESEX NORTH	McGillivray	yes
MCGEE	JOHN	71	IRELAND	MIDDLESEX WEST	Wardsville Village	
MCKAY	BETSY	45	SCOTLAND	MIDDLESEX NORTH	Williams East	
MCMILLAN	JOHN	39	SCOTLAND	MIDDLESEX WEST	Ekfrid	yes
MCNAMEE	JAMES	62	IRELAND	MIDDLESEX NORTH	Biddulph	
MEADS	SARAH	45	ONTARIO	MIDDLESEX NORTH	Biddulph	yes
MORELL	JOSEPH	35	QUE	MIDDLESEX NORTH	Lobo	
MUNS	SAMUEL	76	IRELAND	MIDDLESEX NORTH	Adelaide	
MURRAY	THOMAS	41	SCOTLAND	MIDDLESEX NORTH	Williams West	yes
NICHOL	JOHN	77	SCOTLAND	MIDDLESEX EAST	London Township	
OMERA	MARGRET	37	IRELAND	MIDDLESEX NORTH	Biddulph	yes
PRUDHAM	JOHN	51	ENGLAND	MIDDLESEX EAST	London Township	
RANDALL	WILLIAM	76	ENGLAND	MIDDLESEX NORTH	Williams West	
ROBINSON	SARAH	41	IRELAND	MIDDLESEX NORTH	McGillivray	yes
RYAN	KATE	21	ONTARIO	MIDDLESEX NORTH	Biddulph	yes
SQUIRES	WILLIAM	54	ENGLAND	MIDDLESEX EAST	London Township	
STANLEY	ELLEN	20	ONTARIO	MIDDLESEX NORTH	Biddulph	yes
STEWART	JOHN	66	SCOTLAND	MIDDLESEX NORTH	Biddulph	
TAYLOR	JAMES	40	SCOTLAND	MIDDLESEX WEST	Metcalfe	
TOPPING	MIKEL	77	ENGLAND	MIDDLESEX NORTH	Lobo	
WHITE	JAMES	85	SCOTLAND	MIDDLESEX EAST	London Township	
WILKINSON	JOHN	36	ENGLAND	MIDDLESEX EAST	London Township	
59 weavers in Middlesex County, 7 weavers in Lobo. 22 out of 60 weavers also in Schedule 6 - 37%. Average age is 51 years old. 41 out of 59 are male, 69%.						
Source: 1871 Ontario Census, Schedules 1 and 6.						

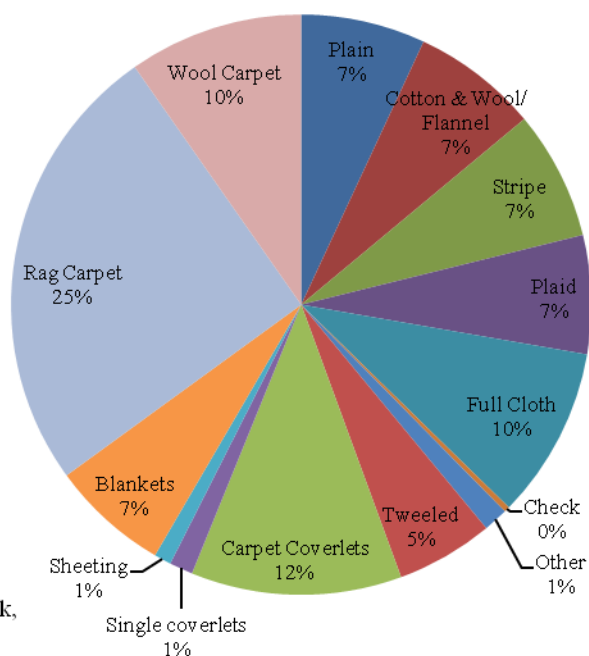
Appendix 1.17

Comparison of Sample Taken from Middlesex and Lambton County with Leeds County Sample District and Ontario			
	Sample district from Middlesex and Lambton Counties	Leeds County Sample District	Ontario
Number of weavers in sample	35	103	610
Average Months worked	3.8	2.55	3.8
Average Fixed Capital	27	17	24.6
Average Net Incomes	218	95.7	142.3
Average yards of cloth	436	441.7	532.2
Information for the Middlesex/Lambton County Sample comes from the 1871 Ontario Census, Schedule 6. Leeds County and Ontario information comes from Kris Inwood and Janet Grant, "Labouring at the Loom: A Case Study of Rural Manufacturing in Leeds County, 1870." Canadian Papers in Rural History Vol. VII (1990): 215-236.			

Appendix 1.18

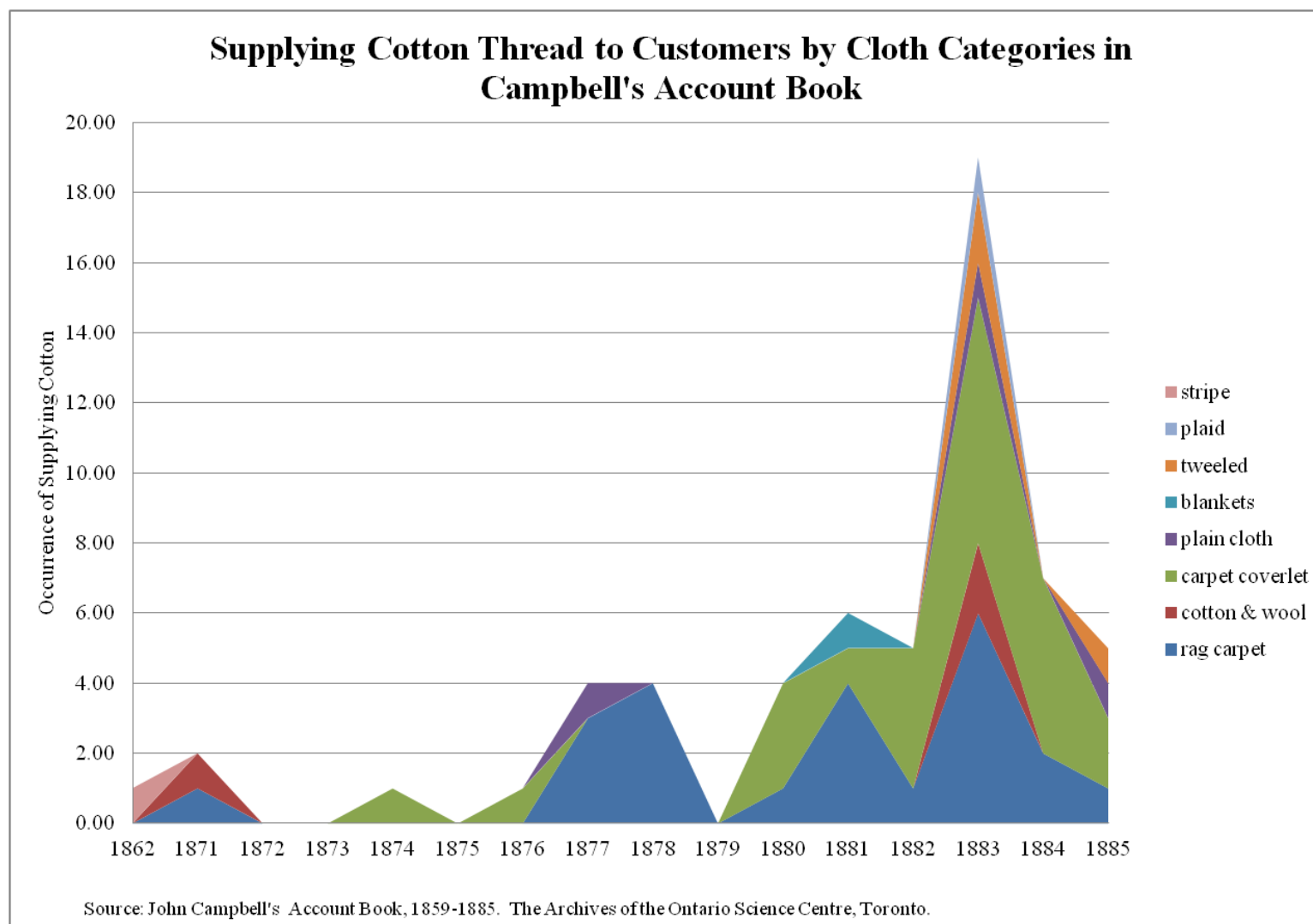
Comparison of Campbell to Two Full-time Handloom Weavers in 1871 Industrial Census					
Name	Age	Months Worked per Year	Yards Produced	Total earnings	Fixed Capital
John Campbell*	65	12	1,523	\$354.59	\$40.00
James Auterson	50	12	800	\$80.00	\$15.00
Andrew Maitland	50	8	2000	\$980.00	\$30.00
*Campbell's information about months worked per year, yards produced and total earnings derives from his account book as the page with Campbell's information on the microfilm from the 1871 Industrial census is missing. Fortunately some of the data can be found in the Middlesex County Industries, 1871, Index to Manuscript Census by G.T. Bloomfield & Elizabeth Bloomfield					

**A Comparison of Cloth Categories from
John Campbell's Account Book in the Twelve Year Study in
Yards, Calculated as Percentages**

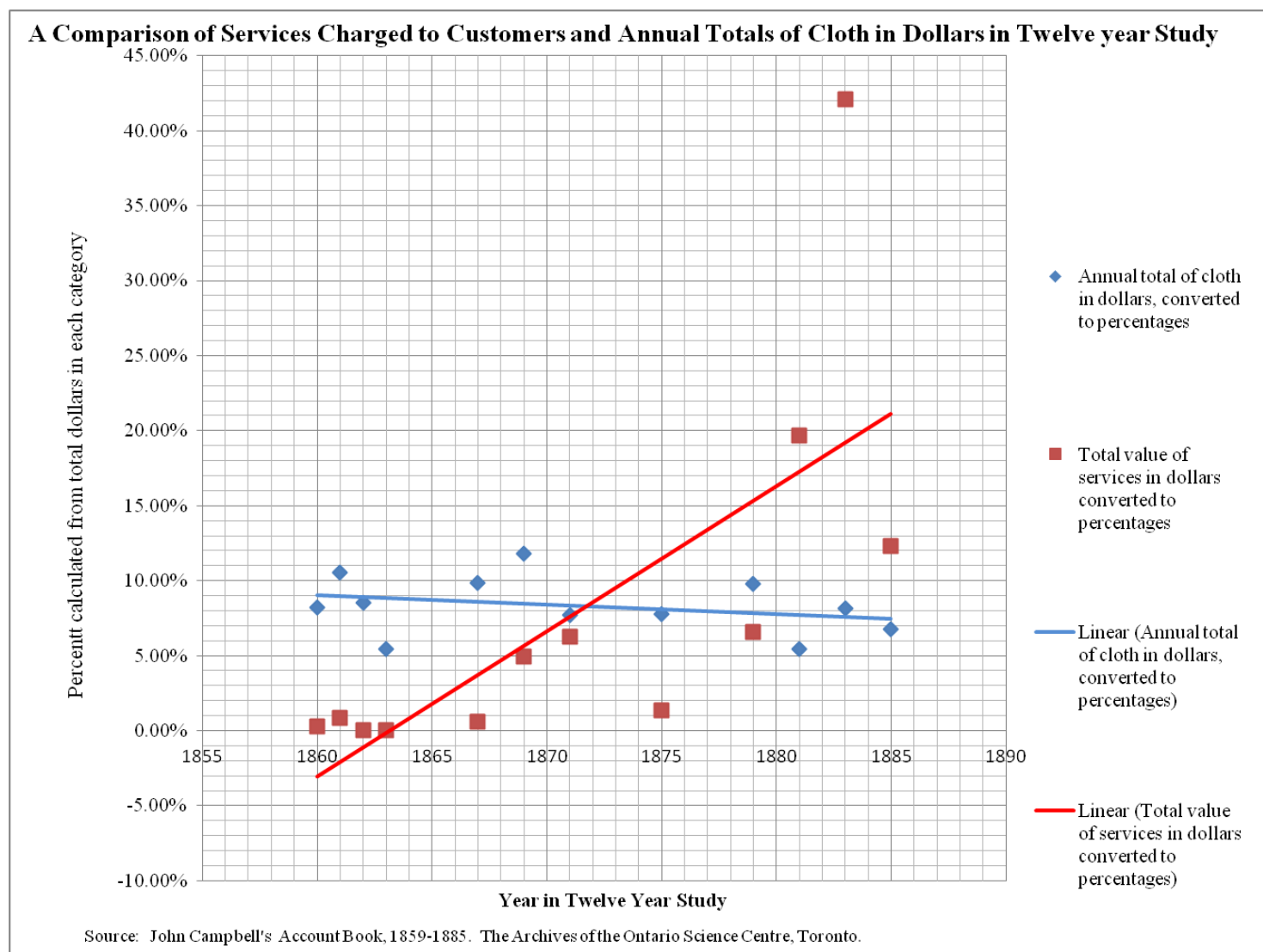


Source:
John Campbell's Account Book,
1859-1885.

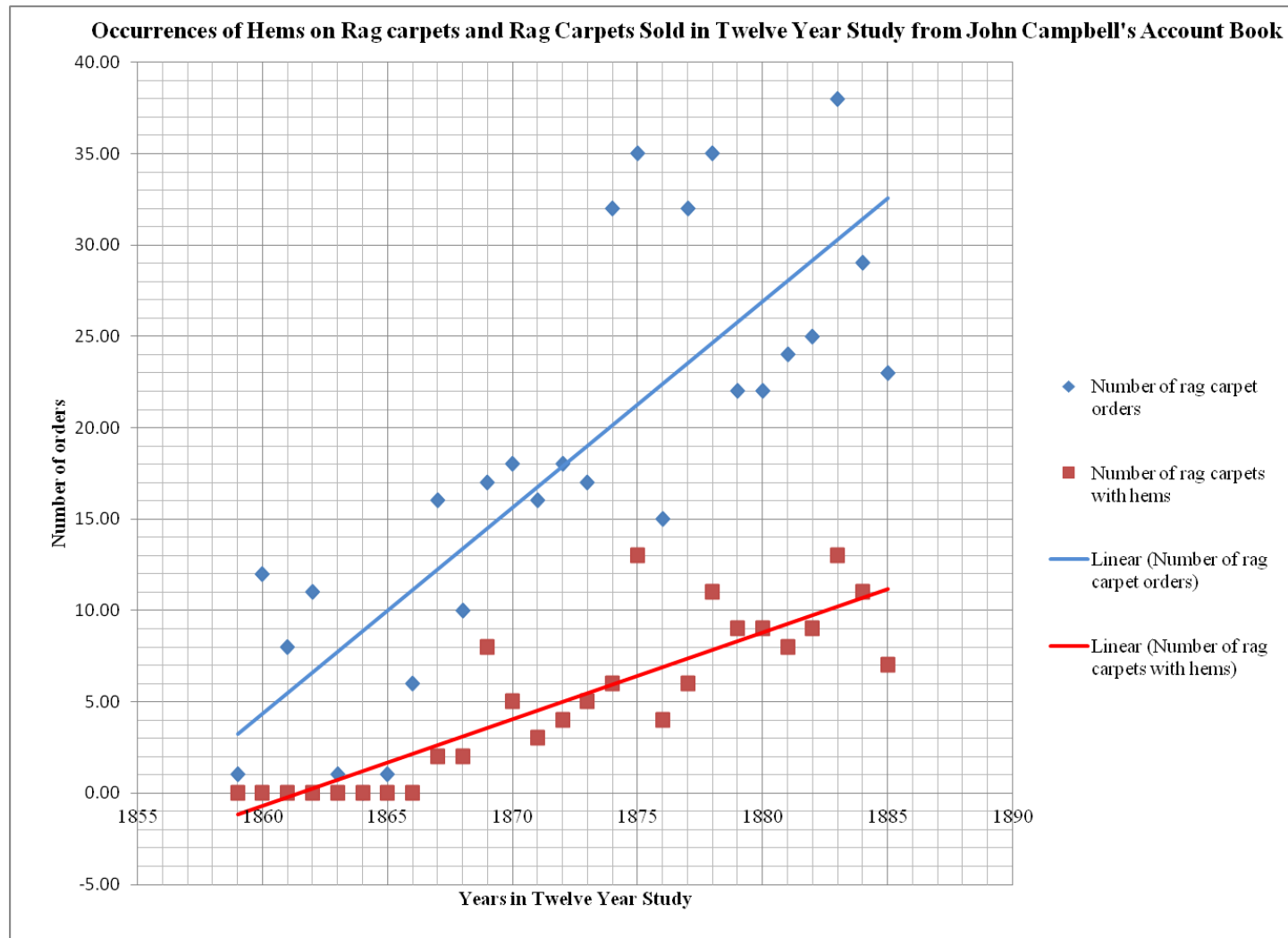
Appendix 1.20



Appendix 1.21

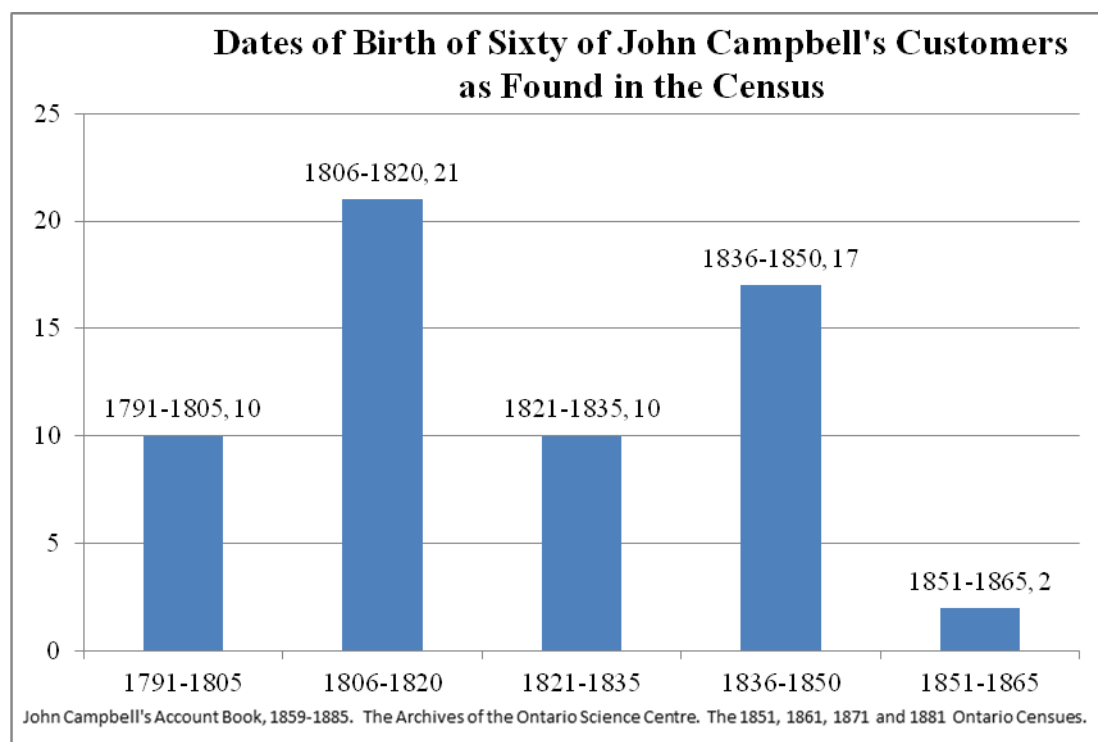


Appendix 1.22



Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario Science Centre, Toronto.

Appendix 1.23

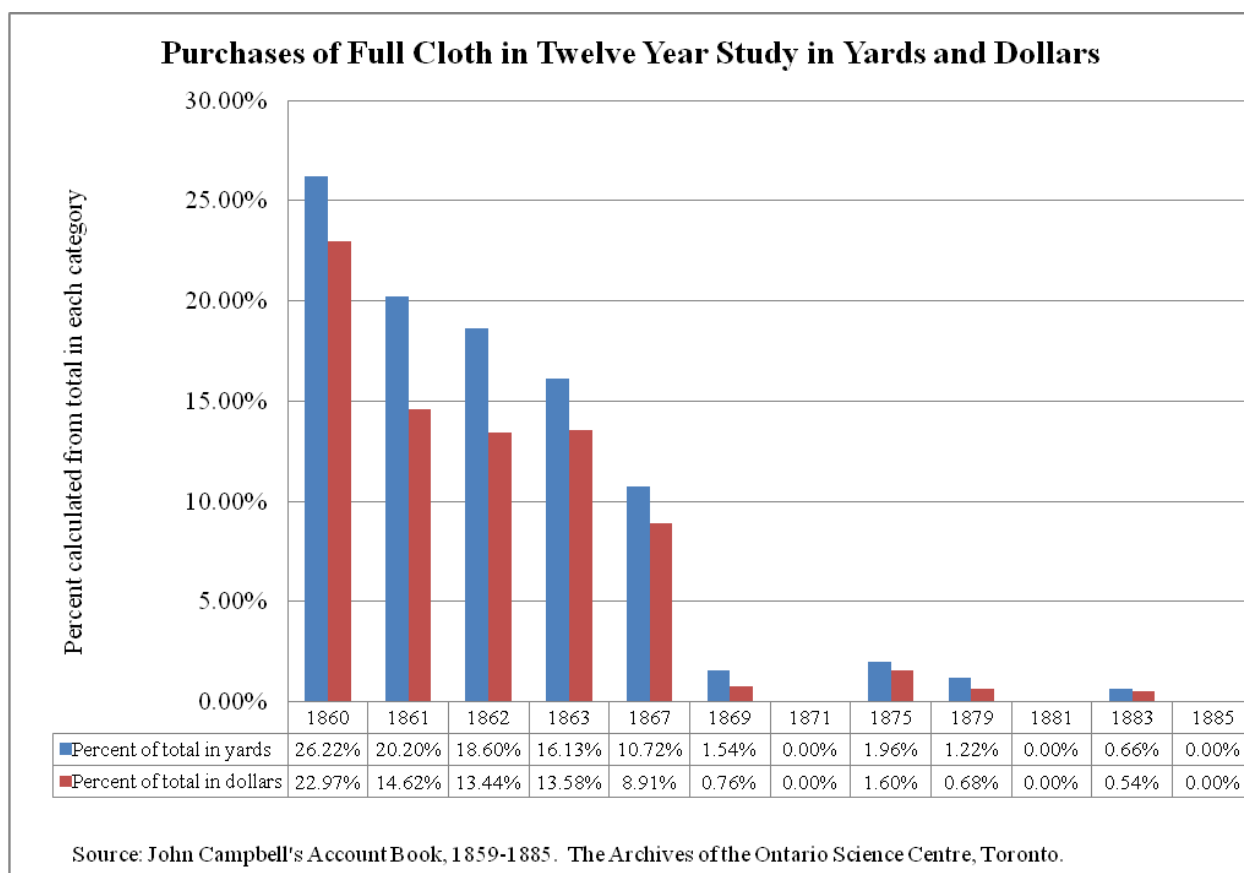


**Number of Cloth Categories and Sub-categories Compared to Earnings
from John Campbell's Account Book**



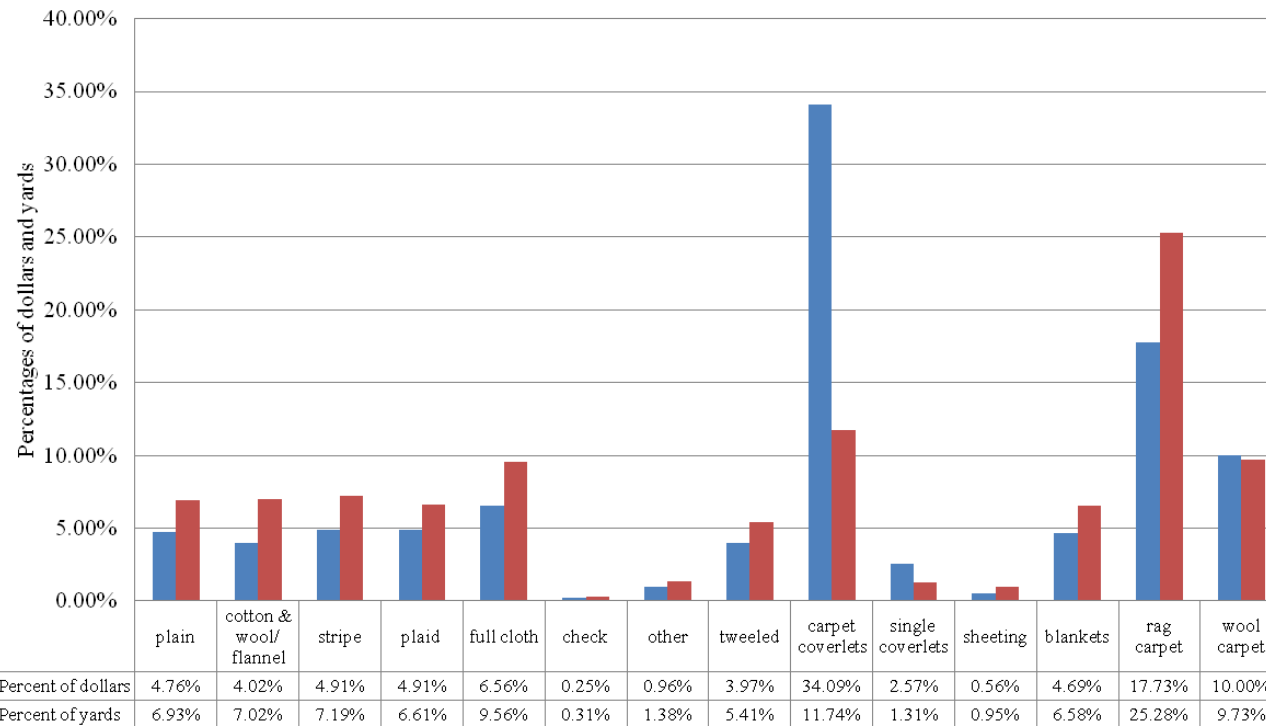
Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario Science Centre, Toronto.

Appendix 1.25



Appendix 1.26

A Comparison of Dollars and Yards of Cloth Categories Calculated as Percentages from John Campbell's Account Book



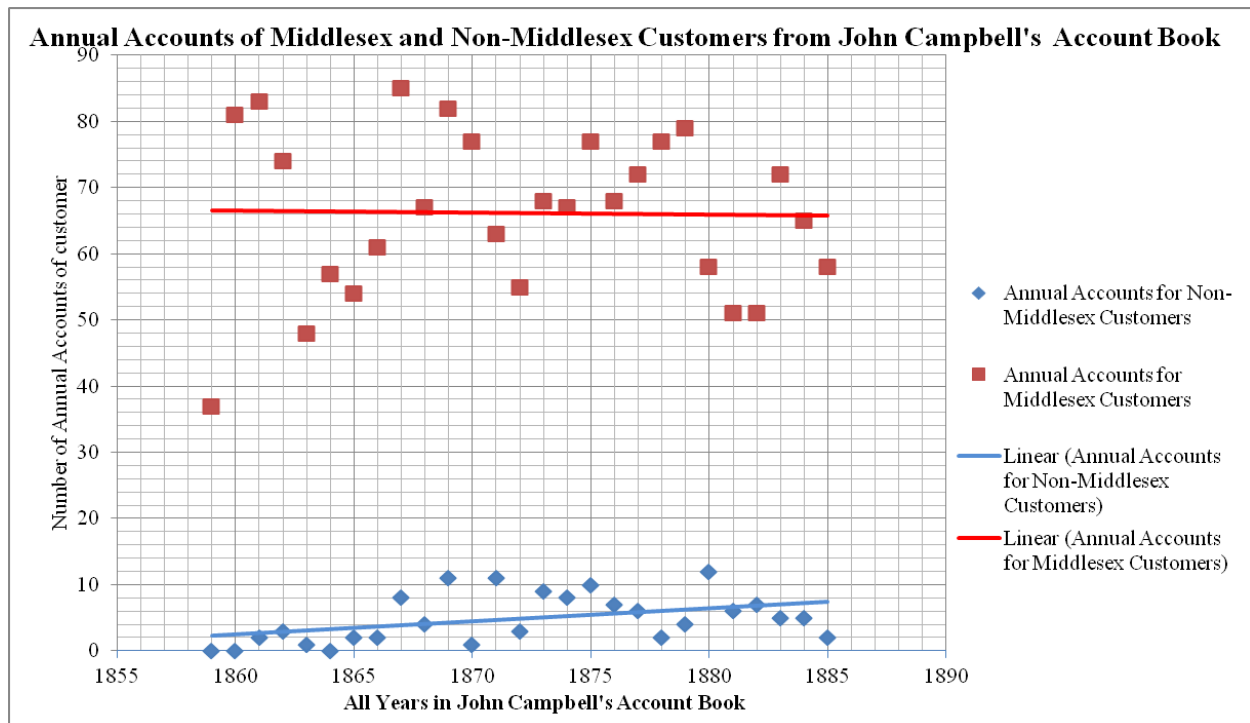
Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario Science Centre, Toronto.

Cloth Categories from John Campbell's Account Book		
	Dollars	yards
plain	\$213.11	1720.50
cotton & wool/ flannel	\$180.20	1742.25
stripe	\$219.95	1783.50
plaid	\$220.00	1640.00
full Cloth	\$293.98	2373.95
check	\$11.20	76.50
other	\$43.46	341.75
tweeled	\$178.36	1343.50
carpet coverlets	\$1,527.25	2915.00
single coverlets	\$115.05	325.00
sheeting	\$24.60	236.00
blankets	\$210.39	1633.50
rag carpet	\$794.24	6276.00
wool carpet	\$447.53	2414.00
Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario Science Centre, Toronto.		

Appendix 1.27

Four Selected Years of Cloth Categories in Yards from John Campbell's Account Book Aggregated by Month												
1862												
	January	February	March	April	May	June	July	August	September	October	November	December
plain	0.00	32.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.00	30.50
cotton & wool/ flannel	26.00	20.00	0.00	0.00	0.00	0.00	0.00	17.00	0.00	0.00	39.50	37.50
stripe	167.50	68.50	0.00	0.00	0.00	0.00	0.00	17.00	53.00	0.00	27.00	23.50
plaid	44.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.00	90.00	61.50
full Cloth	0.00	22.50	21.50	0.00	0.00	0.00	0.00	40.25	92.00	72.00	93.00	54.50
check	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	10.50	0.00
other	0.00	0.00	0.00	0.00	0.00	0.00	40.00	0.00	0.00	0.00	0.00	18.50
tweeled	37.00	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	31.00
carpet coverlets	0.00	0.00	35.00	40.00	0.00	15.00	55.00	55.00	15.00	0.00	0.00	0.00
single coverlets	0.00	0.00	10.00	0.00	0.00	35.00	0.00	0.00	0.00	0.00	0.00	0.00
sheeting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	0.00	0.00
blankets	35.00	98.00	0.00	0.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	13.50
rag carpet	0.00	0.00	29.50	0.00	80.50	75.50	20.00	26.50	0.00	0.00	0.00	0.00
wool carpet	0.00	0.00	56.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1867												
	January	February	March	April	May	June	July	August	September	October	November	December
plain	106.50	83.00	57.00	0.00	0.00	0.00	0.00	0.00	28.00	0.00	83.50	125.00
cotton & wool/ flannel	31.00	13.50	13.50	0.00	0.00	30.50	0.00	0.00	29.00	29.00	63.00	17.50
stripe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.00
plaid	18.00	84.25	61.00	29.00	0.00	0.00	0.00	22.00	0.00	25.00	0.00	69.50
full Cloth	59.50	0.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	137.50	81.50	0.00
check	8.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
other	11.50	29.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.00	0.00
tweeled	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	29.50	0.00	0.00	0.00
carpet coverlets	0.00	0.00	0.00	0.00	20.00	50.00	75.00	85.00	20.00	0.00	0.00	0.00
single coverlets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
sheeting	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.00
blankets	22.00	13.50	40.00	0.00	0.00	24.50	0.00	0.00	0.00	28.50	57.00	0.00
rag carpet	0.00	0.00	13.00	35.00	129.00	0.00	71.50	54.00	0.00	0.00	0.00	48.50
wool carpet	0.00	0.00	0.00	116.50	54.00	0.00	0.00	56.00	51.50	0.00	0.00	0.00
1871												
	January	February	March	April	May	June	July	August	September	October	November	December
plain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	23.00	37.00
cotton & wool/ flannel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.50	26.00	0.00	0.00
stripe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.50	41.00
plaid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00	0.00	0.00
full Cloth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
check	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
tweeled	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00	0.00	0.00	10.00
carpet coverlets	50.00	60.00	30.00	60.00	25.00	25.00	60.00	30.00	10.00	15.00	0.00	0.00
single coverlets	0.00	0.00	35.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
sheeting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
blankets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
rag carpet	36.00	42.00	0.00	93.00	87.00	93.00	18.50	0.00	0.00	20.00	0.00	76.00
wool carpet	38.50	14.00	0.00	0.00	27.50	0.00	50.50	30.50	0.00	36.00	98.50	0.00
1885												
	January	February	March	April	May	June	July	August	September	October	November	December
plain	21.00	0.00	0.00	0.00	0.00	20.00	0.00	10.00	0.00	0.00	0.00	0.00
cotton & wool/ flannel	40.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	0.00	0.00	0.00	15.50
stripe	0.00	0.00	40.00	0.00	0.00	0.00	0.00	0.00	45.00	0.00	0.00	0.00
plaid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
full Cloth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
check	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
tweeled	35.00	0.00	0.00	0.00	66.00	0.00	0.00	0.00	0.00	0.00	0.00	84.00
carpet coverlets	0.00	0.00	15.00	65.00	20.00	0.00	0.00	20.00	0.00	25.00	0.00	0.00
single coverlets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
sheeting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
blankets	68.50	0.00	54.00	0.00	0.00	0.00	0.00	61.00	0.00	0.00	60.00	0.00
rag carpet	0.00	0.00	50.00	80.00	65.00	131.00	106.00	0.00	107.50	26.00	109.00	30.50
wool carpet	0.00	121.00	35.00	13.00	32.00	21.50	0.00	0.00	9.50	77.00	0.00	59.50

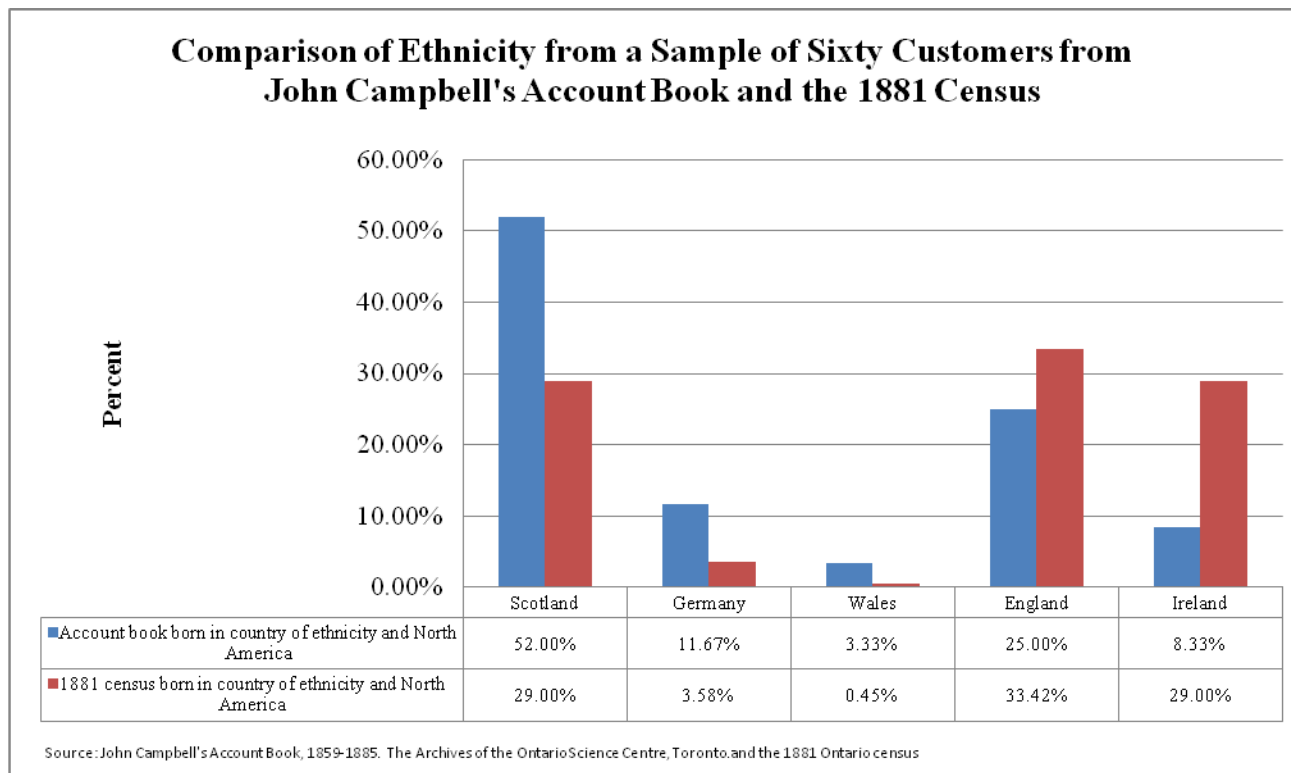
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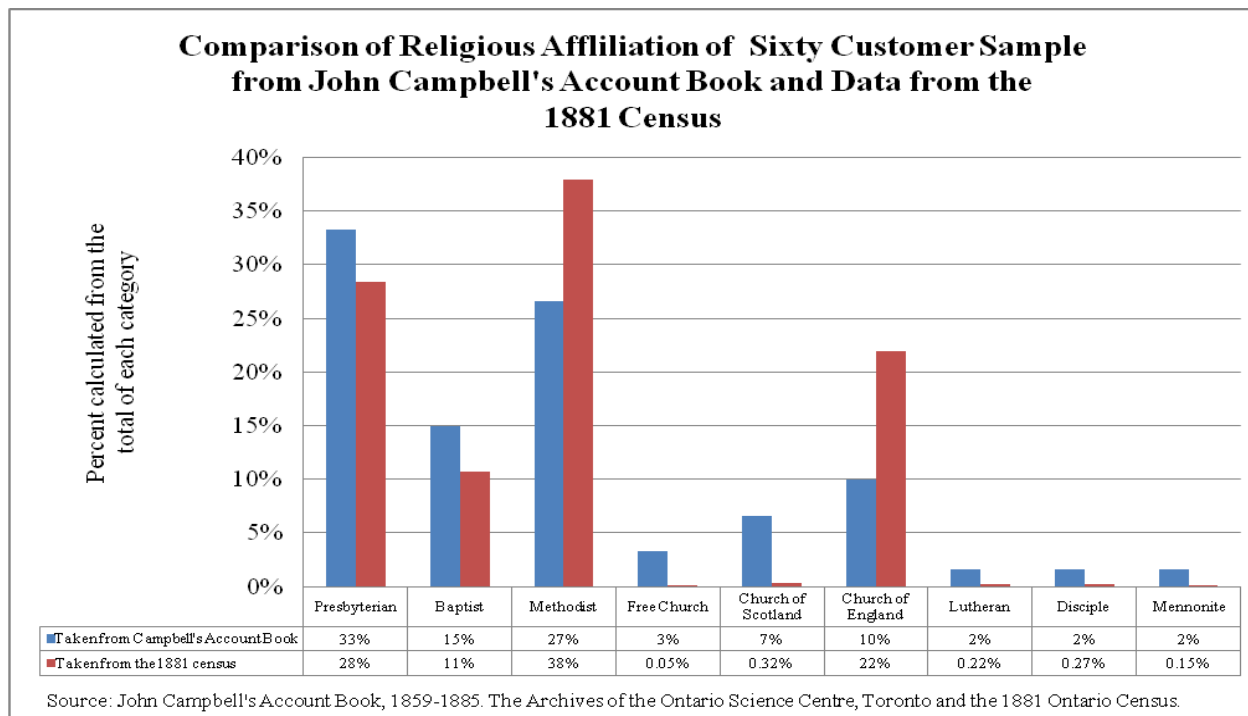
Appendix 1.29

Purchases by Alexander Johnston, Lobo Township		
Apr. 23, 1859	20 yards bordered Blankets at 1/-	\$2.50
Oct. 27, 1859	53 yards full cloth at 1/-	\$6.62
Nov. 13, 1860	31 yards Plaid 3 colors at 1/1	\$4.18
Dec. 21, 1860	58 yards full cloth at 1/-	\$7.25
Dec. 6, 1861	42 yards Blankets at 1/-	\$5.25
Dec. 13, 1861	56 yards cotton & wool at 10 cents	\$5.60
Dec. 28, 1861	26 1/2 yards tweeled Sheeting at 1/-	\$3.31
Mar. 3, 1862	21 1/2 yards full cloth at 1/-	\$2.68
Dec. 20, 1862	34 yards full cloth at 1/-	\$4.25
Dec. 24, 1862	24 yards Plaid 4 coulours at 1/2	\$3.48
Oct. 21, 1863	14 yards stripe at 1/-	\$1.75
Nov. 17, 1863	29 yards cotton & wool at 10 cts.	\$2.90
June. 22, 1864	10 yards thread about at 1/-	\$1.25
Sept. 16, 1864	35 yards Tweeled full cloth at 1/-	\$4.38
Dec. 29, 1864	17 1/2 yards checked shirt at 1/-	\$2.18
Dec. 29, 1864	16 1/2 yards Plaid at 1/-	\$2.60
Oct. 4, 1865	25 yards full cloth 39 inches at 11 cts.	\$2.75
Jan. 10, 1866	17 1/2 yards Plaid at 1/-	\$2.18
Jan. 8, 1867	23 yards full cloth at 12 1/2 cents	\$2.88
Jan. 22, 1867	29 1/2 yards Tweeled Sheeting at 11 cents	\$3.24
Jan. 24, 1867	51 yards Bordered Blankets at 12 1/2 cents	\$6.38
Feb. 4, 1868	30 1/2 yards Plaid at 12 1/2 cents	\$3.81
Feb. 7, 1868	24 yards Tweeled full cloth at 12 1/2 cts.	\$3.81
Mar. 24, 1868	30 yards cotton & wool at 10 cents	\$3.00
Jan. 5, 1869	4 carpet coverlets 1 at 22/- & 3 at 20/-	\$10.25
Dec. 3, 1869	[unlisted]	\$0.50
Dec. 3, 1869	31 yards full cloth at 12 1/2 cents	\$3.88
Jan. 28, 1870	30 1/2 yards 8 at 12 1/2 cts. & 22 1/2 at 10 cents	\$3.25
Oct. 3, 1873	41 1/2 yards Blankets at 12 1/2 cents	\$5.18
Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario Science Centre, Toronto.		

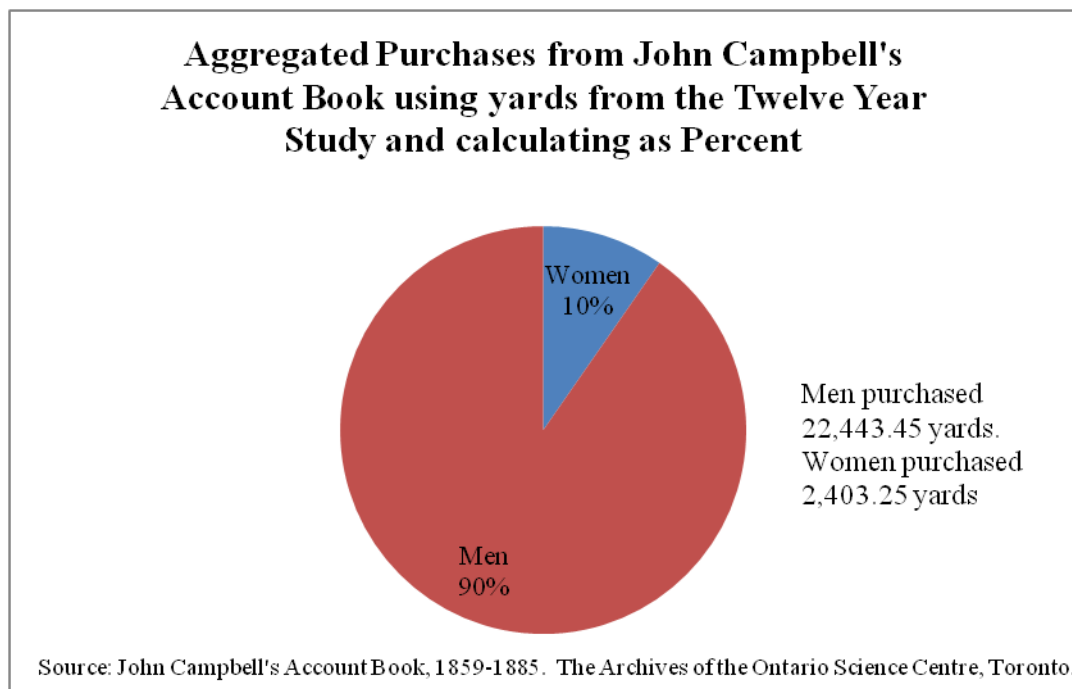
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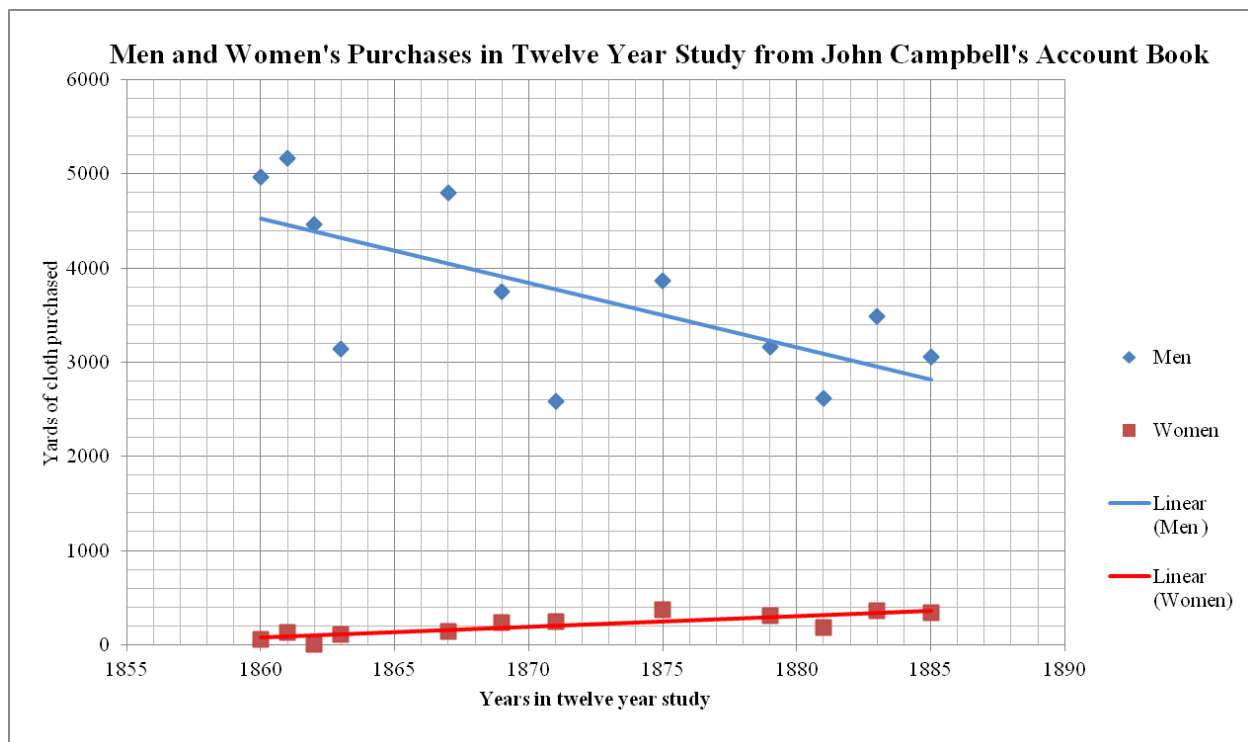
Appendix 1.31



Appendix 1.32

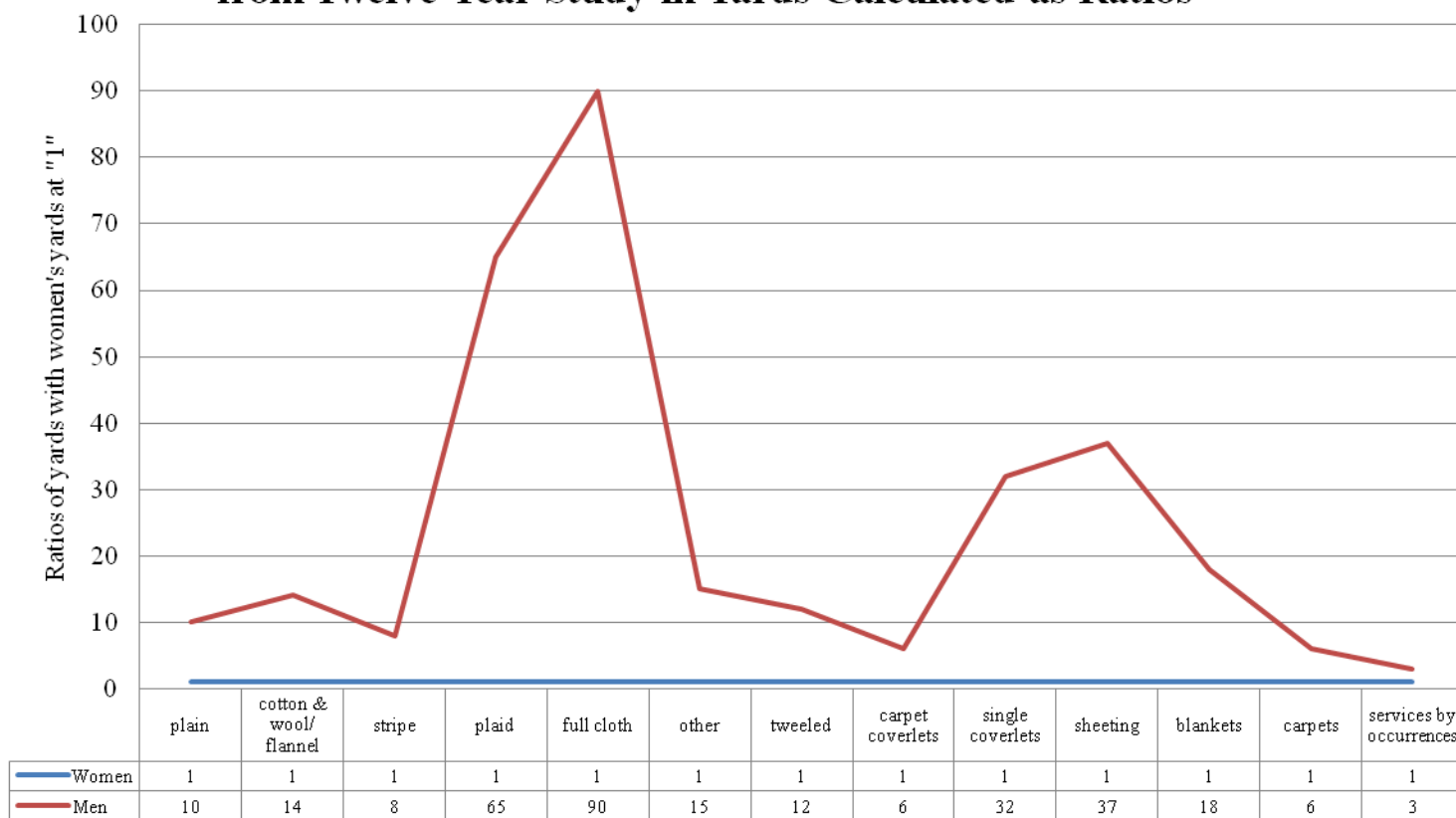


Appendix 1.33



Appendix 1.34

Aggregated Purchases of Cloth Categories by Men and Women from Twelve Year Study in Yards Calculated as Ratios

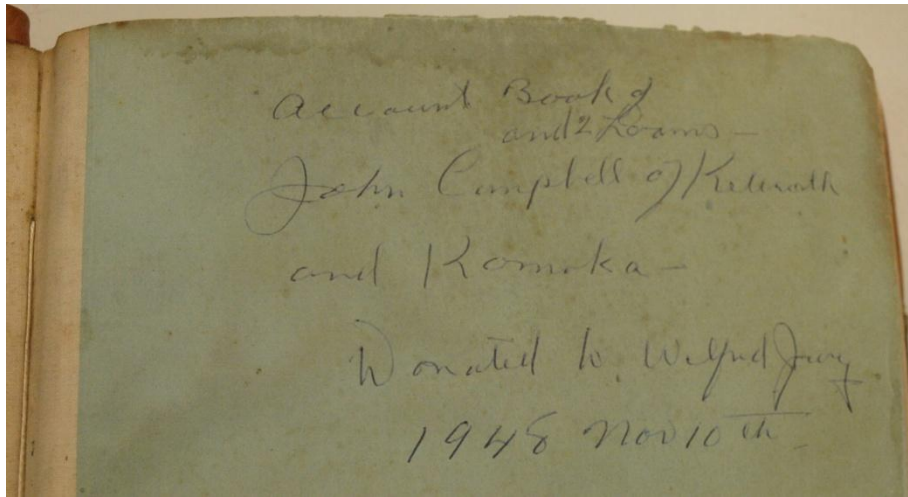


Source: John Campbell's Account Book, 1859-1885, Ontario Science Centre

Appendix 1.35

Farmers with Sheep/Wool in Lobo Township, Division 1, Middlesex County in 1871							
Name	Campbell's customer	Census Data	Location	Sheep	Wool	Cloth	Significant People on same census page
Charles Woodhull, 52 years old, married with 3 daughters and 2 boys	yes	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 4; Family No: 13, Line: 10.	Conc. 2, Lot 6, 7 - 281 acres	46	200 lbs.	0 yds.	Archibald McLellan, Alexander McDougall
Archibald McLellan, 43 years old, married with 1 daughter, 7 sons	maybe - see A.D. McLellan	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 5; Family No: 16, Line: 4.	Conc. 2, Lot 4 - 1/4 acre	0	60 lbs.	30 yds.	Charles Woodhull, Alexander McDougall
Alexander McDougall, 47 years old, married, no children	yes	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 5; Family No: 17, Line: 14.	not there	42	300 lbs.	0 yds.	Charles Woodhull, Archibald McLellan
Johnson Cassidy, 54 years old, married, 3 daughters, 2 sons	no	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 6; Family No: 19, Line: 1.	Conc. 2, Lot 4 - 12 acres	5	25 lbs.	40 yds.	
Daniel Korkery, 64 years old, married, 2 sons	no	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 8; Family No: 27, Line: 1.	Conc. 2, Lot 4 - 1/4 acre	9	50 lbs.	20 yds.	George Steel, Norman Lamont
George Steel, 41 years old, married with 3 daughters, 5 sons	yes	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 8; Family No: 28, Line: 5.	Conc. 2, Lot 5 - 2 acres	0	30 lbs.	0 yds.	Daniel Korkery, Norman Lamont
Norman Lamont, 77 years old, married with 2 daughters	yes	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 9; Family No: 33, Line: 17.	Conc. 3, Lot 8 - 50 acres	9	36 lbs.	40 yds.	Daniel Korkery, George Steel
Thomas Pinion, 45 years old, married with no children	yes	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 10; Family No: 34, Line: 1.	Conc. 3, Lot 5 - 50 acres	9	40 lbs.	0 yds.	
William Carman, 45 years old, married with 2 daughters, 1 son	no	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 15; Family No: 53, Line: 10.	Conc. 2, Lot 5 - 25 acres	5	20 lbs.	0 yds.	John Campbell, weaver; A.D. McLellan
A.D. McLellan, 38	maybe - see Archibald McLellan	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 15; Family No: 54, Line: 15.	Conc. 2, Lot 4 - 6 acres	5	100 lbs.	0 yds.	John Campbell, weaver; William Carman
W.S. Whalley, 46 years old, married with 5 daughters, 1 son	no	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 16; Family No: 56, Line: 8.	Conc. 1, Lot 5-6 - 48 acres	10	15 lbs.	25 yds.	
William Harison, 47 years old, married with 1 daughter and 6 sons	no	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 18; Family No: 63, Line: 1.	Conc. 2, Lot 11 - 108 acres	24	100 lbs.	0 yds.	
George Chaloner, 50 years old, married with 2 daughters, 1 son	maybe - in account book, Mr. Chaloner, Lobo	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 20; Family No: 70, Line: 1.	Conc. 2, Lot 5, 3 acres	4	30 lbs.	0 yds.	Robert Hume, Duncan McMurphy
Thomas Brady, 45 years old, married with 3 daughters and 6 sons	yes	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 24; Family No: 84, Line: 1.	Conc. 4, Lot 1, 50 acres	2	12 lbs.	30 yds.	Patrick Geddes
Peter McKellar, 68 years old, married, 2 sons	yes	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 26; Family No: 92, Line: 1.	Conc. 3, Lot 5-6 - 170 acres	30	50 lbs.	0 yds.	Robert Morris, John Moffat, Israel Doan
John Moffat, 41 years old, married with 3 daughters and 2 sons	yes	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 26; Family No: 93, Line: 5.	Conc. 2, Lot 5 - 7 acres	1	8 lbs.	21 yds.	Peter McKellar, Robert Morris, Israel Doan
Israel Doan, 66 years old, married with 2 sons	no, but a Henry Doan, Lobo	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 26; Family No: 95, Line: 17.	Conc. 2, Lot 10 - 74 acres	22	80 lbs.	0 yds.	Peter McKellar, Robert Morris, John Moffat
Robert Morris, 58 years old, married with 1 daughter and 3 sons	Mr. Morris, Komoka	Year: 1871; Census Place: Lobo, Middlesex North, Div.: 1, Ontario; Roll: C-9903; Page: 27; Family No: 96, Line: 1.	Conc. 2, Lot 3-4 - 90 acres	12	80 lbs.	0 yds.	Peter McKellar, John Mofat, Israel Doan

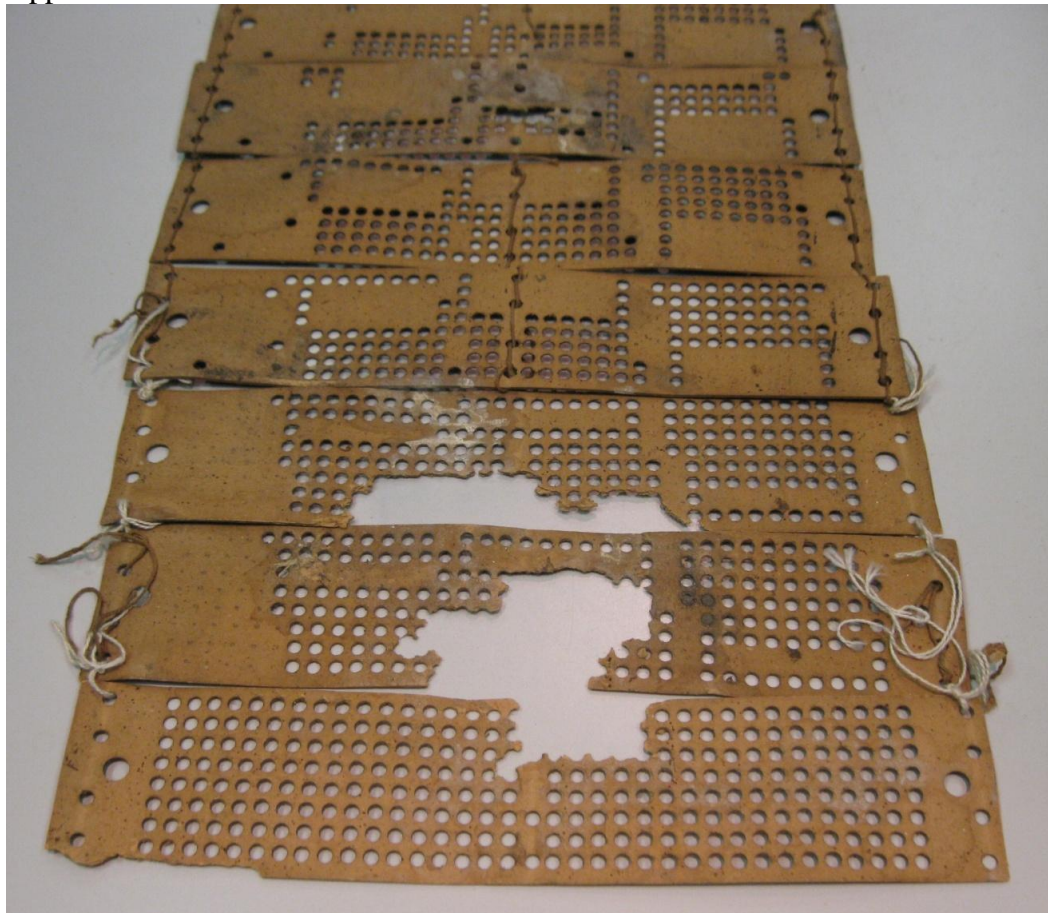
Appendix 2.01 – Inside cover of John Campbell's Account Book



Written in blue ball point ink, documenting the donation of the looms and account book to curator, Wilfrid Jury on Nov. 10, 1948.

Source: John Campbell's Account Book, 1859-1885. The Ontario Science Centre, Toronto.

Appendix 2.02



Punch cards found with John Campbell's carpet coverlet loom.

Source: The Archives of the Ontario Science Centre, Toronto.

Appendix 2.03: Page 61 & 62 - Last page of accounts in Kilworth

		Kilworth		1863
May 17 1863	By Cash	46	Donald Mc Kinlay Solo	2 81
July 17	By Cash	3 12	9 22 1/2 yards Blankets at 1/2	4 20
July 8	By Wm. Butler at 1/2	1 81	11 30 1/2 yards Plaid 4 1/2 at 14 cents	
Dec 5 1863	Paid Balance	1 54	Edward Currey Delaware	1 56
Dec 30	Paid	3 06	15 12 1/2 yards full Cloth at 1/2	1 50
			23 12 yards Plaid at 1/2	
Dec 30	Paid	2 74	Anon Bratt Delaware	2 74
			30 23 1/2 yards Plaid at 1/2	
Sept 9 1864	Paid	9 00	Theo Mc Millan Canadoc	1 51
			18 12 yards Horse Blanket at 1/2	7 50
			26 60 yards Blanket at 1/2	
Nov 1 1864	Paid	8 85	Mr. Mc Gregor Canadoc	2 25
			23 17 yards Plaid 3 colors at 1/2	1 60
			26 16 yards Cotton Wool at 10 cts	
Feb 20	Paid	1 86	John Mc Guggan Canadoc	1 87
			25 10 yards Wool Carpet at 1/2	
Feb 13	Paid	1 26	Fred Homaster Solo	1 26
			6 11 yards Cotton Wool at 11 cents	
May 20	Paid	3 68	Christopher Waugh London	3 68
			13 23 yards wool Carpet at 16 cents	

Source: John Campbell's Account Book, 1859-1885. The Archives of the Ontario Science Centre, Toronto.
Appendix 2.04: Page 63 & 64 - First page of accounts in Komoka.

		Komoka		1864
Jan 16	Paid	3 75	Alas Macleaton Solo	1 75
			15 14 yards Plaid at 1/2	3 75
Dec 5 1863	Paid	3 75	13 3 yards 1/2 Plaid at 1/2	1 10
			15 8 yards Horse Blanket at 1/2	
April 25	Paid	3 75	Donald Mc Kinlay Solo	2 44
			20 17 1/2 yards Plaid at 1/2	3 06
			25 2 1/2 yards 1/2 Blanket full cloth at 1/2	5 50
Oct 11	Paid	2 74	John B. Campbell Solo	2 74
			24 23 1/2 yards Plaid at 1/2	
			Andrew Sharp Delaware	1 62 1/2
			28 12 1/2 yards Plaid 3 colors at 13 cents	1 18
			30 51 yards Plaid at 1/2	1 37 1/2
			4 11 yards Check Blanket at 1/2	4 17

Source: John Campbell's Account Book, 1859-1885.
The Archives of the Ontario Science Centre, Toronto.

Appendix 2.05 – Page 71 and 72 of John Campbell's Account Book

1864

Hornoka		
11 Dec	Thos McMillin Caradoc	3 37
5	25 yards Plaid 3cdoms at 1/-	3 44
21	27 1/2 yards Jumbled Plaid at 1/-	1 10
6 1/2 Feb	4 1/2 yards Shuttling at 10 cents	7 51
	James Mc Vicar Lobo	2 55
2 1/2 Dec	5 2 1/2 yards cotton Sewed at 10 cts	
	Peter Layman Lobo	23 18
3 1/2 Dec	9 27 yards 13 at 1/- & 13 at 11 cents	
	Mr Livingston Hornoka	1 00
Dec 9	10 yards cotton & wool at 10 cts	1 62
2 1/2	13 1/2 yards Stripe at 1/-	
	David Smith Lobo	4 00
4 1/2 Dec	10 40 yards Cotton Sewed at 10 cts	
	Mr Mc Intyre Lobo	1 00
Dec 10	10 yards Flannel at 10 cents	2 31
3 1/2 Jan	24 15 1/2 yards Checked Blankets at 1/-	
	Rich ^d Sinclair Lobo	4 8 1/2
Dec 17	39 yards Plaid at 1/-	1 65
6 1/2 Jan	30 15 yards Jumbled wool Shuttling at 10 cts	
	James Mc Gregor Caradoc	2 25
Dec 24	18 yards Jumbled Plaid at 1/-	1 9 1/2
Jan 20	15 1/2 yards checked full cloth at 1/-	5 87
5 1/2 Feb	2 7 yards Jumbled at 1/-	4 0
	4 1/2 yards Shuttling at 10 cents	5 46
	Alex ^r Graham Lobo	2 00
Dec 31	16 yards Plaid at 1/-	3 50
Jan 4	28 yards full cloth at 1/-	3 50
9 1/2	10 28 yards cotton Sewed Shuttling at 1/-	
	John Mc Dougal Lobo	3 50
3 1/2 Jan	11 28 yards Plaid at 1/-	
	Charles Hemister Caradoc	4 66
6 1/2 Jan	16 40 yards 26 1/2 at 1/- & 13 1/2 at 10 cents	

**Transcription of cloth types from
Page 71 and 72, Dec. 5/64 to Jan. 16/65**

cotton & wool or flannel at 10 cts.

Plaid at 1/-

stripe at 1/-

Tweeled Plaid at 1/-

checked Blankets at 1/-

checked full cloth at 1/-

cotton & wool stripe at 1/-

full cloth at 1/-

Plaid 3 colours at 1/1

plain at 1/- & 11 cents

sheetting at 10 cents

Tweeled at 1/-

Tweeled Plaid at 1/-

Tweeled wool sheetting at 11 cents

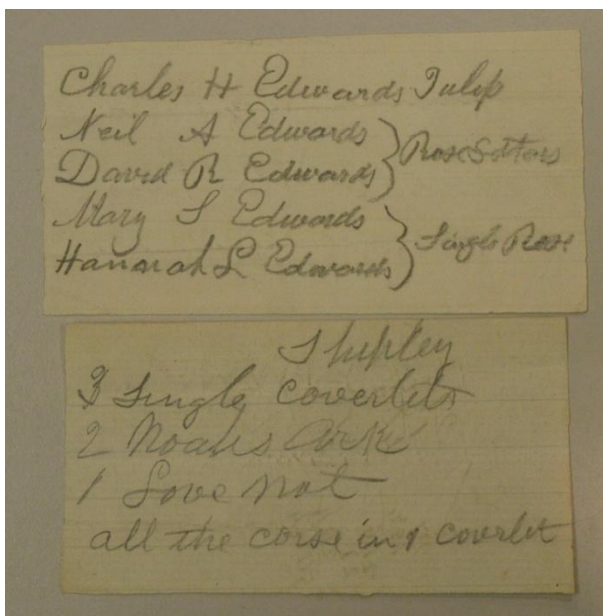
Appendix 2.06



This is a copy of the point paper drawing done by the Burnhams for the Love Knot pattern.

The Ontario Science Centre, Toronto.

Appendix 2.07



A slip of paper found in the back pocket of John Campbell's Account book showing orders for coverlets.

John Campbell's Account Book. The Archives of the Ontario Science Centre, Toronto.

Appendix 2.08



Rose and Stars Coverlet by John Campbell

Accession Number ROM962.75

The Royal Ontario Museum, Toronto.

Appendix 2.09



The design of this coverlet is similar to Campbell's Rose and Stars pattern, however with a different border and weave construction than his known Middlesex coverlets perhaps suggesting that this coverlet was produced in New York State. This coverlet was donated to the Royal Ontario Museum by Campbell's grandson, John Campbell in 1949.

Accession number: ROM 949.154.1.

The Royal Ontario Museum, Toronto.

Appendix 2.10



Love Knot Coverlet woven by volunteers at the Ontario Science Centre on the John Campbell loom

The Ontario Science Centre, Toronto.

Appendix 2.11



The Tulip Coverlet by John Campbell, Accession Number ROM970.296.2

The Royal Ontario Museum, Toronto.

Appendix 2.12



The Single Rose Coverlet by John Campbell, Accession Number ROM984.132.1

The Royal Ontario Museum, Toronto.

Appendix 2.13



John Campbell's Shuttle
The Archives of the Ontario Science Centre, Toronto.

Appendix 2.14



Rose and Stars Coverlet by John Campbell
Fanshawe Pioneer Village, London, Ontario.

Appendix 2.15



Single Coverlet produced by
John Campbell.

Accession Number: ROM
949.154.2

The Royal Ontario Museum.

Appendix 2.16



Single coverlet produced by John Campbell.
Accession Number: ROM 969.219

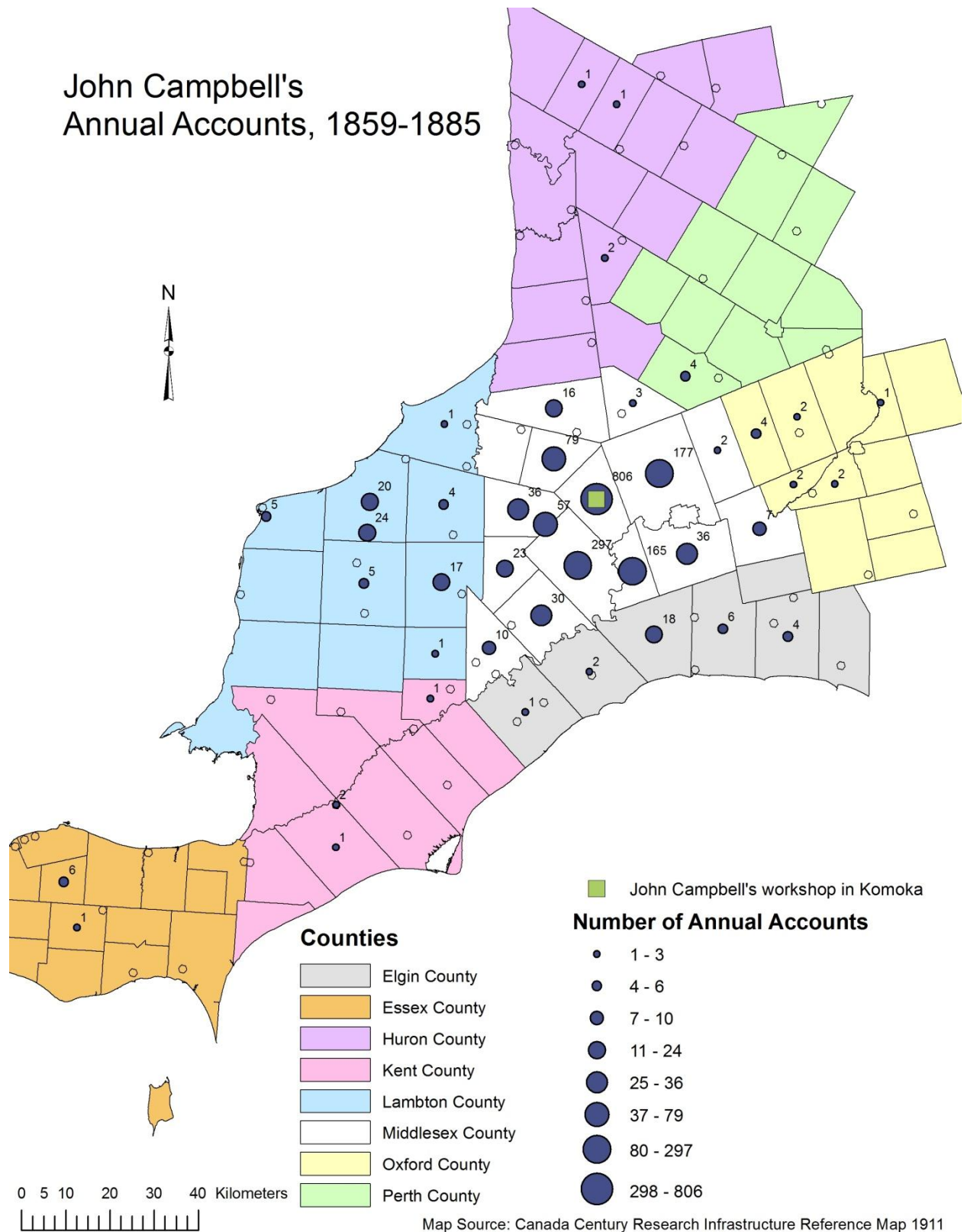
The Royal Ontario Museum

Appendix 2.17

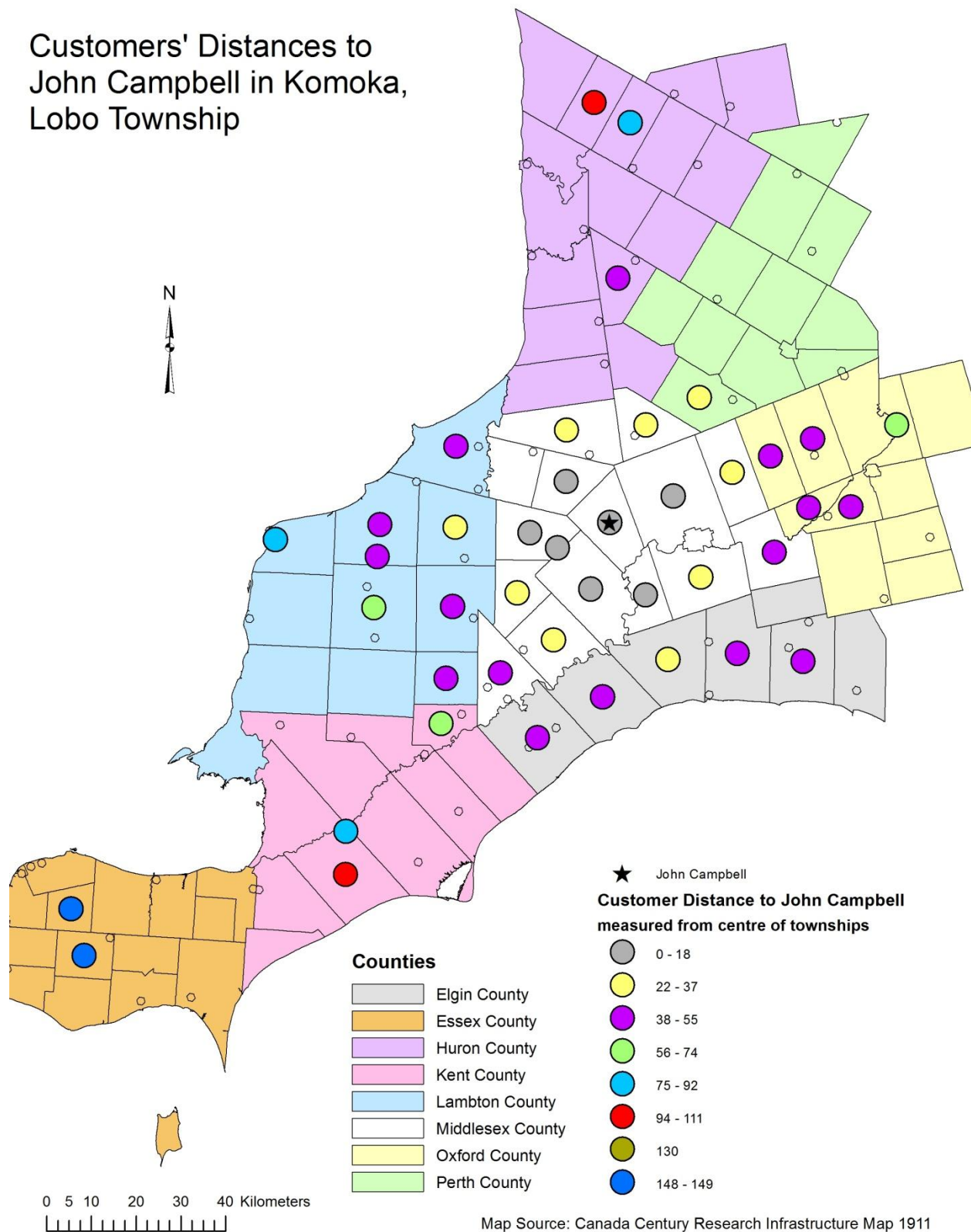


Close-up of Rose and Stars ROM962.75.
This photograph shows that the cotton
warps and wefts are a two-ply S-twist.
The Royal Ontario Museum, Toronto.

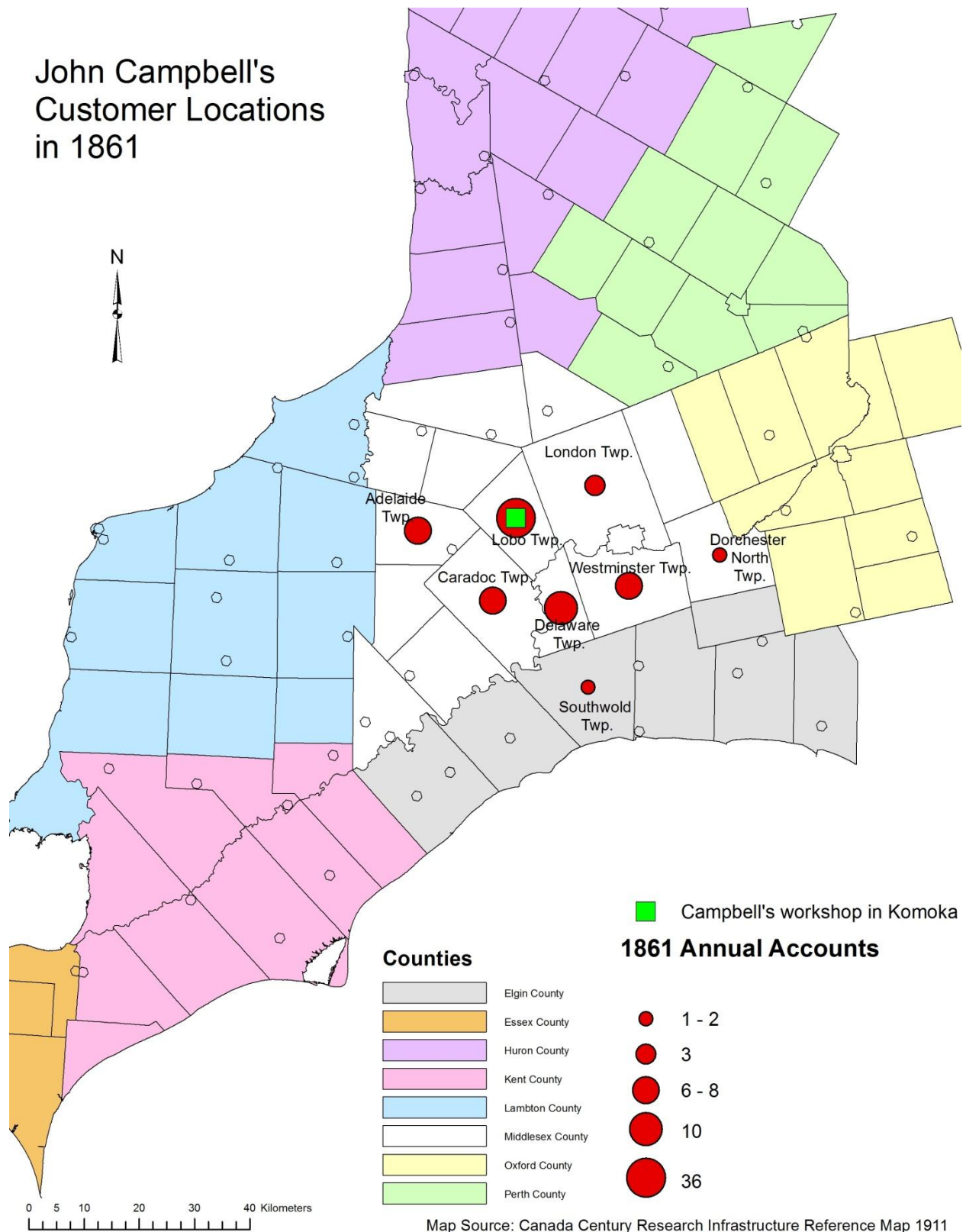
John Campbell's Annual Accounts, 1859-1885



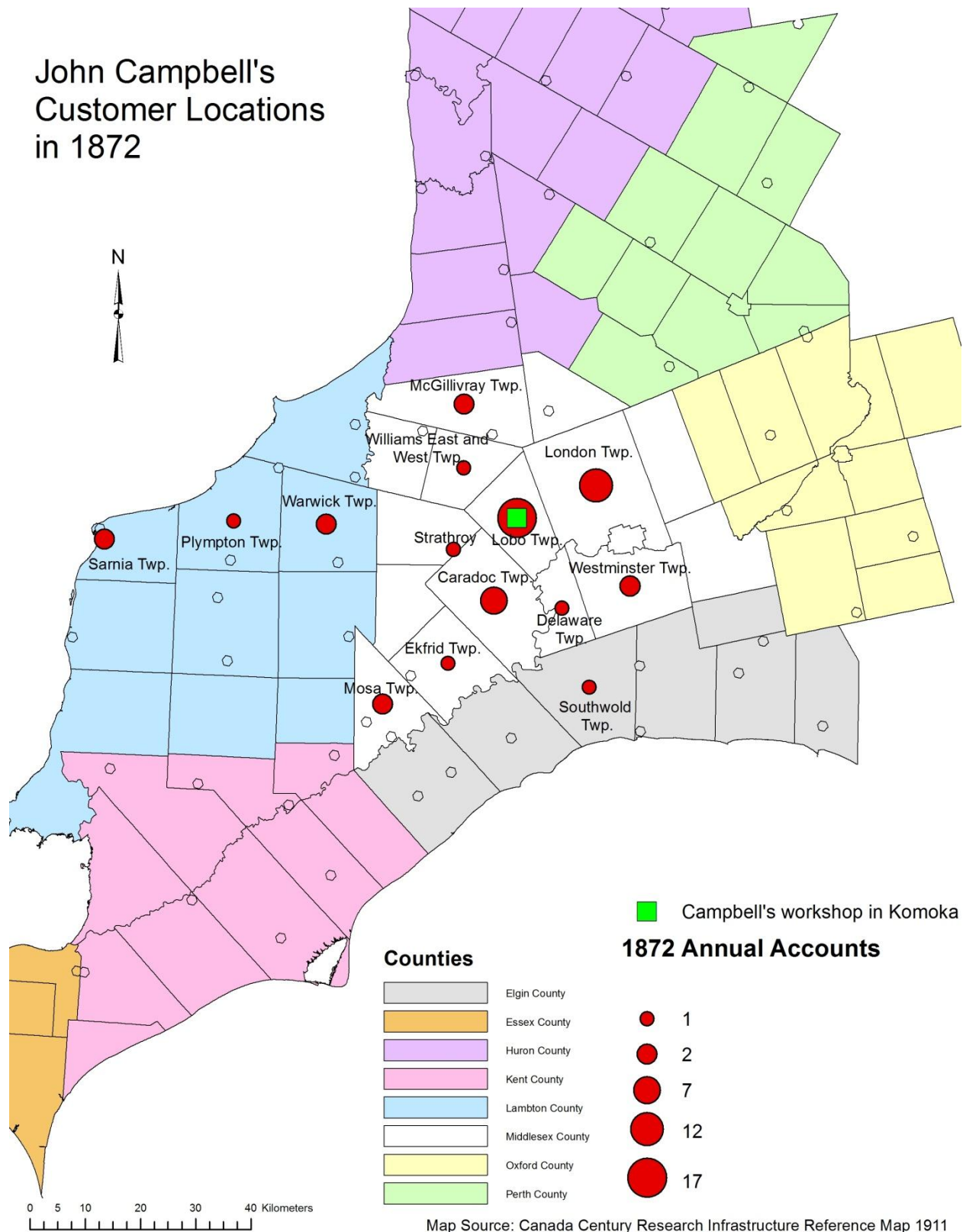
Customers' Distances to John Campbell in Komoka, Lobo Township



John Campbell's Customer Locations in 1861



John Campbell's Customer Locations in 1872



John Campbell's Customer Locations in 1880

