CHARLES KINGSLEY

SANITARY AND SOCIAL LECTURES AND ESSAYS

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Kingsley C.

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Содержание

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WOMAN'S WORK IN A COUNTRY PARISH. [1]

I have been asked to speak a few words to you on a lady's work in a country parish. I shall confine myself rather to principles than to details; and the first principle which I would impress on you is, that we must all be just before we are generous. I must, indeed, speak plainly on this point.

A woman's first duties are to her own family, her own servants. Be not deceived: if anyone cannot rule her own household, she cannot rule the Church of God. If anyone cannot sympathise with the servants with whom she is in contact all day long, she will not really sympathise with the poor whom she sees once a week. I know the temptation not to believe this is very great. It seems so much easier to women to do something for the poor, than for their own ladies' maids, and house-maids, and cooks.

And why? Because they can treat the poor as *things*: but they *must* treat their servants as persons. A lady can go into a poor cottage, lay down the law to the inhabitants, reprove them for sins to which she has never been tempted; tell them how to set things right, which, if she had the doing of them, I fear she would do even more confusedly and slovenly than they. She can give them a tract, as she might a pill; and then a shilling, as something sweet after the medicine; and she can go out again and see no more of them till her benevolent mood recurs: but with the servants it is not so. She knows their characters; and, what is more, they know hers; they know her private history, her little weaknesses.

Perhaps she is a little in their power, and she is shy with them. She is afraid of beginning a good work with them, because, if she does, she will be forced to carry it out; and it cannot be cold, dry, perfunctory, official: it must be hearty, living, loving, personal. She must make them her friends; and perhaps she is afraid of doing that, for fear they should take liberties, as it is called—which they very probably will do, unless she keeps up a very high standard of self-restraint and earnestness in her own life—and that involves a great deal of trouble, and so she is tempted, when she wishes to do good, to fall back on the poor people in the cottages outside, who, as she fancies, know nothing about her, and will never find out whether or not she acts up to the rules which she lays down for them. Be not deceived, I say, in this case also. Fancy not that they know nothing about you. There is nothing secret which shall not be made manifest; and what you do in the closet is surely proclaimed (and often with exaggeration enough and to spare) on the house-top. These poor folks at your gate know well enough, through servants and tradesmen, what you are, how you treat your servants, how you pay your bills, what sort of temper you have; and they form a shrewd, hard estimate of your character, in the light of which they view all that you do and say to them; and believe me, that if you wish to do any real good to them, you must begin by doing good to those who lie still nearer to you than them. And believe me, too, that if you shrink from a hearty patriarchal sympathy with your own servants, because it would require too much personal human intercourse with them, you are like a man who, finding that he had not powder enough to fire off a pocket-pistol, should try to better matters by using the same quantity of ammunition in an eighty-four pound gun. For it is this human friendship, trust, affection, which is the very thing you have to employ towards the poor, and to call up in them. Clubs, societies, alms, lending libraries are but dead machinery, needful, perhaps, but, like the iron tube without the powder, unable to send the bullet forth one single inch; dead and useless lumber, without humanity; without the smile of the lip, the light of the eye, the tenderness of the voice, which makes the poor woman feel that a soul is speaking to her soul, a heart yearning after her heart; that she is not merely a *thing* to be improved, but a sister to be made conscious of the divine bond of her sisterhood, and

[1] This lecture was one of a series of "Lectures to Ladies," given in London in 1855, at the Needlewoman's Institution.

taught what she means when she repeats in her Creed, "I believe in the communion of saints." This is my text, and my key-note—whatever else I may say to-day is but a carrying out into details of the one question, How may you go to these poor creatures as woman to woman?

Your next duties are to your husband's or father's servants and workmen. It is said that a clergyman's wife ought to consider the parish as *her* flock as well as her husband's. It may be so: I believe the dogma to be much overstated just now. But of a landlord's, or employer's wife (I am inclined to say, too, of an officer's wife), such a doctrine is absolutely true, and cannot be overstated.

A large proportion, therefore, of your parish work will be to influence the men of your family to do their duty by their dependants. You wish to cure the evils under which they labour. The greater proportion of these are in the hands of your men relatives. It is a mockery, for instance, in you to visit the fever-stricken cottage, while your husband leaves it in a state which breeds that fever. Your business is to go to him and say, "*Here is a wrong*; *right it*!" This, as many a beautiful Middle Age legend tells us, has been woman's function in all uncivilised times; not merely to melt man's heart to pity, but to awaken it to duty. But the man must see that the woman is in earnest: that if he will not repair the wrong by justice, she will, if possible (as in those old legends), by self-sacrifice. Be sure this method will conquer. Do but say: "If you will not new-roof that cottage, if you will not make that drain, I will. I will not buy a new dress till it is done; I will sell the horse you gave me, pawn the bracelet you gave me, but the thing shall be done." Let him see, I say, that you are in earnest, and he will feel that your message is a divine one, which he must obey for very shame and weariness, if for nothing else. This is in my eyes the second part of a woman's parish work. I entreat you to bear it in mind when you hear, as I trust you will, lectures in this place upon that *Sanitary Reform*, without which all efforts for the bettering of the masses are in my eyes not only useless, but hypocritical.

I will suppose, then, that you are fulfilling home duties in self-restraint, and love, and in the fear of God. I will suppose that you are using all your woman's influence on the mind of your family, in behalf of tenants and workmen; and I tell you frankly, that unless this be first done, you are paying a tithe of mint and anise, and neglecting common righteousness and mercy. But you wish to do more: you wish for personal contact with the poor round you, for the pure enjoyment of doing good to them with your own hands. How are you to set about it? First, there are clubs—clothing-clubs, shoe-clubs, maternal-clubs; all very good in their way. But do not fancy that they are the greater part of your parish work. Rather watch and fear lest they become substitutes for your real parish work; lest the bustle and amusement of playing at shopkeeper, or penny-collector, once a week, should blind you to your real power—your real treasure, by spending which you become all the richer. What you have to do is to ennoble and purify the *womanhood* of these poor women; to make them better daughters, sisters, wives, mothers: and all the clubs in the world will not do that; they are but palliatives of a great evil, which they do not touch; cloaks for almsgiving, clumsy means of eking out insufficient wages; at best, kindly contrivances for tricking into temporary thriftiness a degraded and reckless peasantry.

Miserable, miserable state of things! out of which the longer I live I see less hope of escape, saving by an emigration, which shall drain us of all the healthy, strong, and brave among the lower classes, and leave us, as a just punishment for our sins, only the cripple, the drunkard, and the beggar.

Yet these clubs *must* be carried on. They make life a little more possible; they lighten hearts, if but for a moment; they inculcate habits of order and self-restraint, which may be useful when the poor man finds himself in Canada or Australia. And it is a cruel utilitarianism to refuse to palliate the symptoms because you cannot cure the disease itself. You will give opiates to the suffering, who must die nevertheless. Let him slip into his grave at least as painlessly as you can. And so you must use these charitable societies, remembering all along what a fearful and humbling sign the necessity for them is of the diseased state of this England, as the sportula and universal almsgiving was of the decadence of Rome.

However, the work has to be done; and such as it is, it is especially fitted for young unmarried ladies. It requires no deep knowledge of human nature. It makes them aware of the amount of

suffering and struggling which lies around them, without bringing them in that most undesirable contact with the coarser forms of evil which house-visitation must do; and the mere business habits of accuracy and patience to which it compels them, are a valuable practical schooling for them themselves in after-life. It is tiresome and unsentimental drudgery, no doubt; but perhaps all the better training on that account. And, after all, the magic of sweetness, grace, and courtesy may shed a hallowing and humanising light over the meanest work, and the smile of God may spread from lip to lip, and the light of God from eye to eye, even between the giver and receiver of a penny, till the poor woman goes home, saying in her heart, "I have not only found the life of my hand—I have found a sister for time and for eternity."

But there is another field of parish usefulness which I cannot recommend too earnestly, and that is, the school. There you may work as hard as you will, and how you will—provided you do it in a loving, hearty, cheerful, *human* way, playful and yet earnest; two qualities which, when they exist in their highest power, are sure to go together. I say, how you will. I am no pedant about schools; I care less what is taught than how it is taught. The merest rudiments of Christianity, the merest rudiments of popular instruction, are enough, provided they be given by lips which speak as if they believed what they said, and with a look which shows real love for the pupil. Manner is everything—matter a secondary consideration; for in matter, brain only speaks to brain; in manner, soul speaks to soul. If you want Christ's lost-lambs really to believe that He died for them, you will do it better by one little act of interest and affection, than by making them learn by heart whole commentaries—even as Miss Nightingale has preached Christ crucified to those poor soldiers by acts of plain outward drudgery, more livingly, and really, and convincingly than she could have done by ten thousand sermons, and made many a noble lad, I doubt not, say in his heart, for the first time in his wild life, "I can believe now that Christ died for me, for here is one whom He has taught to die for me in like wise." And this blessed effect of school-work, remember, is not confined to the children. It goes home with them to the parents. The child becomes an object of interest and respect in their eyes, when they see it an object of interest and respect in yours. If they see that you look on it as an awful and glorious being, the child of God, the co-heir of Christ, they learn gradually to look on it in the same light. They become afraid and ashamed (and it is a noble fear and shame) to do and say before it what they used to do and say; afraid to ill-use it. It becomes to them a mysterious visitor (sad that it should be so, but true as sad) from a higher and purer sphere, who must be treated with something of courtesy and respect, who must even be asked to teach them something of its new knowledge; and the school, and the ladies' interest in the school, become to the degraded parents a living sign that those children's angels do indeed behold the face of their Father which is in heaven.

Now, there is one thing in school-work which I wish to press on you; and that is, that you should not confine your work to the girls; but bestow it as freely on those who need it more, and who (paradoxical as it may seem) will respond to it more deeply and freely—*the boys*. I am not going to enter into the reasons *why*. I only entreat you to believe me, that by helping to educate the boys, or even (when old enough), by taking a class (as I have seen done with admirable effect) of grown-up lads, you may influence for ever not only the happiness of your pupils, but of the girls whom they will hereafter marry. It will be a boon to your own sex as well as to ours to teach them courtesy, self-restraint, reverence for physical weakness, admiration of tenderness and gentleness; and it is one which only a lady can bestow. Only by being accustomed in youth to converse with ladies, will the boy learn to treat hereafter his sweetheart or his wife like a gentleman. There is a latent chivalry, doubt it not, in the heart of every untutored clod; if it dies out in him (as it too often does), it were better for him, I often think, if he had never been born: but the only talisman which will keep it alive, much more develop it into its fulness, is friendly and revering intercourse with women of higher rank than himself, between whom and him there is a great and yet a blessed gulf fixed.

I have left to the last the most important subject of all; and that is, what is called "visiting the poor." It is an endless subject; if you go into details, you might write volumes on it. All I can do

this afternoon is to keep to my own key-note, and say, Visit whom, when, and where you will; but let your visits be those of woman to woman. Consider to whom you go—to poor souls whose life, compared with yours, is one long malaise of body, and soul, and spirit—and do as you would be done by; instead of reproving and fault-finding, encourage. In God's name, encourage. They scramble through life's rocks, bogs, and thornbrakes, clumsily enough, and have many a fall, poor things! But why, in the name of a God of love and justice, is the lady, rolling along the smooth turnpike-road in her comfortable carriage, to be calling out all day long to the poor soul who drags on beside her over hedge and ditch, moss and moor, bare-footed and weary-hearted, with half-a-dozen children at her back: "You ought not to have fallen here; and it was very cowardly to lie down there; and it was your duty, as a mother, to have helped that child through the puddle; while, as for sleeping under that bush, it is most imprudent and inadmissible?" Why not encourage her, praise her, cheer her on her weary way by loving words, and keep your reproofs for yourself—even your advice; for *she* does get on her way, after all, where *you* could not travel a step forward; and she knows what she is about perhaps better than you do, and what she has to endure, and what God thinks of her life-journey. The heart knoweth its own bitterness, and a stranger intermeddleth not with its joy. But do not be a stranger to her. Be a sister to her. I do not ask you to take her up in your carriage. You cannot; perhaps it is good for her that you cannot. It is good sometimes for Lazarus that he is not fit to sit at Dives's feast —good for him that he should receive his evil things in this life, and be comforted in the life to come.

All I ask is, do to the poor soul as you would have her do to you in her place. Do not interrupt and vex her (for she is busy enough already) with remedies which she does not understand, for troubles which you do not understand. But speak comfortably to her, and say: "I cannot feel *with* you, but I do feel *for* you: I should enjoy helping you, but I do not know how—tell me. Tell me where the yoke galls; tell me why that forehead is grown old before its time: I may be able to ease the burden, to put fresh light into the eyes; and if not, still tell me, simply because I am a woman, and know the relief of pouring out my own soul into loving ears, even though in the depths of despair." Yes, paradoxical as it may seem, I am convinced that the only way to help these poor women humanly and really, is to begin by confessing to them that you do not know how to help them; to humble yourself to them, and to ask their counsel for the good of themselves and of their neighbours, instead of coming proudly to them, with nostrums ready compounded, as if a doctor should be so confident in his own knowledge of books and medicine as to give physic before asking the patient's symptoms.

Therefore, I entreat you to bear in mind (for without this all visiting of the poor will be utterly void and useless), that you must regulate your conduct to them, and in their houses, even to the most minute particulars, by the very same rules which apply to persons of your own class. Never let any woman say of you (thought fatal to all confidence, all influence!): "Yes, it is all very kind: but she does not behave to me as she would to one of her own quality." Piety, earnestness, affectionateness, eloquence—all may be nullified and stultified by simply keeping a poor woman standing in her own cottage while you sit, or entering her house, even at her own request, while she is at meals. She may decline to sit; she may beg you to come in, all the more reason for refusing utterly to obey her, because it shows that that very inward gulf between you and her still exists in her mind, which it is the object of your visit to bridge over. If you know her to be in trouble, touch on that trouble as you would with a lady. Woman's heart is alike in all ranks, and the deepest sorrow is the one of which she speaks the last and least. We should not like anyone—no, not an angel from heaven, to come into our houses without knocking at the door, and say: "I hear you are very ill off—I will lend you a hundred pounds. I think you are very careless of money, I will take your accounts into my own hands;" and still less again: "Your son is a very bad, profligate, disgraceful fellow, who is not fit to be mentioned; I intend to take him out of your hands and reform him myself." Neither do the poor like such unceremonious mercy, such untender tenderness, benevolence at horse-play, mistaking kicks for caresses. They do not like it, they will not respond to it, save in parishes which have been demoralised by officious and indiscriminate benevolence, and where the last remaining

virtues of the poor, savage self-help and independence, have been exchanged (as I have too often seen them exchanged) for organised begging and hypocrisy.

I would that you would all read, ladies, and consider well the traits of an opposite character which have just come to light (to me, I am ashamed to say, for the first time) in the Biography of Sidney Smith. The love and admiration which that truly brave and loving man won from everyone, rich or poor, with whom he came in contact, seems to me to have arisen from the one fact, that without perhaps having any such conscious intention, he treated rich and poor, his own servants and the noblemen his guests, alike, and *alike* courteously, considerately, cheerfully, affectionately—so leaving a blessing and reaping a blessing wheresoever he went.

Approach, then, these poor women as sisters, and you will be able gradually to reverse the hard saying of which I made use just now: "Do not apply remedies which they do not understand, to diseases which you do not understand." Learn lovingly and patiently (aye, and reverently, for there is that in every human being which deserves reverence, and must be reverenced if we wish to understand it)—learn, I say, to understand their troubles, and by that time they will have learnt to understand your remedies, and they will appreciate them. For you *have* remedies. I do not undervalue your position.

No man on earth is less inclined to undervalue the real power of wealth, rank, accomplishments, manners—even physical beauty. All are talents from God, and I give God thanks when I see them possessed by any human being; for I know that they, too, can be used in His service, and brought to bear on the true emancipation of woman—her emancipation, not from man (as some foolish persons fancy), but from the devil, "the slanderer and divider" who divides her from man, and makes her live a life-long tragedy, which goes on in more cottages than in palaces—a vie à part, a vie incomprise—a life made up half of ill-usage, half of unnecessary, self-willed, self-conceited martyrdom, instead of being (as God intended) half of the human universe, a helpmeet for man, and the one bright spot which makes this world endurable. Towards making her that, and so realising the primeval mission by every cottage hearth, each of you can do something; for each of you have some talent, power, knowledge, attraction between soul and soul, which the cottager's wife has not, and by which you may draw her to you with (as the prophet says) human bonds and the cords of love: but she must be drawn by them alone, or your work is nothing, and though you give the treasures of Ind, they are valueless equally to her and to Christ; for they are not given in His name, which is that boundless tenderness, consideration, patience, self-sacrifice, by which even the cup of cold water is a precious offering—as God grant your labour may be!

THE SCIENCE OF HEALTH. [2]

Whether the British race is improving or degenerating? What, if it seem probably degenerating, are the causes of so great an evil? How they can be, if not destroyed, at least arrested? These are questions worthy attention, not of statesmen only and medical men, but of every father and mother in these isles. I shall say somewhat about them in this Essay; and say it in a form which ought to be intelligible to fathers and mothers of every class, from the highest to the lowest, in hopes of convincing some of them at least that the science of health, now so utterly neglected in our curriculum of so-called education, ought to be taught—the rudiments of it at least—in every school, college, and university.

We talk of our hardy forefathers; and rightly. But they were hardy, just as the savage is usually hardy, because none but the hardy lived. They may have been able to say of themselves—as they do in a State paper of 1515, now well known through the pages of Mr. Froude: "What comyn folk of all the world may compare with the comyns of England, in riches, freedom, liberty, welfare, and all prosperity? What comyn folk is so mighty, and so strong in the felde, as the comyns of England?" They may have been fed on "great shins of beef," till they became, as Benvenuto Cellini calls them, "the English wild beasts." But they increased in numbers slowly, if at all, for centuries. Those terrible laws of natural selection, which issue in "the survival of the fittest," cleared off the less fit, in every generation, principally by infantile disease, often by wholesale famine and pestilence; and left, on the whole, only those of the strongest constitutions to perpetuate a hardy, valiant, and enterprising race.

At last came a sudden and unprecedented change. In the first years of this century, steam and commerce produced an enormous increase in the population. Millions of fresh human beings found employment, married, brought up children who found employment in their turn, and learnt to live more or less civilised lives. An event, doubtless, for which God is to be thanked. A quite new phase of humanity, bringing with it new vices and new dangers: but bringing, also, not merely new comforts, but new noblenesses, new generosities, new conceptions of duty, and of how that duty should be done. It is childish to regret the old times, when our soot-grimed manufacturing districts were green with lonely farms. To murmur at the transformation would be, I believe, to murmur at the will of Him without whom not a sparrow falls to the ground.

> The old order changeth, yielding place to the new,
> And God fulfils himself in many ways,
> Lest one good custom should corrupt the world.

Our duty is, instead of longing for the good old custom, to take care of the good new custom, lest it should corrupt the world in like wise. And it may do so thus:

The rapid increase of population during the first half of this century began at a moment when the British stock was specially exhausted; namely, about the end of the long French war. There may have been periods of exhaustion, at least in England, before that. There may have been one here, as there seems to have been on the Continent, after the Crusades; and another after the Wars of the Roses. There was certainly a period of severe exhaustion at the end of Elizabeth's reign, due both to the long Spanish and Irish wars and to the terrible endemics introduced from abroad; an exhaustion which may have caused, in part, the national weakness which hung upon us during the reign of the Stuarts. But after none of these did the survival of the less fit suddenly become more easy; or the discovery of steam power, and the acquisition of a colonial empire, create at once a fresh demand for human beings and a fresh supply of food for them. Britain, at the beginning of the nineteenth century, was in an altogether new social situation.

[2] The substance of this Essay was a lecture on Physical Education, given at the Midland Institute, Birmingham, in 1872.

At the beginning of the great French war; and, indeed, ever since the beginning of the war with Spain in 1739—often snubbed as the “war about Jenkins’s ear”—but which was, as I hold, one of the most just, as it was one of the most popular, of all our wars; after, too, the once famous “forty fine harvests” of the eighteenth century, the British people, from the gentleman who led to the soldier or sailor who followed, were one of the mightiest and most capable races which the world has ever seen, comparable best to the old Roman, at his mightiest and most capable period. That, at least, their works testify. They created—as far as man can be said to create anything—the British Empire. They won for us our colonies, our commerce, the mastery of the seas of all the world. But at what a cost!

Their bones are scattered far and wide,
By mount, and stream, and sea.

Year after year, till the final triumph of Waterloo, not battle only, but worse destroyers than shot and shell—fatigue and disease—had been carrying off our stoutest, ablest, healthiest young men, each of whom represented, alas! a maiden left unmarried at home, or married, in default, to a less able man. The strongest went to the war; each who fell left a weaklier man to continue the race; while of those who did not fall, too many returned with tainted and weakened constitutions, to injure, it may be, generations yet unborn. The middle classes, being mostly engaged in peaceful pursuits, suffered less of this decimation of their finest young men; and to that fact I attribute much of their increasing preponderance, social, political, and intellectual, to this very day. One cannot walk the streets of any of our great commercial cities without seeing plenty of men, young and middle-aged, whose whole bearing and stature shows that the manly vigour of our middle class is anything but exhausted. In Liverpool, especially, I have been much struck not only with the vigorous countenance, but with the bodily size of the mercantile men on ’Change. But it must be remembered always, first, that these men are the very élite of their class; the cleverest men; the men capable of doing most work; and next, that they are, almost all of them, from the great merchant who has his villa out of town, and perhaps his moor in the Highlands, down to the sturdy young volunteer who serves in the haberdasher’s shop, country-bred men; and that the question is, not what they are like now, but what their children and grandchildren, especially the fine young volunteer’s, will be like? A very serious question I hold that to be, and for this reason.

War is, without doubt, the most hideous physical curse which fallen man inflicts upon himself; and for this simple reason, that it reverses the very laws of nature, and is more cruel even than pestilence. For instead of issuing in the survival of the fittest, it issues in the survival of the less fit: and therefore, if protracted, must deteriorate generations yet unborn. And yet a peace such as we now enjoy, prosperous, civilised, humane, is fraught, though to a less degree, with the very same ill effect.

In the first place, tens of thousands—who knows it not?—lead sedentary and unwholesome lives, stooping, asphyxiated, employing as small a fraction of their bodies as of their minds. And all this in dwellings, workshops, what not?—the influences, the very atmosphere of which tend not to health, but to unhealth, and to drunkenness as a solace under the feeling of unhealth and depression.

And that such a life must tell upon their offspring, and if their offspring grow up under similar circumstances, upon their offspring’s offspring, till a whole population may become permanently degraded, who does not know? For who that walks through the by-streets of any great city does not see? Moreover, and this is one of the most fearful problems with which modern civilisation has to deal—we interfere with natural selection by our conscientious care of life, as surely as does war itself. If war kills the most fit to live, we save alive those who—looking at them from a merely physical point of view—are most fit to die. Everything which makes it more easy to live; every sanitary reform, prevention of pestilence, medical discovery, amelioration of climate, drainage of soil, improvement in dwelling-houses, workhouses, gaols; every reformatory school, every hospital, every cure of drunkenness, every influence, in short, which has—so I am told—increased the average

length of life in these islands, by nearly one-third, since the first establishment of life insurances, one hundred and fifty years ago; every influence of this kind, I say, saves persons alive who would otherwise have died; and the great majority of these will be, even in surgical and zymotic cases, those of least resisting power, who are thus preserved to produce in time a still less powerful progeny.

Do I say that we ought not to save these people if we can? God forbid. The weakly, the diseased whether infant or adult, is here on earth; a British citizen; no more responsible for his own weakness than for his own existence. Society, that is, in plain English, we and our ancestors, are responsible for both; and we must fulfil the duty, and keep him in life; and, if we can, heal, strengthen, develop him to the utmost; and make the best of that which "fate and our own deservings" have given us to deal with. I do not speak of higher motives still; motives which, to every minister of religion, must be paramount and awful. I speak merely of physical and social motives, such as appeal to the conscience of every man—the instinct which bids every human-hearted man or woman to save life, alleviate pain, like Him who causes His sun to shine on the evil and on the good, and His rain to fall on the just and on the unjust.

But it is palpable that in doing so we must, year by year, preserve a large percentage of weakly persons who, marrying freely in their own class, must produce weaklier children, and they weaklier children still. Must, did I say? There are those who are of opinion—and I, after watching and comparing the histories of many families, indeed of every one with whom I have come in contact for now five-and-thirty years, in town and country, can only fear that their opinion is but too well founded on fact—that in the great majority of cases, in all classes whatsoever, the children are not equal to their parents, nor they, again, to their grand-parents of the beginning of the century; and that this degrading process goes on most surely and most rapidly in our large towns, and in proportion to the antiquity of those towns, and therefore in proportion to the number of generations during which the degrading influences have been at work.

This and cognate dangers have been felt more and more deeply, as the years have rolled on, by students of human society. To ward them off, theory after theory has been put on paper, especially in France, which deserve high praise for their ingenuity, less for their morality, and, I fear, still less for their common sense. For the theorist in his closet is certain to ignore, as inconvenient to the construction of his Utopia, certain of those broad facts of human nature which every active parish priest, medical man, or poor-law guardian has to face every day of his life.

Society and British human nature are what they have become by the indirect influences of long ages, and we can no more reconstruct the one than we can change the other. We can no more mend men by theories than we can by coercion—to which, by-the-bye, almost all these theorists look longingly as their final hope and mainstay. We must teach men to mend their own matters, of their own reason, and their own free-will. We must teach them that they are the arbiters of their own destinies; and, to a fearfully large degree, of their children's destinies after them. We must teach them not merely that they ought to be free, but that they are free, whether they know it or not, for good and for evil. And we must do that in this case, by teaching them sound practical science; the science of physiology as applied to health. So, and so only, can we cheek—I do not say stop entirely —though I believe even that to be ideally possible; but at least cheek the process of degradation which I believe to be surely going on, not merely in these islands, but in every civilised country in the world, in proportion to its civilisation.

It is still a question whether science has fully discovered those laws of hereditary health, the disregard of which causes so many marriages disastrous to generations yet unborn. But much valuable light has been thrown on this most mysterious and most important subject during the last few years. That light—and I thank God for it—is widening and deepening rapidly. And I doubt not that in a generation or two more, enough will be known to be thrown into the shape of practical and provable rules; and that, if not a public opinion, yet at least, what is more useful far, a widespread private

opinion will grow up, especially among educated women, which will prevent many a tragedy and save many a life.

But, as to the laws of personal health: enough, and more than enough, is known already, to be applied safely and easily by any adults, however unlearned, to the preservation not only of their own health, but of that of their children.

The value of healthy habitations, of personal cleanliness, of pure air and pure water, of various kinds of food, according as each tends to make bone, fat, or muscle, provided only—provided only—that the food be unadulterated; the value of various kinds of clothing, and physical exercise, of a free and equal development of the brain power, without undue overstrain in any one direction; in one word, the method of producing, as far as possible, the mentem sanam in corpore sano, and the wonderful and blessed effects of such obedience to those laws of nature, which are nothing but the good will of God expressed in facts—their wonderful and blessed tendency, I say, to eliminate the germs of hereditary disease, and to actually regenerate the human system—all this is known; known as fully and clearly as any human knowledge need be known; it is written in dozens of popular books and pamphlets. And why should this divine voice, which cries to man, tending to sink into effeminate barbarism through his own hasty and partial civilisation: “It is not too late. For your bodies, as for your spirits, there is an upward, as well as a downward path. You, or if not you, at least the children whom you have brought into the world, for whom you toil, for whom you hoard, for whom you pray, for whom you would give your lives,—they still may be healthy, strong, it may be beautiful, and have all the intellectual and social, as well as the physical advantages, which health, strength, and beauty give.”—Ah, why is this divine voice now, as of old, Wisdom crying in the streets, and no man regarding her? I appeal to women, who are initiated, as we men can never be, into the stern mysteries of pain, and sorrow, and self-sacrifice;—they who bring forth children, weep over children, slave for children, and, if they have none of their own, then slave, with the holy instinct of the sexless bee, for the children of others—Let them say, shall this thing be?

Let my readers pardon me if I seem to write too earnestly. That I speak neither more nor less than the truth, every medical man knows full well. Not only as a very humble student of physiology, but as a parish priest of thirty years’ standing, I have seen so much unnecessary misery; and I have in other cases seen similar misery so simply avoided; that the sense of the vastness of the evil is intensified by my sense of the easiness of the cure.

Why, then—to come to practical suggestions—should there not be opened in every great town in these realms a public school of health? It might connect itself with—I hold that it should form an integral part of—some existing educational institute. But it should at least give practical lectures, for fees small enough to put them within the reach of any respectable man or woman, however poor, I cannot but hope that such schools of health, if opened in the great manufacturing towns of England and Scotland, and, indeed, in such an Irish town as Belfast, would obtain pupils in plenty, and pupils who would thoroughly profit by what they hear. The people of these towns are, most of them, specially accustomed by their own trades to the application of scientific laws. To them, therefore, the application of any fresh physical laws to a fresh set of facts, would have nothing strange in it. They have already something of that inductive habit of mind which is the groundwork of all rational understanding or action. They would not turn the deaf and contemptuous ear with which the savage and the superstitious receive the revelation of nature’s mysteries. Why should not, with so hopeful an audience, the experiment be tried far and wide, of giving lectures on health, as supplementary to those lectures on animal physiology which are, I am happy to say, becoming more and more common? Why should not people be taught—they are already being taught at Birmingham—something about the tissues of the body, their structure and uses, the circulation of the blood, respiration, chemical changes in the air respired, amount breathed, digestion, nature of food, absorption, secretion, structure of the nervous system—in fact, be taught something of how their own bodies are made and how they work? Teaching of this kind ought to, and will, in some more civilised age and country, be held a necessary

element in the school course of every child, just as necessary as reading, writing, and arithmetic; for it is after all the most necessary branch of that "technical education" of which we hear so much just now, namely, the technic, or art, of keeping oneself alive and well.

But we can hardly stop there. After we have taught the condition of health, we must teach also the condition of disease; of those diseases specially which tend to lessen wholesale the health of townsfolk, exposed to an artificial mode of life. Surely young men and women should be taught something of the causes of zymotic disease, and of scrofula, consumption, rickets, dipsomania, cerebral derangement, and such like. They should be shown the practical value of pure air, pure water, unadulterated food, sweet and dry dwellings. Is there one of them, man or woman, who would not be the safer and happier, and the more useful to his or her neighbours, if they had acquired some sound notions about those questions of drainage on which their own lives and the lives of their children may every day depend? I say—women as well as men. I should have said women rather than men. For it is the women who have the ordering of the household, the bringing up of the children; the women who bide at home, while the men are away, it may be at the other end of the earth.

And if any say, as they have a right to say—"But these are subjects which can hardly be taught to young women in public lectures;" I rejoin—of course not, unless they are taught by women—by women, of course, duly educated and legally qualified. Let such teach to women, what every woman ought to know, and what her parents will very properly object to her hearing from almost any man. This is one of the main reasons why I have, for twenty years past, advocated the training of women for the medical profession; and one which countervails, in my mind, all possible objections to such a movement. And now, thank God, we are seeing the common sense of Great Britain, and indeed of every civilised nation, gradually coming round to that which seemed to me, when I first conceived of it, a dream too chimerical to be cherished save in secret—the restoring woman to her natural share in that sacred office of healer, which she held in the Middle Ages, and from which she was thrust out during the sixteenth century.

I am most happy to see, for instance, that the National Health Society, [3] which I earnestly recommend to the attention of my readers, announces a "Course of Lectures for Ladies on Elementary Physiology and Hygiene," by a lady, to which I am also most happy to see, governesses are admitted at half-fees. Alas! how much misery, disease, and even death might have been prevented, had governesses been taught such matters thirty years ago, I, for one, know too well. May the day soon come when there will be educated women enough to give such lectures throughout these realms, to rich as well as poor—for the rich, strange to say, need them often as much as the poor do—and that we may live to see, in every great town, health classes for women as well as for men, sending forth year by year more young women and young men taught, not only to take care of themselves and of their families, but to exercise moral influence over their fellow-citizens, as champions in the battle against dirt and drunkenness, disease and death.

There may be those who would answer—or rather, there would certainly have been those who would have so answered thirty years ago, before the so-called materialism of advanced science had taught us some practical wisdom about education, and reminded people that they have bodies as well as minds and souls—"You say, we are likely to grow weaklier, unhealthier. And if it were so, what matter? Mind makes the man, not body. We do not want our children to be stupid giants and bravos; but clever, able, highly educated, however weakly Providence or the laws of nature may have chosen to make them. Let them overstrain their brains a little; let them contract their chests, and injure their digestion and their eyesight, by sitting at desks, poring over books. Intellect is what we want. Intellect makes money. Intellect makes the world. We would rather see our son a genius than a mere athlete." Well: and so would I. But what if intellect alone does not even make money, save as Messrs. Dodson and Fogg, Sampson Brass, and Montagu Tigg were wont to make it, unless backed by an

[3] 9, Adam Street, Adelphi, London.

able, enduring, healthy physique, such as I have seen, almost without exception, in those successful men of business whom I have had the honour and the pleasure of knowing? What if intellect, or what is now called intellect, did not make the world, or the smallest wheel or cog of it? What if, for want of obeying the laws of nature, parents bred up neither a genius nor an athlete, but only an incapable unhappy personage, with a huge upright forehead, like that of a Byzantine Greek, filled with some sort of pap instead of brains, and tempted alternately to fanaticism and strong drink? We must, in the great majority of cases, have the *corpus sanem* if we want the *mentem sanem*; and healthy bodies are the only trustworthy organs for healthy minds. Which is cause and which is effect, I shall not stay to debate here. But wherever we find a population generally weakly, stunted, scrofulous, we find in them a corresponding type of brain, which cannot be trusted to do good work; which is capable more or less of madness, whether solitary or epidemic. It may be very active; it may be very quick at catching at new and grand ideas—all the more quick, perhaps, on account of its own secret malaise and self-discontent; but it will be irritable, spasmodic, hysterical. It will be apt to mistake capacity of talk for capacity of action, excitement for earnestness, virulence for force, and, too often; cruelty for justice. It will lose manful independence, individuality, originality; and when men act, they will act from the consciousness of personal weakness, like sheep rushing over a hedge, leaning against each other, exhorting each other to be brave, and swaying about in mobs and masses. These were the intellectual weaknesses which, as I read history, followed on physical degradation in Imperial Rome, in Alexandria, in Byzantium. Have we not seen them reappear, under fearful forms, in Paris but the other day?

I do not blame; I do not judge. My theory, which I hold, and shall hold, to be fairly founded on a wide induction, forbids me to blame and to judge; because it tells me that these defects are mainly physical; that those who exhibit them are mainly to be pitied, as victims of the sins or ignorance of their forefathers.

But it tells me too, that those who, professing to be educated men, and therefore bound to know better, treat these physical phenomena as spiritual, healthy, and praiseworthy; who even exasperate them, that they may make capital out of the weaknesses of fallen man, are the most contemptible and yet the most dangerous of public enemies, let them cloak their quackery under whatsoever patriotic, or scientific, or even sacred words.

There are those again honest, kindly, sensible, practical men, many of them; men whom I have no wish to offend; whom I had rather ask to teach me some of their own experience and common sense, which has learned to discern, like good statesmen, not only what ought to be done, but what can be done—there are those, I say, who would sooner see this whole question let alone. Their feeling, as far as I can analyse it, seems to be that the evils of which I have been complaining, are on the whole inevitable; or, if not, that we can mend so very little of them, that it is wisest to leave them alone altogether, lest, like certain sewers, “the more you stir them, the more they smell.” They fear lest we should unsettle the minds of the many for whom these evils will never be mended; lest we make them discontented; discontented with their houses, their occupations, their food, their whole social arrangements; and all in vain.

I should answer, in all courtesy and humility—for I sympathise deeply with such men and women, and respect them deeply likewise—but are not people discontented already, from the lowest to the highest? And ought a man, in such a piecemeal, foolish, greedy, sinful world as this is, and always has been, to be anything but discontented? If he thinks that things are going all right, must he not have a most beggarly conception of what going right means? And if things are not going right, can it be anything but good for him to see that they are not going right? Can truth and fact harm any human being? I shall not believe so, as long as I have a Bible wherein to believe. For my part, I should like to make every man, woman, and child whom I meet discontented with themselves, even as I am discontented with myself. I should like to awaken in them, about their physical, their intellectual, their moral condition, that divine discontent which is the parent, first of upward aspiration and then

of self-control, thought, effort to fulfil that aspiration even in part. For to be discontented with the divine discontent, and to be ashamed with the noble shame, is the very germ and first upgrowth of all virtue. Men begin at first, as boys begin when they grumble at their school and their schoolmasters, to lay the blame on others; to be discontented with their circumstances—the things which stand around them; and to cry, "Oh that I had this!" "Oh that I had that!" But by that way no deliverance lies. That discontent only ends in revolt and rebellion, social or political; and that, again, still in the same worship of circumstances—but this time desperate—which ends, let it disguise itself under what fine names it will, in what the old Greeks called a tyranny; in which—as in the Spanish republics of America, and in France more than once—all have become the voluntary slaves of one man, because each man fancies that the one man can improve his circumstances for him.

But the wise man will learn, like Epictetus the heroic slave, the slave of Epaphroditus, Nero's minion—and in what baser and uglier circumstances could human being find himself?—to find out the secret of being truly free; namely, to be discontented with no man and no thing save himself. To say not—"Oh that I had this and that!" but "Oh that I were this and that!" Then, by God's help—and that heroic slave, heathen though he was, believed and trusted in God's help—"I will make myself that which God has shown me that I ought to be and can be."

Ten thousand a year, or ten million a year, as Epictetus saw full well, cannot mend that vulgar discontent with circumstances which he had felt—and who with more right?—and conquered, and despised. For that is the discontent of children, wanting always more holidays and more sweets. But I wish my readers to have, and to cherish, the discontent of men and women.

Therefore I would make men and women discontented, with the divine and wholesome discontent, at their own physical frame, and at that of their children. I would accustom their eyes to those precious heirlooms of the human race, the statues of the old Greeks; to their tender grandeur, their chaste healthfulness, their unconscious, because perfect might: and say—There; these are tokens to you, and to all generations yet unborn, of what man could be once; of what he can be again if he will obey those laws of nature which are the voice of God. I would make them discontented with the ugliness and closeness of their dwellings; I would make them discontented with the fashion of their garments, and still more just now the women, of all ranks, with the fashion of theirs; and with everything around them which they have the power of improving, if it be at all ungraceful, superfluous, tawdry, ridiculous, unwholesome. I would make them discontented with what they call their education, and say to them—You call the three Royal R's education? They are not education: no more is the knowledge which would enable you to take the highest prizes given by the Society of Arts, or any other body. They are not education: they are only instruction; a necessary groundwork, in an age like this, for making practical use of your education: but not the education itself.

And if they asked me, What then education meant? I should point them, first, I think, to noble old Lilly's noble old "Euphues," of three hundred years ago, and ask them to consider what it says about education, and especially this passage concerning that mere knowledge which is nowadays strangely miscalled education. "There are two principal and peculiar gifts in the nature of man, knowledge and reason. The one"—that is reason—"commandeth, and the other"—that is knowledge —"obeyeth. These things neither the whirling wheel of fortune can change, nor the deceitful cavillings of worldlings separate, neither sickness abate, nor age abolish." And next I should point them to those pages in Mr. Gladstone's "Juventus Mundi," where he describes the ideal training of a Greek youth in Homer's days; and say—There: that is an education fit for a really civilised man, even though he never saw a book in his life; the full, proportionate, harmonious educing-that is, bringing out and developing—of all the faculties of his body, mind, and heart, till he becomes at once a reverent yet self-assured, a graceful and yet a valiant, an able and yet an eloquent personage.

And if any should say to me—"But what has this to do with science? Homer's Greeks knew no science;" I should rejoin—But they had, pre-eminently above all ancient races which we know, the scientific instinct; the teachableness and modesty; the clear eye and quick ear; the hearty reverence

for fact and nature, and for the human body, and mind, and spirit; for human nature in a word, in its completeness, as the highest fact upon this earth. Therefore they became in after years, not only the great colonisers and the great civilisers of the old world—the most practical people, I hold, which the world ever saw; but the parents of all sound physics as well as of all sound metaphysics. Their very religion, in spite of its imperfections, helped forward their education, not in spite of, but by means of that anthropomorphism which we sometimes too hastily decry. As Mr. Gladstone says: "As regarded all other functions of our nature, outside the domain of the life to Godward—all those functions which are summed up in what St. Paul calls the flesh and the mind, the psychic and bodily life, the tendency of the system was to exalt the human element, by proposing a model of beauty, strength, and wisdom, in all their combinations, so elevated that the effort to attain them required a continual upward strain. It made divinity attainable; and thus it effectually directed the thought and aim of man

Along the line of limitless desires.

Such a scheme of religion, though failing grossly in the government of the passions, and in upholding the standard of moral duties, tended powerfully to produce a lofty self-respect, and a large, free, and varied conception of humanity. It incorporated itself in schemes of notable discipline for mind and body, indeed of a lifelong education; and these habits of mind and action had their marked results (to omit many other greatnesses) in a philosophy, literature, and art, which remain to this day unrivalled or unsurpassed."

So much those old Greeks did for their own education, without science and without Christianity. We who have both: what might we not do, if we would be true to our advantages, and to ourselves?

THE TWO BREATHS [4]

Ladies,—I have been honoured by a second invitation to address you, and I dare not refuse it; because it gives me an opportunity of speaking on a matter, knowledge and ignorance about which may seriously affect your health and happiness, and that of the children with whom you may have to do. I must apologise if I say many things which are well known to many persons in this room: they ought to be well known to all: but it is generally best to assume total ignorance in one's hearers, and to begin from the beginning.

I shall try to be as simple as possible; to trouble you as little as possible with scientific terms; to be practical; and at the same time, if possible, interesting.

I should wish to call this lecture "The Two Breaths:" not merely "The Breath;" and for this reason: every time you breathe you breathe two different breaths; you take in one, you give out another. The composition of those two breaths is different. Their effects are different. The breath which has been breathed out must not be breathed in again. To tell you why it must not would lead me into anatomical details, not quite in place here as yet; though the day will come, I trust, when every woman entrusted with the care of children will be expected to know something about them. But this I may say: Those who habitually take in fresh breath will probably grow up large, strong, ruddy, cheerful, active, clear-headed, fit for their work. Those who habitually take in the breath which has been breathed out by themselves, or any other living creature, will certainly grow up, if they grow up at all, small, weak, pale, nervous, depressed, unfit for work, and tempted continually to resort to stimulants, and become drunkards.

If you want to see how different the breath breathed out is from the breath taken in, you have only to try a somewhat cruel experiment, but one which people too often try upon themselves, their children, and their workpeople. If you take any small animal with lungs like your own—a mouse, for instance—and force it to breathe no air but what you have breathed already; if you put it in a close box, and while you take in breath from the outer air, send out your breath through a tube, into that box, the animal will soon faint: if you go on long with this process, it will die.

Take a second instance, which I beg to press most seriously on the notice of mothers, governesses, and nurses. If you allow a child to get into the habit of sleeping with its head under the bed-clothes, and thereby breathing its own breath over and over again, that child will assuredly grow pale, weak, and ill. Medical men have cases on record of scrofula appearing in children previously healthy, which could only be accounted for from this habit, and which ceased when the habit stopped. Let me again entreat your attention to this undoubted fact.

Take another instance, which is only too common: If you are in a crowded room, with plenty of fire and lights and company, doors and windows all shut tight, how often you feel faint—so faint that you may require smelling-salts or some other stimulant. The cause of your faintness is just the same as that of the mouse's fainting in the box; you and your friends, and, as I shall show you presently, the fire and the candles likewise, having been all breathing each other's breaths, over and over again, till the air has become unfit to support life. You are doing your best to enact over again the Highland tragedy, of which Sir James Simpson tells in his lectures to the working-classes of Edinburgh, when at a Christmas meeting thirty-six persons danced all night in a small room with a low ceiling, keeping the doors and windows shut. The atmosphere of the room was noxious beyond description; and the effect was, that seven of the party were soon after seized with typhus fever, of which two died. You are inflicting on yourselves the torments of the poor dog, who is kept at the Grotto del Cane, near Naples, to be stupefied, for the amusement of visitors, by the carbonic acid gas of the Grotto, and brought to life again by being dragged into the fresh air; nay, you are inflicting upon yourselves the

[4] A Lecture delivered at Winchester, May 31, 1869.

torments of the famous Black Hole of Calcutta: and, if there was no chimney in the room, by which some fresh air could enter, the candles would soon burn blue, as they do, you know, when ghosts appear; your brains become disturbed; and you yourselves ran the risk of becoming ghosts, and the candles of actually going out.

Of this last fact there is no doubt; for if, instead of putting a mouse into the box, you will put a lighted candle, and breathe into the tube as before, however gently, you will in a short time put the candle out.

Now, how is this? First, what is the difference between the breath you take in and the breath you give out? And next, why has it a similar effect on animal life and a lighted candle?

The difference is this. The breath which you take in is, or ought to be, pure air, composed, on the whole, of oxygen and nitrogen, with a minute portion of carbonic acid.

The breath which you give out is an impure air, to which has been added, among other matters which will not support life, an excess of carbonic acid.

That this is the fact you can prove for yourselves by a simple experiment. Get a little lime-water at the chemist's, and breathe into it through a glass tube; your breath will at once make the lime-water milky. The carbonic acid of your breath has laid hold of the lime, and made it visible as white carbonate of lime—in plain English, as common chalk.

Now I do not wish, as I said, to load your memories with scientific terms: but I beseech you to remember at least these two, oxygen gas and carbonic acid gas; and to remember that, as surely as oxygen feeds the fire of life, so surely does carbonic acid put it out.

I say, "the fire of life." In that expression lies the answer to our second question: Why does our breath produce a similar effect upon the mouse and the lighted candle? Every one of us is, as it were, a living fire. Were we not, how could we be always warmer than the air outside us? There is a process; going on perpetually in each of us, similar to that by which coals are burnt in the fire, oil in a lamp, wax in a candle, and the earth itself in a volcano. To keep each of those fires alight, oxygen is needed; and the products of combustion, as they are called, are more or less the same in each case—carbonic acid and steam.

These facts justify the expression I just made use of—which may have seemed to some of you fantastical—that the fire and the candles in the crowded room were breathing the same breath as you were. It is but too true. An average fire in the grate requires, to keep it burning, as much oxygen as several human beings do; each candle or lamp must have its share of oxygen likewise, and that a very considerable one, and an average gas-burner—pray attend to this, you who live in rooms lighted with gas—consumes as much oxygen as several candles. All alike are making carbonic acid. The carbonic acid of the fire happily escapes up the chimney in the smoke: but the carbonic acid from the human beings and the candles remains to poison the room, unless it be ventilated.

Now, I think you may understand one of the simplest, and yet most terrible, cases of want of ventilation—death by the fumes of charcoal. A human being shut up in a room, of which every crack is closed, with a pan of burning charcoal, falls asleep, never to wake again. His inward fire is competing with the fire of charcoal for the oxygen of the room; both are making carbonic acid out of it: but the charcoal, being the stronger of the two, gets all the oxygen to itself, and leaves the human being nothing to inhale but the carbonic acid which it has made. The human being, being the weaker, dies first: but the charcoal dies also. When it has exhausted all the oxygen of the room, it cools, goes out, and is found in the morning half-consumed beside its victim. If you put a giant or an elephant, I should conceive, into that room, instead of a human being, the case would be reversed for a time: the elephant would put out the burning charcoal by the carbonic acid from his mighty lungs; and then, when he had exhausted all the air in the room, die likewise of his own carbonic acid.

Now, I think, we may see what ventilation means, and why it is needed.

Ventilation means simply letting out the foul air, and letting in the fresh air; letting out the air which has been breathed by men or by candles, and letting in the air which has not. To understand

how to do that, we must remember a most simple chemical law, that a gas as it is warmed expands, and therefore becomes lighter; as it cools, it contracts, and becomes heavier.

Now the carbonic acid in the breath which comes out of our mouth is warm, lighter than the air, and rises to the ceiling; and therefore in any unventilated room full of people, there is a layer of foul air along the ceiling. You might soon test that for yourselves, if you could mount a ladder and put your heads there aloft. You do test it for yourselves when you sit in the galleries of churches and theatres, where the air is palpably more foul, and therefore more injurious, than down below.

Where, again, work-people are employed in a crowded house of many storeys, the health of those who work on the upper floors always suffers most.

In the old monkey-house of the Zoological Gardens, when the cages were on the old plan, tier upon tier, the poor little fellows in the uppermost tier—so I have been told—always died first of the monkey's constitutional complaint, consumption, simply from breathing the warm breath of their friends below. But since the cages have been altered, and made to range side by side from top to bottom, consumption—I understand—has vastly diminished among them.

The first question in ventilation, therefore, is to get this carbonic acid safe out of the room, while it is warm and light and close to the ceiling; for if you do not, this happens: The carbonic acid gas cools and becomes heavier; for carbonic acid, at the same temperature as common air, is so much heavier than common air, that you may actually—if you are handy enough—turn it from one vessel to another, and pour out for your enemy a glass of invisible poison. So down to the floor this heavy carbonic acid comes, and lies along it, just as it lies often in the bottom of old wells, or old brewers' vats, as a stratum of poison, killing occasionally the men who descend into it. Hence, as foolish a practice as I know is that of sleeping on the floor; for towards the small hours, when the room gets cold, the sleeper on the floor is breathing carbonic acid.

And here one word to those ladies who interest themselves with the poor. The poor are too apt in times of distress to pawn their bedsteads and keep their beds. Never, if you have influence, let that happen. Keep the bedstead, whatever else may go, to save the sleeper from the carbonic acid on the floor.

How, then, shall we get rid of the foul air at the top of the room? After all that has been written and tried on ventilation, I know no simpler method than putting into the chimney one of Arnott's ventilators, which may be bought and fixed for a few shillings; always remembering that it must be. fixed into the chimney as near the ceiling as possible. I can speak of these ventilators from twenty-five years' experience. Living in a house with low ceilings, liable to become overcharged with carbonic acid, which produces sleepiness in the evening, I have found that these ventilators keep the air fresh and pure; and I consider the presence of one of these ventilators in a room more valuable than three or four feet additional height of ceiling. I have found, too, that their working proves how necessary they are, from this simple fact: You would suppose that, as the ventilator opens freely into the chimney, the smoke would be blown down through it in high winds, and blacken the ceiling: but this is just what does not happen. If the ventilator be at all properly poised, so as to shut with a violent gust of wind, it will at all other moments keep itself permanently open; proving thereby that there is an up-draught of heated air continually escaping from the ceiling up the chimney. Another very simple method of ventilation is employed in those excellent cottages which Her Majesty has built for her labourers round Windsor. Over each door a sheet of perforated zinc, some eighteen inches square, is fixed; allowing the foul air to escape into the passage; and in the ceiling of the passage a similar sheet of zinc, allowing it to escape into the roof. Fresh air, meanwhile, should be obtained from outside, by piercing the windows, or otherwise. And here let me give one hint to all builders of houses: If possible, let bedroom windows open at the top as well as at the bottom.

Let me impress the necessity of using some such contrivances, not only on parents and educators, but on those who employ workpeople, and above all on those who employ young women in shops or in work-rooms. What their condition may be in this city I know not; but most painful

it has been to me in other places, when passing through warehouses or workrooms, to see the pale, sodden, and, as the French would say, "etiolated" countenances of the girls who were passing the greater part of the day in them; and painful, also, to breathe an atmosphere of which habit had, alas! made them unconscious, but which to one coming out of the open air was altogether noxious, and shocking also; for it was fostering the seeds of death, not only in the present but future generations.

Why should this be? Everyone will agree that good ventilation is necessary in a hospital, because people cannot get well without fresh air. Do they not see that by the same reasoning good ventilation is necessary everywhere, because people cannot remain well without fresh air? Let me entreat those who employ women in workrooms, if they have no time to read through such books as Dr. Andrew Combe's "Physiology applied to Health and Education," and Madame de Wahl's "Practical Hints on the Moral, Mental, and Physical Training of Girls," to procure certain tracts published by Messrs. Jarrold, Paternoster Row, for the Ladies' Sanitary Association; especially one which bears on this subject: "The Black-hole in our own Bedrooms;" Dr. Lankester's "School Manual of Health;" or a manual on ventilation, published by the Metropolitan Working Classes Association for the Improvement of Public Health.

I look forward—I say it openly—to some period of higher civilisation, when the Acts of Parliament for the ventilation of factories and workshops shall be largely extended, and made far more stringent; when officers of public health shall be empowered to enforce the ventilation of every room in which persons are employed for hire: and empowered also to demand a proper system of ventilation for every new house, whether in country or in town. To that, I believe, we must come: but I had sooner far see these improvements carried out, as befits the citizens of a free country, in the spirit of the Gospel rather than in that of the Law; carried out, not compulsorily and from fear of fines, but voluntarily, from a sense of duty, honour, and humanity. I appeal, therefore, to the good feeling of all whom it may concern, whether the health of those whom they employ, and therefore the supply of fresh air which they absolutely need, are not matters for which they are not, more or less, responsible to their country and their God.

And if any excellent person of the old school should answer me: "Why make all this fuss about ventilation? Our forefathers got on very well without it"—I must answer that, begging their pardons, our ancestors did nothing of the kind. Our ancestors got on usually very ill in these matters: and when they got on well, it was because they had good ventilation in spite of themselves.

First. They got on very ill. To quote a few remarkable instances of longevity, or to tell me that men were larger and stronger on the average in old times, is to yield to the old fallacy of fancying that savages were peculiarly healthy, because those who were seen were active and strong. The simple answer is, that the strong alone survived, while the majority died from the severity of the training. Savages do not increase in number; and our ancestors increased but very slowly for many centuries. I am not going to disgust my audience with statistics of disease: but knowing something, as I happen to do, of the social state and of the health of the Middle and Elizabethan Ages, I have no hesitation in saying that the average of disease and death was far greater then than it is now. Epidemics of many kinds, typhus, ague, plague—all diseases which were caused more or less by bad air—devastated this land and Europe in those days with a horrible intensity, to which even the choleras of our times are mild. The back streets, the hospitals, the gaols, the barracks, the camps—every place in which any large number of persons congregated, were so many nests of pestilence, engendered by uncleanliness, which defiled alike the water which was drunk and the air which was breathed; and as a single fact, of which the tables of insurance companies assure us, the average of human life in England has increased twenty-five per cent. since the reign of George I., owing simply to our more rational and cleanly habits of life.

But secondly, I said that when our ancestors got on well, they did so because they got ventilation in spite of themselves. Luckily for them, their houses were ill-built; their doors and windows would not shut. They had lattice-windowed houses, too; to live in one of which, as I can testify from long

experience, is as thoroughly ventilating as living in a lantern with the horn broken out. It was because their houses were full of draughts, and still more, in the early Middle Age, because they had no glass, and stopped out the air only by a shutter at night, that they sought for shelter rather than for fresh air, of which they sometimes had too much; and, to escape the wind, built their houses in holes, such as that in which the old city of Winchester stands. Shelter, I believe, as much as the desire to be near fish in Lent, and to occupy the rich alluvium of the valleys, made the monks of Old England choose the river-banks for the sites of their abbeys. They made a mistake therein, which, like most mistakes, did not go unpunished. These low situations, especially while the forests were yet thick on the hills around, were the perennial haunts of fever and ague, produced by subtle vegetable poisons, carried in the carbonic acid given off by rotten vegetation. So there, again, they fell in with man's old enemy—bad air. Still, as long as the doors and windows did not shut, some free circulation of air remained. But now, our doors and windows shut only too tight. We have plate-glass instead of lattices; and we have replaced the draughty and smoky, but really wholesome open chimney, with its wide corners and settles, by narrow registers, and even by stoves. We have done all we can, in fact, to seal ourselves up hermetically from the outer air, and to breath our own breaths over and over again; and we pay the penalty of it in a thousand ways unknown to our ancestors, through whose rooms all the winds of heaven whistled, and who were glad enough to shelter themselves from draughts in the sitting-room by the high screen round the fire, and in the sleeping-room by the thick curtains of the four-post bedstead, which is now rapidly disappearing before a higher civilisation. We therefore absolutely require to make for ourselves the very ventilation from which our ancestors tried to escape.

But, ladies, there is an old and true proverb, that you may bring a horse to the water, but you cannot make him drink. And in like wise it is too true, that you may bring people to the fresh air, but you cannot make them breath it. Their own folly, or the folly of their parents and educators, prevents their lungs being duly filled and duly emptied. Therefore the blood is not duly oxygenated, and the whole system goes wrong. Paleness, weakness, consumption, scrofula, and too many other ailments, are the consequences of ill-filled lungs. For without well-filled lungs, robust health is impossible.

And if anyone shall answer: "We do not want robust health so much as intellectual attainment; the mortal body, being the lower organ, must take its chance, and be even sacrificed, if need be to the higher organ—the immortal mind"—To such I reply, You cannot do it. The laws of nature, which are the express will of God, laugh such attempts to scorn. Every organ of the body is formed out of the blood; and if the blood be vitiated, every organ suffers in proportion to its delicacy; and the brain, being the most delicate and highly specialised of all organs, suffers most of all, and soonest of all, as everyone knows who has tried to work his brain when his digestion was the least out of order. Nay, the very morals will suffer. From ill-filled lungs, which signify ill-repaired blood, arise year by year an amount not merely of disease, but of folly, temper, laziness, intemperance, madness, and, let me tell you fairly, crime—the sum of which will never be known till that great day when men shall be called to account for all deeds done in the body, whether they be good or evil.

I must refer you on this subject again to Andrew Combe's "Physiology," especially chapters iv. and vii.; and also to chapter x. of Madame de Wahl's excellent book. I will only say this shortly, that the three most common causes of ill-filled lungs, in children and in young ladies, are stillness, silence, and stays.

First, stillness; a sedentary life, and want of exercise. A girl is kept for hours sitting on a form writing or reading, to do which she must lean forward; and if her schoolmistress cruelly attempts to make her sit upright, and thereby keep the spine in an attitude for which Nature did not intend it, she is thereby doing her best to bring on that disease, so fearfully common in girls' schools, lateral curvature of the spine. But practically the girl will stoop forward. And what happens? The lower ribs are pressed into the body, thereby displacing more or less something inside. The diaphragm in the meantime, which is the very bellows of the lungs, remains loose; the lungs are never properly filled or emptied; and an excess of carbonic acid accumulates at the bottom of them. What follows?

Frequent sighing to get rid of it; heaviness of head; depression of the whole nervous system under the influence of the poison of the lungs; and when the poor child gets up from her weary work, what is the first thing she probably does? She lifts up her chest, stretches, yawns, and breathes deeply—Nature's voice, Nature's instinctive cure, which is probably regarded as ungraceful, as what is called "lolling" is. As if sitting upright was not an attitude in itself essentially ungraceful, and such as no artist would care to draw. As if "lolling," which means putting the body in the attitude of the most perfect ease compatible with a fully-expanded chest, was not in itself essentially graceful, and to be seen in every reposing figure in Greek bas-reliefs and vases; graceful, and like all graceful actions, healthful at the same time. The only tolerably wholesome attitude of repose, which I see allowed in average school-rooms, is lying on the back on the floor, or on a sloping board, in which case the lungs must be fully expanded. But even so, a pillow, or some equivalent, ought to be placed under the small of the back: or the spine will be strained at its very weakest point.

I now go on to the second mistake—enforced silence. Moderate reading aloud is good: but where there is any tendency to irritability of throat or lungs, too much moderation cannot be used. You may as well try to cure a diseased lung by working it, as to cure a lame horse by galloping him. But where the breathing organs are of average health let it be said once and for all, that children and young people cannot make too much noise. The parents who cannot bear the noise of their children have no right to have brought them into the world. The schoolmistress who enforces silence on her pupils is committing—unintentionally no doubt, but still committing—an offence against reason, worthy only of a convent. Every shout, every burst of laughter, every song—nay, in the case of infants, as physiologists well know, every moderate fit of crying—conduces to health, by rapidly filling and emptying the lung, and changing the blood more rapidly from black to red, that is, from death to life. Andrew Combe tells a story of a large charity school, in which the young girls were, for the sake of their health, shut up in the hall and school-room during play hours, from November till March, and no romping or noise allowed. The natural consequences were, the great majority of them fell ill; and I am afraid that a great deal of illness has been from time to time contracted in certain school-rooms, simply through this one cause of enforced silence. Some cause or other there must be for the amount of ill-health and weakliness which prevails especially among girls of the middle classes in towns, who have not, poor things, the opportunities which richer girls have, of keeping themselves in strong health by riding, skating, archery,—that last quite an admirable exercise for the chest and lungs, and far preferable to croquet, which involves too much unwholesome stooping.—Even a game of ball, if milliners and shop-girls had room to indulge in one after their sedentary work, might bring fresh spirits to many a heart, and fresh colour to many a cheek.

I spoke just now of the Greeks. I suppose you will all allow that the Greeks were, as far as we know, the most beautiful race which the world ever saw. Every educated man knows that they were also the cleverest of all races; and, next to his Bible, thanks, God for Greek literature.

Now, these people had made physical as well as intellectual education a science as well as a study. Their women practised graceful, and in some cases even athletic, exercises. They developed, by a free and healthy life, those figures which remain everlasting and unapproachable models of human beauty: but—to come to my third point—they wore no stays. The first mention of stays that I have ever found is in the letters of dear old Synesius, Bishop of Cyrene, on the Greek coast of Africa, about four hundred years after the Christian era. He tells us how, when he was shipwrecked on a remote part of the coast, and he and the rest of the passengers were starving on cockles and limpets, there was among them a slave girl out of the far East, who had a pinched wasp-waist, such as you may see on the old Hindoo sculptures, and such as you may see in any street in a British town. And when the Greek ladies of the neighbourhood found her out, they sent for her from house to house, to behold, with astonishment and laughter, this new and prodigious, waist, with which it seemed to them it was impossible for a human being to breathe or live; and they petted the poor girl, and fed her, as they might a dwarf or a giantess, till she got quite fat and comfortable, while her owners had

not enough to eat. So strange and ridiculous seemed our present fashion to the descendants of those who, centuries before, had imagined, because they had seen living and moving, those glorious statues which we pretend to admire, but refuse to imitate.

It seems to me that a few centuries hence, when mankind has learnt to fear God more, and therefore to obey more strictly those laws of nature and of science which are the will of God—it seems to me, I say, that in those days the present fashion of tight lacing will be looked back upon as a contemptible and barbarous superstition, denoting a very low level of civilisation in the peoples which have practised it. That for generations past women should have been in the habit—not to please men, who do not care about the matter as a point of beauty—but simply to vie with each other in obedience to something called fashion—that they should, I say, have been in the habit of deliberately crushing that part of the body which should be specially left free, contracting and displacing their lungs, their heart, and all the most vital and important organs, and entailing thereby disease, not only on themselves but on their children after them; that for forty years past physicians should have been telling them of the folly of what they have been doing; and that they should as yet, in the great majority of cases, not only turn a deaf ear to all warnings, but actually deny the offence, of which one glance of the physician or the sculptor, who know what shape the human body ought to be, brings them in guilty—this, I say, is an instance of—what shall I call it?—which deserves at once the lash, not merely of the satirist, but of any theologian who really believes that God made the physical universe.

Let me, I pray you, appeal to your common sense for a moment. When any one chooses a horse or a dog, whether for strength, for speed, or for any other useful purpose, the first thing almost to be looked at is the girth round the ribs; the room for heart and lungs. Exactly in proportion to that will be the animal's general healthiness, power of endurance, and value in many other ways. If you will look at eminent lawyers and famous orators, who have attained a healthy old age, you will see that in every case they are men, like the late Lord Palmerston, and others whom I could mention, of remarkable size, not merely in the upper, but in the lower part of the chest; men who had, therefore, a peculiar power of using the diaphragm to fill and to clear the lungs, and therefore to oxygenate the blood of the whole body. Now, it is just these lower ribs, across which the diaphragm is stretched like the head of a drum, which stays contract to a minimum. If you advised owners of horses and hounds to put their horses or their hounds into stays, and lace them up tight, in order to increase their beauty, you would receive, I doubt not, a very courteous, but certainly a very decided, refusal to do that which would spoil not merely the animals themselves, but the whole stud or the whole kennel for years to come. And if you advised an orator to put himself into tight stays, he, no doubt, again would give a courteous answer; but he would reply—if he was a really educated man—that to comply with your request would involve his giving up public work, under the probable penalty of being dead within the twelve-month.

And how much work of every kind, intellectual as well as physical, is spoiled or hindered; how many deaths occur from consumption and other complaints which are the result of this habit of tight lacing, is known partly to the medical men, who lift up their voices in vain, and known fully to Him who will not interfere with the least of His own physical laws to save human beings from the consequences of their own wilful folly.

And now—to end this lecture with more pleasing thoughts—What becomes of this breath which passes from your lips? Is it merely harmful; merely waste? God forbid! God has forbidden that anything should be merely harmful or merely waste in this so wise and well-made world. The carbonic acid which passes from your lips at every breath—ay, even that which oozes from the volcano crater when the eruption is past—is a precious boon to thousands of things of which you have daily need.

Indeed there is a sort of hint at physical truth in the old fairy tale of the girl, from whose lips, as she spoke, fell pearls and diamonds; for the carbonic acid of your breath may help hereafter to make the pure carbonate of lime of a pearl, or the still purer carbon of a diamond. Nay, it may go—in such a world of transformations do we live—to make atoms of coal strata, which after being buried for ages

beneath deep seas, shall be upheaved in continents which are yet unborn, and there be burnt for the use of a future race of men, and resolved into their original elements. Coal, wise men tell us, is on the whole breath and sunlight; the breath of living creatures who have lived in the vast swamps and forests of some primeval world, and the sunlight which transmuted that breath into the leaves and stems of trees, magically locked up for ages in that black stone, to become, when it is burnt at last, light and carbonic acid as it was at first. For though you must not breathe your breath again, you may at least eat your breath, if you will allow the sun to transmute it for you into vegetables; or you may enjoy its fragrance and its colour in the shape of a lily or a rose. When you walk in a sunlit garden, every word you speak, every breath you breathe, is feeding the plants and flowers around. The delicate surface of the green leaves absorbs the carbonic acid, and parts it into its elements, retaining the carbon to make woody fibre, and courteously returning you the oxygen to mingle with the fresh air, and be inhaled by your lungs once more. Thus do you feed the plants; just as the plants feed you: while the great life-giving sun feeds both; and the geranium standing in the sick child's window does not merely rejoice his eye and mind by its beauty and freshness, but repays honestly the trouble spent on it; absorbing the breath which the child needs not, and giving to him the breath which he needs.

Конец ознакомительного фрагмента.