

*feminine hygiene,  
fashion and*

*the emancipation  
of american women*

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In an essay in *Modern Methods in the History of Medicine*, Charles E. Rosenberg distinguishes between the disciplines of history of science and history of medicine by pointing out that "Medicine, like science, is a body of knowledge and a community of men. But unlike science, it is an organic social function."<sup>1</sup> Further, he writes that "Until comparatively recent times, most medical practice has been in the hands of informal, rural, semi-educated practitioners and such men and women leave few tracks in the archival sands." As a consequence, most sources derive from "a self-conscious and comparatively articulate urban elite," thus making the history of medicine a high-culture success story.<sup>2</sup> It might equally well be stated that the concerns of his elite have emphasized illness, trauma and abnormality rather than normal and popular health care. Thus the documentary tracks of the everyday aspects of the organic social function are covert, elusive, scattered and implicit.

A case in point is normal feminine hygiene. Although this has become more openly and explicitly discussed during the past half-century, the historical development of today's menstrual care practices is almost completely hidden, and even contemporary practices of normal care are rarely topics for professional or academic literature. They do surface in commercial advertising literature, yet even there, they tend to reflect the age-old covert folk tradition. For example, in the fall television season of 1975, advertisements for sanitary napkins and tampons were for the first time scheduled during evening "family-viewing" network programs, thus implying almost total liberation from traditional attitudes, but the con-

tent of the commercials remained traditional. Most of these commercials showed two or more attractive young women engaged in private conversations—in a car-pool going to work, in an afternoon coffee-hour, in a quiet walk on the beach—sharing with one another their experiences with the advertised products. This, of course, is a depiction of traditional oral transmission of knowledge among a cultural sub-group, regardless of how much it has been modernized, commercialized and glamourized.

The glamour implied by contemporary advertising for menstrual care products is indicated by the use of two techniques. One of these glamorizing techniques appears in the freedom of movement in sophisticated environments—at beaches, tennis courts, elegant living-rooms, among career women; the other is indicated by fashionable garments—form-fitting pants and straight skirts, tennis shorts, gauzy beach-jackets and bikini bathing suits. These are emblems of “New Freedom,” which, significantly, is the name of a menstrual absorbent that was introduced for sale in the early seventies, at the cresting of the women’s liberation movement. These examples are clear indicators that there is a new freedom among American women, and that it relates somehow to feminine hygiene, but it should be equally apparent that there is a complexity of interrelationships impinging upon these organic social functions that eludes easy analysis.

With such a web of factors—social-political movements, fashion, folklore, commerce, advertising and medical practice—the problem of unravelling influential and causative factors from unrelated parallel threads cannot be ignored. Dr. Owsei Temkin, in an article on “Historiography of Ideas in Medicine” in the volume named above, notes the “broader issue of how far ideas are linked logically, and how far irrational factors, be they psychological or social, account for their origin, their spread, their modification and their decline.”<sup>3</sup> In the present essay, the *idea* (in the sense of history of ideas) is contained in such semantic variants as “emancipation of women,” “equal rights,” “women’s liberation” and “new freedom.” The particular *concern* of this essay is with certain presumably “irrational factors” relating to the idea of New Freedom. The *thesis* of this essay is that technological and commercial advances in normal menstrual hygiene have had a causal influence on this idea, and that there has been a concomitant influence on women’s fashions, which, in turn, are reciprocal indicators of the idea of liberation.

Fashions in women’s clothing as they relate to women’s liberation are at least symbolic of the degree of emancipation in a given time and place, but it is probable that fashions are more than emblems and metaphors. The fact that until about 1920 almost the entire history of civilized and agricultural human society in both the orient and the western world is marked by the wearing of ankle-length garments by women<sup>4</sup> suggests that the long skirts are not merely frivolous fashions, nor senseless traditions, nor sexist hobbles imposed by males, nor simply graceful expressions of femininity. To a degree, long skirts have been all of these, but

in addition they have operated as social defense mechanisms equal in importance to the traditional behavior stereotypes of "feminine" weakness, irrationality and unpredictability. Long skirts have been functional garments for unembarrassed movement in a civilized society. Indeed, the recent history of women's emancipation can be paralleled by the history of fashion, not simply as an outward manifestation of liberation, but as a contributory factor in freeing women for opportunities equal to those of men. To understand this, we might examine menstruation as a social phenomenon.

Menstruation, unlike pregnancy, cannot be controlled by independent non-participation by the woman, and, again unlike pregnancy, menstruation has never been surrounded by a masculine cult aura of madonnahood and protective chivalry. Quite the contrary. Menstruation has been regarded as a curse, as punishment, as tabooed uncleanness, and as shameful in non-civilized cultures; while in civilized cultures it has been masked by silence, by euphemism, by mystery and by long dresses. The primitive and tribal behavior patterns surrounding the menstrual period are varied, but the usual social scheme is some kind of ostracism, designed, it would seem, to impress upon the woman's ego, with cosmic regularity, that she is regarded as unequal, unpopular, unwanted and unclean.

In European and American urban and industrial culture the behavior patterns surrounding menstruation have been analogous to the primitive practices of ostracism, but until 1921 in the United States, they were almost exclusively made part of the feminine underground, to be practiced and perpetuated individually, without even the dubious social security afforded primitive women by ritualized practices. Modern women will find it difficult to sympathize with the latter viewpoint, but it should be recognized that in tribal structures it was quite unnecessary for a woman to expend energies on developing ruses and disguises to keep her menstrual period a secret from husband, family or society. Menstruation may have been regarded by primitive societies as signal of the fall from grace, a curse inflicted upon women from some primal transgression, but it was still an inescapable natural fact, no more *personal* a punishment than mortality is for all humankind. For the tribal woman, ready-to-wear psychological attitudes were provided, and her monthly state was openly related to the cosmos and her culture. No such open provisions are part of non-tribal societies, for the whole affair has been totally covered by silence. It was not merely a pattern of taboos; the subject itself was taboo. Even such sex-objects as the heroines of the classic erotic literatures do not menstruate. The point of this is that if the *sub rosa* erotic literature tradition (a largely male *genre*, significantly) has had its taboos against menstruation, it goes without saying that *supra rosa* there would be few references to the menses.<sup>5</sup> This is in fact true, for while nineteenth-century novels abound in cases of "sick headaches," "slight indispositions," "the vapours," "green-sickness" and "the blues," these terms are oblique and ambiguous diagnoses. They are equally applicable to hypochondria,

melancholia, malnutrition, malaise and menstruation, and thus, it was possible then and remains possible today for a woman to disguise her menstrual period in a sea of vague ailments. Instead, it seems fair to suggest that much of the “weakness” of many women in the recent past resulted from the social necessity of inventing enough irregular ailments to hide their regular “sickness.”

An early twentieth-century medical adviser to college women at Stanford, Dr. Clelia Duel Mosher, was well aware of this debilitating feedback: “. . . the traditional treatment of rest in bed, directing the attention solely to the sex zone of the body, and the accepted theory that it is an inevitable ‘illness’ while at the same time the mind is without wholesome occupation produce a morbid attitude and favor the development and exaggeration of whatever symptoms there may be.”<sup>6</sup> This attitude was turned to personal advantage by many women, Dr. Mosher noted: one of her college advisees simply told her, “My mother has always stayed in bed every month and I mean to too.”

How far back in American history these defensive hypochondriac practices were common is difficult to determine—one can hardly feature such a self-indulgent expenditure of a woman’s time on the frontier—but in 1855, Dr. Edward H. Dixon included among his *Scenes in the Practice of a New York Surgeon* a chapter entitled “Woman. What are the Causes of the Early Decay in American Women?” His answer was surprisingly modern, because he assumes that while boys and girls start in equal health, at school age the demands of highly restrictive ladylike behavior initiate the decay of healthful breathing and active blood circulation among girls, and that at puberty, this is augmented by the “fee-seeking” members of the medical profession who further weaken girls with “confinement and physic.”<sup>7</sup> But even Dixon is not exempt from the penchant for augmenting hypochondriac disturbances. Although Dixon does ascribe the “weakness” of women to social causes rather than to inherent inequality, like almost all writers on gynecology and feminine hygiene of the nineteenth and early twentieth centuries, he is incapable of divorcing female problems from fashionable pursuits.<sup>8</sup> Thus novel-reading is debilitating in Dixon’s view.<sup>9</sup> In a similar vein, Dr. Edward John Tilt, in *On Diseases of Menstruation and Ovarian Inflammation* (1851), condemns the overexcitement to the organs of reproduction caused by the “prurient incitement of passion-stirring pictures, statues, music, novels and theatres.”<sup>10</sup> As recently as 1926, one popular treatise on *The Sexual Life of Woman in its Physiological, Pathological and Hygienic Aspects* warned women to discontinue singing during menstruation.<sup>11</sup> In 1891, Horatio R. Bigelow’s *Social Physiology; or, Familiar Talks on the Mysteries of Life* ascribed premature menstrual flow to (among other causes), “a long visit to cities [and] a diet of exciting food.”<sup>12</sup> Bathing during menstruation was alternately condemned or advocated by different authorities, and among the advocates, hot and cold water were alternately condemned and advocated. For married women, “excessive marital in-

dulgence" was related to "profuse menstruation,"<sup>13</sup> and as recently as 1916 sexual *pleasure* is tied to female problems, for "the best mothers, wives and managers of households know little or nothing of the sexual pleasure. Love of home, children and domestic duties are the only passions they feel."<sup>14</sup>

All these pronouncements seem designed to produce anxiety and hypochondriac responses rather than reassurance, and at times the most knowledgeable authorities seem to be guilty of the same designs. In 1890, Dr. Alice B. Stockham referred to "certain physiologists" who "claim that *all* sanguineous flow is abnormal, that there should be *no* show of blood in a perfectly healthy woman."<sup>15</sup> Dr. Stockham does not share this exaggerated position, but her own views are precursors of the twentieth-century manuals that discount the inconvenience, the discomfort and the occasional pain of menstrual and pre-menstrual periods. For several decades now, in an effort toward creating an attitude of positive thinking in young women, the booklets prepared by the sanitary products industry for distribution in women's physical hygiene programs tend to dismiss dysmenorrhea—painful menstruation—as an abnormality caused by poor diet and inadequate rest and exercise, and to dismiss discomfort and anxiety as being largely psychological. As the feminist Germaine Greer suggests in *The Female Eunuch*, these ideas, when coupled with the secrecy surrounding the onset of the menses, can produce in a young woman the feeling that "the pain attending this horror is in some way her *fault*, the result of improper adaptation to her female role. . . ." Probably Dr. Greer strikes a reasonable balance in the closing sentence to her chapter on "The Wicked Womb": "Menstruation does not turn us into raving maniacs or complete invalids; it is just that we would rather do without it."<sup>16</sup>

Throughout the history of feminist and women's liberation movements the menstrual period has served as the unspoken but undeniable basis for discrimination. It is possible that the final drive for equal rights has resulted as much from the mass production and distribution of feminine hygiene products as from development of the birth control pill. "The pill" has been the apparent cause for the intensified liberation movement, but this is because it provided a dramatic counter-argument to the overt sexist argument that pregnancy is the sole rationale for job discrimination, when in reality it is more likely that the discriminatory rationale is to be found in male (and even some female) ideas about menstruation, its attendant discomforts, and the consequent psychological tensions to which many women are subject. Thus Dr. Mosher, writing at about the time that women attained suffrage in the United States, states that in her debates with college professors, even the most liberal-minded men who denied any intellectual differences between the sexes invariably "assume a periodic handicap."<sup>17</sup> It was not only the men who believed this: the militant pioneer in the movement to liberate women through birth control, Margaret H. Sanger, wrote in *What Every Girl Should*

*Know* (1916) that "out of 1,000 girls questioned, only 16 per cent were entirely free from pain, which proves that the time has come for women to cease being ashamed of this function, and insisting upon at least one day's rest at the expense of her employer."<sup>18</sup> Mrs. Sanger's statistics are not to be regarded as absolute, however. Dr. Mosher had found a remarkable change in the percentage of college women who were *free* of menstrual pain from 19% in 1894 to 68% in 1915-1916.<sup>19</sup>

The startling advance in the space of two decades is not easily accounted for. Sexual education had done little to dispel the superstitions of "the curse" and bed-ridden disability.<sup>20</sup> Dr. Mosher gives credit for the physiological improvement not to education, but to fashion, and she makes a remarkably strong case for it. "In 1893-96," she wrote, "the average width of skirts worn by 98 young women was 13.5 feet—the widest 15 and the narrowest 9 feet. The weight of the *outside* skirt alone was often nearly as much as the weight of the entire clothing worn by a modern girl (circa 1923). At that period, too, every woman must have a wasp-like waist while several petticoats were also carried from the waist," and, "as the skirt grew short and narrower and the waist grew larger, the functional health of women improved." Thus, Dr. Mosher concluded, "An extraordinary close correlation was found between the fashion of dress and the menstrual disability of women."<sup>21</sup>

There is undoubtedly considerable validity to this analysis. Relieving the stress on the water-logged premenstrual tissues, particularly around the waist and lower abdomen, in addition to reducing the discomfort resulting from the heat that must have been doubly oppressive in unairconditioned summers would be markedly helpful to the overall health of women. But one other clothing-related change at this time in history would have done more than relieved *stress*; it would have relieved *distress* as well. In the two-decade span of time of which Dr. Mosher speaks, a silent revolution in feminine hygiene garments was taking place, but of this revolution, the only evidence to survive is in the mail-order catalogs of Montgomery Ward, of Sears, Roebuck and Company and of Harrod's of London.

The techniques for the absorption of menstrual discharge are almost entirely hidden throughout the history of womankind, this information being passed on among women solely by the spoken word. Every woman's knowledge of regular menstrual treatment seems to have been presumed by physicians. Thus, in one of the first medical descriptions of internal tampons (in 1856) the careful instructions for preparing the tampon ends by stating briefly that "They should be kept there by a napkin, worn as for the menstria. . . ."<sup>22</sup> The tampon prescribed here is for post-parturient bleeding, as are the sanitary pads in the earliest published reference that could be uncovered in the library of the "Kinsey" Institute for Sex Research at the University of Indiana, this being in *The Eugenic Marriage; The Knowledge guide to the new science of better living and better babies* (circa 1913).<sup>23</sup> To judge from all accounts, up to this time all napkins were homemade affairs of clean cloths pinned as a diaper or

folded into pads to be pinned to underclothing. The assumption is that these cloths were not regarded as disposable, but were washed out much as cloth baby diapers are today, although there is no direct description of laundering. In 1908, one popular work described a disposable, but homemade pad for parturition to be made of purchased cotton and cheesecloth,<sup>24</sup> and in 1905, Mary Wood-Allen in *What a Young Woman Ought to Know*<sup>25</sup> provides a recipe for making a reusable cloth envelope for holding napkins, this being supported by shoulder straps.

These, then, appear to be the only popular published descriptions of absorbent pads until the marketing of Kotex in 1921. They hardly suggest a liberation in underclothing adequate to account for the "new woman." For this, we must turn to the mail-order catalog. Not only did these catalogs display manufactured pads and elastic belts in the mid 1890's, but they described their use in the practical and forthright style that still marks the catalogs, more than a century after Aaron Montgomery Ward issued his first catalog in 1872. This easy availability has never before been documented, and it has been included in no medical, educational or popular literature other than the mail-order catalogs.<sup>26</sup> From Montgomery Ward's 1895 catalog, these two descriptions:

Ladies Faultless Serviette Supporter, made of soft sateen with a rubber band across hips. Meets with universal approval. Sizes are every inch from 22 to 36. \$.25 each.

The Faultless Serviette or Absorbent Health Napkin; economical, comfortable, healthful. Recommended by physicians and fast superseding birdseye linen, more absorbent, antiseptic, no washing, burned after using, invaluable while traveling, cheaper than laundering. Medium size \$.50/dozen.

The 1897 Sears, Roebuck catalog lists belts and pads in two "departments" one stating, "This belt . . . is worn by ladies during their menstrual period. . . ." And in the Harrod's of London 1895 Catalogue, one can find a somewhat more oblique offering of "Hartmann's Hygienic Towellettes for Ladies . . . for Ladies Travelling . . . they are invaluable and indispensable. They are supplied at the actual cost of washing. *After Use they are Simply Burnt.*" In these easily procured commercial products, therefore, may be found the liberation of Dr. Mosher's college women from unpleasant drudgery, from possible vaginitis, from embarrassing inconvenience when away from home, and from long heavy skirts that could protect a woman from anxiety-producing accidents from seepage and overflow.

Women's fashions are not so frivolous as are popularly supposed, and the rapid changes in women's clothing in twentieth-century America are not simply the results of campaigns for suffrage, equality and liberation. They are the outward expressions of inner confidence, something that was surely augmented by the development of cheap, absorbent and disposable

menstrual products. To many men and to some modern women this may seem to be overstated, but even today, the menstrual period for many women has some awkward moments caused by premature or profuse flow, by running out of napkins, or by the demanding time-schedules of work, play or travel. But if we were to eliminate the availability of all commercial sanitary products it takes little imagination to find good reasons for long skirts, for staying close to home and for maintaining a mystical pose of fragile unpredictability. Unfortunately, we have little direct historical evidence of this concern because it was expressed in the silent underground of women only. Conceivably it might yet be documented by feminist historians today.<sup>27</sup>

But if this quiet mail-order revolution took place in the period from 1890-1910 (and if, indeed, it served to liberate women from long skirts), it may be wondered why there was a lag in fashion, for we usually ascribe the rise in the hem-line to the 1920's. Actually, the hem-line rise began around 1914, but it did not reach knee level until the later 1920s. There are several reasons that help to account for this. For one thing, fashions came from continental Europe where mass distribution of personal products such as America's mail-order houses developed did not exist. Secondly, the inertia of tradition and superstition related to all sex-related practices is a powerfully conservative force. But the third reason is a complexly interrelated story of technological, marketing, and advertising history, involving both liberated women and men.

During World War I, the shortage of surgical cotton for bandages spurred the development of synthetic substitutes. Among these was a cellulose substance developed by Ernest Mahler, a chemist working with the Kimberly-Clark paper company of Wisconsin. Mahler's product, later named Kotex, was found by Red Cross nurses to be an effective sanitary napkin, and at the close of the war, Kimberly-Clark decided to market it. For the first two years, it was something of a one-woman battle to get the product into retail stores, for marketing was given over to Miss Nesta Edwards, who was an industrial relations consultant.<sup>28</sup> But in 1921, Kimberly-Clark persuaded Albert D. Lasker,<sup>29</sup> a Chicago advertising genius, to take on their account. Lasker responded by preparing straightforward advertising copy and by using his influence to bully magazines into printing it, beginning in 1921 with an advertisement picturing a Red Cross nurse. Eight years later, in 1929, Kotex had become a \$19 million business, and women's fashions were fully emancipated. The complicated nature of emancipation is further compounded by the fact that both magazines and women were sufficiently liberated in 1920 to accept this advertising. Shortly after, in 1936, Dr. Earle Haas' invention of an internally worn tampon for normal flow was marketed as Tampax, and once again nurses were pictured in advertising copy to provide "medical" validation of the new technique, which nonetheless won acceptance slowly at first because of unwarranted concerns about virginity and morality. Today the revolution is complete.



To summarize: over the passage of three-fourths of a century, three social phenomena relating to women have coincided: the liberalizing of legal and social status, the liberalizing of outer dress styles and the development of reliable widely distributed feminine hygiene products. Traditionally the coinciding of the former two phenomena has been regarded as *merely* coincidental, but research into the last phenomenon suggests that these are all interrelated, and that convenient menstrual care products were needed before women's claims to social and occupational equality could be backed up by equally free personal behavior patterns.<sup>30</sup> Adjunct to these hygienic products are biochemical products for symptomatic relief of certain aspects of dysmenorrhea, but these are refinements that follow the effective causes of liberation, and while they do serve to broaden the social impact of the established mechanical devices, they are not as yet free of questionable physiological side effects for some women. Finally, the traditional view of female inequality and the stereotyped "protective discrimination" against women have until recent years probably constituted a convenient way of humanizing primitive practices of ostracizing menstruating women. But the times have changed, and thanks to technology, mass production, mass distribution, education and advertising, women need no longer accept elaborate nineteenth-century behavior patterns along with puberty, and like today's infants, who are given the option of being invested with universal disposable diapers and sexually ambiguous green hair ribbons, the liberalized conventions of dress for women permit absolute freedom of choice in image and activity.

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### footnotes

1. Charles E. Rosenberg, "The Medical Profession, Medical Practice and the History of Medicine," in Edwin Clarke, ed., *Modern Methods in the History of Medicine* (London: The Athlone Press, 1971), 22.

2. *Ibid.*, 24.

3. Owsei Temkin, "The Historiography of Ideas in Medicine," in Clarke, 8.

4. Even Amelia Bloomer's dress reforms of the mid-nineteenth century are not exempt. The pyjama trousers were very loose and covered by a knee-length overskirt. The exceptions to long garments were generally for exotic professionals, such as dancers (but the *tu-tu* does not appear until the latter part of the nineteenth century), and acrobats (and they may have excused themselves from work during their menstrual periods, as prostitutes do today); or for peasant laborers in certain areas of Europe and the orient who needed freer movement in wet fields and paddies.

Men's costumes such as robes, caftans, burnouses and togas are similar to women's dress, but may be regarded as irrelevant to this thesis because of the equally frequently encountered kilts, hose, tights, knee-breeches and trousers. Undoubtedly some civilized cultures and subcultures have been equally modest in dress for women and for men, but then the women were further covered by the restrictions of cloister, purdah, or periodic ostracism (see *Leviticus* 12).

5. See Mary Jane Lupton and Emily Toth, "Out, Damned Spot!," *MS* (January, 1974), 97-99, for an authoritative and wide-ranging overview of oblique and direct references to the menses in literature.

6. Dr. Clelia Duel Mosher, *Woman's Physical Freedom* (New York: The Women's Press, 1923), 25.

7. Dr. Edward H. Dixon, *Scenes in the Practice of a New York Surgeon* (New York: DeWitt and Davenport, 1855), 111-114.

8. A great deal of research into nineteenth-century sex-manuals, Victorian stereotypes, and the opinions of male-dominated medical and scientific establishments has been done in the past few years. See, for example, Elaine and English Showalter, "Victorian Women and Menstrua-

tion," *Victorian Studies*, Vol. 14 (September, 1970) and Janice Law Trecker, "Sex, Science and Education," *American Quarterly*, Vol. 26 (October, 1974). The wealth of material on these subjects is reflected in the lack of significant duplication among the primary sources employed by these scholars and by this article. See also Vern Bullough and Martha Voight, "Women, Menstruation, and Nineteenth-Century Medicine," *Bulletin of the History of Medicine*, XLVII:1 (January-February, 1973).

9. Dixon, 114-118.

10. Dr. Edmund John Tilt, *On Diseases of Menstruation and Ovarian Inflammation* (New York: Samuel S. and William Wood, 1851), XXVI.

11. Heinrich F. Kirsch, *The Sexual Life of Women in its Physiological, Pathological and Hygienic Aspects* (New York: Allied Book Co., 1926), 126.

12. Horatio R. Bigelow, *Social Physiology; or, Familiar Talks on the Mysteries of Life* (New York: Union Publishing House, 1891), 64.

13. Florence Dressler, *Feminology*, 3rd edition (Chicago: C. L. Dressler & Co., 1903), 433.

14. T. W. Shannon and W. J. Truitt, M.D., *Nature's Secrets Revealed, Scientific Knowledge of the Laws of Sex Life and Heredity of Eugenia* (Marietta, Ohio: S. A. Mullikin, 1916), 162.

15. Dr. Alice B. Stockham, *Tokology: A Book for Every Woman* (Chicago: Alice B. Stockham & Co., 1890), 253. The italics are mine.

16. Germaine Greer, *The Female Eunuch* (New York, 1970), 42-43.

17. Mosher, 12. See also Trecker, note 4 above.

18. Margaret H. Sanger, *What Every Girl Should Know* (Reading, Pa.: Sentinal Printing Co., 1916), 32.

19. Mosher, 30

20. Frank A. Manny, "Bibliography of Sex Hygiene," *Educational Review*, Vol. 46 (Sept. 1913), 168-176. Many of the materials listed refer to prostitution and venereal disease, and the more "normal" materials come from the period after 1910, clearly reflecting radically progressive views.

21. Mosher, 20-30. The fact that social pressures can produce menstrual discomfort was demonstrated as early as 1876 in a brilliant statistical study by Mary Putnam Jacobi, M.D., in her prizewinning *The Question of Rest for Women During Menstruation* (New York, 1877). Dr. Jacobi found that 84% of unmarried women were prone to monthly pain, as opposed to 11% for married women, and she ascribed this primarily to depression because in our society "celibacy implies social failure" (209).

22. Charles D. Meigs, M.D., *Obstetrics: The Science and The Art*, 3rd edition (Philadelphia: Blanchard & Lea, 1856), 254.

23. W. Grant Hague, *The Eugenic Marriage: The knowledge guide to the new science of better living and better babies* (New York: Reviews of Reviews Co., circa 1913), Vol. 1, 62-66.

24. Emma Frances Angell Drake, *What a Young Wife Ought to Know*, new revised edition (Philadelphia: The Vir Publishing Co., 1908), 194-195.

25. Mary Wood-Allen, *What a Young Woman Ought to Know* (Philadelphia: The Vir Publishing Co., 1905), 149.

26. It would be impossible to demonstrate how wide-spread was the use of manufactured pads and belts. Both obstetricians and the educational divisions of the major manufacturers of feminine hygiene products are apparently unaware of any mass-distributed products prior to 1921, when Kotex was first marketed widely, but on the other hand, the design of Kotex duplicated the mail-order products, and obviously derived from them, only substituting cellulose materials for cotton-wool. It is also quite probable that the earlier products were available in dry-goods stores.

27. Oral histories of the "Foxfire" type would be valuable. I have for instance, been told by a staff-member of Tampax that her grandmother, who was a one-room schoolteacher, said that many times she was "saved" only by her long skirts during the long, unprivate schooldays (in the mid-nineteenth century many rural schools had no privies at all). Interviews in nations that have recently undergone technological revolution might be even more productive of evidence both as to older informal practices and as to the social-psychological impact of cheap, reliable and disposable menstrual care products.

28. "50 Years of Confidence," *Cooperation* [marketing publication of Kimberly-Clark] (Fall, 1969), 1-3. Both Miss Edwards and Dr. Mosher are excellent counter-evidence to the fallacious stereotypes of vocational inequality.

29. John Gunther, *Taken at the Flood! The Story of Albert D. Lasker* (New York, 1960), 150-154.

30. Advertising copy continues to respond to some women's anxieties about wearing certain fashions. In the September, 1976 issue of *Woman's Day*, for example, an advertisement depicting a group of young adults playing volleyball has one woman stating: "It was also the first time I'd dared to wear my low-cut pants with a full-size napkin" (131). Viewed in the context of this article, the advertisement can serve as an icon of the interrelationships among the factors of fashion, feminine hygiene, liberation of women's behavior patterns and commercial advertising.