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"Forced selling", domesticity, and the diffusion of washing-machines in inter-war America

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Abstract

This article explores the reasons behind the relatively slow diffusion of washing machines in inter-war America and the rise and decline of a distinctive marketing strategy employed to accelerate diffusion: door-to-door sales. Washers represented a particularly difficult selling challenge, as many white-collar households (and, in the

South, most white families) had already out-sourced some, or all, of their washing, to a laundress or a commercial laundry. Consumer resistance to machine washing was particularly strong in the South, reflecting both the greater availability and lower cost of black domestic servants, together with attitudes, inherited from the slavery era, that clothes washing was beneath the dignity of white women. During the 1920s washers were mainly sold door-to-door, by salesmen who focused primarily on the large number of blue-collar families who relied on manual home washing. The Depression witnessed a change in the washer market, with a greater emphasis on over-the-counter selling and price competition. Yet diffusion remained relatively slow, as the sector failed to provide a machine that would give housewives what they wanted – a means of doing their laundry within the privacy of the family unit, without significant inputs of either effort or time.

Introduction

The "industrialization of the home" during the early and middle decades of the twentieth century had far-reaching impacts on American households, including women's work and social roles; differentials between blue-collar and white-collar standards of domestic cleanliness and comfort; and evolving social norms based around high standards of hygiene, domesticity and privacy.[1] Laundry had been the least popular chore for nineteenth century housewives – owing to the long, heavy, and unpleasant physical labor that hand-washing required. It was, therefore, the task that women typically prioritized for out-sourcing or mechanization.[2] Yet, despite the development of powered household washing machines by the 1910s, their diffusion proved relatively slow, falling behind that of the more recently introduced, and more expensive, electric refrigerator by 1940.

This paper examines the marketing of powered washing machines during the 1920s and 1930s. Washing machines constituted a particularly complex selling challenge, as their adoption involved substantial changes to entrenched social habits, practices, and routines.[3] Most new durables required only modest changes in practices; for example, the refrigerator's functions were broadly similar to those of the ice box and the vacuum cleaner closely substituted the functions of manual cleaning. Washing machines often entailed larger changes (bringing washing back into the home), as many white-collar housewives out-sourced most, or all, their washing by either employing a laundress or, more commonly, using a commercial laundry. In the South even most working-class white women out-sourced washing to black laundresses, reflecting both the low cost of black female labor and social conventions, established in the slavery era, that heavy manual labor was below the dignity of white southern women.

During the 1920s armies of door-to-door salesmen were mobilized by the washing machine manufacturers and the retailers they supplied, using hard-sell techniques to get the housewife's signature on the purchase contract – methods described, even in the trade, as "forced selling".[4] These played a crucial role in the early diffusion of washing machines (and for other major appliances, such as refrigerators and vacuums), though this has been rendered invisible in official data on channels of distribution – as sales made door-to-door were attributed to the retailer or manufacturer the salesman worked for.[5] Washer salesmen

found their largest market among blue-collar families, who typically used manual home washing methods, were regarded as being more receptive to high-pressure selling. and, typically, could not afford to out-source all or most of their washing to a washerwoman or commercial laundry.[6]

The Depression precipitated a decline in working-class washer purchases and a market shift to white-collar families, many of whom were struggling to maintain a middle-class lifestyle on reduced incomes. This brought washers into more intense competition with power laundries – a well-organized industry, with a dynamic trade association, that proved a formidable competitor. Moreover, the effectiveness of direct selling was undermined by the greater "price-mindedness" of white-collar workers, who often opted for over the counter purchases of retailer own-brands (which offered much better value for money, as their prices did not need to cover the heavy costs of direct selling). The washer trade explored various methods of boosting sales – even using overtly racist arguments to deter Southern white families from using black laundresses. However, they failed to address the fundamental problem – that the labor-saving services of the pre-automatic washer did not clearly provide superior value for money to laundries that would almost entirely negate the weekly washing chore. This in turn reflected the fact that, while the semi-automatic machines of the era took most of the drudgery out of the washing process, they were much less successful in reducing the time that it took, as the housewife's presence was required to run each item of clothing through the powered wringers between each part of the cycle.

After briefly reviewing the development of the washing machine industry, this paper examines how washers were sold to an often resistant public; the nature of competition with the power laundry industry; and the particular problems washing machine salesmen faced in the South. It then explores how the Depression shifted the market towards white-collar families and how this upset the high-price, intensive promotion, marketing regime of the 1920s. Finally, we examine the reasons for the washer's failure to "take-off" into accelerating diffusion prior to World War Two.

The rise of the washer industry

Prior to industrialization much clothing worn by ordinary people was virtually unwashable (woven woolen goods and outer garments of leather or animal skins), while even linen or knitted woolen underclothing was rarely laundered. However, the switch to cotton fabrics, together with rising standards of hygiene and increased smoke pollution from the expanding industrial cities, created the weekly washing chore.[7] The late nineteenth and early twentieth centuries witnessed rising household demand for washing services, driven by evolving hygiene norms. New scientific breakthroughs such as the germ theory of disease associated cleanliness with health, while cleanliness also became an important status marker. Such values, promulgated by health professionals, home economists, and the media, cumulatively accorded cleanliness a central role in an emerging cluster of "respectable" values, for both working-class and middle-class households, including smartly furnished homes, "privatized" family- and home-centered lifestyles, and an increased commitment of resources to the welfare and material advancement of the next generation.[8] As Jan De Vries has noted, personal cleanliness took center stage in this "complex of consumption goals", by sending out a highly-visible signal of commitment to achieving this new domesticated lifestyle.[9]

Laundry was a particularly unpopular household chore, owing to the drudgery of the washing process – rubbing, wringing, and lifting water-laden clothes, prolonged exposure of hands and arms to caustic substances, and the necessity of carrying, then heating, around fifty gallons of water.[10] Entrepreneurs soon explored ways to mechanize the laundry chore. Various hand-powered devices were developed during the second half of the nineteenth century, with the "funnel on a stick" machine being superseded by the "milk stool dolly", from around 1900, using the agitation principle (oscillating back and forth). Early devices risked tangling and tearing clothing – a problem later solved by replacing the milk stool legs with fins.[11] By the 1880s belt-drives were being fitted to some of these devices, while the invention of the electric washing machine is dated to around 1908.[12] By the late 1910s washers were beginning to incorporate both washing and spin dry functions in a single tub, while from 1914 their sales received a boost from the launch of granulated soaps developed specifically for them.[13]

The 1920s witnessed rapidly-rising demand for labor-saving durables, owing to the growth of households wired for electricity, the growing scarcity of domestic labor, and the rise of the “scientific homemaking” movement.[14] From the 1920s women’s magazines, which had hitherto assumed that housework would be done by servants, now promoted the image of the efficient middle-class housewife, using the new appliances to transform housework from a chore to an expression of love for her family.[15] Consumer durables were presented as taking the drudgery out of housework, thus weakening the strong white-collar norm that heavy or dirty household tasks were unladylike.[16] Salesmen capitalized on this by introducing themselves as instructors in methods of improving household efficiency.[17] However, these ideas appear to have impacted less on demand for washers than for other labor-saving durables, as laundry remained very time-consuming, even using the latest machines, while there was an alternative that out-sourced the whole washing task - the commercial laundry.

In 1924 there were around 100 washing machine manufacturing plants in the USA, concentrated in Iowa (principally in Newton), together with Illinois, Ohio, Missouri, and New York (collectively encompassing some 70 per cent of U.S. plants). [18] The industry was tightly controlled via patent pool licensing. Maytag – the industry leader for most of the inter-war era - was a former agricultural machinery firm that had diversified into domestic washing machines to reduce seasonal demand variations.[19] From 1917 it controlled the syndicates that managed the industry’s fundamental patents - for the swinging wringer and drive gear mechanisms - its licensees representing 85 per cent of powered washing machines sold in 1922.[20]

Control over the sector, enforced through royalty licenses, underpinned Maytag's industry leadership; it was said to have much stronger competencies, and investments, in legal services than in R&D.[21] The Maytag syndicate's legal position was in fact problematic, as they did not hold certain earlier patents on key features of the reversible swinging wringer. Yet their legal team succeeded in winning court cases that allowed Maytag to not only extract royalties from competitors, but also enforce price-fixing agreements (eventually negated by anti-trust pressures). It took until 1939, when the "gyrator" patent litigation reached the Supreme Court, for their patent claim to be finally declared invalid.[22]

Marketing washing machines

During the 1920s major washer manufacturers switched from distributing mainly through wholesalers to dealing directly with retailers.[23] They sought dealers who would actively promote their products through advertising, special promotions, and door-to-door selling, while giving them greater prominence than competing brands (or, ideally, not stocking directly competing goods). This generally entailed giving retailers exclusive franchised territories. Maytag adopted this policy in 1924, together with strict prohibitions against "bootleggers" (firms who encroached on others' territories).[24]

Liaising with several thousand retail outlets required substantial travelling sales forces. In 1927 Easy Washing Machine Co. had a staff of 178 salesmen who travelled the USA in automobiles, managed by six district offices. In addition to promoting their product and managing the flow of information along the value chain, they were trained to teach dealers how to get more business.[25] Easy opened 15 retail stores in various parts of the USA, so they could provide expert advice to their independent retailers: "They want to… know more about retail selling (through actual experience) than any Dealer they serve."[26]

Heavy reliance on salesmen in turn raised problems of motivating, coordinating and controlling geographically dispersed salesforces. Washing machine firms typically used similar methods to other consumer durables manufacturers (such as refrigerator and vacuum firms) – a mixture of financial and "symbolic" incentives. Payment was partly on commission, while frequent competitions were held, both between individual salesmen and teams. In 1929 Maytag formed the F.L. Maytag Century Club for elite salesmen, (selling 100 washers in one year and 60 per year thereafter to maintain membership). Competitions and clubs blended both financial rewards and status markers (being made highly visible to their colleagues).[27] National or regional Conventions were also used to build salesmen's loyalty, motivation, and a distinctive corporate culture, reflecting a wider trend towards using such techniques to persuade dispersed sales team to not only accept the corporation's goals, but to adhere to a single "ideology" (a group of driving ideas regarding their sales mission).[28]

Supporting the retailer

Manufacturers used a variety of media to maintain close contact with sales staff. Maytag used a combination of sales manuals, house magazines, and personal contact via their district managers, to provide "all of the information and inspiration which… will enable him to close sales." [29] The use of company magazines as a channel of staff communication (especially with field sales forces) was widespread among large corporations at this time. Managers perceived that they not only served to disseminate information, but cultivated an esprit de corps among the staff; humanizing the salesman's relationship with the company through celebrating workers' activities and achievements and emphasizing the company's internal culture and sense of community.[30] This was particularly important for sales-orientated firms, which found it difficult to directly monitor geographically dispersed salesforces.[31] Maytag also extended this policy to its authorized dealers, principally via its dealer magazine *Profit News*, introduced in 1922, which had a circulation of 15,000 by

1929.[32] Extending corporate communications to independent authorized retailers - effectively treating them as part of the organization – was a strategy employed by many durables manufacturers, including Hoover, Frigidaire, and Crosley Radio.[33]

Information transmitted to retailers included the various advertising, marketing, and sales support activities they provided. Manufacturers engaged in extensive consumer advertising, both directly and co-operatively with retailers; government analysis of eight of the largest manufacturers found advertising expenses were equivalent to 3.1 per cent of total sales.[34] Advertising was used both to sell the general idea of domestic washing machines, and the merits of their specific brand, to the public. One of the most sophisticated early initiatives was undertaken by Hurley Machine Co., which hired household efficiency expert Christine Frederick to write the booklet *You and Your Laundry* in 1922. This argued that manual washing methods were out of date and then explained how to machine wash; the advantages of Hurley's *Thor* brand machine; and the alleged cost advantages of machine washing over commercial laundries (or paying a laundress to do it in situ). Frederick claimed that the costs of machine washing were substantially lower than for laundry service, though, in common with subsequent similar comparisons, the calculations were based on rather dubious assumptions (for example, no costs for machinery depreciation or repairs were factored in).[35] Federick also used the language of the household efficiency literature to press home her arguments: "Can you afford this `high cost of cleaning?' If not, then at once investigate the purchase of a THOR washer and ironer, in order to reduce your `operating cost' and keep it low in your budget."[36]

During the 1920s in particular, most washing machines were sold to consumers in their homes, by door-to-door salesmen. The dominance of direct sales is often overlooked, as data on channels of distribution typically focus on the type of organization that supplied the goods to final consumers (such as a retail store or mail order catalogue), rather than the way they were actually “sold” to that consumer. Evidence from two leading manufacturers (Maytag and Easy) indicate that most of their sales were made by door-to-door salesmen, a finding corroborated by trade press articles and government investigations.[37]

In common with other consumer durables sectors, salespeople were almost universally male (with the exception of canvassers sometimes sent in advance of the salesman’s visit).[38] This probably reflected the masculine sales cultures that firms sought to create for their sales forces, based on their missionary role; the competitive nature of their calling; and the rewards for success – encompassing immediate financial rewards, symbolic incentives, and meritocratic promotion up the corporate ladder.[39] During this era female direct sales staff were largely confined to a few niche sectors with special characteristics. For example, in cosmetics, the overwhelmingly female salesforce reflected not only the gendered and intimate nature of skills associated with applying the products, but also the fact that the industry was looking for reliable part-time staff with well-developed female social networks, who were not seeking promotion to managerial positions.[40]

Washing machines were particularly reliant on “push” selling. As *Electrical Merchandising* noted, “the washing machine… does not add to social standing, it has no luxury appeal, and no entertainment value. Even when a washer is desired it’s purchase can be postponed and the clothes sent out. These factors have made persuasion by the individual salesman necessary and sales have been almost entirely due to his persistence in corralling the elusive signature.”[41]

Easy’s General Sales Manager noted in 1927 that 70-75 per cent of sales were the direct result of house-to-house selling. Most of the rest came from special demonstrations, with “pick-up business in the stores” constituting only a small proportion.[42] Almost all such sales were formally made by retailers, though the salesman would often be a de facto employee of the manufacturer. From 1922 Maytag began hiring commission salesmen and sending them out to assist their dealers for 30 days, showing how to sell washers door-to-door by demonstration.[43] By 1927 their district managers - working out of seven regional sales branches - supervised approximately 6,800 Maytag "resalemen" (salesmen who sold washers door-to-door on behalf of Maytag's retailers, but were trained, paid, and supervised by Maytag). Maytag resalemen had exclusive territories and got commission for all retail sales in their territory, whether they sent them in or not.[44] Maytag focused on demonstrating washers in the home; as F.L. Maytag explained in 1927:

> it is very much more effective to demonstrate our machines in the home than to depend upon sales talk in the dealer's store… In the home the housewife interprets our merchandise in terms of her own problems, whereas in the retail sales floor the interview is on a more theoretical and a less personal basis. [45]

This involved three steps – scheduling the demonstration (by door-to-door canvasing); undertaking the demonstration; and closing the sale, with pressure selling only starting with the third step. Maytag was said to have developed a "formula" that, for every six demonstrations, three washers would be left in the home for further consideration and one sale would result.[46]

A series of Maytag salesmen's instructional booklets from the mid-1930s provide a detailed insight into the demonstration process. Extensive newspaper advertising was used to establish "customer acquaintance" with the brand, while telephone canvassing and mail circulars were also employed to prepare the ground for the salesman's visit.[47] Maytag used the offer of a free clothes wash, in the prospect's own home, as its standard sales method. Salesmen were advised to persuade housewives to accept this offer even if they had no intention of buying, using the argument: "That's all right. I haven't said a word about buying. The great Maytag slogan is, `if it doesn't sell itself, don't keep it.'"[48]

Maytag demonstrations involved the salesman completing a whole wash, which gave him the opportunity to demonstrate the washer's features and extoll its workmanship. Salesman were advised to divide their demonstration talk into sections, using a test close at the end of each section. This brought out any objections and questions that the prospect had, thus informing the salesman in advance of the final close at the end of the demonstration.[49] The manuals set out a highly gendered approach to pitching the sale. Salesmen were advised to avoid overly-technical demonstrations to the housewife, focusing instead on "what the Maytag will do for her!"[50] "A woman is more sentimental and more emotional than a man. She will be more susceptible to flattering and alluring pictures if you can get across the idea that `here is a man who understands a housewife's problem.'"[51] Conversely, they were told to focus on arguments regarding mechanics, construction, and materials when talking to husbands:

> Mrs. Jones will not be so much interested in this, but I know that you will. You realize that the price of any piece of merchandise is governed largely by its quality… The cheapest washer then is the one in which you get the most for your money. Being a man, Mr jones, you will know what it means to have these precision cut steel gears, the sealed-in-oil power drive, with material and workmanship as fine as any automobile…[52]

Maytag prided itself on its direct sales expertise. Maytag sales executives were required to have door-to-door sales experience; a policy which both ensured that they understood the realities of this form of selling and acted as an important signal to the salesforce that sales work offered strong promotion prospects. As F.L. Maytag reminded his audience at a 1928 Eastern Branch convention: "In building our organization we have tried to reward merit. Our managers, branch, divisional, and district men, have all rung doorbells before attaining their present position. We have not gone out of our organization to find leaders and lieutenants for our work." [53]

Another approach was to provide retailers with door-to-door sales training, so that they could supervise their own direct sales teams. By 1922 Hurley Machine Co. was running a washing machine sales school at their Chicago plant throughout the year. Each course lasted around one week and consisted of general lectures, a factory tour to see how the machines were made, a day in the company of one of Hurley's house-to-house canvassers, and another day "helping" an expert salesman in the company's downtown store. This also included a presentation of Hurley's advertising plan, with particular application to local advertising. The school was open to anyone interested in attending (mainly drawing utility sales managers, electrical contractors, and general retailers).[54]

Salesmen typically used health, hygiene, convenience and economy arguments – often tailored to the particular circumstances of the prospect. For example, a 1940 trade article divided housewives without washing machines into three classes: women who *do washing by hand* (labelled the "dwbh's"); those who *send washing out*, but wouldn't mind doing it with a machine (the "swo-thrifties") and those who send it out, but wouldn't do it themselves even with a machine (the "swo-lazies"). The "swo-lazy" woman was said to be, "not a prospect. She wouldn't have a washing machine as a gift."[55] Therefore economy and ease of use arguments, or warnings about the destruction of clothes by laundries, were wasted on her. However, the article claimed that these represented only about 25 percent of *swo* women.

Conversely, "swo thrifty" women were regarded as excellent prospects, and:

> easy to sell. The moment she gives the "can't afford" argument, she has cooked her goose… The woman knows what she pays the laundryman, she sees it go out every week… where the laundry bill is $1.00 a week and the payments on the washing

machine will approximate that, many of these women can see without much assistance from you where the economy lies. We ignore the cost of operation; it isn't enough to take into consideration – and seldom will the woman herself consider it.[56]

Salesmen were advised to tell swo thrifty prospects that buying the washer, "is just like putting money in the bank… the payments on the washing machine cease as soon as it is paid for – whereas the payments to the laundryman do not cease, until she buys the washer."[57] However "dwbh" (typically blue-collar) women were regarded as the best prospects, as the salesman could focus on convenience, time-saving, and drudgery-saving advantages. Despite their typically lower household incomes, dwbh housewives were said to be particularly receptive to the salesman's arguments, given the onerous nature of their weekly washing chore. [58]

Most washers were sold on the instalment system. In 1922 Hurley's Vice-President, E.N. Hurley Jr., claimed that 95 percent of Hurley's washing machine sales were on instalment; as were around 75 per cent of Maytag's sales during the 1920s.[59] Both washer companies and leading manufacturers of their electric motors financed retailers' instalment credit, by purchasing their instalment contracts at a small discount to face value. Manufacturers also subsidized retailers' trade-ins.

Door-to-door selling was an expensive business. Resalemen typically received between 10 and 15 per cent of the list price, plus bonuses for meeting sales quotas and occasional sales competition prizes.[60] When their administrative and supervision costs are added, together with other costs borne by the retailer, generous margins were required to ensure that retailers had a profitable business. High distribution costs made it difficult to extend the market for washers to households towards the bottom of the blue-collar income range, while during the 1920s middle class families still typically preferred to send their washing to a commercial laundry.

The competition

Laundresses were traditionally the most numerous specialized domestic servants, with many women employing them as their only regular source of paid help.[61] However, following the war-time decline in domestic servants, power laundries constituted the washing machine salesman's main competition; their household laundry turnover climbing from an estimated $236 million in 1919 to $700 million by 1928. By comparison electric washer sales rose from $67 million in 1919 to $108 million in 1928. Based on an estimate that laundry service cost the average family $80 per year, this would suggest around nine million families used power laundries in 1928, while some 5,735,000 homes were estimated to use electric washers in January 1929.[62] In 1939 there were still some 6,773 power laundry establishments in the USA, with total receipts of $453,579,000 (or $408,868,000 after deduction of dry-cleaning sales), plus 15,245 hand laundries, with a revenue of $45,783,000. Around 60 percent of total laundry custom was from households. Power laundries were more important in the large cities and mainly served white collar workers.[63] They were particularly attractive to single men and women, who found it hard to devote most of a day to (hand or machine) laundering, on top of their long working week. [64]

The power laundries were quick to react to the threat from the washing machine, offering a greater variety of services (e.g. "Damp wash," "Flat ironed," "Rough dry," and "Economy") to appeal to a broader market. They also developed an effective sales promotion strategy, using similar tactics to the washer manufacturers - telephone canvassing and door-to-door selling, incentivized by sales quotas, bonuses, and sales contests and backed up by advertising.[65] Power laundry advertising stressed convenience advantages (leisure, freedom from drudgery, “a three minute washday”), followed by cleanliness and health appeals, attractive appearance, dependability, and economy.[66] As an appliance trade journalist noted in 1929, “We have all read the laundry ads. With pictures and text they paint for the tired housewife the ease of sending laundry work out of the home. `No more washing days’ they repeat. `You have nothing to do after handing the bundle to the driver. You get back a finished product.’”[67]

The interests of the washing machine and laundry industries were not completely antagonistic. As a 1922 laundry trade article noted, “any advertising that is done for electric washers tends to promote the idea of clean clothes with the washing done at the least possible expense and in the most convenient manner. Can a laundry ask for anything better than that?”[68] Yet washing machine salesmen routinely included negative statements about power laundries in their sales pitch, claiming that they were unsanitary, used strong (and by implication dangerous) chemicals, and employed processes which wore out clothes prematurely. Maytag salesmen were advised to stress the cost-savings of home machine washing over laundry services, especially in terms of reducing damage to clothing. One section of script prepared for them claimed that:

> According to a survey conducted by a national women’s magazine, the value of washable clothing and linens in the average family runs around $500.00. This survey also disclosed the astonishing fact that clothes washed by a commercial laundry lasted only one-half as long on the average as clothes washed at home… When you wash in such a way that the average life of your clothes will be doubled, do you not see the tremendous saving that you will make year after year?[69]

Laundry salesmen reacted by highlighting the numerous injuries inflicted by power wringers and occasional instances of electrocution, while also claiming that washing machines tore clothes. Each group also produced cost breakdowns that universally showed the other method in a negative light.[70] Despite rising sales, the laundry trade resented such attacks. As one laundry manager noted in 1925, "If a domestic washer salesman calls at a home and fails to interest the home manager in one of his machines, he succeeds at least in making her think of laundries as a sure means of ruin to her clothes."[71]

In 1925 the National Laundry Owners' Association launched a four year advertising program to combat the washer industry's attacks, with a $4 million budget (boosted to $6 million in 1926).[72] A truce was brokered by the Laundryowners National Association and the American Washer and Ironer Manufacturers Association in 1927, though this later broke down, leading to a second peace conference in 1933, which produced a more detailed agreement on unacceptable promotional tactics, but again with only temporary success.[73] A further bout of negative competition broke out in 1936, with the laundries focusing their attack on claims that washing machines bred bacteria, using window displays and demonstrations of the bacteria found in washers.[74] The continuing competitive strength of the laundry sector is evidenced by the much more rapid national sales growth for gasoline powered washers, compared to electric washers, during the mid-1930s. Gasoline washers were sold in rural areas, typically lacking both electricity and proximity to laundries.[75]

Ruth Cowan argues that the industrialization of the home was determined partly by the decisions of individual householders and partly by social processes over which they had very little or no control.[76] While this is largely true, local and regional social practices could also have a considerable impact on the pace and pattern of diffusion, as evidenced in the South. Southern households showed the strongest sales resistance to the washing machine, owing to an entrenched social attitude that, "a washing machine is beneath the dignity of the Southern woman."[77] White women traditionally paid "black washerwomen" to do their laundry, as they considered heavy manual housework "unladylike" – reflecting attitudes inherited from the slavery era.[78] Given their very limited opportunities for alternative paid employment, low wages made black laundresses (and, to some extent, less specialized domestic labor) available even to most blue-collar white southern families. As one woman recalled, “No white family ever did its own washing.”[79]

Efforts to educate Southern housewives about the benefits of mechanical home laundry thus fell on death ears. One “home service woman” (employed by the power utilities to conduct classes using, and demonstrations of, household appliances for women’s clubs, local communities, schools, and similar organizations) from “Way Down South” reported in 1932 that their occasional laundry demonstrations received, “Very little interest. Whites don’t care and negroes can’t buy… [it] will be a long time before white people wash clothes here.”[80]

Even the industry leader, Maytag, was forced to close its Southeastern branch office in Atlanta in 1930 (five years after its establishment) owing to limited public acceptance of the household washer in the South, together with the high costs of selling there. Only in 1935 did Maytag re-establish a presence, by granting a distributorship.[81] The washing machine trade addressed consumer resistance in the South by playing on popular anxieties about, “the risk of clothes being lost or injured by strangers.”[82] This partly drew on a more generalized aversion among women to having their family’s clothes washed together with other people’s (even in power laundries, where high temperatures killed bacteria far more efficiently than either hand or machine home laundering).[83] Moreover, having people outside the family unit seeing and handling their dirty laundry ran counter to emerging standards of privatized respectability, discussed above. However, exploiting these anxieties was adapted by washer salesmen in the South to draw on racial prejudice.

According to the trade press, the most effective means of combatting the white housewife's refusal to do home laundry was to play up the conflict between two of the South's key social institutions: Jim Crow and black domestic service. These represented conflicting goals for white households, who typically sought to distance themselves from the black population, while relying on black servants to perform intimate tasks in their homes. The racial caste system in the South was underpinned by a common assumption among the white population that black servants were inherently inferior in both intelligence and personal habits. Yet black domestic service involved delegating them such tasks as clothes washing, cooking, and child care.[84] Moreover, it was not unknown for black servants to express dissatisfaction with their employers by sabotaging their work (for example, cooks dismissed by white families were reported to have responded by telling them that they had spit, or even urinated, in the food they had prepared).[85]

In September 1928 *Electrical Merchandising* reported how one washing machine retailer in Birmingham, Alabama, employed the argument that: "It is becoming increasingly difficult to obtain satisfactory colored servants and Southern housewives are beginning to realize that the colored Mammy's service is not always all that can be wished from the standpoint of sanitation."[86] The dealer, E.Z. Ponder of the Easy Housekeeping Shop, was said to have sold 187 washers during June 1928 with this pitch, mainly using direct canvassing in the name of the Birmingham Electric Company (the local power utility). This line of attack was said to have been subject to "continual pounding" on the public in the past, with a substantial cumulative impact in lowering sales resistance.[87]

Seven years later Paul J. Watson of the Alabama Appliance Co. of Birmingham explained in more detail how this pitch was employed to "combat the weakness of the negro washer woman." "Our biggest argument in overcoming the washerwoman bugaboo. We suggest that the woman would probably not care to go and spend a week with a Negro servant, yet she permits her clothes to remain two or three days at the servant's house. The prospect doesn't relish the idea at all, but has largely closed her eyes in the past to this rather unpleasant conception."[88] This approach appears to have been developed at local level, by retailers and power companies, though its positive and uncritical discussion in the trade press suggests at least tacit approval on behalf of the wider industry.

A U.S. Bureau of Labor Statistics investigation of the regional diffusion of powered appliances confirms the South's aversion to the washing machine. Cities in each region were divided into five size categories, from "Metropolis" to "small cities", and by household income. Figure 1 shows the results for "large cities," to control for urbanization. The diffusion of powered washing machines in the south was both lower than in other regions, and, in common with other parts of the USA, demonstrated relatively little variation with income. This does not reflect a generalized aversion to powered appliances in the South; the survey found much stronger relationships between income and diffusion rates for electric refrigerators and vacuums in large southern cities (from 16 and 8 percent respectively at $750-1,000 income to 68 and 83 percent for families on $5,000-7,500; reflecting a broader trend across the USA of vacuum and refrigerator diffusion being strongly related to income).

[Figure 1 near here]

New England also had low washer diffusion, which cannot be explained in terms of a relatively large servant population (its ratio of female workers in domestic and personal service, to numbers of families, 10.99 percent, was roughly equal to the national average, 10.63 percent).[89] This probably reflects the problems of operating washers in the typically smaller apartments and houses of large New England cities. While some washing machines were not much bigger than their modern equivalents, they required rinse tubs placed alongside, which could triple space requirements, making machine washing difficult for homes lacking basements, out-buildings, or large kitchens. This is corroborated by the survey's data for cities of different sizes. For example, at incomes of $3,000-$3,500, New England diffusion rates rose from 8 percent in metropolitan cities to 37 percent in large, 54 percent in medium-sized, and 64 percent in small, cities. In contrast, southern families in this income bracket had similar diffusion rates, 12 and 14 percent respectively, in large, and medium, cities (the only size categories enumerated for this region).

Southern resistance to machine washing persisted until after World War Two. A major 1947 survey undertaken by the American Institute of Laundering and Proctor & Gamble found that, despite its relative poverty, the South had the largest proportion of power laundry customers (48 percent; compared to 43 percent for the East, 36 percent for the Far West, and 24 percent for the Mid-west). Conversely, only 36 per cent of urban families in the South had washing machines, compared to a national average for urban families of 61 per cent, with other regions varying from 59 per cent (East) to 76 percent (Mid-West). This was explained as reflecting southern women's "inherent aversion to washing clothes," which was in turn ascribed to the "servant tradition" carried over from the slavery era.[90]

The changed market of Depression era America

In 1940 business analyst Ernest C. Hastings noted the poor sales performance of washers over the previous decade. From 1929 to 1932 their dollar sales performed almost 25 percent worse than his overall appliance sales index and, from 1932-37, failed to keep up with the index for any year except 1934. By 1939 the overall appliance index was 18 percent up on 1929, while washers were about 25 percent down. Hastings ascribed this to two main problems; a loss of dealer interest and the commercial laundries' successful sales campaign.[91]

In contrast to the 1920s, when the families of factory operatives and other blue collar workers had constituted the prime market for washers, during the Depression era most such families could no longer afford washing machines and the market shifted towards white collar households. In 1932 the Secretary of the American Washing Machine Manufacturers Association noted that Depression conditions had brought “an entirely new class” of more affluent households into the market, because they were now compelled “to direct attention to every item of household expense.”[92]

This group now struggled to maintain their former standard of living and machine home laundry was an attractive means of reducing family expenditure.[93] However, this market proved less suitable for the established sales formula of high-pressure door-to-door selling and high retailer margins to pay for its heavy costs. As *Electrical Merchandising* noted, “The demand for these buyers was less for quality than for price.”[94] Cutting prices while maintaining dealer margins was problematic for even the largest washer manufacturers, owing to the sector’s limited scale economies. A 1940 U.S. government report found little potential for production cost reductions: “The industry is largely one of machining and assemblage. Most of the manufacturers purchase a considerable portion of their materials partially or wholly fabricated. Opportunities to lower the cost of manufacture are correspondingly limited.”[95]

Cutting prices undermined the viability of direct sales (as it was impractical to charge a higher price for a machine sold door-to-door than for the same model purchased in store). Large retailers such as chains and department stores were typically less reliant on the direct sales system and could compensate for low margins with high stock-turn. Retailing thus shifted from specialist dealers using door-to-door methods to larger, more general, retailers whose appeal was strongly price-based.[96] Manufacturers felt compelled to introduce cheaper models to tap this price-based market, or even cut prices across their range. In September

1930 Easy jolted the trade by announcing a price reduction on one model of the Easy Washer from $99.50 to $79.50. Mail order houses such as Sears and Montgomery Ward, who had both recently begun to open conventional stores, were already selling washing machines for as little as $67 and many department stores were selling at just above this level. However, this was a major price drop for a leading manufacturer brand.

The decline in washer prices during 1930 upset the trade, undermining its dominant high margin, high promotion, sales formula. As *Electrical Merchandising* argued, "The electric washing machine has always been marketed by creative selling – forced selling, if you will. Without profits enough to continue forced selling, is there demand enough to maintain washer volume?"[97] Nevertheless other major manufacturers followed Easy's line, or even undercut its new price, until by January 1933 a bottom price of $30-40 was reached.[98] Some of these were "stripped" price leader models, used to attract customers with adverts emphasizing low prices and then "up-sell" them to more expensive models. However, there appears to have been more emphasis than, for example, in the refrigerator sector, on using reductions as a genuine attempt to compete on price.[99]

Sears and Montgomery Ward were particularly active in extending their market through lower prices. In January 1935 Sears announced a $29.85 washer (six sheet porcelain tub) and a $49.85 cabinet washer, while Montgomery Ward launched a six sheet standard washer at $32.45. These prices were said to make competition difficult for other retailers, without cutting margins to unacceptable levels.[100] In December 1937 John F. Thomas of Sears informed the American Marketing Association that Sears could sell an own-brand washer, equivalent to a manufacturer brand retailing at $155 for only $89.50, mainly through cutting the retailer's margin from 58.7 percent to 35.2 percent of the retail price (as non-transport marketing and distribution costs were virtually eliminated in their integrated value chain).[101] Integration of production and distribution also removed the need to compete with other washer brands on retail margins and salesmen's commission in order to secure sales outlets.

Such competition severely depressed margins along the value chain. *Electrical Merchandising* claimed that at least 40 per cent of the 1.1 million washers sold in 1934 were retailing at or below cost. Moreover, it was argued, prevailing prices allowed no margin for active selling, transforming the trade into an over the counter business, focused on a now mainly white-collar market that purchased on price.[102] Yet manufacturers also lacked the product differentiation that was key to both premium prices and selling a particular brand door-to-door on the basis of its superior features. A 1934 trade article noted, "the almost complete uniformity of present washer design" – in terms of both mechanisms and features (in contrast to much stronger product differentiation in the mid-1920s).[103] This reflected the industry's conservatism regarding product development (in contrast to the refrigerator sector, which invested heavily in product differentiation features). For example, it took an aviation company, rather than an industry insider, to develop the fully-automatic washing machine. Indeed an "ultraconservative and lawyer laden" Maytag only launched its own fully automatic washer range in 1949, twelve year's after Bendix introduced the first automatic.[104]

Explaining the washer's limited consumer acceptance

As Figure 2 shows, the electric washer's sales growth does not conform to the S-shaped curve predicted in standard models of product diffusion, where, following an "early-adopter" phase, demand "takes off" into self-sustaining growth via a "contagion" process of growing social acceptance that transforms the product from a luxury to a "necessity".[105] Instead the rate of growth, as a proportion of wired homes, appears fairly constant, in contrast to the refrigerator (a more recent durable, with only 1 percent diffusion in 1925, compared to

24 percent for the electric washer) which achieved much faster diffusion, over-taking the washer in 1940. This cannot be explained in terms of affordability: even in 1940 the average washer sold for less than half the price of the average refrigerator, while also having lower running costs.[106] Moreover, the data on washer diffusion rates by income in 1935-36 (examined, for washers, in Figure 1) show a relatively weak relationship between income and diffusion, while the survey's data for refrigerators and vacuums show income to be a much stronger determinant of diffusion.[107]

[Figure 2 near here]

In contrast to the refrigerator sector, whose incumbent competitor - the domestic ice industry - was deeply conservative and slow to take coordinated defensive action, washing machine manufacturers faced a much more agile and well-organized competitor in the power laundry sector. While refrigerator firms generally saw "the ice-man" as a figure of ridicule (reflecting popular perceptions), washer manufacturers perceived, correctly, that the power laundries constituted a formidable adversary.[108] The laundries in turn respected the threat that the washer industry presented and developed a coordinated advertising and PR campaign to combat it.

Table 1 compares national power laundry receipts from 1925-1941 with washing machine dollar, and unit, sales. From 1925-33 the laundries out-performed the washing machine sector in terms of revenue, though not in unit sales (reflecting falling washer prices during the Depression). Washer dollar sales growth out-paced power laundry sales during the second half of the 1930s, but even in 1940 laundry sales were higher, relative to 1925, than washer sales, despite the growing diffusion of washers - which were now estimated to be in more than 60 percent of wired homes.[109]

[Table 1 near here]

Ultimately no amount of pressure selling could compensate for the washer's principal weakness: it failed to eradicate the time-consuming nature of the weekly washing chore. Prior to World War Two all washing machines (with the exception of the very expensive newly-introduced automatics, from 1937) required running wet clothes through the powered wringers between each part of the cycle and, therefore, the need to be in attendance while the machine was running.[110] Thus, while they took most of the drudgery out of the weekly household chore, they had much less impact on the time it took.[111] Nor were the cost differentials between the washing machine and power laundry compelling, especially when the housewife's (or a servant's) time was factored in.[112] Furthermore laundry services could be reduced or dispensed with, if household financial circumstances required, whereas instalment payments on a washer could not easily be deferred without losing both the washer and all payments already made on it. The victory of the washer over the laundry came only in the 1950s, with affordable automatic washing machines that could be left unattended and were accessible even to people who could not afford the cost of (or did not have space for) their own machine, via coin-operated launderettes.

Conclusion

Forced selling proved a successful, if high-cost, means of creating mass markets for washers during the 1920s. However, it was a technique that was only effective for a certain segment of the population – people who had weak resistance to direct selling and were receptive to the salesman's (often exaggerated) claims regarding the machine's ease of use, economy, and other benefits. Targeting blue-collar workers proved a viable strategy both because this was the largest occupational group (and therefore offered the largest number of people with low sales resistance) and because this group had greater need for mechanical washing, as they could not afford the cost of out-sourcing the whole of the laundry task to an external agency.

However, Depression conditions made washers unaffordable for many blue-collar workers, while simultaneously making machine washing a more attractive option for those white collar workers who now struggled to afford commercial laundry services. Yet this group, comprising administrators, executives and professionals, typically had substantial experience of business transactions and were therefore less likely to succumb to pressure selling. Instead they actively sought out washing machines, based on price and value for money. The forced selling approach was thus increasingly undermined by a new business model based on lean supply chains, lower prices, and quality within price bracket, led by retail brands such as Sears and Montgomery Ward.

Meanwhile the industry's conservatism regarding technical innovation delayed the fundamental breakthrough that would trigger the washer's "take-off" into rapid household diffusion during the 1950s – the automatic washer – which eliminated both the drudgery and the time costs of the washing chore. After developing a viable semi-automatic washing machine the industry had become conservative and complacent regarding product innovation. For example, after launching the very successful Model 80 series in 1922, Maytag continued to produce essentially similar machines for the rest of the inter-war era, in contrast to leading firms in other durables sectors – such as Frigidaire, Radio Corporation of America, and Hoover, who invested intensively in systematic R&D to sustain their competitive advantage.[113] The potential for technological advance – and resistance to it on the part of the industry - is evidenced by the fact that when, in 1935, two young inventors developed a fully-automatic washing machine, they had to seek backing from a firm outside the sector - Bendix Aviation Co.[114]

The automatic heralded the demise of the commercial laundry, as it had one overwhelming advantage – privacy – preventing strangers from literally seeing the family's dirty washing. As Frank Trentman has noted, washing machines spoke directly to a sense that the activities of the home were private and had to be “shielded from outside pollution,” from the clothing, and the hands, of others.[115] Similarly, Cowan has charted the eventual failure of most innovations involving out-sourcing housework to external agencies, given the twentieth century western family’s growing preference for domestic privacy and autonomy, which proved incompatible with solutions that required the regular intervention of an external agency (be it a traditional laundress or a laundry collection service).[116] The washer salesmen in Birmingham Alabama, while exploiting racial prejudice to undermine the livelihood of the black laundress, were thus - perhaps unwittingly - also tapping into an emerging preference for households to reject any routine outside intervention in their affairs, once mechanization allowed housework to be undertaken within the family unit at an acceptable cost in terms of money, time, and effort.

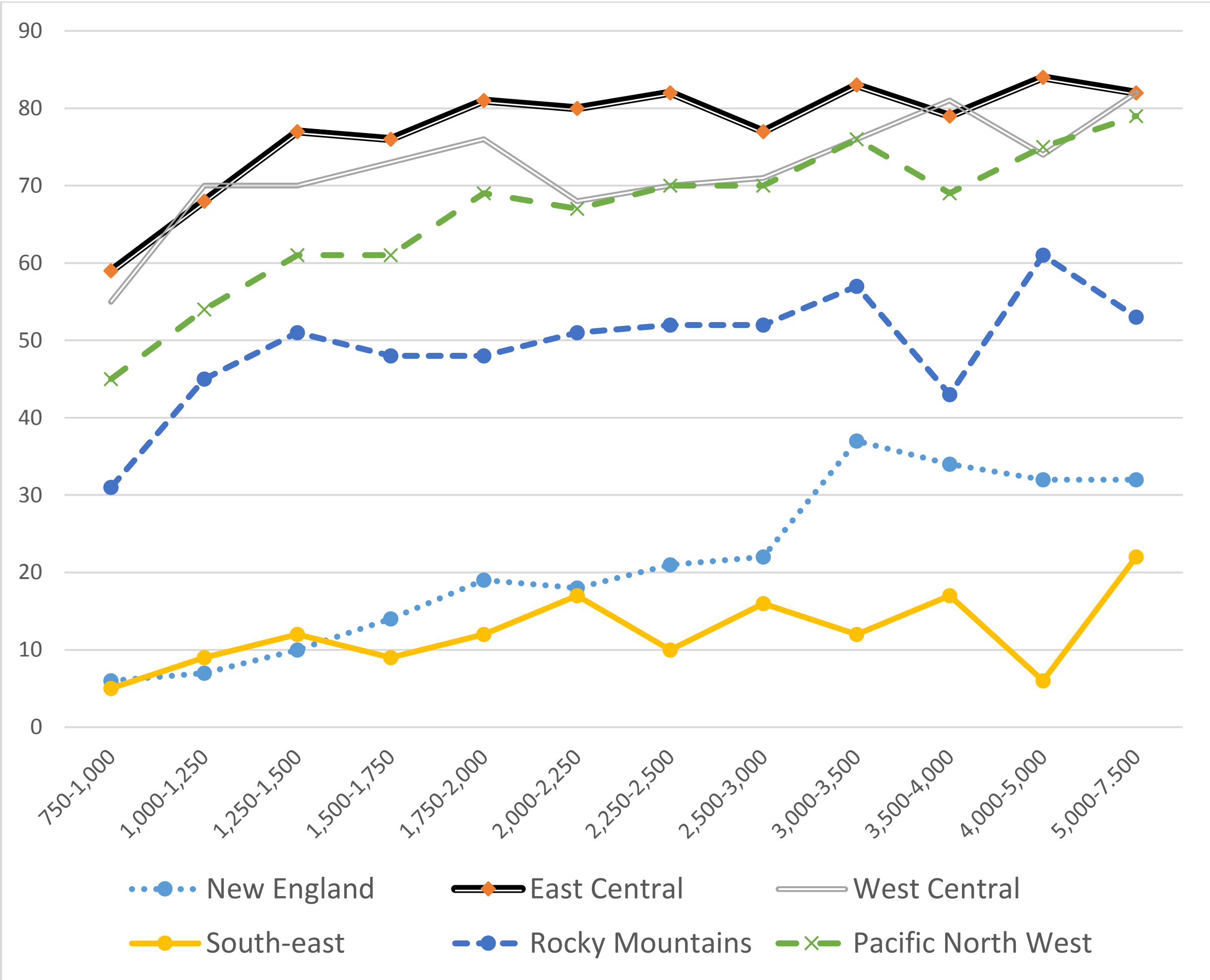
Table 1: Power laundry receipts (excluding dry cleaning) and washing machine sales, 1925-1941

Year	Laundry receipts		Washing machine sales			
	$	1925=100	$	1925=100	No. sold	1925=100
1925	360,494,749	100.0	103,500,000	100.0	726,000	100.0
1929	526,158,197	146.0	107,900,000	104.3	956,000	131.7
1931	444,969,305	123.4	69,020,000	66.7	812,000	111.8
1933	278,641,307	77.3	59,935,300	57.9	966,700	133.2
1935	343,001,886	95.1	79,932,000	77.2	1,228,800	169.3
1939	408,868,000	113.4	100,519,000	97.1	1,433,300	197.4
1940	431,764,000	119.8	113,156,100	109.3	1,552,700	213.9
1941	489,621,065	135.8	159,329,900	153.9	2,014,400	277.5

Source: Fred De Armond, *The Laundry Industry* (New York, 1950): 21.

Notes: laundry receipts include both domestic and other laundry business.

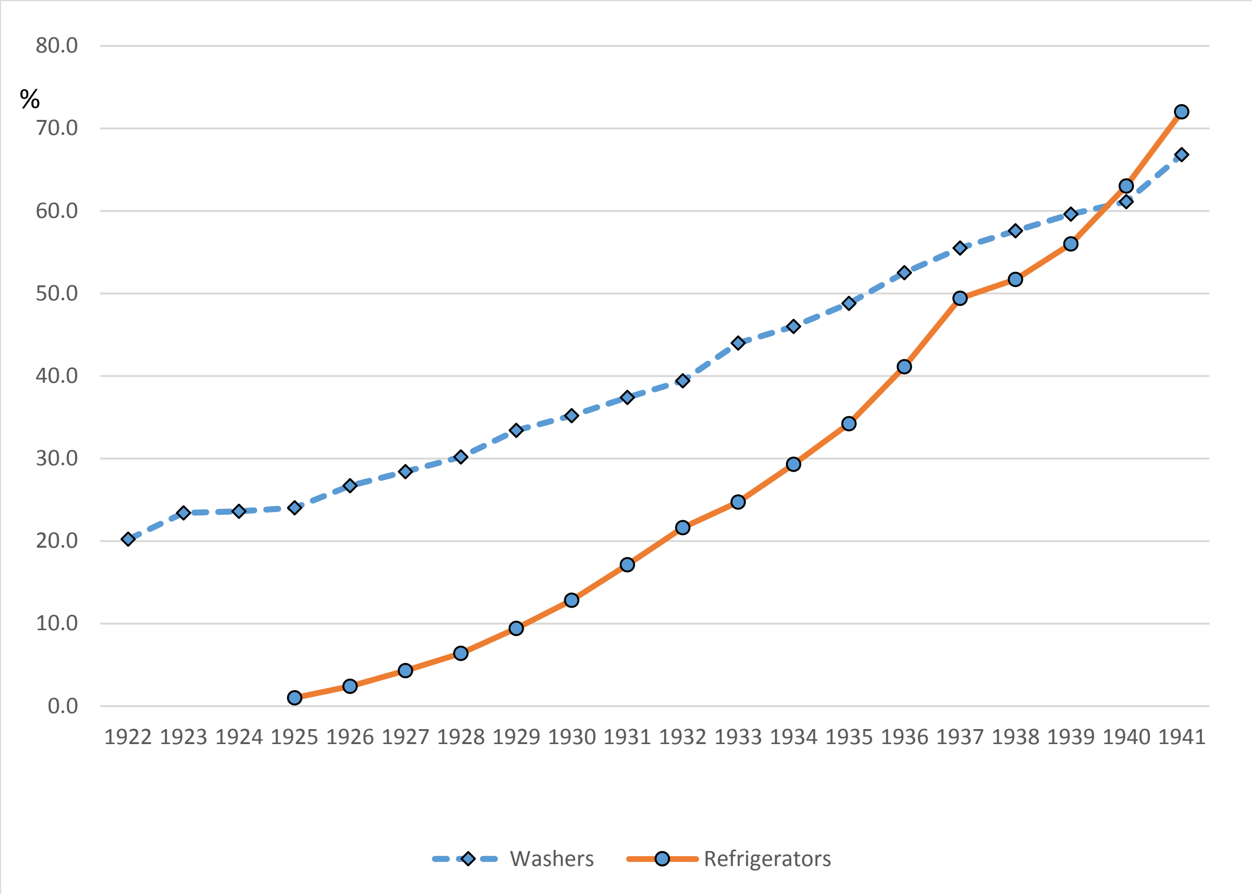
Figure 1: Powered washing machine ownership in large cities, 1935-36 (percentage of families reporting ownership by income class).



Source: United States, Temporary National Economic Committee, *Investigation of Concentration of Economic Power. Monograph No. 1. Price Behavior and Business Policy* (Washington: USGPO, 1940): 263.

Notes: based on Bureau of Labour Statistics data, for non-relief families with a husband and wife, both native-born, in 31 selected cities. Data are weighted by occupation, income, and family type.

Figure 2: The diffusion of electric washing machines and refrigerators (as a percentage of wired homes), 1922-41



Source: Anon., "50 years of statistics and history," *Merchandise Week*, 104, 9 (28 Feb. 1972): 21-54 & 110-160.

[1] Ruth Schwartz Cowan, *More Work for Mother*. *The Ironies of Household Technology from the Open Hearth to the Microwave* (New York, 1983): 14& 145-50; Jan De Vries, *The Industrious Revolution. Consumer Behaviour and the Household Economy, 1650 to the Present* (Cambridge 2008): 189

[2] Susan Strasser, *Never Done. A History of American Housework* (New York, 1982): 104-5.

[3] Elizabeth Shove, *Comfort, Cleanliness, and Convenience. The Social Organization of Normality* (Oxford, 2003): 139-168.

[4] Anon., "Just Because Prices have Sold Millions of Cars –Cutting Prices will not sell more Washers," *Electrical Merchandising* (Nov. 1930), 46-7: 46.

[5] For radios, see Peter Scott and James T. Walker, "Bringing Entertainment into America's homes: Marketing Radios in an Era of Rapid Technological Change', *Business History Review*, Vol. 90 (2016): 251-76.

[6] Julia S. Woersdorfer, *The Evolution of Household Technology and Consumer Behavior, 1800-2000* (London, 2017): 122.

[7]Cowan, *More Work for* Mother: 65.

[8] Woersdorfer, *Evolution of Household Technology*: 76-78.

[9] De Vries, *Industrious Revolution*: 189.

[10] Strasser, *Never Done*: 104-5.

[11] Tom. F. Blackburn, "Washers get Better and Better," *Electrical Merchanising* (Nov. 1940), 6-15 & 70: 8.

[12] U.S. Federal Trade Commission, *Report of the Federal Trade Commission on the House Furnishing Industry. Vol. III: Kitchen Furnishings and Domestic Appliances* (Washington, 1925): 25.

[13] Lee M. Maxwell, *Saving Women's Lives: History of Washing Machines* (Eaton Co., 2003): 16; Strasser, *Never Done*: 117.

[14] Cowan, *More Work for Mother*: 175.

[15] Ibid: 177.

[16] Phyllis Palmer, *Domesticity and Dirt. Housewives and Domestic Servants in the United States, 1920-1945* (Philadelphia, 1989): 33.

[17] See Scott and Walker, "Bringing Radio into America's Homes."

[18] U.S. Federal Trade Commission, *Report of the Federal Trade Commission*: 26.

[19] Hagley Museum Library & Archives, 2069/9/16, Victor Talking Machine Co., "Consignment selling," Victor Talking Machine Co. field survey, 1926-27. Reports of interview with Mr F.L. Maytag (Chairman) and Mr Roy A. Bradt (Sales and Advertising Manager), Maytag, 1 June 1927.

[20] U.S. Federal Trade Commission, *Report of the Federal Trade Commission*: xxi.

[21] Maxwell, *Saving Women's Lives*: 46.

[22] Maxwell, *Saving Women's Lives*: 47; Robert Hoover and John Hoover, *An American Quality Legend* (New York, 1993): 118.

[23] Source: Electrical Merchandising Joint Committee, *Merchandising Electrical Appliances* (New York, 1933): 287.

[24] Hoover and Hoover, *An American Quality Legend*: 117.

[25] Hagley Museum Library & Archives, 2069/9/16, Victor Talking Machine Co., "Consignment Selling," Victor Talking Machine Co. field survey, 1926-27. Reports of interview with Mr L. Boulware, General Sales Manager, Syracuse Washing Machine Corp., 27th April 1927. Easy Washing Machine Co. was a subsidiary of Syracuse.

[26] Ibid.

[27] Jasper County Historical Museum, unpublished Maytag historical timeline history, n.d., c. 1950s: 328.

[28] Olivier Zunz, *Making America Corporate 1870-1920* (Chicago, 1990): 181-5; Jasper County Historical Museum, unpublished Maytag historical timeline history, n.d., c. 1950s: 253.

[29] Hagley Museum Library & Archives, 2069/9/16, Victor Talking Machine Co., "Consignment Selling," Victor Talking Machine Co. field survey, 1926-27. Reports of interview with Mr F.L. Maytag (Chairman) and Mr Roy A. Bradt (Sales and Advertising Manager), Maytag, 1 June 1927.

[30] Clark Davis, *Company Men. White-Collar Life and Corporate Cultures in Los Angeles 1892-1941* (Baltimore, 2000): 109-117.

[31] Nicole W. Biggart, *Charismatic Capitalism. Direct Selling Organizations in America* (Chicago, 1989): 85.

[32] Jasper County Historical Museum, unpublished Maytag historical timeline history, n.d., c. 1950s: 225 & 332.

[33] Peter Scott, "Prisoners of their Business Models: the Decline of America's Leading Vacuum Cleaner Firms during the Depression-era," *Business History Review* (forthcoming); Scott and Walker, "Bringing Radio into America's Homes."

[34] U.S. Federal Trade Commission, *Domestic Laundry Equipment Manufacturing Corporations* (Washington, 1940): 16-17.

[35] Christine Frederick, *You and Your Laundry* (New York, 1922); 28.

[36] Frederick, *You and Your Laundry*: 29.

[37] Hagley Museum Library & Archives, 2069/9/16, Victor Talking Machine Co., "Consignment Selling," Victor Talking Machine Co. field survey, 1926-27, reports of interview with Mr L. Boulware, General Sales Manager, Syracuse Washing Machine Corp., 27th April 1927; ibid, reports of interview with Mr F.L. Maytag (Chairman)

and Mr Roy A. Bradt (Sales and Advertising Manager), Maytag, 1 June 1927; Anon, “Just Because Prices have sold Millions of Cars,”: 46; United States, Temporary National Economic Committee, *Investigation of Concentration of Economic Power. Monograph No. 1. Price Behavior and Business Policy* (Washington, 1940): 139; U.S. Federal Trade Commission, *Report of the Federal Trade Commission on Distribution Methods and Costs. Part IV (*Washington, 1944): 151.

[38] Walter A.Friedman, *Birth of a Salesman*. *The Transformation of Selling in America* (Cambridge, Mass., 2004): 195 & 202–3.

[39] Angel Kwolek-Folland, *Engendering Business. Men and Women in the Corporate Office 1870-1930* (Baltimore, 1994):75-84.

[40] Katina L. Manko, “A depression-proof Business Strategy: the California Perfume Company’s Motivational Literature,” 142-168 in Philip Scranton (ed), *Beauty and Business: Commerce, Gender, and Culture in Modern America* (London, 2001): 147-150 & 158.

[41] Anon, “Just Because Prices have sold Millions of Cars”: 46.

[42] Hagley Museum Library & Archives, 2069/9/16, Victor Talking Machine Co., “Consignment Selling,” Victor Talking Machine Co. field survey, 1926-27. Reports of interview with Mr L. Boulware, General Sales Manager, Syracuse Washing Machine Corp., 27th April 1927.

[43] Jasper County Historical Museum, unpublished Maytag historical timeline history, n.d., c. 1950s: 224.

[44] Hagley Museum Library & Archives, 2069/9/16, Victor Talking Machine Co., “Consignment Selling,” Victor Talking Machine Co. field survey, 1926-27. Reports of interview with Mr F.L. Maytag (Chairman) and Mr Roy A. Bradt (Sales and Advertising Manager), Maytag, 1 June 1927.

[45] Ibid.

[46] Hoover and Hoover, *American Quality Legend*: 114-16.

[47] University of Illinois at Urbana Champaign, Maytag company, *Maytag Methods* (salesman’s instructional brochure series), Vol. 2, “How to Get Prospects,” n.d., c. 1936: 6.

[48] Ibid, Vol 5. “The approach and selling a demonstration”: 12

[49] Ibid, Vol. 6,”Demonstrating the Maytag washer”: 14-18.

[50] Ibid: 14.

[51] Ibid: 37.

[52] Ibid: 38-39.

[53] Jasper County Historical Museum, unpublished Maytag historical timeline history, n.d., c. 1950s: 321.

[54] G.A. Nichols, "How your Competitor Builds up your Business," *Printer's Ink Monthly* (Aug. 1922): 35-36 & 102.

[55] Anon, "Getting Started with… Washers," *Radio and Television Retailing* (Feb. 1940): 36-37, p. 36.

[56] Anon, "Getting Started with… Washers,": 37.

[57] Ibid.

[58] Ibid.

[59] Nichols, "How your Competitor Builds up your Business": 102; Hoover and Hoover, *American Quality Legend*: 116-117; Jasper County Historical Museum, unpublished Maytag historical timeline history, n.d., c. 1950s: 316.

[60] Hagley Museum Library & Archives, 2069/9/16, Victor Talking Machine Co., "Consignment Selling," Victor Talking Machine Co. field survey, 1926-27. Reports of interview with Mr F.L. Maytag (Chairman) and Mr Roy A. Bradt (Sales and Advertising Manager), Maytag, 1 June 1927; report of interview with Mr L. Boulware, General Sales Manager, Syracuse Washing Machine Corp., 27th April 1927.

[61] Cowan, *More Work for Mother*: 98.

[62] L.E. Moffatt, "Will they all beat us to it," *Electrical Merchandising* (Oct. 1929): 65.

[63] Fred De Armond, *The Laundry Industry* (New York,1950): 19-22. Figures exclude institutional laundries.

[64] Strasser, *Never Done*: 109.

[65] Ibid: 119-120.

[66] De Armond, *Laundry Industry*: 189-197.

[67] Moffatt, "Will they all beat us to it": 65.

[68] Albert Stritmatter, "Competition Builds up your Business!" *The Starchroom* (Aug. 1922): 34.

[69] University of Illinois at Urbana Champaign, Maytag company, *Maytag Methods*, Vol 5. "The approach and selling a demonstration", n.d., c. 1936: 21.

[70] De Armond, *Laundry Industry*: 213-15; Anon., "The Laundries Want a Fight," *Electrical Merchandisng* (Dec. 1932): 22-25: 22.

[71] W.S. Smithson, "Power Laundry vs Home Washer," *The Starchroom* (Dec. 1925): 74.

[72] Moffatt, "Will They all Beat us to it,": 65; Anon., "The Laundries Want a Fight,": 22-3.

[73] De Armond, *Laundry Industry*: 213-15..

[74] Anon., "Washing Machines," *Electrical Merchandising* (Jan. 1937): 8-9, p. 9.

[75] Anon, “The Merchandising Month,” *Electrical Merchandising* (June 1935): 1; Anon., “Review and Forecast,” *Electrical Merchandising* (Jan. 1936): 6.

[76] Cowan, *More Work for* Mother: 14.

[77] Geo. H. Watson, “Competition with Muscle,” *Electrical Merchandising* (March 1935): 9.

[78] Rebecca Sharpless, *Cooking in other Women’s Kitchens. Domestic Workers in the South, 1865-1960* (Chapell Hill, N.C., 2010): 130.

[79] Tera W. Hunter, *To 'Joy my Freedom: Southern Black Women's Lives and Labors after the Civil War* (Cambridge: Mass, 1997), 108-9. See also Palmer, *Domesticity and Dirt.*: 9-10.

[80] Fred R. Clauss, “The Washer and Ironer… They Need Home Service Support,” *Electrical Merchandising* (Feb. 1932): 52-55, p. 53

[81] Jasper County Historical Museum, unpublished Maytag historical timeline history, n.d., c. 1950s: 273.

[82] Misci Museum, Schenectady New York, General Electric archives, Product Advertisement Collection, Box 1. Lailah J. Cooper, “Goodbye to Blue Mondays,” *Household Magic* (General Electric household customer magazine),, Vol 1, 1, (1931): 8-9, p. 8.

[83] De Armond, *Laundry Industry*: 218.

[84] David M. Katzman, *Seven Days a Week. Work and Domestic Service in Industrializing America* (New York, 1978): 188-9; Hunter, *To 'Joy my Freedom*: 105; Sharpless, *Cooking in other Women’s* Kitchens: 134-5.

[85] Sharpless, *Cooking in other Women’s* Kitchens: 150.

[86] Anon., “Washers Now Sell in the South,” *Electrical Merchandising* (Sept. 1928): 72-3, p. 72.

[87] Ibid.

[88] Watson, “Competition with Muscle.”

[89] Sources: U.S. Department of Commerce: Bureau of the Census, *Fifteenth Census of the United States: 1930. Population. Volume IV*. (Washington DC, USGPO, 1938)*:* 20; ibid, *Volume VI*: 33.

[90] De Armond, *Laundry Industry*: 23-4 & 210-211.

[91] Ernest C. Hastings, “Trends in Appliance Sales,” *Electrical Merchandising* (Feb. 1940): 6-7 & 76, p. 76.

[92] Cited in Cowan, *More Work for Mother*: 176.

[93] Anon. “Washers,” *Electrical Merchandising* (Jan. 1934): 29-31, pp. 29-30.

[94] Ibid: 29-30.

[95] United States, Temporary National Economic Committee, *Investigation of Concentration of Economic Power*: 143.

[96] Anon., “Washers,”: 29-31, p. 30.

[97] Anon., “Just Because Prices have sold Millions of Cars,”: 46.

[98] Anon. “Washer Prices Take the First Step up,” *Electrical Merchandising* (January 1933): 18-19.

[99] United States, Temporary National Economic Committee, *Investigation of Concentration of Economic Power*: 142.

[100] Anon., “Competition with an Axe,” *Electrical Merchandising* (Jan. 1935): 1.

[101] John F. Thomas, “Varying Functions in distribution, their Costs and Influence on Retail Prices,” *Journal of Marketing*, 3, 1 (1938): 47-61, pp. 55-56.

[102] Anon., “The Salesman who Knows the Washer Story,” *Electrical Merchandising* (March 1935): 10-11, p. 10.

[103] Anon., “Washers”: 31.

[104] Maxwell, *Saving Women’s Lives*: 19 & 47.

[105] Sue Bowden and Avner Offer, “Household Appliances and the use of Time: the United States and Britain since the 1920s,” *Economic History Review*, XLVII (1994): 725-48, pp. 725-7.

[106] Anon., “50 Years of Statistics and History,” *Merchandise Week*, 104, 9 (28 Feb. 1972): 21-54 & 110-160.

[107] United States, Temporary National Economic Committee, *Investigation of Concentration of Economic* Power: 263.

[108] Oscar E. Anderson, *Refrigeration in America. A History of a New Technology and its Impact* (Port Washington, NY, 1953): 208-210.

[109] See Figure 2.

[110] Cowan, *More Work* for Mother: 94.

[111] For a discussion of the importance of reducing drudgery, see Woersdorfer, *Evolution of Household Technology*: 90-180.

[112] De Armond, *Laundry Industry*: 215-18.

[113] Maxwell, *Saving Womens Lives*: 41-46.

[114] Tom. F. Blackburn, `Washers get Better and Better,' *Electrical Merchanising* (Nov. 1940): 6-15 & 70, p. 9.

[115] Frank Trentmann, *Empire of Things. How We Became a World of Consumers, from the Fifteen Century to the Twenty-First* (St. Ives, 2016): 253.

[116] Cowan, *More Work for Mother*: 145-150.