University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Textiles, Merchandising and Fashion Design: Dissertations, Theses, & Student Research Textiles, Merchandising and Fashion Design, Department of

4-2022

"Any Lady Can Now Learn to Cut Perfect Fitting Dresses": The Role of Pattern Drafting Systems in the Production of Women's Dress, 1880–1900

Alyssa Smith University of Nebraska-Lincoln, asmith107@huskers.unl.edu

Follow this and additional works at: https://digitalcommons.unl.edu/textilesdiss

Part of the Fashion Design Commons, Fiber, Textile, and Weaving Arts Commons, Industrial and Product Design Commons, Labor History Commons, Other History Commons, and the Women's History Commons

Smith, Alyssa, ""Any Lady Can Now Learn to Cut Perfect Fitting Dresses": The Role of Pattern Drafting Systems in the Production of Women's Dress, 1880–1900" (2022). *Textiles, Merchandising and Fashion Design: Dissertations, Theses, & Student Research.* 21. https://digitalcommons.unl.edu/textilesdiss/21

This Thesis is brought to you for free and open access by the Textiles, Merchandising and Fashion Design, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Textiles, Merchandising and Fashion Design: Dissertations, Theses, & Student Research by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

"Any Lady Can Now Learn to Cut Perfect Fitting Dresses": The Role of Pattern Drafting

Systems in the Production of Women's Dress, 1880-1900

by

Alyssa Smith

A THESIS

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Master of Arts

Major: Textiles, Merchandising, & Fashion Design

Under the Supervision of Professors Mary Alice Casto and Claire Nicholas

Lincoln, Nebraska

May, 2022

"Any Lady Can Now Learn to Cut Perfect Fitting Dresses": The Role of Pattern Drafting Systems in the Production of Women's Dress, 1880–1900

Alyssa Smith, M.A.

University of Nebraska, 2022

Advisor: Mary Alice Casto

This research conveys findings from my MA thesis research focused on pattern drafting systems for women's garments developed between 1880 and 1900. The study builds on the seminal work of Claudia Kidwell, who divided these systems into three categories: proportional, hybrid, and direct measure. To date, the study of this textile technology and how it positioned women and sewing in both domestic and professional spheres has received little scholarly attention, but pattern drafting technology transformed the possibilities for pattern creation and proportionate measurements, especially for home sewers. It also aided in the paper pattern and ready-made clothing industries. This research, therefore, contributes to the discussion of textile technologies, such as the sewing machine and paper pattern industries, through examination of an understudied technology. The goal of this research is to understand how pattern drafting systems, and the skills required to use them, were adapted to the ever-changing style of women's clothing. It considers data collected from three methods typical of material culture studies and historiography: artifact analysis, content/visual analysis, and historical reproduction. Through this research more information come to light about the broader group of people potentially using these systems including dressmakers (professional and self-taught), home sewers and domestic servants. There was also a definite cost of knowledge

associated with the different systems whether that be in relation to the quality or price for instruction. These systems were adapted over time to account for the changing styles and the needs of the users which can be seen through the increased and clarified instructions and markings printed directly on the systems and changes between different iterations of the same systems.

Acknowledgements

I would like to say a special thanks to Marna Davis, Kay Cynova and Stuhr Museum of the Prairie Pioneer for giving me in person access to the pattern drafting systems in their collections.

Thank you Kay Cynova for always encouraging me to follow my dreams of both going to graduate school to focus on historical textiles/museum collections and working as a museum professional. You have always inspired me to learn more and follow all the historic research rabbit trails. I will forever be grateful for the impact you have had on my life.

Thank you Marna Davis for allowing me access to your collection of pattern drafting systems for my research and loaning me the Van Dame system from which I made a reproduction pattern. You always inspire me to research deeper and share my knowledge with others just as you have always done.

I would like to also acknowledge my advisor Dr. Mary Alice Casto and professor Dr. Claire Nicholas for their guidance, expertise and encouragement throughout this process. I am so grateful for all that they have taught me over the years.

Lastly, thank you for the support of my wonderful family and friends who encouraged me and showed me such grace while this research became such a large part of my life.

Table of Contents

List of Table	es v
List of Figu	resv
Chapter 1	Introduction1
Chapter 2	Historiography: Historical Context of Garment Production4
	Womanhood, Home Sewing. and the Sewing Machine4
	Women's Work and the Dressmaking Industry7
	Inside the Industry: A Hierarchy of Skill13
	Making and Consuming Clothing in the Mid-Late Nineteenth Century
	Representing & Selling Fashion20
	Technologies & Transformation: Pattern Drafting Systems, the Sewing Machine, and Paper Patterns
	The Sewing Machine26
	Paper Patterns and Print Media29
Chapter 3	Methods
	Artifact Analysis
	Drafting Systems Selected for the Research
	Methodology
	Content/Visual Analysis of Print Media41
	Newspapers41
	Historical Reproduction42
Chapter 4	Research Conducted47

Artifact Analysis: A Comparison of Individual Drafting Systems and Their Changes between 1880 and 189047
National Garment Cutter48
Williams Perfection Tailor System
Van Dame World's Fair Premium Tailor System for Drafting
Women and Children's Garments67
The Claims74
McDowell Garment Drafting Machine76
McDowell Diversifies—Paper Patterns & Pictorial Review Buddington as a Competitor82
Summary of the Artifact Analysis83
Quality and Type of Materials84
Ease of Use and Accuracy85
Instructions
Changes over Time88
Content/Visual Analysis
Newspaper and Classified Advertisements92
Classified Advertisements: Selling the Pattern Drafting Systems
Agents Wanted97
Classified Advertisements: Dressmaker for Hire98
Professional Dressmaking by Use of Pattern Drafting Systems
Seeking Dressmakers/Seamstresses through Classified Advertisements101

	Dress Cutting Schools' Association with Pattern Draftir	•
	Systems	101
	Additional Newspaper Advertisements Specific t McDowell System	
	The McDowell System as a Dressmaking Technology	-
	The World's Fair	106
	World's Fairs and Expositions: Product	
	Promotion	107
	Van Dame Instruction Book and Dressmakers' Journal	109
	Dress Cutting Schools	113
	Characterizations of Skill and Women's Labor.	115
	Audience	118
	Linguistic Diversity in Advertising	120
	Historic Reproduction Using the Van Dame System	124
	Analysis	125
	Mock-Up Number 1	130
	Mock-Up Number 2	132
	Summary of Historical Reproduction	135
Conclusion		139
	Artifact Analysis	140
	Technology Change & Changing Fashions	140
	Users	141

	Starting Knowledge143
	Price of Knowledge143
Conten	t/Visual Analysis145
	Skills & Expertise Assumed or Encouraged145
	Terminology & Frequency of Advertisement145
	Demographics of Potential Users146
Reproduction	
Limita	tions150
Sugges	tions for Further Research151
	Foreign Language151
	Periodicals152
	Domestic Service
	Expansion into Other Time Periods153
Glossary	
Bibliography	

Tables

TABLE 1: Advertisement Count for Drafting Systems Mentioned	
TABLE 2: Terminology Used to Name Pattern Drafting Systems 91	
TABLE 3: Classified Advertisements Related to Dresscutting. Dressmaking and Dresscutting Schools	2

Figures

Figure 1: Ladies Home Journal (Dec. 1889): 86
Figure 2: Ladies Home Journal (December 1895): 4827
Figure 3: Ladies Home Journal (December 1892): 3627
Figure 4: Ladies Home Journal (December 1898): 4629
Figure 5: <i>National Garment Cutter</i> rulers courtesy Marna Davis48
Figure 6: National Garment Cutter, 1888, 4-651
Figure 7: 1888 National Garment Cutter, 4–5
Figures 8: 1888 National Garment Cutter, 653
Figures 9: 1888 National Garment Cutter, 553
Figures 10: 1888 National Garment Cutter, 154
Figures 11: 1888 National Garment Cutter, 2–354
Figure 12: National Garment Cutter, 1892, 16–1755
Figure 13: National Garment Cutter 1888, 24–2556
Figure 14: National Garment Cutter, 1892, 23 and 2457
Figure 15: <i>The Perfection Tailor System</i> , 188759
Figure 16: The Perfection Tailor System, 188760

Figure 17: <i>The Perfection Tailor System</i> , 189160
Figure 18: <i>The Perfection Tailor System</i> , 188762
Figure 19: <i>The Perfection Tailor System</i> , 189163
Figure 20: <i>The Perfection Tailor System</i> , 189163
Figure 21: <i>The Perfection Tailor System</i> , 188764
Figure 22: <i>The Perfection Tailor System</i> , 189164
Figure 23: Van Dame World's Fair Premium Tailor System
Figure 24: Van Dame System
Figure 25: Van Dame System70
Figure 26: <i>World's Fair Premium Tailor System</i> Instructions73
Figure 27: World's Fair Premium Tailor System Instructions73
Figure 28: World's Fair Premium Tailor System Instructions73
Figure 29: World's Fair Premium Tailor System Instructions73
Figure 30: 1899 World's Fair Premium Tailor Sleeve System74
Figure 31: <i>McDowell Garment Drafting Machine</i> 77
Figure 32: Index, pages 49 & 50 from the 1885 McDowell Instruction Manual81
Figure 33: Buddington Dress Cutting Machine
Figure 34: "Multiple Classified Advertisements." <i>Daily Inter Ocean</i> , Dec. 17, 1893, 2094
Figure 35: Multiple Classified Advertisements." <i>St. Louis Globe-Democrat</i> 6, no. 293 (April 10, 1881)
Figure 36: "Multiple Classified Advertisements." <i>Daily Inter Ocean</i> , Sept. 17, 1893, 19
Figure 37: "Multiple Classified Advertisements." <i>Milwaukee Daily Sentinel</i> , July 20, 1895, 7102

Figure 38: J. R. Van Dame & Co. Instruction Book and Dressmakers' Journal n. d112
Figure 39: J. R. Van Dame & Co. Instruction Book and Dressmakers' Journal n. d112
Figure 40: J. R. Van Dame & Co. Instruction Book and Dressmakers' Journal n. d112
Figure 41: J. R. Van Dame & Co. Instruction Book and Dressmakers' Journal n. d112
Figure 42: Norman Tailor System 1885123
Figures 43: Van Dame World's Fair Premium Tailor System125
Figures 44: Van Dame World's Fair Premium Tailor System125
Figure 45: Van Dame World's Fair Premium Tailor System126
Figure 46: Van Dame World's Fair Premium Tailor System126
Figure 47: Van Dame World's Fair Premium Tailor System127
Figure 48: Van Dame World's Fair Premium Tailor System127
Figure 49: Van Dame World's Fair Premium Tailor System127
Figure 50: Van Dame World's Fair Premium Tailor System128
Figure 51: Van Dame World's Fair Premium Tailor System128
Figure 52: Van Dame World's Fair Premium Tailor System129
Figure 53: Van Dame World's Fair Premium Tailor System129
Figure 54: Van Dame Pattern Mockup 1, Front view
Figure 55: Van Dame Pattern Mockup 1, Back view
Figure 56: Van Dame System folder with instruction132
Figure 57: Van Dame System additional instructions
Figure 58: Van Dame System additional instructions
Figure 59: Van Dame Pattern Mockup 1, Front view
Figure 60: Van Dame Pattern Mockup 1, Back view

CHAPTER 1: Introduction

Pattern drafting systems emerged as a new technology in the early nineteenth century. Along with other key technologies such as the sewing machine, they subsequently transformed the way clothing was made both for women sewing at home and for dressmakers and others in the apparel industry, including those producing readymade garments. Indeed, scholarship addressing the history of pattern drafting systems in the United States from 1820–1920 positions it as the precursor to the paper pattern.

When pattern drafting systems emerged in the 1830s, they were a new technology that offered a useful set of tools for dress and pattern making by home sewers and dressmakers (working in professional shops and homes). Pattern drafting systems or machines (as they were sometimes called) allowed a person to make the basic pattern pieces for a garment that matched their (or a client's) individual measurements. These systems for home sewers had the potential to be an alternative to purchasing clothing or having it made by a dressmaker. Throughout much of history, and certainly in the nineteenth century, women have had a hand in making clothing for themselves, their families, and others. It is important to understand the experience of the women who were making clothing at a time when both fashion and the technology involved in its production were evolving quickly. Close examination of the pattern drafting systems that women had available for use offers one window onto this experience.

In this research I explore how women used pattern drafting systems between 1880 and 1900, assess the representations of drafting systems in newspaper and magazine advertisements, and consider why women dressmakers and home sewers were choosing to use pattern drafting systems instead of previous means of clothing construction. I focus

1

on usage of these systems in women's clothing by dressmakers, domestic workers, and middle-class women who were sewing at home in the United States between 1880 and 1900. By this point the systems were no longer a new technology but, rather, commonplace in garment production. Further, by this time the sewing machine had been widely available for use in the home for several decades.¹ I expand on previous research on pattern drafting systems by Claudia Kidwell and Winifred Aldrich to include a more in-depth understanding of their use and a focus on middle-class women (and potentially their domestic workers) who sewed in their homes.² The focus on 1880–1900 allows for an analysis of one major silhouette change and the corresponding adjustments made to the pattern drafting systems.

The specific questions explored through this research include: 1) How did pattern drafting technology change to account for and support fashion trends of the period? 2) What skills or expertise did different systems assume their users had or encourage them to cultivate? 3) What does the representation of these systems say about the relationship between the technology and the skill involved in making women's clothing? 4) How were the pattern drafting systems integrated into and shape the new configurations of training, teaching, learning and selling in the production of clothing, within the dressmaking industry and at home?

This research sheds light on an aspect of women's history that will enrich the broader historiography of late-nineteenth century America, particularly that concerned

^{1.} Judith Coffin, "Credit, Consumption, and Images of Women's Desires: Selling the Sewing Machine in Late Nineteenth-Century France," *French Historical Studies* 18, no. 3 (1994): 754-768.

^{2.} Claudia Kidwell, *Cutting a Fashionable Fit: Dressmakers' Drafting Systems in the United States* (Washington, D.C.: Smithsonian Institute Press, 1979), and

Winifred Aldrich, "The Impact of Fashion on the Cutting Practices for the Woman's Tailored Jacket 1800–1927," *Textile History* 34, no. 2 (2003): 134–170, doi: 10.1179/004049603235001580.

with women's roles in the apparel industry and blurred boundaries with industry in the home. I do this in two ways: first, by demonstrating that fashion historians should not only look at what women were wearing and why but also seek to understand how the garments were created, which is often indicative of the technology available at the time. Researchers such as Kidwell have shown how crucial these pattern drafting systems were and how they changed the way garments, and their patterns, were created.³ Although we do not use these exact systems today, their influence lives on through the paper pattern industry. Today, we can purchase ready-made paper patterns for personal use. The study therefore contributes to the discussion of women's work and the late-nineteenth-century apparel industry through the lens of material culture studies and a history of technology perspective. Second, there is a gap in the field of women's and clothing history vis-à-vis the perception and actual implementation of pattern drafting systems by the women who used them. Thus, these systems are worth researching further to gain a better understanding of not only these systems but also the women who used them at home and within the dressmaking industry.

^{3.} Kidwell, 1979, 3-104.

CHAPTER 2: Historiography: Historical Context of Garment Production

Womanhood and Home Sewing

Despite the increasingly widespread availability of ready-made clothing by the end of the 1800s, for most of the nineteenth century social norms and ideals about women's roles in the home dictated that women should be able to create clothing for their families. This continued into the late 19th century, despite industrialization and the increasing presence of mass-produced garments. According to English professor Sarah Gordon, by the 1890s, "women's styles accounted for only 26 percent of factory-made clothing."⁴ If they were not purchasing factory/ready-made clothing, then women had to obtain clothing another way. Ava Barm, engineer, and Susan Klepp, sociologist, explain that most lower- and middle-class women could only afford to produce their garments at home, while upper-class women had the opportunity to hire a dressmaker or import the current fashions.⁵ Gordon also states that sewing at home was the only choice for some women, making the ability to sew and, to an extent, then pattern clothing a necessity.⁶

In an 1837 issue of *The Young Lady's Friend*, "Eliza Farrar wrote, 'a woman who does not know how to sew is as deficient in her education as a man who cannot write."⁷

^{4.} Sarah Gordon, "Boundless Possibilities': Home Sewing and the Meanings of Women's Domestic Work in the United States, 1890–1930," *Journal of Women's History* 16, no. 2 (2004): 70, doi: 10.1353/jowh.2004.0045.

^{5.} Ava Barm and Susan Klepp, "If I Didn't Have My Sewing Machine . . .": Women and Sewing Machine Technology," in *A Needle, a Bobbin, a Strike: Women Needleworkers in America*, ed. Joan Jensen & Sue Davidson (New York: Temple University Press, 1984), 28.

^{6.} Gordon, "Boundless Possibilities": 68–91.

^{7.} Helvenston, Sally and Bubolz, Margaret, "Home Economics and Home Sewing in the United States, 1870-1940," in *The Culture of Sewing: Gender, Consumption & Home Dressmaking*, ed. Barbara Burman (New York: Oxford, 1999), 304.

Fashion historian Jennifer Grayer Moore confirms American social expectations around sewing ability:

The cultural necessity of sewing that was inherent in nineteenth-century life meant that many women would have had robust prior knowledge earned through a life of working with needle and thread and in all likelihood had a network of needlewomen in her family and community to advise her when problems arose.⁸

Nevertheless, "most people did not enjoy a high level of skill, and despite their best efforts the garments they produced often betrayed their origins."⁹ Thus, women who possessed the aptitude and ability to sew were tasked with creating the desired garments.

By the 1890s, options for purchasing clothing had expanded somewhat. Women who wanted to dress in the latest fashion, but who did not want to sew it themselves, had the option to purchase the item from either a dressmaker or a store. Even so, the cost of purchasing a garment or having it made by a dressmaker could be a limiting factor, leading a woman to sew her clothing at home regardless of her dressmaking ability. As explained by Wendy Gamber, the expense to replace worn-out garments each year was one of the reasons women chose to save money by creating their own clothing because most were replacing one to two dresses each year, not including any garments they would have had to produce for their family.¹⁰

^{8.} Grayer Moore, "A Brief History of Patternmaking," 19.

^{9.} Gordon: 74.

^{10.} Gamber, *The Female Economy: The Millinery and Dressmaking Trades, 1860–1930* (Chicago: University of Illinois Press, 1997), 114–15.



Figure 1: Ladies Home Journal (Dec. 1889): 8.

Despite the gendered expectation of the skills young ladies and women should possess, not all women had access to others in their family with the needed sewing and garment creation skills. This social expectation meant that women had to find a way around their sewing weaknesses. According to Kidwell, "the amateur dressmaker usually followed another time-honored custom, that of taking a pattern from an existing dress or lining."¹¹ This entailed taking a garment apart to copy the pieces or copying it while it was still being assembled. Some women sewing at home "'made' [their dress[es], not by designing a pattern anew, but by laboriously picking apart an older garment and using its pieces as [their] guide."¹² Tracing the pieces generated a pattern, but this method simply reproduced the previous garment and its fit.¹³ It therefore limited a woman's ability to produce a garment different from ones already owned. Women who did not want to take a pattern from a garment had some other options.

^{11.} Kidwell, Cutting a Fashionable Fit, 13.

^{12.} Gamber, "Reduced to Science": 464.

^{13.} Grayer Moore, "A Brief History of Patternmaking," 27.

One option for middle-class women was to purchase a pattern drafting system, which allowed them to create their own pattern to make the desired garment. Because these pattern drafting systems were adjustable, they could aid both the highly skilled dressmakers and tailors along with the women who were sewing at home. This was the intention of Aaron Tentler, the first person to have a system patented, stating, "every lady may learn to make any kind of dress herself, in a short time."¹⁴ In the 1850s, women could also acquire a single-size pattern drafted by a dressmaker, and by the 1860s they might purchase a printed Butterick pattern.¹⁵ However, even when a pattern had been created or acquired, women still had to be able to sew the pieces together.

Women's Work and the Dressmaking Industry

As indicated briefly in the preceding section, alongside home sewing, the dressmaking industry was crucial to clothing a fashionable society in the nineteenth century. The industry comprises dressmakers, tailors, and seamstresses. Barm and Klepp explain that at a time when few occupations were acceptable for women, sewing was considered a respectable form of women's work.^{16,} Textile and linguistics expert Elizabeth Wayland Barber attributes the tasks associated with women's work with childbearing, explaining that women's work had to be conducive to interruptions, safe for children to be around, repetitive, and close to home.¹⁷ Heather Pristash, Inez Schaechterle, and Sue Carter Wood explain that the gendering of women's work occurred

^{14.} Kidwell, Cutting a Fashionable Fit, 25.

^{15.} Walsh, M. "The Democratization of Fashion: The Emergence of the Women's Dress Pattern Industry." The Journal of American History 66, no. 2 (1979): 229–313 and Waller-Zuckerman, Mary Ellen. "Marketing the Women's Journals, 1873–1900." Business and Economic History 18, no. 99 (1989). 16. Barm and Klepp, 20-25.

^{17.} Elizabeth Wayland Barber, *Women's Work: The First 20,000 Years Women, Cloth, and Society in Early Times* (New York: W. W. Norton & Company, 1994), 29–30.

early on because young girls were expected to be "little women" training at a young age to learn the needlework skills that would be required in their future home or trade.¹⁸

An 1859 example from Caroline Dall explains where sewing fit into women's work; she commented: "the command of society to the uneducated class is, 'marry, stitch, die or do worse."¹⁹ This clearly, though somewhat euphemistically, marked the limited options available for women in need of an occupation. Such limitations according to history professor Christopher Breward, were perpetuated through printed magazines which promoted a feminized domesticity, that included dressmaking.²⁰ Furthermore historian Helen Rogers explains that women in the needlework trades, which included milliners, seamstresses, and dressmakers, did not always have access to resources and agency within the textile industry or even a collective voice in their respective trades.²¹

Dressmakers in the United States were primarily women aged 35–44, which was consistent with the level of skill and training required to become skilled in the dressmaking trade.²² Between 1880 and 1920, the trade of dressmaker was a female-dominated profession, and the term typically referred to trained women who primarily made women's clothing, while a tailor was usually a man who was not limited to only making women's clothing.²³ The occupation of a seamstress in the nineteenth century was more prevalent than that of the dressmaker and was considered unskilled work for

^{18.} Maureen Daly Goggin and Beth Fowkes Tobin, *Women and the Material Culture of Needlework and Textiles, 1750–1950* (Surry: Ashgate, 2009), 17–18.

^{19.} Barm and Klepp, 24.

^{20.} Barbara Burman, *The Culture of Sewing: Gender, Consumption & Home Dressmaking* (New York: Oxford, 1999), 23.

^{21.} Helen Rogers, "The Good Are Not Always Powerful, Nor the Powerful Always Good": The Politics of Women's Needlework in Mid-Victorian London," *Victorian Studies* 40, no. 4 (1997): 617–18.
22. Trautman: 84.

^{23.} Trautman: 77-88.

Patricia Trautman, *Clothing America: A bibliography and Location Index of Nineteenth-Century American Pattern Drafting Systems.* N.p.: Costume Society of America, Region 2, 1987, 83.

women because society expected them to have been taught the needed skills as part of their upbringing.²⁴ In this way, the labor and skill employed in the professional dressmaking trade were on a continuum with the dressmaking and sewing skills young girls were taught growing up both at home and in schools.²⁵

By the 1890s, as seen in Menomonie, Wisconsin, manual training schools were becoming more common to teach young girls cooking, sewing, millinery, and other domestic tasks required of women when they married.²⁶ Young girls' education at a manual training school extended beyond the typical school curriculum such as reading and arithmetic, and girls were being taught skills previously learned in the home. Schools like that in Wisconsin taught these skills based on the fundamental idea of "learning by doing."²⁷ Manual training schools reflected and perpetuated the stereotypes about skills expected of women in the home and reinforced the scope of work thought to be appropriate for women such as dressmaking and millinery (some of which could take place outside the home).

The status of women's labor both inside and outside the home—as perpetuated in schooling, upbringing, and the division of professional labor in the garment industry—indexed a societal understanding that female wage labor was "unnatural" and took jobs from men.²⁸ Some male tailors claimed that female, Irish, and immigrant laborers were overcrowding the workplaces. One man argued that "owing to the reduction of prices, many wives who formerly attended solely to their domestic duties and their family are

^{24.} Barm and Klepp, "My Sewing Machine," 22.

^{25.} Trautman, 1987, 81.

^{26.} Sébastien-Akira Alix, "The Hand as Agent of the Mind? The Irony of Manual Training Reform in Menomonie, Wisconsin (1890–1920)," *History of Education* 48, no. 4 (2019): 484. 27. Alix: 494.

^{28.} Rogers, "The Good Are Not": 608.

now obligated to labour with the husband, and still the earnings of the two are less than he alone formerly obtained.²⁹ Wendy Gamber's work extends a consideration of compensation to training in the garment industry, adding, "Dressmaking and millinery were predominantly the domain of two overlapping groups: white women native birth, and women whose families could afford to support them while they labored as unpaid or barely compensated apprentices.³⁰ She also explains that the average apprenticeship was unpaid and lasted three months to two years, but there was an understanding by both the young women entering these apprenticeships and their families that the trade would increase their status in society.³¹

Therefore, aside from the skills and training required to enter a trade, women encountered other obstacles to making a living as members of the paid workforce. Besides the norms already described, in the late nineteenth century, middle-class values demanded that men, as the main breadwinners, were to provide for their wives and children. Women in the workforce were still considered to be dependent on men and thus did not require a full wage (they received between half and two-thirds that of a man's wages for the same or equivalent positions within the textile industries).³² As women's labor historian Ileen DeVault explains, the "'family' or 'living' wage" is "a single wage high enough to support the male worker's entire family."³³ In these trades, women were not paid a livable wage, and what little they did make could be fined and reduced, which,

^{29.} November 1849 in Rogers: 607.

^{30.} Gamber, *The Female Economy*, 56.

^{31.} Gamber, 67–71.

^{32.} Deirdre Busfield, "Tailoring the Millions'; the Women Workers of the Leeds Clothing Industry, 1880–1914," *Textile History* 16, no. 1 (1985): 84–85, doi: 10.1179/004049685793701179.

^{33.} Ileen DeVault, "Family Wages: The Roles of Wives and Mothers in U.S. Working-Class Survival Strategies, 1880–1930," *Labor History* 54, no. 1 (2013): 4.

according to researcher Deirdre Busfield, rarely happened to men in the same trade.³⁴ This double standard prioritized the morality and structure of a traditional family over the unmarried or wage-dependent woman. The living wage treated all workers, but especially women, as consumers instead of producers because it was pegged to the standard of living at the time and factored into the male worker's wage, which could however differ along class and racial lines.³⁵ The production of ready-made clothing further hurt dressmakers and diminished the income they received. Dressmakers in the "1850s could expect to earn \$1.33 a day. By the 1860s the average daily wage had fallen to 93 cents."³⁶ The wage recovered slightly to "\$1.10 in the 1890s."³⁷

In addition to gendered wage gaps and diminishing rates of pay and status, the dressmaker's job was intersected by tensions of race and class, especially when a dressmaker's ability or economy came into question.³⁸ This corresponds in part to broader statistics on women's workforce participation between 1880 and 1910, which reveal lines of cleavage related to marital status, race, and country of birth. According to historian Jan Whitaker, "during its ascendancy from about 1880 to 1920, American society shifted from rural to urban centers and absorbed more than twenty-three million immigrants."³⁹ This would have been a large influx of people bringing new ideas, cultures, and experiences with them. These immigrants would have also needed to purchase goods and make a living. One of the McDowell System advertisements shown in the later content-visual analysis of newspaper articles points to dress cutting schools

^{34.} Busfield, "'Tailoring the Millions'": 83.

^{35.} DeVault : 4.

^{36.} Barm and Klepp, "My Sewing Machine," 49-50.

^{37.} Barm and Klepp, 49–50.

^{38.} Burman, The Culture of Sewing, 143.

^{39.} Jan Whitaker, *Service and Style: How the American Department Store Fashioned the Middle Class* (New York: St. Martin's Press, 2006), 1.

that taught using a drafting system. The ad acknowledges the need to teach immigrants in a language they understood to sell the systems. The advertisement, which was printed in the *Daily Inter Ocean* of December 17, 1893, notes that students could learn from French, German, and English teachers at the McDowell Dress Cutting Academy.⁴⁰

As per the demographic categories applied in DeVault's research, in 1880, among Black, native-born women, 29.3 percent of married; 54 percent of widowed, divorced, or separated; and 64 percent of the group as a whole participated in the labor force, whereas among White, native-born women, only 2.1 percent of married; 15.9 percent of widowed, divorced, or separated; and 29.6 percent of the group as a whole participated. This stands in contrast to single, foreign-born women in the United States, among 3.6 percent of married; 21.4 percent of widowed, divorced, or separated; and 65.8 percent of the entire group were entering the labor force.⁴¹ These numbers represent the larger labor force and are not limited to workers within the textile industries. However, they do show the contrast in the choice and/or necessity of women to find work outside of the home, which disproportionately affected Black, native-born, and foreign-born women.

For numbers related directly to race and the textile and fashion industry,

according to the United States Census from 1900, there were:

753,340 personal clothiers working in the U.S. This represents an increase of 101,848 persons or 14% over 1890. The number of dressmakers, male and female,listed in the 1900 U.S. Census is 359,453, including 55 Negro Males and 12,514 Negro Females. This represents an increase of 1,254 Caucasian men dressmakers (46%) and 52,126 Caucasian women dressmakers (18%).⁴²

^{40.} Daily Inter Ocean, Dec. 1893, 20.

^{41.} DeVault, "Family Wages": 7.

^{42.} Trautman, "Personal Clothiers": 77.

By 1900, according to DeVault, "less than 6% of all married women . . . entered the labor force."⁴³ This meant that the remainder of the women in the workforce were unmarried, widowed, or divorced and thus without the income of a husband. Indeed, by 1910, unmarried women in the United States made up 68.5 percent of dressmakers.⁴⁴ However, Devault also points out that many wives and mothers brought in additional income outside of the official labor force statistics. She explains that they did this by "selling subsistence," meaning they took in cooking, cleaning, washing, or sewing tasks or sold garden produce or goods such as eggs, milk, or butter to bring in additional income.⁴⁵ The popularity of the dressmaking trade for women continued to rise until the 1920s, when it declined in part from the loose, unfitted silhouette seen in that decade.⁴⁶

Inside the Industry: A Hierarchy of Skill

The dressmaking industry of the nineteenth century was structured according to an internal hierarchy based both on gender and perceptions of skill. Industry culture looked down on female dressmakers and seamstresses. Tailors were viewed as the ones who created the "complex women's garments such as coats and jackets as well as men's suits and overcoats."⁴⁷ This is because tailors worked from patterns either on paper or fabric and combined their "knowledge of human anatomy, simple geometry, and garment styling with a nuanced understanding of how to create a perfect fit."⁴⁸ Women, on the other hand, were seen as more capable of handling the "boring, repetitive work . . . based

^{43.} DeVault, "Family Wages": 6.

^{44.} Trautman, "Personal Clothiers": 83.

^{45.} DeVault, "Family Wages": 12.

^{46.} Rogers, "The Good Are Not": 591 and Trautman, "Personal Clothiers": 84-94.

^{47.} Trautman, "Personal Clothiers": 75.

^{48.} Catherine Roy, "The Tailor's Voice: Pattern Drafting Systems and the State of the Art," in *Patternmaking History and Theory*, ed. Jennifer Grayer Moore (London: Bloomsbury Publishing, 2019), 93.

on manual dexterity," unlike the "mental dexterity" required of men.⁴⁹ Notions of skill, differentiated according to the head and the hand, perpetuated ideas about women's capabilities and the work society deemed acceptable for them. Women in the needlework trades (dressmaker, milliner, seamstress) were therefore working both within and against gendered stereotypes, which represented women as both "vulnerable and powerless."⁵⁰

Even female dressmaker shops perpetuated this hierarchy of status and skill. The women who fitted the garments held the highest rank within the shop, while the finishers (who sewed the garments) came next, followed by the apprentices (who performed simple tasks such as basting seams).⁵¹ There was an understanding within the trade of rank and the process by which women moved through the ranks. Upward movement was something to be earned with experience (time) and skill. Garment fitters occupied the top rank based on the complex technical (and social) skills necessary to achieve the fit expected by their customers. If the finished garment did not fit the customer, the rest of the work was less important. Edna Bryner, a dressmaker after the turn of the nineteenth century, describes one example of the fitting process undertaken by dressmakers in 1916:

The system of dressmaking used in all establishments consists in making a cambric lining, called a foundation guide, to fit the customer; putting this foundation on a form somewhat smaller and stuffing it out so as to duplicate the customer's figure; fitting the lining proper upon this foundation; 'building' the dress upon it in the proper lines; and fitting the draped dress upon the customer to make finer adjustments before completing the finishing operations.⁵²

The need for proper-fitting garments was at the core of the industry, with both dressmakers and tailors playing an important role in the creation of pattern drafting

^{49.} Busfield, "'Tailoring the Millions'": 87.

^{50.} Rogers, "The Good Are Not": 590.

^{51.} Gamber, "Reduced to Science": 462.

^{52.} Gamber: 477.

systems to facilitate good fit. The men, who were already paid more for their work, were creating pattern drafting systems, which would have not only increased their income but also expedited the production of the garments they made.⁵³ Pattern drafting systems also led to the creation of the ready-made clothing industry. Before the use of pattern drafting systems, there were graduated tapes, which relied "on a few basic measurements and scal[ed] to offer so-called 'custom made' and ready-to-wear garments."⁵⁴ Returning to the dressmakers' hierarchy, pattern drafting systems at least potentially threatened the need to have a professional dressmaker pattern and cut the garment. This threat exerted the most pressure on those at the top of the skill hierarchy.

Advertisements for patterning drafting systems specifically targeted toward dressmakers augmented this pressure. Two systems specifically discussed in Gamber's research include the system by Mr. S. T. Taylor, who claimed "he saw the difficulties under which the dressmakers labored, and applied a life's study to elaborate a way of dress-cutting which would be on par with cutting done by tailors."⁵⁵ The other example of this was from Caleb H. Griffin and David Knox, who created "The Great American Draughting Machine":

We frequently meet cutters . . . who have practiced the greater part of their lives, and yet, who . . . work by such a crude system, compared to that sanctioned by experts in the art, that they can scarcely be mentioned beside them." "Among the many thousands of professional dressmakers in this country the number who excel in their profession are comparatively few.⁵⁶

S. T. Taylor created the 1896 S. T. Taylor's System of Dress Cutting. 56. Gamber: 468.

Draughting is the spelling used.

^{53.} Aldrich, "The Impact of Fashion": 136.

^{54.} Aldrich: 136.

^{55.} Gamber, "Reduced to Science": 467.

A technology that was part of changing the way clothing was accurately made was also being used to hurt and diminish the perceived skills of women in the dressmaking trade. Advertisements like this were all too common and just one more way that pattern drafting systems hurt dressmakers, while helping women sewing at home. Although in this analysis the same demeaning language toward dressmakers was not found, these are some of the types of advertisements surrounding the pattern drafting and dressmaking industry.

Consuming & Marketing Fashion in the Mid-Late Nineteenth Century

Regardless of class or country of birth, dress was an important part of women's lives and in one way or another had to be purchased or made. For nineteenth-century middle-class women in particular, "everything is saturated with meaning: their clothes, their bodies, their houses, all are assumed to be markers of some deeper, pathological form of identity."⁵⁷ There were many modes of clothing consumption, but this changed between working and middle-class women. There were quite a few influences on fashion, including how women thought they would be viewed by others and how they wanted to present themselves.

In the late 19th century, women's clothing styles and silhouettes were changing rapidly. A major style shift took place from the 1870s and 1880s bustle skirts to the bellshaped skirts of the 1890s. Even between 1891 and 1899, style changes were present in both the design details and the overall silhouette and would have been time consuming and challenging to keep up with for women who were not skilled seamstresses or

^{57.} Stephanie Lawler, *Disgusted Subjects: The Making of Middle-Class Identities* (The editorial board of *The Sociological Review*, Blackwell Publishing Ltd., 2005), 437.

dressmakers. To correctly follow these styles, a woman needed a well-fitted and correctly shaped final garment, because a poor fit would have been obvious. According to Claudia Kidwell, part of the reason these pattern drafting systems were important was that "these women had to cut and sew their own clothes to be respectably dressed" because "according to the morality of that age it was common to regard an individual's appearance as an index of character."⁵⁸

With society's expectations of the ideal look for women as well as the changing fashions and values of neatness and looking presentable in public, it would have been imperative that a woman had access to well-made clothing or the ability to create these garments herself.⁵⁹ If a woman's morality could be implied by how she dressed, then it continued to push ideas that women had to dress and look a certain way. This social dynamic echoes Erving Goffman's concept of the "presentation of self in everyday life," and the notion of "*impression management*, in which we attempt to control and manipulate information about ourselves to attempt to influence the impression others form of us."⁶⁰

The way a woman looked, even within the working class, was important at this time and could influence the degree of respectability with which one was viewed. According to Stephanie Lawler, "bodies—their appearance, their bearing and their adornment—are central and representations of white working-class people."⁶¹ Respectability was viewed through women's bodies and behaviors, and this mattered

- 59. D. Newman and J. O'Brien, *Sociology: Exploring the Architecture of Everyday Life Readings* (Los Angeles, CA: Pine Forge Press, 2008), 109.
- 60. Newman and O'Brien, Sociology, 109.
- 61. Lawler, Disgusted Subjects, 432.

^{58.} Kidwell, Cutting a Fashionable Fit, 80.

because "respectability [was] coded as an inherent feature of 'proper' femininity."⁶² Dress was given meaning, especially for the working class whose clothing had the potential to be viewed as "indicat[ing] signs of ignorance, stupidity [and] tastelessness," regardless of whether this was true.⁶³ According to Pierre Bourdieu, "social identity lies in difference, and difference is asserted against what is closest, which represents the greatest threat."⁶⁴ There was a meaning behind women's clothing choices and how they chose to show themselves through their dress.

Mary Louise Roberts explains that women were connected by society to ideas of consumption and frivolity owing to the, "liveliness, yet passivity, of women's sense of sight and imagination."⁶⁵ She adds that women's domesticity and consumption were seen by those around them to represent their nation, family, and class, while luxury walked the line of conspicuousness, as well as social and moral order.⁶⁶ Lois Banner delineates that clothing consumption was originally heavily influenced by dressmakers, but fashion magazines and the ready-made clothing industry also helped push new ideas of fashion into the homes of its wearers.⁶⁷

The selling and purchasing of mass-produced goods was nothing new by the 1880s–1890s. According to Nancy Woloch, "the label of 'consumer,' around the turn of the century, was a code word for the middle-class woman. It set apart the purchaser of goods from the good's producers."⁶⁸ Department stores, advantaged by the economy of

^{62.} Lawler, 435.

^{63.} Lawler, 437.

^{64.} Pierre Bourdieu, *Distinction: A Social Critique of the Distinction of Taste, Classes, and Classifications*, trans. Richard Nice (Massachusetts: Harvard University Press, 1984), 479.

^{65.} Mary Louise Roberts, "Gender, Consumption, and Commodity Culture," *The American Historical Review* 103, no. 3 (1998): 822.

^{66.} Roberts: 826.

^{67.} Lois W. Banner, American Beauty (New York: Aldred A. Knopf, 1983), 28-32.

^{68.} Woloch, A Class by Herself, 13.

scale, were able to sell goods for less, opening them up to people from a broader range of socioeconomic statuses. At the same time, as mentioned in an 1897 *Scribner's* magazine, it was the quantity and not quality of the goods that drew people into the stores.⁶⁹ Although ready-made clothing had entered the market by the 1840s, it was primarily geared toward men, leaving the majority of women's clothing production to the home.⁷⁰

By the 1880s and 1890s, department stores had emerged as important sites of consumption, though women's ready-to-wear garments were still relatively uncommon because 70 percent of the ready-to-wear clothing available was for men.⁷¹ For women, one of the items that did become available was the shirtwaist. According to Jan Whitaker, "it was a hit in the summer of 1892 in New York City, where its availability for as little as \$0.39 played a role in its broad popularity."⁷² The shirtwaist was not a fitted, complex or complicated to sew garment compared to a dress or more fitted bodices. Due to the fitted nature of much of the women's garments in the 1880s and 1890s they were complex to fit and hard mass produce. Pattern drafting systems on the other hand were used to make the most fitted basic pattern that would then be adjusted to the desired styles. The fit that is achieved with individual measurements and a drafting system were not easily replicable in the ready-made clothing industry due to the complexity of fitting the body.

Besides department stores, expositions and fairs were another way to showcase clothing and other goods. The Chicago World's Fair in 1893, also known as the World's Columbian Exposition, displayed various exhibits of clothing, including dresses from

^{69.} Whitaker, Service & Style, 9–10.

^{70.} Barm and Klepp, "My Sewing Machine": 27.

^{71.} Whitaker, Service & Style, 53–54.

^{72.} Whitaker, 57-58.

dressmakers in Paris, and much of that clothing served to inspire not only the women who saw it but the fashions sold in American department stores.⁷³

Representing & Selling Fashion

According to Waller-Zuckerman, fashion ideals, trends, and advice were disseminated through periodicals such as the *Ladies Home Journal*, *Delineator*, and *Godey's Lady's Book*.⁷⁴ The *Godey's Lady's Magazine* advised women to hire a dressmaker when it could be afforded, explaining, "a dressmaker's charge is seventy-five cents a day, and including mantillias and capes, no family can well dispense with less than a week's service every season."⁷⁵ These journals aided in the diffusion of fashion and the ideas of what it meant to be a woman to society. Karin Bohleke, a literature and fashion historian, explains that it was not just the advertisements and advice that made these so important, but journals like *Godey's Lady's Book* and *Peterson's Magazine* included colored fashion plates, which showed the newest fashionable ideals.⁷⁶ These fashion plates were images of ideal fashions now disseminated to women in color instead of text alone.

Fashion plates were more than just a picture to which to aspire. Heidi Brevik-Zender, a professor of French and literature, shows the power of the fashion plates, which were used to "stimulate consumption by women, both of garments and of ladies'

^{73.} Whitaker, 60.

^{74.} Mary Ellen Waller-Zuckerman, "Marketing the Women's Journals, 1873–1900," *Business and Economic History* 18, no. 99 (1989): 99-108.

^{75.} Joy Spanabel Emery, A History of the Paper Pattern Industry: The Home Dressmaking Fashion Revolution (New York: Bloomsbury, 2014), 29.

^{76.} Karin Bohleke, "Americanizing French Fashion Plates: Godey's and Peterson's Cultural and Socio-Economic Translation of *Les Modes Parisiennes*," *American Periodicals: A Journal of History & Criticism* 20, no. 2 (2010): 120-55, doi: 10.1353/amp.2010.0006.

periodicals themselves."⁷⁷ The women reading them were encouraged to not only purchase the periodicals or journals that contained these fashion plates but to recreate or purchase garments as pictured. Brevik-Zender also notes, "'fashion' is a reference not only to garments, but also to the visual culture."⁷⁸ This visual culture includes dress, but also extends to visual aspects of everyday life such as home décor which many periodicals included.

As Jennifer Grayer Moore explains, women's magazines contained more than just information targeted to the women at home but were also important resources for professional dressmakers and seamstresses.⁷⁹ Periodicals included information and images, communicating current styles and appearance ideals for the consumer. The continually changing nature of fashion meant that periodicals always had something new to report in order to help their readership stay abreast of current trends whether for themselves or their clients. Author Barbara Burman adds that information about pattern drafting systems was also included in these periodicals and women's magazines, reinforcing society's narrative of women sewing at home for their families.⁸⁰

One of these periodicals, the *Delineator*, influenced fashion and gender role expectations and "defined women's traditional duties and responsibilities . . . with the standard editorial departments on sewing, cooking, childcare and fancy work."⁸¹ Judith Coffin explains that femininity was represented in print by showing women "with such

^{77.} Heidi Brevik-Zender, "Interstitial Narratives: Rethinking Feminine Spaces of Modernity in Nineteenth-Century French Fashion Plates," *Nineteenth-Century Contexts* 32, no. 2 (2014): 95,

doi: 10.1080/08905495.2014.895290.

^{78.} Brevik-Zender, "Interstitial Narratives," 95.

^{79.} Grayer Moore, "A Brief History of Patternmaking," 17.

^{80.} Burman, The Culture of Sewing, 1999.

^{81.} Sidney Bland, "Shaping the Life of the New Woman: The Crusading Years of the '*Delineator*," *American Periodicals* 19, no. 2 (2009): 166.

qualities as dexterity, taste, intuition, and artistry, but these qualities were sharply distinguished from craft, skill, and technology mastery, which according to common conceptions, were acquired and maintained in the masculine world of the shop."⁸² This reveals the influence journals and advertisements may have had regarding more than fashionable dress.

Technologies & Transformation: Pattern Drafting Systems, the Sewing Machine, and Paper Patterns

The first pattern drafting system, according to costume historian Claudia Kidwell, was seen "between 1820 and 1838," but the first patent was not filed until 1841.⁸³ Prior to, and at the start of pattern drafting system use, other methods of garment and pattern creation remained in use, for instance, draping or cutting a new garment using an old one as a pattern. Winifred Aldrich challenged previous research, stating, "Whilst Kidwell speculates that the simple system, published and patented by Aaron Tentler of Philadelphia in 1841 and also taught by Fowler of Chicago in 1841, was not 'created' by a tailor for use in the tailoring trade, it was in fact the use of a tailor[s]s notched strip in combination with a radial punch hole system similar to that of the English tailor John Woods in 1827," showing that markedly similar systems were used earlier by professional tailors.⁸⁴ In 1856, a tailor, Phillip Kurtz, was using graduated tapes to create and size his patterns.⁸⁵ These tapes would use an individual's measurements, but did not require the same mathematical calculations required to make a pattern because each set of

^{82.} Coffin, "Credit, Consumption, and Images": 758.

^{83.} Kidwell, Cutting a Fashionable Fit, 20-21.

^{84.} Aldrich, "The Impact of Fashion": 137.

^{85.} Aldrich: 137.

tapes would correlate to an individual's measurements. For instance, a set of tapes could be made to a thirty-inch bust measure compared to one for a thirty-five-inch bust. This helped the dressmaker or tailor grade the patterns to multiple sizes, but would still have required the ability to pattern clothing.

By the 1880s, there were three main types of pattern drafting systems to choose from: proportional (1840s), hybrid (1860s), and the direct measure system (1880s), each improving upon the last.⁸⁶ Within these categories women had different choices for the systems based on their needs and skill level. Kidwell's seminal work set the stage for later research and is the most thorough overview of the system categories and their history to date. Aldrich gave the three categories different names (*direct measurement, divisional systems, and combination systems*); however, they refer to the same types of systems, and for this research, the systems will be referred to by the names designated by Kidwell.⁸⁷

The proportional systems, which used the most basic and fewest measurements, came first and contained a set of perforated lines, which provided the basic shape of pattern pieces.⁸⁸ The proportional systems were also referred to as perforated systems, and historian Wendy Gamber adds that they relied on the bust (and sometimes waist) measurements to find the rest of the measurements.⁸⁹ The complication came if a person did not fit the standard (or ideal) bust-waist-hip proportion. The earliest of these systems, owing to their complexity to use (especially when fitting someone without standard

^{86.} Kidwell, Cutting a Fashionable Fit, 25, 31, 45.

^{87.} Aldrich, "The Impact of Fashion": 135–36.

^{88.} Kidwell, Cutting a Fashionable Fit, 25–28.

^{89.} Wendy Gamber, "Reduced to Science': Gender, Technology, and Power in the American Dressmaking Trade, 1860–1910," *Technology and Culture* 36, no. 3 (1995): 455–82, doi: 10.2307/3107238.

proportions), are presumed to have been primarily intended for the professional dressmaker.⁹⁰ The increased complexity of a system results in more room for error, especially for a home sewer who may not have been as skilled at pattern creation.

This was followed by the hybrid systems, which still contained the perforations but also included a set of curves, making it easier to create curved lines, which had been a challenge in the proportional systems.⁹¹ The perforated and hybrid systems share the greatest similarity and were the most user friendly. However, as Kidwell explains, "the more direct measurements used in a hybrid system, the more accurate it was, but the more complicated to use."⁹² A woman choosing between the systems had to weigh the need for accuracy in measurements and fit with the difficulty of using the technology. The final system, the direct-measure system, used adjustable tools in the shape of the desired pattern piece as well as requiring additional measurements, making it, therefore, the most accurate while at the same time the most complicated.⁹³ These systems were created to aid dressmakers, but they also aided home sewers. The different pattern drafting systems were advertised to both groups.

Art and fashion historian, Laura Casal-Valls, adds that "between 1880 and 1914, twenty-eight" dressmaking systems were created for and advertised specifically to dressmakers as a more efficient option.⁹⁴ Gamber looks more specifically at the relationship between pattern drafting systems and dressmakers, explaining that the popularity of the systems challenged dressmakers" "monopoly over cutting," which sets

^{90.} Aldrich, "The Impact of Fashion": 145.

^{91.} Kidwell, Cutting a Fashionable Fit, 31-35.

^{92.} Kidwell, 39.

^{93.} Kidwell, 45-53.

^{94.} Laura Casal-Valls, "Fashioning Modernity: Elite Dressmaking in Barcelona c. 1870-

^{1919,&}quot; Costume 50, no. 2 (2016): 236, doi: 10.1080/05908876.2016.1175211.

her research apart.⁹⁵ She also brings to light the fact that many advertisements for pattern drafting systems, created by male tailors, use the opportunity to denigrate female dressmakers' abilities by claiming that their system could help dressmakers make garments more like those made by tailors and/or increase their productivity.⁹⁶ Dressmakers may have become reliant on the systems because it was difficult to acquire adequate training in an apprenticeship. The apprenticeships were hard to get, owing to the competitive nature of the trade and its training whereby the apprentice would ultimately become the dressmakers' competition.⁹⁷ The standard units of measurement created through pattern drafting systems also aided in the large-scale sizing for the ready-to-wear industry, so they were used for more than just home sewing, dressmaker, or tailor use.⁹⁸

More recently, Jennifer Grayer Moore, an art and design historian, added to the research by explaining that there were two main issues with pattern drafting systems: first, "the commoditization of patternmaking and its related industries and products," and second, "the level of skill that would be needed to utilize these systems."⁹⁹ What we see, instead of the outcomes, are the promises by the individuals and companies who produced them with their claims of "speed, ease, and accuracy."¹⁰⁰ This leaves a lingering question about this technology: How do the individual systems compare to their advertised claims?¹⁰¹

^{95.} Gamber, "'Reduced to Science'": 466.

^{96.} Gamber: 467-68.

^{97.} Gamber: 475.

^{98.} Aldrich, "The Impact of Fashion": 135.

^{99.} Jennifer Grayer Moore, "A Brief History of Patternmaking," in *Patternmaking History and Theory*, ed. Jennifer Grayer Moore (New York: Bloomsbury Publishing USA, 2019), 16. 100. Grayer Moore, 16.

The Sewing Machine

Another transformative textile technology of the nineteenth century was the sewing machine. It is hard to understand garment production in the late 19th century without acknowledging the invention of the sewing machine, which revolutionized sewing both in and outside of the garment industry. First patented in 1848, the sewing machine transformed the activity of sewing and thus a woman's ability to properly dress her family; it also changed the garment industry by increasing the speed at which clothing was produced.¹⁰² The Singer machine received its patent in 1851, and by 1853, as the largest manufacturer, the company "produced only 810 machines," while by 1867 alone it produced 43,000.¹⁰³ This level of growth not only demonstrates the popularity of the sewing machine; it also hints at changes in its accessibility across social classes.

Judith Coffin's work on the selling of the sewing machine shows how much marketing influenced the dispersion of the sewing machine and its success thereafter.¹⁰⁴ Sewing machines, like pattern drafting systems, were originally marketed to professionals to increase productivity, rather than toward women sewing for their families. But this changed over time, with new and highly effective marketing campaigns targeting home sewers. Kathryn Wilson's research shows that the "sewing machine and proportional dress patterns, both heavily marketed to women after the Civil War, reinforced . . . fashion culture."¹⁰⁵ Wilson also points out that the success of Singer required downplaying the potential increase in leisure time, while showing the productivity that

^{102.} J. M. Gregory, "A History of the Sewing Machine to 1880," *Transactions of the Newcomen Society* 76, no. 1 (2006): 130.

^{103.} Barm and Klepp, "My Sewing Machine," 31.

^{104.} Coffin, "Credit, Consumption, and Images": 749-83.

^{105.} Wilson in Burman, The Culture of Sewing, 144-46

could come from the use of the sewing machines in the home (alongside their use in

factory ready-made garment production.)¹⁰⁶



Figure 2: *Ladies Home Journal* (December 1895): 48 Figure 3: *Ladies Home Journal* (December 1892): 36

Coffin explains that across the entire world sewing was considered women's work, and thus the audience for the sewing machine and its advertisements was primarily women.¹⁰⁷ The sewing machine was advertised to working- and middle-class women as the "great emancipator," making working women's lives easier, and as something worth investing in and displaying in the home.¹⁰⁸ An 1855 edition of *Godey's Ladies Book and*

- 106. Wilson in Burman, 145.
- 107. Coffin : 750.

^{108.} Coffin: 772.

Magazine recounts a woman purchasing a sewing machine because "she herself calculated to do up her years sewing in a week, and then have plenty of time for mental culture, for society, and general recreation, privileges from which women are often excluded solely by the never ending labors of the needle."¹⁰⁹ Nancy Page Fernandez adds that advertisements directed toward husbands promoted sewing machines as essential for a happy family and that by purchasing a sewing machine, the husband was fulfilling his role as the provider.¹¹⁰ In all cases the advertisements reinforced current societal ideals and narratives about the family while simultaneously connecting the implementation of those narratives to buying and using (and even displaying) a sewing machine.

The Singer company marketed its machines to ordinary middle-/working-class families, and by 1880, "the mean income per machine sold . . . was around \$30–35."¹¹¹ One of the masterstrokes in the Singer Company's marketing of the sewing machine was its use of credit payment plans because working women would not have been able to afford such an expensive technology.¹¹² Similarly, campaigns targeting middle-class women sewing at home had to convince them that sewing machines were necessary and justified the added expense.¹¹³ Although the expense had been made more manageable by programs such as rentals or the option to pay in installments, it was still a large financial cost. Multiple payment plan systems thus expanded the market and made it more affordable for a larger group of people.

^{109.} Barm & Klepp, "My Sewing Machine," 20.

^{110.} Burman, 158–59.

^{111.} A. Godley, "Selling the Sewing Machine around the World: Singer's International Marketing Strategies, 1850–1920," *Enterprise & Society* 7, no. 2 (2006): 289. 112. Coffin: 752.

^{113.} Barm and Klepp, 36.

By the 1890s, the home had become "the center of display and consumption, modernity, and the 'new woman' who embodied all of these, supplied an extraordinary variety of new themes to manufacturers, industrial designers, department stores, and poster artists."¹¹⁴ Coffin explains that part of the success of the sewing machine came from showing it in fashion plates as well as women's and trade journals and making it a piece of furniture that everyone should have in their home instead of merely a piece of technology.¹¹⁵ Thus, by the 1890s it would not have been uncommon to find a sewing machine in someone's home.¹¹⁶

Paper Patterns & Print Media



Figure 4: Ladies Home Journal (December 1898): 46

Barm and Klepp explain that "the growth of the [paper] pattern industry in the

1860s significantly boosted the expansion of the home sewing machine market."¹¹⁷

^{114.} Coffin: 765.

^{115.} Coffin: 762-65.

^{116.} Godley, "Selling the Sewing Machine": 289 and Barm and Klepp, "My Sewing Machine," 31.

^{117.} Barm and Klepp, "My Sewing Machine": 36.

According to Kidwell, printed patterns were originally created from pattern drafting systems and aided in the sizing of paper patterns used today.¹¹⁸ Walsh points out that Ebenezer Butterick, inventor of the paper pattern, wanted to save time and effort, so he decided to produce a set of men's shirt patterns that were graded which did not have to be redrafted every time he made a shirt.¹¹⁹ Business professor Mary Ellen Waller-Zuckerman adds that Butterick sold his "proportionally graded patterns.¹²⁰ Graded patterns in 1863," later expanding into children's and finally women's patterns.¹²⁰ Graded patterns meant that multiple sizes of a pattern could be made and then the pattern and could be purchased in the different sizes. According to Walsh, he began with a "workforce of twelve in 1867" and "expanded to include some 140 operatives in 1870."¹²¹ Spanabel Emery adds that early on, the paper pattern companies, like Butterick, advertised their tissue paper patterns through periodicals and ladies' print media with some of the earliest patterns superimposed on top of each other, while later versions included individual pattern pieces.¹²²

Butterick also published *The Delineator*, one such periodical, which by the 1890s had become one of the most popular periodicals for women.¹²³ By 1895, the circulation of *The Delineator* had reached 550,000.¹²⁴ According to Jennifer Grayer Moore, *The Delineator* "provided extensive information about products that could aid both the

^{118.} Kidwell, Cutting a Fashionable Fit, 1979.

^{119.} M. Walsh, "The Democratization of Fashion: The Emergence of the Women's Dress Pattern Industry," *The Journal of American History* 66, no. 2 (1979): 303-305.

^{120.} Waller-Zuckerman, "Marketing the Women's Journals": 99.

^{121.} Walsh, "The Democratization of Fashion": 304.

^{122.} Spanabel Emery, 40–52.

^{123.} Mary Ellen Waller-Zuckerman: "Old Homes, in a City of Perpetual Change": Women's Magazines, 1890–1916," *The Business History Review* 63, no. 4 (1989): 716-719.

^{124.} Waller-Zuckerman: 717.

professional apparel maker and the home sewer. Both advertisements and expository articles provided information about items like drafting systems."¹²⁵

According to Grayer Moore, "by the 1880s there were six major paper pattern companies in the United States," namely: "*Demorest, Butterick, McCall's, Harper's Bazaar, Taylor, and Domestic*."¹²⁶ The list consists of major companies during this time period and does not include smaller companies or ones from outside the United States. "The inexpensive, size-graded paper patterns, along with the changes in dress styles, made it easier for women to produce fashionable clothes for themselves at home."¹²⁷ The paper pattern industry's beginnings overlapped with the prominence of pattern drafting systems and they both played an important role in helping women make clothing at home.

However, Grayer Moore adds that these patterns published in periodicals and journals were rudimentary and provided minimal information or instructions.¹²⁸ This type of pattern, unlike the paper patterns sold by Butterick, did not come individually sized. According to Grayer Moore, many of these patterns relied on the user's skill to draft the pattern to their individual size based on the unsized diagrams.¹²⁹ Once the user had a pattern, there were often no directions or indications about where closures should be or how the garment was to be constructed.¹³⁰ She explains that instead, instructions focused less on constructions and more on yardage and fabric choice.¹³¹ Using superimposed pattern diagrams included in magazines and journals would have required prior

^{125.} Grayer Moore, 22.

^{126.} Grayer Moore, "A Brief History of Patternmaking," 20.

^{127.} Barm and Klepp, "My Sewing Machine": 36.

^{128.} Grayer Moore, "A Brief History of Patternmaking," 18.

^{129.} Grayer Moore, 18–19, 23.

^{130.} Grayer Moore, 19.

^{131.} Grayer Moore, 19.

knowledge of garment construction for their successful use. Paper patterns were heavily shaped and sold by print media, whether the patterns were ordered and advertised in periodicals, newspapers, or journals or the superimposed pattern diagrams were printed directly. Print media and paper pattern technology were intertwined, and the advertisements and publications were imperative in the success of the paper pattern.

As a group, the technologies of sewing machines, pattern drafting systems, and paper patterns revolutionized the speed at which garments could be produced both professionally and at home.

CHAPTER 3: Methods

In this research I use historical research methods and material culture methodology. Richard Grassby, a social historian, suggests that historians should include more material culture research because objects become the basis for "the rules and belief patterns of those who trade, purchase, or use them."¹³² Dress is a critical component of material culture because, as dress historians Charlotte Nicklas and Annebella Pollen explain, what people wear helps "groups and individuals express and negotiate their identities."¹³³ Severa and Horswill also confirm that clothing is an integral part of material culture.¹³⁴ The advantages of material culture methodologies for dress history are also evident in Lou Taylor's work, which shows the importance of analyzing the details of garments and objects, in turn enabling identification, dating, and better understanding of these artifacts.¹³⁵ Some studies are more concerned with textile and dress technologies, such as Mary Carolyn Beaudry's work on the thimble, in which material culture analysis shows the history and evolution of the material, functional, and formal qualities of the thimble, as well as its meaning and purpose.¹³⁶ Bringing together all of these perspectives, I examine changes in pattern drafting systems used in the production of dress alongside the social, cultural, and professional status of those who used them. Moreover, when analyzing pattern drafting systems, it is important to

^{132.} Richard Grassby, "Material Culture and Cultural History," *Journal of Interdisciplinary History* 35, no. 4 (2005): 592.

^{133.} Charlotte Nicklas and Annebella Pollen, *New Directions in Theory and Practice* (New York: Bloomsbury, 2015), 1.

^{134.} Ames, 1989, 51.

Joan Severa and Merrill Horswill, "Costume as Material Culture," in *Dress* 15 (1989), 51-64. 135. Lou Taylor, "Doing the Laundry? A Reassessment of Object-Based Dress History," *Fashion Theory* 2, no. 4 (1998): 347–48, doi: 10.2752/136270498779476118.

^{136.} Mary Carolyn Beaudry, *Findings: The Material Culture of Needlework and Sewing* (Yale London: University Press, 2006): 86–101.

understand their relationship to the changing garment styles and how this would influence the fit on a woman's body.

In this study I bring together qualitative and quantitative research methods to compare and understand how pattern drafting systems worked and why middle-class women were using them. This includes artifact analysis of the physical systems, textual and visual analysis of print sources in which systems were discussed and represented, and historical reproduction of a bodice using an 1890s drafting system. Kidwell listed 148 U.S. patents for pattern drafting systems prior to 1900, including some as early as the 1840s, and duplicates as the creators filed again for improvements and adjustments.¹³⁷ In this respect, this research builds on Katherine Durack's noteworthy work on the information we can gain from looking at sewing pattern patents. According to Durack, there is much to be learned from U.S. patent records: "The patent record reveals how different individuals sought to solve one of the greatest challenges pattern manufacturers faced: how best to communicate the procedures for the detailed and delicate task of cutting and constructing individual garments."¹³⁸ This study effectively extends the applicability of Durack's research methodology to pattern drafting systems. The creators of these systems were working to adapt and improve upon the pattern drafting technology. These changes and improvements are analyzed within the artifact analysis comparison of the systems and their later updates. In what follows, I describe each method and relevant sources in turn.

^{137.} Kidwell, Cutting a Fashionable Fit, 105–25.

^{138.} Katherine Durack, "Patterns for Success: A Lesson in Usable Design from U. S. Patent Records," *Technical Communication* 44, no. 1 (1997): 38.

Artifact Analysis

In this study I approach artifact analysis of forty-three pattern drafting systems dated between 1865 and 1909, the majority from the 1880s and 1890s (with seven identified for detailed analysis) using a combination of methods expounded by Jules Prown (1982) and E. McClung Fleming (1974).¹³⁹ The drafting systems used in this research were accessed through the Stuhr Museum of the Prairie Pioneer's collection and personal collections held by Marna Davis and Kay Cynova containing multiple originals. I began by examining pattern drafting systems in person from the Stuhr Museum as well as the personal collection of Davis followed by the smaller collection owned by Cynova. The limitations to these collections are that they rely on donations or systems acquired by an individual and may be limited in number of examples. Another limitation has to do with access, where the physical distancing restrictions related to the coronavirus pandemic caused museum closures and affected access. This inhibited in-person research from taking place outside of the three previously mentioned collections.

Drafting Systems Selected for the Research

In this research I focus on the 1880s and 1890s to see how the systems and/or their instructions were adjusted to account for the changing clothing styles. Pattern drafting systems, whether made from cardboard or metal, aided in making a garment pattern. The pattern would need to work for and/or be adjusted to match the currently prevailing, fashionable silhouette. It is important to note then that all measurements taken

^{139.} Jules David Prown, "Mind in Matter: An Introduction to Material Culture Theory and Method," *Winterthur Portfolio* 17, no. 1 (1982): 1-19 and E. McClung Fleming, "Artifact Study: A Proposed Model," *Winterthur Portfolio* 9 (1974):153-73.

and used for a pattern drafting system would have been taken to a woman's corseted measurements to match the current styles.

A major style shift took place from the 1870s and 1880s bustle skirts to the bellshaped skirts of the 1890s. There were three main bustle periods: the first bustle era (1870–1875), the natural form era (1876–1882), and the final bustle era (1883–1889).¹⁴⁰ As the 1880s progressed, the bustles protruded farther in the back and became more shelflike, with fabric draped over top.¹⁴¹ The first bustle era had a silhouette created by the manipulation and draping of fabric across the back of the skirt, creating a much fuller look.¹⁴² In the natural form or second bustle era, the bustles were no longer used and instead the skirts fit tightly around the hips and flared out below the hips, toward the train portion of the skirt.¹⁴³ At this point the cuirass bodice, much like a longer jacket that was fitted over the hips, became popular. The final bustle era is best characterized by the shelf-style bustle, which supported the skirt at a ninety-degree angle and was the most severe shape of the three.¹⁴⁴ Bodices at this time were also typically fitted. The bustle style changed substantially in the late 1870s and 1880s, before the silhouette changed again as women's clothing entered the 1890s without the aid of a bustle.

In the 1890s, the emphasis moved from the bustle to the creation of a small waist through adding volume to the skirt—especially toward the hem, creating a bell or cone shape—and large, full sleeves, which by 1895, with the introduction of the leg-of-mutton

^{140.} Lydia Edwards, *How to Read a Dress: A Guide to Changing Fashion from the 16th to the 20th Century* (New York: Bloomsbury Visual Arts, 2017), 94.

^{141.} Phyllis Tortora and Sara Marcketti, Sara, *Survey of Historic Costuming*, 6th ed. (New York: Fairchild Books, an Imprint of Bloomsbury Publishing Inc., 2015), 392.

^{142.} Tortora and Marcketti, 392.

^{143.} Edwards, How to Read a Dress, 94.

^{144.} Edwards, 94.

sleeve, reached their apex.¹⁴⁵ The overall effect of these stylistic elements, such as the bell-shaped skirts and large sleeves, was an hourglass shape where the dress fitted smoothly over the bodice, waist, and upper hips with back-skirt fullness created through gores or pleats.¹⁴⁶ "Varying and eccentric fashionable body shapes all demanded a close, perfect fit to the upper body, which was the core of a dressmaker's skill."¹⁴⁷ This silhouette was created by a corset and multiple petticoats, which gave the outfit its shape and volume.¹⁴⁸

The selection of appropriate systems for closer analysis for this research reflects both the particular design and construction requirements of the 1890s, as explained above, and the kinds of systems that were widely available during this period. The drafting systems were selected in an effort to understand how they were adjusted to account for the changing clothing styles. This meant that access was needed to either the systems themselves spanning the 1880s and 1890s, or in the cases where the systems were not changed, then the instructions that show how to adjust for the changes. I list the specific systems below:

Proportionate: The 1892 National Garment Cutter was selected as the proportionate system because the rulers remained unchanged for both the 1888 and 1890s versions, but the diagrams were updated. **Hybrid:** The hybrid systems include the Williams Perfection Taylor System as well as the Van Dame Adjustable System. The Williams Perfection Taylor System was chosen because access to both the 1887 iteration

^{145.} Smithsonian, *Fashion: The Definitive History of Costume and Style* (New York: Dk Publishing, 2012), 206–07.

^{146.} Tortora and Marcketti, Survey of Historic Costuming, 397-405.

^{147.} Aldrich, "The Impact of Fashion": 159.

^{148.} C. Willett and Phillis Cunnington, *The History of Underclothes* (New York: Dover Publications, Inc., 1951), 176–78.

and the 1891 update were available. This enabled examination of changes made to one individual system over time. The Van Dame 1893 adjustable hybrid system was included because there was access to two versions, even though neither was from the 1880s. This system is important because it was shown at the 1893 Chicago World's Fair and the 1899 Greater American Exposition in Omaha, Nebraska, and additionally it is the system used for the study reproduction. **Direct Measure:** The McDowell System, which according to Claudia Kidwell was updated through 1891, is the direct measure system chosen. The McDowell System was also chosen because of how frequently it was discussed in the advertisements located in the content/visual analysis.

Methodology

Fashion historian Valerie Steele demonstrates how bringing together the methodologies of Prown and Fleming can generate rich insights, quoting Prown's explanation that "artifacts are primary data for the study of material culture, and, therefore, they can be used actively as evidence rather than passively as illustrations."¹⁴⁹ Steele also points out that both Fleming and Prown show the importance of placing artifacts within their historic context and comparing them to other objects because they alone are not sufficient in telling their own history.¹⁵⁰ Several other fashion and dress historians, such as Ingrid Mida, Alexander Kim, and Lydia Edwards, have drawn on Prown and Fleming to develop similar systems of object analysis tailored specifically to garments. Mida and Kim break down artifact study even farther with their steps of observation, reflection, and interpretation of garments and their detailed observation

^{149.} Valerie Steele, "A Museum of Fashion is More than a Clothes-Bag," *Fashion Theory* 2, no. 4 (1998): 329.

^{150.} Steele: 331.

checklist.¹⁵¹ Edwards' *How to Read a Dress* shows images of garments and a breakdown of their details.¹⁵² She provides an explanation of how common details are for a given time period, thus placing extant garments in their wider context. Like Steele, Mida and Kim, and Edwards, the foundational work of Prown and Fleming became the basis for the types of data I collected from the pattern drafting systems. Although the individuals who used and created the pattern drafting systems cannot be interviewed, I analyze and document the pattern drafting systems themselves, along with the directions included with them to understand how they functioned.

Combining elements of Prown (1982) and Fleming (1974), my artifact analysis steps were as follows:

Identification (Fleming) of the object's characteristics, date, creator, patent,

description of physical characteristics based on observation (Prown).

Evaluation (Fleming) by comparison to other pattern drafting systems and deduction (Prown) based on its function and how user friendly it appears.

Cultural Analysis combined with **Interpretation** (Fleming) of the object's meaning.

Experience (pulling from Prown's category of emotional response) by reproducing a garment using one of the pattern drafting systems.¹⁵³ This last step is discussed in the section on historical reproduction.

Evaluation and identification are used specifically for the physical systems themselves; this information was gathered to the extent possible for every system viewed in person,

^{151.} Ingrid Mida and Alexander Kim, *The Dress Detective: A Practical Guide to Object-Based Research in Fashion* (London: Bloomsburg, 2015), .

^{152.} Edwards, How to Read a Dress, 1-288.

^{153.} Prown, "Mind in Matter": and Flemming, "Artifact Study": 1-19.

and detailed photographs were taken to enable comparisons across systems. The evaluation process was focused on the perceived ease of use based on examination of the components, how they work together, and the instructions that came with them.

This approach broadly overlaps with Giorgio Riello's *Things that Shape History*, where he identifies three ways that historians use material culture to construct their narratives: history from things, history of things, history and things.¹⁵⁴ My research is both a "history from things" and a "history of things," in that I analyze pattern drafting systems themselves through identification, evaluation, and experience but also explore the history of the systems through cultural analysis and interpretation.

With regard to the latter, three key historical phenomena emerge as critical dimensions to explore in parallel to the analysis of the physical systems: First, it is important to contextualize events such as world's fairs and expositions, where pattern drafting systems like the Van Dame System were featured. Second, I pay close attention to shifting or variable nomenclature and special terminology used to describe various systems. The goal of this is to understand what the creators were choosing to call them, especially when "tailoring/tailor" or "dressmaking" was used in the title. Sources important to this aspect of the analysis include printed text on systems and instructions, patents (where available), and other print sources such as magazine advertisements.¹⁵⁵ Third, modifications in physical systems must be correlated with changing garment silhouettes and design details in the latter decades of the nineteenth century.

^{154.} Giorgio Riello, "Things that Shape History: Material Culture and Historical Narratives," in *History and Material Culture: A Student's Guide to Approaching Alternative Sources*, ed. Karen Harvey (New York: Routledge, 2009), 25–26.

^{155.} Grassby. "Material Culture": 593.

Content/Visual Analysis of Print Media

Content and visual analysis of newspapers was important not only for the cultural interpretation of the physical systems but also to obtain a better understanding of how people might have used and/or purchased the systems, as well as the way the systems were advertised to potential consumers.

Newspapers

The process included searching Gale Primary Sources Nineteenth-Century Newspapers Database for advertisements from the 1880s and 1890s. The search terms used were: Van Dame, Van Dame System, World's Fair Premium Tailor System, World's Fair System, McDowell System, National Garment Cutter, Williams Perfection Tailor System, Perfection Tailor System, pattern draughting, pattern drafting systems, and dressmaker. These search terms resulted from other preliminary searches on the terminology used to describe pattern drafting systems and specifically the Van Dame System, which was analyzed in a course project related to this thesis.

The terms Van Dame, Van Dame System, World's Fair Premium Tailor System, National Garment Cutter, Williams Perfection Tailor System, and Perfection Tailor System produced no useable results. The McDowell System search resulted in six advertisements used in this research specific to the system itself or a McDowell Cutting School as well as advertisements for dressmakers who used or could use the McDowell System. Pattern Draughting System yielded only one article discussing pattern draughting for tin work instead of garment production. The search for Pattern Drafting Systems garnered multiple examples from the *Daily Inter Ocean, Milwaukee Daily Sentinel*, and *Milwaukee Journal*, including one for the World's Fair Premium Tailor School. The searches in Gale Primary Sources-Historical Newspapers Database were intended to locate advertisements within newspapers from 1880–1899, although the ones that proved useful were from the 1890s, while few were located from the 1880s. One of the greatest limitations is that access was limited to the newspapers available within Gale Primary Sources Nineteenth-Century Newspapers, which certainly is not representative of all newspapers in the United States. The scope of the research was limited to regional newspapers from the middle of the United States. This means that they were not as widely spread as national publications, but were also more targeted to their audience.¹⁵⁶

Historical Reproduction

Several dress historians and museum-based researchers have recently argued for the importance of this somewhat marginalized mode of inquiry within dress history. Anne Bissonette conducted research on the work of Betty Kirke, who set the stage for research through reproduction in her investigation of the garments produced by Madeleine Vionnet.¹⁵⁷ Bissonette explains, "through reproductions, the study of museum artifacts meant to cover a living body may lead to discoveries regarding new dimension of investigation that go beyond the static place garments occupy in a collection and enable a researcher to explore motion."¹⁵⁸ We can learn more about pattern drafting systems in the same way, by using them as they were intended, learning how they worked, and seeing them in motion.

^{156.}Project for Excellence in Journalism, "Framing the News: The Triggers, Frames, and Messages in Newspaper Coverage," 1998. https://www.pewresearch.org/wp-content/uploads/sites/8/legacy/framingthenews.pdf

^{157.} Anne Bissonette, "Doing History with Objects: Betty Kirk and Madeleine Vionnet," *Fashion Theory* 19, no. 3 (2015): 281–314.

^{158.} Bissonette: 305.

According to Beverly Gordon, the making of garments is undervalued in that people are not taught to use hands-on recreation as a means of research within academia.¹⁵⁹ She explains that as someone reproduces a textile they gain a different level of knowledge about the construction, details, and work that go into using or creating the artifact.¹⁶⁰ Gordon suggests that hands-on investigation should become part of all textile research because "understanding the way a textile is made is a kind of literacy, and we must be literate to properly 'read' our artifacts."¹⁶¹ The art of reproducing a textile contributes to our scholarly understanding of the textile and its production process. This is why it is important for this study to also include garment reproduction as a way to understand pattern drafting systems.

The approach adopted in this research also builds on previous empirical work in historical reproduction, specifically a study examining women's clothing patterns conducted by curator and conservator Michael Marendy. Marendy looked specifically at 1880s bustle dresses but, instead of only viewing the patterns, he tried to reproduce a set of pattern blocks and recreate a dress from that time.¹⁶² He also compared different pattern drafting systems, modern and historical, to understand which would produce the most accurate silhouette.¹⁶³ One issue he faced while trying to find a system for his research that could still be used today was locating a complete system. Many were often missing a piece or tool that was crucial to that specific drafting system.¹⁶⁴ If a piece is

^{159.} Beverly Gordon, "The Hand of the Maker: The Importance of Understanding Textiles from the 'Inside Out," *Textile Society of America Symposium Proceedings* 519 (2002): 189.

^{160.} Gordon: 196.

^{161.} Gordon: 197.

^{162.} Michael Marendy, "The Development and the Evaluation of Costume Reproduction Pattern Blocks for an 1880's Women's Dress," *Clothing and Textiles Research Journal* 11, no. 4 (1993): 41-45. 163. Marendy: 42-48.

^{163.} Marendy: 42-48 164. Marendy: 48.

missing and there is not another one to replace it, then it becomes challenging to understand how all of the components work together, especially when using them to recreate a garment. For his study, he ultimately chose to use an original drafting system because it gave the most accurate shape and measurements when recreating a piece from that time period.¹⁶⁵ This shows not only that the systems can still be used today but also how crucial each piece was for their operation.

Hilary Davidson's research on making and remaking dress as an academic practice also shows the importance of historical reproduction. Davidson, a dress historian and curator, argues that bodies and materiality cannot be separated from fashion and the clothing people wore.¹⁶⁶ In reconstructing that clothing, we extend scholarship and provide insights into how and why clothing was made and worn the way it was.¹⁶⁷ Davidson remarks that the remaking of dress has always found its way into dress history, just not in the reconstruction route that has only recently been explored as an academic practice.¹⁶⁸ Dress curators as well as textile conservators have used reconstruction to support and repair fragile objects or to substitute fragments that are missing.¹⁶⁹ Reconstruction has also been used in living history as a means of recreating, learning, and using while educating the public.¹⁷⁰ The most important part of Davidson's research for this research on pattern drafting systems is her inclusion of what can be gained by reconstructing a historic garment, in which she explains that "reconstruction can test and explore the processes involved in the construction of historic garments, elucidating the

^{165.} Marendy: 44-46.

^{166.} Hilary Davidson, "The Embodied Turn: Making and Remaking Dress as an Academic Practice," *Fashion Theory* 23, no. 3 (2019): 347-52.

^{167.} Davidson: 329-31.

^{168.} Davidson: 334.

^{169.} Davidson: 334.

^{170.} Davidson: 333-35.

nature of spinning, weaving, cutting, patternmaking, dying, embroidery, fit, wear and other elements that contribute to a finished object and influence how it works in the social and cultural sphere."¹⁷¹

She also quotes Janet Arnold, a clothing conservator and dress historian, who pointed out that a reproduction does not necessarily have to be a fully complete object reproduced down to the last stitch but can also be as simple as "'a single layer of calico simply to test the assembly of pattern shapes."¹⁷² In the case of this reproduction, a pattern drafting system is used only to complete the broadest mock-up, which included the front side, front side back, and back pattern pieces.

As a final method for understanding the function and use of pattern drafting systems, one particular example, the J. R Van Dome World's Fair Premium Tailor System from the 1890s, was selected to create a muslin bodice based on the researcher's individual measurements. This allowed for an analysis of the fit and accuracy as well as the ease of use by someone who is not a professional dressmaker. This aided in understanding the process of creating a garment from one of these systems as well as the directions that a woman sewing at home would have had access to when using a pattern drafting system. The reproduction process was journaled and photographed. This specific system was chosen because it is from the 1890s, which is the period that I am most familiar with and for which proper understructure garments were readily available. I also had access to a complete set of the Van Dame System. The process included first completing the artifact analysis of the system, then creating a pattern from the system, using my measurements; making a muslin mock-up; and making and recording any

^{171.} Davidson: 340.

^{172.} Janet Arnold, in Davidson: 340.

adjustments that were needed and subsequently made. I then created a second pattern using the instructions that would have been included for additional cost when the pattern was originally sold, followed by completion of a final muslin bodice. These three sections of research combine to provide a more complete picture of the pattern drafting technology, who they were intended for and how they were used.

CHAPTER 4: Research Conducted

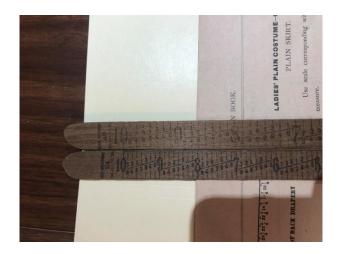
Artifact Analysis: A Comparison of Individual Drafting Systems and Their Changes between 1880 and 1890

As articulated in the previous chapter, object-based analysis begins with material and physical observation but then integrates information surrounding the objects, and comparisons across objects, to aid in interpretation. The artifact analysis helps to answer the question: How did the technology change to account for the changing fashions? Another question that arose was: What was the price of knowledge either in system quality or instructions? Moreover, these systems illustrate the variety in these systems as well as how they worked and the information provided and/or included in corresponding (often optional) instruction booklets. This section aids in answering the question of who the audience/users of these systems were and what level of starting knowledge/experience was required to use them. There were numerous variations in design features on pattern drafting systems including colors, imagery such as the pattern pieces included within the system, typeface and fonts, names of the drafting systems, and even functionality.¹⁷³ Kidwell explains that many systems received patents; however, that did not mean they were actually manufactured, and there were many systems that were manufactured without receiving a patent or copyright.¹⁷⁴ In comparing two of the same systems from different years, the focus can be less on the many variations and instead on how they were adjusted to accommodate the changing clothing styles.

^{173.} Kidwell, Cutting a Fashionable Fit, 2, 105–55.

^{174.} Kidwell, 3.

These drafting systems were selected in an effort to understand how they were adjusted to account for the changing clothing styles. This meant that access was needed to either the systems themselves from the 1880s and 1890s or, in the cases where the systems were not changed, then the instructions that show how to adjust for the changes. Pattern drafting systems, whether made from cardboard or metal, aided in making a garment pattern. The pattern would need to work for and/or be adjusted to match the currently prevailing, fashionable silhouette. Pattern drafting systems were one way women could achieve the desired silhouette without needing the skill to pattern the garments utilizing mathematical measures. The fit was important, and the measurements would have been taken of the corseted body so that the clothing would fit smoothly.¹⁷⁵ Pattern drafting systems used the corseted measurements and then followed proportions in the shape of the patterning pieces to achieve the smooth, fitted look desired at the time.¹⁷⁶



National Garment Cutter

^{175.} Mdme. Lofovall, *How to Cut, Fit, and Finish a Dress* (Boston, MA: Alfred Mudge & Son, Printers, 1892): 3–4, 18.

^{176.} Kidwell, Cutting a Fashionable Fit, 35.

Figure 5: *National Garment Cutter* rulers courtesy Marna Davis. Authors own image.

The 1892 National Garment Cutter (also the Diamond Garment Cutter in 1895, by the same proprietors Goldsbury, Doran and Nelson) is a proportionate system: the type that works by using a set of rulers. The proportions for this system are based on an individual woman's bust measurement, at which point the ruler corresponding to her specific measurement is chosen to complete the pattern. This means that although everyone would use the same diagrams, they may not have used the same set of rulers if they did not have the same bust measurement. According to Winifred Aldrich, the *National Garment Cutter* was a trade periodical, primarily containing patterns used by dressmakers and tailors based on the need for patterns to be individually fit to each person, which may not have been as easy for a woman sewing for herself at home.¹⁷⁷ Unlike a standard ruler, they were ten inches long and the distance between each inch differed based on the woman's bust measurement. These rulers were produced in oneinch increments, and by closely examining just two of the rulers as shown in figure 5 used for this proportionate system one can see rulers for the 24- and 40-inch bust are marked to 10 inches, yet are not the same length. If one were to compare these sets of rulers to a normal ruler, they would not follow standard inch, quarter-inch, and half-inch markings. When the 10-inch marks are lined up on these two rulers, one can see that the 9-, 8-, and 7-inch markings do not line up in the same way. This difference is owing to the system using these measurements and simply changing the rulers to match the necessary proportions. Therefore if the person requiring the ruler for the 24-inch bust

^{177.} Winifred Aldrich, Sizing in Clothing: Developing Effective Sizing Systems for Ready-to-Wear Clothing, ed. S. P. Ashdown (New York: Woodhead Publishing Limited, 2007), 26.

used the ruler for the 40-inch bust, the results would not be appropriate for their figure proportions. The reason this system is considered a proportionate system is that it is based on the understanding that there is a basic set of proportions that can be used based on a single measurement. This makes more sense if we compare it to one of the *National Garment Cutter* diagrams for which these would be utilized. The *National Garment Cutter* books included an image of what the garment could look like, together with some brief instructions and diagrams for the pattern pieces, which would then be used with the rulers that corresponded with the needed bust measurement. This example from pages 4–6 shows the instructions and diagrams for one of the "ladies costumes" included in the 1888 *National Garment Cutter*. The instructions are as follows in figure 6:

Use scale corresponding with the bust measure.

It is in eight pieces: Front, Back, Side Back, Collar, two Sleeve portions and Back and Front Drapery.

THE BASQUE

Is perfectly plain, with collar and cuffs of velvet to correspond with the skirt, which is made of velvet.

THE DRAPERY

Is drafted by the scale corresponding with the waist measure. It is in two pieces: Front and Back.

THE FRONT

The right side is laid in three upward-turning plaits, while the left side is lain in four backward- turning plaits; press the plaits on the left side but do not tack them.

THE BACK DRAPERY

Lay six backward-turning plaits on the left side, and also six backward-turning plaits on the right side, bringing the two together in the center of the back, forming a loop in the center of the back, which gives a very graceful drapery without any draping.

Regulate the length by the tape measure.

Figure 6: National Garment Cutter, 1888, 4-6.

It is important to note that these instructions include fabric choice options and a few steps for assembling the pattern pieces but no information on how to use the rulers or draft the figures aside from "use scale corresponding with bust." There are brief instructions included previously in the booklet with these diagrams. The earlier 1884 instructions also made the claim that "any lady of limited means" will find the system to be a "valuable and economic fraction of her domestic education."¹⁷⁸ Even in 1884 the company was implying that women were lacking in their domestic sewing knowledge and required the aid of a patterning system. This particular set of instructions also gave general directiond on the use of a tailor square and curve (a curved ruler to aid in drafting the curved portions such as the neck line, armscye, darts, and hip curve) to help draft the patterns. These could be used in addition to the rulers to aid in the ease of completing the pattern. The additional use of a basic curved ruler meant that the user would not have to make as much of a guess about how to connect the curved lines together after plotting the diagramed points on the pattern paper.

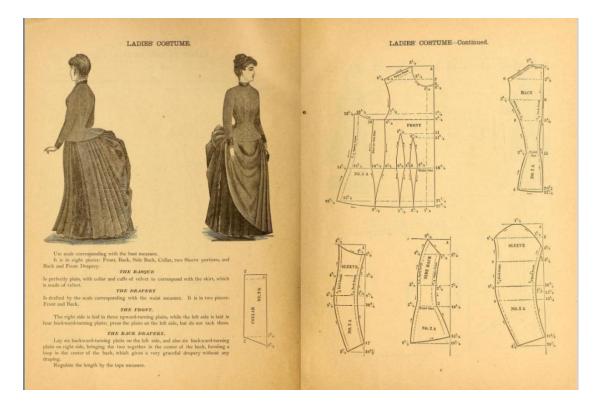
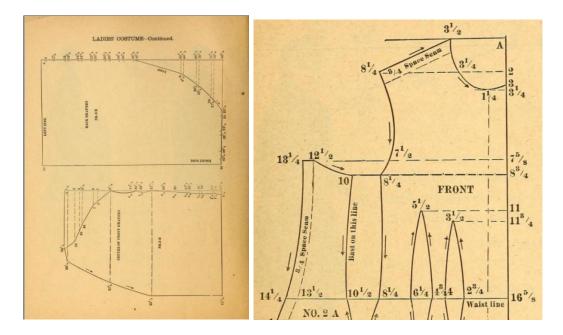


Figure 7: 1888 National Garment Cutter, 4-5.

^{178. &}quot;National Garment Cutter." 1884.



Figures 8, & 9: The preceding images are from the 1888 *National Garment Cutter*.; bottom left, page 6; bottom right, page 5.

Examining the diagram for the bodice front of the ladies' costume in figure, the

following steps would be followed using the ruler "corresponding with the bust

measure":

- Start by drafting perpendicular lines (90° angle) from point A in the upper right hand corner.
- Draw a solid horizontal line 3¹/₂ inches to the left from point A
- Draw a solid vertical line 22³/₄ inches down from point A
- Mark the following points on the vertical line from point A
 0 2, 3, 3¹/₄, 7 5/8, 8³/₄, 11, 11³/₄, 16 5/8, 22 7/8, 22³/₄
- Draw a dashed line from the 2-inch mark below point A to the left 8 1/4 inches
- From point $3\frac{1}{4}$ draw a dashed line $1\frac{1}{4}$ inches to the left.

If the points are followed on the diagram using the same measures on the ruler, then the

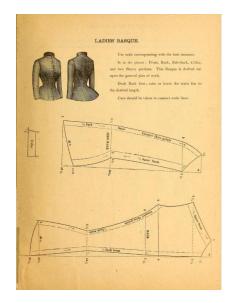
points are now marked out on a sheet of paper for the shoulder seam and neckline on the

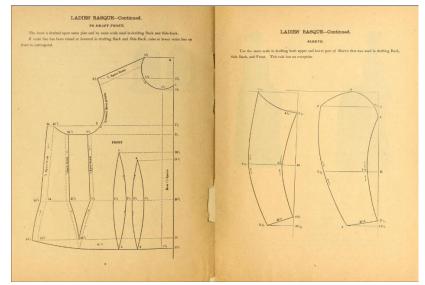
front pattern piece. To finish drafting the shoulder seam:

• Draw a solid, diagonal line from the points at 8¹/₄ to 3¹/₂ inches.

At this point, the diagram shows the "space seam" (seam allowance) of ³/₄ inches for the shoulder seam. By referring to the diagram:

• Connect points to draft the line for the slope of the neck.





Figures 10 & 11: The preceding images are from the 1888 *National Garment Cutter* pages 1–3 respectively.

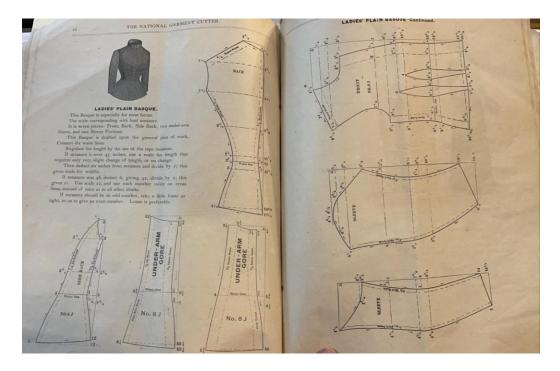


Figure 12: National Garment Cutter, 1892, 16–17.

When the *National Garment Cutter* is compared to different editions of the same system, some repeated diagrams and garment drawings appear. Two examples of this are the basque and ladies' tea gown from 1888, which can also be found in the 1892 edition. The basic basque pattern, shown in figures 10, 11 and 12 underwent some changes between the 1888 and 1892 versions. The changes between the layout and instructions are noticable, but the changes in the pattern diagrams are less obvious. Part of the discrepancy is owing to the fact that the 1892 pattern is intended "especially for stout forms," which accounts for the two additional side forms not shown in the 1888 diagram. The 1892 version also has darts, which have a diamond-like shape while the underpart of the sleeve is slightly curved in at the back of the arm, unlike the 1888 diagram. The shoulder length shortens from the 1888 to the 1892 diagrams, though it is hard to know why additional changes were made, considering the patterns were intended for different figure types. After looking through the different editions and seeing the repeated garment

images and extremely similar diagrams, it is clear that patterns were used again in the *National Garment Cutter*, with changes acounting for the ever-changing styles between the 1880s and 1890s, even when looking at a more simple fitted basque pattern.

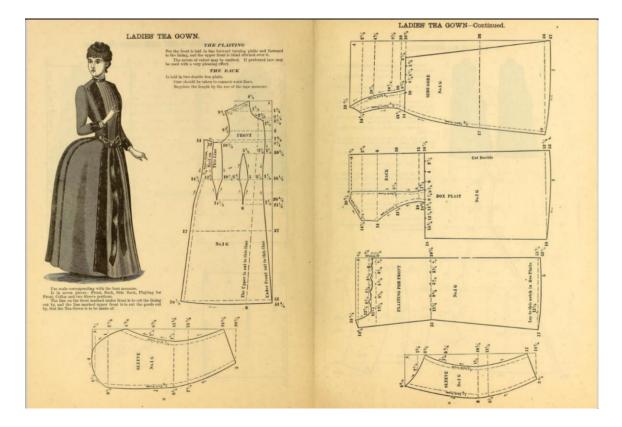


Figure 13: National Garment Cutter 1888, 24–25.

The image of the 1888 ladies' tea gown shown in figure 13 also shares similarities with its 1892 counterpart. The differences between 1888 and 1892 become more apparent in these garment designs than the differences seen with the ladies' basque. The two dresses are nearly identical with the exception of the skirt back. The 1880s version has a bustle that would was in style during the period, wheras the 1890s rendition eliminated the no longer fashionable bustle. Specifically, the diagrams of three of the pattern pieces (back, side, and pleating for front) all account for some of the additional fabric needed in the 1880s style. The 1880s pieces have additional space added at the top of each skirt

panel toward the waist to account for wearing a bustle. In 1892, there were no changes made to the sleeve pattern, and the bodice portion only had minor adjustments, most within 1/8 to 1/4 inch of the 1888 version. The largest difference was the shoulder length, which was a half-inch shorter by 1892. Additionally, the sparse instructions, with only nine sentences instructing the drafting, not construction of the tea gown, remained the same for both sets of printed diagrams.

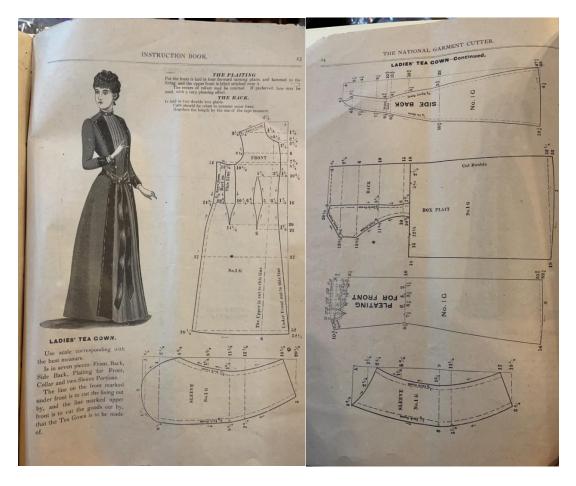


Figure 14: National Garment Cutter, 1892, 23 and 24. Images courtesy of Marna Davis.

The *National Garment Cutter* relied on bodily proportions and an understanding that women's corseted bodies followed a proportional set of measurements. The other measurements were then based on the bust measurement. Regardless, these patterns still likely required additional adjustments for any woman whose figure did not uniformly

follow the proportionate measurements used to create these patterns. The 1880s and 1890s patterns appear to be highly similar with small adjustments accounting for shoulder length, slope, and, in some cases, dart placement, but with limited changes overall to the bodice portion. Additional differences are found in the skirt shapes, but that is a change consistent with shifting fashions. One benefit of using the proportionate rulers for the *National Garment Cutter* is that it consistently used the same set of rulers, so if a user had the diagrams then they could still choose an up-to-date style and use their individual set of rulers to make a pattern. More choices for garment designs are found in the pages of the *National Garment Cutter*, where some designs repeated with or without stylistic adjustments over the years (as shown in figures 13 & 14) and new designs were added. As styles changed, women using this proportional system would have been able to acquire an updated copy of the *National Garment Cutter* to make new garments. If her measurements changed or she was making an outfit for another woman, then she would simply use the ruler associated with the new or different bust measurement.

Williams Perfection Tailor System

The Williams Perfection Tailor System of Dress Cutting was created by W. R. Williams in Lawrence, Kansas. Aside from where it was created, there is no indication as to where the system was sold, purchased, or used on the object. Williams was both the proprietor and manufacturer of this system. According to the 1891 update, this version was perfected on March 10, 1879 and then improved January 1, 1884, June 10, 1886, June 1, 1887, September 1, 1888, January 1, 1890, and April 25, 1891.¹⁷⁹ The Williams

^{179.} W. R. Williams, "Williams Perfection Tailor System" (Lawrence Kansas, 1891).

Perfection Taylor System could be purchased for \$7.00, which was the "price of complete system, with full oral instructions for using,"¹⁸⁰ The price is consistent between both the 1887 and 1891 versions without other price options. The Williams Perfection Taylor System is a hybrid system, made from a thick cardboard material with all of the instructions and imagery printed in black ink. This system works by use of perforated cardboard pieces and the bust, waist, shoulder, and waist length measurements of the woman supported by a diagram with the caption, "to secure a perfect fit the several measurements must be taken just as shown in the above figure."¹⁸¹ The figure also includes the skirt length and sleeve measurements. The only other imagery included on this system is located at the top of the front bodice piece and includes image of the primary pattern pieces for this system. These include the front, back, side, dart rule, and an additional skirt rule. The chart for the front piece includes letters A–H to list the order for taking measurements and marking the respective perforations. "A" is the neck measure with the choice to select high, medium, or low neck.



^{180.} W. R. Williams, "Williams Perfection Tailor System" (Lawrence Kansas, 1887).181. W. R. Williams, "Williams Perfection Tailor System" (Lawrence Kansas, 1887).

Figure 15: The Perfection Tailor System, 1887.

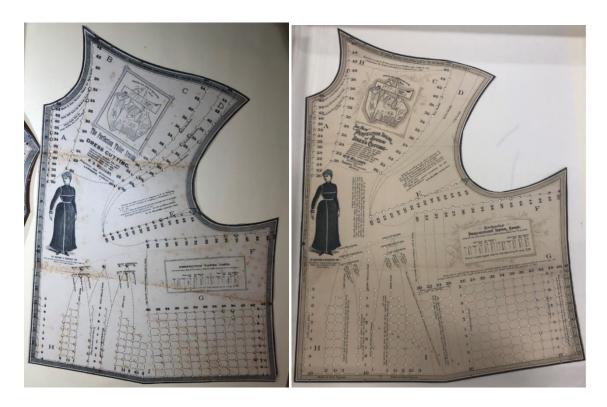


Figure 16: The Perfection Tailor System,Figure 17: The Perfection Tailor System,18871891

Although at first glance the two versions appear identical, there are differences between the 1887 and 1891 versions. One of the primary differences between the renditions is the length of the shoulder seam. The shoulder seam is narrower on the 1890s than the earlier 1887 version, and the darts also appear to be slightly adjusted. If one looks at the innermost dart toward the center front seam, there are nine perforations to mark or adjust the dart, whereas there are only eight for 1887. Examining the centermost dart, the numbers "5" through "9½" are listed, whereas the 1891 improvement goes from "5" through "10." These adjustments are indicative of the changing styles from the basque to the bodice as well as this slight change in waistline and dart height. When looking below the marking "G" on the far right side seam, the 1891 version has also expanded its potential measurements for both the waist and bust. The waist changes from 20–46 inches in 1887 to 20–48 inches by 1891, with the bust measurement range expanding from 20–46 to 20–50 inches. They were not only adjusting for the changing styles but also expanding the size range that was possible using this system without the dressmaker or home sewer making further adjustments. Along with the adjustments for the waist and bust measurements as well as the shoulder seam, the shape and angle of the armscye does adjust by slightly rotating more upward in the 1891 version. Another significant change between the two versions is that the 1891 version increased the instructions printed directly on the system by expanding what had been written prior and adding some text that had been absent in the 1887 rendition.

Not only did the maker increase the instructions printed directly on the system, there was also a printed instruction manual. This instruction book came with the system free of charge, and the introduction claimed that it was to be used in conjunction with the printed system and oral instruction.¹⁸² At the end of the 1891 instruction manual, there is a note from the proprietor, W. R. Williams, explaining that they will provide with the system a German or French instruction book to customers who need it (in the 1886 edition, only English and German instructions were available).¹⁸³ If the user needed another copy in French, German, or English or did not receive one, they could purchase additional copies for 25 cents.¹⁸⁴ This manual includes instructions on taking the

^{182.} W. R. Williams' New Instruction Book, Giving General and Complete Instructions for Using the New Perfection Tailor Body System, Perfection Tailor Sleeve Rule, Perfection Tailor Skirt and Collar Rule (11th Edition, 1891), 1-3, access courtesy of Marna Davis.

^{183.} W. R. Williams' New Instruction Book (1891), 34 and W. R. Williams' New Instruction Book, Giving Full and Complete Instructions for Using the Perfection Tailor System of Dress Cutting (2nd Edition, 1886), 23, access courtesy of Marna Davis.

^{184.} W. R. Williams' New Instruction Book (1891), 34.

measurements and how to adjust the pattern or use the system when one does not have the standard proportions, such as needing to account for a larger bust or longer waist.¹⁸⁵ It also provides some basic information on adjusting the pattern to different clothing styles such as a wrapper dress or polonaise in 1891 or style elements in 1886, such as doublebreasted cloaks and sacques, or adjusting the sleeve style.¹⁸⁶ More details were included in 1891. There are differences in the clothing styles that the instructions are for between 1886 and 1891, but aside from this they are quite similar.

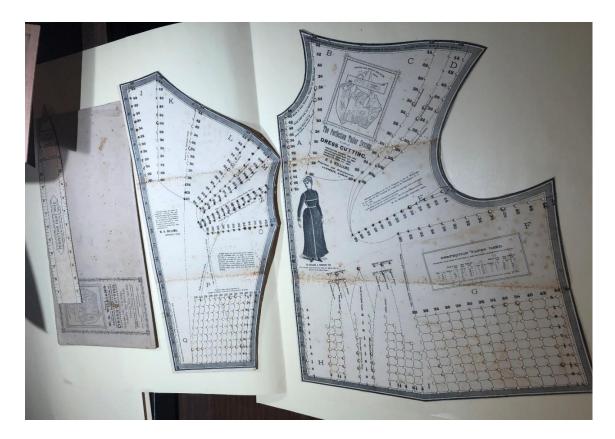


Figure 18: The Perfection Tailor System, 1887, courtesy of Marna Davis,

author's own image.

^{185.} W. R. Williams' New Instruction Book (1891), 2-26.

^{186.} W. R. Williams' New Instruction Book (1891), 10–17 and W. R. Williams' New Instruction Book (1886), 8–12.

As shown in figure 15, the Williams Perfection Taylor System also includes back and side pattern pieces, dart rule, and an additional skirt rule. The 1887 system used for this research was missing the side rule.



Figure 19 & 20: *The Perfection Tailor System*, 1891, courtesy of Stuhr Museum, author's own image.

Pictured in the preceding figures are the additional pieces for the 1891 system. From left to right, pieces include: the dart rule, sleeve rule, side rule, collar pattern, back pattern, and skirt rule. Just as with the front bodice pieces, there are more instructions on each of the 1891 pieces than there were on the 1887 version. The addition of the collar system is a unique feature, which was not found in any of the other systems studied for this research. It is unclear whether this would have been purchased separately or included with the system. The collar rule is not pictured in the diagram printed on the front bodice piece.



Figure 21: The Perfection Tailor System,

1887 courtesy Marna Davis.

Figure 22: The Perfection Tailor System,

1891 courtesy Stuhr Museum.

It is apparent that the maker of this system was not only making updates to account for the changing styles but also to make it easier to use by including more thorough instructions. The 1887 instruction manual listed that the updated system functions identically to how it was used before, however, the size range increased four sizes and the shoulder, shoulder seam as well as armsyce and darts were moved to adjust for the current clothing style.¹⁸⁷ The 1891 instruction manual made it clear that the manufacturer tweeked the shape of the pattern pieces and the size range increased yet another two inches from the previous update and explains to the user how they can adjust

^{187.} W. R. Williams' New Instruction Book (1886), 24.

the size even larger should it be required.¹⁸⁸ In figures 21 and 22, one can see the additional instructions that were added in the later version. Not only did they change the wording for the dart markings (seen at the bottom of both images), but they also indicated how to make the front of the dress bigger or smaller. The original dart notes simply had three points marked: slender form, medium form, and stout form for both the low dressing and high dressing dart heights. This is specific to the bust point. The additional printed instuction book explained the user should "mark the dividing space between front and back dart . . . Then the points of the darts usually in the middle row of perforations, in scale marked 'Medium Dressing;' but for long-waisted persons you had better mark in scale marked 'High Dressing,' and for very short-waisted in 'Low Dressing.'"¹⁸⁹ The 1891 edition listed only two instructions for this directly on the system. The first reads "mark here for medium and large taper or figure," while the second "mark here for small taper or figure." The taper is referring to the difference between the corseted bust and waist measurement, so a large taper would have a greater difference between the two measurements than a small taper. There is also the addition of points at the top of the darts. These two points can be selected for three dart heights: low dressing, medium dressing (which was not included in 1887), and high dressing. There is also the addition, as seen in figure 22, of instructions for adjusting the front of the pattern:

If at any time you should wish to make the space between the front of dress in front dart greater move the system from you just far enough to give the desired

^{188.}W. R. Williams' New Instruction Book (1891), 29-30.

^{189.} W. R. Williams' New Instruction Book (1891), access courtesy of Marna Davis.

width, but if less, then move it towards you. However you should never move it either way, until after the outlines have all been dotted.¹⁹⁰

Even with these additional instructions, with much of what was included with the *National Garment Cutter*, the instructions are simply for cutting out the garment and not for constructing it. This means that either the user had to already have knowledge of the constuction of the garments or have someone helping them put the final garment together. This system leaves the assumption that whomsoever is constructing the final garment does have that knowledge already.

This system, compared to many others, also includes a pattern piece for the collar and darts, which does not appear to be common amongst pattern drafting systems. This system does not, however, seem to be the easiest to use, and if a marking were to be placed in the wrong position there is increased room for error. The marks would have been made by making a mark through each of the holes corresponding with the desired measurements. These marks would then be connected to make the darts, side, or shoulder measurements. To connect the darts, a ruler or curve (a curved ruler that comes in varying sizes to make it easier to draft curved lines) is applied to the edge of the drafting system (such as drawing the shoulder seam by tracing the shoulder of the system or drawing to match what is pictured, as would be the case with the darts). Compared to the *National Garment Cutter*, the system uses more measurements and should increase its accuracy when used correctly. One difference between this system and an adjustable hybrid system is that there is no risk of setting the system to the correct measurements and it sliding out of place while being used.

^{190.} The Perfection Tailor System, 1891.



Van Dame World's Fair Premium Tailor System

for Drafting Women and Children's Garments

Figure 23: *Van Dame World's Fair Premium Tailor System* courtesy of Marna Davis, Author's own image, Left to right: Bodice front, side front, side back, and back.

The design of this system is relatively simple. The Van Dame System is a hybrid system meaning it is adjustable and works based on individual measurements selected on the system. The system itself, however, is made based on proportional measurements with the understanding that there are certain proportions that should be relevant based on a set on individual measurements. The Van Dame Pattern Drafting System is made from thick, tan cardboard with a smooth, glossy finish along with metal brackets and grommets, which allow it to move.¹⁹¹ The system is made from templates of the most

^{191.} J. R. Van Dame, "World's Fair Premium Tailor System," copyright 1895, courtesy of Marna Davis.

basic bodice pattern with additional adjustable pieces of cardboard attached, which slide and adjust to the user's individual measurements.¹⁹² This is unlike the pre-Tentler System (the earliest surviving example), which is exclusively cardboard, or the McDowell System made from metal.¹⁹³ The images and text on the Van Dame System appear to be stamped or printed on the individual pieces, and the cardboard was likely cut by machine. The images on the main pieces are printed/stamped on the surfaces with black ink, while the sleeve and skirt system rulers are printed in blue ink.

This system consists of four main pieces: the front, side front, side back, and back. For each pattern piece, the cardboard is layered in a way that allows the pieces to easily slide across to marked measurements. Each of the combined, adjustable pieces then forms one of the bodice pattern pieces, either the front, side front, side back, or back, which work together to make a complete pattern on paper. Each piece is created so that it works with the measurements of the corresponding piece (i.e., side front fits with side back). There are also three additional parts for the Van Dame System, namely: Twentieth Century Tailor System (tailoring square, including the shoulder and neck curve), skirt system, and sleeve system. Based on the markings and seals, it would appear that the original World's Fair Premium Tailor System, patented in 1894, included the front, side front, side back, and back adjustable pieces, meaning other pieces were made at a later date and/or sold separately as appears to be the case with the 1899 adjustable sleeve system.

^{192.} See appendix 2 for image of the Van Dame system.

^{193.} Kidwell, Cutting a Fashionable Fit, 23, 56-66.

^{194.} See Appendices 4 and 5 for images of the seals that will be discussed.

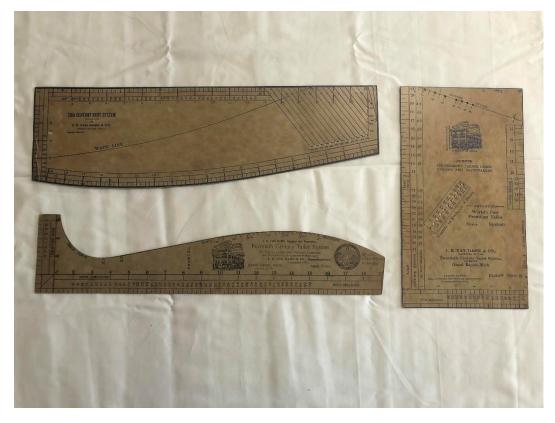


Figure 24: *Van Dame System* courtesy of Marna Davis, authors own image. Top left: Twentieth Century Skirt System, Bottom Left: Twentieth Century Tailor System, Right: Improved World's Fair Premium Tailor Sleeve System.

The Twentieth Century Tailor System for cutting ladies' and children's garments was copyrighted to J. R. Van Dame & Co., manufactured and patented October 25, 1898, then finally copyrighted in 1899. The tool lists J. R. Van Dame as both inventor and proprietor. It includes the graphic for the "World's Fair Premium Tailor System of Dress Cutting for Ladies & Children School." This connects it to the other pieces as well as to the 1899 Omaha Greater America Exposition, where it received the "Official Gold Medal 1st Award." The tailoring square has the price \$25 printed on it. The sleeve and skirt systems are printed with blue ink instead of black and are part of the "Improved" World's Fair Premium Tailor System, but neither has a patent date printed on it.¹⁹⁵ The sleeve

^{195.} See appendix 6 for images of the Van Dame skirt, sleeve, and tailoring square.

system is not the one Van Dame patented on January 24, 1899 (patent 618,387).¹⁹⁶ The Twentieth Century Skirt System, which was also printed in the blue ink, has no date or seal listed, but was copyrighted by J. R. Van Dame & Co. These three pieces make up the extra pieces that appear to have been made after the World's Fair Premium Tailor System but prior to the Greater America Exposition.

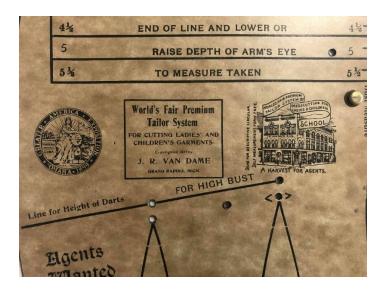


Figure 25: The *Van Dame System* courtesy of Marna Davis, authors own image taken of the front pattern piece. The preceding image lists the three seals/images: Omaha Greater America Exposition 1899, World's Fair Premium Tailor System, and World's Fair Premium Tailor System for Ladies and Children School.

The primary components of the World's Fair Premium Tailor System are the front, side front, side back, and back pieces. The set was copyrighted in 1893, and an application was submitted for a patent. These pieces include the image of the World's Fair Premium Tailor System of Dress Cutting for Ladies and Children's School and the 1899 Omaha Greater America Exposition as shown in Figure 25. The front bodice piece also advertises "agent wanted salary or commission." This system cost \$10.00 on its own or \$20.00 if the purchaser also wanted the instructions. The consumer would have had to

^{196.} See figure 30 for image of the adjustable sleeve pattern that Van Dame patented January 24, 1899, courtesy of Stuhr Museum.

decide whether or not they needed more directions than were already printed on the drafting system.

There are some directions printed on the pieces, but they are not particularly detailed. The front piece simply states, "place pencil at end of line and lower or raise depth of arm's eye to measure taken." If the desired bust measurement was 36 and waist 27, then those specific measurements would be selected each time the pattern asked for those measurements. The cardboard is then slid until it lines up with the corresponding measurement. All of the pieces provide the basic instructions on the adjustable areas for which measurement should be selected, either the bust or waist. One of the side pieces provides four additional instructions for the two side pieces, which instruct how to adjust for the bust and hip lines while drafting that pattern piece. The only other directions (aside from that which would have been separately purchased) are included on the back pattern. The primary instructions are printed on the pieces and do make more sense while looking at the markings on the pieces, although they are not extensive. The back piece provides the most information to "adjust to bust measure," instructing the user to:

Observe lines numbered 1, 2, 3, 4, 5, 6, and 7, draft them in rotation. Draw line 1 full length of pattern. Slide pattern down $\frac{1}{2}$ inch. Make dot the length of back . . . lay underarm measure on waist measure dot with star on arm's eye line, and draw back curve line 7. This locates bust point to fit side form, and will often come above star dot; if below, extend eye line strait down.¹⁹⁷

The back piece appears to have the most instruction as well as the most room for error. The back piece still has only eleven sentences of instruction, significantly more than the other pieces. This one piece alone has more instruction than the drafting instructions included on the *National Garment Cutter* pieces combined.

^{197.} This is an excerpt from the back pattern piece of the Van Dame World's Fair Premium Tailor System.

When this system is compared to another version of the same system, more information becomes available. The pink version of the Van Dame System, also copyrighted in 1893 as shown in the following images, is in essence the same system. There are a few modifications made between the two versions: the pink version includes more instructions, a slightly different back piece, and an entirely different sleeve pattern. The color of this system also stands out in that none of the other systems analyzed for this research were pink. The price for this version is still \$10.00 or \$20.00 with instructions on the front bodice piece. What can be seen comparing the previously shown tan/brown version to the pink, which includes the additional instructions, is that the \$20.00 would still buy the same amount of instructions as printed on the individual Van Dame System, but additional printed instructions were included separately instead of being printed on the system. The additional instructions are included on each pattern piece, an extra cardboard instruction sheet, as well as on the folder that holds the system.

Even the sleeve changes in the different revisions of the system. The first Van Dame System analyzed has a sleeve system in the form of a rectangle with measurements and perforations, but the pink version includes a sleeve form that is already more in the shape of a sleeve, and finally the 1899 version, which Van Dame patented on January 24, 1899 (patent 618,387), looks like a sleeve.¹⁹⁸ The version from 1899 is adjustable, similarly to the other Van Dame system pieces, and has instructions printed on it.

^{198.} Van Dame, "World's Fair Premium Tailor System Adjustable Sleeve," patented January 24 1899, courtesy of Stuhr Museum.

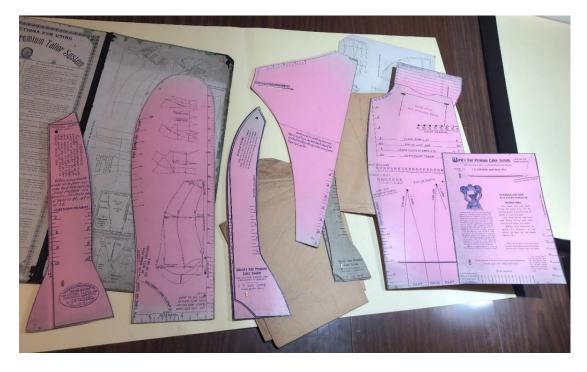


Figure 26: *World's Fair Premium Tailor System* Instructions Courtesy Marna Davis, authors own image.

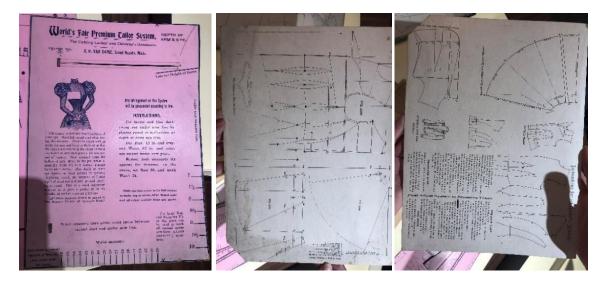


Figure 27, 28, 29: *World's Fair Premium Tailor System* Instructions Courtesy Marna Davis, authors own images.



Figure 30: 1899 *World's Fair Premium Tailor* Sleeve System, Courtesy of Stuhr Museum, Author's own image.

Even with the different variations of the Van Dame World's Fair Premium Tailor System, there was limited information found. The creator of this system, John R. Van Dame (also listed on some of the patents and this system as J. R. Van Dame), held a copyright for this system, but it was not his only foray into pattern drafting technology. Van Dame also held a patent for a tailor square (patent 613,095) from October 25, 1898, a sleeve pattern (patent 618,387) from January 24, 1899, and a tailor's chart (patent 790,333) from May 23, 1905.¹⁹⁹

The Claims

There was also a *Dressmakers' Journal and Instruction* book printed with the Van Dame System, which is discussed further in the content/visual analysis section later in this research. Its claims assert the system uses "scientific principles of garment cutting" and "ideas measurements and theories" and that it "[relieves] the user of all study and

^{199.} Kidwell, Cutting a Fashionable Fit, 142, 143, 145, 154.

calculation, to save time and trouble."²⁰⁰ This pushes the ideas of science, technology, and innovation in relation to this drafting system. This is especially important considering it had been displayed along other textile technologies at the Chicago World's Fair and claimed to be a "marvel of the age." As a marvel, however, it would not have improved anyone's pattern drafting ability if it was not seen and used. When looking closely at the seals, which are stamped directly onto the cardboard, the system was originally made for the Chicago World's Fair in 1893, where it would have been on display for the world, and was then in 1899 sold and/or shown at the Greater America Exposition in Omaha, Nebraska. With a printed journal, as well as being displayed at the World's Fair and Greater America Exposition, this system was certainly marketed to the public. The addition of the seals printed directly onto the system points to the popular places where others might have seen or acquired this system, playing on the popularity of these locations. One claim that was unique is the claim that using this drafting system makes "artistic fitting" more pleasurable. The addition of the term "artistic" is one that is not seen in any of the other advertisements or drafting systems analyzed through this research. "Artistic" implies that the system can be used to make garments with some sort of stylistic freedom outside of the most basic pattern.

The marketing goes beyond merely the consumer. The advertisers of the journal are not only offering a trial for free to get women to use the system, but also looking for "salesm[e]n and ladies to teach, first southern and western states."²⁰¹ There are no qualifications specifically listed in the journal or on the system for someone to teach and

^{200.} J. R. Van Dame & Co., *Instruction Book and Dressmakers' Journal* (n. d.), images courtesy of Mary Ann Kennedy. 201. J. R. Van Dame & Co.

sell the Van Dame System, but it implies that they are encouraging women to sell the products, and thus it has the potential to also become a form of revenue for the company and the saleswoman. The marketing of the Van Dame System in both what was printed about the system and the information and seals included on the system itself were essential in communicating to consumers why they should seek out and use the system. If the consumers could not see how the system would aid them, then it would have been harder to justify purchasing it.

The Van Dame Pattern Drafting System, the additional cost for instructions, and the dressmaking journal show the cost and value of knowledge as well as the understanding that not everyone had the same skill level. It is clear that adjustments continued to be made on the Van Dame System whether for ease of use or to accommodate the changing styles, as can even be seen in the difference between the sleeve systems from 1899 where it was adjustable and sleeve shaped and the earlier undated sleeve system in the shape of a rectangle. Although the system appears to rely on the awards it has won and the places it was shown such as the World's Fair and Greater America Exposition, the creators did continue to build off the original product. Adjustments were made to some of the components such as the sleeve patterns. Additional products, such as journals/periodicals, were also published and show that the system continued to be used after the World's Fair.

McDowell Garment Drafting Machine

The McDowell System is considered a direct measure system, which were the most accurate because of the number of measurements used and yet the most

complicated, given one example included nine measurements and another thirteen.²⁰² Similar to the hybrid systems, McDowell also included additional sets of curves or darts to aid in patterning. Although it relied on multiple measurements, the adjustable nature of McDowell's "machine" for drafting a bodice and sleeve simplified the accuracy of selecting the correct measurements because they were written on each of the corresponding pieces of the tools.



Figure 31: *McDowell Garment Drafting Machine*, Courtesy Marna Davis, author's own image.

As seen in figure 31, the McDowell System is completely fabricated from metal and does not have any text or images on the system. A primary difference between the other systems and the McDowell System is its mechanization; it can be adjusted by releasing and sliding metal screws.²⁰³ The sliding metal bars and screws adjust so that the

^{202.} J. R. Van Dame & Co.: 45-50 and Kidwell, Cutting a Fashionable Fit, 45-53.

^{203.} *McDowell Garment Drafting Machine and Instruction Book*, MAAS: Museum of Applied Arts and Sciences, accessed March 4, 2021, https://collection.maas.museum/object/362048.

machine takes the form of the exact pattern piece needed. This technology allows for more measurements to be included and adjusted for to gain the most accurate fit for the user. The screws then lock down once it has been adjusted, preventing the system from sliding while the pattern is adjusted as can be problematic with some of the other systems. The main components of the system appear to be cut from flat sheets of metal. The metal was brass that underwent a "gold lacquer process," giving it the final appearance.²⁰⁴ These marked measurements that correspond with that of the user are not complicated to locate and adjust when examining the McDowell System in person, especially when utilizing the corresponding instruction book. It is simple to adjust and when the pieces have been set to the correct measurements, they take the shape of the pattern piece and can be traced with little adjustment. The metal pieces have the measurement numbers engraved in the metal, making it easy to follow even without substantial written directions.

The instructions are printed in a book as opposed to directly on the system. The printed, step-by-step instructions were helpful in ensuring not only that each piece was set correctly, but that the measurements had been taken correctly. This system required the greatest quantity of measurements of any system included in this research, but the instructions in combination with this system make it one of the more accurate to use. This system not only has four bodice pieces (front, side-front, side-back, and back), but it also has a sleeve "machine" with an adjustable sleeve head as well as length so it can be adjusted where the elbow hits regardless of the arm length. This is a highly detailed and

^{204.} Gamber, "Reduced to Science": 146.

sturdy pattern drafting system, which could be purchased for around \$17.50 in the 1880s when it was patented.²⁰⁵

As Casal-Valls points out, "Between 1880 and 1914, twenty-eight" commercial

dressmaking systems entered the market for purchase by home sewers and dressmakers,

including the McDowell System.²⁰⁶ However, according to Claudia Kidwell, the

McDowell System was the best-known adjustable pattern drafting system or machine of

its kind.²⁰⁷ Furthermore, the McDowell System's advertisements promoted it as the

creme de la creme or best money could buy of the many options on the market.²⁰⁸

According to its patent, the McDowell Pattern Drafting System was created in

1886 by Albert McDowell. McDowell explained:

The objects of my present invention are, in general, to provide for a better adjustment of the parts of the pattern; to remove non-essential and extraneous parts which only add to the weight in cumbersome character of the pattern; to provide a parallel motion or adjustment for the darts, whereby whatever may be the length or width of the darts the same relative proportions as to length will be maintained; also, to avoid the complexity and waste of material incident to the formation of the hip-dart, which I now accomplish by making a separate pattern for the under-arm piece, thus making a front part pattern for the body or waist of the dress or other garment. I also provide a more perfect adjustment between the curves of the side body and those of the back or back body, and have made changes in the side body pattern, whereby I am enabled to place the material for the sleeve, the novel characteristics of which will be hereinafter fully set forth.²⁰⁹

McDowell's patent shows that he believed his system improved motion and adjustment,

proportion to length, and fit between the side and back of the body as well as ease of

^{205.} Kidwell, *Cutting a Fashionable Fit*, 66 and Albert McDowell, "Adjustable Pattern for Drafting Garments," United States, US342216A (May 5, 1886).

^{206.} Casal-Valls, "Fashioning Modernity": 236.

^{207.} Kidwell, Cutting a Fashionable Fit, 53.

^{208.} Kidwell, 63 and "Multiple Classified Advertisements," *Daily Inter Ocean*, Feb. 11, 1894, 19, Nineteenth Century Collections Online,

http://link.gale.com/apps/doc/GT3013622475/GDCS?u=linc74325&sid=zotero&xid=c1a9758d. 209. McDowell, "Adjustable Pattern for Drafting Garments."

Chaugesin is the word listed in the patent, I am not certain if another word was intended here.

making the sleeves, prioritizing fit and ease of use.²¹⁰ These adjustments would have improved the ability of a home sewer to utilize technology as well as the perceived usefulness in the eyes of potential users/buyers.

McDowell explained that he made changes and updates from his original patent to "avoid, as far as possible, any reliance on the judgment of the operator in making allowances" when drafting their garments and thus limiting room for error. Kidwell explains that McDowell made five updates to his system before finally perfecting it in 1886, and by that point had already filed two other patents, one in 1879 and another in 1885.²¹¹ This final patented version was then revised again in 1891 to once again accommodate the ever-changing silhouette.²¹² When the patent images from the 1880s are compared to the images used in the 1890s advertisements, the system used is still remarkably similar and any differences are hard to see.²¹³

Potential purchasers of the McDowell System might have been drawn to the bright and shining metal pieces hanging on the wall or in a display case with the light reflecting off of them, especially in comparison to the cardboard and occasional metal options (such as the Buddington Machine) that were found otherwise.²¹⁴ The McDowell Garment Drafting Machine works by sliding and adjusting the metal components to smaller or larger measurements, which correspond with the measurements of the woman for whom the garment is constructed.²¹⁵ Once in place, small screws can be tightened to

^{210.} McDowell, "Adjustable Pattern for Drafting Garments."

^{211.} Kidwell, Cutting a Fashionable Fit, 54.

^{212.} Spanabel Emery, Paper Pattern Industry, 71.

^{213.} McDowell, "Adjustable Pattern for Drafting Garments" and "Multiple Classified Advertisements," *Daughters of America* 4, no. 5 (1890): 11, Nineteenth Century Collections Online, https://link-gale-com.libproxy.unl.edu/apps/doc/JVJNTD070303874/GDCS?u=line74325&sid=GDCS&xid=633dbab1. 214. Kidwell, *Cutting a Fashionable Fit*, 54.

^{215.} Personal observation from in-person study of the McDowell Pattern Drafting Machine.

keep the pieces in place to prevent sliding from where they were adjusted, which is not something included in any of the other systems used for this research.

The 1885 instruction book for the McDowell System is highly detailed with nine pages instructing how to take and adjust for individual measurements along with four pages detailing how and in what order to adjust the machine before even using it. The manual also includes instructions for garments and garment creation such as a linen duster, dolmans, and polonaise as well as cutting the lining, basting, and keeping wrinkles out. This manual provides not only thorough instructions for using the system but also how to make the pattern and adjust it for the desired final garments. The manual does not appear to require a level of assumed sewing knowledge or previous experience to use because of how thorough the step-by-step instructions are.

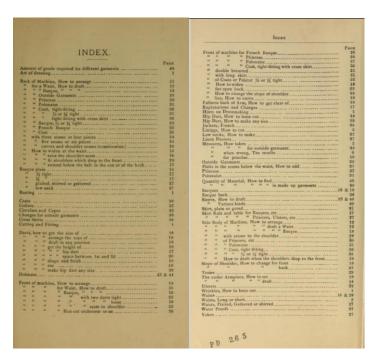
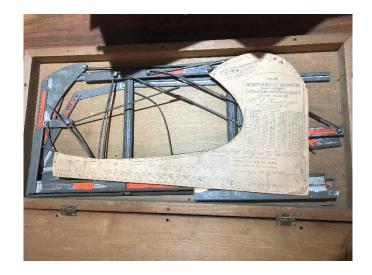


Figure 32: Index, pages 49 & 50 from the 1885 McDowell Instruction Manual,

archive.org

McDowell Diversifies—Paper Patterns & Pictorial Review

McDowell did not limit himself to only his patented pattern drafting system. Similar to Butterick, McDowell also branched out into paper patterns.²¹⁶ McDowell first published *Pictorial Review* on September 15, 1899 and at first offered only one paper pattern in it, which expanded as the publication continued.²¹⁷ By 1910, the circulation of *Pictorial Review* had reached 364,777, and it originally cost \$1.00 per year, providing a readership and a platform for his paper patterns, while he was already well known for the quality of his drafting system.²¹⁸ At this time, according to Spanabel Emery, it was being discussed that dressmakers would eventually switch from pattern drafting systems to paper patterns now that they were multisized, which would have affected the sales of his system. McDowell was able to recognize that his system may not have been applicable forever with the changing needs of users and styles of clothing and diversified into other venues for his work.



^{216.} Waller-Zuckerman, "Marketing the Women's Journals": 99.

^{217.} Spanabel Emery, Paper Pattern Industry, 64-66.

^{218.} Waller-Zuckerman, "Women's Magazines": 717.

Figure 33: *Buddington Dress Cutting Machine*, courtesy of Marna Davis, authors own image.

The preceding image is the Buddington System in its original box. The viewer may observe how flimsy it is in comparison to the McDowell System, which it attempted to emulate.

Buddington as a Competitor

In comparison, another adjustable, direct measure system created in 1887, just a year after the McDowell System, was the Buddington Improved Dress Cutting Machine for "a perfect fit without change of seam" (Figure 33).²¹⁹ This system was produced to be an economical alternative to the popular McDowell System, but the quality was on par with the cost. In the 1880s, the Buddington System sold for \$4.10 compared to the \$17.50 for the McDowell System.²²⁰ When looking at images or in person at the Buddington System, it is clear that there are some discrepancies between the two systems. First, the Buddington is flimsier and less user friendly. The components do not stay in place well, and it does not adjust to as many measurements. Even when the system is set to the needed measurements (i.e., waist/bust), the overall form of the system does not as clearly replicate the pattern piece that it is trying to make. This is because of the bulkier metal pieces and small adjustable wire pieces, which do not move or adjust as simply as the McDowell System does. It appears to be more difficult to accurately adjust without it morphing out of place while being used. This is problematic not only while the system is being adjusted, but also while the paper pattern is being made. On pieces requiring multiple measurements it is problematic if the user system is adjusting away from the

^{219.} Waller-Zuckerman, "Marketing the Women's Journals": 66.

^{220.} Waller-Zuckerman, 66-67.

measures set while the user is trying to adjust another measurement. When the system is set to the desired measurements and being traced or marked to draw the paper pattern, the metal rods tend to slide out of place and bend, positioning the pattern incorrectly. This can affect the final fit as well as user experience. This is unlike the McDowell System, where the screws lock the sturdier sliding pieces in place to prevent movement while making the paper pattern or adjusting other proportions. These observations are from visual analysis and hands-on study only, not from using either system to create a garment. The Buddington System is also less visually appealing. The Buddington System was, as Kidwell describes, the less expensive version of the McDowell; it is clear to see why the McDowell would be the more popular choice when it could be afforded.²²¹

Summary from the Artifact Analysis

Overall, there are pros and cons to each of the pattern drafting systems. The user would have to decide what was important or necessary to them. The systems differed in quality and type of materials, ease of use and accuracy, as well as the instructions' clarity and inclusion.

Quality and Type of Materials

All the pattern drafting systems selected for closer analysis, with the exception of the McDowell System, were made of cardboard. The systems created from cardboard were likely cut by machine, while the images and text appear to be stamped or printed on the individual pieces. Miss Elmira Harroun's Dress Making Charts, beginning in 1870, "were manufactured using a copperplate obtained in New York. In 1876 the first set of

^{221.} Waller-Zuckerman: 66.

improved, colored, nickel engravings" were made.²²² Claudia Kidwell explains that another type of cardboard system had been "printed on thin cardboard, perforated, and cut out when it was manufactured."²²³

The National Garment Cutter comprised multiple wooden rulers and was supplemented with printed books that were adjusted over time to account for the changing clothing styles, while the rulers remained unchanged. As the patterns updated, the user would only need to purchase the newest *National Garment Cutter* book to use with their ruler. The Williams Perfection Tailor System and Van Dame System, meanwhile, were both made from sturdy cardboard. The Williams Perfection Tailor System was not adjustable and used perforations in the cardboard, which had to be marked and connected. The Van Dame System differed from the Perfection Tailor System in that it was adjustable. Small metal brads allowed for the cardboard pieces to slide and adjust to different measurements. The McDowell System was made from sturdier sliding metal bars with screws that tightened and locked the system into place to prevent it from shifting over time or as other adjustments were made. The quality also influenced the price. The McDowell System cost \$17.50 compared to the Buddington System, which sold for \$4.10 and was of significantly lower quality.²²⁴

Ease of Use and Accuracy

The National Garment Cutter provided patterns and images that a person would then draft to their own size. The downside is that as a proportionate system, the pattern was based solely on the bust measurement, and adjustments would likely have to be made

^{222.} Kidwell, Cutting a Fashionable Fit, 75.

^{223.} Kidwell, 33.

^{224.} Kidwell, 66–67.

to any patterns if the woman did not fit the proportions used in the patterns. The National Garment Cutter allowed the desired pattern pieces to be drafted the first time, with fit modifications needed. This is unlike the other three systems, which created a base pattern that was then modified to create the final pattern for the desired style of garment. For individuals who were better at adjusting for fit than for stylistic differences in garments, this might have been a useful option.

In comparison the two hybrid systems, the Williams Perfection Tailor System (which uses perforations) and the Van Dame World's Fair Premium Tailor System (which is an adjustable system) rely on more measurements than the National Garment Cutter. These hybrid systems, however, already came in the general shape of each pattern piece. Because they use more measurements, the fit should be more accurate if the pattern is drafted correctly. There is room for error if the wrong perforation is marked, measurements are set incorrectly, or the systems shift at all during the drafting process. Both the Perfection Tailor System and the Van Dame System create a base pattern as opposed to specific stylized garments, so any changes beyond the most simplistic fitted garment such as a dress or bodice would need to be adjusted in another iteration of the pattern.

The hybrid systems as well as the McDowell System, which was a direct measure system, would have been more accurate because of the increased points in the patterns that were already adjusted to the lady's specific measurements and proportions. The downside is that more measurements create more steps for creating a pattern and increases the opportunity for mistakes. The Van Dame and McDowell Systems, which are both adjustable, need to be set to the exact measurements without sliding out of the necessary positions during use. The small screws in the McDowell System must be loosened prior to adjustment and tightened once everything is set in its place, making it more reliable.

Instructions

Not all instructions are created equally. The National Garment Cutter had very few instructions included with the patterns; however, the addition of drawn images for each pattern showing the intended garments is useful in comparison to the other three systems. The National Garment Cutter had fewer instructions, but also only one ruler was used. The instructions were specific to drafting the pattern from the diagrams and not constructing the final garment.

The Williams Perfection Tailor System included the instructions on the pattern pieces themselves as well as an added instruction book free of charge (or 25 cents if another was needed). As the system was adjusted and reprinted over time with more instructions for drafting, the patterns were added and clarified directly on the system. The Van Dame System has more components and additional instructions that could be purchased. Similar to the Perfection Tailor System, a set of basic drafting instructions was printed directly on the pieces. The back pieces, which were the most complicated to make using this system and had the most room for error, had the most thorough instructions, while the side pieces, which were the simplest, had the least. The pattern was sold as is for \$10.00 with minimal instructions printed directly on the cardboard or \$20.00 with additional instructions.

In the case of the Van Dame with its *Instruction Book and Dressmaking Journal* or the McDowell System's instruction book, additional patterning information could be

used to adjust the patterns that were made. Although the McDowell System is presumably the most complicated with everything set to the exact measurements, it also had the most in-depth instructions of all the systems. The instruction book walked the user from start to finish while offering measuring and fitting advice, as well as explanations on how to adjust patterns to the desired style. These instructions were significantly more thorough with a step-by-step breakdown for drafting the pattern and how to change the basic pattern created by using the system into one that matched the desired final garment.

Changes over Time

All four of these systems were adjusted over time, whether it be modifications made to the actual system as can be seen with the Williams Perfection Tailor System and the Van Dame System, or changes in the additional literature as was done for the National Garment Cutter. In both forms, the creators were making adjustments to the systems based on the changing needs of the consumers. Changes included improvements to the instructions; more easily adjustable systems; and updating measurements, seams, and stylistic elements to match the ever-changing clothing styles. Not all of the adjustments, such as the changing shoulder lengths, are as obvious as the additional, clearer instructions that were added to the Williams Perfection Tailor System, but they were all important enough to require changes to the systems.

Content/Visual Analysis

It is important to understand not only what the systems themselves look like and how they function, but also how they were advertised. These sources were gathered to go alongside the information found in the artifact analysis to help answer the question of "what skills or expertise did different systems assume their users had or encourage them to cultivate?" This research was also aimed at answering the questions: What terminology was used to describe/name pattern drafting systems? Which systems were more commonly advertised within the newspapers included within this research? What information was included within advertisements about the intended/potential demographic (in terms of ethnicity, linguistic background, education, socioeconomic status, etc.) information of potential users/buyers? The goal of advertisements was to sell the pattern drafting systems, so we can see the claims being made about their products that might have been seen by the women purchasing the systems. The newspapers had dedicated areas for advertisements.

Name of System	Date	Publication/Location	System/School
Jackson's Tailor	December 17,	Daily Inter Ocean	System
System	1893	(Newspaper)	
	October 27, November 10, November 24, December 1, & January 5, 1895	Daily Inter Ocean	Jackson's Chicago Tailoring Institute and French Dressmaking School (presumably Jackson Tailor System)
	April 29, 1895	Daily Inter Ocean	
	-	·	Jackson Tailor
			System
Madame Kellogg	February 4 &	Milwaukee Daily	Madame Kellogg's
French Tailoring System	March 10, 1894	Sentinel (Newspaper)	School of Dress Cutting

 TABLE 1: Advertisement Count for Drafting Systems Mentioned within This

	March 25, 1894	Milwaukee Daily Sentinel	System & Madame Kellogg's School of Dress Cutting
McDowell	December 17, 1893	Daily Inter Ocean (Newspaper)	McDowell Dress Cutting Academy
	February 11, 1894	Daily Inter Ocean	McDowell French Dress Cutting Academy
	February 4 & March 10, 1894	<i>Milwaukee Daily</i> <i>Sentinel</i> (Newspaper)	System at Madame Mulkern's new school of dress cutting
	March 25, 1894	Milwaukee Daily Sentinel	System & McDowell French Dress Cutting School located in Madame Mulkern's
	May 1, 1894	Milwaukee Journal Milwaukee Daily	McDowell School
	May 2, 1894	Sentinel	McDowell Standard System (placed by Madame Mulkern)
Merchant Tailor System of Dress Cutting	March 10, 1894	Milwaukee Daily Sentinel	System
Rood's Magic Scale	December 17, 1893	Daily Inter Ocean (Newspaper)	System
	February 11, 1894	Daily Inter Ocean	System
S. T. Taylor System	December 17, 1893	Daily Inter Ocean (Newspaper)	System
	February 11, 1894	Daily Inter Ocean	System
Van Dame World's Fair Premium Tailor System	July 20, 1895	Milwaukee Daily Sentinel (Newspaper)	World's Fair Premium Tailor System Cutting School

There were more advertisements found across this research for the McDowell System (seven advertisements) and the Jackson Tailor System (seven advertisements). There were seventeen different advertisements (many which were printed repeatedly). Of these, nine referred directly to the systems, while ten were advertising a school associated with one of the systems. These data cover seven different systems advertisements and show that these advertisements were not limited to only one place of publication or individual drafting system.

Terminology	Name of Systems
System	McDowell, S. T. Taylor, Buddington
Garment Drafting	McDowell
Tailoring System	Will Rood's Magic Scale, Madame
	Kellogg French Tailoring System
Tailor System	Williams Perfection Tailor System,
	Jacksons Tailor System, J. R. Van Dame
	World's Fair Premium Tailor System,
	Merchant Tailor System of Dress Cutting,
	Norman Tailor System

TABLE 2: Terminology Used to Name Pattern Drafting Systems

Of the systems and advertisements included in this research both for artifact analysis and content/visual analysis, the most common terminology was tailor system (five), followed by system (three), tailoring system (two), and finally garment drafting (one). Considering most of the drafting systems were made by men, for women, it is less surprising to see that ten of the systems have tailor or tailoring in the title.

Newspaper and Classified Advertisements

Many of the newspaper advertisements from this research came from designated dresscutting or dressmaking sections as shown in table 3. This was a larger trend than just one instance or newspaper. Just a few examples of this can be found in the following chart:

 TABLE 3: Classified Advertisements Related to Dresscutting. Dressmaking

Newspaper	Date	Page	Category
Daily Inter Ocean	December 17, 1893	20	Dresscutting,
			Dressmaking
	February 4, 1894	21	Dresscutting,
	·		Dressmaking
	February 11, 1894	19	Dresscutting (with a
	·		subcategory of
			dresscutting
			schools),
			Dressmaking
	April 7, 1895	29	Dress Cutting,
	-		Dressmaking
Milwaukee Journal	March 10, 1894	7	Dresscutting,
			Dressmaking
Milwaukee Daily Sentinel	March 25, 1894	14	Dressmaking

and Dresscutting Schools

The classified advertisements were not just a place to hire dressmakers or sell drafting systems. They also allowed dressmakers, dressmaking schools, and agents for patterning systems to advertise their skills and products. This leaves two main categories of classified advertisements specific to dressmaking and/or pattern drafting systems:

those meant to sell something and those seeking work. For the purposes of this research, these will be broken into three categories: the selling of the pattern drafting systems, dressmakers for hire, and the pattern drafting schools. Newspapers play a role in dispersing information to the readers. The newspapers used in this research were all regional papers. Regional/local papers are not as widely spread as a national publication, but they are also more pointed to and aware of their specific audience.²²⁵ According to Robert Picard, a professor and scholar of media and communications economics, "classified advertising includes local business advertisers such as those offering jobs, houses, and automobiles through ads in the classified section, as well as individual nonbusiness advertisers selling household goods, animals, etc."²²⁶ This was a designated section within the newspaper. The classified section can contain advertisements for products such as patterning systems being sold or for someone seeking something such as work, as can be seen in this research.

Classified Advertisements: Selling the Pattern Drafting Systems

Many of the classified newspaper advertisements were placed by individuals listing the reasons to use or learn one of the drafting systems, not by the companies or creators themselves, as was more often the case with the advertisements in the periodicals. This type of paid advertisement was placed with the purpose of selling.

^{225.} Project for Excellence in Journalism, "Framing the News: The Triggers, Frames, and Messages in Newspaper Coverage," 1998. https://www.pewresearch.org/wp-content/uploads/sites/8/legacy/framingthenews.pdf

^{226.} Robert G. Picard, "Shifts in Newspaper Advertising Expenditures and Their Implications for the Future of Newspapers," *Journalism Studies* 9, no. 5 (2008): 704–716, doi: 10.1080/14616700802207649.

DRESSCUTTING.

THE MCDOWELL FRENCH DRESS-CUTTING ACADEMY-NEW YORK AND CHICAGO.

LARGEST AND BEST DRESS SCHOOLS IN THE WORLD. DRESS-CUTTING THE

SCHOOLS IN THE WORLD. SCHOOLS IN THE WORLD. Ladies, before buying a system of cutting call and examine the celebrated McDOWELL GAR-MENT-DRAFTING MACHINE, which is acknowi-edged by all good cutters to have no equal and to be the greatest invention of the age. NEARLY EVERYBODY KNOWS THAT WE HAVE THE LARGEST DRESS - CUTTING SCHOOL IN AMERICA. AND THE STANDARD SYSTEM OF CUTTING THROUGHOUT THE WORLD. A free test will really convince you that the drafting machine is easy to learn, rapid to use, and posi-tively saves refitting. When getting a system, why not get the best? OUR ACADEMY is the ONLY PLACE in the city where ladies can learn to cut every style of gar-ment worn and also the entire art of French, German, and English teachers. You can make a dress for yourself while learn-ing. We have a great demand for good cutters using our system. Good positions secured. The McDowell System received the THREB HIGHEST AWARDS at the World's Columbian Exposition. One of these medals was awarded because our Drafting Machine was acknowledged to be the only system taking the place of it. Ladies, be cautious in whom you place

and the only system taking the place of it.

and the only system taking the place of it. Ladies, be cautions in whom you place confidence. The McDowell Company is known from Maine to California as the largest and most reliable firm in this line. WECUTTO MEASURE all the new style-waisis, elceves, skirts, capes, etc., and guarantees them to fit perfectly. Call or send at once for a fashion book and cir-cular free. Evening classes Monday, Wednesday, and Friday. To be admitted call before 7:30 p. m.

THE MCDOWELL CO., 78 State st., Chicago, Ill: (5th floor). (Opposite Marshall Field's.)

S. in the world for cutting address garments: self-instruction book: every lady can be her own teacher and feel certain of success by the new in-struction book: call and investigate: imported patterns for winter dress-cutting a specialty; sub-scriptions taken for La Bon-Ton. COONS & CO., 420 Wabash av.

144,000 MAGIC SCALES SOLD. THIS POP-measurement all garments for all forms: no refit-ting: price. \$5: investigate before buying: agents wanted everywhere: circulars free. The Rood Magic Scale Co., 822 W. Madison. st., Chicago. III,

DRESSMAKERS-JACKSON'S TAILOR SYSTEM received World's Fair highest award. R. 26, 207 State st.

Figure 34: "Multiple Classified Advertisements." Daily Inter Ocean, Dec. 17, 1893, 20.

Multiple advertisements for the McDowell System came up specifically in the Daily Inter Ocean (Illinois), Milwaukee Journal (Wisconsin), as well as the Milwaukee Daily Sentinel (Wisconsin). Those in the Daily Inter Ocean appeared to primarily focus on selling the system itself, whereas the ones in the *Milwaukee Journal* and *Milwaukee* Daily Sentinel were more focused on schools of dress cutting or earning wages from the use of a dressmaking system. The *Daily Inter Ocean* paper included an entire section

within the classified advertisements for dress cutting and another for dressmaking. This is where Multiple McDowell advertisements were listed.

The Daily Inter Ocean was printed daily in Chicago, Illinois from 1879–1902.²²⁷ The cost in 1896 was \$6.00 per year (or \$4.00 without the Sunday edition), and it was affiliated with the Republican party at the time and considered a family paper.²²⁸ The Milwaukee Journal (Milwaukee Daily Journal from 1883–1890) was an afternoon newspaper printed daily in Milwaukee, Wisconsin from 1890–1995 (after 1995 it became the Milwaukee Journal Sentinel, merging with the Milwaukee Daily Sentinel.).²²⁹ The newspaper began as an "independent, community-oriented newspaper" and "became noted for its coverage of Milwaukee and state affairs, gained extensive statewide circulation, and became distinguished for its editorial stance. It tended over the years to support progressive or liberal candidates for political office."²³⁰ The Milwaukee Daily Sentinel was a morning paper printed daily in Milwaukee, Wisconsin from 1837–1995.²³¹ This was "one of Wisconsin's leading papers" and took a strong antislavery stance and was associated with the Democratic party for its first year, followed by the Whig party and later the Republican party.²³² All three of these were regional newspapers with local audiences and thus would be more likely to know their readership.

^{227. &}quot;The *Daily Inter Ocean* (Chicago, Ill.) 1879–1902," The Library of Congress, https://www.loc.gov/item/sn85038321/.

^{228. &}quot;The Inter Ocean," Ann Arbor Register, April 23, 1896, https://aadl.org/node/549113.

^{229. &}quot;The *Milwaukee Journal* (Milwaukee, Wis.) 1890–1995," The Library of Congress, https://www.loc.gov/item/sn83045292/.

^{230. &}quot;Milwaukee Journal Sentinel," Encyclopaedia Britannica, Inc.,

https://www.britannica.com/topic/Milwaukee-Journal-Sentinel.

^{231.} Stephen Byers, "*Milwaukee Journal Sentinel*," Encyclopedia of Milwaukee, https://emke.uwm.edu/entry/milwaukee-journal-sentinel/.

^{232.} Byers, "Milwaukee Journal Sentinel."

The Daily Inter Ocean of December 17, 1893 included four advertisements for pattern drafting systems: one boasting that the "Jackson's Tailor System received World's Fair highest award," and another for the Rood Magic Scale for ladies' clothing with a price of \$5.233 There was also an advertisement for the S. T. Taylor System, "the only perfect system in the world for cutting ladies garments," which included an instruction book and stating, "Every lady can be her own teacher."²³⁴ The same newspaper included an advertisement for the McDowell Dress Cutting Academy, claiming the reasons women should not only learn through their school but also use the McDowell System, including that they could learn to cut *every single* style of garment and that they are the most *well-known* and *reliable*. This advertisement also claims that students can learn from French, German, and English teachers at the McDowell Dress Cutting Academy, pointing to potential for other languages being spoken or nationalities encouraged to learn at this school. There is no price listed; however, one reason to use the McDowell System is that it "received the three highest awards at the World's Columbian Exposition."²³⁵ None of the advertisements within these newspapers included images, and only the Rood's Magic Scale listed a price, leaving only the written content for analysis. Similar advertisements for the McDowell French Dress Cutting Academy, S. T. Taylor System, and the Rood Magic Scale appear again in the *Daily Inter Ocean*, February 11, 1894.236

^{233. &}quot;Multiple Classified Advertisements," advertisement for the Jacksons Taylor System, *Daily Inter Ocean*, Dec. 17, 1893, 20 and "Multiple Classified Advertisements," advertisement for the Rood Magic Scale, *Daily Inter Ocean*, Dec. 17, 1893, 20.

^{234. &}quot;Multiple Classified Advertisements," advertisement for the S. T. Taylor System, *Daily Inter Ocean*, Dec. 17, 1893, 20.

^{235. &}quot;Multiple Classified Advertisements," advertisement for the McDowell Dress Cutting Academy, *Daily Inter Ocean*, Dec. 17, 1893, 20.

^{236. &}quot;Multiple Classified Advertisements," *Daily Inter Ocean*, Feb. 11, 1894, 19, Nineteenth Century U.S. Newspapers, Gale Primary Sources.

Agents Wanted

Schools for dress cutting and pattern drafting systems were not the only ones teaching women. In an advertisement in the 1881 St. Louis Globe-Democrat, Mrs. Buck advertised "wanted- ladies, seamstresses and all who wish to learn the only perfect system of measurement in fitting garments."²³⁷ While listing positives of the system, the advertisement claims that the fit of garments can be accomplished without change of seams. This refers to adjusting the seams post patterning/garment creation. This means that ladies learning this system would not have to adjust seams because the measurements are so accurate according to the advertisement's claims. The advertisement ended by stating that agents were wanted. Unlike most of the other advertisements, this one does not specify which "perfect system of measurement" would be taught. It also implies that women who learned to use it could not only perfectly fit garments but also had the potential to turn it into a source of income as an agent selling the systems. This reveals that it was not just larger schools teaching women to use the systems, but also agents who had potentially learned to use the systems from a school, the company, or another agent. Advertisements such as these were just one more way to spread the word about the systems and how women could acquire and learn to use one, whether they chose to go through an agent or a school.

> W ANTED-Ladies, seamstresses and all who wish to learn the only perfect system of measurement in fitting garments of all sizes and styles, without change of seam, or who wish patterns that will fit any form perfectly. Call on Mrs. Buck, 814 Washington ave. Agents wanted.

Figure 35: Multiple Classified Advertisements." *St. Louis Globe-Democrat* 6, no. 293 (April 10, 1881). Nineteenth Century US Newspapers.

^{237. &}quot;Multiple Classified Advertisements," *St. Louis Globe-Democrat* 6, no. 293 (April 10, 1881), Nineteenth Century U.S. Newspapers.

In an 1887 *St. Louis Globe-Democrat*, an advertisement was placed by an agent for her work stating, "dressmaking- Madame Montgomery, agent for Buddington's new tailor machines; system taught and machines for sale."²³⁸ She was teaching dressmaking with, and selling, the Buddington System, which was previously shown in comparison to the McDowell System (in the artifact analysis). She would have been trained to use the system and now had a potential income by training women and selling a pattern drafting system. Women were becoming agents for these systems; it was not just something advertised and written on the systems.

Classified Advertisements: Dressmaker for Hire

The classified advertisements show that pattern drafting systems had the potential to make money for more than just the creators. Whether women became agents, teachers, or dressmakers using one of the systems, there was the possibility of creating an income. Schools were even created to teach dressmaking with pattern drafting systems. The systems changed more than just the home sewers and dressmakers who used them.

Professional Dressmaking by Use of Pattern Drafting Systems

The classified section of these newspapers included advertisements for dressmakers seeking work and those looking to hire. These were advertised by the dressmaker/seamstress with the goal of the advertisement being viewed by someone looking to hire. Some of the advertisements specifically include which system they planned to use as part of their work.

^{238. &}quot;Multiple Classified Advertisements," *St. Louis Globe-Democrat*, Jan. 1, 1887, Nineteenth Century U.S. Newspapers.



Figure 36: "Multiple Classified Advertisements." *Daily Inter Ocean*, Sept. 17, 1893, 19. 19th Century US Newspapers.

Through an analysis of the newspaper advertisements, some interesting advertisements were found including one which advertised, "situation wanted-10 years' experience, dressmaker with McDowell System would like week work at reasonable wages in good family."²³⁹ This advertisement came from the newspaper *Daily Inter* Ocean on September 17, 1893. The amount the dressmaker was willing to be paid is not included; however, it should be noted that the dressmaker who placed this advertisement mentioned her experience with the McDowell System. This leads to more questions about the advertisement of work using a drafting system and why a dressmaker would place this type of classified advertisement. According to Wendy Gamber, dressmakers at the time were concerned about the younger dressmakers coming in and learning to use pattern drafting systems instead of undergoing the traditional apprenticeship and working their way up through the dressmaker's shop.²⁴⁰ This makes the purposeful inclusion of the McDowell System in a personal advertisement an example of their use and is intriguing when compared to the McDowell advertisement encouraging women to show the system to their dressmaker (description and image included in a later section about the 1895 *Delineator*). This was also not the only advertisement from a dressmaker in search of work utilizing a pattern drafting system.

^{239. &}quot;Multiple Classified Advertisements," *Daily Inter Ocean*, Sept. 17, 1893, 19, 19th Century U.S. Newspapers.

^{240.} Gamber, "Reduced to Science": 463, 474.

Another advertisement also appeared for a dressmaker, Mrs. Lewis, who used the McDowell System. On this occasion the advertisement offered herself as a "stylish dressmaker: perfect fit guaranteed: prices reasonable: from Denver: McDowell System."²⁴¹ Once again, she did not include the cost other than claiming it to be reasonable; however, she did advertise her use of the McDowell System. Mrs. Lewis was just one of the dressmakers advertising their work on patterning systems, which can be seen in multiple newspapers including the Portland Oregonian, Daily Inter Ocean, St. Louis Globe-Democrat, and Milwaukee Daily Sentinel. The classifieds in the Daily Inter Ocean of February 1, 1894 included an advertisement under the category of dressmakers that reads, "situation wanted- by first class dressmaker by the day in private family: McDowell System."²⁴² In this case an unnamed woman once again is looking for a job as a dressmaker and lists the McDowell System as part of her qualifications. This differs from the dressmaker advertisement mentioned previously, which reads "situation wantedfirst class dressmaker with large experience wishes position as cutter or to take charge in city or town."²⁴³ This advertisement implies that she is looking to work within a shop either as a cutter, who held the highest position in the dressmaker's hierarchy, or as the person taking charge of the dressmaker's shop. These examples show there were a variety of positions available both inside a dressmaker's shop and within homes for a skilled person.

^{241. &}quot;Multiple Classified Advertisements," *Portland Oregonian (Oregon Territory)* 33, no. 10 (May 3, 1893): 558, Nineteenth Century U.S. Newspapers.

^{242. &}quot;Multiple Classified Advertisements," *Daily Inter Ocean*, Feb. 1, 1894, 11, Nineteenth Century U.S. Newspapers.

^{243. &}quot;Multiple Classified Advertisements," *Daily Inter Ocean*, Feb. 1, 1894, 11, Nineteenth Century U.S. Newspapers.

Seeking Dressmakers/Seamstresses through Classified Advertisements

In an 1887 *St. Louis Globe-Democrat*, this same trend can be studied with an advertisement that branches more toward the sphere of domestic service. The purpose of these advertisements was to fine and hire someone meeting the requirements. The advertisement reads, "wanted- ladies maid and seamstress; must be competent and obliging . . . full wages for a competent person."²⁴⁴ In this case a family is looking to hire someone to fill two roles. This also leaves room for patterning systems and dressmakers (without training through a traditional apprenticeship) to enter the domestic sphere through work within an employer's home as opposed to working inside their own home. In this same set of classified advertisements, two people are seeking dressmakers to employ. One sought a dressmaker for "out of town opportunities" and the other for work with a "suburban family."²⁴⁵ Advertisements for dressmakers using the McDowell System are used to find work for themselves, but someone with dressmaking experience could search through the same advertisements and find work as a dressmaker.

Dress Cutting Schools' Association with Pattern Drafting Systems

Pattern drafting systems were also advertised via their association with dress cutting schools. The purpose of these schools was to teach using one of the systems and thus increase awareness, train agents, and continue encouraging people to use *their* pattern drafting system. They were advertised to both people wanting to learn how to use the system and those wanting to create income (either as dressmakers or agents selling the systems). It should also be acknowledged that these dressmaking schools were

^{244. &}quot;Multiple Classified Advertisements," *St. Louis Globe-Democrat*, Jan. 1, 1887, Nineteenth Century U.S. Newspapers.

^{245. &}quot;Multiple Classified Advertisements," *Daily Inter Ocean*, Feb. 1, 1894, 11, Nineteenth Century U.S. Newspapers.

teaching dressmaking using a pattern drafting system at a time when professional dressmakers had concerns about these systems undermining the traditional apprentice model within the dressmaking shops. These training schools, as per the claims in their advertisements about income potential and skill proficiency, had the ability to teach dressmaking to a level that may have otherwise required more formal training in the craft.

An advertisement found in the *Milwaukee Daily Sentinel* from July 20, 1895 claimed "ladies with some knowledge of sewing can make good wages by calling at the World's Fair Premium Tailor System Cutting School."²⁴⁶ The cutting school was associated with the Van Dame World's Fair Premium Tailor System used in the object analysis as well as the reproduction for this research. This is the only advertisement located in this research pertaining to the Van Dame System, but it was certainly not the only advertisement for dressmaking schools based on an individual pattern drafting system.

> LADIES with some knowledge of sewing can make good wages by calling at the World Fair Premiere Taylor System Cutting school, 310 Grand avenue.

Figure 37: "Multiple Classified Advertisements." *Milwaukee Daily Sentinel*, July 20, 1895, 7.

Multiple newspaper advertisements were found for other dress cutting schools. The *Milwaukee Daily Sentinel* of March 25, 1894 contained two advertisements, one for Madame Kellogg's School of Dress Cutting using the Madame Kellogg French Tailoring System and another for the McDowell French Dress Cutting School located in Madame Mulkern's (a school of dress cutting according to another advertisement). The Kellogg

^{246. &}quot;Multiple Classified Advertisements," Milwaukee Daily Sentinel, July 20, 1895, 7.

advertisement claims that the system has received awards and is the "easiest to learn and most accurate in results of any method."²⁴⁷ The McDowell advertisement also boasts the awards received and claims that it has "never been defeated in any contest" and "when getting a system why not get the best."²⁴⁸ In both cases, a drafting system was paired with a dressmaking school where it could be taught. These two advertisements focused more on the systems themselves than the school. In the case of the McDowell School, it was not necessarily its own building because it was within Madame Mulkern's, yet it was referenced as the McDowell French Dress Cutting School. A similar set of advertisements for the McDowell Garment Drafting Machine at Madame Mulkern's New School of Dress Cutting and Madame Kellogg's School of Dress Cutting were printed February 4 and March 10 of the same year.²⁴⁹ Schools were not only paying to have the advertisements printed once but repeated opportunities for the readers to see and purchase a pattern drafting system or attend a school to learn to use one.

A similar trend can be found in the *Daily Inter Ocean* for the Jackson's Chicago Tailoring Institute and French Dressmaking School. The same advertisement appears October 27, November 10, November 24, December 1, and again on January 5, 1895. This advertisement boasts that the school "teaches the world's fair prize winner: only system used by leading houses and successful cutters: patterns cut perfect: fit guaranteed."²⁵⁰ It is not evident whether this school teaches using a Jackson System. In a

^{247. &}quot;Multiple Classified Advertisements," *Milwaukee Daily Sentinel*, Mar. 25, 1894, 14, Nineteenth Century U. S. Newspapers, Gale Primary Sources.

^{248. &}quot;Multiple Classified Advertisements," *Milwaukee Daily Sentinel*, Mar. 25, 1894, 14, Nineteenth Century U. S. Newspapers, Gale Primary Sources.

different advertisement for the Chicago Tailoring Institute, it makes it clear that the Jackson's Tailor System is used "by more leading houses, ladies tailors and high class dressmakers" and is "EASY TO LEARN, RAPID TO USE."²⁵¹ Not only does this advertisement mimic that of the McDowell System in its claim to be "easy to learn. Rapid to use," but it is also pointing out that fashion houses and professionals are using this specific system to create their clothing. This advertisement specifically appears to be focused on people looking to increase their skill and income as opposed to just women sewing for their own household. These advertisements appear to be frequent and reoccurring. Similar to other advertisements, they list the positive attributes and the success from learning to use the pattern drafting system that they teach with; however, as usual, no cost to attend the school or acquire the system is included. With all of the advertisements for the different dress cutting schools, it is clear that many of the systems had a school associated with them. At a minimum, there would be a location that taught dress cutting using the system, even if it was not specific to it.

Additional Newspaper Advertisements Specific to the McDowell System

Although the pattern drafting systems were available and used professionally, they did not spread to home sewers simply through word of mouth. There was an abundance of advertisements placed in newspapers for pattern drafting systems, in particular the McDowell System. More advertisements were located in this research for the McDowell System than any other.

^{1895): 19,} Nineteenth Century U.S. Newspapers, "Multiple Classified Advertisements," *Daily Inter Ocean* 24, no. 245 (Nov. 24, 1895): 17, Nineteenth Century U.S. Newspapers, and "Multiple Classified Advertisements," *Daily Inter Ocean* 24, no. 252 (Dec. 1, 1895): 19, Nineteenth Century U.S. Newspapers. 251. "Multiple Classified Advertisements," *Daily Inter Ocean* 24, no. 35 (Apr. 28, 1895): 27, Nineteenth Century U.S. Newspapers, Gale Primary Sources.

The McDowell System as a Dressmaking Technology

An 1890 advertisement included in the *Daughters of America* claimed that with the help of the McDowell Garment Drafting Machine, "Dressmaking [Is] Simplified. Any lady can now learn to cut perfect-fitting dresses" because it is "Easy to Learn. Rapid to Use. Follows Every Fashion" and "All first class dressmakers are adopting this wonderful garment drafting machine."²⁵² The advertisement also claimed that it was "the only improvement on the Tailor Square ever invented" and encouraged women not only to test it out in their own homes for a thirty-day trial but also to show the advertisement to their dressmakers because this new technology was exactly what they had "always wanted."²⁵³ This advertisement also includes an image of the four-piece set with the front, side front, side back, and back pieces, which causes it to stand out on a page filled with words.

Just one year later, another advertisement for the McDowell System can be found in the *Daughters of America* with the same image and slogan across the top stating, "any lady can now learn to cut perfect fitting dresses," as well as flagging the same thirty-day trial.²⁵⁴ The claims of this advertisement differ from others in stating, "no one using a chart or square can compete with the McDowell Garment Drafting System in cutting stylish, graceful and perfect fitting garments" and that it is "an invention as useful as the sewing machine."²⁵⁵ The most striking difference between this and the earlier advertisement is its comparison to other textile technologies such as the tailor square and the sewing machine. The comparison in this advertisement positions the McDowell

^{252.} Daughters of America 4, no. 5 (1890).

^{253.} Daughters of America 4, no. 5 (1890).

^{254. &}quot;Multiple Classified Advertisements," *Daughters of America* 5, no. 11 (1891): 5, Nineteenth Century Collections Online,

http://link.gale.com/apps/doc/LMXISD057037736/GDCS?u=linc74325&sid=zotero&xid=b38525bc. 255. *Daughters of America* 5, no. 11 (1891): 5.

System as revolutionary technology and life changing for both home sewers and the sewing industry, which is a fairly substantial claim. As listed in ProQuest, the full name of the periodical is *Daughters of America Lives Full of Usefulness Are Worthy of Renown and Imitation*.²⁵⁶ This newspaper was printed monthly in Augusta, Maine from 1886–1894.²⁵⁷ The term *usefulness* is especially indicative of the content with advertisements about homemaking, childcare, cooking, and medicines surrounding the advertisements for the McDowell System.

The World's Fair

Another advertisement from 1894 listed in the Milwaukee Daily Sentinel contains

no images and simply reads:

The celebrated McDowell Garment Drafting Machine has never been defeated in any contest. Always leads, receiving eight premiums and two highest awards at the World's Fair Columbian Exposition. It was proven and officially acknowledged that of all methods of dress cutting the McDowell Drafting Machine was the most rapid, the most stylish, the most simple, the most complete and the only correct method, as there was positively no refitting in any of the test garments cut by this method. When getting a system why not get the best.²⁵⁸

This advertisement also mentioned that the McDowell French Dress Cutting School had

just opened up in Milwaukee. This is an interesting juxtaposition that can be seen in

multiple advertisements that place information about a school, named for teaching with

the McDowell System, alongside an advertisement for the system itself. This

com.libproxy.unl.edu/ps/aboutJournal.do?contentModuleId=NCCO-

8&resultClickType=AboutThisPublication&actionString=DO_DISPLAY_ABOUT_PAGE&searchType= AdvancedSearchForm&docId=GALE%7C5FWD&userGroupName=linc74325&inPS=true&rcDocId=GA LE%7CQLCQFN125647179&prodId=GDCS&pubDate=118871200.

^{256.} Gale Primary Sources, https://go-gale-

^{257. &}quot;Daughters of America (Augusta, Me.) 1886–1894," The Library of Congress,

https://www.loc.gov/item/sn93099996/.

^{258. &}quot;Multiple Classified Advertisements," *Milwaukee Daily Sentinel*, Apr. 1, 1894, 15, Nineteenth Century U.S. Newspapers, https://link-gale-

com.libproxyunl.edu/apps/doc/GT3017370936/GDCS?u=linc74325&sid=GDCS&xid=a406dbed.

advertisement also foregrounds the World's Fair Columbian Exposition, which was an event where people would have encountered a host of innovations. By including this information in the advertisement, the manufacturer is attempting to gain added credibility with the reader. The visibility and success of being part of an international event like a World's Fair added a sense of popularity for the McDowell Pattern Drafting System.

Similarly, one advertisement from the *Daily Inter Ocean* boasted of the success enjoyed by the McDowell System at the World's Fair Columbian Exposition, adding, "The McDowell Co. is known from Maine to California as the largest and most reliable firm in this line," and the "McDowell System is the only one used in the best establishments."²⁵⁹ This promotes its seeming popularity as well as allowing the school to share in the accomplishments of the McDowell System. Interestingly, and somewhat contradictorily, the system was advertised as something that was "easy to learn" while simultaneously indicating its use within dress cutting schools as though more training might be required.

World's Fairs and Expositions: Product Promotion

Despite the contradiction inherent in the ad, the use of World's Fairs and Expositions as a promotional tool was wise given the reach and popularity of these international events. For example, the Chicago World's Fair, also known as the World's Colombian Exposition, cost \$28 million to stage but only cost 25–50 cents per person to attend.²⁶⁰ Relative affordability combined with grandiose spectacle meant that by the end of its six month run, 27.5 million people had attended.²⁶¹ World's fairs were important

^{259.} Daily Inter Ocean, Feb. 11, 1894.

^{260.} Bolton and Laing, 93-99, 106.

^{261.} Norm Bolton and Christine Laing, *The World's Columbian Exposition: The Chicago World's Fair of 1893* (Chicago: University of Illinois Press, 2002), 20.

social events, places to see and be seen, but also educational, places to expand and demonstrate one's knowledge of the world. ²⁶²

According to Rydell, Findling, and Pelle, World's Fairs brought ordinary Americans to a place where they encountered objects and artifacts, both natural and manmade, to which they had heretofore never been exposed.²⁶³ The fairs displayed everything from agricultural products to machinery to manufactured goods. In addition, "nearly every American university" set up displays of curricula, teachers' manuals, and faculty profiles. Attendees were exposed to new technologies and even able to purchase new products, such as pattern drafting systems, like the Van Dame System. One attendee of the Columbian Exposition recalled seeing several dress-cutting systems included alongside ironing boards and a self-serving table in the Women's Building.²⁶⁴ Thus, drafting systems were on display among some of the greatest technologies of the time, like electricity, an early kinetoscope, electric irons, electric lights, streetcars, and elevators.²⁶⁵

Besides large scale international fair's like the Columbian Exposition there were smaller scale fairs, like the *Greater American Exposition* in Omaha²⁶⁶ which according to the *Omaha Bee*, was designed to show: "Products, industries and civilization of the United States of America, and particularly to illustrate the products, development and resources of Cuba, Puerto Rico, Hawaii and the Philippine Islands, and the manners,

^{262.} Rydell, Findling, and Pelle, 1–10.

^{263.} Robert W. Rydell, John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs In the United States* (Washington D.C.: Smithsonian Institution Press, 2000), 4–10.

^{264.} The Waukesha Freeman, Aug. 3, 1893.

^{265.} Julian Ralph, "Harper's Chicago and the World's Fair: The Chapters on the Exposition Being Collated from Official Sources and Approved by the Department of Publicity and Promotion of the World's Columbian Exposition," *Harper and Brothers* x, no. 109 (January 1893): 196–97.

^{266.} Courtney L. Cope Ziska, "Omaha, Nebraska's Costly Signaling at the Trans-Mississippi and International Exposition of 1898," *University of Nebraska-Lincoln*, 2012, 57.

habits and industrial capacity of the people of these Islands, and also such exhibits as may be provided by the United States, or any state or foreign country.²⁶⁷ The exposition was meant to have "novel and attractive exhibits of the material resources, products, industries, manufactures, architecture art, types of native peoples and illustrations of the present state of civilization²⁶⁸ and was to remain open from July 1 through November 1. The Greater America Exposition was by all accounts a failure, with neither the infrastructure nor community support required.²⁶⁹ Even though the *Greater America Exposition* was not a financial success, it was still a prominent venue for J.R. Van Dame and Co. to display its successful pattern drafting system and subsequently feature its appearance at the fair on the cover of the *Instruction Book and Dressmaker's Journal* for the World's Fair Premium Tailor System as a credible endorsement of the systems' innovation and quality.

Van Dame Instruction Book and Dressmakers' Journal

In addition to showing the World's Fair Premium Tailor System at the Chicago World's Fair and the Greater American Exposition in Omaha, Nebraska, Van Dame also found other marketing routes for his system, including an *Instruction Book and Dressmakers' Journal* created by J. R. Van Dame & Co. When it began publication is unknown, since this is the only example found during this study. This example, based on clothing illustrations on pages 24 and 25, was likely printed between approximately 1904 and 1907 which is past the timeframe for this study.²⁷⁰ However, it nonetheless includes

^{267. &}quot;Greater America Exposition at Omaha, July 1 to Nov. 1, 1899," The Bee, n.d..

^{268. &}quot;Guide to Greater America Exposition, July 1, 1899 to November 1, 1899", 3.

^{269.} Ziska, "Omaha," 57.

^{270.} Edwards, How to Read A Dress, 127 and O'Loughlin, Delineator (January 1904): 23.

valuable information, as it demonstrates that the Van Dame system was still a viable tool for home and professional dressmakers into the early 1900s.

The *Instruction Book and Dressmakers' Journal* itself would have been an invaluable, possibly indespensible, resource for using the Van Dame System. Not only does it include instructions for taking measurements, using the system, and making the basic patterns, but also images and instructions for how to create garments similar to the ones pictured in the book. This would include adjustments made to the more basic pattern created by the system alone. It is difficult to determine from the instruction book whether the pattern drafting system underwent any major modifications to acount for the changing styles of the early 20th century or if instructions were simply adjusted without changes to the system. However, *what did change* was the system's intended use, which included the additional claim, "every garment worn by men, women and children, may be drafted and cut" by use of the New World's Fair Premium Tailor System.²⁷¹ Somehow, the "new" update to this system allowed for the drafting of men's garments, a feature that was not present in the 1893 version. The manufacturer also renamed it the "New World's Fair

^{271.} J. R. Van Dame & Co., Instruction Book and Dressmakers' Journal.

Premium Tailor System". The first page of the book included claimed its success as an innovation and explained why people should use it, as follows:

Endorsed by leading dressmakers and ladies tailors everywhere. You cannot afford to be without it. More can be learned with it in a few hours then by months of study of other systems. Pays for itself in time and labor saved in one week. Used once, always used. Dressmakers given special terms for their apprentices. Easy to learn! Easy to operate!

We modestly, yet decidedly, challenge the world!

To advance finer, more scientific principles of garment cutting, by a method more practical, more easily taught and learned.

This result was obtained through the united efforts, study, investigation and experience of 15 of the leading ladies tailors of the United States, and the inventor,

J. R Van Dame.

This marvel of the age

Embodies ideas, measurements and theories never before advanced, absolutely

ensuring success!

Perfect forms, deformed and out of proportion figures alike, by intelligent drafting, are perfectly fitted and given graceful curves, thereby greatly improving the form. No progressive dressmaker can afford to be without this time saving invention!

The object of this invention is too relieve the user of all study and calculation, to save time and trouble when cutting and fitting, and to make artistic fitting a pleasure to all parties instead of a worry.

THE PROOF IS IN THE TRIAL, FREE.

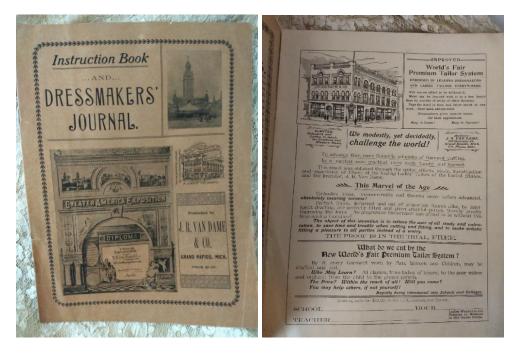


Figure 38 & 39: J. R. Van Dame & Co. *Instruction Book and Dressmakers' Journal* n. d. Images courtesy of Mary Ann Kennedy.



Figure 40 & 41: J. R. Van Dame & Co. *Instruction Book and Dressmakers' Journal*, n. d. Images courtesy of Mary Ann Kennedy.

The additional claims about the time saved in one week using the system, paying

for itself, and that "no progressive dressmaker can afford to be without this time saving

invention" implied that it was no longer just a system for the home sewer, but also the professional dressmaker.²⁷² Much like its competatiors, the Van Dame system claimed to be necessary for dressmakers' success. Moreover, they claimed that their system was, in fact, endorsed by dressmakers and tailors alike, and that special terms would be given to dressmakers' apprentices who wanted to purchase a system. Considering the hierarchy of the dressmakers' shops as well as fears about drafting systems potentially impinging upon dressmakers' skills, this claim complicates the discussion around dressmakers learning from and using these systems.²⁷³ These multiple claims also present this system as a time saving and modern technology more than merely a simple a sewing tool.

Dress Cutting Schools

There were also other advertisements pairing the McDowell System with a dress cutting school or academy. They frequently boast of the success and advantage of these systems in encouraging women not only to purchase the system but also learn to use it through their school. One final advertisement in the *Daily Inter Ocean* in 1895 for the McDowell French Dress Cutting Academy in New York and Chicago explains: "The growing popularity of the McDowell System made it necessary to add more space for school purposes. Another floor added. Pupils pouring in from every direction. Everything that pertains to dress cutting and dressmaking scientifically and systematically taught. No guesswork about it. There is no experiment about these. Those who take it learn to a certainty."²⁷⁴

^{272.} J. R. Van Dame & Co.

^{273.} Gamber, "Reduced to Science": 462, 467-68.

^{274. &}quot;Multiple Classified Advertisements," *Daily Inter Ocean*, Apr. 7, 1895, 29,

Nineteenth Century Collections Online,

http://link.gale.com/apps/doc/GT3013626502/GDCS?u=linc74325&sid=zotero&xid=e8111ba4.

It is difficult to say for sure whether these advertisements that paired the McDowell System with a dress cutting school were targeting the professional/aspiring professional dressmaker or the home sewer. It is clear, however, that all these advertisements boosted the success of pattern drafting technology in the usefulness it posed for women wanting to learn to sew their garments or considering using a system. It is important to note that none of the McDowell System advertisements discussed included the purchase price.

Advertisements specific to the McDowell School also appeared in other newspapers and periodicals, including the May 1, 1894 edition of the *Milwaukee Journal*, where they appeared twice. One explained that the McDowell School on Grand Avenue would teach anyone with a McDowell System for free. The second listed that the McDowell School was in search of "one waist trimmer and one apprentice girl to learn sewing."²⁷⁵ The waist trimmer would have presumably been trained in dressmaking. According to Wendy Gamber, the trimmer sat in the dressmaker's hierarchy with fitter, above apprentices and finishers.²⁷⁶ The term "trimmer" was more often associated with millinery and the step of trimming or decorating the hats, which would imply that a waist trimmer was conducting similar decorative steps on shirtwaists.²⁷⁷ This suggests that they were looking for people to work at the school and teach/demonstrate the ease of use of the system. The advertisement was searching for "one apprentice girl to learn sewing." According to the 1892 Webster's dictionary, "girl" refers to "a female child; young

^{275. &}quot;Multiple Classified Advertisements," *Milwaukee Journal*, May 1, 1894, 2, Nineteenth Century U.S. Newspapers.

^{276.} Gamber, The Female Economy, 14, 95.

^{277.} Gamber, 77-79.

woman," so this is potentially someone newly entering the field.²⁷⁸ If the girl was taught using a system, it would appear easier to use and learn if she had minimal prior experience.

The McDowell System was patented after many updates, improvements, and being advertised as a way to help women more accurately cut and fit their garments. As the McDowell System grew in popularity, advertisements surrounding it boasted of its incomparable accuracy and ease of use, as well as the creation of dress cutting schools solely relying on the McDowell System for their pupils. Compared to similar systems such as the Buddington System, the McDowell System was thought of highly and frequently advertised, and Kidwell, as well as others, positions the McDowell System as top of the line.²⁷⁹

Characterizations of Skill and Women's Labor

In her research, Gamber explains that articles and advertisements at times pushed against dressmakers' skills and perpetuated the concerns of some about dressmakers and a perceived lack of experience.²⁸⁰ She explained that there was concern over the deskilling of dressmakers by both dressmakers, who had followed the traditional hierarchy, and those seeking the work of a skilled dressmaker because of "amateurs who believed that their domestic skills qualified them for the marketplace."²⁸¹ The dressmaking trade was changing and no longer maintained the same requirements to be considered a dressmaker such as a long apprenticeship and slowly moving up the ranks of

- 279. Kidwell, Cutting a Fashionable Fit, 53, 63.
- 280. Gamber, The Female Economy, 467.

^{278.} Noah Webster, Webster's High School Dictionary; A Dictionary of the English Language with an Appendix (Springfield, Mass.: G. & C. Merriam Co., 1892), 212.

^{281.} Gamber, 128.

a dressmaker's shop. This change in ideas about who could become a dressmaker can be seen in a later advertisement for the Women's College of Scientific Dressmaking from 1905. The advertisement claims that women can "learn dressmaking at home by mail" and "earn \$15 to \$100 a week."²⁸² According to the advertisement: "Dressmakers are paid higher salaries than any other class of women. Some receive \$1000 for a single gown. Hundreds earn from \$50 to \$200 a week. These women had no greater ability than you have. What they have done, you can do. If you are a stenographer, bookkeeper, housekeeper, or even a dressmaker, we will teach you so that you can double your present income."²⁸³

Even after the turn of the twentieth century, dressmaking was advertised as something women could do at home to increase their income. It is hard to say how truthful this advertisement was for someone working as a paid dressmaker from home, however; according to Gamber, the average wage per week of dressmakers in 1880 was \$10.22 in Massachusetts and \$7.60 in other states.²⁸⁴ On average, \$7.00–10.00 is not the same as the \$50.00–200.00 listed in the advertisement. The claims of potential income alongside the classified advertisements for dressmakers working in homes or using a pattern drafting system do imply a shift in dressmaking outside of the shop or at least some desire for it.

Dressmaking was not just something learned by young girls for the purpose of income, but it was also to be used within the home. Sarah Gordon writes, "the first line of a sewing textbook from the 1890s reads, 'Girls: You have now become old enough to

^{282. &}quot;Multiple Classified Advertisements," *Madame* IV, no. 5 (Springfield Ohio, 1905): 345, Gale Primary Sources.

^{283. &}quot;Multiple Classified Advertisements," Madame IV, no. 5: 345.

^{284.} Gamber, The Female Economy, 77.

prepare for woman's duties; one of these is the art of sewing, which we will take up as simply as possible.²²⁸⁵ Society had an expectation that girls and women had some sewing ability to be used within the home. Even though the skills were not being taught, they were still viewed as important for women and traditional women's work/trades. If these specific skills were not taught in the home, then they had to be learned outside of it, which is when sewing courses and home economics taught in school began. If someone did not learn these skills in school, they could also be learned in dressmaking schools that taught using pattern drafting systems. Gordon explains that there were changes seen even in the textbooks from the 1890s as the lessons shifted from a focus on a woman's role within the household to the practical household items girls should begin making (1910s).²⁸⁶ This also perpetuated ideas of what was considered acceptable in terms of women's labor, and most of those skilled jobs were considered to be within the garment industry. Although the need for sewing garments decreases with more ready-made clothing becoming available as we approach the 1920s, women who did not have the skill still wanted their daughters to sew.²⁸⁷ The education began to switch from teaching sewing skills in the home to the school and outside sources. This also left room in a person's education for technology such as pattern drafting systems to become useful if they wanted to become a seamstress or dressmaker without prior training.

There are implications to the ads for both schools teaching dressmaking or pattern drafting as well as advertisements for specific systems. The implication is that that they are accessible to all whether that is income or skill driven. When looking at drafting

^{285.} Sarah Gordon, "When Mother Lets Us Sew': Girls, Sewing, and Femininity," in "Make it Yourself": Home Sewing, Gender, and Culture, 1890–1930 (New York: Columbia University Press, 2009), 47. 286. Gordon. 60.

^{287.} Gordon, 73-74.

systems specifically, the "skill" was materialized in the pattern drafting technology. This is important when looking at schools teaching dressmaking using a specific system, such as the McDowell System, because for schools to make money they still need to justify that some teaching has to take place to use the system instead of purchasing the technology outright. There is a contradiction between the schools implying that students need to be taught to use the systems and the advertisements claiming that they are easy to learn and use.

Other advertisements also spoke to the feelings people had about dressmakers, including one from January 1900 in *The New York Times* titled *Heard about Town*. This appears to be more of a gossip/hearsay column, but a man writes in about his wife's experience with a dressmaker shorting the fabric in the skirt that was ordered. He claims that the dress was shorted by a yard and a half from the fabric she had purchased. The husband also explains that his wife's friends say that it is common for fabric shorting to happen with dressmakers. Whether or not that is true, it still adds to the discussion of how dressmakers were perceived, and the article points to a lack of trust in dressmakers and their professionalism.

Audience

The advertisements were not centered around just one group of people or skill level. Some were targeted more towards the professional dressmaker, others towards the home sewer. Advertisements claimed that any lady could use them and some pushed for mothers to teach their daughters to use them. There were even drafting systems that were either printed had instruction manuals printed in languages other than English. Age, ability, knowledge, and language were all accounted for in one system or another. Under a column for female help wanted in the *Milwaukee Daily Sentinel*, an advertisement was looking for "girls- to learn the Merchant Tailor System of dress cutting the latest out. Dressmakers are especially invited."²⁸⁸ This advertisement also searched for girls to learn the system and would also accept dressmakers, although it does not specify their level of experience. Both advertisements searched for someone with a level of training and a girl who presumably would not have been trained in or used the system. The advertisement for the Merchant Tailor System specifically was searching for a girl to learn the system, not someone who used it.

In discussion regarding the ease of use that is implied in many of the drafting system advertisements, multiple advertisements specifically claim that children could use them. Two advertisements for the McDowell System in the 1894 *Milwaukee Daily Sentinel* stand out. The first reads, "girls make their dresses after learning the McDowell Standard System."²⁸⁹ This advertisement was placed for Madame Mulkern, who ran a school for dress cutting that used the McDowell System as seen in a previous advertisement. The second, also for Madame Mulkern, states, "mothers teach your daughters McDowell System of Garment Cutting: better than a legacy: investigate."²⁹⁰ These two advertisements are geared toward mothers who want their daughters to be proficient dressmakers or potentially bring in extra income through trade work. The advertisements were not placed by the McDowell Company, but instead by Madame Mulkern, who would have been profiting from teaching the girls.

^{288. &}quot;Multiple Classified Advertisements," *Milwaukee Daily Sentinel*, Mar. 10, 1894, 7, Nineteenth Century U. S. Newspapers, Gale Primary Sources.

^{289. &}quot;Multiple Classified Advertisements," *Milwaukee Daily Sentinel*, May 2, 1894, 7, Nineteenth Century U. S. Newspapers, Gale Primary Sources.

^{290. &}quot;Multiple Classified Advertisements," *Milwaukee Daily Sentinel*, May 2, 1894, 7, Nineteenth Century U. S. Newspapers, Gale Primary Sources.

Overall, whether directed at selling something or looking for work/hire, the classified advertisements give a glimpse into the potential for sales/income surrounding these pattern drafting systems. These were paid-for advertisements targeting a transaction of some kind, whether through a sale, hire, or student for a school. The varied use of these systems also becomes apparent. There are advertisements for schools and teachers specifically teaching dressmaking with one of the systems. Other advertisements are for the systems themselves or agents selling them. The most surprising are the advertisements specifically placed by dressmakers/seamstresses who are seeking work admittedly using one of the systems. If it was entirely seen as a negative to perform dressmaking professionally with the aid of a drafting system, they would not have been paying to advertise that they would be using a specific one if they were hired in a dressmaking capacity. Unlike the other types of advertisements, the ones for women seeking employment were unique to the newspapers and not included in periodicals. There is diversification in the types of classified advertisements surrounding these systems as well as who placed them and what they hoped to gain.

Linguistic Diversity in Advertising

According to DeVaults research, in 1880, 64 percent of Black, native-born women, 29.6 percent of White, native-born women, and 65.8 percent of single, foreignborn women in the United States entered the labor force, not just the textile industry.²⁹¹ The census reported that 14.8 percent of the total population in 1890 was composed of foreign-born immigrants.²⁹² The total US population in 1890 according to the US Census

^{291.} DeVault, "Family Wages": 7.

^{292.} U.S. Census Bureau, "Historical Census Statistics on the Foreign Born Population: 1850–1990," The United States Census Bureau, February 23, 2017, https://www.census.gov/library/working-papers/1999/demo/POP-twps0029.html.

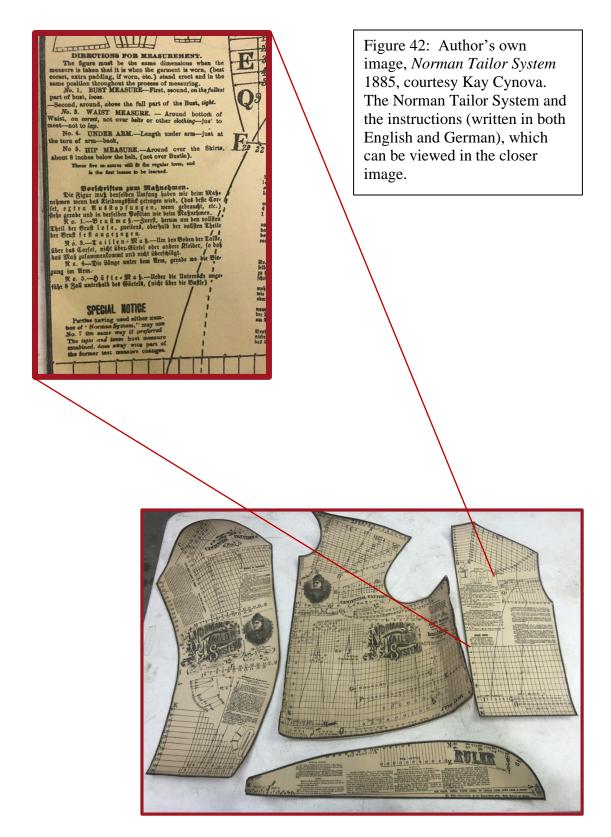
was 62,622,250 people.²⁹³ This shows that targeting advertisements to immigrants and those who did not use English as their first/primary language would benefit a large number of individuals.

The inclusion of more than one language can be seen in comparison with the Norman Tailor System, Figure 42, which included both German and English instructions. Alternate languages were not as commonly included for other systems such as the Van Dame System, which is used for the object analysis of this research as well as reproduction and is only written in English.²⁹⁴ As previously discussed in the artifact analysis, the W. R. William Perfection Tailor System also had a connection to non-English speakers. Although the instructions directly on the system are English, the Perfection Tailor System came with instructions in either English, German, or French (French was not yet included in the 1886 instruction manual). The company here decided to completely reprint its instructions in two other languages to accommodate a language barrier for potential users. It is not a coincidence that non-English speakers were being advertised to for magazines and had patterning systems available in their own language. One of the McDowell System Dressmaking schools took yet another approach to this as shown in the later content visual analysis. The classified advertisement, published in the *Daily Inter Ocean* of December 17, 1893, reported that students had the opportunity to learn from French, German, and English teachers at their school.²⁹⁵ These schools would have provided a hands-on opportunity to learn how to use the McDowell System in dressmaking. Another important part to consider is that not all dressmakers were native-

^{293.} U.S. Census Bureau.

^{294. &}quot;Norman Tailor System," 1885, courtesy of Kay Cynova and "Van Dame World's Fair Premium Tailor System" courtesy of Marna Davis. 295. *Daily Inter Ocean*, Dec 17, 1893, 20.

born English speakers, so advertisements and systems such as these would likely appeal to those professionals within the textile industry. More information about the linguistic diversity in advertising and pattern drafting systems is included later in the conclusion and suggestions for farther research.



Historical Reproduction Using the Van Dame System

The J. R Van Dame World's Fair Premium Tailors System from the 1890s was selected for the garment reproduction for two main reasons: access and year. Permission was given by the owner of this system for it to be used for reproduction purposes in this research. This system also fit the requirement of being from the 1890s, which was important because the measurement needed to be taken over the proper undergarments and I already owned a corset and petticoats made in an 1890s style. Hilary Davidson points out that through reconstruction of historical clothing we can better understand how and why clothing was made the way it was.²⁹⁶ This is a step toward answering the question of: how user friendly are pattern drafting systems? This section also works toward Prown's category of experience, as previously discussed, by reproducing a garment using the Van Dame System.²⁹⁷ The Van Dame System was also analyzed through both the artifact and content/visual analyses.

It should be noted that I have spent the past 7 years working as a Historical Interpreter, sewing and wearing 1890s clothing as part of my daily routine within that job. I am used to the way the garments should fit, move and function throughout a day regardless of the typical 1890s task that is being accomplished. I have also been sewing since the age of seven. I have however only ever used the *National Garment Cutter* as a means to draft patterns. I have no formalized training in pattern making and had never previously used a hybrid system.

^{296.} Davidson, "The Embodied Turn": 329-31.

^{297.} Prown, "Mind in Matter": and Flemming, "Artifact Study": 1-19.

Analysis

The following steps are based on corseted measurements using an 1890s reproduction corded corset:

Hips 37

Waist 26.5

Bust 34

Supplies used: Van Dame World's Fair Premium Tailor System, pencil, paper, measuring tape, basic ruler (for adding seam allowance), muslin fabric, thread, scissors, and a sewing machine.



Figures 43 and 44: Author's own images, *Van Dame World's Fair Premium Tailor System* courtesy of Marna Davis. Left to right: Bodice front, side front, side back, back.

To begin the process of reproducing a bodice mock-up using the Van Dame Pattern Drafting System, the pieces were adjusted to my corseted measurements (over an 1890s corset). Some of the measurements that were required were quite specific and left me with questions about how they were supposed to be taken. While patterning the first mock-up, I did not have access to instructions for the Van Dame World's Fair Premium Taylor System aside from those included on the individual pattern pieces. At a later time, I was able to get the instructions that came with another Van Dame System, but the first mock-up was completed without reviewing them to evaluate the pitfalls of purchasing the pattern drafting system for \$10 without the instructions compared to \$20.00 with instructions.



Figure 45 and 46: Author's own images, *Van Dame World's Fair Premium Tailor System* courtesy of Marna Davis. Left to right: Bodice front form, drafted bodice front pattern.

The first piece drafted was the front bodice. Immediately, it was apparent that the armscye would be problematic. As can be seen looking at the pattern piece shown in figure 45, the front of the armscye was not curved enough, but the system alone did not clarify how to make the curve and did not have the points for marking in a place to guide the curve. This is something that will need to be adjusted for either in the next pattern

adjustment or mock-up. The front bodice and neckline were easy to draft. I marked and extended past the waistline to fall over the hips based on the side pieces, which included hip instructions. I chose to make an adjustment to extend the length because I needed a final pattern that went below the waist, given the bodice would need to be tucked into a skirt that sits directly on the waist. Another complication with this piece was deciding how to draft the side of the front piece (figure 50). After closer examination of the side, it was clear that although the adjustable piece was straight, the main cardboard cutout had a curve to it. The problem appeared to be that the adjustable piece, which slides in and out for the bust and waist measurements, does not slide in far enough to trace the curve that is shown on the edge of the upper layer of cardboard, as can be seen in figure 50. Because of this, the curve had to be added in by measuring and marking the different points and later smoothing out the curve as close as possible.

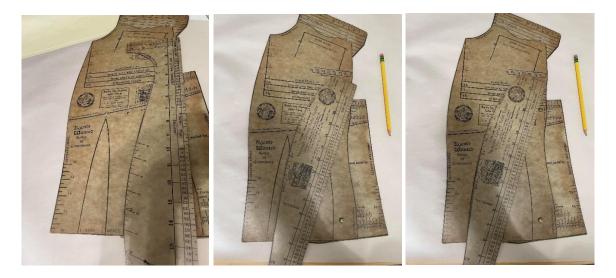


Figure 47, 48 and 49: Author's own images, *Van Dame World's Fair Premium Tailor System* courtesy of Marna Davis. Left to right: curve of rightmost dart, the next two are images finding the curve placement for the leftmost dart.

The system for the front bodice piece also included the darts, which were not cut out, but had a perforation at the top point of the dart, and the sides needed to be drafted. The curve that was included in the set matched up at different points for both darts and was then used to transfer the dart curve onto the drafted pattern.

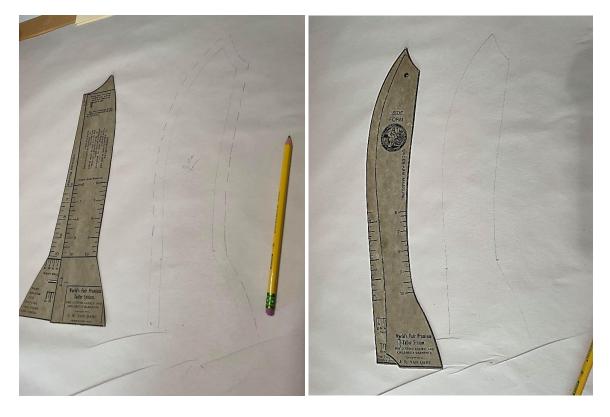


Figure 50 & 51: Author's own images, *Van Dame World's Fair Premium Tailor System* courtesy of Marna Davis. Drafting of the side front and side back forms.

The two side pieces were the easiest to draft. They only required a few measurements—the bust, under-arm, and waist—and had instructions for how to shift the pieces to add the hip spring below the waist. Every piece needed to have the seam allowance added. A half-inch seam allowance was added to the outside of the front, back, and both side pieces. The pattern did state that a seam allowance was included or give instructions to add it, but it is my personal preference to already add seam allowance to every pattern instead of adding it while cutting out the fabric.

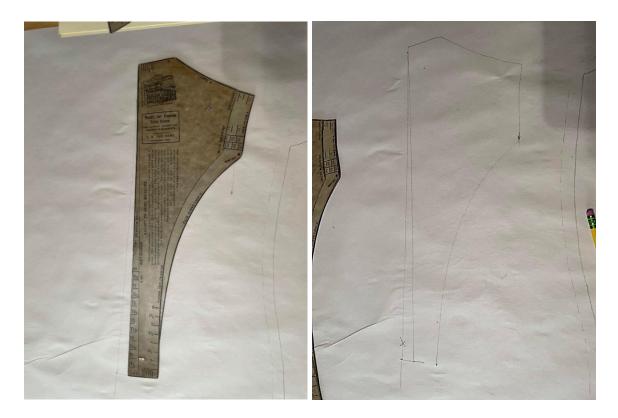


Figure 52 & 53: Author's own images, Van Dame World's Fair Premium Tailor System courtesy of Marna Davis. Drafting of the back pattern piece.

The back piece was the most complicated to complete, although it included the best instructions. It was more complicated because unlike the side pieces, one cannot simply adjust it to the measurements, place it on the paper, and trace it. Instead, the pattern had to be traced and shifted to create the next set of lines. In following the instructions given, the back pattern piece had to be shifted four times to draft the pattern. For instance, the first step is to draw the starting line, which can be seen in figure 53 with the x. This line in the seventh step was no longer needed because the waistline and sewing line had been marked. Once the sewing line for the back seam was drawn, the starting line no longer served a purpose. The directions were greatly helpful for this step and crucial to its success. As someone who has previously drafted 1890s garments using the National Garment Cutter, a proportional system, which uses a set of rulers and only requires the bust measurement, I found this system to be harder to learn. [I could have drafted an entire outfit using the National Garment Cutter in less time (because I am already familiar with it) than it took me to learn this one without the instructions.] I am not a professional dressmaker, so the directions would have likely answered many of the questions and removed much of the guesswork. The front piece was the most difficult because it had the least amount of instructions and required the largest number of measurements.



Mock-Up Number 1



Figure 54: Van Dame Pattern Mockup 1,

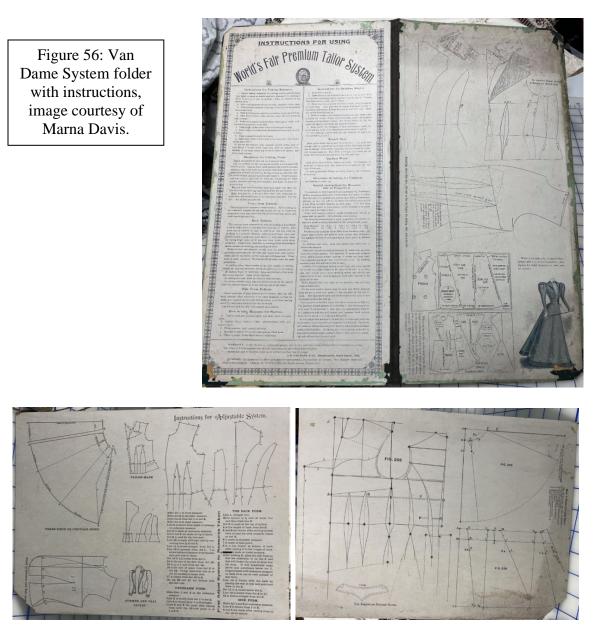
Figure 55: Van Dame Pattern Mockup 1,

Front view.

Back view.

Images of the first mock-up shown in figures 75 and 76 were composed of two of the following pieces: front, side front, side back, and back pieces. Using a half-inch seam allowance, they were sewn together beginning with the two back pieces followed by the side back, side front, and finally front pieces (after the darts were sewn). This mock-up was completed using only the instructions written on the pattern pieces, which the user would have acquired for \$10. No additional instructions were used or read prior to its completion. This mock-up had a few fit issues, some of which I later discovered were from measurement discrepancies that were explained in the instructions I did not have access to at this point. The reader should keep in mind that if this was a finished garment there would also be a collar and sleeves, which would take in some of the fabric from those places. This is because when adding these pieces one would be sewing on the seamline, which is half an inch in from the edges. Additionally, the front of this mock-up was pinned, but in a final garment either a button placket or additional length on the center edge of the front pieces would be added to the pattern to account for a closure. This item was constructed as the most basic pattern to check fit.

The biggest problems with the first mock-up include the waist sitting too high above the waist point on the corset, the darts not extending high enough, the armscyes being too tight, shoulders being too long, and excessive width across the chest. To fix this pattern, the waist would need to be lengthened and the highest point of the darts raised. Once the waistline is lowered, it would also decrease the wrinkling and pulling on the rib cage. To fix the chest and shoulder, the armscye would need to be cut in more and lowered slightly below the arm. As for the back, it fit well at the top and just needed the waist to sit a bit lower, the same as the other pieces. Overall, this mock-up fit better than expected considering how difficult it was to pattern.



Mock-Up Number 2

Figures 57 & 58: Van Dame System additional instructions, images courtesy of Marna

Davis.

For the second mock-up I was able to access the instructions. The Van Dame System plus instructions would have cost the user \$20, twice as much as the pattern alone. Unsurprisingly, they were very helpful. I completely recalculated the measurements using their instructions for taking them and realized that a couple of the measurements needed to be adjusted according to the directions. I then proceeded to redraft each pattern piece, closely following the step-by-step instructions. This process went *much* faster having not only the knowledge from using the system once before, but the additional help from the instructions. Just like before, I still chose to extend the front and back pieces down past the waist to match the length of the two side pieces (which was not mentioned in the instructions) as well as adding the ½" seam allowance to the pattern pieces.



Figure 59: Van Dame Pattern Mockup 1,



Figure 60: Van Dame Pattern Mockup 1,

Front view.

Back view.

The second mock-up is not perfect, but it fit much better. The waist and bust point of the darts now hit in the right place. The back and front now sit smoother over the corset, and the shoulders would be in the correct place if sleeves were added. There are still some puckers, some of which are from pinning the front, which is curved instead of adding a placket or extending the pattern for buttons. There are also still some wrinkles caused by the armscye still sitting slightly forward in the back and high under the arm. Overall, the shape and fit were much improved on the second mock-up, considering it was only the second time I have ever used the Van Dame System to draft a pattern.

The choice to include a 1/2" seam allowance directly to the pattern instead of while cutting out the muslin mock-up was partly owing to preference to work with a finished pattern with seam allowances. When patterning, the seams are added to final/completed patterns; for mock-ups the seam allowance is added while cutting the muslin.²⁹⁸ The patterns I made using the Van Dame System made a completed base pattern for the simplest possible garment. I could use the pattern as is if I desired a basic, fitted bodice without modification. If I was using this to pattern my clothing I would end up adjusting it to add fullness, combine seams, add a yolk or button placket, and so on to match the style I was trying to create. All of that would require adjusting this pattern. Part of the freedom that comes with a pattern, such as this is, is that once one makes the pattern the first time it can be copied and adjusted to create multiple styles at a later time. In terms of patterning, this means that it is not technically the *final pattern* because it can be adjusted into the final desired style based on the fitted base pattern and completed muslin mock-up. That pattern would then include seamlines to be technically considered

^{298.} Helen Joseph Armstrong, *Pattern Making for Fashion Design*, 5th ed. (India: Pearson Education Inc, 2010), 49, 72.

a completed pattern by today's standards.²⁹⁹ Seam allowances can get in the way if the user has to readjust something in their pattern after a mock-up because they would then have to move not only the seamline, but also the added seam allowance.

According to Joy Spanabel Emery, at the beginning of the twentieth century a 3/8 inch was used for commercial patterns; however, not all patterns included a seam allowance.³⁰⁰ She explains that the Burda Pattern Company was still leaving out seam allowances on its patterns into the 1990s to make it easier for the fit of its patterns to be adjusted by the user.³⁰¹ Prior to this, many commercial paper patterns were printed in overlay form, whereby all the pattern pieces were overlapped onto one sheet of paper and printed in a single size.³⁰² These overlayed patterns also left off seam allowances to conserve space and eliminate extra lines.³⁰³ This shows that seam allowances and patterns were not always as standard as they are today.

Summary of Historical Reproduction

The greatest difference between the artifact analysis and reproduction was that instead of simply looking at the instructions and how it should work, I was setting the system to specific measurements, following the instructions, and drafting the pattern. This was purposefully done at the end of the process so that it would not influence my understanding of the system through the artifact analysis. Until using the system itself, I did not fully understand why there were step-by-step instructions for the back piece and not the rest. I now know that there is significantly more room for error, and without the

^{299.} Joseph Armstrong, 72.

^{300.} Spanabel Emery, Paper Pattern Industry, 85.

^{301.} Spanabel Emery, 210–11.

^{302.} Spanabel Emery, 189.

^{303.} Spanabel Emery, 189.

detailed instructions patterning that piece would not have gone as smoothly. As Anne Bissonette explains, "through reproductions, the study of museum artifacts meant to cover a living body may lead to discoveries regarding new dimension of investigation that go beyond the static place garments occupy in a collection and enable a researcher to explore motion."³⁰⁴ That can really be seen through this research. This helped me understand why this system used the measurements it did and also how the body itself can affect fit. This pattern really relied on the bust and waist measures more than the rest; however, each measurement was important in setting the system to fit me and my proportions instead of just standard pattern measurements. I am also able to move around in the mock-up and see how it fits and moves with my reproduction 1890s corset. Between the first mock-up and second, I learned a lot about the importance of not only instructions but also fit. When I fixed the fit issues for the second mock-up using the additional instructions as a guide, the mock-up laid more smoothly over the corset but also allowed for a greater range of motion while wearing it. The changes made were not that drastic; however, they made a major difference in the overall appearance and function of the garment. The process went from a two-dimensional, adjustable pattern drafting system to a two-dimensional paper pattern and then a three-dimensional fitted garment. There is much more to learn about these objects by using them as they were originally intended.

Through this form of research, we can also learn more about bodies that do not fit the standard proportions. Fortunately for me, the system's proportions adjusted well to my own measurements; however, if someone had a larger hip spring or bust-to-waist

^{304.} Bissonette, "Doing History with Objects": 305.

difference, other adjustments may be necessary during or after the first patterning. The more measurements, the harder to use, but the more likely to match a person's individual proportions as opposed to simply the standard patterning industry ones.³⁰⁵ The problems would be more apparent and require more adjustments for someone who does not fit the standard measurements with a system such as the proportionate systems (like the National Garment Cutter). These relied on the bust (and sometimes waist) measurements, and all of the rest were acounted for in standard proportions.³⁰⁶ This would be less of a problem with the Van Dame System, which uses more measurements, but is still not as individual in its measurements as the McDowell System. If the user did not have proportionate measurements, they would need to adjust for the other measurement on their own. This is because the pattern they created using a pattern drafting system would still be limited to the proportions used in the system, even when the user sets it to their own measurements.

Through the reproduction process it became clear not just how precise the measurements needed to be, but also how precisely those measurements needed to be set in the system. If the user measures incorrectly or is careless in setting those measurements into the system, then the results will not be as accurate. I would say that the Van Dame System, specifically, requires less math on the part of the user than the National Garment Cutter does, where one is using simple rulers to draft the pattern out onto the paper. Much of the math was accounted for within the system itself and the proportions that were built into it by Van Dame. This system, like many others, does leave the construction up to the user. The system aids in making the pattern but does not

^{305.} Kidwell, *Cutting a Fashionable Fit*, 39 and Aldrich, "The Impact of Fashion": 145.

provide information on sewing or constucting the final garment. Very minimal additional imagery or instruction could be found if the user purchased the J. R. Van Dame & Co. *Instruction Book and Dressmakers' Journal*, but even that is primarily focused on the pattern constuction and taking proper measurements.

Overall, the Van Dame System is a highly useful tool and technology that I believe with practice would get easier and faster to use, and the user would learn how to adjust to the learning curve and create the desired patterns. The complexity of the patterns they could create would still be dependent on either their skill and knowledge/experience patterning and/or access to additional information such as the dressmaking journal to aid in the patterning of more specific garments. This system did its job aiding in the patterning of a fitted, basic bodice, and with time and use my skills/the skills of the user would be likely to improve. I noticed in just the first and second time using it that it took less time, and the adjusting of the system became less complicated and foreign. Using the system as it was intended gave a much deeper understanding of how the system worked and why it was constructed with the sliding, adjustable cardboard.

Conclusion

This research triangulated object-based, visual, and textual research, including a reproduction. The artifact analysis was used to gain a better understanding of the pattern drafting systems as well as to compare their changes over time and use. Additionally, the artifact analysis illuminated how manufacturers were adjusting their systems to account for the changing clothing styles. Textual and visual research aided in understanding why these systems were created, what made them unique, their perceived usefulness and the way they were advertised. Finally, the reproduction garment gives a better picture of not only the function of a pattern drafting system, but also the ease of use and experience of working with this technology. Combined, these components provided a more in-depth picture of pattern drafting systems, their use, history, marketing, and context.

Pattern drafting systems were an important tool for creating a fashionable silhouette and helping women dress to meet society's expectations. Technological influences on dress changed dressmaking, home sewing and were heavily advertised as seen in the visual/discourse analysis of newspaper advertisements. Within the research the following questions were examined: How did pattern drafting technology change to account for and support fashion trends of the period? What skills or expertise did different systems assume their users had or encourage them to cultivate? What does the representation of these systems say about the relationship between the technology and the skill involved in making women's clothing? How were the pattern drafting systems integrated into and shaping the new configurations of training, teaching, learning, and selling in the production of clothing, within the dressmaking industry and at home?

Artifact Analysis

Technology Change and Changing Fashions

Much like other textile technologies, such as the sewing machine, pattern drafting systems were made to fill a need, and improvements were often made upon the original model as needs changed. The different patent dates, often seen printed directly on the pattern drafting systems, testify to this fact. When two patent dates from the same system were compared side by side, it became clear that the changes were often subtle but accounted for either a need in clarification of instruction or adjustment for the changing clothing styles. Such changes were seen in both the Van Dame System and Williams Perfection Tailor System. Through analysis, changes such as dart and shoulder/armscye placement became more apparent. For other systems, such as the National Garment Cutter, and to an extent the McDowell System, there were greater changes to the instructions, oriented towards accounting for changing fashions rather than the system design itself. In the case of the National Garment Cutter, the rulers were not changed at all, while updated printings of the instructions containing detailed drafting diagrams were added. The McDowell System did receive updates on its patents; however, the real stylistic differences were seen within the instruction manual, which outlined how to take accurate measurements, set the machine, and adjust the patterns to the current styles.

Artifact analysis also brought to light two responses that accounted for the everchanging clothing styles, 1) to update the system or 2) to update the instructions associated with the system. The choice of either option was dependent on how much styles had changed and how the system itself worked. Changes were relatively simple for the McDowell System, where each component is adjustable. They could account for some of these clothing changes within the drafting instructions as they were reprinted over time. However, McDowell also changed his patents to keep up with style changes, evidenced in 1879, 1885 and 1886 filings.³⁰⁷ The same is true for the National Garment Cutter, where the rulers are associated with an individual's bust measurement while the diagrams, which were reprinted and adjusted in each edition of the instruction book, accounted for the body's proportions as well as changing clothing styles. As a result, there was no need to change the rulers. Moreover, diagrams were easier to update and reprint to account for the changing styles than an entire system. It would have likely been worth the companies' time and money to update and sell manuals with the newer diagrams to address continuing (and changing) consumer demand. This would also continue the companies' income source from users who purchased systems requiring little updating, but who could not adjust the patterns entirely on their own. This would lead them to continue purchasing the updated instructions with the newer style pattern diagrams.

Users

The audience for the systems was broad. The data presented in the content/visual analysis portion points to more than one group of people using the system and even that it was used in different ways. It would be a benefit to the manufacturer to advertise to a wider audience and adjust their systems to best fit the needs of the users. By increasing the market for their systems they had the potential to sell them to a wider population and thus increase their profit. Some of the advertisements appear to target women sewing at home (even teaching their daughters how to use it) and clothing their families, while

^{307.} Kidwell, Cutting a Fashionable Fit, 54.

others focus on the monetary value such as selling the system or using one within the profession/trade of dressmaking. One of the advertisements for Madame Mulkerns Dressmaking School, which taught using the McDowell System, pushed mothers to purchase the system to teach their daughters how to use them, thus investing in their daughter's future.³⁰⁸

Similarly, the systems used in the artifact analysis did not appear to be targeting one sole linguistic or cultural group. Systems were generally printed only in English and if another language was available it was only in a reprint of the instruction book. The exception was the Norman Tailor System, which had the English and German instructions printed directly on the system. Likewise, the advertisements printed in newspapers were not just addressed to the dressmakers or middle-class woman who might have hired someone to sew her clothing but also to domestic servants. With the instructions often printed in other languages, such as German and Spanish, it was apparent that companies anticipated that some of their users were potentially non-English speakers. This aligns with the data on women in the labor force, not all women in domestic service and the dressmaking industry would have been native English speakers. DeVaults research, explained that in 1880, 65.8 percent of single, foreign-born women in the United States had entered the labor force.³⁰⁹ The 1890s census reported that foreignborn immigrants composed 14.8 percent of the total United States population.³¹⁰ There is possibility that the foreign-born women who may have used these systems were not

^{308. &}quot;Multiple Classified Advertisements," *Milwaukee Daily Sentinel*, May 2, 1894, 7, Nineteenth Century U. S. Newspapers, Gale Primary Sources.

^{309.} DeVault, "Family Wages": 7.

^{310.} U.S. Census Bureau, "Historical Census Statistics on the Foreign Born Population: 1850–1990," The United States Census Bureau, February 23, 2017, https://www.census.gov/library/working-papers/1999/demo/POP-twps0029.html.

fluent English speakers and thus would have been aided by systems and instructions printed in their native languages.

Starting Knowledge

The systems all required a different level of starting knowledge. The system that would be the best fit was dependent on the level of dressmaking knowledge an individual possessed. All of the systems also presumed a certain level of literacy. Directions were either printed directly on the pieces or instruction manuals. The National Garment Cutter included the least amount of instruction however, they would ultimately need more skill to be able to fit the final garment. This would be especially true if the user was unable to read English. The McDowell System would have created a pattern with an exact fit to the individuals' measurements if they followed the detailed instructions precisely. While most of the systems were relatively clear on how to draft a basic pattern, they became less clear without the aid of additional instruction on adjusting to match current styles and the user having prior knowledge of garment construction. More often, the creators of the systems provided instructions focused on using the system and not the construction of the garment. In other words, the system typically was focused on the construction of the pattern, and not the construction of the final garment.

Price of Knowledge

The cost of different systems varied depending on the prior knowledge of the user, the quality of the systems itself (i.e. materials), and the level of detail in instructions provided. While this research did not discover the cost for all of the systems studied, some examples are as follows: The Van Dame system had the price of \$20 with additional instructions and \$10 with only instructions printed directly on the system. The McDowell cost \$17.50 and did not have an additional price listed for instructions on the examples studied.³¹¹ McDowell's instructions were updated to accommodate newer clothing styles, but the system itself could have still been used without the updates. Although the price of the National Garment Cutter was not located, the updated instruction book would need to be acquired periodically with the changing clothing styles. The rulers for the system itself did not change. The Williams Perfection Tailor System did list a price of \$7.00, which included the instructions.³¹² If the user was a non-English speaker, they had the option to purchase instructions for 25 cents in French or German.³¹³

The price of the system also varied with regard to quality of materials, which also impacted what consumers or users could access and afford. The McDowell System which was quite sturdy cost more than the flimsier Buddington System. The McDowell system was also less likely to warp while the pattern was being drafted because it locked in place. The hybrid systems such as the Van Dame (adjustable) and Williams Perfection Tailor were made from sturdy cardboard. The National Garment Cutter was simply a different type of system all together with the wooden rulers. The most direct comparison available for the quality differences within the system categories is really the McDowell.³¹⁴

^{311.} Kidwell, Cutting a Fashionable Fit, 66 and Albert McDowell, "Adjustable Pattern for Drafting Garments," United States, US342216A (May 5, 1886).

^{312.} W. R. Williams, "Williams Perfection Tailor System" (Lawrence Kansas, 1887).

^{313.} W. R. Williams' New Instruction Book (1891), 34.

^{314.} Kidwell, McDowell.

Content/Visual Analysis

Skills and Expertise Assumed or Encouraged

These system advertisements encouraged women to use the technology to either make an income as a dressmaker, sales agent or do their own personal dressmaking with the aid of a pattern drafting system. As discussed, there was certainly a level of assumed dressmaking knowledge for using all of the various systems. For instance, with the exception of the McDowell System, the instructions did not cover dressmaking/garment construction and the advertisements did not explicitly state any necessary knowledge, dressmaking or otherwise required to make "perfect fitting dresses." The instructions simply covered the making of the pattern. Advertisements seemed to encourage women to learn new technologies via the systems, schools, or the agents selling them. The McDowell System's advertisements claimed that the system could be used by "any woman."³¹⁵ Advertisements also communicated the expectation that through the use of pattern drafting technologies women would learn dressmaking and be able to adjust the simpler, more basic clothing patterns into more fashionable or functional garments. For example, the instruction book for the Van Dame System, claimed their system would make constructing "artistic fitting" garments more pleasurable. The descriptor "artistic" implies that users would likely desire to expand beyond basic styles.³¹⁶

Terminology and Frequency of Advertisement

The least to most used terminology to describe the patterning technology was: garment drafting, system, tailoring system, tailor system. Linda Morton explained that prior to the 1880s it was mainly male tailors instead of the female dressmakers creating

^{315.} Daughters of America 5, no. 11 (1891): 5.

^{316.} J. R. Van Dame & Co., Instruction Book and Dressmakers' Journal (n. d.).

and advertising pattern drafting systems.³¹⁷ It should definitely be noted that the two most frequently used terms of *tailoring system* and *tailor system* point to the male dominated trade instead of just dressmaking in general. The creators of the systems were not afraid to market the tailoring skill used in pattern creation through the inclusion of tailor in one form or another in many of the system names. In the three most used categories the term *system* was used as all or part of the terminology (i.e. *system* vs. *tailoring system*). *System* points to the technology while the terms *garment drafting* and *tailor(ing)* point to the process/method of patterning.

During the review of newspapers accessed within this research, the McDowell System and Jackson's Tailor System were the most frequent (both with seven advertisements). This was followed by Madame Kellog's French Tailor System (three advertisements). The McDowell and Van Dame Systems (one advertisement) were the only two systems used in the artifact analysis that had advertisements appear in the newspapers that were searched.

Demographics of Potential Users

Male tailors primarily created and advertised pattern drafting systems prior to 1880. The advertisements were primarily geared toward women sewing at home and/or female dressmakers, making it appear that they needed the help of the male tailor. ³¹⁸ In addition, the advertisements and objects themselves included calls for workers to sell the systems and show that they were advertised to women. They had the potential to be used as a source of income, either by selling the systems or using them professionally as a

^{317.} Linda Morton, "The training of a tailor," *Dress 8*, no. 1. (1982). DOI: 10.1179/036121182803657827 Aldrich, 136.

^{318.} Linda Morton, "The training of a tailor," *Dress 8*, no. 1. (1982). DOI: 10.1179/036121182803657827 Aldrich, 136.

dressmaker. The drafting systems and advertisements encouraged women to sell them as agents. However, the classified advertisements specifically paint a bigger picture. A specific example of this was seen with the advertisement placed in the *St. Louis Globe-Democrat* in 1887 by Madame Montgomery, who was both selling *and* teaching people how to use the Buddington System.³¹⁹ Additionally, other advertisements, such as the one posted by a dressmaker, advertised dressmakers looking for a position using the McDowell System in the *Daily Inter Ocean* in 1894 as a skill set.³²⁰ This implies that women were not only selling the systems as a form of income, but using them as a way to engage in the dressmaking industry. If these were only used by women sewing at home for their families or for professional dressmakers employed by a dress shop, then advertisements for dressmakers looking to be hired for work as a dressmaker using one of the pattern drafting systems would not have been as apparent. This shows that more people had access to and used pattern drafting systems than shown in past research.

As was shown in Jan Whitakers research, millions of immigrants from all over the world were coming to the US in the 1880s and 1890s and needed to seek employment.³²¹ Therefore, it is quite possible that the dressmakers for hire using a drafting system such as the McDowell System were immigrants seeking employment. Immigrants coming to the United States who knew how to sew had the potential to work as a dressmaker or seamstress. This would not have necessarily been easy and as Kathryn Wilson adds, the dressmaker's job was intersected by class and race, especially in situations where there

^{319. &}quot;Multiple Classified Advertisements." St. Louis Globe-Democrat, 1 Jan. 1887. Nineteenth century U.S. newspapers.

^{320. &}quot;Multiple Classified Advertisements." *Daily Inter Ocean*, 1 Feb. 1894: 11. Nineteenth century U.S. newspapers.

^{321.} Whitaker, 1.

were questions surrounding the dressmakers skill or economy in dressmaking.³²² There already appeared to be a level of distrust for women entering the dressmaking trade via routes other than a formalized apprenticeship and this was then compounded with class and race, which already separated women within the professional dressmaking trade. If working as a dressmaker in a shop was increasingly complicated in terms of race and class, working class immigrants would be at a disadvantage.

When looking at research conducted by other scholars to the 1885 Norman Taylor System, which had instructions in both German and English alongside an advertisement seeking domestic help for a household who could also work as a seamstress; the sources lead to the conclusion that middle class women with English as their primary language were not the only users of pattern drafting systems. The advertisement for the McDowell Pattern Drafting Machine asked the reader to show the advertisement to her dressmaker. This also opens the possibility that immigrant and/or working-class women were hired by middle class women as dressmakers, especially with the large percentage of foreign born women entering the workforce. Not only did advertisements show that a broad range of women were targeted to use them but also their prevalence, which increased the chances of women both working and middle class seeing and/or purchasing one.

Reproduction

When the artifact analysis is compared to the reproduction it is easy to see why the ease of use was such a prevalent claim in advertisements. If the user did not think a system would be a benefit to them then they would be less likely to purchase and use it.

^{322.} Wilson in Burman, 1999, 143.

With so many competing systems it would benefit to manufacturer to point to or claim that their systems were easy to use. The question of how user friendly the systems were would differ significantly depending on the user's knowledge and experience. Advertisers were constantly making claims about the user-friendly nature of their specific system, but that does not mean that all users were equal in knowledge or skill. When using the Van Dame System it became clearer that there was minimal room for error when using a system without needing to make significant adjustments later in the patterning process. This is because the proportions were so specific and the pattern pieces use the measurements to make a tight fitting pattern without ease (excess space between the person and the garment). When the first pattern was made I realized how close it fit to the body and could really see where it was pulling or not fitting smoothly over the corset. After making the second pattern which fit significantly better even though the changes in patterning were not major. If the user made an error on even one part of the pattern for a tightly fitting garment the outcome would not be as positive and adjustments would need to be made to the pattern.

Through reproducing a pattern using the Van Dame System the cost of knowledge was also made clear. The Van Dame System specifically, had two prices. One for the system (with some instruction printed directly on the individual components) and one for the system including additional instructions. Without the additional instructions the final product did not lay smoothly, and questions arose about how some of the steps, such as lengthening the pattern past the waist, should be done. Many of the questions were clarified in the instructions, which in this case would have cost the same amount as the system itself. The instructions also clarified some of the measurements and gave hints for some of the steps to aid in a more precisely fitting pattern.

My experience in using both the National Garment Cutter and the Van Dame Systems is that after a challenging start it becomes more intuitive every time you use it. This was true even with sections that were more difficult to decipher, such as the back bodice piece. Part of the overall challenge of use was that, as with the other systems, the instructions were there to aid in drafting the basic pattern (also known as a sloper), but not garment construction once the pattern was completed. In other words, direct use of the system, rather than close observation only, meaningfully added to insights about functionality.

Limitations

A limitation is that the systems used in this research had to be accessible for both the 1880s and 1890s in order to see how companies adjusted to changing clothing styles, and whether any adjustments were to the system itself or simply a change in instructions for the same system. Although access was gained to a large variety of systems there were only a small number of them that could be compared thoroughly for both time periods. In addition, it was necessary to analyze the systems in person to see how they moved and observe their scale in greater detail than a single image could provide.

Due to the COVID 19 Pandemic there were issues with access to sources. It was not possible to travel far to access additional sources in person aside from the pattern drafting systems owned by Marna Davis, Kay Cynova and Stuhr Museum. This limitation also applied for research in periodicals and newspapers which all had to take place virtually and in some cases could not be accessed in its complete form. The newspapers accessed online were limited to a regional scope within the databases such as Gale Primary Sources Nineteenth Century Newspapers.

Given my previous knowledge of 1890s clothing and dressmaking techniques coming into the reproduction and being a 21st century person my experience could never exactly replicate that of a 19th century woman. My experiences and results should not be extrapolated or generalized to account for what was likely a very diverse historical userbase for the systems. Nevertheless, as articulated in the historical reproduction section, the process has merit in understanding how these systems functioned. As Anne Bissonette explained, reproductions allow the researcher to explore the motion of museum objects instead of just observations about them."³²³

Suggestions for Further Research

Foreign Language

Within this research it became clear that there was a linguistic component deserving of more study than could be done within this research. Research in the future could expand the linguistic information by looking at the other publications printed by the Butterick Publishing Company (who printed the advertisements in the Butterick *Delineator*). It would be worth reviewing periodicals such as *Butterick's Modenblatt* or *Modas Metropolitanas*, to see whether the advertisements for pattern drafting systems were also included in those, as they were in the *Delineator*. This linguistic analysis would also be benefited by looking at the quantity of other pattern drafting systems sold

^{323.} Bissonette, "Doing History with Objects": 305.

in the United States which printed their instruction books or taught within their dressmaking schools (like the McDowell System School) in another language. This would account for the growing population of immigrants and need for them to have access to these textile technologies in their own language, especially if they are using them as part of their work within the textile industry.³²⁴ Lastly, were other systems sold in the United States printed in multiple languages or a language other than English? This was found with the Norman Tailor System with German and English instructions so surely they were not the only ones.

Periodicals

Preliminary research in both the *Delineator* and *Ladies Home Journal* lead to promising advertisements within the advertisements section at the back of the periodicals. A more comprehensive examination of these and other periodicals would expand this research to a form of print that according to Waller-Zuckerman aided in the spread of fashion ideals, trends and advice.³²⁵ The advertisements included both within the periodicals and in the dedicated section at the end were a wealth of information and are worth locating and looking into for a more dedicated content analysis. It would also be a benefit in seeing if there are differences in the way these systems are advertised in periodicals compared to newspapers.

^{324.} Daily Inter Ocean, Dec 17, 1893, 20.

^{325.} Mary Ellen Waller-Zuckerman, 99-108.

Domestic Service

Research into classified advertisements show women seeking work within homes as dressmakers using one of the pattern drafting systems. There were also advertisements for families looking for someone to fill the roles of both a domestic servant.³²⁶ These advertisements considered and the potential use of pattern drafting systems by seamstresses there would have been room for pattern drafting systems to be seen as a technology used within this sphere. The advertisements also discussed the simplicity, ease of use and income potential associated with the technology. One specifically wrote "Madam, show this to your dressmaker; it is just what she has always wanted."³²⁷ Moreover, with the systems and instructions being printed in other languages it would have made them more accessible to women in domestic service regardless of their language skills. Expanded research would be needed to see if the use in domestic service within homes can be confirmed as opposed to just work as a dressmaker or personal use within a home.

Expansion into Other Time Periods

This research into the 1880s and 1890s proved to be rich. However, there is great potential for research on patterning drafting systems to expand into earlier years. This would be especially beneficial between 1860 and 1880, when they were becoming more commonly used and accessible than the Pre-Tentler System would have been in 1841 and no longer just intended to be used within the tailoring trade.³²⁸ At what point did they

^{326. &}quot;Multiple Classified Advertisements," *St. Louis Globe-Democrat*, Jan. 1, 1887, Nineteenth Century U.S. Newspapers.

^{327.} Robert S. O'Loughlin, "McDowell Garment Drafting Machine Advertisement," *Delineator* XLV, no. 1 (June 1895): vii. Archive.org

³²⁸ Kidwell, *Cutting a Fashionable Fit*, 20–21.

begin associating dressmaking schools like the Van Dame World's Fair Premium Tailor System of Dress Cutting for Ladies and Children's School and McDowell School with their respective systems? Did the thoroughness of instructions differ majorly in earlier examples? According to Kidwell, earlier systems were intended for professional use by people who would have then had extensive dressmaking/tailoring knowledge and thus may not have required as detailed of instructions. This can be seen even withing the 1880-1899 timeframe where the companies started to adjust their instructions to clarify them or lessen the room for error. This was seen in the Williams Perfection Tailor system in both what was printed on the system and the accompanying instruction book. As can be seen through this research, this technology had an impact on the garment industry as a while, both professionally and within the home. This research contributes to the discussion of pattern drafting systems in relation to their function and users. My hope is that this research will encourage others to learn about this fascinating topic and expand it so that we can continue to acknowledge and learn more about this textile technology.

Glossary

Agent (for patterning system). A person who sells the patterning systems

Armscye. The armhole

Artistic. Stylistic freedom outside of basic pattern

Basque. A bodice separate from the skirt which extends below the waist

Basting. A temporary seem that holds the layers in place

Bodice. Upper portion of a garment close to the torso such as the top of a dress

Bustle. A separate garment worn under a skirt to add fullness to the back of the skirt

Bustled skirt. Worn during one of three bustle periods where the skirt is worn over a bustle and accentuated with draped fabric

Butterick. A paper pattern company started by Ebenezer Butterick

Corset. An under garment which wraps around the waist and supports the bust

Dart. Tapered stitched area on the bodice to add shape and a closer fit to the torso

Dolman. A garment, much like a coat with sleeves that were wide toward the wrist

Drafting. The process of creating a clothing pattern

Draped. The action of draping a garment without a pattern by use of pleats, gathers, folds and fabric manipulation

Extant. An original garment or object, not a reproduction

Hip spring. The numerical difference/ratio between the hip and waist measurements, referring specifically to corseted measurements

Leg-of-mutton sleeve. Very full towards the shoulder and smaller towards the wrist, a variation worn in both the 1830s and 1890s

Millinery. Hat making

Mockup (sometimes called a toile). A test run of the pattern on fabric such as muslin to check the fit before sewing the final garment

Muslin. Plain weave cotton fabric used for mockups

Petticoat. Shaped much like a skirt, one or more petticoats were worn under the outer garments to support the skirt and maintain the desired shape

Placket. An opening of overlap in a garment where closures, such as buttons and buttons holes are placed

Pleats. Folds, typically evenly spaced in fabric to create shape or add decoration. This is often found at the top or back of skirts.

Polonaise. (Post 18th Century) Draped overskirt worn on top of another layer

Seam allowance. The extra space accounted for on a pattern piece between the edge and the sewn seamline.

Yoke. Top portion of some dresses (below the collar) that the rest of the garment hangs from

Bibliography

- "About The Field Museum." Field Museum, February 22, 2019. https://www.fieldmuseum.org/about.
- Aldrich, Winifred. "The Impact of Fashion on the Cutting Practices for the Woman's Tailored Jacket 1800–1927." *Textile History* 34, no. 2 (2003): 134–70. doi: 10.1179/004049603235001580.
- Aldrich, Winifred. Sizing in Clothing: Developing Effective Sizing Systems for Ready-towear Clothing. Edited by S. P. Ashdown. New York: Woodhead Publishing Limited, 2007.
- Alix, Sébastien-Akira. "The Hand as Agent of the Mind? The Irony of Manual Training Reform in Menomonie, Wisconsin (1890–1920)." *History of Education* 48, no. 4 (2019): 479-95.
- Armstrong, Helen. *Pattern Making for Fashion Design*, 5th edition. India: Pearson Education Inc, 2010.
- Banner, Lois W. American Beauty. New York: Aldred A. Knopf, 1983.
- Barm, Ava, and Susan Klepp. "If I Didn't Have My Sewing Machine": Women and Sewing Machine Technology. In A Needle, a Bobbin, a Strike: Women Needleworkers in America, edited by, Joan Jensen & Sue Davidson. Philadelphia: Temple University Press, 1984:20-59.
- Beaudry, Mary Carolyn. Findings: The Material Culture of Needlework and Sewing.Yale London: University Press, 2006.
- Bland, Sidney. "Shaping the Life of the New Woman: The Crusading Years of the 'Delineator." *American Periodicals* 19, no. 2 (2009): 165–88.

- Bissonette, Anne. "Doing History with Objects: Betty Kirk and Madeleine Vionnet." *Fashion Theory* 19, no. 3 (2015): 281–314.
- Bohleke, Karin. "Americanizing French Fashion Plates: Godey's and Peterson's Cultural and Socio-Economic Translation of *Les Modes Parisiennes*." *American Periodicals: A Journal of History & Criticism* 20, no. 2 (2010): 120–55. doi: 10.1353/amp.2010.0006.
- Bolton, Norm, and Christine Laing. *The World's Columbian Exposition: The Chicago World's Fair of 1893*. Chicago: University of Illinois Press, 2002.
- Bourdieu, Pierre. *Distinction: A Social Critique of the Distinction of Taste, Classes and Classifications*. Translated by Richard Nice. Massachusetts: Harvard University Press, 1984,
- Brevik-Zender, Heidi. "Interstitial Narratives: Rethinking Feminine Spaces of Modernity in Nineteenth-Century French Fashion Plates." *Nineteenth-Century Contexts* 32, no. 2 (2014): 91–123.

doi: 10.1080/08905495.2014.895290.

- Buddington. "Buddington Dress Cutting Machine," Personal Collection of Marna Davis.
- Burman, Barbara. *The Culture of Sewing: Gender, Consumption & Home Dressmaking*. New York: Oxford, 1999.
- Busfield, Deirdre. "'Tailoring the Millions'; the Women Workers of the Leeds Clothing Industry, 1880–1914." *Textile History* 16, no. 1 (1985): 69-92. doi: 10.1179/004049685793701179.
- Byers, Stephen. "*Milwaukee Journal Sentinel*." Encyclopedia of Milwaukee. https://emke.uwm.edu/entry/milwaukee-journal-sentinel/.

- Casal-Valls, Laura. "Fashioning Modernity: Elite Dressmaking in Barcelona c. 1870– 1919." *Costume* 50, no. 2 (2016): 220–43. doi: 10.1080/05908876.2016.1175211.
- Coffin, Judith. "Credit, Consumption, and Images of Women's Desires: Selling the Sewing Machine in Late Nineteenth-Century France." *French Historical Studies* 18, no. 3 (1994): 749–83.
- Davidson, Hilary. "The Embodied Turn: Making and Remaking Dress as an Academic Practice." *Fashion Theory* 23, no. 3 (2019): 329-62.
- "Daughters of America (Augusta, Me.) 1886–1894." The Library of Congress. https://www.loc.gov/item/sn93099996/.
- DeVault, Ileen. "Family Wages: The Roles of Wives and Mothers in U.S. Working-Class Survival Strategies, 1880–1930." *Labor History* 54, no. 1 (2013): 1-20. doi: 10.1080/0023656X.2012.759806.
- Durack, Katherine T. "Patterns for Success: A Lesson in Usable Design from US Patent Records." *Society for Technical Communication* 44, no. 1 (1997): 37–51.
- Edwards, Lydia. *How to Read a Dress: A Guide to Changing Fashion from the 16th to the 20th Century.* New York: Bloomsbury Visual Arts, 2017.
- Fleming, E. McClung. "Artifact Study: A Proposed Model." *Winterthur Portfolio* 9 (1974): 153–73.
- Gamber, Wendy. *The Female Economy: The Millinery and Dressmaking Trades*, 1860– 1930. Chicago: University of Illinois Press, 1997.
- Gamber, Wendy. "'Reduced to Science': Gender, Technology, and Power in the American Dressmaking Trade, 1860–1910." *Technology and Culture* 36, no. 3 (1995): 455–82. doi: 10.2307/3107238.

- Godley, A. "Selling the Sewing Machine around the World: Singer's International Marketing Strategies, 1850–1920." *Enterprise & Society* 7, no. 2 (2006): 266– 314.
- Goffman, Erving. *The Presentation of Self in Everyday Life*. New York: Doubleday, 1959.
- Goggin, Maureen Daly, and Beth Fowkes Tobin. Women and the Material Culture of Needlework and Textiles, 1750–1950. Surry: Ashgate, 2009.
- Gordon, Beverly. "The Hand of the Maker: The Importance of Understanding Textiles from the 'Inside Out.'" *Textile Society of America Symposium Proceedings* 519 (2002): 189-98.
- Gordon, Sarah. "Boundless Possibilities": Home Sewing and the Meanings of Women's Domestic Work in the United States, 1890–1930." *Journal of Women's History* 16, no. 2 (2004): 68–91. doi: 10.1353/jowh.2004.0045.
- Gordon, Sarah. "When Mother Lets Us Sew': Girls, Sewing, and Femininity," in "Make it Yourself": Home Sewing, Gender, and Culture, 1890–1930. New York:
 Columbia University Press, 2009.
- Grassby, Richard. "Material Culture and Cultural History." *Journal of Interdisciplinary History* 35, no. 4 (2005): 591–603.
- Gregory, J. M. "A History of the Sewing Machine to 1880." *Transactions of the Newcomen Society* 76, no. 1 (2006): 127–44. doi: 10.1179/175035206X105249.
- "Guide to Greater America Exposition, July 1, 1899 to November 1, 1899." https://transmississippi.unl.edu/memorabilia/view/TMI04561.html

- Helvenston, Sally and Bubolz, Margaret, "Home Economics and Home Sewing in the United States, 1870-1940," in The Culture of Sewing: Gender, Consumption & Home Dressmaking, ed. Barbara Burman (New York: Oxford, 1999), 304. Inder, Pam. Busks, Basques, and Brush-Braid: British Dressmaking in the 18th and 19th Centuries. London: Bloomsbury Publishing USA, 2020.
- "The Inter Ocean." Ann Arbor Register. April 23, 1896. https://aadl.org/node/549113.
- Kidwell, Claudia. *Cutting a Fashionable Fit: Dressmakers' Drafting Systems in the United States*. Washington, D.C.: Smithsonian Institute Press, 1979.
- Lawler, Stephanie. *Disgusted Subjects: The Making of Middle-Class Identities*. The Editorial Board of *The Sociological Review*, Blackwell Publishing Ltd., 2005.
- Marendy, Michael. "The Development and the Evaluation of Costume Reproduction Pattern Blocks for an 1880's Women's Dress." *Clothing and Textiles Research Journal* 11, no. 4 (1993): 41–52.
- Matthews David, Alison. "Vogue's New World: American Fashionability and the Politics of Style." *Fashion Theory* 10, no. 1–2 (2006): 13–38. doi:

10.2752/136270406778051049.

McDowell, Albert. "Adjustable Pattern for Drafting Garments, United States, US342216A." May 5, 1886.

- McDowell, Albert. "McDowell Garment Drafting Machine." Personal Collection of Marna Davis.
- McDowell Garment Drafting Machine and Instruction Book. MAAS: Museum of Applied Arts and Sciences. Accessed March 4, 2021.

https://collection.maas.museum/object/362048.

- Mdme. Lofovall. *How to Cut, Fit, and Finish a Dress*. Boston, MA: Alfred Mudge & Son, Printers, 1892.
- Mida, Ingrid, and Alexandra Kim. *The Dress Detective: A Practical Guide to Object Based Research in Fashion*. London: Bloomsburg, 2015.
- Miller, Bonnie M. "A Primer for Using Historical Images in Research." *American Periodicals* 27, no. 1 (2017): 73-94.
- *"The Milwaukee Journal* (Milwaukee, Wis.) 1890–1995." The Library of Congress. https://www.loc.gov/item/sn83045292/.
- "Milwaukee Journal Sentinel." Encyclopaedia Britannica, Inc.

https://www.britannica.com/topic/Milwaukee-Journal-Sentinel.

- Moore, Jennifer Grayer. "A Brief History of Patternmaking." In *Patternmaking History and Theory*, edited by Jennifer Grayer Moore, 11–29. New York: Bloomsbury Publishing USA, 2019.
- Morton, Linda. "The Training of a Tailor." *Dress* 8, no. 1 (1982): . doi: 10.1179/036121182803657827.
- "Multiple Classified Advertisements." Advertisement for the Jacksons Tailor System. Daily Inter Ocean, Dec. 17, 1893, 20.
- "Multiple Classified Advertisements." Advertisement for the McDowell Dress Cutting Academy. *Daily Inter Ocean*, Dec. 17, 1893, 20.
- "Multiple Classified Advertisements." Advertisement for the Rood Magic Scale. *Daily Inter Ocean*, Dec. 17, 1893, 20.
- "Multiple Classified Advertisements." Advertisement for the S. T. Tailor System. *Daily Inter Ocean*, Dec. 17, 1893, 20.

"Multiple Classified Advertisements." Daily Inter Ocean, Apr. 7, 1895, 29.

Nineteenth Century Collections Online,

http://link.gale.com/apps/doc/GT3013626502/GDCS?u=linc74325&sid=zotero& xid=e8111ba4.

"Multiple Classified Advertisements." Daily Inter Ocean, Feb. 11, 1894, 19.

Nineteenth Century Collections Online,

http://link.gale.com/apps/doc/GT3013622475/GDCS?u=linc74325&sid=zotero& xid=c1a9758d.

"Multiple Classified Advertisements." *Daily Inter Ocean*, Sept. 17, 1893, 19. Nineteenth Century U.S. Newspapers.

"Multiple Classified Advertisements." Daughters of America 4, no. 5 (1890): 11.

"Multiple Classified Advertisements." Daughters of America 5, no. 11 (1891): 5.

Nineteenth Century Collections Online,

http://link.gale.com/apps/doc/LMXISD057037736/GDCS?u=linc74325&sid=zote ro&xid=b3852c.

"Multiple Classified Advertisements." Milwaukee Daily Sentinel, Apr. 1, 1894, 15.

Nineteenth Century U.S. Newspapers,

https://linkgalecom.libproxyunl.edu/apps/doc/GT3017370936/GDCS?u=linc7432

5&sid=GDCS&xid=a406dbed.

"Multiple Classified Advertisements." Milwaukee Daily Centennial, July 20, 1895, 7.

"National Garment Cutter." 1884.

"National Garment Cutter." 1888.

https://archive.org/details/nationalgarment00gold/page/n1/mode/2up

"National Garment Cutter." 1892. Courtesy of Marna Davis.

- Newman, D., and J. O'Brien. Sociology: Exploring the Architecture of Everyday Life Readings. Los Angeles, CA: Pine Forge Press, 2008.
- Nicklas, Charlotte, and Annebella Pollen. *New Directions in Theory and Practice*. New York: Bloomsbury, 2015.

Nineteenth Century Collections Online, https://link-gale-

com.libproxy.unl.edu/apps/doc/JVJNTD070303874/GDCS?u=line74325&sid=G DCS&xid=633db.

- Picard, Robert. "Shifts in Newspaper Advertising Expenditures and Their Implications for the Future of Newspapers," *Journalism Studies* 9, no. 5 (2008): 704–716, doi: 10.1080/14616700802207649.
- Project for Excellence in Journalism. "Framing the News: The Triggers, Frames, and Messages in Newspaper Coverage." 1998. https://www.pewresearch.org/wpcontent/uploads/sites/8/legacy/framingthenews.pdf
- Prown, Jules David. "Mind in Matter: An Introduction to Material Culture Theory and Method." *Winterthur Portfolio* 17, no. 1 (1982): 1–19.
- Ralph, Julian. "Harper's Chicago and the World's Fair: The Chapters on the Exposition Being Collated from Official Sources and Approved by the Department of Publicity and Promotion of the World's Columbian Exposition." *Harper and Brothers* x, no. 109: 1-244. January 1893.: 196–97.
- Riello, Giorgio. "Things that Shape History: Material Culture and Historical Narratives."
 In History and Material Culture: A Student's Guide to Approaching Alternative Sources, edited by Karen Harvey. New York: Routledge, 2009.

- Roberts, Mary Louise. "Gender, Consumption, and Commodity Culture." *The American Historical Review* 103, no. 3 (1998): 817–44.
- Rogers, Helen. "The Good Are Not Always Powerful, Nor the Powerful Always Good": The Politics of Women's Needlework in Mid-Victorian London." *Victorian Studies* 40, no. 4 (1997): 589–623.
- Roy, Catherine. "The Tailor's Voice: Pattern Drafting Systems and the State of the Art."
 In *Patternmaking History and Theory*, edited by Jennifer Grayer Moore, 91-108.
 London: Bloomsbury Publishing, 2019.
- Rydell, Robert W., John E. Findling, and Kimberly D. Pelle. *Fair America: World's Fairs in the United States*. Washington, D.C.: Smithsonian Institution Press, 2000.
- Seligman, Kevin. Cutting for All! This Sartorial Arts, Related Crafts, and the Commercial Paper Pattern: A Bibliographic Reference Guide for Designers, Technicians, and Historians. Edwardsville: Southern Illinois University Press, 1996.
- Severa, Joan, and Merrill Horswill. "Costume as Material Culture," in *Dress* 15 (1989), 51-64.
- Smithsonian. *Fashion: The Definitive History of Costume and Style*. New York, Dk Publishing, 2012.
- Spanabel Emery, Joy. A History of the Paper Pattern Industry: The Home Dressmaking Fashion Revolution. New York: Bloomsbury, 2014.
- Steele, Valerie. "A Museum of Fashion is More than a Clothes-Bag." *Fashion Theory* 2, no. 4 (1998): 327–35.

- Taylor, Lou. "Doing the Laundry? A Reassessment of Object-Based Dress History." *Fashion Theory* 2, no. 4 (1998): 337–58. doi: 10.2752/136270498779476118.
- "The Daily Inter Ocean (Chicago, Ill.) 1879–1902." The Library of Congress.

https://www.loc.gov/item/sn85038321/.

The Waukesha Freeman. Aug. 3, 1893.

- Tortora, Phyllis, and Sara Marcketti. *Survey of Historic Costume*, 6th edition. New York: Fairchild Books, an Imprint of Bloomsbury Publishing Inc., 2015.
- Trautman, Patricia. Clothing America: A bibliography and Location Index of Nineteenth-Century American Pattern Drafting Systems. N.p.: Costume Society of America, Region 2, 1987.
- Trautman, Pat. "Personal Clothiers: A Demographic Study of Dressmakers, Seamstresses and Tailors 1880–1920." *Dress* 5, no. 1 (1979): 74–95. doi: 10.1179/036121179805298747.
- Van Dame, J. R. & Co. *Instruction Book and Dressmakers' Journal* (n. d.). Images courtesy of Mary Ann Kennedy.
- Van Dame, J. R. "World's Fair Premium Tailor System," copyright 1893. Courtesy of Marna Davis.
- Van Dame, J. R. "World's Fair Premium Tailor System Adjustable Sleeve," patented January 24, 1899. Courtesy of Stuhr Museum.
- Waller-Zuckerman, Mary Ellen. "Marketing the Women's Journals, 1873–1900."Business and Economic History 18, no. 99 (1989): 99-108.

Waller-Zuckerman, Mary Ellen. "'Old Homes, in a City of Perpetual Change'":

Women's Magazines, 1890–1916." *The Business History Review* 63, no. 4 (1989): 715–56.

- Walsh, M. "The Democratization of Fashion: The Emergence of the Women's Dress Pattern Industry." *The Journal of American History* 66, no. 2 (1979): 229–313.
- Wayland Barber, Elizabeth. Women's Work: The First 20,000 Years Women, Cloth, and Society in Early Times. New York: W. W. Norton & Company, 1994.
- Whitaker, Jan. Service and Style: How the American Department Store Fashioned the Middle Class. New York: St. Martin's Press, 2006.
- Williams, W. R. "Williams Perfection Tailor System." Lawrence Kansas, 1887.
- Williams, W. R. "Williams Perfection Tailor System." Lawrence Kansas, 1891.
- Willett, C., and Phillis Cunnington. *The History of Underclothes*. New York: Dover Publications, Inc., 1951.
- Wilson, Kathryn. "Commodified Craft, Creative Community: Women's Vernacular Dress in Nineteenth-century Philadelphia." In Burman, Barbara. *The Culture of Sewing: Gender, Consumption & Home Dressmaking*. New York: Oxford, 1999.
- Woloch, Nancy. A Class by Herself: Protective Laws for Women Workers, 1890s–1990s.New Jersey: Princeton University Press, 2015.
- W. R. Williams' New Instruction Book, Giving General and Complete Instructions for Using the New Perfection Tailor Body System, Perfection Tailor Sleeve Rule, Perfection Tailor Skirt and Collar Rule. 1891. Access courtesy of Marna Davis.

- W. R. Williams' New Instruction Book, Giving Full and Complete Instructions for Using the Perfection Tailor System of Dress Cutting, 2nd Edition. 1886. Access courtesy of Marna Davis.
- The Waukesha Freeman, Aug. 3, 1893.
- Ziska, Courtney L. Cope. "Omaha, Nebraska's Costly Signaling at the Trans-Mississippi and International Exposition of 1898." University of Nebraska-Lincoln, 2012: 1-96.
- Zuckerman, Mary Ellen. A History of Popular Women's Magazines in the United States, 1792 to 1995. Connecticut: Greenwood Press, 1998: 99-108.