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Getting a Grip on the Corset: Gender, Sexuality and Patent Law

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Kara W. Swanson*

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"[N]o discussion of the feminine body in the Western world can make much sense without getting a grip on the corset, . . . for the corset has played . . . a starring role in the body's history."

—Susan Brownmiller, Femininity (1984)¹

"The inventor slept on his rights for eleven years."

—Justice Woods, Egbert v. Lippmann (1881)²

Over twenty years ago, Susan Brownmiller stressed the need to "get[] a grip on the corset" when considering femininity. As activists in the women's liberation movement, Brownmiller and other women had rejected bras and girdles as a political act.³ She considered the predecessor to these bodyshaping garments, the corset, crucial to her gender analysis of contemporary society.⁴ By the time Brownmiller wrote her analysis of late twentieth-century femininity, the corset's heyday was long past. The corset achieved the pinnacle of its "starring role" in the history of American femininity during the decades between the Civil War and the turn of the twentieth century. In those decades, the corset was the near-constant companion of most women in the United States, from children to the elderly, from the working classes to the upper classes. According to historian Leigh Summers, the corset was "a phenomenon that swept England and America between 1860 and 1900." The corset created the public figure of femininity.

The late-nineteenth-century corset was also a technological wonder. The corset was an intricate structure, reinforced with bone and steel. Its ability to mold women's bodies into an hourglass shape was dependent on technologies of the Industrial Revolution—from metal eyelets, to the sewing machine, to the steam engine. Like the more celebrated technologies of the era, such as the telephone, the telegraph, and the light bulb, the corset was the product of many inventors, who made and patented improvements and fought about their rights in court. As American women donned their corsets, they were enacting a daily

SUSAN BROWNMILLER, FEMININITY 35 (1984).

^{2.} Egbert v. Lippmann, 104 U.S. 333, 337 (1881).

^{3.} For Brownmiller's account of the women's liberation movement, see SUSAN BROWNMILLER, IN OUR TIME: MEMOIR OF A REVOLUTION (1999). Her discussion of the more relaxed undergarments of the 1960s, which allowed her "to breathe normally for the first time since high school," is at 4. Her discussion of the "Freedom Trash Can," into which women discarded bras and girdles (as well as high-heeled shoes and eyelash curlers) at the protest of the Miss America pageant in 1968, is at 37-39.

^{4.} Brownmiller was not the first to consider the corset as an aspect of the patriarchal subjugation of women. *See, e.g.*, Helene E. Roberts, *The Exquisite Slave: Clothes in the Making of the Victorian Woman,* 2 SIGNS 554 (1977).

^{5.} LEIGH SUMMERS, BOUND TO PLEASE: A HISTORY OF THE VICTORIAN CORSET 63 (2003). For the ubiquity of the garment across age and class, see *id*. at 4, 8-9 and VALERIE STEELE, THE CORSET: A CULTURAL HISTORY 35-36 (2001).

^{6.} The industrialization of corset manufacture is described in Bernard Smith, *Market Development, Industrial Development: The Case of the American Corset Trade, 1860-1920*, 65 BUS. HIST. REV. 91 (1991).

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intimate relationship with a heavily patent-protected technology. The corset during these decades was deeply embedded both within the social construction of gender and sexuality, as a marker of femininity and respectability, and within the United States patent system, as a commercial good in which many claimed intellectual property rights.

Getting a grip on the corset, then, offers a way to simultaneously consider gender, sexuality, and patent law as part of the burgeoning project to analyze intellectual property from a feminist perspective. The admonition to get a grip on the corset is particularly relevant to this project because in addition to its "starring role" in the history of the Western feminine body, the corset has also played a starring role in the canon of patent law. In 1881, the Supreme Court issued its opinion in *Egbert v. Lippmann*, declaring that a corset patent owned by the plaintiff, Frances Egbert, was invalid. Since then, *Egbert* has been recognized and repeatedly cited for its foundational explication of the "public use" doctrine in patent law. Reiterating over a century of reliance on the case, the Court of Appeals for the Federal Circuit in 2005 cited *Egbert* as "the classical standard for assessing the public nature of a use." The Supreme Court's opinion is excerpted in virtually every patent casebook today to explain the public use doctrine. Anyone who has taught or taken patent law is nearly certain to remember what is commonly referred to as the "corset case."

Despite its established position in the canon, the *Egbert* decision appeared odd when it was issued, and it is an oddity today. This oddity arises in part because the Court used a case about underwear to explain the parameters of the *public* use of an invention. The Court found that one woman's use of an improved steel stiffener within her corset was a public use of the

^{7.} Only within the last decade has the absence of scholarship in this area been noted. This omission has begun to be remedied in recent years, particularly through the annual IP/Gender Symposium at American University School of Law, first held in 2004. Peter Jaszi, *Opening Remarks*, 15 Am. U. J. GENDER SOC. POL'Y & L. 177, 177-78 (2007).

^{8. 104} U.S. 333, 337 (1881).

^{9.} Egbert has been continually cited from its issuance to the present for its interpretation of the public use bar to patenting, with nearly two hundred citations in opinions published across every intervening decade. See, e.g., Electric Storage Battery Co. v. Shimadzu, 307 U.S. 5, 20 (1939); Hall v. Macneale, 107 U.S. 90, 97 (1883); Woodland Trust v. Flowertree Nursery, Inc., 148 F.3d 1368, 1370-71 (Fed. Cir. 1998); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 1266 (Fed. Cir. 1986); In re Smith, 714 F.2d 1127, 1134-36 (Fed. Cir. 1983); Nicholson v. Carl W. Mullis Eng'g & Mfg. Co., 315 F.2d 532, 535 (4th Cir. 1963); Metallizing Eng'g Co. v. Kenyon Bearing & Auto Parts Co., 153 F.2d 516, 518-19 (2d Cir. 1946); Wendell v. Am. Laundry Mach. Co., 248 F. 698, 700 (3d Cir. 1918).

^{10.} Invitrogen Corp. v. Biocrest Mfg., L.P., 424 F.3d 1374, 1382 (Fed. Cir. 2005); see also Kevin M. Drucker, Bars to Patentability, 41 ARIZ. ATT'Y 22, 23 (Jan. 2005) ("classic case"); Note, Prior Art in the Patent Law, 73 HARV. L. REV. 369, 381 (1959) ("leading case").

^{11.} See, e.g., F. Scott Kieff et al., Principles of Patent Law, 341-44 (4th ed. 2008); Robert P. Merges & John F. Duffy, Patent Law and Policy: Cases and Materials, 522-27 (4th ed. 2007); Craig Allan Nard, The Law of Patents 279-82 (2008). The case is considered so basic that it is also included in intellectual property survey casebooks. See, e.g., Shubha Ghosh et al., Intellectual Property: Private Rights, the Public Interest, and the Regulation of Creative Activity 284-87 (2007); Robert P. Merges et al., Intellectual Property in the New Technological Age 220-22 (5th ed. 2010).

improvement. By this ruling, this most private garment was made legally public. This odd aspect of *Egbert* was noted by the dissenting Justice at the time, and it remains a startling feature of the case when it is used to introduce the public use doctrine to contemporary law students. The case also seems odd in the early twenty-first century because it involves a female patent owner as plaintiff and a feminine garment as the disputed technology, both rare within the patent law canon. The plaintiff Frances Egbert, her corset, and her corset patent all appear exotic in the context of a standard patent law course, which involves "hard," that is, masculine, technologies such as auto parts, chemicals, airplanes, and light bulbs, and a steady parade of male inventors and male litigants. The oddities of the *Egbert* decision provide rich opportunities for a feminist analysis of patent law. By paying careful attention to gender and sexuality while considering the nineteenth-century corset as invention, we can understand the oddness of *Egbert*, both to its nineteenth-century participants and to its twenty-first-century readers.

Replacing oddity with understanding requires taking seriously the realization that patents and patent law, like other areas of intellectual property law, and like the law generally, exist within a gendered set of knowledges about men and women, including what they make and do and how they interact in commercial settings, in domestic settings, in courtrooms, and in intimate relationships. This Article addresses this challenge by examining the corset as patented technology and by re-considering Egbert v. Lippmann and the public use doctrine as a case study in the gendered nature of patent law. After a consideration in Part I of what it means to attempt a feminist analysis of patent law by getting a grip on the corset, in Part II I detail the history of the corset as invention, using patent records, published opinions, and archival court records. Part III situates this little-known history against the existing historical understanding of the corset as an aspect of female fashion that reinforced gender roles, and uncovers the role of the corset in the courtroom as a witness to women's sexual activities. Part IV contains an archivally based excavation of Egbert v. Lippmann. In Part V, I use the accumulated understandings of the

13. Id. at 339 (Miller, J., dissenting).

^{12.} Egbert, 104 U.S. at 337.

^{14.} Men predominate as actors in patent law casebooks, a fact which may be interpreted in various ways depending on the perspective of the reader. *See* Mary Joe Frug, *Re-Reading Contracts: A Feminist Analysis of a Contracts Casebook*, 34 Am. U. L. REV. 1065 (1985).

^{15.} The few existing considerations of the corset as patented technology include brief discussions in the popular history, Hoag Levins, American Sex Machines: The Hidden History of Sex at the U.S. Patent Office 149-52 (1996), as well as in histories of women inventors. See B. Zorina Khan, The Democratization of Invention: Patents and Copyrights in American Economic Development, 1790-1920, at 144-46 (2005) [hereinafter Khan, Democratization of Invention]; B. Zorina Khan, "Not for Ornament": Patenting Activity by Nineteenth-Century Women Inventors, 31 J. Interdisciplinary Hist. 159, 177 (2000) [hereinafter Khan, Not for Ornament]; Deborah J. Merritt, Hypatia in the Patent Office: Women Inventors and the Law, 1865-1900, 35 Am. J. Legal Hist. 235, 245-46 (1991).

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corset as technology, garment, and object of legal scrutiny to get a grip on the corset in patent law, making a feminist analysis of the "public use" doctrine as defined in *Egbert*.

PART I. TOWARD A FEMINIST APPROACH TO PATENT LAW

Because there is so little scholarship engaged in feminist analysis of patent law, I begin with a brief discussion of what such analysis might entail, acknowledging that feminist thought is a collection of analytic approaches, and that any feminist analysis is only one of many such analyses that might be made. ¹⁶

A. Identifying the Tools

Less than a decade ago, Peter Jaszi described the general consensus that gender studies and intellectual property scholarship lacked any connections whatsoever. In response, scholars have begun to consider the broad project of feminist interpretations of intellectual property, and to "map[] the connections" between gender and forms of intellectual property. This project has not been limited in its understanding of what such feminist analysis might be, although it has particularly invited consideration of gender. I join the project from this perspective, adding sexuality to gender as another key analytic focus. I also appreciate the reminder of Dan Burk, an early contributor to this project, that "feminist inquiry is fundamentally about determining who has power and how it is being used."

16. Debora Halbert, Feminist Interpretations of Intellectual Property, 14 AM. U. J. GENDER SOC. Pol'y & L. 431, 432-33 (2006) (acknowledging "multiple feminisms"); Judith A. McGaw, No Passive Victims, No Separate Spheres: A Feminist Perspective on Technology's History, in IN CONTEXT: HISTORY AND THE HISTORY OF TECHNOLOGY 172 (Stephen H. Cutcliffe & Robert C. Post eds., 1989) (claiming only "a feminist perspective").

^{17.} Jaszi, *supra* note 7, at 177-78.

^{18. &}quot;Mapping the Connections" has been the subtitle of the IP/Gender symposia. See supra note 7. For examples of scholarship in this area, see, for example, Ann Bartow, Fair Use and the Fairer Sex: Gender, Feminism, and Copyright Law, 14 AM. U. J. GENDER SOC. POL'Y & L. 551 (2006) [hereinafter Bartow, Fair Use]; Ann Bartow, Likelihood of Confusion, 41 SAN DIEGO L. REV. 721, 776-92 (2004) [hereinafter, Bartow, Likelihood of Confusion]; Emily Chaloner, A Story of Her Own: A Feminist Critique of Copyright Law, 6 I/S: J. L. & POL'Y FOR INFO. SOC'Y 221 (2010); Cary Craig, Reconstructing the Author-Self: Some Feminist Lessons for Copyright Law, 15 AM. U. J. GENDER SOC. POL'Y & L. 207 (2007); K.J. Greene, Intellectual Property at the Intersection of Race and Gender: Lady Sings the Blues, 16 AM. U. J. GENDER SOC. POL'Y & L. 365 (2008); Halbert, supra note 16; Eileen Kane, Molecules and Conflict: Cancer, Patents, and Women's Health, 15 AM. U. J. GENDER SOC. POL'Y & L. 305 (2007); Malla Pollack, Toward a Feminist Theory of the Public Domain, or Rejecting the Gendered Scope of United States Copyrightable and Patentable Subject Matter, 12 WM. & MARY J. WOMEN & L. 603 (2006); and Rebecca Tushnet, My Fair Ladies: Sex, Gender, and Fair Use in Copyright, 15 AM. U. J. GENDER SOC. POL'Y & L. 273 (2007).

^{19.} Dan L. Burk, *Feminism and Dualism in Intellectual Property*, 15 AM. U. J. GENDER SOC. POL'Y & L. 183, 185 (2007) [hereinafter Burk, *Feminism and Dualism*]. Burk has been an ongoing organizer of the IP/Gender symposia and a frequent contributor to this scholarly project. *See also* Dan

To date, feminist interpretations of intellectual property law have focused primarily on copyright.²⁰ The development of a feminist scholarship of patent law has proven slower to emerge,²¹ although Burk has begun the conversation by suggesting a set of connections between feminist critiques of powerful sociocultural dualisms—mind/body and nature/culture—and the reliance on these dualisms in both patent and copyright law.²² Burk and others have also noted the fruitful links between feminist epistemologies and the constant struggle within intellectual property law to define knowledge.²³ The analysis in this article draws upon both these categories of feminist thought, that is, upon feminist sociology of knowledge and feminist critiques of dualism as sites of the creation of power inequalities. It also draws upon a few other resources, which I have found particularly useful in considering a feminist approach to patent law, and which I briefly describe here.

First, there exists a feminist literature about women and invention that spans the last century. While less than one percent of all patents issued during the nineteenth century were granted to women, ²⁴ by the late nineteenth century, feminists had begun pushing for the recognition of those women. At their urging, the United States Patent Office published several listings of women inventors between 1888 and 1895, attempting to catalogue all patents issued to women since 1790. ²⁵ At both the Centennial Exhibition in Philadelphia in 1876 and the World's Columbian Exhibition in Chicago in 1893, women inventors received special notice, with a Woman's Pavilion in Chicago prominently displaying inventions by women. ²⁶ These early efforts to connect invention and feminist goals such as women's equality and economic self-sufficiency have been enhanced in recent decades by scholarly efforts to

L. Burk, Copyright and Feminism in Digital Media, 14 AM. U. J. GENDER SOC. POL'Y & L. 519 (2006) [hereinafter Burk, Copyright and Feminism]; Dan L. Burk, Do Patents Have Gender?, U.C. Irvine Sch. of Law Research Paper No. 2010-17, available at http://ssrn.com/abstract=1652873 [hereinafter Burk, Do Patents Have Gender?].

^{20.} For examples of the feminist analysis of copyright law, see Bartow, *Fair Use*, *supra* note 18; Burk, *Copyright and Feminism*, *supra* note 19; Craig, *supra* note 18; Tushnet, *supra* note 18.

^{21.} Burk, *Do Patents Have Gender?*, *supra* note 19, at 3 (describing feminist patent scholarship as "almost unheard of").

^{22.} Burk, Feminism and Dualism, supra note 19.

^{23.} *Id.*; Halbert, *supra* note 16, at 438-47.

^{24.} KHAN, DEMOCRATIZATION OF INVENTION, *supra* note 15, at 135.

^{25.} U.S. Patent Office, Women Inventors to Whom Patents Have Been Granted by the United States Government 1790 to July 1, 1888 (1888); U.S. Patent Office, Women Inventors to Whom Patents Have Been Granted by the United States Government 1790 to July 1, 1888 to October 1, 1892 App. No. 1 (1892); U.S. Patent Office, Women Inventors to Whom Patents Have Been Granted by the United States Government October 1, 1892 to March 1, 1895 App. No. 2 (1895).

^{26.} See generally DENISE E. PILATO, RETRIEVAL OF A LEGACY: NINETEENTH-CENTURY AMERICAN WOMEN INVENTORS, 141-72 (2000); Deborah Jean Warner, Women Inventors at the Centennial, in DYNAMOS AND VIRGINS REVISITED: WOMEN AND TECHNOLOGY CHANGE IN HISTORY 102-19 (Martha Moore Trescott ed., 1979); Mary F. Cordato, Representing the Expansion of Woman's Sphere: Women's Work and Culture at the World's Fairs of 1876, 1893, and 1904 (1989) (unpublished Ph.D. dissertation, New York University) (on file with U. Microfilms Int'l).

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catalogue female inventors (the government lists have been shown to be incomplete),²⁷ to understand the women who did seek patents, and to examine the various legal, social, financial and educational barriers which have kept female participation in the patent system low.²⁸ Given the contemporary concern with attracting workers into science and technology, understanding barriers to female participation in these activities is of ongoing interest, and scholarship focusing on women's participation in invention and patenting in the early twenty-first century is increasing.²⁹

As the work already done in copyright law exemplifies, however, feminist analysis of intellectual property includes, but is not limited to, tracing the participation of women in formal systems of intellectual property. It also encourages asking questions about gender and sexuality that lead beyond a consideration of women as actors into a consideration of both masculinity and femininity and of heteronormativity in the doctrines and processes of intellectual property. Here, the project of connecting gender studies and intellectual property can draw upon feminist historians of technology, who, while not explicitly dealing with inventions or patents, have been attempting to rethink the history of technology by asking this very class of questions.³⁰

The relative absence of scholarship that considers issues of gender and sexuality in patent doctrine can be explained in part by the pervasive and abiding perception of science and technology as uniquely fact-based, and thus gender-neutral. About thirty years ago, feminist scholars noted that this perception had pervaded not only popular notions but also the historiography of science and technology. Using the feminist insight that knowledge itself can be gendered, a feminist critique has since emerged, arguing that science and technology themselves are gendered, not just in the ways in which they are

27. Autumn Stanley, *The Patent Clerk as Conjurer: The Vanishing Lady Trick in a 19th-Century Historical Source, in* WOMEN, WORK, AND TECHNOLOGY: TRANSFORMATIONS 118 (Barbara Drygulski Wright et al. eds., 1987).

^{28.} See Khan, Democratization of Invention, supra note 15; Anne L. MacDonald, Feminine Ingenuity: Women and Invention in America (1992); Pilato, supra note 26; Autumn Stanley, Mothers and Daughters of Invention: Notes for a Revised History of Technology (1993); Ethlie Ann Vare & Greg Ptacek, Mothers of Invention: From the Bra to the Bomb (1988); Ethlie Ann Vare & Greg Ptacek, Patently Female: From AZT to TV Dinners (2002); Khan, Not for Ornament, supra note 15; Mertitt, supra note 15.

^{29.} See, for example, the following papers presented at the seventh Annual IP/Gender Symposium, American University Washington College of Law, April 2010: Bernardita Escobar, Women and Science Production in Developing Countries: Chile in the 1990-2008 Period; Annette I. Kahler, Examining the Right To Exclude: Historical, Social and Economic Perspectives on Women and Invention; and Shlomit Yanisky Ravid, Patents and Gender: The Exclusion of Women Inventors from IP Rights.

^{30.} For a discussion of the goals and challenges of this type of feminist history of technology, see Nina E. Lerman, *Categories of Difference, Categories of Power: Bringing Gender and Race to the History of Technology*, 51 TECH. & CULTURE 893, 895-904 (2010); and McGaw, *supra* note 16.

^{31.} As pointed out in Bartow, *Likelihood of Confusion*, *supra* note 18, at 776 n.195 (discussing Elizabeth Warren, *What Is a Women's Issue? Bankruptcy, Commercial Law, and Other Gender-Neutral Topics*, 25 HARV. WOMEN'S L.J. 19 (2002)), the perception of intellectual property law as genderneutral is also linked to the perception of commercial law as gender-neutral.

performed differently by men and women—and are most often performed by men—but also in the knowledge and objects created by these performances.³² Feminist historians of technology have analyzed mundane aspects of women's lives as part of the history of technology, combining consideration of gender roles within the factories of the industrializing United States with consideration of traditionally feminine technologies like irons and sewing implements and the technologies used in daily household tasks.³³ This literature is thus a second resource for the development of a feminist analysis of patent law.

B. Starting with the Corset

One could roughly characterize these two sets of literatures I have just identified by their methodology: the first follows the women, and the second follows the technology. These approaches, however, need not be mutually exclusive. A pioneering feminist historian of technology, Judith McGaw, herself borrowing from a feminist philosopher of science, has noted that to take a feminist perspective requires consideration "of women and their actual experiences" and "of those domains of experience that have been relegated to women: namely, the personal, the emotional, and the sexual."³⁴ By choosing the corset as a starting point for a feminist analysis of patent law, I am slanting my project toward following the technology. In the following pages, I follow the corset in and out of the patent office, factories, small workshops, parlors, bedrooms, and the courtroom. But considering the corset as patented technology provides an opportunity to combine both methodological approaches, and also follow women. The corset as a material object was part of the lived experience of women in these decades, a mundane feature of their lives that controlled how they walked, sat, worked and danced. To the extent that the historical record allows, I have attempted to recover women's roles in patenting and manufacturing corsets, and, in my case study, to trace the

^{32.} See, e.g., DYNAMOS, supra note 26; FEMINISM IN TWENTIETH-CENTURY SCIENCE, TECHNOLOGY AND MEDICINE (Angela N.H. Creager, Elizabeth Lunbeck & Londa Schiebinger eds., 2001); GENDER & TECHNOLOGY: A READER (Nina E. Lerman, Ruth Oldenziel & Arwen P. Mohun eds., 2003); EVELYN FOX KELLER, REFLECTIONS ON GENDER AND SCIENCE (1985); RUTH OLDENZIEL, MAKING TECHNOLOGY MASCULINE: MEN, WOMEN AND MACHINES IN MODERN AMERICA, 1870-1945 (1999); MARGARET W. ROSSITER, WOMEN SCIENTISTS IN AMERICA: BEFORE AFFIRMATIVE ACTION, 1940-1975 (1995); MARGARET W. ROSSITER, WOMEN SCIENTISTS IN AMERICA: STRATEGIES AND STRUGGLES TO 1940 (1982); LONDA L. SCHIEBINGER, NATURE'S BODY: GENDER IN THE MAKING OF MODERN SCIENCE (1993); LONDA L. SCHIEBINGER, THE MIND HAS NO SEX? WOMEN IN THE ORIGINS OF MODERN SCIENCE (1989). Burk has also pointed scholars to feminist studies of science. Burk, Feminism and Dualism, supra note 19.

^{33.} See, e.g., JUDITH A. MCGAW, MOST WONDERFUL MACHINE: MECHANIZATION AND SOCIAL CHANGE IN BERKSHIRE PAPER MAKING, 1801-1885, at 335-74 (1987) (discussing gender roles in nineteenth-century papermaking). A foundational example of the feminist analysis of household technologies is RUTH SCHWARTZ COWAN, MORE WORK FOR MOTHER: THE IRONIES OF HOUSEHOLD TECHNOLOGY FROM THE OPEN HEARTH TO THE MICROWAVE (1983).

^{34.} McGaw, *supra* note 16, at 172-73 (quoting KELLER, *supra* note 32).

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experiences of Frances Egbert as both corset-wearer and corset-manufacturer, placing her in the context of other women who also assumed these roles.

By following the corset as a garment worn by women, beyond its travels through the patent office and courtrooms, I also enter into those domains often marked as feminine—the personal and the sexual. Here I borrow methodologies from the feminist history of technology, but I also benefit from the existing scholarship on the history of the corset, which has been written largely from the perspective of the history of fashion and dress. The corset, as an undergarment, was very personal to the woman who wore it. It was also inherently gendered and sexualized as a garment that both heightened women's secondary sexual characteristics with the goal of attracting the male gaze, and controlled women's sexuality by limiting access to their flesh. It is these aspects of corsetry that have drawn the attention of fashion historians, and led Summers, in her study of the Victorian corset in England and the United States, to conclude:

By the 1880s the pubescent child, the maid, the young woman, the matron, the grandmother, the prostitute, and the subject of the pornographer alike were marked as sexual by the [corset], for it simultaneously evoked the entire continuum of sexual stereotypes from chaste innocence to erotic perversion. In other words, corsetry operated at all ages and all stages of women's lives, to create a body that was appropriately modest and virginal, yet sexually alluring. . . . corsetry was a powerful coercive apparatus in the control of Victorian women, and . . . it was subsequently instrumental, indeed crucial, in the maintenance of Victorian hetero-patriarchal dominance. ³⁵

To consider gender, sexuality and patent law, I ultimately leave the corset as material object behind and consider the corset as narrative object within judicial opinions. The corset did not cease to evoke sexual stereotypes when it became the object of legal scrutiny in the courtroom.³⁶ In judicial opinions, we

35. SUMMERS, *supra* note 5, at 8. In addition to Summers' work, the history of the corset is explored in DAVID KUNZLE, FASHION AND FETISHISM: A SOCIAL HISTORY OF THE CORSET, TIGHT-LACING, AND OTHER FORMS OF BODY-SCULPTURE IN THE WEST (1982); STEELE, *supra* note 5; NORA WAUGH, CORSETS AND CRINOLINES (1954); and Casey Finch, 'Hooked and Buttoned Together': Victorian Underwear and Representations of the Female Body, 34 VICTORIAN STUD. 337, 347-48

(1991).

^{36.} The relationship between women's clothing, gender, and sexuality in other areas of law has not gone unremarked; it is explored in, for example, Mary Whisner, *Gender-Specific Clothing Regulation: A Study in Patriarchy*, 5 HARV. WOMEN'S L.J. 73 (1982) (discussing employment law and other areas); and Amy Adler, *Girls! Girls! Girls!: The Supreme Court Confronts the G-String*, 80 N.Y.U. L. REV. 1108 (2005) (discussing First Amendment law). Although not discussed in this Article, the category of patented underwear extends well beyond the corset. The hoop skirt was also a patent-protected technology of the nineteenth century, and inventors have continued to obtain patents to all manner of female undergarments in the twentieth century. *See, e.g.*, U.S. Patent No. 57,309 (issued Aug. 21, 1866) (hoop skirt); U.S. Patent No. 191,641 (issued June 5, 1877) (hoop skirt springs); LEVINS, *supra* note 15, at 153-76 (twentieth-century patents).

can find traces of the social knowledge of corsets as gendered and sexualized objects. A feminist analysis of patent law leads us to ask what we can understand about patent doctrine when we consider the corset from this perspective. How did the power of the law support or subvert the role of the corset in maintaining "Victorian hetero-patriarchal dominance?"

C. An Archaeology of a Case

As part of sketching a feminist approach to patent law, it is worth thinking briefly about my chosen methodology of linking the law and social history by focusing on the single case of *Egbert v. Lippmann*.³⁷ Such microhistory is an established approach within legal history, using one case as a window into an entire set of legal and social relations.³⁸ There is also an analog for my approach in the historical scholarship of material culture. In this blend of museum studies and history, a single item within a museum or personal collection is examined in detail and in context for all it can tell us about the people who used it and the world in which they lived. In essence, the methodology creates an archeology of the recent past using historical tools.³⁹

In choosing *Egbert* as the center of my case study for the intersection of gender and patent law, I follow the guidance of both models of microanalysis, using historical methods to craft an archeology of the case employing all of the tools described above. The archival court records for the trial of *Egbert* proved to be gratifyingly full, and they provided a tantalizing glimpse of the plaintiff herself in the handwritten transcript of her deposition. The docket book for the circuit court allowed me to trace other cases filed by Frances that did not lead to published opinions. I used city directories and records, court records, and patent office documents to glean tidbits about all of the participants in the case—the judge, the lawyers, the defendants, and the witnesses—following one to another to map a web of connections within the New York corset business, a

^{37.} While *Egbert* is the focus of my analysis, I collected and reviewed all published opinions regarding corsets between 1870 and 1900 as part of my effort to understand both the corset as patented technology and the corset in the Victorian courtroom.

^{38.} One of the more artful practitioners of this mode of legal history is Hendrik Hartog. *See* HENDRIK HARTOG, MAN AND WIFE IN AMERICA: A HISTORY (2000). Within the history of technology, McGaw has argued for the value of careful analysis of what she calls "small things," such as "red wheelbarrows." Judith A. McGaw, *'So Much Depends upon a Red Wheelbarrow': Agricultural Tool Ownership in the Eighteenth-Century Mid-Atlantic, in* EARLY AMERICAN TECHNOLOGY: MAKING AND DOING THINGS FROM THE COLONIAL ERA TO 1850, 328, 333 (Judith A. McGaw ed., 1994).

^{39.} One early collection illustrating this scholarly approach included an essay analyzing a corset ordered as part of the bridal trousseau of a woman who was married in New York State in 1895. Leslie Shannon Miller, *The Many Figures of Eve: Styles of Womanhood Embodied in a Late-Nineteenth-Century Corset, in American Artifacts: Essays in Material Culture 129 (Jules David Prown & Kenneth Haltman eds., 2000).* For work in material culture focused on textiles, see Laurel Thatcher Ulrich, The Age of Homespun: Objects and Stories in the Creation of an American Myth (2001).

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web linked by supply chains, patent assignments, and startlingly frequent litigation.

While the richness of the source materials supported my analysis, as legal scholars we have the luxury of choice. Often an item is chosen for material culture analysis simply because it has survived—a rare exemplar of a once common item. While accessibility to early case records and opinions is not at all comparable to the easy electronic access we have to contemporary materials, there are certainly many cases from which to choose. Why *Egbert*? I chose to investigate *Egbert* because of its combination of prominence and strangeness, included in the canon of patent law, yet somehow set apart by the oddities mentioned above. Before beginning my analysis, I want to briefly catalogue the elements of *Egbert*'s strangeness that provided avenues for my feminist analysis of the case, in the hopes that both the presence and the absence of such elements in other cases might provide starting points for further analysis.

First, Egbert involved the corset as patented technology, which provides a different slant on the corset's history and meaning. As patented technology, the corset has a dual gender valence. It is coded feminine as a garment for women. This femininity is what causes titters when Egbert is discussed in a patent class⁴⁰—the corset appears as an oddity in a subject area that usually appears gender-neutral. ⁴¹ As Brownmiller noted and as my students grasp instinctively, the corset was part of the social construction of femininity for decades. As such, the corset can be considered a *feminine* technology; it is a tool for making its wearer feminine. But as the subject of patents, it is also technology in the way in which that term was coming to be understood in the late nineteenth century, as something made by man. Technology and invention of technology was and is coded *masculine*.⁴² The courts, when confronted with a corset as a patented invention, had to navigate this duality. Reaching a decision in such a case involved doing gender in one way or another, making it easier for us to see the gendering of legal knowledge in the area of patent law, where gender is often invisible. 43 Following the corset through Egbert provides a means of exposing the unfounded assumption of gender neutrality in patent law.

Second, *Egbert* involved a female plaintiff and patent-owner, Frances, another oddity within patent casebooks. Women inventors are rare and were even more rare in the nineteenth century. Who was this woman, this widow

42. For a discussion of the gendering of technology as masculine in the late nineteenth century, see OLDENZIEL, *supra* note 32. Like whiteness, masculinity is often overlooked. Lerman, *supra* note 30, at 894 (describing how the historiography of technology has largely excluded both race and gender). For the racialization of the corset, see *infra* note 165 and accompanying text.

^{40.} I have experienced these titters not only when teaching *Egbert*, but whenever I discuss *Egbert* before scholarly audiences, whether those audiences are gender scholars, intellectual property scholars, or historians.

^{41.} See supra note 31 and the accompanying text.

^{43.} Burk, *Do Patents Have Gender?*, *supra* note 19, at 3 (noting that even asking whether patents have gender is frequently seen as nonsensical).

who wielded her deceased husband's patent so aggressively that she was willing to litigate all the way to the Supreme Court? How did she overcome the well-documented barriers to women patenting and commercially developing inventions? These questions build upon the largest existing strain of scholarship regarding gender and invention, that of women's participation in the patent system. Understanding this aspect of *Egbert*'s oddity helps to answer questions of systematic gender bias in the functioning of the patent system. Considering *Egbert* in the broader context of corset invention, commercialization and litigation reveals the ways in which Frances both was and was not exceptional.

Finally, Egbert turns upon the legal definition of "public." The public use doctrine in patent law, first created by statute in 1839, creates a statutory bar to patenting an otherwise patentable invention. An inventor is allowed only a limited grace period for the "public use" of an invention prior to the filing of a patent application. 44 If the grace period is exceeded, the invention is no longer patentable, and any patent issued is invalid and void as of issuance. Prior to Egbert, the interpretation of this doctrine had turned on substance—had the inventor created a situation in which the public would assume that the invention was in the public domain, such that it would be unfair to allow him or her to patent? A prominent treatise explained that the doctrine was triggered when an inventor showed a clear intent to abandon the invention, generally by exploiting it commercially without attempting to protect it. 45 Egbert broadened the existing law of "public use," making the analysis of "public" much more formal. Since its issuance, Egbert has been steadily cited for the proposition that use of a single patented article, by a single person, even if the use is known only to that person and hidden from public view, can constitute "public use," as long as there is no "limitation or restriction, or injunction of secrecy" on that user. 46 Any actual ability of the public to exploit the invention is not required, so that "public use" became "not secret use." The case established a brightline rule which has persisted to the present, and which makes it relatively easy for inventors to trigger the statutory period, so that a lengthy delay between

44. Patent Act of March 3, 1839, § 7, 5 STAT. 354. The grace period has varied over time. The Act of 1839 set the period at two years, a period which remained until 1939. Act of Aug. 5, 1939, § 1, 53 STAT. 1212. Today the bar is a one-year period, preventing an inventor from receiving a patent on an otherwise patentable invention if the invention has been "in public use" or "on sale" more than twelve months before the patent application filing date. Patent Act of 1952, 35 U.S.C. § 102(b). The law has also varied with respect to whether use sufficient to trigger the statutory bar must be with the consent of the inventor. Under the law in effect at the time *Egbert* was decided, this issue was unclear, and the Supreme Court refused to decide it. *Egbert v. Lippmann*, 104 U.S. 333, 334-35 (1881). Today inventor consent to a public use is not needed to give rise to a bar. 35 U.S.C. § 102(b).

^{45.} GEORGE TICKNOR CURTIS, A TREATISE ON THE LAW OF PATENTS FOR USEFUL INVENTIONS IN THE UNITED STATES OF AMERICA § 389 (3d ed. 1867).

^{46.} Egbert, 104 U.S. at 337; see cases cited supra note 9.

^{47.} Note, Prior Art in the Patent Law, 73 HARV. L. REV. 369, 373 (1959).

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invention and filing a patent application can prove fatal to the enforceability of the resulting patent, as it did for the inventor in *Egbert*, Samuel H. Barnes. 48

The oddity of *Egbert* within the development of the public use doctrine lies in the incongruity of using a fact pattern about undergarments to broaden the public use doctrine. The Court found that when Frances wore Samuel Barnes's invention as part of her corset before he filed his patent application, her use of the invention was "public." The Court went out of its way to reach this conclusion, choosing not to rely on other evidence of public disclosure of the invention that had been cited by the trial judge.⁴⁹ Justice Miller's criticism of the majority's opinion in his dissent seems as trenchant today as it did in 1881. Given the holding, he proclaimed: "I am at a loss to know the line between a private and a public use." ⁵⁰ In Victorian America, how could a woman's underwear be considered public? And if Frances's corset was "in public use," what was left as "private use?" The feminist critique of the public/private divide is a rich strand of feminist scholarship, related to the other dualist critiques identified by Burk. This dualism, so central to legal thought, is frequently aligned in Western thought with the masculine/feminine divide, and as such, has been critiqued as promoting patriarchal hierarchy and restrictive gender constructs.⁵¹ That the public use doctrine rests on categorizing a corset as "public" must be considered in light of Summers's conclusion that the corset was "crucial[] in the maintenance of Victorian hetero-patriarchal dominance." 52 If the corset was a signal and an instrument of female subordination to male power, and male power was exercised in the public realm, what did it mean in Victorian America to declare as a matter of law that Frances's corset was in public use? The articulation of the public use doctrine in this way necessarily implicates gender hierarchies. But was the Court in Egbert reinforcing or subverting such hierarchies by performing gender through patent doctrine? This final aspect of the strangeness of Egbert is related to the troubled and gendered nature of the public/private divide and the social role of the corset in patriarchal dominance. Only by making the gendered aspects of the corset as material object, invented object, and narrative object explicit, can Justice Miller's critique be answered.

I did *not* choose *Egbert* for any explicit discussion of gender or sexuality in the case itself. The narrative of the case, as crafted by the Supreme Court majority, sidesteps any reference to issues of gender and sexuality, including the gendered nature of corsets and the personal relationship between the

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^{48.} Egbert, 104 U.S. at 337.

^{49.} See discussion infra, text accompanying note 228.

^{50.} Egbert, 104 U.S. at 339.

^{51.} See, e.g., Halbert, supra note 16, at 438; Tushnet, supra note 18, at 291-94.

^{52.} SUMMERS, supra note 5, at 8.

inventor, Samuel Barnes, and Frances Egbert, 53 the woman who wore his invention. In summarizing the relevant testimony, the Court recounted that Samuel's invention was made in 1855 after he was present when two women, his "intimate friend," Frances, and her friend, Miss Cregier, 54 were "complaining of the breaking of their corset steels." "Steels" referred to vertical stiffeners used on either side of the front closure of a corset.⁵⁶ While the lived experience of daily corset wearing is difficult to access a century and a half later, there are indications that women experienced recurrent difficulties with the durability of corsets. Under the tension of lacing, the structural supports of corsets would break, ruining the garment, causing social embarrassment and perhaps even injury to the wearer.⁵⁷ Frances testified that the next time Samuel visited, he brought her a pair of steels he had made to overcome this problem, using two pieces of metal fastened together to created a doubled, reinforced steel.⁵⁸ Frances then wore the steels sewn into her corset for eleven years before Samuel filed his patent application. During that time, Frances and Samuel were married. Writing for the majority, Justice Woods characterized Samuel's gift of his innovative steels to Frances as a transfer of an invention "without limitation or restriction," and analogized the steels sewn into her corset to an innovative gear "covered from view in the recesses of a machine for spinning or weaving," hidden, but still public.⁵⁹

The only indication in the majority opinion that the Court was aware of the gendered nature of corsets, and of the emotional and sexual aspects of the relationship between Frances and Samuel, comes in the concluding section, when the Court used what to contemporary readers appears to be a sly innuendo in chastising Samuel. In letting Frances continue to wear his steels, the Court found, Samuel "slept on his rights for eleven years." Many patent

^{53.} Frances used at least four different last names during the years preceding the Supreme Court opinion: Willis, Lee, Barnes, and Egbert. For the sake of clarity, I refer to both Samuel and Frances by their first names in this paper. According to the records of Frances's marriage in 1870 to Wesley Egbert, Willis was her birth name. She used Barnes from 1863 to 1870, while she was the wife and then widow of the inventor Samuel Barnes, referring to herself as Frances Lee Barnes. The case was filed after she marriage Egbert and took his name. I have not found any record of a marriage to a Mr. Lee.

^{54.} The Supreme Court calls Frances's friend Miss Cugier. *Egbert*, 104 U.S. at 335. The original longhand deposition transcript, as well as the printed version submitted to the Court, calls her Miss Cregier, and that is the name I use. Transcript of Deposition of Frances Lee Egbert, *Egbert v. Lippmann*, Box 297, Case 428A (C.C.S.D.N.Y. Dec. 3, 1875), at 2; Transcript of Record, *Egbert v. Lippmann*, 104 U.S. 333 (1881) (No. 335), at 15.

^{55.} Egbert, 104 U.S. at 335.

^{56.} Steels were also called "stays" or "springs." Samuel's patent was titled "Improvement in Corset-springs." U.S. Patent No. 56,345 (issued July 17, 1866).

^{57.} STEELE, *supra* note 5, at 73; SUMMERS, *supra* note 5, at 28.

^{58.} Transcript of Record, *supra* note 54, at 15. Frances's testimony is summarized by the Court at *Egbert*, 104 U.S. at 335.

^{59.} Egbert, 104 U.S. at 336.

^{60.} Id. at 337.

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attorneys can recite this sentence of the case with a grin.⁶¹ This phrasing, reminding the reader that Frances and Samuel shared a bed for some portion of this period—it is undisputed that they married before Samuel filed his patent application—has led casebook authors to indulge in mild witticisms that acknowledge the gendered context of the case, such as stating that "if given a choice between a statutory bar to his invention and a permanent bar to his marriage [by insulting Frances with a requirement of a written confidentiality agreement], Samuel no doubt made the right choice."

Frances might have failed to see the wit in such a remark. It was she, after all, who was the plaintiff in *Egbert*. Samuel died soon after his patent for the corset steels issued in July 1866, leaving a will in which Frances was named as his sole devisee and executrix. ⁶³ She spent the next fifteen years aggressively seeking to maximize the value of the patent, first as a widow, and later with the assistance of her subsequent husband, Wesley Egbert, whom she married in 1870. ⁶⁴ In hindsight, she might well have preferred such an insult to the eventual loss of her patent.

As a case study in the nascent effort to consider gender and patent law, Egbert thus offers a rich blend of facts and doctrine. It provides a test case for feminist analysis. Does the oddity of Egbert's holding, a taken-for-granted part of patent doctrine, dissolve when the analytic lens is shifted from patent law to gender studies? My answer, as developed in Part V, is yes. Patents and patent law do have gender, and examining corset patent litigations, including Egbert, exposes gender at work. I argue that the Supreme Court's opinion was motivated by the Justices' keen awareness of Victorian gender hierarchies, and, in particular, by the public and private uses of corsets to signal gender and sexuality in the late nineteenth century. By putting Frances in the context of the wider world of corset inventions and manufacture, I show that, from a Victorian perspective, Frances was neither odd in her position as the female owner of a corset-related patent, as a female litigant in patent infringement cases, nor as a businesswoman who participated as a partner in corset manufacturing, making and selling Samuel's invention. But she was unique in that as well as assuming these more common public roles, which had led her to the Supreme Court as a plaintiff, she also appeared in court as the unmarried "intimate friend" of the inventor. In the same case, Frances presented herself

61. One senior patent attorney described this sentence to me as his "favorite" quotation in patent law, yet expressed puzzlement when I suggested that the case implicated questions of gender and sexuality, revealing that he shared the commonly held belief that patent law is gender-neutral.

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^{62.} MERGES & DUFFY, *supra* note 11, at 522-27. While it is impossible to know whether Justice Woods intended a double entendre by his use of the phrase "slept on his rights," the OXFORD ENGLISH DICTIONARY confirms that both the phrase "to sleep on," meaning to delay a decision, and the phrase "to sleep with," meaning to engage in sexual relations, were in use by about 1880 (2d ed. 1989).

^{63.} Will of Samuel H. Barnes, *in* Transcript of Record, *supra* note 54, at 158-59 (dated Aug. 8, 1866).

^{64.} Bill of Complaint, in Transcript of Record, supra note 54, at 2.

on both sides of the gendered public/private divide within American society, and thus posed a challenge to a Court considering the difference between public and private with respect to inventions. Faced with a choice between acknowledging the intimacy between Frances and Samuel as an unmarried couple at the time of his invention in 1855 and according Frances the public role as businesswoman she had achieved by the 1870s, the Court chose the latter. In the end, it was not that Samuel "slept on his rights," but that Frances wielded those rights, publicly and successfully, which better explains the Supreme Court's broad definition of "public" and reveals the highly gendered origins of the "public use" doctrine.

PART II. THE CORSET AS TECHNOLOGY

In the context of the industrializing United States in the post-Civil War decades, sometimes called the "Golden Age" of invention, the corset seems to be a trivial and mundane technology when compared to the telephone or the light bulb. Yet long before most Americans had access to the new electric lights or had used a telephone, the corset was a pervasive and essential part of everyday life and a surprisingly complicated and varied garment. There was plenty of scope for its improvement, many Americans with experience in its use, and significant sums to be made in its manufacture and sale. In patenting his improved corset steel in 1866, Samuel was part of the leading edge of an explosion in corset patents, which would peak at the turn of the century.

Corsets came to North America with colonization. Women in Western Europe had been wearing stiffened bodices since at least the fourteenth century. By the fifteenth century, as European countries began to explore North America, aristocratic women were wearing bodices that laced in the front and back, to provide a stiffened torso and support form-fitting clothing. In the sixteenth century, bodices were sometimes made more rigid by inserting whalebones along the front and sides. These garments could be either outer garments or undergarments. The shape, materials, and manufacture of the garments varied considerably, as did the type of bodies who wore them. The overall trend, which hid considerable regional variation and short-term shifts of fashion, was a transition from the corset as a garment of the aristocracy, worn by both men and women, to a garment which in its nineteenth-century heyday was worn almost exclusively by women, but by women of all social classes and ages. The shape is a support of the aristocracy of the social classes and ages.

^{65.} ELIZABETH EWING, DRESS AND UNDRESS: A HISTORY OF WOMEN'S UNDERWEAR, 22, 27 (1978) (detailing different terms for these bodices, including "bodys" [sic] and "stays"); STEELE, *supra* note 5, at 6. In this Article, I use the term most common in the late nineteenth century, "corset," to refer to all such garments.

^{66.} The history of the corset is discussed in C. WILLET CUNNINGTON & PHILLIS CUNNINGTON, THE HISTORY OF UNDERCLOTHES 62-64, 106-07, 127-28, 130-32 (1992); EWING, *supra* note 65, at 22-

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The use of corsets in the North American colonies has not been studied in detail, but can be deduced in outline.⁶⁷ Efforts to import and maintain an aristocracy in the colonies were largely unsuccessful, and thus, the number of women who attempted to wear the fashions of the European elite must have been limited. Finery in dress was explicitly discouraged in certain New England colonies, and American republican ideals during the revolutionary and early republic period supported homespun and plain dress.⁶⁸ By the early nineteenth century, however, women in the United States were striving to reach European standards of fashion.⁶⁹ These standards included the corset, which was increasingly adopted by middle-class women. In both the United States and western Europe, corset makers were at work in major urban centers, providing this key foundation garment for the latest fashion in female dress.⁷⁰

Corsets served to transform the body, creating an idealized silhouette. They could emphasize and augment certain body parts, usually hips and breasts, both by pushing flesh up and/or down and by the use of padding. Corsets could also emphasize by diminishing and reshaping, as lacing was used to reduce the diameter of the waist, and also to reshape the natural oval of a human waist into a circle. 71 Corsets were also used to affect posture, creating a rigidity of the torso that varied as corsets varied in length, from belt-like models, to those suspending from the shoulders and covering the breasts, to others reaching down to encase the abdomen and hips. This rigidity served to cabin and contain flesh, to prevent jiggling and to make the very feeling of flesh inaccessible under layers of metal, wood, bone and fabric.⁷² Corsets could tilt the spine into the desired shape, from poker-straightness to the Scurve emphasized in the turn of the twentieth-century Gibson girl ideal. The ultimate utility of the corset as patented technology was to achieve this ideal feminine form, although most inventions were directed to improvements in the making, wearing or washing of the corset.

^{24;} STEELE, *supra* note 5, at 6-33 (discussing pre-nineteenth-century corset wearing); SUMMERS, *supra* note 5 (focusing on the nineteenth century).

^{67.} For general discussion of colonial female dress, see ALICE MORSE EARLE, TWO CENTURIES OF COSTUME IN AMERICA, 1620-1820, at 51-159 (1910).

^{68.} ULRICH, *supra* note 39; MICHAEL ZAKIM, READY-MADE DEMOCRACY: A HISTORY OF MEN'S DRESS IN THE AMERICAN REPUBLIC, 1760-1860, at 11-13 (2003).

^{69.} The history of corsets in the United States is less well researched than that in England, particularly for the colonial and antebellum periods. Summers' history of the Victorian corset focuses on England, but contains some information on the United States. *See* SUMMERS, *supra* note 5. For a discussion of American dress and fashion in the antebellum period, with some reference to the colonial era, see Lois W. Banner, American Beauty 17-85 (1983).

^{70.} BANNER, supra note 69, at 28.

^{71.} At times, both recent and medieval, corsets have also been used to minimize breasts and/or hips, most recently during the early twentieth century, when a slender, boyish silhouette was in fashion. STEELE, *supra* note 5, at 148.

^{72.} Miller, *supra* note 39, at 137.

^{73.} BANNER, supra note 69, at 22; EWING, supra note 65, at 110-11; STEELE, supra note 5, at 84.

For example, in the 1860s, Americans obtained patents for new ways of cutting the pieces of cloth in order to form a garment from fewer pieces, reducing manufacturing time and cost. A garment that included bone, wood, and/or metal posed special challenges in washing, and some inventors sought patents on improvements to promote the ease of removal and reinsertion of non-fabric components, or to reduce rust spots, evidently an on-going frustration.⁷⁴ The late-nineteenth-century corset, as a highly structured garment, relied upon the technological transformations of the cloth-making, sewing, and metalworking industries in the eighteenth century, which changed the possibilities of corsetry. The development of metal eyelets riveted into the cloth in the first decades of the nineteenth century was perhaps the key technological change that supported the nineteenth-century heyday of the corset. Metal eyelets supported tighter lacing of corsets, preventing the laces from tearing the cloth of the garment. Further, steel pieces could be used to replace or augment whalebone as side-stiffening inserts around the circumference of the corset. Beginning around 1830, front "busks," rigid pieces inserted vertically in the front of the corset to provide a smooth and stiff front, traditionally made of wood or ivory, also began to be made of metal, hence their new name, "steels." They were generally used in pairs, one on either side of the front opening. While originally corsets opened only at the back, or laced closed both back and front, metal allowed for ways of holding together the front halves which could be undone by the wearer, freeing her from the need of a second party to help her out of her corset. The back of the corset would be laced, using metal eyelets to protect the fabric, and the front of the corset could open down the middle, with clasps linking the pair of steels. Corset makers experimented with various types of clasps, attached to the fabric or as part of the steels.⁷⁷ These front-fastening corsets became common after about 1850.⁷⁸ Samuel and many others were seeking to improve this new component of the corset.

In addition to the inclusion of other materials such as straw, wood, bone, leather, and metal, corsets by mid-century were generally made up of at least eight pieces of cloth, cut in particular shapes and sewn together, and could have as many as fifty pieces to allow for a form-fitting shape.⁷⁹ The cloth was sewn

^{74.} See, e.g., U.S. Patent No. 84,746 (issued Dec. 8, 1868) (way of treating steel to prevent rusting); U.S. Patent No. 48,045 (issued June 6, 1865) (way of removing steels for washing); U.S. Patent No. 39,964 (issued Sept. 15, 1863) (way of cutting fabric). Warner Brothers advertised a line of "rust-proof" corsets. SUMMERS, *supra* note 5, at 193 (reproducing a copy of Warner's advertisement).

^{75.} STEELE, supra note 5, at 44.

^{76.} *Id.* at 10-12, 43.

^{77.} *Id.* at 43. As in all aspects of corsetry, the terms for the fasteners and the springs were numerous. Steels or springs that also served to hook the corset closed in front were sometimes called "clasps," a term that could also refer to hook and eye or other types of metal fastenings. This Article uses the term "steels."

^{78.} CUNNINGTON & CUNNINGTON, supra note 66, at 149.

^{79.} U.S. Patent No. 96,951 (issued Nov. 16, 1869).

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together by specialized seamstresses and shaped with stiffeners into an approximation of an hourglass shape. Women could also make their own, following directions and patterns published in women's magazines, although that option, like home dressmaking generally, became a less common choice over the course of the nineteenth century. Corsets, at first a made-to-order garment, became, in the second half of the nineteenth century, part of the ready-to-wear revolution, available in shops and through mail order to women of all income levels and geographic locations. The ready-to-wear corset was most often a loom-woven corset, rather than a hand-sewn garment. Using powered looms, manufacturers could greatly increase their production volumes, although the finishing of the corsets, including insertion of all the non-fabric parts, continued to be done by hand. The transition to woven corsets was another fertile area for patenting, as expert weavers applied their knowledge in new directions, and engineers skilled in power looms adapted them for corset production.

A. Corset Patents and Patentees

Even before the ready-to-wear revolution, nearly all socioeconomic classes of American women wore corsets regularly, including some slaves and female prisoners. When Samuel undertook to develop a stronger corset steel in 1855, he stepped into an increasingly crowded commercial and inventive space, as the broad popularity of corsets in the nineteenth century supported multiple layers of commerce in corset parts and finished corsets. The business of corsets included steel temperers who manufactured parts, skilled seamstresses and fitters, and door-to-door saleswomen. By the 1850s, when Samuel invented his steel, and even more so by the 1860s, when he patented it, corsets were a complicated, necessary, and commonplace technology in the United States. It is thus no surprise that with each decade of the nineteenth century, more inventors sought to patent improvements in corsetry.

The earliest United States patent relating to corsetry, for a device for inserting eyelets into cloth, issued in 1837. There were almost no corset

81. STEELE, *supra* note 5, at 44; Smith, *supra* note 6.

^{80.} SUMMERS, supra note 5, at 11.

^{82.} The manufacture of loom-woven corsets is discussed in the deposition testimony in *Cohn v. U.S. Corset Co.*, 73 U.S. 366, passim (1876) (No. 106); see also Smith, supra note 6.

^{83.} See, e.g., U.S. Patent No. 88,365 (issued Mar. 30, 1869); U.S. Patent No. 65,112 (issued May 28, 1867); U.S. Patent No. 38,195 (issued Apr. 14, 1863); U.S. Patent No. 37,547 (issued Jan. 27, 1863).

^{84.} STEELE, *supra* note 5, at 49; SUMMERS, *supra* note 5, at 9-10, 13-14, 16.

^{85.} SUMMERS, *supra* note 5, at 33 (discussing corset makers and saleswomen). For a steel temperer, see John Fitzpatrick, discussed *infra*, text accompanying note 127.

^{86.} U.S. Patent No. 181 (issued April 5, 1837). The data presented herein were collected using electronic searching of multiple patent databases using the term "corset," and then discarding patents unrelated to corsets (e.g., patents to hoopskirts, stocking supporters, medical treatments). The numbers

patents issued through 1850 (about two in total), ⁸⁷ and then the rate of patenting began to increase. During the 1850s, about six corset-related patents issued, and then, in the 1860s, the decade in which Samuel Barnes obtained his long-delayed patent, about 100 corset-related patents issued, despite the dip in overall patent applications coinciding with the Civil War. ⁸⁸ The numbers continued to rise throughout the nineteenth century. Samuel was thus on the leading edge of this increasing attention to the corset as patent-protected technology. By the 1870s, when his patent was being litigated, his patent was one of hundreds of such patents. The corset was both a common part of everyday apparel, and a commonplace within the patent system.

As a man, Samuel was a typical nineteenth-century inventor. The manufacture of corsets, however, was an art that had traditionally involved not only women's bodies as the intended target of the technology, but also women as manufacturers themselves. Both in Europe and in the United States, corset manufacture had long involved both men and women as proprietors of their own small shops and as employers of others, drawing upon both the traditionally male trade of tailoring and the traditionally female trade of dressmaking. Women's involvement in corset manufacture led them to invent improvements and seek patents in numbers much greater than their overall participation in the patent system. Almost one quarter of corset-related patents issued in the United States before 1880 were issued to women.

of what I am calling corset-related patents must be considered approximate. The U.S. Patent Office has made nineteenth-century patents available for electronic searching, but the poor quality of the electronic texts, apparently caused by optical character recognition problems in scanning, renders any word search of early patents inexact.

^{87.} U.S. Patent No. 2360 (issued May 20, 1842) (umbilical supporter and corset); U.S. Patent No. 1940 (issued Jan. 21, 1841) (pregnancy corset).

^{88.} The number of issued patents from 1861 until 1863 was lower each year than the number issued in 1860. By 1864, the number of issued patents reached pre-war levels, and then, in 1865, it jumped about 33%. U.S. Patent Activity Calendar Years 1790 to Present, U.S. Patent & Trademark Office, April 16, 2009, available at www.uspto.gov. Note that generally, the rate of patenting per person increased in the United States during the second half of the nineteenth century, although as different technologies increased and decreased in importance, the rate of patents for a particular technology might not have followed the overall curve. Naomi R. Lamoreaux & Kenneth L. Sokoloff, Introduction: The Organization and Finance of Innovation in American History, in FINANCING INNOVATION IN THE UNITED STATES: 1870 TO THE PRESENT, at 9 (Naomi R. Lamoreaux & Kenneth L. Sokoloff eds., 2007).

^{89.} STEELE, supra note 5, at 16-18; SUMMERS, supra note 5, at 30-33.

^{90.} Counting patents issued to women in the United States is notoriously difficult because the patent office did not collect any sex-specific information, and its attempt to retrospectively identify women's patented inventions at the end of the nineteenth century has been proven flawed. Merritt, *supra* note 15, at 245-46. Further, the number of women who invented, but whose inventions were patented in the name of men because of women's legal disabilities, or otherwise, is uncountable. B. Zorina Khan, *Married Women's Property Laws and Female Commercial Activity: Evidence from U.S. Patent Records, 1790-1895*, 56 J. ECON. HIST. 356 (1996) (noting that women patented more often as legal disabilities were reduced) [hereinafter, Khan, *Married Women's Property Laws*]. This estimate is based on my own research and is approximate due to both the inexactitude of counting corset-related patents and the need to rely on first names and titles to identify patents issued to women. Patents issued to inventors identified only by first initials were thus not included. For further discussion of counting female inventors, see Khan, Democratization of Invention, *supra* note 15, at 133 n.16. Khan has counted

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Women's much more significant representation in patents in this area reflected the clustering of women's patenting activity generally in areas related to domestic manufacture and sewing, activities in which women often engaged. One of the earliest United States patents issued to any woman was granted in 1809 to Mary Kies for a method of weaving straw to make hats, and women ever since have patented in the area of clothing, particularly women's and children's clothing. While women always experienced barriers to patenting, they have been more successful in overcoming those barriers in these areas of technology than in many others.

The robust participation by American women in the patenting of corsets paralleled that of women in Great Britain, where women also obtained noticeable numbers of patents. Summers, in her analysis of nineteenth-century British corset patents, has described male inventors as having a near-obsession "with reinforcing all aspects of the corset," while "a significant number" of patents received by women-although not all-focused on the comfort of corsets. 94 A review of United States corset-related patents does not reveal any such neat bifurcation. While male inventors did not discuss comfort often, and indeed, lacked the experience necessary to do so, they did make inventions to reduce the problem of steels poking through the fabric of corsets, 95 to facilitate laundering corsets by allowing the easy removal of steels, 96 and to replace stiff and heavy metal stays with lighter and more flexible ones made of treated rawhide⁹⁷ or wood,⁹⁸ all of which might have been designed to increase comfort and/or ease of use. Both men and women proposed innovations in the number and shape of cloth pieces from which the corset was sewn, to improve fit and to limit wastage, and in the steel used, to reduce rusting.⁹⁹

Women and men also used their patents in similar ways. Some women, like Frances, used the patents they controlled in their own businesses. Others sold or licensed their patents to larger concerns. Lavinia Foy, a resident of

²⁴⁰ corset patents issued to women between 1790 and 1895, and 1661 corset patents in total, calculating women's participation at less than ten percent across the entire nineteenth century. *Id.* at 146.

^{91.} KHAN, DEMOCRATIZATION OF INVENTION, *supra* note 15, at 144-46; Khan, *Not for Ornament*, *supra* note 15.

^{92.} KHAN, DEMOCRATIZATION OF INVENTION, *supra* note 15, at 134; PILATO, *supra* note 26, at 37, 41-43. Kies is often credited as the first female patentee in the United States. Khan has identified an earlier patent granted in 1808 to Hazel Irwin for a method of cheese manufacture. Khan, *Not for Ornament*, *supra* note 15, at 165.

^{93.} See infra text accompanying notes 102-103; KHAN, DEMOCRATIZATION OF INVENTION, supra note 15; Khan, Not for Ornament, supra note 15; Merritt, supra note 15; sources cited supra note 28.

^{94.} SUMMERS, supra note 5, at 24-27.

^{95.} U.S. Patent No. 40,298 (issued Oct. 6, 1863).

^{96.} U.S. Patent No. 48,045 (issued June 6, 1865).

^{97.} U.S. Patent No. 56,438 (issued July 17, 1866).

^{98.} U.S. Patent No. 86,920 (issued Feb. 16, 1869).

^{99.} For example, U.S. Patent No. 84,746 (issued Dec. 8, 1868) was granted jointly to Catharine Maxwell and I. Newton Pierce. Phillip Lippmann, a defendant in *Egbert*, obtained a patent to an improved clasp that he alleged would be more resistant to rust. U.S. Patent No. 143,359 (issued Sept. 30, 1873).

Worcester, Massachusetts, obtained at least thirteen patents related to corsets between 1862 and 1884, 100 and reportedly received an annual income of \$25,000 in license fees. 101

Since the late nineteenth century, feminists and scholars have attempted, first, to dispel the belief that technology and invention are inherently masculine, and second, to provide social, rather than biological, explanations for the rarity of nineteenth-century women inventors. The laundry list of obstacles to patenting by women is long and real: the legal disabilities suffered by married women throughout much of the nineteenth century, the lack of female access to education and technical training, and social condemnation of women acting for themselves in the commercial realm, which limited women's ability to tap into networks of manufacturers, financiers, lawyers, and businessmen necessary to transform an inventive idea into a successful commercial product. It has been argued, too, that the predominantly male patent examiners took feminine inventions, that is, technologies used only by women, less seriously. It

Yet, within the world of corset making, numerous women were able to overcome these obstacles. They invented, they obtained patents, they sold or licensed their patents, they defended and asserted their patents in court, and they used their patents to support the development of successful businesses. Just as women used their patents similarly to men, to the extent that I have been able to determine, men and women tapped into similar networks of professionals to obtain and enforce corset-related patents. For example, male and female inventors used the same patent attorneys to prepare their patent applications, including the most prominent attorneys of the day. One of the deponents in *Egbert*, Mina Sebille, patentee and proprietor of her own corset workshop in New York City, hired Lemuel Serrell to prepare her application for an improved corset. Serrell later acted as a patent attorney for Thomas Edison, perhaps the most successful inventor of the era. Frances, seeking a

^{100.} U.S. Patent No. 523,888 (issued July 31, 1894); U.S. Patent No. 214,247 (issued Apr. 15, 1879); U.S. Patent No. 200,384 (issued Feb. 19, 1878); U.S. Patent No. 197,463 (issued Nov. 27, 1877); U.S. Patent No. 79,647 (issued July 7, 1868); U.S. Patent No. 54,323 (issued May 1, 1866); U.S. Patent No. 45,296 (issued Nov. 29, 1864); U.S. Patent No. 41,987 (issued Mar. 22, 1864); U.S. Patent No. 39,911 (issued Sept. 15, 1863); U.S. Patent No. 39,910 (issued Sept. 15, 1863); U.S. Patent No. 39,909 (issued Sept. 15, 1863); U.S. Patent No. 39,908 (issued Sept. 15, 1863); U.S. Patent No. 35,930 (issued July 22, 1862).

^{101.} KHAN, DEMOCRATIZATION OF INVENTION, *supra* note 15, at 146-48 (citing MACDONALD, *supra* note 28). Note that Merritt lists only thirteen patents for Foy, Merritt *supra* note 15, at 259, whereas Khan describes her as having seventeen patents.

^{102.} For an extensive discussion of women's disabilities in invention and patenting during the nineteenth century, see PILATO, *supra* note 26, *passim*.

^{103.} *Id.* at 3-5. The first female patent examiner was hired in 1872. *Id.* at 11. Because I have examined only issued patents, and not rejected patent applications, I am unable to assess the truth of this claim as applied to corsets, except to note the large numbers of corset-related patents that were granted to both men and women.

¹⁰⁴ U.S. Patent No. 39,964 (issued Sept. 15, 1863). For Serrell's work for Edison, see Paul Israel, Edison: A Life of Invention 56,97 (1998).

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reissue of Samuel's patent as his widow, used the same patent agents as had Samuel, Munn & Co. In relying upon Munn, a New York-based patent agency that advertised heavily and was noted for the high volume of their applications, Frances was joined by both female and male corset inventors. Both in inventing and patenting corsets, at least some nineteenth-century American women had access to the needed skills and assistance, and were able to convince the patent office that their applications were meritorious. While Frances, as the plaintiff in *Egbert*, was slightly unusual in litigating her patent to the United States Supreme Court, she was not particularly unusual in her role as a businesswoman in corsetry, or as a female applicant to the patent office in that art.

B. Corset Patent Litigation in the New York Metropolitan Area

Patent litigation was a lively area of practice in the federal courts in the nineteenth century, and just as corset patents were commonplace, so too was corset patent litigation. During the late nineteenth century, *Egbert* was not the only corset case on the docket of the Southern District of New York, where it was filed, ¹⁰⁶ or before the Supreme Court. ¹⁰⁷ Further, about one-quarter of the reported patent cases across the country involved female plaintiffs. ¹⁰⁸ As this proportion correlates with the proportion of corset-related patents issued to women during this period, women apparently were litigating their patents about as often as men. Any conclusions based on published decisions, however, must necessarily be tentative. The only certainty about patent litigation rates in the nineteenth century is that published cases provide only a very rough proxy of the caseload of the federal courts. Initial evidence from the dockets in Philadelphia and New York indicates that counting published opinions

105. Women: Emilie J. Meriman, U.S. Patent No. 81,926 (issued Sept. 8, 1868); Marie T. Smith, U.S. Patent No. 93,489 (issued Aug. 10, 1869). Men: Myron H. Beckworth, U.S. Patent No. 65,636 (issued June 11, 1867); James P. Love, U.S. Patent No. 65,246 (issued May 28, 1867). For the role of Munn & Co. in patent practice, see Kara W. Swanson, *The Emergence of the Professional Patent Practitioner*, 50 TECH. & CULTURE 519, 542-43 (2009).

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^{106.} Other reported cases involving corset patents include *Hardy v. Marble*, 10 F. 752 (C.C.S.D.N.Y. 1882); *Thomson v. Jacobs*, 23 F. Cas. 1099 (C.C.S.D.N.Y. 1877); *Seligman v. Day*, 21 F. Cas. 1040 (C.C.S.D.N.Y. 1876); *Carstaedt v. U.S. Corset Co.*, 5 F. Cas. 188 (C.C.S.D.N.Y. 1875); and *Cohn v. U.S. Corset Co.*, 6 F. Cas. 28 (C.C.S.D.N.Y. 1874).

^{107.} Cohn v. U.S. Corset Co., 93 U.S. 366 (1876).

^{108.} This estimate is based on collecting all published decisions containing the word "corset" decided in 1890 or earlier, and then identifying cases in which a corset patent was at issue. There are twenty-five such cases, including the *Egbert* decisions in the trial court and the Supreme Court. Seven of these had female plaintiffs (including the *Egbert* case) and two others involved patents issued to women, although the female patentees were not directly involved in the litigation. Since the number of reported cases is rather small, and the number of cases which were filed but did not result in published decisions may be as great or greater, it is quite possible that female participation in patent litigation was either more or less extensive than female participation in patent prosecution.

probably grossly underestimates the volume of patent litigations filed. ¹⁰⁹ Frances herself filed four patent cases and one trademark case related to corsets in a five-year period, and only two of these case resulted in published opinions. ¹¹⁰

One indicia of the rate of corset patent litigations in the late nineteenth century can be found in the docket of Samual Blatchford, the federal judge in New York who heard the *Egbert* case at the trial level. Blatchford served as circuit judge from 1872 to 1882. During those eleven years, he heard not only Frances's five lawsuits related to intellectual property in corsets, but three other reported corset-related patent litigations. Given than Frances alone filed three suits that did not result in reported decisions, Blatchford's overall corset patent docket was probably even greater. At least in the Southern District of New York, corset patent litigation was relatively common. When Blatchford heard the *Egbert* case, he already had experience with corsets as patented technology. Neither Blatchford nor the Supreme Court Justices would have experienced *Egbert* as an oddity because of its subject matter or female plaintiff.

Taking a closer look at the cases filed in the Circuit Court of the Southern District of New York in the 1870s and 1880s can also provide information about the networks of competing retailers and suppliers in which Frances was attempting to earn money using Samuel's patent. Samuel and Frances were both residents of New York City during the time of his invention and its later commercial exploitation by Frances. The court records in Frances's litigations, and the published decisions in other corset patent cases, provide a window into the mixed-sex world of corset manufacture in New York City in the second half of the nineteenth century, and the extensive use of patents in that business. The litigation records reveal that both men and women obtained patents as a common part of operating small, regional manufacturing shops. Like Frances,

109. The best available data on unreported patent cases in the nineteenth century is that being collected by Christopher Beauchamp, Brooklyn Law School. Personal communication with author.

^{110.} Frances's many lawsuits are discussed in Part IV *infra*. The reported cases were *Egbert v. Lippmann*, 8 F. Cas. 370 (C.C.D.N.Y. 1878) and *Barnes v. Straus*, 2 F. Cas. 876 (C.C.S.D.N.Y. 1872).

^{111.} ERWIN SURRENCY, A HISTORY OF AMERICAN LAW PUBLISHING 68 (1990). Blatchford was elevated to the United States Supreme Court in 1882. Blatchford's legal career is summarized in his obituary. Obituary, *Justice Blatchford Dead*, N.Y. TIMES, July 8, 1893.

^{112.} Hardy v. Marble, 10 F. 752 (C.C.S.D.N.Y. 1882); Thomson v. Jacobs, 23 F. Cas. 1099 (C.C.S.D.N.Y. 1877); Cohn v. U.S. Corset Co., 6 F. Cas. 28 (C.C.S.D.N.Y. 1874).

^{113.} Because the only way to count unreported cases is to review all docket sheets for the court for the relevant years, which are organized simply by defendant's name, I do not claim to have identified all corset cases heard by Blatchford, nor have I made investigations in other courts or for other judges in New York City or elsewhere.

^{114.} In addition to the corset patent cases over which he presided, *supra* note 112, Blatchford wrote and published case reports of other corset patent cases. *See, e.g.*, Seligman v. Day, 21 F. Cas. 1040, 14 Blatchf. 72 (C.C.S.D.N.Y. 1876); Carstaedt v. U.S. Corset Co., 5 F. Cas. 188, 13 Blatchf. 119 (C.C.S.D.N.Y. 1875); SURRENCY, *supra* note 111, at 68, 71.

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others in these networks used patents to protect innovations in a rapidly developing technology, and to better participate in patent litigation.

Not only was Frances a frequent filer in the Circuit Court of New York, 115 but nearly every other participant in Egbert was involved in other patent suits. Lawyers, witnesses, and parties frequently knew each other. Using *Egbert* as a starting point, we can trace the connections among them. Frances hired one of the nation's most prominent patent attorneys, George Gifford, to bring all of her suits. 116 As with the patent agents she used, Frances had access to the same level of legal representation as her male competitors. Gifford had successfully managed the patent portfolios of the major sewing machine companies during the 1850s and 1860s. 117 Not only did Gifford have broad experience with patent litigation, but he had specific experience with corset litigation. Gifford twice defended the United States Corset Company against allegations of patent infringement in the Circuit Court of New York, and argued before the United States Supreme Court on appeal in one of those cases. 118 Gifford was also counsel of choice for one of the largest ready-to-wear corset manufacturers, Thomson, Langdon & Co., who sold the heavily-advertised "Thomson's Glove-Fitting Corset." 119 It called upon Gifford to represent the firm in a suit alleging patent infringement by the New Haven, Connecticut-based corset manufacturer, Jacobs, Strouse & Co. 120 Gifford had already represented Frances in an earlier suit against Jacobs, Strouse & Co. 121

The defendants in *Egbert* were Phillip Lippmann and August Seligmann.¹²² The men were former partners in a corset clasp manufacturing business in New York City that controlled a corset patent issued to Phillip Lippmann in 1873.¹²³ While Frances's suits were pending against Lippmann and Seligmann,

^{115.} In filing multiple suits to enforce her patent, Frances was following common nineteenth-century practice. Many patentees filed clusters of suits in a particular federal court as they attempted to eliminate competition in a particular area. Personal communication with Christopher Beauchamp, Brooklyn Law School. Note that during this period, the circuit court was primarily a trial court; there were no federal courts of appeal other than the Supreme Court.

^{116.} Note that Gifford did not represent Frances in her appeal to the Supreme Court. Her decision to choose another lawyer could have been due to Gifford's advanced age. Born in 1811, he died in 1883, only two years after the opinion in *Egbert*. Obituary, *George Gifford*, N.Y. TIMES, July 3, 1883.

^{117.} *Id.* The complicated patent arrangements in the sewing machine industry are discussed in Adam Mossoff, *The Rise and Fall of the First American Patent Thicket: The Sewing Machine War of the 1850s*, 53 ARIZ. L. REV. 165 (2011).

^{118.} Carstaedt v. U.S. Corset Co., 5 F. Cas. 188 (C.C.S.D.N.Y. 1875); Cohn v. U.S. Corset Co., 6 F. Cas. 28, *aff* d 93 U.S. 366 (1876).

^{119.} Thomson v. Jacobs, 23 F. Cas. 1099, 1099 (C.C.S.D.N.Y. 1877); STEELE, *supra* note 5, at 54, 119 (reproducing the "Thomson's Glove-Fitting Corset" advertisements).

^{120.} The location of Jacobs, Strouse & Co. is discussed in Transcript of Deposition of Edward E. Cargill, *in* Transcript of Record, *supra* note 54, at 140-41.

^{121.} Barnes v. Jacobs (C.C.S.D.N.Y., filed Apr. 30, 1872).

^{122.} In addition to the case that became *Egbert v. Lippmann*, Frances filed a second case against Lippmann and Seligmann for trademark infringement, discussed *infra* text accompanying notes 203-204.

^{123.} U.S. Patent No. 143,359 (filed Nov. 2, 1872).

Seligmann sued Joseph Day and Nathan Hyman for infringement of the Lippmann patent. Seligmann moved aggressively, seeking a preliminary injunction against infringement of the patent, which was to a form of covered corset clasp. The court found that the Lippmann patent lacked novelty and refused to grant a preliminary injunction to Seligmann. 124

Lippmann was not the only witness in *Egbert* who held his own corset-related patents. Four other deponents in *Egbert* held corset-related patents: Mina Sebille, ¹²⁵ William Cargill, ¹²⁶ John Fitzpatrick, ¹²⁷ and Ferdinand Straus, who was the defendant in Frances's first patent litigation case. ¹²⁸ The testimony of these regional businesspeople provides evidence not only of the commonplace use of patents in the corset business, but also as to the nature of different commercial concerns within corsetry and the relationships among them.

Mrs. Mina Sebille patented an improved way of cutting the fabric pieces for a corset in 1863, just a year after she went into business as a corset maker in New York City. While Mrs. Sebille possibly was in business with her husband, she was sufficiently involved in the business to testify as to its suppliers. She was not alone as a female corset maker in the city. Her supplier of corset steels, a Mr. Charles Schneller, who both sold steels and manufactured corsets in his own shop, testified about the network of small corset makers who bought his steels, and named equal numbers of men and women as the proprietors who were among his customers. A person of either sex might apprentice with someone of the other sex before opening his or her own business. Mrs. Sherman, whose establishment was in Brooklyn, employed at least two women and one male corset cutter. Mr. Geering, who emigrated from Switzerland as a corset maker, testified that he worked for a Mrs. Bowles in her shop before going into business for himself.

Patentees Cargill and Fitzpatrick represented another type of small businessman in corsetry, those who specialized in the metal parts of corsets without themselves making the finished product. The two lived and worked in Connecticut. Cargill described his occupation as a manufacturer of corset

131. *Id.* at 63-64.

^{124.} Seligman v. Day, 21 F. Cas. 1040 (C.C.S.D.N.Y. 1876).

^{125.} U.S. Patent No. 39,964 (issued Sept. 5, 1863); Transcript of Deposition of Mina Sebille, *in* Transcript of Record, *supra* note 54, at 65-66.

^{126.} U.S. Patent No. 78,056 (issued May 19, 1868); U.S. Patent No. 75,856 (issued March 24, 1868); U.S. Patent No. 73,873 (issued Jan. 28, 1868); Transcript of Deposition of William B. Cargill, *in* Transcript of Record, *supra* note 54, at 47-54, 86, 135-39, 148.

^{127.} U.S. Patent No. 96,685 (issued Nov. 9, 1869); Transcript of Deposition of John Fitzpatrick, *in* Transcript of Record, *supra* note 54, at 143-47, 151-52.

^{128.} Barnes v. Straus, 2 F. Cas. 876 (C.C.S.D.N.Y. 1872); U.S. Patent No. 88,752 (issued Apr. 6, 1869).

^{129.} Transcript of Record, *supra* note 54, at 65.

^{130.} Id.

^{132.} Id. at 224-26.

^{133.} Id. at 55-56.

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clasps and steels since 1862.¹³⁴ He worked first for Jacob, Strouse & Co. in New Haven and then set up his own manufactory in Waterbury, Connecticut. Cargill held three corset-related patents to improved corset clasps.¹³⁵ He began his business in his garret, then moved it to a "little shop" in the yard of his house, where he worked along with his son and two female employees.¹³⁶ William Cargill's son, Edward, had also worked for Jacob, Strouse & Co., as had John Fitzpatrick who patented his version of a reinforced steel in 1869.¹³⁷ After leaving the firm, Fitzpatrick also lived and worked in Waterbury as a steel temperer for a company that made both corset steels and carriage trimmings.¹³⁸

As the owner of a patent to an improved corset steel, Frances was striving to find a way of making money among these networks of steel manufacturers and corset makers in a commercial environment which included both local businesses and nationalizing companies like Thomson, Langdon & Co. ¹³⁹ As a businesswoman, Frances would have encountered other businesswomen and sharp competition from other steel manufacturers who had their own patents to assert. The witnesses in her case no doubt knew each other, knew the past history of suits among themselves, and were familiar with both the lawyers and judges they encountered.

C. Construing a Corset Patent

This quick survey of corset patents and New York City corset patent infringement cases in the second half of the nineteenth century resituates Frances and her lawsuit. From a twenty-first-century perspective, Frances, as an executrix attempting to enforce her dead husband's patent to a corset steel, seems an unusual plaintiff, and her patent, to a metal piece of an undergarment, seems an unusual subject for patent law. While the "corset case" may appear anomalously feminine and frivolous in the midst of casebooks and treatises filled with masculine inventors and masculine technology, there is every indication that United States Supreme Court Justices in the late nineteenth century would not have shared that viewpoint. Corsets were big business, they were frequently the subject of inventions by both men and women, and respected and elite members of the bar and bench had considerable involvement with corsets as patented technology. Neither the sex of the

135. U.S. Patent No. 75,856 (issued May 24, 1868); U.S. Patent No. 78,056 (issued May 19, 1868); U.S. Patent No. 73,873 (issued Jan. 28, 1868).

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^{134.} Id. at 47.

^{136.} Transcript of Record, *supra* note 54, at 52.

^{137.} U.S. Patent No. 96,685 (issued Nov. 9, 1869).

^{138.} Transcript of Record, supra note 54, at 143-44.

^{139.} See Smith, supra note 6 (discussing the transition to national companies in corsetry).

plaintiff in *Egbert* nor the corset as invention would have been unfamiliar to the judges deciding Frances's case in either the circuit court or the Supreme Court.

From this historically situated perspective, it is useful to consider one other corset patent case in detail. Five years before Frances's case reached the Justices, the Supreme Court heard *Cohn v. United States Corset Company*, ¹⁴⁰ another case on appeal from a decision of Judge Blatchford. The facts of *Cohn*, the arguments that were made, and the fate of Cohn's asserted patent provide a useful foil for the analysis of gender and sexuality within *Egbert*.

1. Cohn v. United States Corset Company

A common scenario sparked the *Cohn* case: a group of employees left one business to start their own competing business, causing their irate former employer to sue. All parties were in the business of making woven corsets, and, like so many other corset manufacturers, the employer, Moritz Cohn, had obtained a patent that he was attempting to wield in order to shut down the competing business of his former employees. If he could convince a court that they were infringing his patent, he could stop them from using the knowledge they had acquired in helping him produce an improved woven corset. ¹⁴¹

The testimony and court records in *Cohn* open a window onto another segment of the corset business, highlighting the mass production of corsets on powered looms. After about 1870, this segment of the corset manufacturing industry increased. Cohn, a weaver by training, had a business in the manufacture of hoop skirts, and saw an opportunity to expand into another type of ladies' foundation wear, corsets, when the Convex Weaving Company went out of business. He bought all the looms and hardware owned by Convex Weaving and hired several of its employees to set up the equipment and get it functioning. Its

The type of corsets produced by Convex Weaving, by Cohn's factory, and by the defendant United States Corset Company, were mass produced and then finished by hand. They thus differed from the hand-sewn corsets made by the networks of corset manufacturers who testified in *Egbert*, and were generally cheaper to make. Cohn was interested in making corsets more cheaply still by reducing the number of employees he had to hire to finish the corsets. If pockets for bone stiffeners were not woven in, they had to be sewn in by hand before the bones could be inserted, and then finished with additional stitching

^{140. 93} U.S. 366 (1876).

^{141.} Cohn thus could avoid the problematic assertion of loss of working knowledge, an aspect of the law of corporate intellectual property still in flux during this period. *See generally* CATHERINE L. FISK, WORKING KNOWLEDGE: EMPLOYEE INNOVATION AND THE RISE OF CORPORATE INTELLECTUAL PROPERTY, 1800-1930 (2009).

^{142.} For the development of the large-scale manufacture of machine-made corsets, see Smith, *supra* note 6.

^{143.} Transcript of Deposition of Moritz Cohn, in Transcript of Record, supra note 82, at 8, 46-47.

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to hold the bones in place. Cohn conceived of weaving pockets into the body of the corset, reducing the necessary finishing work. Because of the hourglass shape of corsets, the stays varied in length. Therefore, the loom needed not only to weave pockets, but to weave pockets of predetermined but variable length. Using the modern Jacquard looms, which were programmed by means of punched cards, Cohn was able to produce the corsets he envisioned, and he received a patent to the improved corset thus produced. 144 accomplishment, however, required the assistance of a succession of two expert weavers, skilled in punching cards for looms, and the use of paid consulting services provided by the inventor of an innovative loom, who further modified his loom for Cohn's purposes. 145 It was the loom inventor, James Lyall, who, together with his brother William, then opened his own corset manufacturing business, the United States Corset Company, which used the modified looms James had first designed for Cohn to manufacture woven corsets. 146 Cohn, undoubtedly greatly irritated at this betrayal as well as by the threat to his business, sued the company and its directors for patent infringement, claiming that his patent covered the corsets they were making.

The Lyalls successfully defended against the suit at trial by arguing that Cohn's patent was invalid because his invention was already known. ¹⁴⁷ In fact, they claimed, it had been fully disclosed in a printed publication, an English provisional specification filed in the United States patent office in 1854. ¹⁴⁸ In considering this argument on appeal, the Justices concentrated their attention on interpreting Cohn's patent, in order to determine whether his invention had been disclosed in the English document.

They determined that the English specification was "fatal" to Cohn's patent because it sufficiently described the corset claimed by Cohn. According to the Court, Cohn, like Frances, was trying to assert a monopoly over something known to the public. In Cohn's case, the public was the community of weavers on both sides of the Atlantic, who had learned of the invention from an Englishman.

On its surface, then, the narrative of *Cohn* does not appear in any way unique to the corset business or to have anything to do with gender. Cohn's masculinity did not save his suit from the same fate as Frances's suit. In each

145. Testimony of Gustav Zorn, *in* Transcript of Record, *supra* note 82, at 32 (designer); Testimony of Charles Gahren, *in* Transcript of Record, *supra* note 82, at 37 (engineer); Testimony of Louis Langlotz, *in* Transcript of Record, *supra* note 82, at 41 (weaver); Testimony of Moritz Cohn, *in* Transcript of Record, *supra* note 82, at 47-48 (weaver and owner); *see also* Brief for Appellants, *in* Transcript of Record, *supra* note 82, at 33-34.

^{144.} U.S. Patent No. 174,199 (filed Feb. 9, 1876).

^{146.} Testimony of James Lyall, in Transcript of Record, supra note 82, at 113, 117-18.

^{147.} Decision, reprinted in Transcript of Record, supra note 82, at 168-74 (Blatchford, J., C.C.S.D.N.Y. June 20, 1874).

^{148.} English Patent No. 143, Complainants's Exhibit No. 143, *reprinted in Transcript of Record, supra* note 82, at 54.

^{149.} Cohn v. U.S. Corset Co., 93 U.S. 366, 370 (1876).

case, the Court invalidated a corset-related patent because of prior public knowledge of the invention. In *Cohn*, the Court did not need to remake the understanding of "public" in any troubling way, nor did it signal that a few years later, it might find that the public could consist of a single intimate friend of the inventor as much as an international group of skilled workers.

Women's bodies, however, remained significant to how the *Cohn* case was argued and decided, even though, as in *Egbert*, the gendered nature of corset technology went unacknowledged. The corset as patented technology designed to shape women's bodies entered the masculine province of the courtroom with the dual gender valence I described in Part I. It was masculine technology, but even in the absence of any female actors in the *Cohn* litigation, the corset brought femininity into the courtroom. The Court's reasoning, as it compared the English specification to Cohn's patent, elevated the terms "grace" and "elegance" to technical terms of art, in an elision of the body to be encompassed within the corset with the patented corset itself.

2. "Grace" and "Elegance" as Terms of Art

Cohn argued to the Supreme Court that while the English specification revealed a corset with pockets for bone stays woven into the corset, unlike in his improvement, in the English corset, the closed ends of the pockets were all at "uniform distances from the edge of the corset." His improvement, then, consisted in the ability to vary the length of the pockets, allowing the insertion of stays of varying length around the perimeter of the corset, which was necessary for a better fit. The stays in the front of the corset, which had to run from the swell of the wearer's breasts down to her abdomen, needed to be of a different length than those along her sides, which ran from under her armpit over the curve of her hip, and different still from those on her back. The function of a corset in this period was to emphasize the breasts and hips relative to the waist, and the resulting hourglass shape would be lost if all stays were the same length.

The English inventor had failed to mention any variation in pocket length. Yet, the Court was unpersuaded by Cohn's attempt to read the English specification so narrowly. Instead, the Court focused on the words of description in the English document that claimed that the inventor's corset contained "all the elegance and graceful contour of sewn corsets made by manual labor." "Every person skilled in corset making," declared the Court, knew that pockets had to be of varying length in order to "preserve a graceful shape at the top," that is, to emphasize the curve of the wearer's breasts rather

^{150.} Brief for Appellants, in Transcript of Record, supra note 82, at 3.

^{151.} Cohn, 93 U.S. at 375 (quoting specification).

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than to flatten them. ¹⁵² In its analysis of the sufficiency of description in the English specification, the Court repeated the words "elegance" and "grace" multiple times. 153 According to the Court, these words, as modifying the type of "contour" the corset was designed to create, were sufficiently specific by themselves to indicate the use of pockets of multiple lengths. The Court thereby considered "grace" and "elegance" as terms of art, communicating to one skilled in the art of corset making the desired contour of the female body intended to be created by the garment, which, in turn, dictated a particular variation in stay length.

These words served as coded descriptors for the female body left invisible in the drawings of the corset within the patent documents. The Justices, Victorian gentleman all, were relying on an unarticulated trans-Atlantic conception of the female body, so familiar and unquestioned that it could be assumed. There may have been no elegantly dressed women in the courtroom, but the Justices needed no reminder to understand that the ultimate utility of any corset was in molding the female form itself. "Grace" and "elegance" in the female form were typified by the silhouette manufactured by an hourglassshaped, whalebone-stiffened corset. Further, the Court assumed that this understanding was shared by English weavers in 1854 and New York corset makers in 1873, as well as by Supreme Court Justices in 1876.

The Cohn opinion thus reveals the result of male judges applying patent doctrine to a technology of gender. Corsets may have been feminine technology, made for use by women, but their purpose was to satisfy the male gaze, "functioning and signifying for the beholder." Unlike when assessing inventions in, for example, telegraphy, the Justices needed no expert testimony to understand the evidence provided by their male gazes about what constituted "elegance and [a] graceful" feminine contour. The purpose of corsets, and thus the utility of patented corsets, was the creation of feminine beauty. 155 The corset may have been worn by women, even sometimes invented and manufactured and sold by women, but in the courtroom, with the all-male judiciary, it was masculine knowledge of the female body that defined the patentable contours of this technology. 156 As has been noted by Brownmiller and many other feminist thinkers, femininity and masculinity are not constructed in isolation by one sex, but are the result of the dynamic interplay

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Id. at 376. 152.

^{153.}

¹⁵⁴ Miller, supra note 39, at 136.

^{155.} Note that some nineteenth-century corsets were considered medical devices designed for health purposes, thus having a different utility, but one not at issue in Cohn. For a discussion of the use of corsets to treat scoliosis, see Jane Farrell-Beck, Medical and Commercial Supports for Scoliotic Patients, 1819-1935, in 11 CADUCEUS: STUD. IN ANATOMY & TECH. 142 (1995).

Cf. Burk, Do Patents Have Gender?, supra note 19, at 22-23 (considering the unacknowledged masculine nature of the PHOSITA-Person Having Ordinary Skill in the Art-deployed in patent cases to evaluate inventions).

between sexes and gender roles.¹⁵⁷ The Justices were unselfconsciously enacting their own masculinity by construing the words of a patent specification to describe an invention that was constitutive of femininity. They had, in Brownmiller's words, a "grip on the corset" and its social purpose. Cohn lost his case because of the hegemonic notion of female beauty that privileged the male gaze over female comfort, and that guided the Justices' interpretation of an anticipatory reference. In writing this opinion, the Justices were enacting gender as well as patent law, both using and creating gendered knowledge of the corset as technology.

Viewing the corset as patented technology, using gender and sexuality as analytic foci, thus provides a way of considering the first two elements of *Egbert*'s strangeness. The historical data about corset patents and litigations show that to contemporaries *Egbert* was not odd in its subject matter or its female plaintiff. Yet, the example of *Cohn* emphasizes that despite the routine nature of corset patents and corset patent litigations, the corset was a gendered technology that carried gendered messages into the courtroom even when corseted women were not present. Even in the technical area of patent law, justice was not gender-blind.

PART III. THE CORSET IN PUBLIC AND PRIVATE

A close reading of the *Cohn* opinion underscores the reality of law in action. The all-male judiciary shared and applied Victorian gender assumptions as it considered corset-related patent cases, as judges assuredly did in all cases. These assumptions concerned not only what body shape was graceful and elegant for a woman, but also where women's bodies should be found and what those bodies did, with specific implications for the patent doctrine the Justices would consider five years later, when they were asked to construe the "public use" of a corset invention.

Gender roles in Victorian America were understood by what is often referred to by historians, although not by Victorians themselves, as the "ideology of separate spheres." This ideology held nearly hegemonic sway in the Victorian period. It described a sex-segregated society in which men engaged in commerce, the business of earning a livelihood, in the public sphere, and then retreated to the domestic sphere, where their wives and daughters, angels of the home, used their feminine nature to provide a welcoming private life. The public sphere and its activities and relationships

^{157.} BROWNMILLER, *supra* note 1, at 236; Joan Scott, *Gender: A Useful Category of Historical Analysis*, 91 AM. HIST. REV. 1053, 1054 (1986).

^{158.} The ideology of separate spheres has been extensively discussed in the historical literature. See, e.g., NANCY F. COTT, THE BONDS OF WOMANHOOD: "WOMAN'S SPHERE" IN NEW ENGLAND, 1780-1835 (1977); Gerda Lerner, The Lady and the Mill Girl: Changes in the Status of Women in the Age of Jackson, 1 AM. STUD. J. 5 (1969); Barbara Welter, The Cult of True Womanhood: 1820-1860, 18

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were masculine; the private sphere and its activities and relationships were feminine. This ideology did not reflect reality for most American men and women, but as an ideology, it was enormously influential in these decades in shaping how men and women enacted their gender roles. The Supreme Court had, just a few years before Egbert v. Lippmann, reiterated this ideology as the law of the land in Bradwell v. Illinois. 159 It was this ideology that led the Court to uphold the right of Illinois to keep Mrs. Myra Bradwell from practicing law. In that case, Justice Bradley wrote a separate concurrence to note that "the civil law, as well as nature herself, has always recognized a wide difference in the respective spheres and destinies of man and woman."160

The doctrine of separate spheres, as an ideology, was an inescapable part of judicial reasoning of the period. It made no difference that judges often considered cases in which women were active participants in commercial life, and heard testimony that described many women toiling in factories, rather than gracing front parlors with their elegant, corset-induced curves. The gendered assumptions shared by all men of their class and era created a prism through which judges heard testimony and made decisions. In cases related to corsets, women were always present—either as witnesses and litigants, or in the bodies suggested by the shaped garments under consideration.

To complete a feminist analysis of the corset as patented technology, it is necessary to understand Victorian notions of gender, the shared understandings of femininity and masculinity, as enacted through dress and activities. It is also necessary to consider sexuality and women's physical bodies. The American legal system reflected social understandings of both gender and sexuality, which surrounded precisely the decisive issue in *Egbert*—the public and private roles of the corset. In this Part, I consider the social and legal meanings of the corset outside of the patent context, to more fully appreciate the ways in which a corset brought gender and sexuality into American courtrooms.

The Dual Nature of Corsets

Both the corset and the ideology of separate spheres were in their heyday in the late nineteenth century, and this was no chance coincidence. The corset was in its heyday not just in terms of the number of corset patents issued, but also in terms of the degree to which the garment was worn by a broad spectrum of American women, from girls to the elderly, from domestic servants and

AM. Q. 151 (1966). Its relationship to law, particularly family law, has also been extensively explored. See, e.g., MICHAEL GROSSBERG, GOVERNING THE HEARTH: LAW AND THE FAMILY IN NINETEENTH-CENTURY AMERICA passim (1985); HENDRIK HARTOG, MAN AND WIFE IN AMERICA: A HISTORY (2002); Frances Olsen, The Family and the Market: A Study of Ideology and Legal Reform, 96 HARV. L. REV. 1497 (1983).

⁸³ U.S. 130 (1873).

⁸³ U.S. 130, 141 (1872) (Bradley, J., concurring)

factory workers to the Gilded Age heiresses in their New York mansions. The corset was so popular during the late Victorian era in part because of the ways in which it supported and was deployed to maintain the ideology of separate spheres. In many ways, the corset was used to signal the boundary of public and private. That boundary, as interpreted through the ideology of separate spheres, was a crucial construct for what Summers called "the maintenance of Victorian hetero-patriarchal dominance." The spheres were not only separate, but unequal, with the public masculine sphere dominating the private feminine sphere in power and importance, and the corset thus reinforced masculine power and feminine subordination.

The corset played this role through its physical effects and its cultural meanings. It has been frequently noted that the corset acted as a stand-in for a woman's body, just as it did in the *Cohn* opinion. 162 With the nineteenthcentury development of the mass-produced corset as a heavily marketed consumer item, it has been portrayed as such a stand-in in advertisements. ¹⁶³ In addition to signifying women's bodies, the corset was intended to remake women's bodies. By emphasizing women's secondary sexual characteristics, the hourglass corset emphasized female biology, biology that was believed by many of all classes in the late nineteenth century to limit women's abilities. Women's bodies, marked by the hips and breasts of childbearing and childsuckling, were believed to be weaker than men's bodies. Women's biology thus provided a naturalized explanation for the ideology of separate spheres. Women were not physically suited for the rough and tumble of public life, or even for the mental exertion of advanced education. They were suited for childbearing and rearing, and quiet domestic tasks. Ideology was grounded in biology. 164

The corset both emphasized this biology and reinforced its social construction by actually making women's bodies weaker. Corseting could reduce muscle tone, cause internal injuries, limit mobility, and promote pallor and fainting in the wearer, all effects that reinforced the contemporary understanding of women's bodies as weak and unreliable. When women of all races and social classes wore corsets, they were participating in a mass enactment of these beliefs, emphasizing their femininity. They were also suggesting that they were lady-like, implying not only a gender role, but also a class role. The ideology of separate spheres and the cult of true womanhood focused on the non-wage-earning middle-class white woman as the feminine

163. *Id.* at 178-79; see also Finch, supra note 35, at 347-48.

^{161.} SUMMERS, supra note 5, at 8.

^{162.} *Id*.

^{164.} Rima D. Apple, *Introduction* to Women, Health & Medicine in America: A Historical Handbook, at xiii, xvi (Rima D. Apple ed., 1990) ("[Nineteenth-century] physicians, commentators and women themselves wrote as if women . . . were sickly"); *see also* EDWARD H. CLARKE, SEX IN EDUCATION; OR, A FAIR CHANCE FOR THE GIRLS (1873) (arguing that education was dangerous for girls and women).

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ideal. 165 A corseted body, which made movement more difficult, signaled leisure. In his famous work The Theory of the Leisure Class, contemporary observer Thorstein Veblen characterized the corset as "a mutilation, undergone for the purpose of lowering the subject's vitality and rendering her permanently and obviously unfit for work.",166

It is worth stressing again that this understanding of women's biology and social role, and its promotion by widespread corset use, bore little relationship to the actual lives of many women, who, while wearing corsets, engaged in significant physical labor, including both unpaid labor within their own homes and wage labor. A corset could be more or less restrictive depending on its style and how tightly it was laced. The corset allowed working-class women to appear as if their bodies were more ornamental than useful, even as they relied on their own labor for economic survival.

The corset also signaled sexuality, both in its role as a stand-in for the unclothed body within it, and in the way it reshaped the female body. By pushing up the breasts and exposing them to the male gaze, and creating a silhouette that men of the period could find graceful and elegant, the corset allowed women to display their bodies attractively, as part of the quest for a husband. By the 1880s, this message was so explicit that the Warren Corset Company used "A True Story" in four chapters as an illustrated advertisement, showing a woman despairing at her figure in her old corset, replacing her corset with an improved model, obtaining admiring glances from men, and then appearing at the altar, a tightly corseted bride in white. 167

The corset was a safe and controlled way of signaling sexuality because the corset also confined female flesh, displaying cleavage, a wasp waist, and rounded hips, but rendering most of the body inaccessible behind a carapace. It prevented any visible jiggling that would reveal the flesh beneath the bones and steels. The body was displayed to the male gaze as a sexual object, but was protected from access. A corseted body necessarily maintained a stiff and upright posture, suggestive of rigid morality and restraint. Conversely, the failure to wear corsets was associated with moral looseness. An unbound female body in public was threatening, suggesting an indifference to the male gaze, or worse, an unrestrained sexuality. As Summers has quipped, Victorian women were "bound to please." ¹⁶⁸

dangerous, writhing woman" influenced twenty-first-century First Amendment law).

It is beyond the scope of this Article to explore further how the issues of gender and sexuality surrounding the corset were crosscut by considerations of class and race. This area of fashion history has been touched upon, but not yet fully researched. See STEELE, supra note 5, at 48-49; SUMMERS, supra note 5, at 9-36.

^{166.} THORSTEIN VEBLEN, THE THEORY OF THE LEISURE CLASS: AN ECONOMIC STUDY OF INSTITUTIONS 172 (1912 ed.) (1899)

Advertisement reproduced in STEELE, supra note 5, at 134. 167.

The understanding of feminine sexuality as dangerous is not confined to the nineteenth 168. century. See Adler, supra note 36, at 1109 (describing how the cultural view of the "seductive,

The social dictate to be corseted in public was part of the way the corset acted to signify the boundaries between public and private spheres. Corsets were worn under clothes, and were to remain unseen. The degree to which corsets were intended to be seen can be assessed by the balance struck in these garments between functionality and ornamentation. While corsets have been made in many colors and fabrics, and decorated with embroidery and lace, by the second half of the nineteenth century, mass-produced corsets were most commonly prosaic garments, white, with little or no ornamentation. This utilitarian appearance reflected both their purchase price and their private nature. Cheap ornamentation was part of the ready-to-wear world of women's fashion, with many working-class women investing their wages in embellished hats and gloves and dresses. But for those on limited incomes, the expenditure on decoration did not extend to the corset. The corset was not for public display.

Yet just as the corset had a double gender valence as patented technology, it had a dual nature as a garment with respect to the public/private divide, making it an ideal boundary marker. It was a private garment with a public role. 171 While unseen in public, the corset created the public form of the female body. The very purpose of the garment was to attract the male gaze in public. In public, the corset invisibly surrounded the woman's body, molding its presentation, and only in private could the corset be removed, allowing the unbound body to return to its natural state. The presence or absence of a corset thus acted as a signal, indicating both the moral character of the wearer and the nature of the space she was inhabiting. In public spaces in which public relationships occurred, women should be corseted. In such places, like the street, places of amusement, shops, and other homes, an uncorseted woman signaled that she was unable, due to extreme poverty, or unwilling to strive for a middle-class ideal of femininity. 172 Depending on circumstances, she might also be signaling that her body was public, sexually available for money or otherwise. 173 In other words, that she was a trollop, with its mixed meaning of slatternly and promiscuous. On the other hand, a woman of any means could

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^{169.} STEELE, *supra* note 5, at 39 (explaining that corsets until 1870 were almost always white); SUMMERS, *supra* note 5, at 14-15. Note that the bridal corset analyzed by Miller had some ornamentation, and was "near the top of the Royal Worcester [Corset Company's] line," costing over three times as much as the most basic corset the company sold. Miller, *supra* note 39, at 136.

^{170.} As the ready-to-wear revolution made trims less expensive, e.g., machine-made lace, cheaper corsets once again began to show more embellishment. *See* advertisements in STEELE, *supra* note 5, at 44-65; SUMMERS, *supra* note 5, at 178-99. For a general discussion of working-class women's dress at the turn of the twentieth century, see KATHY PEISS, CHEAP AMUSEMENTS: WORKING WOMEN AND LEISURE IN TURN-OF-THE-CENTURY NEW YORK 62 (1986).

^{171.} Miller, *supra* note 39, at 136-37.

^{172.} Some women, for reasons of comfort, health, or philosophy, including some active in the cause of women's rights, rejected the corset. SUMMERS, *supra* note 5, at 144-48.

^{173.} While the removal of a corset in a public space could signal sexual availability, as discussed further *infra*, I do not mean to suggest that prostitutes routinely went uncorseted. Such women also had reason to attract the male gaze.

signal that she was socially proper and morally upright, by removing her corset only in private spaces, in which private familial relationships occurred. The only men present in such spaces were to be children and husbands, and perhaps brothers and medical doctors. If the corset was removed, its wearer was signaling that she was in an intimate, private space, accessible only to family members and sanctioned sexual partners.

The world, of course, is not readily divided into public and private spaces. The ideology of separate spheres can lead us to overlook the complexity in the daily living of men and women, and the gradations that occur. Women were subject to categorization not only by where they were found, and what they were wearing, but also by their class, race, and age. Within these confines, however, they could, by donning or removing a corset, transform a space from public to private, or reconfigure the meaning of their relationship to any man present. As a technology of gender, corsets in the Victorian era also acted as a marker of the gendered divide between public and private.

B. The Corset as Witness

These mixed meanings of the corset to signal femininity, sexual availability and attractiveness, and moral constraint were well known to Americans of the period. Thus, corsets could figure in non-patent lawsuits as stand-ins for the gender conformity and sexual activities of women. The Supreme Court Justices, like all judges, were products of their time. They understood and participated in the replication of the ideology of separate spheres, both in their professional life and in their personal lives. They also understood the meanings of corsets as a symbol both of femininity and of female sexuality. They understood those meanings not just as Victorians, but as lawyers and judges. The legal system in the nineteenth century had incorporated the corset as a form of witness when a case turned on a woman's sexual activities, routinely giving it evidentiary weight.

In 1876, for example, the Massachusetts Supreme Court considered an appeal by a man and woman from their conviction for adultery, which they denied committing.¹⁷⁵ They had been found in a hotel room at midnight. The man was in the bed, and the woman was not, and was fully clothed, except for her corset and shoes. Her uncorseted presence was considered probative of an adulterous purpose in their visit to the hotel. Similarly, in 1885 when an Iowa woman was found in a bedroom with a man not her husband, wearing a "loose" wrapper, with her hair hanging "loosely," and her corset lying on the bed, her general state of physical looseness and her removal of her constraining corset

^{174.} Susan Gal, A Semiotics of the Public/Private Distinction, 13 DIFFERENCES: J. FEMINIST CULTURAL STUD. 77, 78-79 (2002).

^{175.} Commonwealth v. Bowers, 121 Mass. 45, 45-46 (1876)

were considered evidence of loose morals sufficient to prove adultery. ¹⁷⁶ In cross-actions for divorce, the evidence of her corset helped the husband establish himself as the wronged party. 177 In each of these cases, in the absence of eyewitness testimony of suspected sexual activity, the corset bore witness. The removal of a woman's corset transformed the presumption that an unmarried man and woman were public acquaintances into a presumption that their relationship was within the private sphere, a sphere that included not only feminine domesticity, but also sexuality.

Only a few years after the *Egbert* decision, the Illinois Supreme Court matter-of-factly concluded that evidence that a man gave a corset to a woman was evidence that would have led a jury to believe that there had been a sexual relationship between the pair. 178 The man in question had been accused of bastardy, the crime of fathering an illegitimate child by the woman to whom he gave the corset. At his initial trial he had denied any sexual relationship, and then was tried and convicted of perjury for his denial in the face of the evidence of the corset. The appellate court agreed that the evidence that "[t]he purchase of the [corset], and giving it to [the woman], was a circumstance which, unexplained, was likely to prejudice the case of the defendant in the minds of the jury."180

This case reveals the extent of the corset's power as a witness. The corset merely as a topic of conversation or an item of exchange could also testify to a private relationship. The Supreme Court heard the Egbert case with full awareness of the way the Victorian corset produced femininity through its graceful contours and of the way it signaled sexual interactions between men and women. The Egbert case involved not only a patent, but the relationship between the male inventor, Samuel, and his "intimate friend," Frances, who first wore his innovative corset steel, and later, came to control Samuel's patent. The corset in the case was not only the result of Samuel's knowledge creation as an act of invention, but also itself generated knowledge about a male/female interaction. As the Court considered the nature of public and private use of a patented invention, it did so in the context of the gendered divide between public and private spaces policed by the corset itself.

Names v. Names, 25 N.W. 671, 671-72 (Iowa 1885). 176.

Id.; see also Graham v. Graham, 50 A. 701, 701 (N.J. Ch. 1892) (finding removal of corsets in presence of alleged lover as evidence of wife's adultery).

Maynard v. People, 25 N.E. 740, 744 (Ill. 1890). 178.

¹⁷⁹ Id. at 741.

^{180.} Id. at 434 (finding error in failure to allow the defendant to explain why he bought the corset).

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PART IV. FRANCES EGBERT AND THE BARNES PATENT

To understand how this layered epistemology of the corset led to the expansive interpretation of the public use doctrine in Egbert, I describe the procedural history and litigated facts of the case. For Frances, Egbert was not a one-time effort, but the latest in a succession of patent infringement suits brought as part of her business strategy. Egbert began in September 1874, when Frances sued Lippmann and Seligmann, corset steel manufacturers in New York City, for infringement of Samuel's patent. 181 The case was finally resolved at the trial level in the defendants' favor in 1878. 182 whereupon Frances appealed to the Supreme Court. What the Supreme Court opinion does not reveal, but what is disclosed in the case files of the Circuit Court for the Southern District of New York, is that Frances had been using the patent system and the courts to extract value from the patent almost from the moment of its issuance in 1866. Her loss in 1881 followed at least a decade of more successful maneuverings. While Samuel showed a reluctance to involve himself with the patent system, his widow and executrix moved aggressively to commercialize his invention. Just as the *Egbert* case was one of many corset patent litigations of these decades, it was one of several that Frances herself had brought.

A. Reissues and Early Litigation

Like Cohn, Frances wielded her patent against her competitors. Within a year of gaining control of the patent as executrix of Samuel's estate, Frances went into the business of manufacturing and selling corset steels in New York City in partnership with George Cruttenden, Jr. 183 At about that time, Frances began to use the legal system to reduce competition from other area corset steel manufacturers. Frances began by using the nineteenth-century practice of reissue to adjust the patent issued to Samuel. Under the then-broad interpretation of the statutory right to correct errors in patents, patent claims could be revised to correct insufficiency, broadening them to cover subject matter included in the invention, but left out of the claims. 184 Reissuance

183. Articles of Co-partnership, Barnes & Cruttenden, *in* Transcript of Record, *supra* note 54, at 156-58. Barnes & Cruttenden as a manufacturer of steels was included in a New York City directory in 1872. 85 TROW'S NEW YORK CITY DIRECTORY FOR THE YEAR ENDING MAY 1, 1872, at 64 (H. Wilson comp., 1872). Frances may have later changed partners, because in 1874, certain remarks were attributed to "Egbert & Lum, successors to Barnes & Cruttenden." Transcript of Record, *supra* note 54, at 35.

^{181.} Bill of Complaint, in Transcript of Record, supra note 54, at 1.

^{182.} Egbert v. Lippmann, 8 F. Cas. 370 (C.C.S.D.N.Y. 1878).

^{184.} Patent Act of July 3, 1832 §3, 4 Stat. 559. The interpretation and use of reissue is explained in Kendall J. Dood, *Pursuing the Essence of Inventions: Reissuing Patents in the 19th Century*, 32 TECH. & CULTURE 999 (1991).

practice made patents very changeable documents during this period, allowing a patent-holder to easily react to the market. Frances took full advantage of this ability, and obtained three reissues of the patent between May 1868 and August 1869. 185 In the fall of 1869, Frances wielded her third reissue offensively, filing a suit for patent infringement against Ferdinand Straus. Straus attempted to defeat the patent by arguing that Samuel was not the first inventor of the improved corset steel, but Straus was unsuccessful. Judge Samuel Blatchford made a careful analysis of Samuel's invention, which consisted of a pair of steels that fastened together. Each steel itself was composed of two pieces of metal permanently joined together in order to allow them to slide a bit vertically with respect to each other, but not to slip apart laterally. 186 The steels were also tapered to fit the curves of a corset. Blatchford found that Samuel's invention was novel, and was not anticipated by a carriage-spring or a French corset spring as Straus had argued. Straus was permanently enjoined from infringing the patent. 187

Emboldened by her success, Frances continued to litigate. 188 concluding her case against Straus, she filed complaints on April 30, 1872 against two separate groups of corset manufacturers, Bardwell, Castle & Co. and Jacobs, Strouse & Co. 189 Each group of defendants filed an answer, but no further action was taken in either case. Instead, Frances returned to the patent office for two further reissues, obtained in November 1872 and January 1873. 190 Armed with a reshaped patent, Frances almost immediately asserted her fifth reissued patent on January 23, 1873 against the Castle firm, now doing business as S.A. Castle & Co. 191

Although the firms of Jacobs, Strouse & Co. and S.A. Castle & Co. were separate entities, they evidently shared a common supplier of corset steels, who managed the defense in both cases. The suit against Jacobs, Strouse & Co. was allowed to languish, when all counsel agreed to abide by the ruling in the re-

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U.S. Patent Reissue No. 3624 (issued Aug. 31, 1869); U.S. Patent Reissue No. 3520 (issued June 29, 1869); U.S. Patent Reissue No. 2929 (issued May 12, 1868).

^{186.} Barnes v. Straus, 2 F. Cas. 876 (C.C.S.D.N.Y. 1872).

^{187.} Id. at 877-78.

This summary is based on the facts recited in the record of Egbert v. Lippmann, 8 F. Cas. 370 (C.C.S.D.N.Y. 1878), and Egbert v. Castle, and a review of the Docket Book for the Circuit Court for the Southern District of New York from Oct. 1872 to Nov. 1874, National Archives, New York, New York. It may not be exhaustive. There is reference to another injunction obtained by Frances against Parker Bros. & Co., manufacturers of the "climax steel," although I have not found records of the case. Transcript of Record, supra note 54, at 241.

The suits were filed not against the firms, but against the individual partners. The firm names were used in the deposition testimony of Joseph Sturges, Transcript of Record, supra note 54, at 102-03. By the 1880s, Jacobs, Strouse & Co. may have become the Strouse-Adler Company. See Smith, supra note 6, at 97.

^{190.} U.S. Patent No. 5216 (issued Jan. 7, 1873); U.S. Patent Reissue No. 5130 (issued Nov. 5, 1872). Evidently, the only difference between the fourth and fifth reissues was Frances's last name: the 1872 reissue had been granted to Frances Barnes, and as she was now Frances Egbert, she sought another reissuance to correct her name. Bill of Complaint, in Transcript of Record, supra note 54, at 3.

Transcript of Record, *supra* note 54, at 102.

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filed *Egbert v. Castle* litigation. The *Castle* case was hotly fought, with extensive testimony taken from witnesses in New York, Connecticut, and Pennsylvania. The defense against Frances's patent was managed by Alexander Mayer, the husband of Rebecca Mayer, a partner in Jacobs, Strouse & Co., together with a Mr. Phillip Marston of Philadelphia. Marston, whom Alexander Mayer later described as the "actual party in interest," was a member of the firm of Disston, Marston & Co., corset steel manufacturers. The *Castle* defendants used two prominent New York patent law firms, Keller & Blake, and Thomas P. How. Frances was represented in the *Castle* litigation, as in all her other cases, by George Gifford.

The parties took over fifty depositions, as the defendants sought to prove that Samuel's invention had been anticipated by other corset steels in previous use. If they could show anticipation, the patent would be invalid. Alexander Mayer characterized the defense as taking "months of time, and thousands of dollars, to procure all the evidence that could be got." The parties had filed their proofs with the court in preparation for final hearing in the spring of 1874, when the defendants became convinced, according to Mayer, that their evidence was not going to be sufficient to prove patent invalidity, leading to a settlement of the case. The parties appeared before Judge Blatchford, and Blatchford issued a decree in May 1874 stating that Reissue Patent No. 5216 was valid, was infringed by the *Castle* defendants, and that the defendants owed Frances their profits, damages, and the costs of litigation. Pursuant to the settlement, Jacobs, Strouse & Co. was granted a license, and began paying semi-annual license fees to Frances.

Frances, or her firm, had a circular printed, which was sent in the form of a letter from Jacobs, Strouse & Co. to its customers, ¹⁹⁸ notifying them that:

After a long and protracted struggle between Messrs. S.A. Castle & Co., of New York, defendants and Frances Lee Egbert, also of this city, plaintiff, his honor, Judge Blatchford, sustained the validity of the Egbert patent and rendered a decree whereby all corset-clasps composed of two or more plates are an infringement upon said patent. ¹⁹⁹

195. Id.

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^{192.} *Id.* at 19. After the answer, there were no further filings in the Jacobs, Strouse & Co. case, which was formally dismissed only in 1918. Equity Docket, C.C.S.D.N.Y., Vol. 6 (Oct. 1872 to Sept. 1874).

^{193.} Transcript of Record, *supra* note 54, at 19.

^{194.} *Id*.

^{196.} Decree of May 15, 1874, Egbert v. Castle, in Transcript of Record, supra note 54, at 34-35.

^{197.} Transcript of Record, *supra* note 54, at 22, 29-30.

^{198.} Id. at 28.

^{199.} *Id.* at 35-36.

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The letter further explained that the firm now had a license covering its "everlasting" corset clasps, and included a copy of the decree, and a signed endorsement by Frances certifying that Jacobs, Strouse & Co. held a license to the "Egbert patent."²⁰⁰

B. Egbert v. Lippmann, Twice

During the *Castle* litigation, Frances's counsel had taken the testimony of Phillip Lippmann about his involvement in corset making in New York.²⁰¹ Frances or her lawyer evidently identified Lippmann and his partner, August Seligmann as good targets and/or as dangerous competition, for in the fall of 1874, Frances filed two complaints against the men, the first a suit alleging violation of her trademark in "Cantbreakem" corset steels, and the second, the patent infringement suit that was eventually heard by the Supreme Court.

Lippmann and Seligmann sold hoop skirts, bustles, and corset steels, including a model described as the "patent Cantbustem corset steels." The steels were inscribed with the Cantbustem trademark, and the partnership had a sign on the outside of its place of business, twenty-two feet long and one foot high, which displayed the Cantbustem trademark. To provide evidence for the patent suit against Lippmann and Seligmann, Frances's then-husband, Wesley Egbert, sent a clerk, Edward Le Seur, to buy corset steels from P. Lippmann & Co. Le Seur paid \$1.12 for one dozen "plain double steels" and \$2.00 for one dozen "patent adjustable" steels.

1. The Testimony

The parties in *Egbert* agreed to re-use the testimony taken in the *Castle* litigation, and the bulk of the record in *Egbert* is composed of that earlier deposition testimony. The defendants also redeposed many of the earlier witnesses and added more, including some of the *Castle* defendants, as well as acquaintances of Lippmann, brought to rebut Frances's allegation that

^{200.} Id

^{201.} Testimony of Phillip Lippmann, in Transcript of Record, supra note 54, at 197-203.

^{202.} Like corsets, hoop skirts—frames for holding out a lady's skirt which fastened around the waist—and bustles—padding worn at the small of the back, also under a skirt—were technologies of ladies' undergarments routinely worn by women of the period and also frequently patented by the late nineteenth century. *See* EWING, *supra* note 65.

^{203.} The trademark suit was evidently also litigated, although the final proofs offered for judgment have not survived in the court records. This suit was dismissed in 1878. Equity Docket, C.C.S.D.N.Y., Vol. 6 (Oct. 1872 to Sept. 1874).

^{204.} Transcript of Deposition of Edward C. Le Seur, *in* Transcript of Record, *supra* note 54, at 13; Exhibit C, Bill from Lippmann & Co., *in* Transcript of Record, *supra* note 54, at 14. The word "patent" could have referred to the patent issued to Phillip Lippmann in 1873 (*supra* note 123), although that patent was never introduced into evidence in either of the suits.

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Lippmann was a notorious patent-infringer and scoundrel, whose word as a businessman could not be trusted. ²⁰⁵

Frances and her attorneys deposed only four witnesses, none of whom had testified previously. These were Le Seur, the clerk who bought the steels; Alexander Mayer, who testified as described about the earlier litigation and its resolution; Wesley Egbert; and Frances herself. Unlike all the other witnesses, who were deposed in an attorney's office, Frances was deposed in her home, where she was lying in bed. During the few hours of her deposition, Frances testified that as of that time, December 1875, she had not left her home for two months, except for medical treatment, and had been told just the day before by her doctor that "unless I was very quiet and my mind kept perfectly at ease . . . I would not live thirty days." Having thus established herself as a frail woman, not to be disturbed by aggressive questioning, Frances under direct examination by her own counsel provided the most complete narrative of Samuel's invention in the record. The narrative recounted in the Supreme Court opinion is based almost exclusively on her testimony.

Frances described the original scene in which Samuel was privy to a conversation between Frances and her friend, Miss Cregier, about their corset issues, in which the women complained that "we could not keep a pair of plain steels in our corsets without breaking," and testified about two pairs of steels Samuel had given her, one in 1855, and another in 1858. Frances also related that Samuel had made another pair, in about 1863, for a Mrs. Bower, "to try the effect on a very stout lady." No one, Frances averred, other than herself, Miss Cregier (now dead), and Mrs. Bower had any knowledge of Samuel's innovative steels. 210

Frances also testified as to Samuel's activities and state of mind between the time of his invention and his patent application. She stated that while Samuel had "always intended to patent" his invention, "from the time I knew him until the time he died he was always sick with consumption, poor, and low-spirited and in trouble." In 1855, because of his illness, "[h]e did not attend to any active business," but may have had "some interest in something in

^{205.} The list of witnesses for the defense is provided at Transcript of Record, *supra* note 54, at 1-2. The following defense witnesses had not testified in *Castle*: Samuel A. Castle, Henry Ten Broeck, Bernard Adler, George Sanderson, John H. N. Glassford, Herman Ury, William E. Stein, Joseph Lehman, Louis Borchard, Charles Eichler, George E. Batcheller, Henry Schwarz, Henry S. Hawke, Max Rosenstock, G.W. Lockwood, L. Rothschild, Thomas Robinson, Edwin B. Stimpson and August Seligmann.

^{206.} Transcript of Deposition of Frances Egbert, Transcript of Record, *supra* note 54, at 14-15.

^{207.} *Id.* at 15. Note that Frances remained alive to post an appeal bond in October, 1878. Transcript of Record, *supra* note 54, at 256. I have not found her death certificate.

^{208.} Id.

^{209.} Id.

^{210.} Id. at 17.

^{211.} Id.

California."²¹² In addition to the steels, Samuel made other models of inventions which he hoped to patent, but never did.²¹³ Despite her characterization of Samuel as ill and destitute, Frances married him in 1863. After their marriage, Samuel finally "nerve[d] himself to patent [the improved steels]," Frances testified, "in the hope of leaving something, as he thought, for my support."²¹⁴ He applied for the patent in March 1866, received it in July, and was dead by August, leaving a will dated the day before his death leaving his estate to Frances, as his sole devisee and executrix.²¹⁵

Several witnesses in the *Castle* litigation corroborated Frances's testimony about Samuel and his activities. Joseph Sturges, the former baggage master at the Fairfield, Connecticut station of the New York & New Haven Railroad, testified that he met Samuel on a train in 1863, somewhere along the line in Connecticut. Sturges, on the lookout for a business opportunity, was sufficiently intrigued by Samuel's description of his inventions to visit the Barnes' home in New York, where Samuel showed him a leather tanning invention. Sturges testified that Samuel apologized for not having a set of steels to show him, having given out his sample a few days earlier (perhaps to Mrs. Bower). At Samuel's request, Frances, by then his wife, left the room, removed her corset, and returned with it to the room. There she used scissors to rip open the corset and remove the steels—the only way that they could be viewed. 217

Mr. Bower, Samuel's landlord and husband to the stout Mrs. Bower, also testified about the steels. According to Bower, Samuel was living in Bower's home as a boarder in 1862, and brought Frances there to live in 1863 after their marriage. Mr. Bower testified that Samuel was "getting up" the steels in his bedroom, working with samples in wood or paper as well as metal, and that he gave Mrs. Bower a pair. Mr. Bower refused to agree with the suggestion of counsel that the steels were not yet completed, instead testifying that "[h]e showed me the full operation of the steels." By 1866, Samuel allegedly told Mr. Bower that he intended to patent the steels, but had not done so yet due to his sickness. 220

The record in the case suggests that this patent, as managed by Frances in her widowhood, formed the basis of a business to support her, and by 1875, her

213. *Id.* at 18.

^{212.} Id.

^{214.} Id

^{215.} Will of Samuel H. Barnes, *in* Transcript of Record, *supra* note 54, at 158-59. Israel Bower testified that Samuel died August 9, 1866. Transcript of Deposition of Israel Bower, *in* Transcript of Record, *supra* note 54, at 111.

^{216.} This invention, described as patented, was also specifically left to Frances in Samuel's will. Transcript of Record, *supra* note 54, at 158-59.

^{217.} Transcript of Deposition of Joseph Sturges, in Transcript of Record, supra note 54, at 98.

^{218.} Transcript of Deposition of Israel Bower, in Transcript of Record, supra note 54, at 110-11.

^{219.} Id. at 112.

^{220.} *Id.* at 111.

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new husband as well. Wesley Egbert testified that he was thirty-three years old and unemployed, although actively engaged in supporting Frances's litigation. Under cross-examination, Wesley was forced to admit that he was younger than his wife, although his attempt to estimate the age difference at "about 6 years" was perhaps more kind than accurate when he also testified that she was probably "a little more than" thirty-nine years old. Frances herself, during her sickbed deposition, was not asked any awkward questions about her age or employment.

2. The Judicial Opinions

Back before Samuel Blatchford, the same judge who had presided over the *Castle* litigation, and armed with Frances's testimony, her attorney, Gifford, argued that because the patent had already been judged valid in *Straus* and *Castle*, the only issue was its infringement, which had been proved. ²²³ In their answer, the defendants concentrated their argument on the alleged prior use of the claimed invention by other corset makers. ²²⁴ It was presumably the testimony about the extensive use of various sorts of double or otherwise reinforced steels in *Castle* that led Gifford to put forward Frances as a witness to provide evidence that Samuel had invented his steels considerably before he filed his application in 1866.

Judge Blatchford apparently surprised Frances's counsel by deciding the case on grounds not emphasized by the defendants. Instead of focusing on the testimony designed to show the manufacture and use of reinforced steels by other manufacturers and corset makers in New York and Connecticut, Blatchford turned Frances's own testimony against her. He declared that under settled law, even the "original and first inventor of the thing patented" is not entitled to a patent if the invention was in public use more than two years before the date of the application, as long as the invention was "in such condition that he can apply for a patent for it." Any patent issued in violation

Transcript of Deposition of Wesley Egbert, in Transcript of Record, supra note 54, at 31-33.

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^{222.} *Id.* at 33. Wesley also testified that he was not sure of Frances's birthplace, which may have been New York or Jersey City, and that her surname was Willis before she married Barnes. It is unclear whether the name "Lee" which Frances used with both her married names of Barnes and Egbert was her given middle name, or yet another surname from another stage of her life. The marriage certificate between Wesley and Frances gives her name as Frances Lee Barnes, her maiden name as Willis, and her birthplace as New London, Connecticut.

^{223.} In its opinion, the Supreme Court readily agreed that the Cantbustem steels infringed Samuel's patent, as reissued. Egbert v. Lippmann, 93 U.S. 333, 334 (1881).

^{224.} Answer of Defendants, *in* Transcript of Record, *supra* note 54, at 5-11. These characterizations of the arguments in the Circuit Court are based on a careful reading of the pleadings, examination, and cross-examination of witnesses in deposition (the case was tried without in-court testimony), and the Supreme Court briefs. The briefs below, although referenced in the Supreme Court briefs, are not recorded in the Circuit Court docket, or included in the surviving files of the Circuit Court.

of these conditions was void.²²⁵ The judge reviewed the use by Frances, the use by Mrs. Bower, and the display of the steels to Sturges after Frances removed them from her corset.²²⁶ The judge found these uses to be "sufficient public use." According to Blatchford, "[i]t was not a use for experiment, or a use in private or a private use. It was a practical use in public of the completed article. No secrecy was maintained or enjoined as to the article or its structure."

The parties evidently had not been in a hurry to have the case heard, for despite concluding depositions in December 1875, it was the fall of 1878 when Blatchford heard argument and issued his ruling. He dismissed the bill of complaint, with costs to be paid by Frances. On appeal, both parties returned to arguing the case as they understood it to be framed by the pleadings. Counsel for Lippmann and Seligmann noted the "characteristic sagacity" with which Blatchford had found "undisputed evidence" "in the testimony of plaintiff herself and her witnesses" "which is fatal to the patent" by showing "a public use with consent of the patentee, more than two years before his application." But they also noted the "other numerous questions raised and large amount of evidence" they had brought to show prior public use from independent sources. Twenty pages of their twenty-seven page brief were devoted to that evidence, and they wasted no space arguing about Frances's testimony, indicating which argument they thought was strongest.

Frances's counsel²³⁰ were more forthright about attempting to redirect the Court's attention. They began their brief by arguing that while "the sole ground" for decision was "that complainant's own proof showed a public use," "[t]his point does not appear to have been considered or mooted, save only in the opinion of the Court." Just in case the Supreme Court missed this point, after enumerating the errors in the opinion below, counsel again reminded the Court that "[t]he point on which the Circuit Court decided this cause, was not considered in the argument below."

Faced with this unexpected use of Frances's testimony, counsel decided to rely on Gifford's Circuit Court brief for its analysis of the defendants' arguments and evidence, and used the Supreme Court brief to attempt to undo the damaging construction that had been placed on Frances's testimony. Counsel asserted that the use by Frances and Mrs. Bower, and the showing to

^{225.} Decree of Sept. 26, 1878, in Transcript of Record, supra note 54, at 253-54; see also Egbert v. Lippmann, 8 F. Cas. 370, 370-71 (C.C.S.D.N.Y. 1878).

^{226.} Egbert, 8 F.Cas. at 370.

^{227.} Egbert, 8 F. Cas. at 371.

^{228.} Brief for Appellees, in Transcript of Record, supra note 54, at 6.

^{229.} Id

^{230.} Frances's appeal was taken by J.C. Clayton and A.Q. Keasbey of New York City.

^{231.} Brief for Appellant, in Transcript of Record, supra note 54, at 1.

^{232.} Id. at 2.

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Sturges, was "a mere experimental private use." By that phrasing, counsel were trying to make several arguments at once.

They were trying to fit Samuel's actions over the eleven years between 1855 and 1866 into the experimental use exception to the statutory bar. In the recent case of *City of Elizabeth v. American Nicholson Pavement Co.*, ²³⁴ the Court had termed a six-year very public and for-profit use of wooden pavement on a toll road in Boston to be experimental use, and therefore not a bar to a later patent. Samuel's steels were evidently substantially complete by 1855, and by Frances's own testimony, Samuel believed them to be ready for patenting during the long period of her use. The *City of Elizabeth* case, however, had turned on a need to test the durability of the novel pavers under actual conditions, a set of facts that could be easily transferred to Samuel's invention. The use in Frances's and Mrs. Bower's corsets could be viewed as allowing Samuel to test the endurance of his steels, compared to other, easily broken steels, both on a woman of normal figure (Frances) and the "very stout" Mrs. Bower. Frances's counsel quoted extensively from *City of Elizabeth* in their brief. ²³⁵

Counsel also focused on the word "public" in the statute, by characterizing the invisible use by Frances and Mrs. Bower as "private" use. Because the statute quoted by Judge Blatchford also banned patents upon "proof of abandonment of such invention to the public," counsel argued that there was not sufficient proof of abandonment in this case, based on the lack of public knowledge of the invention, given the very limited circle of those who knew of it, and Samuel's stated intention to pursue a patent as soon as health and finances would allow. ²³⁷

Unlike the defendants' brief, which focused almost exclusively on the facts, Frances's counsel marshaled considerable legal precedent to remind the Court of prior cases suggesting that the statutory bar created by public use was only to be raised against an inventor in clear circumstances. Quoting from *Mellus v. Silsbee*, ²³⁸ a Circuit Court of Massachusetts opinion authored by then-Judge Story, counsel reminded the Court:

[A]cts of an inventor . . . are to be liberally construed as acts of an experimental character, nor is the inventor to be estopped by allowing a few persons to use his invention to ascertain its utility, or by any such acts of use or indulgence to others to use the same, as are not

234. 97 U.S. 126 (1877).

^{233.} *Id.* at 1.

^{235.} Brief for Appellant, *supra* note 54, at 20-24.

^{236.} Egbert v. Lippmann, 8 F. Cas. at 370 (quoting Patent Act of Mar. 3, 1839, §7, 5 Stat. 354).

^{237.} Brief for Appellant, supra note 54, at 24.

^{238. 16} F. Cas. 1332 (C.C. Mass. 1825).

inconsistent with the clear intention to hold the exclusive privilege, and to secure the same by letters patent.²³⁹

They added the opinion of the contemporary Treatise on the Law of Patents, by George Ticknor Curtis, that "the inference that [the inventor] intends to surrender the invention to the public" is "never favored, nor will it, in general, be sufficient to prove such a defense, unless it appear that the use, exercise, or practice of the invention was somewhat extensive and for the purpose of gain, evincing an intent on the part of the inventor to secure the exclusive benefits of his invention without applying for the protection of letters patent."²⁴⁰ In other words, when an inventor attempted to exploit an invention commercially and then sought a patent, perhaps after a failure to keep it as a trade secret, he would run afoul of the public use bar. The record in Egbert was devoid of any suggestion either that Samuel had allowed the "extensive" use of his steels, or that he had done so "for the purpose of gain." Rather, his allowing his "intimate friend" to use a pair of steels for eleven years might fall into the category of what Story had called "such acts of peculiar indulgence and use as may fairly consist with the clear intention to hold the exclusive privilege."²⁴¹

Indeed, counsel argued: "The use of a corset steel, concealed in the dress, by two intimate friends of different figures, for a short time, could never have been held to be a public use depriving the inventor of his rights." Samuel, far from abandoning his invention, "tested it in the only way possible for such an article, and to the most limited extent consistent with his object." As they noted, "He could not try it on himself." Further, the use was so private and discreet that "[s]o far from being public was [the use], that when he proposed to sell his invention, just before his patent was obtained, he had to get his wife to rip it from her corset to exhibit it." ²⁴⁵

As well as marshalling earlier case law suggesting that courts should be hesitant to find a public use bar, and should only do so in cases in which the inventor benefited financially from the use, Frances's counsel confronted the issues of gender and sexuality in the case more directly than did the Justices to whom they argued. Counsel argued that the law could not mean to penalize Samuel for actions that a married man could have carried out with impunity. Frances's counsel argued that it was obvious that if Samuel had tried his steels

^{239.} Brief for Appellant, in Transcript of Record, supra note 54, at 18.

^{240.} GEORGE TICKNOR CURTIS, A TREATISE ON THE LAW OF PATENTS FOR USEFUL INVENTIONS AS ENACTED AND ADMINISTERED IN THE UNITED STATES OF AMERICA §389 (3d ed. 1867), as quoted in Brief for Appellant, in Transcript of Record, supra note 54, at 20.

^{241.} Brief for Appellant, *in* Transcript of Record, *supra* note 54, at 20 (citation omitted).

^{242.} *Id.* at 25.

^{243.} *Id.* at 24.

^{244.} Id. at 26.

^{245.} Id. at 27.

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"for any length of time" on his wife and daughter, "it could not have been deemed a public use." Those female bodies, bound to a husband and father through legal ties creating male authority, were obviously within the private circle of a family. This argument was based on the legal assumptions underlying the doctrine of coverture, an ancient English doctrine denying unmarried women and wives any legal standing. Although the passage of Married Women's Property Acts during the nineteenth century had begun to limit this doctrine, these underlying assumptions were still quite strong. ²⁴⁷

In an argument evidently persuasive to the dissenting Justice Miller, Frances's counsel argued that the unfortunate lack of a legally recognized relationship between Frances and Samuel in 1855 should not be able to redesignate Frances's undergarments from the private sphere of the home and family into the public sphere of commerce. It was unfair, they argued, that because Frances was merely an "intimate friend," and only later a wife, Judge Blatchford had termed her use to be "public." Frances's counsel did not take advantage of testimony in the record to show that Samuel was not the only unmarried male inventor in the area of corsetry who gave an invention to a woman to try in her corset.²⁴⁸ Edward Cargill, who was thirteen years old and working in his father's shop in Waterbury, Connecticut, made a pair of double corset steels in 1863, according to his mother and father. ²⁴⁹ In the presence of his mother, his father gave them to a Miss Eliza Doolittle who was living in their home while seeking work as a teacher. 250 According to the recollection of both Cargill parents ten years later, Miss Doolittle sewed the steels into her corsets and wore the steels for "three or four weeks" "as a test." Similarly, the patentee John Fitzpatrick, who was also living in Waterbury, and knew the Cargills, testified that he made a pair of innovative steels as a young man of eighteen in 1865, and gave them to Miss Jennie McNulty to wear. Miss McNulty sewed the steels into her corsets, and reportedly continued to wear them until her corsets wore out. 252 Fitzpatrick described a similar scene to the

^{246.} *Id*

^{247.} For a recent discussion of the relationship between Married Women's Property Acts and coverture, see KATHLEEN S. SULLIVAN, CONSTITUTIONAL CONTEXT: WOMEN AND RIGHTS DISCOURSE IN NINETEENTH-CENTURY AMERICA (2007). The doctrine with respect to female inventors is discussed in PILATO, *supra* note 26, at 7-8, and Khan, *Married Women's Property Laws*, *supra* note 90.

^{248.} There is no indication as to why counsel did not draw upon this evidence. It is possible that this type of behavior was so common that counsel did not feel the need to belabor the point. This speculation is supported by the failure of the appellees to concentrate on Frances's use as evidence of invalidity, an indication that they too felt that Judge Blatchford was misguided in his reasoning, if not in the outcome of his decision. Or it may be that counsel did not want to draw attention to the fact that Cargill and Fitzpatrick moved much more rapidly to file a patent application than had Samuel.

^{249.} Transcript of Deposition of Jeanette Cargill, *in* Transcript of Record, *supra* note 54, at 131; Transcript of Deposition of William B. Cargill, *in* Transcript of Record, *supra* note 54, at 135.

^{250.} Transcript of Deposition of Jeanette Cargill, in Transcript of Record, supra note 54, at 131.

^{251.} *Id.* at 131-32; Transcript of Deposition of William B. Cargill, *in* Transcript of Record, *supra* note 54, at 136.

^{252.} Transcript of Deposition of John L. Fitzpatrick, *in* Transcript of Record, *supra* note 54, at 143, 145.

one Frances had described: "I was down to her house, and she was taking out a broken pair out of her corsets, and I gave her [the newly invented pair] to put in; she got them in and sewed them up."²⁵³ Like Samuel, Fitzpatrick later married the recipient of his steels.²⁵⁴ Samuel's behavior was evidently not particularly unusual. What distinguished Samuel from William Cargill and Fitzpatrick was Frances's later patent infringement suits. There are no reported cases in which the Cargill or Fitzpatrick patents were litigated.²⁵⁵

Despite the extensive efforts on the part of Frances's counsel to cast Frances's use as a "mere experimental private use" and to remind the Court of the traditional strong evidence of abandonment required to invoke the public use bar, the Supreme Court largely followed Blatchford's line of reasoning. Disregarding the failure of the defendants both in the Circuit Court and in their Supreme Court brief to rely on what they evidently felt was the slim reed of Frances's testimony, Justice Woods chose to portray the defendants' case as "mainly" based on prior public use by Frances.²⁵⁶ The attempt by Frances's counsel to frame such an argument as outside the pleadings and as an unsupported venture of Judge Blatchford went unheeded. Further, the Supreme Court went beyond Blatchford in forging new ground in the case, dropping any reliance on Mrs. Bower's use or the display to Sturges. By relying solely on Frances's use, the Court interpreted the statutory bar based on public use as broadly as possible, making it easy for inventors to lose the ability to patent otherwise patentable inventions.

The Court began by reiterating that the use of only one article could constitute public use, based on previous cases and using the examples of a large, expensive object such as a mower, a printing press, and a railway car, manufactured and sold by the inventor to a commercial establishment. Further, the Court went on, without any citations to earlier case law, determining whether the use of an invention is public or private "does not necessarily depend on the number of persons to whom its use is known." The operative issue is whether the recipient takes the invention subject to any sort of "limitation or restriction, or injunction of secrecy." This pronouncement changed the emphasis from substance to form. The confidentiality needed to be explicitly requested—an inventor could not simply rely on actual lack of public knowledge. Finally, Justice Wood argued that the hidden nature of an invention which by its "very character" is "only capable of being used where [it] cannot be seen or observed by the public eye" is also not

254. Id. at 143.

^{253.} Id. at 146.

^{255.} It is possible that either patent was litigated in one or more cases that did not result in a published opinion.

^{256.} Egbert v. Lippmann, 104 U.S. 333, 335 (1881).

^{257.} *Id.* at 336.

^{258.} Id.

^{259.} *Id*.

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determinative of the public or private nature of use. ²⁶⁰ Just as open use could fail to be public use, such as the experimental use in *City of Elizabeth*, hidden use could be public use. The Court used the example of a spring or gear within a machine. "[I]f its inventor *sells* a machine of which his invention forms a part, and allows it to be used without restriction of any kind, the use is a public one," ²⁶¹ the majority concluded. Based on this explanation of the law, the Court concluded that Frances's use alone was sufficient to raise a statutory bar of public use, without any need to consider the use by Mrs. Bower, or the display to Sturges. In the cases it cited, and in this summary sentence, the Court consistently discussed Frances's use without considering the transfer of the steels to Frances as a non-pecuniary gift. The opinion was written as if Samuel had sold her a single copy of his invention.

PART V. PATENT TROLLS AND TROLLOPS

This "as if" assumption allowed the Court to ignore aspects of the facts related to gender and sexuality. If the transfer was a simple sale, it was not legally significant—as Frances's counsel had argued—that Samuel, a man, needed a woman to try out his invention. Nor did it matter that Frances and Samuel were "intimate friends." By considering the transfer to Frances as if it were a sale, the Court shifted not just Frances's corset, but the entire relationship between the future husband and wife, to the public, commercial realm. From this assumption, the Court considered what Frances "might have" done. "She might have exhibited [the steels] to any person, or made other steels of the same kind, and used or sold them"²⁶² In this characterization of Frances's possible actions, the Court treated her as a businessperson. It flatly ignored, not just the facts of the case before it, but also the understanding of the gendered public/private divide maintained by the ideology of separate spheres.

The Court's analysis, by considering Frances free to exhibit, manufacture or sell the steels, placed Frances, wearing her corset, firmly within the public realm of commerce, a place where many nineteenth-century American women worked in order to support themselves and their families, but a realm that was considered ideally a masculine preserve. ²⁶³ Considering Frances's wearing of

^{260.} Id

^{261.} *Id.* (emphasis added).

^{262.} Egbert v. Lippmann, 104 U.S. 333, 337 (1881).

^{263.} Working class and enslaved women have always worked for their livelihoods in the United States. The doctrine of separate spheres was an ideology that shaped the choices of American men and women of all classes (most obviously, but not exclusively, in the types of work available for and wages offered to women), but did not describe the reality of lived experience of many. For a discussion of the influx of middle-class women into workplaces during the nineteenth century, and the constant tension their employment caused because of the social ideal of the public sphere as masculine, see CINDY

the steels as "public use" placed her in that masculine public sphere, despite the lack of any evidence that she was engaged in commerce related to the steels during the period in question—the eleven years before Samuel's death. It was only after his death that she began to commercially exploit the patent and go into business. The Court, however, chose to focus on what she might have done, in the absence of a legally binding confidentiality agreement, rather than what she did. Its reasoning reversed the presumptions of the separate spheres ideology. Instead of assuming that Frances, as a corset-wearing woman, conducted her life within the private sphere, and relied on men's work within the public sphere to support her, it assumed without requiring any supporting facts that Frances wore and used the corset in public ways. This reasoning not only appeared to violate the ideology of separate spheres, but was contrary to prior understandings of the public use doctrine in patent law as a difficult-to-trigger standard requiring a showing of financial gain and actual public knowledge, making it seem odd even at the time.

The Circuit Court for the District of Massachusetts, called upon to apply the public use doctrine in a patent litigation after the ruling of the New York Circuit Court in *Egbert*, but before the Supreme Court ruled, called the decision "remarkable" in an opinion that refused to follow Judge Blatchford's expansive reading of the public use doctrine. The Massachusetts judge reiterated his understanding of the law of public use as substantive, not formal, requiring "not only a use *by the public*, but a use *in public*, that is to say, one which is *not secret*, and therefore, one from which, so far as the inventor is concerned, the public may, by any of the chances of life, acquire the knowledge." But it was the dissenting Supreme Court Justice Miller, who put the matter most bluntly in disagreeing with the newly reconfigured public use doctrine crafted by the *Egbert* majority:

If the little steel spring inserted in a single pair of corsets, and used by only one woman, covered by her outer-clothing, and in a position always withheld from public observation, is a *public* use of that piece of steel, I am at a loss to know the line between a private and a public use. ²⁶⁶

Given that the corset itself was such a powerful enforcer of the public/private divide between feminine and masculine spheres of activity and influence, able to speak in courtrooms to that divide, what led the majority to

SONDIK ARON, LADIES AND GENTLEMEN OF THE CIVIL SERVICE: MIDDLE-CLASS WORKERS IN VICTORIAN AMERICA (1987).

^{264.} Manning v. Cape Ann Isinglass & Glue Co., 16 F. Cas. 643, 644 (1879) (involving use of a method of cooling scrapers in a factory).

^{265.} Id. (emphasis added).

^{66.} Egbert, 104 U.S. at 339 (Miller, J., dissenting) (emphasis added).

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blatantly transgress this ideology in a corset case? The answer lies in the multiple ways of knowing about corsets, gender, and sexuality in law and society.

There is a strong hint that the majority was motivated by a suspicion that Samuel had acted unfairly in delaying his application, even though the record failed to show that he had obtained any actual benefit by his delay, and although the articulated legal test did not include any consideration of the patentee's motive. Reviewing the evidence collected by the defendants about other corset steels, the Court concluded that by the time of Samuel's patent application in 1866, "the principle of his device was almost universally used in the manufacture of corset-steels. It is fair to presume that having learned from this general use that there was some value in his invention, he attempted to resume, by his application, what by his acts he had clearly dedicated to the public." Today, such actions might be pejoratively termed "trollery"—as Samuel could be portrayed as not simply passively sleeping on his rights, but instead waiting to bear the costs of patenting until he could be sure of rich license fees from an industry which had settled on double steels as the best technology for stiff, front-opening corsets. 268

With a more expansive understanding of the facts of the case, and of Frances's history as the patent-owner, this motivation for the decision can be seen as reflecting the gender assumptions of the Court, at work even as the Justices surprisingly placed Frances in the public realm. The Court assumed that Samuel as a male inventor was commercially savvy and economically rational in his actions. There is no indication in the record, however, that Samuel felt that his invention had increased in commercial worth during the 1850s, or that he paid particular attention to developments in corset technology. Rather, he appears to have been an underemployed, dreamy tinkerer, with many unrelated ideas, and no personal or financial resources to realize any of them. ²⁶⁹ It was Frances, as a consumer of corsets, who testified that she had owned multiple pairs during the decade in question, ²⁷⁰ who was in a position to appreciate the value of Samuel's invention. Her estimation may have

^{267.} *Id.* at 337.

^{268.} The contemporary term patent "troll" is sufficiently controversial and malleable that many scholars prefer not to use it, but it persists as shorthand pejorative for those perceived as unfairly wielding patents. For a recent discussion of the "troll" term see, for example, Robert P. Merges, *The Trouble with Trolls: Innovation, Rent-Seeking and Patent Law Reform*, 24 BERKELEY TECH. L.J. 1583, 1586-87 (2009). For previous uses of the term ahistorically to refer to debates of the eighteenth and nineteenth centuries, see JEFFREY H. MATSUURA, JEFFERSON VS. THE PATENT TROLLS: A POPULIST VISION OF INTELLECTUAL PROPERTY RIGHTS (2008).

^{269.} Samuel is thereby distinguished from Cargill and Fitzpatrick, each of whom were familiar with corset steel manufacture at the time of their innovation. Cargill received three patents in rapid succession in 1868 for improvements in corset clasps (none of which was for a strengthened steel): U.S. Patent No. 73,873 (issued Jan. 28, 1868), U.S. Patent No. 75,856 (issued Mar. 24, 1868), and U.S. Patent No. 78,056 (issued May 19, 1868). Fitzpatrick patented a form of doubled corset steel in 1869: U.S. Patent No. 96,685 (issued Nov. 9, 1869).

^{270.} Transcript of Deposition of Frances Egbert, in Transcript of Record, supra note 54, at 17.

motivated her marriage, after eight years' intimacy, to a man she described as poor, sick, and depressed. It was after the marriage that Samuel decided to test the steels on a "very stout lady." It may well have been at Frances's initiative that he did so, and also at her urging that he finally "nerved himself" to patent the invention three years after their marriage. Less than two months after receiving the patent, Samuel was dead, leaving a written will despite his apparent lack of worldly goods, and Frances moved quickly to go into business and to maximize the value of his estate.

Frances showed every sign of being a savvy businesswoman both before and after her re-marriage to Wesley Egbert in 1870. Ironically, while there was no evidence that Frances moved to exploit Samuel's invention or to reveal it to the public in any way before he filed his application, after his death, she brought her corseted self firmly into the public sphere, engaging in all the activities which the Court suggested she might have earlier—exhibiting the steels, making others, and selling them. After eleven years of merely experiencing the private benefit of durable corset steels, by the time she testified as a litigant, she was using her commercial exploitation of Samuel's steels to support herself and her new husband. In 1881, Frances, as a businesswoman, was unquestionably engaged in the public use of Samuel's steels, while between 1855 and 1863, she had kept them, as far as the record reveals, as an undisclosed element of her personal wardrobe. The Supreme Court's opinion thus involved a temporal sleight of hand, shifting Frances and her corset nunc pro tunc, and also a transposition of Frances's ambition (a masculine trait with no place in the private feminine sphere of home and hearth) to the hapless Samuel.

The Court may have suspected that Samuel was acting as a troll, but the previous case law had suggested that inventors should be given the benefit of the doubt. Using a feminist lens to identify the multiple knowledges of the nineteenth-century corset and the gendered and hierarchical nature of any public/private distinction allows us to develop a deeper explanation of the Court's construction of public use. In seeking to understand why the Court failed to give the benefit of the doubt to the savvy Frances and her corset, it is helpful to apply McGaw's admonition to consider both women and their experiences, and feminine domains. In Parts II and III, we followed the corset, but in considering Egbert as a case study, we have also been following Frances as a woman. Following the corset, we have learned that Frances was not unique as a female business owner and patentee in corset manufacture, but in the facts of Egbert, she becomes unique as a woman who made a transition from an intimate friend of the inventor, who wore his personal gift of a reinforced pair of corset steels, to a manufacturer of corset steels and enforcer of the Barnes patent. It was Frances's actions in the public sphere that distinguished her from Miss Dolittle and Miss McNulty, who also accepted

innovative corset steels as gifts from male inventors. Frances remains singular as a donee who became a patent owner and litigator. This transition moved Frances from a relationship in which male and female actions could be understood through the prevailing gender ideology of the time, into a role in which she acted in the public sphere directly, without the mediation of a man, and in unspoken defiance of the separate spheres ideology.

As we saw in *Cohn*, the corset itself carried gendered knowledge into American courtrooms, but Frances also had agency in her deployment of gender norms. Like the other women in the Victorian period involved in corset patents, manufacture, and litigation, Frances chose when to embrace gender ideology, and when, as countless other women had when earning their living, to ignore it. The staging of Frances's deposition in her home, a private space, with Frances lying in bed as an self-proclaimed invalid, showed that Frances and her lawyer, like the judiciary, were fully aware of the ideology, and could deploy it strategically. Her very decision to wear a corset regularly through the 1850s and 1860s, keeping Samuel's invention in use, was a decision to enact respectable femininity, regardless of any simultaneous sexual relationship with a man not her husband. Even the reported presence of Miss Cregier during the conversation about breaking corset steels was testimony that the encounter between the unmarried Frances and Samuel was chaperoned.

Like many, if not all, Victorians, Frances during the course of her life situated herself in apparently contradictory ways with respect to the ideology of separate spheres. Within a world organized to support patriarchal dominance, she found room to maneuver as a woman seeking power over her own economic destiny. She was a retiring female, more comfortable in her home than in an lawyer's office, *and* she was a business partner of George Cruttenden, with her own office. Her sexuality was controlled and contained by a corset, *and* she was "intimate friends" with Samuel. These contradictions had worked well for her.

By the time of the Supreme Court's decision in December 1881, three years after the case was appealed, Samuel's patent had only about eighteen months to run on its original seventeen-year term. So while Frances may have had reason to regret Samuel's failure to specify that her use of the steels in 1855 was confidential and/or for experimental purposes, she had been able to use her inheritance for fifteen years as the basis for an apparently successful business. She had forged alliances with a business partner, hired well-known counsel, and litigated successfully in the federal courts, all to support her corset

^{271.} Transcript of Deposition of Alexander Mayer, *in* Transcript of Record, *supra* note 51, at 25 (testifying that he first met Frances at her "business office").

^{272.} I base my characterization of Frances's business as successful by her ability to pay fees for the five patent reissues (which cost \$30 a piece plus legal expenses) and for leading attorneys to litigate her cases, and her certification in support of her appeal bond that she was worth at least \$1000 beyond her debts. Transcript of Record, *supra* note 54, at 256.

steel business, and to obtain license fees from Samuel's patent. She both wore corsets and profited by them.

In her final court case, however, these contradictions became a liability. The corset she wore, and its significance in her relationship with Samuel, carried different knowledge than the corsets she alleged Lippmann and Seligmann sold in violation of Samuel's patent. There were multiple ways of knowing corsets and Frances before the Court, and it had to choose a way of aligning the public/private divide in patent law with existing gendered understandings of both the public/private divide and of the corset.

By 1881, the American legal system had already decided upon a clear set of meanings for the relationship between a particular corset and one woman's body. The use in question in Egbert began as Samuel was involved in a conversation with two women, neither any relation to him, about their corsets. By discussing her corset with Samuel, Frances created evidence that she was not respectable, but perhaps, a trollop. She then strengthened this evidentiary presumption by accepting a corset-related gift from Samuel—a new steel that he suggested would solve her problem of breaking corsets. Her personal corset was a witness, creating an unrebutted presumption of a sexual relationship between her and Samuel.²⁷³ If Frances and Samuel were sexual partners, the idea that Samuel should have sought a non-disclosure agreement from Frances seems ludicrous. As the dissent noted: "It may be well imagined that a prohibition to [Frances] . . . against exposing her use of the steel spring to public observation would have been supposed to be a piece of irony."²⁷⁴ The irony arose because a sexual relationship was private, distinct from the public commercial realm of arms' length transactions in which a confidentiality agreement might be used. A man need not get his lover to sign an agreement that she would not show her undergarments to anyone else; his exclusive right to view those undergarments was an assumption of their private relationship. 275 And if the relationship was private, then was the use of the steel not also private, and therefore unable to trigger the statutory bar?

273. Their actual relationship remains unknowable. There is the possibility that the sexual relationship between Frances and Samuel was a commercial one, that is, that Frances was a full-time or casual prostitute, or Samuel's financially-supported mistress. It is also possible that from 1855 to 1863, she was legally married to someone else (Mr. Lee, perhaps), but that they were living separately. There is no evidence in the record that supports or rejects either possibility. If we compare Samuel's actions to that of Fitzpatrick and Cargill, we note that Fitzpatrick also was apparently on a path to marriage with Miss McNulty, indicating some intimacy in their relationship, and that Cargill was already married when he gave his son's steels to Miss Dolittle, which he did in the presence of Mrs. Cargill, perhaps to rebut any suggestion of extramarital intimacy with an unmarried woman living in his house. See supra text accompany notes 249-254.

^{274.} Egbert v. Lippmann, 104 U.S. 333, 339 (1881) (Miller, J., dissenting).

^{275.} Note that there is no indication that either Cargill or Fitzpatrick sought a commitment from their dones to keep the novel corset steel secret, despite the apparent intention of each man to patent his invention

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This is the logical result of considering Frances's corset as a witness, based on multiple cases in which the corset testified as to a man's sexual access to the female body wearing the corset. Yet those cases involved socially sanctioned reasons to recognize non-marital sexual relationships—the avoidance of support payments by a cuckolded husband, the assignment of support obligations to a ne'er-do-well seducer, and the condemnation of adultery. In Egbert, there were no such questions of family law and order at stake. By the time Frances was litigating her case, she was married to Wesley Egbert, and was a self-supporting businesswoman. And, as the Court noted, she was seeking to monopolize a now-common element of a ubiquitous technology. The circular published after the disposition of the Castle litigation showed the breadth of Frances's claim: at least in the New York metropolitan area, she asserted ownership of any reinforced steel. This claim, if sustained, might have required all corset manufacturers to pay her license fees. To recognize the relationship of Frances and Samuel in 1855 as intimate, and therefore to understand Frances's acceptance and use of the steels as private, would have rewarded the couple for the socially unacceptable behavior of an extramarital sexual relationship by allowing Frances, two decades later, to control a leading technology. The femininity and sexuality of Frances's personal corset thereby came into conflict with the masculinity of the thousands of corsets being made and manufactured in the United States, simply another form of patented technology. Following this logic, Frances would be rewarded for being a trollop by being allowed to act like a troll.

Instead, the Court chose to consider Frances's own corset from the perspective of masculine technology, as if it were a spring or cog, simply another widget made and used by men. Her personal corset was merely one example of the corset as patented technology, a commercial product rather than an intimate garment. Her discussion with Samuel was like a conversation between two interested parties about a new cog for a mower. By choosing to recognize only the masculine valence of the corset as patented technology, the majority could reasonably treat Frances as a business associate, even a potential business competitor. Letting another businessperson use a potentially valuable invention in a technological area about which the user had significant expertise, without any restrictions, might easily be considered abandonment of the invention to the public.

By the time Frances was deposed in 1875, she was firmly within the public sphere when it came to her use of Samuel's invention, as a businesswoman and patent owner, circulating corset steels in commerce. Her counsel made two determined efforts to emphasize the femininity of Frances and her corset, rather than the masculinity of her business ventures and of the corset steels she manufactured: first, in insisting that Frances be deposed in the domestic, private space of her home, and second, by arguing that Frances, as Samuel's

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future wife, should have been able to wear the steels for as long as she liked as a private use. These efforts failed, not because the Court was unaware of the feminine valence of the corset, and the witness it gave, but precisely because it was aware of these ways of knowing the corset. Recall Justice Woods' phrasing of Samuel's fatal mistake: "The inventor slept on his rights for eleven years."

The Court needed to ignore Frances's femininity in order to avoid using patent law to sanction her extralegal sexual activities. The choice ultimately came down to considering one woman's underwear public, or acknowledging and rewarding a sexual intimacy of many years standing between two unmarried people. As Victorian gentlemen, the Justices knew femininity when it was referenced by the shorthand terms of "grace" and "elegance." They also considered the law, even patent law, as appropriately recognizing and reinforcing the natural "spheres and destinies" of man and woman, 276 which did not include elevating a trollop to Supreme-Court-approved patent troll. Frances's intimate relationship with Samuel may have led to their marriage, and to her control of the patent as his widow, but like many women before and since, Frances found her sexuality to be a double-edged sword. The dual nature of the corset in public and private, and the meanings it thus carried, worked together to motivate the Court's ruling against Frances.

Subjected to a feminist analysis, the *Egbert* case no longer appears odd. It was not about an male inventor sleeping on his rights, but about a woman marshalling her varied resources in the best ways she could within a constraining ideology of gender, maintaining a grip on her own femininity as she both wore and profited from corsets as patented technology. And from this analysis, we can answer the question Dan Burk recently raised: "What might a gendered patent or gendered patent system look like?",277 It looks like the patent system we have. The patent system is not a gender-free zone of technology, but involves carefully negotiated knowledges about gender that are exposed when the masculine category of technology is claimed for a profoundly femininized item, such as a corset. The decision in Egbert about the public use doctrine arose out of judicial understanding of the gendered nature of the public/private divide in American life. Having revealed Egbert, the foundational case for the public use doctrine, as inextricably bound to matters of gender and sexuality, we can begin to see the way that patents have been gendered, and to appreciate that patent law, like other areas of law explored through a feminist lens, is not a realm set apart, but is part of the gendered society in which inventors, examiners, judges, attorneys, and witnesses all live and act. Getting a grip on the corset gives us a grip on gender, helping to make visible the previously invisible.

276. Bradwell v. State, 83 U.S. 130, 141 (1872).

^{277.} Burk, Do Patents Have Gender?, supra note 19, at 3.

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