## Journal of the American Medical Association.

EDITED FOR THE ASSOCIATION BY N. S. DAVIS.

PUBLISHED WEEKLY.

Vol. X.

CHICAGO, APRIL 28, 1888.

No. 17.

## ORIGINAL ARTICLES.

DRESS OF WOMEN IN ITS RELATION TO THE ETI-OLOGY AND TREATMENT OF PELVIC DISEASE.

Read before the Gynacological Society of Boston, December 15, 1887,

BY HELEN L. BETTS, M.D., OF BOSTON, MASS.

There are certain conditions of degeneracy that come to prevail in countries and among people, which strike at the root of vitality and therefore of beauty and usefulness. The changes by which such conditions are effected are not sudden nor forced. They creep on gradually, in apparently legitimate ways, and many generations may slip away before some sage thinkers, more observant than the rest, or whose individual interests are more closely touched, open wide eyes to find a relentless hand is upon the throat of the dearest interests of home and country. And these results do not come of malicious intent. Ignorance of relation of cause and effect, and lack of thought, are often as powerful for evil as deepplotted mischief. This is evident in the damaging results now seen in sections of country which depended upon the once heavily timbered uplands beyond for their moisture and streams. The pioneer learned too late that the pine and cedars were the gentle persuaders of the rain, and so the mainspring of agricultural prosperity, and now millions of money and years of planting cannot bring back this tremendous rain-factor, or the stalwart beauty that was ignorantly sacrificed.

This is not an inapt illustration of the vital harm that woman is doing to-day to herself and posterity by her unhealthful dress. It strikes a paralyzing blow at the root of vitality, beauty and usefulness.

We need not look back beyond the observation and work of to-day, to know there is a radical wrong somewhere in woman's environment, which tends to degeneracy. Perhaps the index to woman's physical status can be best obtained by noting the proportion of medical literature devoted to woman's diseases. There are Systems of Gynecology, American and Foreign, which in themselves make whole libraries. Gynecologists and gynecological societies are multiplving in every section of the land. Where so much remedy is needed, there must be great disor-der. Is this a necessary condition? Was woman and is scolded for being a romp. Before a boy is born to invalidism? With the lower mammalia this six years old he is relieved of skirts, and the boy's

ing as the male, and careful study shows there is nothing lacking in woman's anatomical structure which prevents her from being vigorous or even powerful.

But the fact remains that women, as a rule, are delicate, with little power of endurance. They bear with difficulty one, two, or three children, then are faded and nervous, and finally drop into the long list of patients that have uterine disease or nervous prostration, or, if they have neither of these, they think they have, which indicates quite as unsound a condition of body and mind. Why should they not grow hale and hearty with the years, and with their husbands and brothers? It is not fair to say that any one factor effects all this wrong. Much can be said of early crowding at school, irregular meals of indigestible food, late hours, imprudence at the merstrual period, untrue husbands, and fast living generally; but if woman brought to life's battle a properly developed physique, all these conditions combined could hardly effect such complete wrecks as often drag themselves into the office of the specialist. Indeed, from a robust body, most of these blighting influences would rebound, leaving it still symmetrical and unmarred. No vigorous girl would be overtaxed by our ordinary school duties. Wholesome tired-ness would send her early to bed; a healthy appetite would find no satisfaction in caramels, limes, croquettes, and nondescript entrées at all hours. A woman with a sound mind in a sound body would be too sufficient to herself to make an alliance with one who lacked truth and honor. A healthy, positive nature would find nothing satisfying in hot-house society life, where social evil generates and thrives.

Still, acknowledging these other unwise conditions, let us take this one factor—dress—and see what its physiological, or, rather, pathological bearings are. In early life girls are as vigorous and healthy as boys, but, as a rule, they are taught in-door sports. When they should be romping and climbing in the open air, developing bone and muscle with which to meet the needs of mature life, they are keeping tiers clean, nursing dolls, and being taught to be lady-like!

But, provided girls are allowed and taught climbing, running, ball and tennis, they can obtain but a small part of the good they might gain, because their movements are restricted. If a girl climbs she catches her skirt, and is pulled back; she tears her dress, is not so. The female is quite as hardy and endur- real joy in his first pantaloons is not simply pride in

being dressed like a man, it is a natural, happy outburst at being free. Now he can run, leap, turn somersaults, stand on his head. There is nothing to catch, chafe or hinder. His close garments are a part of himself. No wonder the boy in his first pantaloons is exultant.

Up to ten or twelve years a girl can walk with comparative ease, if she cannot climb; but now, the lengthening of her skirts increases her bondage. Just as every line and muscle is rounding with nascent strength and beauty, when growth is giving generously to the most active members and development is fast widening or limiting the relative power and skill of each system in the organism, what is every girl taught to do? She decorously confines the limbs by heavy clinging drapery which impedes every movement; each step is checked by the muffled friction of soft, pliant skirts that sway and wrap about the calves and ankles and hold her back from rapid walking, and make running exceedingly difficult. The result is that all exercise involving rapid and extended movement of the thighs is gradually abandoned. Now this girl is the prospective mother of the next generation. The pelvic bones, ligaments, muscles and fascia are in process of development, and this is a momentous period. It matters notcustom and fashion say "Long skirts;" so the limbs are pinioned. Now what becomes of the obturators, the transversates, the levators, and sphincters? Their proper development cannot come, save from vigorous action, daily systematic, energetic exercise, which brings into play the back, thighs and abdominal muscles. No one who has dissected a pelvis, or studied those magnificent plates of Savage, can doubt that woman is fully equipped for rapid, easy and safe parturition.

Then why does woman dread childbirth, as cities dread the earthquake? Because she knows that in the last dread throes the foundations are often literally torn away. And why? Simply because all those pelvic belongings are allowed in early life to lie dormant and undeveloped. The forces that nature has appointed as a reserve corps, at both flanks and rear, to lengthen and strengthen the perineum in the last minutes of extreme pressure and tension, are unused and unskilled, so they do what untrained members usually do when brought to the crucial test: They fail, and the perineum is sacrificed. Where lies the So long as woman wears long, clinging skirts she cannot, as a rule, reach that point in physical development that makes child-bearing safe and desirable. A mother lately complained to me that her little girl was learning slang from playing with boys. She ran in crying, "Mama, Bab stumped me to shin up the piazza post, and I did it, too." My advice was, "Forgive the slang provided she shins up the post successfully." It is this lack of bodily freedom which makes woman fragile; she may have no disease, she may call herself well, but we have Health and Health, or Wholth, as the old Saxon has Health may simply allow its possessor to follow comfortably a quiet, uninterrupted routine life. By

ments without sickness or pain. Life is a calm, unimpassioned, monotonous existence. Health may make life a glad song of joy; every faculty is tense and keen; simple existence is a luxury. Eating, drinking, sleeping are physical delights, and breathing is literally a constant inspiration. This is as was intended and what is possible; but it can only come with exuberant, robust health. Whatever checks growth and development cuts off the possibility of a vigorous physique, and also the main avenue by which the most healthful, joyous influences reach us.

I have seen women in mature life whose fragile, half-developed bodies have set relentless limits to enjoyment, mental and physical. They looked out as from grated prison cells upon the spontaneous, active life, which was once, but now no longer, possible to them.

The moving finger writes, and having writ Moves on; nor all their penitence or wit Can lure it back to cancel one half line, Or all their tears wipe out one word of it.

There is another feature quite as objectionable; while the long drapery dwarfs the body and lowers its vitality, the corset with unsupported skirts induces actual disease. The prevailing style allows all the weight of clothing below the waist to rest upon the abdomen and hips; as the point of greatest projection of the viscera is higher up than the hips and more prominent, this part forms the main support; consequently, there must be compression, with displacement of the abdominal viscera and a corresponding degree of disturbance of blood-supply and nutrition. This often gives rise to a condition of the uterus that for a long time was covered by the term inflammation, but that has been elaborated by different authors, according to their ideas of pathology, and now we have the engorgement of Lispane; the irritability of Hodge and Gooch; the active congestion of Chapman; the passive congestion of Emmet; Kolb's formative irritation; Hewitt's abnormal nutritive activity; the areolar hyperplasia

We will, for clearness, adopt a term in every day use, congestion. What follows a long-continued congestion? First, disturbed nutrition of tissue. Second, altered function; and with these two conditions, without the aid of another single cause, we have the factors of nine-tenths of the disturbance that gynecologists are called upon to treat. Let us see if this statement is too broad. Congestions, displacements, flexions, glandular enlargement, erosions, excessive and altered secretions, naturally arise from prolonged compression with displacement.

of Thomas, etc.; all agree that there is abnormal

cell-proliferation.

to shin up the piazza post, and I did it, too." My advice was, "Forgive the slang provided she shins up the post successfully." It is this lack of bodily freedom which makes woman fragile; she may have no disease, she may call herself well, but we have Health and Health, or Wholth, as the old Saxon has it. Health may simply allow its possessor to follow comfortably a quiet, uninterrupted routine life. By living carefully and guarding against extravagant outlay, the body may answer all moderate require-

tological researches of to-day point strongly toward the congestion theory as being the most rational on which to explain fibroid growths? Among pathologists we may speak of our country-woman, Dr. Mary Putnam Jacobi, as worthy authority, and her investigations all go to show that in subinvolution venous congestion is the etiological factor where without the arterial hyperamia necessary to inflammation, we have the venous hyperamia necessary to growth. Upon this ground it has been suggested that the frequency of fibroids in the posterior wall of the uterus may be explained, the constant pressure from the crowded rectum causing venous hyperæmia, the potent factor in fibro-genesis.

However, it is not necessary to trace all uterine disease to congestion in order to make attention to dress imperative. Observation with ordinary reasoning, without a knowledge of pathology, teaches that great injury must be caused by continued weight and pressure. With this fact granted, it is hard to understand why it is so generally ignored. In other disturbances of the organism the environment is always taken into account in the treatment. We not only use remedies which relieve, but we remove influences which have brought about or which increase the disorder. What results from treatment could we expect in typhoid fever even with the most approved remedies, with the patient breathing sewer gas day and night? Or in a case of nervous prostration in a teacher who spends her days in an illventilated school room and her evenings in correcting examination papers? Could we expect brilliant results in gastritis with a patient who breakfasted on fried pork and buckwheats, and dined on corned beef and cabbage? Would he be a scientific surgeon who would apply a soothing disinfectant to a compound fracture of the humerus, and then leave the arm unguarded to dangle loosely in the coat sleeve? But is not this as consistent with the first principles of medicine and surgery as it is to expect successful results from pessaries and depleting applications to the uterus while the patient is steadily pushing the abdominal contents upon and into the pelvis with from four to twelve, and often twenty, pounds of pressure? If it is reasonable and scientific to regard diet in indigestion, mental and social influences in neurasthenia, atmospheric changes in pulmonary disease, is it not quite as rational to regard the force of gravity in uterine disease? And yet it is often left entirely out of account in the matter of treatment.

I will speak simply from personal knowledge. A lady came into my hands for retroversion with enlargement, and of course, prolapsus. This condition had first been recognized six years ago. She had been under the care of a specialist from time to time ever since. She had had everything commendable in the way of applications, douches, and pessaries, but she wore the usual weight about the hips, and she had never been at all enlightened concerning its hurtful effect. Her physician had exhausted all resources in the line of internal supports in trying to raise up the large, and heavy uterus, while all the time a firm pressure of several pounds was irresisting.

bly weighing it into the pelvis. For this patient, like very many women, had lost the dorsal curve, and so the body was carried at such an angle that the whole weight of the abdomen was precipitated directly upon the pelvis.

directly upon the pelvis.

Some months ago a gentleman came to the office, and when I saw his sad, worn face and heard his pathetic voice, my mental diagnosis was, this man has either dyspepsia or an invalid wife. It proved the latter. She had been ill two years, nine months in bed, but had finally convalesced to that degree that she could sit up for two hours during the day. She was assured that all she needed was strength, but, as for several weeks she had been losing ground, she, with her husband, were facing, as bravely as they might, the grim fact of invalidism for an energetic wife and mother of thirty years of age. Her illness really began with subinvolution six years before. For four years this continued, with constipation and the usual half invalid condition. After severe exertion during sickness in her family, she was obliged to take her bed with an acute uterine congestion; soon mucous polypoid growths appeared and a surgeon from the city was called and an operation was performed. Later, the retroverted uterus was replaced with a sound, which operation was followed by prolonged hæmorrhage. After nine months in bed, a naturally strong physique came to her rescue and she regained her feet. But she was in constant pain in her back, head and limbs. She was wakeful, and her mind easily confused and depressed. The uterus was engorged, and all the pelvic organs were crowded as low as the floor of the pelvis would permit, and in a state of intense hyperæmia.

The first, clearest indication seemed to remove the superincumbent pressure; so, as usual, I examined her mode of dress. You will be interested from a professional standpoint to know what this patient wore. I examined her at her home, so she had on simply her in-door garments. There were, knit and muslin drawers, flannel and muslin underskirts, hoopskirt and bustle, then a muslin and a dress skirt, seven bands; fourteen thicknesses were buttoned closely about the corset, and not long before, her physician having noticed that she wore her garters about her legs, said he feared they would interfere with circulation, and advised that she should put an elastic band about the waist and fasten the stockings to this! I asked if her clothes were not oppressive. She said she thought she wore very light clothing, but had noticed at night a purple crease about the waist where the bands came about the corset, and wondered if that could keep her from gaining strength. With all this weight and compression this poor woman was waiting to get well, wondering why she could not stand, that her limbs ached and prickled, and why she could not walk without getting so tired. Neither physician nor specialist had spoken of her mode of dress.

she had never been at all enlightened concerning its hurtful effect. Her physician had exhausted all resources in the line of internal supports in trying to raise up the large, and heavy uterus, while all the time a firm pressure of several pounds was irresistiand bright, and the husband is as cheery as the wife—

her recovery was brought about in the simplest manner. She took off her corset, adopted under garments without bands. She took gymnastic exercise regularly—two or three times a day she assumed the genu-pectoral position. The medical and local treatment I consider really unimportant compared with the changes of habit. This consisted in the ordinary means for restoring tonicity to the intestinal tract, with the usual uterine applications.

These cases will serve as an index to an interesting experience which has convinced me that there is a reason not generally recognized, why our brothers in the profession and in the flesh pass over so lightly the subject of woman's dress in their practice and teaching. Men who have won enviable places in the profession, both as authors and workers, dismiss the subject with a few lines. In the "Cyclopedia of Gynecology," published lately by Wood, consisting of eight volumes, it would be hard to find one half page that could possibly be construed to refer to woman's dress. In Prof. Mundé's very excellent and practical handbook upon "Minor Gynecology," in two hundred and fifty pages upon treatment of displacements, two single lines enjoin removing the superincumbent weight from-not the uterus, butthe pessary, that it may not be displaced. He describes and gives illustrations showing over seventy different pessaries and abdominal supports which are made from leather, cotton, kid, hard rubber, celluloid, glass, whalebone and cedar wood. In speaking of abdominal supports, he advises that they be sus- for the entire change of dress will effect a conversion, pended from the shoulders, and gives an illustration of an apparatus made of a metallic rim which shall cine, pocketed the fee, shut the office door with a rest on the hips and be suspended from the shoulders; to this with the skirts, he remarks parenthetically, the abdominal support is to be attached! The less treatment. picture is almost pathetic, and with a knowledge of Prof. Mundé's love of mechanics and skill in contriving, it is simply astonishing. The situation will admit of but one explanation.

Patients often ask. "What do you think is the reason my physician did not tell me about my clothes?" There is but one answer. Because he did not know. "But why should he not know? Physicians know how women dress." Oh, yes, but he never in his own body felt the bondage. Nothing teaches like experience. No surgeon is so thoroughly aseptic as one who has seen the germs grow in the culture tube and demonstrated them under the microscope. He had seen with his own eyes, and knows he has an actual factor to deal with; there is nothing that would so effectually convince physicians of the immense factor for harm that woman's dress is to women, and so to the race, as a little individual experience. You need not put on a fashionable calling suit with braid and jet which would weigh all the way from ten to forty pounds, the waist of which must be put on after the bonnet and gloves, for after it is fastened the arms are literally pinioned. This would be extreme and unfair. Take an ordinary working suit, not omitting the high-heeled, narrow-toed boot. You would then have from four to ten pounds slipped must repeat itself can we not by earnest, wise effort snugly down over your corset, with yards of drapery raise the next cycle to a higher plane than this? outside and beneath swaying and twisting about

your limbs. Go about your ordinary work, which involves no more active movement than woman's work. Feel the clinging friction at every step. Have a hand always ready to hold your skirts from your own and others' feet as you go up and down stairs; get in and out of your carriage. Walk across Boston Common in a stiff breeze—this for one day only. Three items I would confidently vouch for in the outcome: first, most righteous, but undignified and unrestrained rage; second, rending of raiment; third, you would never attempt to treat a patient for displacement, or congestion, or vesical irritation without first working a reform in her dress.

It may be said that women are used to their dress and so do not mind it. "'Tis true, 'tis pity-pity 'tis, tis true." The majority of women know no more of bodily freedom than the domesticated canary or parrot. But the fact does not make them any more efficient or happy members of society, or fit their half-developed bodies to produce a hardy progeny. Perhaps some lack of effort in this direction may be due to the fact that it is exceedingly difficult to persuade women to make radical changes in their dress. They will tell you their clothes are not tight, they never lace, they can turn round in the corset. Indeed their clothes are quite comfortable. They would rather take medicine for the congestion or the constipation, or most usually both, and in the pressure of daily work, when I see that only a round half-hour's talk with blackboard illustrations and full directions I have given the patient the desired bottle of medigroan over the hopeless condition of the patient, and let me add in self-defense, a groan over my own shift-

Were this matter not one of vital moment, in view of the unwillingness of women to make the necessary change we might, with some peace of conscience. leave these miserable women and girls to their unhealthful dress, treat them as so many emergency cases, whose lives are to be comforted and eked out in a superficial from-hand-to-mouth way. But this is not a side issue. No fact in Biology stands better proved than this, that change of function is followed by change of structure. With diminished exercise comes diminished size and development, and the dwindling of a little-used part has by inheritance been more and more marked in successive generations. opinion, in his later life, Mr. Darwin was careful to keep constantly in view. Although the especial factor of natural selection which he first recognized still held its ground as playing an immense part in organic evolution, he repeatedly stated that great weight must be attributed to the inherited effects of use and disuse with respect to both mind and body. If these are facts, and they stand proved every day to those who observe and think, what sort of a race will the half-developed, half-furnished pelves of to-day bring forth? Is it inevitable that the children of culture and intellect be always puny and sterile? If history

The matter of women's dress is one in which pub-

lic opinion has a powerful influence, especially the opinion of men. Women dress not for their own comfort, or the health of posterity, but to please their brothers, their lovers, and their husbands. Men could wield a mighty influence for good in this work if they but realized its importance. As man has a more extended field for observation, woman has come naturally to regard his opinions with deference.

Women physicians, especially, work here at a disadvantage. With most women, save those in the advance ranks of thought, any suggestion in the way of hygiene in dress is immediately branded as Dress Reform, and straightway the masculine, pantaloontype of radical dress is brandished and they say, "What else could we expect from one who would

study medicine?"

Woman does not like to be laughed at and called strong-minded. She would rather suffer pain and discomfort in her body than to be wounded in her heart by those whom she loves. This seems a plight—certainly we are warranted in using the word, for never was mortal more plicated, enfeebled, almost inextricably entangled—this seems a plight in which you, my brothers, have a work to accomplish, which no one else can do. Will you do it?

## GNYECOLOGICAL SOCIETY OF BOSTON.

Stated Meeting, December 15, 1887.

VICE-PRESIDENT H. C. WHITE, M.D., IN THE CHAIR.

Dr. Helen L. Betts read a paper entitled

WOMAN'S DRESS; ITS RELATION TO THE ETIOLOGY AND TREATMENT OF PELVIC DISEASE.

(See p. 509.)

At the conclusion of the paper Dr. Betts exhibited to the Society specimens of the garments recommended and worn by the women interested in dress reform. The undergarments are in one piece, and fit the form throughout. Over this is worn a long waist accurately fitted to the figure, to which are buttoned the skirts by a distinct row of buttons for each. The waist-bands of the skirts are of the same length as the circumference of the waist, so as to avoid any constriction. Shoulder straps for supporting the skirts will not take the place of the full waist, as by their use the weight is brought upon two small points and they become intolerable.

DR. É. C. KELLER said that it was possible for a woman to look as trim and neat in the dress recommended as by use of the corset. This dress is almost exactly like that of childhood.

Dr. L. F. Warner said that the paper was a good one, and should be of great practical value. His ex-

perience had been that it was impossible to secure any change in the manner of dress among women. The constriction about the waist interferes with the return of blood from the pelvis, and leads to congestion with consequent enlargement of the uterus and other pelvic organs. The corset presses these organs out of their natural place and relation and adds to the difficulty. Children are, as a rule, well and strong until their approach to puberty is supposed to demand the use of corsets. These vicious habits of dress ruin nine-tenths of our young women. Women, as a rule, dress to outdress one another, but the men are to blame because they do not lend their influence in behalf of a more sensible and rational system of dress.

Dr. A. P. Clarke said that it would be up-hill work to secure any radical change of dress simply on the ground that the present modes are deleterious to health; but that if we could persuade our patients that the new style of dress will improve the form we may be more successful.

DR. W. S. Brown said that the subject of the paper was new and important. He believed that the great expense was one great objection to the new mode of dress. The "union" garment and others recommended are three times as expensive in this country as in England. The nearer any style of female apparel approaches to the trousers the better it will be. Dr. Brown would not strive to secure a change in the fashionable mode of dress, but would aim to radically change the working dress of all classes so that work can be done without loss of strength. There are many elements influential in producing the common ill-health among girls: indigestion, lack of proper nutriment, over-pressure in school, all have their pernicious influence, and the vicious habits of dress may prove to be the last straw which breaks the camel's back.

DR. E. W. CUSHING called attention to the radical differences between the rural classes of this country and Europe in regard to manner of life and habits. The working women in foreign countries, as Germany, do not wear any such dress as the rural population in this country. Foreign women wear boots and short skirts supported by broad hips. The habits of outdoor work by women in this country have passed away, and the class of women corresponding most closely to the foreign peasant has sought to assume the dress of polite society, with all its faults.

Dr. Cushing believed the corset to be a classical garment, and that women would always wear some such garment to support the breasts. The human race is not yet entirely used to the erect posture upon two legs. The veins of the pelvis are valveless and the erect posture renders the return of blood more difficult. When a tight waist still further interferes with the circulation trouble is likely to result.

DR. ESTHER HAWKS believed that the question of dress was a matter of education. We should keep on with the children and continue their style of dress into later life. The expense of the new style garments is an objection, but it can be avoided with success by directing that buttons be sewed on the corset cover and the skirts hung from that.