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Ironing out the Wrinkles: Technological and Aesthetic Change in Domestic Irons, 1880-1920

Emily Gann

Canada Science and Technology Museums Corporation

Abstract: In 1914, James Smart Manufacturing Company advertised the sale of two technologically identical, yet stylistically different irons: one had a black painted finish, the other, a nickel plated finish. Both styles operated in the same fashion, producing a comparable final product, however the latter was a new addition to the catalogue and was set at a higher price. The similar functionality of these domestic tools suggests that this stylistic change was made on behalf of clients' preference and taste, rather than quality of work. By employing an object based analysis to the iron, this paper will illustrate the reciprocal relationship between gender and technology and engage with the growing discourse surrounding the changes in domestic space from 1880 to 1920 in Canada.

Résumé: En 1914, James Smart Manufacturing Company a annoncé la vente de deux fers à repasser technologiquement identiques, mais stylistiquement différents: l'un avait un fini peint noir, l'autre, un fini plaqué nickel. Les deux modèles fonctionnaient de la même manière et produisaient un résultat final comparable, mais le fer au fini plaqué nickel était un nouvel ajout au catalogue, à un prix plus élevé. La fonctionnalité similaire de ces outils domestiques suggère que ce changement de style a été fait au nom des préférences et des goûts des clients, plutôt que de la qualité du travail. Une analyse de la culture matérielle du fer à repasser illustre la relation réciproque entre le genre et la technologie et participe à la réflexion de plus en plus commune autour des changements de l'espace domestique entre 1880 et 1920 au Canada.

The 20th century has witnessed a marked increase in the functionality of domestic technologies in the home. Technologies in this context refer not only to the objects or tools themselves, but also the process or routines by which they were used. Stemming from this development, while simultaneously propelling it along, has been the de-skilling of household labour throughout the first half of the century, and the need to meet the aesthetic requirements of the new-working class throughout the second

part of the 20th century.¹ These factors and influences have compounded, and, as a result, consumers increasingly demanded better designed and more useful domestic technologies. Since the late 1870s, these household tools have evolved from a place of relative seclusion in the private sphere into a nuanced part of our home-scapes. This shift is especially apparent in the years from 1880 to 1920, as this period reveals the incompatibility of contemporary domestic service with modern, cultural attitudes and industrial trends influencing the home. This paper looks at the developmental, technological, and aesthetic change in the design of domestic irons as a reflection of this phenomenon. This small appliance, often overlooked in the broader studies in the field of history of technology, offers excellent evidence of the transformation of a domestic object from a tool into an aesthetically desirable commodity.

The home has, until relatively recently, been recognized as a private and non-technological space; an understanding that has meant its exclusion from long standing discussions surrounding labour, technology, and the nation. In the 1970s, housework was recognized by scholars as 'work' and became the subject of serious academic study by historians and sociologists.² Judy Wajcman notes that, "this was part of a general concern with the relationship between the changing structures of industrial capitalism and the shaping of everyday life within the household."3 Ruth Schwartz Cowan's seminal book, More Work for *Mother*, was part of this movement as she studied housework through an industrial lens, rather than analyzing it as an unrelated form of labour.⁴ In the early 1990s, Cynthia Cockburn argued that the home did constitute a sphere of technology and pushed for relational studies between designer and user, wherein the treatment of the household and its technologies provides an entry point for examining economic planning and technological development.⁵ In her book, Bringing Technology Home, she emphasized that since technology and gender are both socially constructed and socially pervasive, we can never understand one without understanding the other.⁶ This observation has led to numerous studies

Ruth Schwartz Cowan, "The "Industrial Revolution" in the Home: Household Technology and Social Change in the 20th Century," *Technology and Culture* 17 (1976): 4.
Judy Wajcman, *Feminisms Confronts Technology* (University Park: Pennsylvania State University Press, 1991), 81.

^{3.} Ibid.

^{4.} Ruch Schwartz Cowan, More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave (New York: Basic Books, 1983).

^{5.} Cynthia Cockburn and Susan Ormrod, *Gender and Technology in the Making* (London: SAGE, 1993).

^{6.} Cynthia Cockburn "The Circuit of Technology: Gender, Identity and Power" in Consuming Technology: Media and Information in Domestic Spaces, eds. R. Silverstone

that focus on the roles of domestic objects, for example the work done by Joy Parr on kitchens and Shelley Nickles on refrigerators, and is part of a recent historiography that engages with specific household spaces or tools in order to create, shape, and deconstruct gender, labour, and technology.⁷

A material culture approach extrapolates on the existing conversations surrounding the home by engaging directly with the objects of this space. The underlying premise of this type of study is based on the understanding that "human-made objects reflect, consciously or unconsciously, directly or indirectly, the beliefs of the individuals who commissioned, fabricated, purchased, or used them and, by extension, the beliefs of the larger society to which these individuals belonged."⁸ Many flavours of material culture exist, which allow for a variety of analysis when it comes to identifying objects, evaluating their authenticity, examining their provenance, and assessing their meaning for a variety of audiences. Objects are also powerful in their ability to enable cultural connections with the era in which they were built and used. As Edmund Fleming's analysis suggests:

By studying the function performed by the artifact in its culture, one can discuss the human behaviour associated with the artifact and the social groups engaged in this behaviour. This approach also leads to a discussion of the artifact as a means of conveying status, ideas, values, feelings, and meanings.

Museum exhibitions can also employ a material culture approach through the presentation and interpretation of artifacts. The National Design Museum's *Mechanical Brides: Women and Machines from Home to Office*, for example, informed visitors of the cultural differences between women and men in American life through the display of laundry equipment, telephones, and type writers. By engaging with these artifacts, the narrative put forth in *Mechanical Brides* suggested that "assumptions about the aspirations and responsibilities of women are reflected and reinforced by the way these machines have been designed, marketed, used, and imagined in the twentieth century."¹⁰ In 1996, the Canada

and E. Hirsch (London: Routledge, 1992), 40.

^{7.} Joy Parr, "Modern Kitchen, Good Home, Strong Nation" *Technology and Culture* 43, 4 (2002): 657-667; Shelley Nickles, "More is Better: Mass Consumption, Gender, and Class Identity in Postwar America" *American Quarterly* 54, 4 (2002): 581-622.

^{8.} Jules Prown, "The Truth of Material Culture: History of Fiction," in *History of Things: Essays on Material Culture*, ed. Steven Lubar and W. Kingery (Washington, D.C.: Smithsonian Institution, 1993), 1.

^{9.} Edward Fleming, "Artifact Study: A Proposed Model," in *Material Culture Studies in American*, ed. Thomas Schlereth (Nashville: American Association for State and Local History, 1982), 169.

^{10.} Ellen Lupton, Mechanical Brides: Women and Machines from Home to Office

Science and Technology Museum opened *Loved, Leisure and Laundry: Why Housework Just Won't Go Away.* This exhibit also placed artifacts and trade literature at the centre of its interpretive approach and used this collection to assist visitors in considering "how socio-cultural and regional factors shaped the design and use of domestic technology."¹¹ While these two exhibitions posed different questions and focused on different national demographics, both interpretive approaches relied heavily on the inherent material culture of the artifacts selected for display.

Narrowing in on the materiality of household objects, these 'every-day' tools allow for a re-reading of social history as they are especially powerful in conveying and reinforcing gender and status. Recent scholarship in this area has tended to focus on whole rooms and larger appliances and, as a result, has overlooked the complexity of smaller domestic technologies such as irons. This is an unfortunate oversight in the field as these objects embody ingenuity, choices, and culture.¹² As Daniel Roche notes in his book, A History of Everyday Things, their study "enables us to understand better the continuity of the material and the symbols, the effort of intelligence and crystallised labour which is conserved" in the most mundane things and ordinary objects.¹³

From 1880 to the present, the iron's technical functionally and aesthetic presence has radically changed from a slug of iron to a light-weight tool that can press and steam.¹⁴ Not only did the look and feel of the tool evolve, but its physical place of operation in the home also expanded by moving outside of the kitchen. Much of this development was a result of newly introduced fuel sources such as gas and later, electricity, which greatly diminished the user's need to remain close to a hot stove or range, and allowed manufacturers to experiment with the iron's form and functionality. Technical innovations such as the first temperature settings introduced in 1917; the first truly automatic adjustable temperature system released in 1927; and the introduction of the steam iron in the

⁽NewYork: Cooper-Hewitt, National Museum of Design, Smithsonian Institution and Princeton Architectural Press, 1993), 4. This exhibition opened in August 1993 and closed in January 1994.

^{11.} Karen Dubinsky, "National Museum of Science and Technology, Love, Leisure and Laundry: Why Housework Just Won't Go Away," *Material Culture Review*, 44 (Fall 1996): 113.

^{12.} Daniel Roche, A History of Everyday Things: The Birth of Consumption in France, 1600-1800 (Cambridge: Cambridge University Press, 2000), 7.

^{13.} Ibid.

^{14.} The Canada Science and Technology Museums Corporation's collection (CSTMC) contains 168 irons that physically depict and document these changes. These artifacts were examined and researched as part of this study.

mid-1930s made these domestic technologies easier and easier to use and showcase the evolution of this tool.¹⁵ The design of the iron also transformed as a result of newly available or improved materials, and while generally sold in simplistic, consumer friendly designs like the 1928 Canadian General Electric Co. Ltd. Hotpoint F20, they were also built to reflect art deco styles, streamlining details, and incorporated different colours. Through an examination of the material culture of pressing irons from the late 19th and early 20th century, this article explores how these tools speak to the changing dynamic of the home as not only a lived-in environment but as a site where status and identity were questioned and reinforced.¹⁶

The Nation, the Home, and Chores

Although urbanization and industrialization were underway by 1880, only fourteen percent of Canada's population lived in towns and cities.¹⁷ In the wake of the New Policy, middle-class women were active in, as Desmond Morton notes, "defending the sanctity of the family from drunkenness, prostitution, and bad sanitation" in these urban centres.¹⁸ In light of their active role in social governance, the comportment of women's middle and upper-class homes and families was ever more important as a reflection of their status and propriety. Within this private sphere, Magda Fahrni argues that paid household labour was necessary to the creation and maintenance of a respectable home as having paid staff was a sign of bourgeois status and their duties reinforced the pre-existing standards of cleanliness and tidiness promoted within this socio-economic demographic.¹⁹

During this period, labour that related to the personal needs of household members and the maintenance of the middle or upper-class home was most often done by a domestic servant.²⁰ In 1901 Canada, thirty-eight percent of all women with paid labour occupations were live-in domestic servants, and the occupation itself attracted more women

^{15. &}quot;Fuel choice was often dependent on geographic location, socio-economic status, and whether one was an urban or rural dweller." Franz Klingender, *To Lighten the Burden of Womenkind*": *The Mechanization of Domestic Equipment, 1890-1960* (Ottawa: CSTMC, 1994), 5.

^{16.} While this study focuses on Canada more generally, case studies and statistical information pertain to the experiences in Ontario more closely.

^{17.} Census of Canada, 1921–Population, xxxi.

^{18.} D. Morton, A Short History of Canada (Toronto: McClelland & Stewart, 2001), 118.

^{19.} Magda Fahrni, "'Ruffled Mistresses and 'Discontented' Maids: Respectability and the Case of Domestic Service, 1880-1914" *Labour/Le Travail* 39 (1997): 72.

^{20.} The term 'servant' was applied quite liberally throughout the 19th century and had a different definition for both French and English-speaking Canadians.



Figure 1. Waverly Tool Company's 1941 Petitpoint W410, Vancouver Engineering Works Limited's 1945 Nepro Midget 33, and Renfrew Electric Products Limited's 1925 Majestic Por-cel-iron 88

Source: CSTMC, artifact no. 1996.0035, 1988.0433, and 1992.0342

than the entire manufacturing sector.²¹ Domestic servants were almost always single; as most were live-ins, few employers would hire women with husbands, and many employers discouraged domestics from continuing paid labour after marriage.²² Most domestic servants were young, often under the age of twenty. Many were immigrants, largely from the British Isles, however it was most common to have Canadianborn girls working in Canadian homes.²³ They were generally literate young women who had succeeded in the compulsory school system, with its socialization of girls into gender-specific and most often domestic roles.²⁴

Regardless of education and professional training, almost all were lowpaid, earning at the turn of the century a national average of \$120 a year.²⁵ This rate included room and board, and wages varied considerably between urban and rural settings, and between regions.²⁶ Servants in cities earned more than those in rural areas and those in Western Canada more than those in Central Canada, where women seeking employment as domestic servants were more numerous.²⁷ In Ontario, the majority of servant-employing households did not maintain a large staff but hired only one domestic at a time.²⁸ This relative isolation, coupled with the arduous tasks of servitude, meant that the majority of employed young women at the turn of the century found themselves in an occupation that entailed long hours of work, a lack of freedom, loneliness, and vulnerability to exploitation.

Class conceptions held by the employers towards their hired labourers only served to exaggerate these less than ideal working conditions, as the class link of domestic servant was often associated with criminality and

^{21.} Genevieve Leslie, "Domestic Service in Canada, 1880-1920," in *Women at Work: Ontario, 1850-1930*, eds. Janice Acton, Penny Goldsmith, and Bonnie Shepard (Toronto: Canadian Women's Educational Press, 1974), 72.

^{22.} Fahrni, "'Ruffled Mistresses and 'Discontented' Maids", 72.

^{23.} Helen Lenskyj, "A 'Servant Problem' or a 'Servant-Mistress Problem'? Domestic Service in Canada, 1890-1930," *Atlantis* 7, 1 (1981): 7

^{24.} The introduction of domestic science studies in Ontario elementary schools began at the end of the 19^{th} century and was intended to educate as well as elevate the status of household work in the province.

^{25.} Canadian Families Project 2002, "1901 Census of Canada Database," http://web.uvic.ca/hrd/cfp/index.html. Accessed November 6, 2013.

^{26.} Eric Sager, "The Transformation of the Canadian Domestic Servant, 1871-1931," *Social Science History* 31, 4 (2007): 514.

^{27.} Census of Canada, 1881, 1891, 1901, 1911, 1921. Marilyn Barber, "The Women Ontario Welcomed: Immigrant Domestics for Ontario Homes, 1870-1930," Ontario Homes 72, 3 (1980): 102.

^{28.} Jean Thomson Scott, *Conditions of Female Labour in Ontario* (Toronto: Warwick & Sons, 1892), 92.

even prostitution. Fahrni suggests that, despite the associated public respectability of being employed, which was only heightened by working in middle or upper-class home, the apparent sense of inferiority that was imposed within this private space was inescapable.²⁹ Society may have respected the young domestic servant, but her employer generally did not, and these attitudes are reflected in the material culture of tools most commonly purchased by the employer for the domestic servant. Elements such as design and safety consideration or user comfort were not initially important for the commercial success of these products.

While the presence of domestic servants in the home had steadily increased in Canada throughout the latter part of the nineteenth century, it reached a plateau in the 1890s and between 1890 and 1920 this service sector decreased by half.³⁰ Female domestic servants were forty-one percent of all women with occupations in 1891 but this proportion fell to thirty-four percent in 1901, and fell further still to eighteen percent in 1911.³¹ Although domestic service remained an important occupation for women until the Second World War, socio-economic factors that played a significant role in driving women out of this field of work were clearly visible between 1880 and 1920: a 40-year period influenced by industrialization, urbanization, job growth, and the demands and opportunities of the Great War. Industrialization, for its part, has been credited with bringing "workers together in larger and larger numbers," which ultimately "led to protective legislation, standardization of working conditions, and the potential power of workers through collective action."³² Domestic service declined in status alongside the progress of industrialization as it was no longer considered an integral part of the economy in the face of the new industrial workforce. These changing attitudes and new employment opportunities created an ideal environment for this generation of women who sought time-oriented wage-paid labour, such as factory and office work, rather than the long hours of task-oriented work in the home.³³

As a result of this increasing scarcity in household labourers, middle and upper-class women were now charged with caring for their own homes. Tasks that had previously been left to domestic servants were now the extended duties of the lady of the house with, in time, the help of new commodities and technologies.³⁴ The first series of "The Conditions

^{29.} Fahrni, "'Ruffled Mistresses and 'Discontented' Maids", 75.

^{30.} Dominion Bureau of Statistics, Census of Canada, 1921, Vols. 4-5.

^{31.} Sage, "The Transformation of the Canadian Domestic Servant", 514.

^{32.} Leslie, "Domestic Servants in Canada", 76

^{33.} Fahrni, "'Ruffled Mistresses and 'Discontented' Maids", 75.

^{34.} Miriam Glucksmann and Jane Nolan. "New Technologies and the Transformations of

of Female Labour in Ontario" noted that, "many families who formerly were able to keep a servant now do without," but stressed that, "[O]wing to the invention of many modern conveniences it is possible to reduce the work to a minimum."³⁵ As long as servants had been available, however, most families spent minimal funds on making these 'modern conveniences' easy to use or attractive.³⁶ Kitchens were located in the basement or in the back of the house and housewives preferred to spend money on rooms used by the family and their guests. These priorities changed when the housewife was forced to do her own cooking and cleaning and spend time in the areas she had previous dismissed.³⁷ This new reality changed house work from that of paid labour to a gendered, socially expected, and essentially glamorized, responsibility and it was in response to the wants and needs of this demographic that household tools, such as the iron, were *beautified*.

The Tools

In 1880, most housework, such as laundry, cooking and cleaning, was accomplished with a few basic tools and, in light of such limited technologies, domestic servants required strength and knowledge in order to complete these laborious tasks. By 1890, many routine domestic chores had been affected by an early stage of mechanization, which prompted an initial de-skilling of this type of labour.³⁸ Gradually, labour and skill were replaced by technologies. In the case of laundry, scrub boards continued to be staples in the home, but hand-cranked washingmachines were emerging as a new method for washing clothes, eliminating the need to wring clothes by hand. Larger and wealthier households might have had a mangle, a device used to remove the water from large textiles such as bed sheets, and to press them.³⁹ Laundry finishing tools, such as the iron, also experienced a process of mechanization. Up until the late 1870s, the most widely used iron had been the sad iron.⁴⁰ Unlike its successors, this type of iron was constructed completely out of iron, and was very heavy.⁴¹ The iron's

Women's Labour at Home and Work," *Equal Opportunities International* 26, 2 (2007): 100.

^{35.} Scott, Conditions of Female Labour, 92.

^{36.} Jean Gordon and Jan McArthur, "American Women and Domestic Consumption, 1800-1920: Four Interpretive Themes," *Journal of American Culture* 8, 3 (1985): 43.

^{37.} Ibid.

^{38.} Klingender, To Lighten the Burden, 5.

^{39.} Ibid.

^{40.} Elaine Marie Alphin, Irons (Minneapolis: Carolrhoda Books, Inc., 1998), 18.

^{41.} Ibid. Alphin states that in the 1820s, one meaning of the word 'sad' was 'heavy' and suggests that in light of the fact that an average sad iron from this period weighed about 15

conductivity was especially problematic as it was heated directly on a piece of sheet iron set on a hearth, and later on the stove, and was therefore quite painful to use as heat from the base would travel up into the handle .⁴² Even with attempts to improve the general design of this iron, such as patented metal and leather heat deflectors, its inability to keep a hot base for a long period of time meant that the tool had to be continuously reheated and, as a result, pressing textiles remained a potentially painful, labourious, and time consuming chore.⁴³

Figure 2. Unknown Manufacturer 1894 G Iron



Source: CSTMC, artifact no. 1987.0294.001

In 1893, Mary Florence Potts of Ottumwa, Iowa, patented the doublepointed sad iron with a detachable wooden handle.⁴⁴ Potts's iron permitted the user to remove the handle from the iron, which meant that it would stay cool, and could be easily interchanged with another heated iron base. Mary, and her husband Joseph, marketed this newly patented iron as the "Mrs. Potts Iron" as they felt that female customers would endorse a product that was invented by a woman.⁴⁵

pounds, this is likely the reason for its name.

^{42.} Susan Strasser, *Never Done: A History of American Housework* (New York: Pantheon Books, 1982), 108.

^{43.} Klingender, To Lighten the Burden, 3.

^{44.} Alphin, Irons, 19.

^{45.} Fred Amram, Women of Mettle: Women Inventors Change the World http://www.fredamram.com/Women_of_Metal_web.pdf. Accessed February 15, 2014.



Figure 3. James Smart Manufacturing Company 1880 Black Painted Iron

Source: CSTMC, artifact no.1987.0311.001

While the Potts's initial sales campaign failed, Mrs. Potts's iron was a marked advancement in ironing technology. Not only did it increase productivity, as users could heat multiple iron bases at once without having to wait for a single iron to re-heat, it also provided the user with greater level of comfort.

Figure 4: Advertising Card showing the difference between a sad iron and a sad iron with a detachable handle



Source: Boston Public Library, Print Department. 19th Century American Trade Cards.

In 1894, James Smart Manufacturing Company of Brockville, Ontario, which opened in 1854 and was Canada's oldest factory, advertised the sale of two technologically identical, yet stylistically different sad irons with detachable handles: one had a black painted finish, the other, a nickel plated finish. Both styles operated in the same fashion and produced a comparable final product; however, the latter was a new addition to the catalogue and was set at a higher price. The similar functionality of these domestic tools could suggest that this stylistic change was made on behalf of clients' preference and taste, rather than the quality of work produced. This argument is visibly reinforced when one compares the styles of these two irons to contemporary design trends. The look of the black painted sad iron, as it was made of cast iron, is similar with that seen in agricultural tools and machinery of this period and, for that reason, has a certain rural feel to it. This type of material was also known to rust and was relatively brittle and for these reasons was not given high material value.⁴⁶ While the nickel plated iron's shape continued to reflect the 'simple' manufacturing process from this period, its metallic and clean look spoke to a more modern esthetic. This design change was given tremendous impetus by the industrial revolution. By the 1880s and 1890s, domestic consumption had become the norm for most North Americans and, although "values associated with a simpler. small town way of life persisted, these were challenged by the mores of the newer, urban, commercial secularized communities."47 Within the first few decades of the 20th century, mass production, popular culture and modern advertising had all but prevailed over rural values and traditional consumption.48

In households wealthy enough to take advantage of gas lighting, a gasfired clothes iron was often used. With these irons, the user no longer had to remain close to the hot stove in order to continuously press textiles; she had the mobility of a long rubber tube, which eliminated the need to be near a heat source or a pressurized canister like the National Stamping & Electric Works' *Comfort* iron. While natural gas did not necessitate the extensive labour associated with wood or coal, during the early period of its development it was a dirty fuel. Contemporary writers attributed much of the discolouration of textile finishes in the home to the open combustion of fuel in gas burners.⁴⁹ Similarly to the nickel plated Smart iron, these gas irons were not purchased because of the final product they

^{46.} Louise Peet and Lenore Slater, *Household Equipment* (New York: John Wiley & Sons, 1934), 28.

^{47.} Gordon, "American Women and Domestic Consumption," 35.

^{48.} Ibid.

^{49.} Klingender, To Lighten the Burden, 3.

produced but because of the way they were marketed and, in this case, the fact that they incorporated a new fuel source. A lighter, sleeker gas iron seemed worth the risk to many ironers and was instantly popular.⁵⁰

Source: CSTMC, artifact no.1987.0308.001

While it was not until the period between 1920 and 1940 that the broader spectrum of Canadian homes gained access to electricity, advertisements that promoted the uses of this new energy source first appeared in the early 1900s, and electrically operated domestic technologies quickly became coveted tools. Utility companies and appliance manufacturers enticed customers to acquire a full complement of the new technology through initiatives like General Electric's 1902 campaign, which offered Canadians to trade in old sad irons for new electric irons. During this period, model names also changed, as manufacturers selected titles that appealed to and flattered the users rather than the process of labour. As early as 1908, the Ideal Electric Manufacturing Company of London, Ontario, was marketing their *Ideal* Electric Iron, which boasted a "very attractive appearance."⁵¹ In 1912, the American Electrical Heater Company released the *Beauty Series* in an attempt to bridge the gap between art and industry in the eyes of the

Figure 5: National Stamping & Electric Works' 1910 Comfort iron

^{50.} Alphin, Irons, 22.

^{51.} This period also saw the appearance of the "ideal housewife" and "ideal home" in advertisements and discourse. Glucksmann, *New Technologies*, 100.

potential customer. And so was the trend of the 1910s, with Renfrew Electric Products Company's *Canadian Beauty* series, Canadian Radiant Electric Company's *Majestic* and *Deluxe* models, and *Ideal* irons from Taylor-Forbes Company Limited, and Woodstock Electric Company. The addition of 'beauty' or an allusion to it was crucial to any machine that was to play a role in domestic life and the consumption of which was more than likely the responsibility of the housewife.

Figure 6: To promote the use of electricity, the General Electric Company gave away 2,000 electric irons in exchange for sad irons.



Source: miSci- Museum of Innovation and Science

Regardless of these efforts, early electric irons retained many features of their manual predecessors: the traditional shape often endured, and the device remained a heavy cast iron weight with a wooden handle.⁵² However, the introduction of pressed metal construction did make irons somewhat lighter and also minimized the transfer of heat from the element's integral heat source to the user's hand. But while they were toted as being, "Simple, Clean," and, "Convenient" they also shared

^{52.} Klingender, To Lighten the Burden, 6.

many of the same problems as their predecessor.⁵³ As Klingender notes in his *Historical Assessment* of domestic technology in Canada:

If one was not careful the iron might overheat and scorch the fabric. With the electric element which was separated from the metal portions of the iron only by a thin sheet of mica, came the added hazard of electric shock. [...] As the power cord twisted during use there was also a tendency for the insulation to break down causing the iron to short out.⁵⁴

In light of these apparent risks, the time and labour saving capabilities of this electrified tool was seen to outweigh its apparent dangers as contemporary advertisements and manuals echoed that, "The new electrically and gas heated irons [...] have greatly reduced the time and energy required."⁵⁵





Source: CSTMC, artifact no.1992.0221.001

Conclusion

With the exception of minor improvements, there was little change in the nature and variety of small appliances available from 1890 to 1920

^{53. &}quot;Ideal Electric Iron" advertisement, The Ideal Electric Manufacturing Company, *Canadian Electrical News*, 1910.

^{54.} Klingender, To Lighten the Burden, 32.

^{55.} Peet, Household Equipment, 212.

and the developments that did occur were alterations to existing technological forms. While the initial sad iron design was beautified in response to the new "domestic servant", the housewife, products of later years were marketed almost exclusively to her and reinforced her role within the home and society. These technologies and the way they were designed and sold also changed the attitudes that women, and society more generally, brought to housework during this period. Seen as a task for a paid domestic servant, household labour evolved from a necessary chore to something quite different—an emotional 'trip':

Laundering was not just laundering, but an expression of love; the housewife who truly loved her family would protect them from the embarrassment of tattletale gray. Tasks of this emotional magnitude could not possibly be delegated to servants, even assuming qualified servants could be found. ⁵⁶

By studying domestic objects, such as irons, and their associated trade literature, it is evident that gender and technology are very much coproducing, as both are seen as performed and processional in character, rather than given and unchanging. The agency of these technologies, then, is their ability to reinforce cultural expectations and/or establish new social ideals for the women they address and the forms of labour they represent.

^{56.} Cowan, "The "Industrial Revolution" in the Home," 16.