

Health, or, How to Live

HEALTH:
OR
HOW TO LIVE.

NUMBER ONE.

"Beloved, I wish above all things that thou mayest prosper and be in HEALTH, even as thy soul prospereth." 3 John 1:2.

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[Digital Edition's Note: This work was a series of six pamphlets compiled from various writers and published under the title "Health, or How to Live" with each pamphlet paged separately. However, in this digital collection the material will be paged consecutively throughout as follow:

Number One: pages 1-64

Number Two: pages 65-128 (64 pages)

Number Three: pages 129-192 (64 pages)

Number Four: pages 193-256 (64 pages)

Number Five: pages 257-336 (80 pages)

Number Six: pages 337-400 (64 pages)

James White wrote the Introduction, at the end of which he noted that Ellen White was contributing one article for each of the six pamphlets. The Ellen White material will also be found in 2SM411-479. We chose to leave her articles here as well. As will be gathered from a reading of the other material (such as the report on the visit to "Our Home"), James White was both a contributor and the compiler. His notes will also be found at the beginning of Numbers Two and Three.]

NUMBER ONE

"Beloved, I wish above all things that thou mayest prosper and be in HEALTH, even as thy soul prospereth." 3 John 1:2.

INTRODUCTION

In introducing to the public a series of Pamphlets on health it is proper that we should distinctly state that we claim no skill to cure the sick. This is not our work. Our mission in this direction is to draw from personal experience, from the word of God, and from the writings of able and experienced health reformers, facts for the common people, which we ardently hope may teach them how to preserve vital force, live healthily, save doctor's bills, and be better qualified to bear with cheerfulness the ills of this mortal life.

We are deeply impressed with the great fact that grains and fruits are the proper food for man. These are best, and generally far the cheapest, which is a worthy consideration for the poor. Cheerful toil, or exercise, proper rest in sleep, air, water and light, are Heaven's great remedies. To use these properly should be the study of the people. This leaving our souls with the ministers and our bodies with the doctors, and we pass along ignorant of our real hold of either earth or Heaven, is bad business.

It is our custom to urgently invite the people to come to the Bible and to Christ, and learn the way to everlasting life for themselves. We would also invite their attention to the great fact that it is their privilege to learn how to live more healthfully and more happily.

Mrs White designs to furnish a liberal chapter in each Pamphlet on health, the happiness and miseries of domestic life, and the bearing which these have upon the prospects of obtaining the life to come. JAMES WHITE.

HOW TO LIVE.

THE LADDER WITH EIGHT ROUNDS: OR BIBLE SANCTIFICATION

"SIMON PETER, a servant and an apostle of Jesus Christ, to them that have obtained like precious faith with us through the righteousness of God and our Saviour Jesus Christ, grace and peace be multiplied unto you through the knowledge of God, and of Jesus our Lord, according as his divine power hath given unto us

all things that pertain unto life and godliness, through the knowledge of him that hath called us to glory and virtue; whereby are given unto us exceeding great and precious promises; that by these ye might be partakers of the divine nature, having escaped the corruption that is in the world through lust. And besides this, giving all diligence, add to your faith, virtue; and to virtue, knowledge; and to knowledge, temperance; and to temperance, patience; and to patience, godliness; and to godliness, brotherly kindness; and to brotherly kindness, charity. For if these things be in you, and abound, they make you that ye shall neither be barren nor unfruitful in the knowledge of our Lord Jesus Christ. But he that lacketh these things is blind, and cannot see afar off, and hath forgotten that he was purged from his old sins. Wherefore the rather, brethren, give diligence to make your calling and election sure: for if ye do these things, ye shall never fall; for so an entrance shall be ministered unto you abundantly into the everlasting kingdom of our Lord and Saviour Jesus Christ." 2Pet.1:1-11.

This quotation from Peter is a clear and beautiful

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illustration of the advances in the Christian life which constitute Bible sanctification. In introducing this subject we call attention to the following points!

1. The apostle addresses young converts, or those who have just "obtained like precious faith," and sets before them the victories to be obtained, or the graces to be added, in their order, necessary to insure an admittance into the everlasting kingdom of our Lord and Saviour Jesus Christ.

2. If the apostle regarded a happy frame of mind as alone constituting sanctification, then we might expect him to illustrate the victories of the onward course in the Christian life by higher and still higher flights of feeling. But in this quotation he is silent in regard to feeling, and presents progress in well-doing as the basis of true sanctification. The love of God shed abroad in the heart, enlightening the mind, and purifying the affections, is the result of faith in Jesus Christ while living in obedience to the word. Such blessedness, resulting from walking in the self-denying path of

obedience, in Bible sanctification. It is certainly the privilege of the true Christian, who walks in willing obedience to the word, to enjoy all that peace and fullness of joy expressed in the Bible. But to make flights of feeling constitute the sum total of sanctification, is to expose the minds of inexperienced disciples to the wildest freaks of fanaticism.

3. Peter's progressive work system of sanctification is safe to embrace and follow, as it leads to all that faith and hope can grasp. It secures an abundant entrance into the everlasting kingdom of our Lord and Saviour Jesus Christ.

4. The apostle teaches the young Christian to progress by the simple rule of addition, with an all-persevering hand, all the way through to the kingdom. We may illustrate his system of sanctification by a ladder with eight rounds, reaching from earth to Heaven, or from a state of sin to a condition of moral fitness for the kingdom of God. Here are the rounds of the ladder: "And besides this giving all diligence, add to your

SANCTIFICATION

- "1. FAITH (upon which the young disciple stands),
- "2. VIRTUE; and to virtue,
- "3. KNOWLEDGE; and to knowledge,
- "4. TEMPERANCE; and to temperance,
- "5. PATIENCE; and to patience,
- "6. GODLINESS; and to godliness,
- "7. BROTHERLY KINDNESS; and to brotherly kindness
- "8. CHARITY," or love, the crowning Christian grace.

The order in which the apostle has given these progressive steps is worthy of especial notice. The young disciple, who has just embraced the faith of the gospel, must first add to his faith, virtue, and then to virtue, knowledge. He may have been vicious; at least, he may have lacked the principles of real virtue. His first work is to seek for purity of thought, words, and acts. Then, in a pure mind and heart, he may add knowledge of the word of God to enable him to defend his position before the world. Some make a careless stride over the first round, and seek to add to their faith,

knowledge. They neglect to cultivate virtue, and labor to store their minds with knowledge, that they may be able to argue down their neighbors. Such seldom turn men from error to truth; but frequently, from their lack of piety, disgust and prejudice those with whom they mingle. They may talk the truth, but it is poorly represented by them. The food they offer is good of itself, but tastes badly of the dish. They generally become self-righteous, and say in their hearts, "I am rich, and increased with goods, and have need of nothing," and they know not that they are "wretched, and miserable, and poor, and blind, and naked."

Who can but admire the order in which the apostle has given the victories in the christian life? He continues, "and to knowledge, temperance: and to temperance, patience." The intemperate man cannot be a patient Christian; hence he must add temperance first, then patience will be an easy victory. The man who uses intoxicating drinks is seldom a patient man. Intemperance in eating, either in quantity, or in the rich quality, or in both, deranges the system, causes dyspepsia, affects the nerves; depresses the spirits,

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sours the temper, and renders the epicure unfit for the exercise of true Christian patience. We live in an unfortunate age, when men move from impulse more than from reason. The appetite must be gratified regardless of results. In the preparation of food, the taste and not the stomach, is generally consulted.

But while we object to high-seasoned, greasy food, we would not recommend an impoverished diet, but plain, nourishing food. Thus prayed Agur, "Feed me with food convenient for me," Prov.30:8.

But we must come a little closer and speak of the filthy habit, and results of using tobacco. Probably no one at first loved the taste of tobacco. It was a task to learn to use it. Yet millions contract this strong habit, useless, inconvenient, expensive, filthy, and annoying to women, and children, and temperate men, and are slaves to it till their death.

If tobacco had been known and used by any of the descendants of Abraham in the days of Moses, or by any of the nations around

them, endangering the purity of the Israelites, God would have given them a law forbidding its use, in harmony with the principles of purity and cleanliness taught that people. And when we come to the New Testament we may see that every declaration requiring purity, cleanliness, and self-denial, is a plain rebuke on tobacco-using.

But many professing Christians will continue the use of tobacco because it is not convenient to leave it off. Was it convenient for their Lord to die on Calvary? If we suffer, we shall also reign with him. What! a cross-bearing, tobacco-eating, tobacco-smoking, tobacco-snuffing, follower of the crucified One! This is but a trifle short of a burlesque upon the Christian religion.

But physicians recommend tobacco as a medicine. May God pity them! Tobacco will not remove disease. It is a cause of disease itself. It may change the form of disease in some cases; so will the small pox, and the ague and fever. But who would expose himself at the pest-house, or to the miasma of a Michigan marsh, to find relief from some of the trifling ailments to which human nature is heir?

The habitual use of tobacco is injurious to the constitution. As one proof of this we refer to those who have become so nervous and shattered by long using this slow poison that they are compelled to abandon it. Says a veteran tobacco-user, "I have used it thirty years, and I do not see that it has much influence on me." Well, you certainly had a good constitution on the start, or you would now probably be in your grave. But if tobacco is not deranging your system, and injuring your constitution, what makes you feel so dreadfully when your tobacco-box is emptied, and the stimulating influence of the filthy weed is gone from you? You may have been without it twenty-four or forty-eight hours. How strangely you felt. Your head seemed to you thrice its usual size. And how wonderfully numb and strange you felt around the mouth and throat. In this deplorable condition a trifle would irritate you and make you manifest impatience, to be ashamed of afterward.

God has made us wisely, and nature will do her work well unless intruded upon, and wearied to feebleness by receiving into the system the influence of stimulating poisons. When the work of nature has been thus disturbed, and the habit fully formed, the steam must be kept up, or the poor slave to a morbid appetite is in trouble. Interrupted and enfeebled nature cannot rally in a moment to take the place of the intruder, and oh, the demand just now for a little more tobacco! But keep the base intruder back, and give nature time to rally and fill her place, and the appetite becomes natural, the hankering is gone, and health improves.

And as far as the health is injured by the use of tobacco, so far the mind is affected, and one of the evil results is impatience; hence in the onward victories of Bible sanctification, patience is preceded by temperance.

We come a little closer yet and ask, Why use tea and coffee? In point of filth these cannot be classed with tobacco; but they are as useless, and more expensive. In regard to their influence on the health, we use the same arguments as in the case of tobacco. The reason why those who have for years used strong tea, especially

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females, rise in the morning with such bad feelings at the stomach and in the head, is because the stimulating influence of tea is gone, and they find relief only in a good strong cup of tea. Sleep will restore the temperate person, and to him or her, the morning hours are the clearest and the best.

The drunkard lies down upon his couch at night under the influence of liquor; the tobacco-slave casts aside his well-chewed quid to smoke his pipe before retiring to rest, and the tea-drinker goes to rest under the influence of strong tea. In the morning they rise with languid feelings, while a cloud of melancholy hangs over them, and they are in danger of getting impatient unless domestic matters move off smoothly. But the drunkard goes for his dram, and he feels better, for the steam is up again, while the others find similar relief in their morning rations of tobacco and tea.

And are any of these real Christians? Some think they are. Doubtful Christians, these! And do they think of meeting Jesus at

his coming with a smile while their lips and beard are stained with tobacco, and their whole system and soul tainted with it! May God have mercy, and help them to cleanse themselves "from all filthiness of the flesh and spirit, perfecting holiness in the fear of God." 2Cor.7:1. This is Bible holiness. When men, seeking for the grace of life, are thus cleansed from their idols, the light of Heaven will illuminate their minds, and enable them in all the walks of life to exhibit true Christian patience.

The apostle continues, "and to patience, godliness; and to godliness, brotherly-kindness; and to brotherly-kindness, charity." He who has added to faith virtue, and to virtue, knowledge, and to knowledge temperance, and to temperance, patience, has so far escaped the corruptions of this world that he may understand the principles of true godliness. His idols are slain, therefore he has no other gods before the Lord. He now loves God supremely, and delights to do his commandments.

And he who loves the Lord God with all the heart,

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and with all the soul, and with all the mind, will love his brother as himself, and the manifestation of brotherly-kindness will be natural and easy. Hence he who adds godliness will also add brotherly-kindness. Charity, or the perfect love of God, next comes in as the crowning Christian grace, constituting the highest round in the ladder of Bible sanctification.

The apostle continues in language most pointed as he applies the subject to the hearts and consciences of the people of God. Weigh well his words: "For if these things be in you and abound, they make you that ye shall neither be barren (margin, idle) nor unfruitful in the knowledge of our Lord Jesus Christ. But he that lacketh these things is blind, and cannot see afar off, and hath forgotten that he was purged from his old sins. Wherefore the rather, brethren, give diligence to *make your calling and election sure; for if ye do these things ye shall never fall*, for so an entrance shall be ministered unto you abundantly into the everlasting kingdom of our Lord Jesus Christ."

In conclusion we notice the following points:

1. The conditions stated - "if ye do these things" - if ye ascend the ladders, step by step, and overcome and gain the specified victories. Then these things will be in you and abound.

2. In so doing there is safety - "ye shall never fall." Then let those who are trembling with fear that at some future time they will fall, cast aside such fears and in confidence ascent the way to life.

3. Those who lack these things are blind and forgetful. They cannot see afar off, and have forgotten that they were purged from their old sins.

4. Peter's view of election. He does not teach that all men are elected to salvation or destruction, and that their fate is unalterably fixed before they are born, and leave them in Satan's easy chair; but he exhorts his brethren to diligence to make their calling and election sure.

5. The reward. The apostle in his first epistle, chap.1:2, says, "Grace unto you, and peace be multiplied." He teaches sanctification by the rule of addition; but holds forth spiritual blessings to be enjoyed

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in this life by the obedient by the rule of multiplication. But in this connection he presents before those who "do these things" their final reward. "An entrance shall be ministered unto you abundantly into the everlasting kingdom of our Lord and Saviour Jesus Christ."

The ministration of an abundant entrance into the city of God means something more than a mere permission to pass in. Those who have honored their lives by well-doing, and have ascended the ladder of Bible sanctification step by step, will be conducted in triumph into the metropolis of the kingdom of God. Jesus overcame, and as he ascended to the Father's throne, attending angels in triumph shouted, "Lift up your heads, O ye gates, and be ye lift up, ye everlasting doors, and the King of glory shall come in." And in response to the inquiry, "Who is the King of glory?" they again shouted, "The Lord, strong and mighty, the Lord, strong in battle." Ps.24:7,8.

In like manner those who overcome and sit upon the throne of the Son, as he overcame and sat down upon the throne of the Father, will be escorted thither with triumph, while the voice of Jesus will be heard saying, Come, ye blessed of my Father, inherit the kingdom prepared for you. Welcome to the tree of life! and the crystal waters! Welcome to all the joys of the kingdom forever.

"OUR HOME:" OR THREE WEEKS AT DANSVILLE, NEW YORK

IN the month of September, 1864, Mrs. W. and self spent three weeks at the health institution at Dansville, Liv. Co., N. Y., called "Our Home." Our object in this visit was not to take treatment, as we were enjoying better health than usual; but to see what we could see, and hear what we could hear, so as to be able to give to many inquiring friends a somewhat definite report.

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As far as location and buildings are concerned, we cannot do better than to copy from the statement of Dr. Jackson addressed to Prof. Albert Hopkins, and Prof. John Bascon, Williams College, Williamstown, Mass., given in the Laws of Life for Sept. 1864, as follows:

"I doubt whether on the whole continent of America there can be found a spot better calculated, from the various combinations of health-preserving agencies, to develop good health in its population than this. In looking around to see in what direction, and to what extent, combinations of hygienic agencies exist here, we find:

"(A) Very fine and bracing air.

"(B) Abundance of sunlight.

"(C) Pure water.

"(D) A mild climate, especially in winter.

"(E) Beautiful landscape scenery.

"(F) Seclusion, or natural conditions for quiet, being located contiguous to a thriving village of about four thousand inhabitants, yet far enough from it to make us entirely independent of any

unhealthful conditions which closer contact might naturally, and would almost necessarily create.

"The house we purchased at the time of our coming here had been built about four years. It consisted of the main or center part of our present group of buildings, including a kitchen attachment, was four stories high, forty feet wide, one hundred feet long; and was finished, *after a fashion*, in its lower and second stories, the third and fourth being simply inclosed. There was no cellar under the main building. Now, we have put under the whole length of the building a large cellar, have built on the south end of the house a fine piazza three stories high and extending across the whole breadth of it. On the north end of the building which we purchased, we have put up what we call the "new part," consisting of a building four stories, and three stories high, eighty feet in length and thirty feet in width, giving us a work room, store room, bakery, bath and packing rooms for ladies, and large and extensive suites of rooms. Back of this, we have

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built a wing, two stories high, and sixty feet in length by thirty in width, containing bath room, dressing room, packing room and lodging rooms for gentlemen.

"On the south end, connecting with the south piazza, by a corridor which is sixteen feet high, ten feet wide and one hundred and fifteen feet long, which makes a beautiful place in the summer, and a warm promenade in the winter, we have erected a building and named it "LIBERTY HALL." It is sixty-five feet long, thirty-two feet wide and eighteen feet high between joints, with a fine cupola, finished in ornate style, and both in design and construction is an honor to the architect. This Hall is our play-room, lecture room, and chapel. By means of our south Piazza and corridor, persons can walk from the north end of our building to Liberty Hall - a distance of three hundred feet - without being exposed at all to currents of cold air."

The Physicians of the institution, as stated in the Laws of Life for December, are,

"JAMES C. JACKSON, M.D., Physician-in-chief,
"F. WILSON HURD, M. D.,)
"MISS HARRIET N. AUSTIN, M. D.,) Associate
"MRS. MARY H. YORK, M. D.,) Physicians.
"HORATIO S. LAY, M. D.,)

In September there were at the Cure nearly three hundred patients. Their numbers have since increased, as we learned of Dr. Lay in December, to nearly four hundred.

Baths given at "Our Home" are not as cold, neither given as frequently, as we expected to find them. They are tempered to the conditions and diseases of patients so as generally to be regarded by them as a luxury instead of with feelings of dread. The most heroic treatment, which a score of years since caused much prejudice upon the public mind against water as a curative agent, is abandoned by all well-informed hydropathic physicians. In our opinion no one, however low and sensitive to cold, need fear being injured by water at this institution.

The tables are spread with an abundance of plain

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and nourishing food, which becomes a daily luxury to the patients, as the natural and healthful condition of the taste is restored. The glutton, who gratifies his depraved appetite with swine's flesh, grease, gravies, spices, etc., etc., on looking over Dr. Hurd's Tract on Cookery, may in his ignorance regard this style of living as a system of starvation. But a few weeks' experience at "Our Home" would correct his appetite, so that he would eat plain, simple, and nutritious food with a far better relish than he now does that which is unnatural and hurtful. We never saw men and women gather around tables more cheerfully, and eat more heartily, than the patients at Dansville. The uniformity and sharpness of appetite was wonderful for a crowd of patients. It was the general leanness and lankness of these persons alone that could give the idea that they were sick. Besides the usual rounds of excellently-cooked wheat meal mushes, wheat meal biscuits, cakes, and pies, and occasionally other varieties, we found the tables bountifully loaded with the fruits of the season, such as apples, peaches, and grapes.

No one need fear of starving at "Our Home." There is greater danger of eating too much. The appetite of the feeble patient, who has been pining with loss of appetite over fashionable food, becomes natural and sharp, so that simple food is eaten with all that keen relish with which healthy country school children devour plain food. The food being nutritious, and the appetite keen, the danger of that class of patients who have become feebly by self-indulgence, is decidedly in the direction of eating too much.

The change from the common meat-eating, greasy style of living, to a plain and healthful diet, is indeed a great change, and with some it requires time for its accomplishment. Those who are performing hard labor, whether physical or mental, should make the change gradually. It is distinctly taught by the physicians at the Dansville health institution that it endangers the constitution to make so great a change suddenly, while taxing the mental or physical energies. With their arrangements of pleasant exercise, and their noon season of quiet and rest, the change is

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easily and safely made. As we had lived almost entirely without meat, grease, and spices, for more than a year, we were in a condition to have our wants in the line of food fully met at the tables at "Our Home."

The manners of all connected with this institution, from the physician-in-chief down to the attendants in the bath-rooms, were affable and cheerful, in harmony with the friendly name - "Our Home." As a physician Dr. Jackson is unquestionably master of his business. He is a clear and impressive speaker, and is decidedly thorough in whatever he undertakes.

The morning lectures, most frequently from Dr. Jackson, but occasionally from Dr. Hurd, were able, and deeply interesting. All who were able were required to attend the lectures at Liberty Hall, and perform their daily prescribed walks upon the hillside, or descend into the village. In all their amusements we could not unite. For the object for which they were intended, and when confined to the institution, these seem less objectionable. But we fear the influence of card-playing and dancing, upon young men

and women, who at the same time profess to be Christians, when they shall leave the institution and be exposed to the vices so common with card-players and dancers. But it is just to say that the patients are left to the greatest freedom of conscience in these matters. The views and feelings of the most conscientious Sabbath-keeper are treated with tenderness and respect the same as those of the popular, pleasure-loving professor.

It should be understood that this is not a theological institute It is emphatically a hygienic institution, a "Home" for the suffering invalid, where he can, if not too low, recover lost health, and learn to no longer insult the Maker by abusing the laws of his being. The religion at the institution is of about the same stripe of the popular professors everywhere, all of which, as is generally understood, we think needs reforming in about the same ratio that the able Doctors of "Our Home" think the popular practice needs reforming.

To the inquiry of many - "Are they not Spiritualists at Dansville?" - we would say that we neither saw nor heard more of Spiritualism at "Our Home" than

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we see and hear in any community where they do not profess this ism. Two things at least have a tendency to give the impression that this class of health reformers are Spiritualists; first, the popular publications of Dr. Trall are offered for sale in connection with the most rabid works on Spiritualism and women's rights; and second, at "Our Home" the ladies wear what is commonly called the short dress, which is so frequently worn in its ultra style by brazen-faced and doubtful female Spiritualists. These things have a tremendous prejudicial influence abroad against the invaluable good of this institution. We recognize the principles from which arise the valid objections to the present fashionable style of woman's dress, and look for a remedy that will save to the world her appearance as a woman, and save her from public ridicule, and to herself influence. But we have serious objections to woman's dress being so long as to constitute her a street-sweeper, and we strongly incline to the opinion that existing evils in her dress can be fully removed without

adopting those extremes which we sometimes witness. More on this subject hereafter.

Some of the cures performed are marvelous. Charles Melville, the only little son of Eld. J. N. Andrews, is a case of note. This boy became lame in one of his legs. His hip and leg seemed withering, and malformation appeared to be taking place in the ankle. To see this brilliant little fellow literally drag his leg after him, was enough to touch a heart of stone. He was placed under the care of the physicians at "Our Home," and in the period of fifteen weeks was so far recovered as to be returned to his parents. And when we saw him, a few days later, he would run and skip about the yard, as nimbly as other boys. The size of his leg was increasing, and the cure promised full restoration. Any good father or mother would, if the world were theirs, and purest gold, cut it in two and give half of it for such a cure on such a son.

A brother King, more than sixty years of age, came to "Our Home" from Massachusetts in August, 1864, with a cancer broken out upon the lip. In December following he was sent home cured. Under the popular

practice his life would have been regarded of little more worth than a three-cent postage-stamp. We might mention others, but these are the most noted.

Prices of board and treatment, though reasonable for the times, are higher than people in common circumstances in life can afford to pay for a very lengthy sojourn at Dansville, unless their cases are very urgent. Critical cases, unless beyond all reasonable hope, we would recommend to the care of the skillful Physicians at Dansville. To these who are active yet suffering from failing health we urgently recommend health publications, a good assortment of which we design to keep on hand. Friends, read up in time to successfully change your habits, and live in harmony with the laws of life. And to those who call themselves well, we would say. As you value the blessings of health, and would honor the Author of your being, learn to live in obedience to those laws established in your being by High Heaven. A few dollars' worth of books, that will

teach you how to live, may save you heavy doctor bills, save you months of pain upon a sick bed, save you suffering and feebleness from the use of drugs, and, perhaps from a premature grave. God has strongly related man to life. If he will live in obedience to the laws of life, and give nature a chance, she will manifest her wondrous power in restoring the sick, and in preserving health to those who are well.

FLESH AS FOOD FOR MAN

THIS is the title of a fine Tract written by H. C. Jackson, M. D., Physician-in-chief at Our Home, and for sale by F. Wilson Hurd and Co., Dansville, N. Y. We quote largely from it as follows:

"1. Nature has divided the vertebrate animals, or those animals who have back-bones into two classes - those who are *scavengers*, and those who are not. The scavengers are those who live upon animal or vegetable

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matter when it is in a *putrescent* state, eating it *with more relish* when in the early stages of decomposition. By thus doing, they through their existence subserve a valuable purpose; they preserve the lives and secure the health of beings of a higher organization. The purpose of the Creator in making them is manifest, but he never made them as *food for man*. All *flesh-eating* animals are *scavengers*, and so are *omnivorous* animals; and uniformly these are animals low in the scale of organization. Of those in the sea, the oyster and shell fish are examples, and were it not for them the ocean would become a mass of putridity, whose pestilential exhalations would exhaust all life within itself, and on the land also. Of those on the land, THE HOG is at the head; he is the *illustrious* scavenger. From the filthiest heap of decaying vegetables, from the excrements of animals superior in organization to himself, to the putrid carcass of such animals, *the hog never turns away*. He has in his gross and filthy body made visible the object for which he was created; it is to work up into his own tissues putrescent and effete organic matters, and *thus* subserve the ends of human existence. His mission - if a hog

can have a mission - is to dispose of, to get out of the way, *filthy* matters, He is of all the back-boned animals the *scavenger-in-chief*. Does it need an unusual degree of *common sense* to conclude that in thus organizing and classifying him, the Creator did not design that MAN - the creature made in his own image - should make him a staple for *food*? Pure human instinct would decide this question quickly. The hog has uses *outside* the alimental department. Vegetarians leave him there, where God placed him, without thinking it at all needful to find a reason for his having been created in *eating* him.

"Just in proportion as the earth is brought under human culture, and its resources properly developed, do the scavenger class of animals die, "*pass away*." If they live, they need care at the hand of man. The hog originally wild, needs domestication in order to preserve his existence. Occupying the soil for his own uses, man circumscribes the means of livelihood to the hog, and so is forced to bring him under his special

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care, or have him become extinct. The same fate would await him that has overtaken the wolf, the cougar, the lion, and tiger, wherever they have existed and man has made settlements. All animals whose end of existence is to *devour*, must give way as man tills and improves the earth and his own condition, to animals which along with their propensity to eat have in themselves *substantial qualities for use*. Whenever any people shall have become so far civilized and enlightened by Christianity as to have nothing *filthy* about them for the hog to devour, they will cease to be so *filthy* as to *devour him*. Meanwhile, they will keep up their present *filthy* relation of making *him scavenger* to all the dead and decaying matter in their streets, their pastures, their farm-yards, their stables, their cow-yards, and their hog-pens, and then do themselves the honor of *becoming scavenger* to him.

"2. There are animals inferior to man, in their scale of being, which do not eat other animals: these are the *herbivora*. They are the only animals which in their *best estate* man should consent to eat, and "vegetarians" will not eat these, because it is clear that human

thought and feeling are modified greatly by the conditions of the body, and that these conditions are largely dependent on the food eaten, as well as the beverage drunken, and that of all kinds of food flesh-meats have the most peculiar influence on the human body by carrying into the blood qualities of their own, and which, in so far as they are assimilated, make the human tissue like to themselves. History settles this question conclusively, demonstrating the law in nature, that animals of the higher organization are not intended to eat those of a lower grade, and that all tribes and nations of men who have made themselves scavengers - as the carnivorous and omnivorous animals do, have lost power, sunk in rank, deteriorated in character, and ultimately perished.

"Now, although the herbivorous are not scavengers, and are not subject, on the score of organization, to the same objections that the hog, the turkey-buzzard, the toad, the serpent, and the rat are, yet to a creature delighting himself in that he wears the image of God,

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there are insuperable obstacles in the way of their use as food.

"1. He has in the grains, the vegetables, and fruits, materials for food greatly superior to their flesh. This is evident from the single fact, that any defect in growth or formation, or any disease of the grain, vegetable, or fruit, can be apprehended, and its use avoided. A decayed apple, a rotten potato, grown wheat, can be detected, and the ill results from their use forestalled. But with the flesh of animals it is otherwise. The animals may be diseased *when killed* - so diseased that inoculation of their diseases in the human body may take place, producing the direst results, and yet no analysis suffice to give light on the subject. There is no *doubt* of the truth of this statement, the facts being patent to all close observers, though Chemistry fails to give scientific demonstration. Thus, during one week in the hot months of this year, 1858, there passed through Buffalo, in the State of New York, 2,150 "head of cattle" in the space of thirty-six hours. They were all shipped at Cleveland, Ohio, and were on the route from that city to New York, the space of sixty-six hours. The days and nights during which they were

passing, were among the hottest of the season; they stood the whole time on their feet closely packed, and *not one of them had given it on the whole route a drop of water*. They were *fattened* cattle, going to slaughter, and on arrival at New York were unloaded, sold, and butchered without delay. Numbers of them died on being released from confinement. To state the condition in which they were at the time of slaughter, is to furnish evidence that they were unfit to be eaten by human beings; yet the closest analysis failed to furnish proof of difference between this and other flesh of cattle killed under totally different circumstances.

Take another illustration. The cows of the Sixteenth Street distillery stables were found, on examination by the Health Officer of New York, in horrible conditions: their ears were full of sores, their eyes ran rheum, their tongues were thickened and the edges raw, their nostrils were glanderous, their udders had

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externally large corroding ulcers, and inside the glands were stopped by the garget; while on their bodies, in various places, were large sores of different sizes - all betokening highly inflammatory conditions. So affected were the strength and health of some of the animals, that when lying down they had to be lifted up, and when up, had to be held up by straps passing under the body just behind the fore legs. Yet their milk, on subjection to *chemical analysis, showed no morbid or poisonous constituents, and differed only in a slight degree from the milk of healthy cows*. So the milk was declared good, and the stables where "white-washed." But who among *thoughtful* people believes the milk to be healthy? Chemistry is not omnipotent. What the laboratory *fails* to find, the stomach of a child *can* find; and so swill milk, used as a beverage or as food by children, has its poison distilled into their blood till health is lost. Because the analyst fails to discover poison in swill milk, is no proof that it does not contain it. Because the butcher or the buyer declares the meat of *fattened* cattle to be good, and excellent as food, does not demonstrate the absence of poison in it; that kind of poison, too, which, when introduced to the veins of a human being, makes awful havoc with health. The issue has to be met, in the absence of proof, on

philosophical grounds, and this involves an appeal to the laws of the organization of the animals eaten, and of those who eat them.

"We affirm, then, that though it be admitted that herbivorous animals, when in a healthy state, are fit materials for *food* of man, as they are handled, tended, fed, fattened, slaughtered, and cooked, they are wholly *unfit* to be eaten by him. The process of preparation is a steady, uninterrupted process from health to disease, so that by the time the animals, whether ox or sheep, whether turkey or chicken, is fit for market, it is *unfit* to be taken into the human stomach. Cellular, or adipose tissue has its limits of accumulation in animals which are *healthy*. There is a point beyond which the increase of fat cannot go, and have the animals in normal state. Where is this line, and how shall it be drawn? This is it, and *it is easily drawn*. That animal

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which accumulates fat, no matter by what means, to a degree that impairs its strength, lessens its activities, diminishes its usefulness in the sphere which it was made to fill, is *diseased*. It is in abnormal conditions, and unnatural and extraordinary changes are going on in its organism. Functional derangements are being established - perhaps organic changes are in process. That one *or* the other is *true*, is beyond question, and the proof is in the *external* change of the animal. Naturally strong, it is now weak. Naturally active, it is now inert. Naturally playful, it is now morose. Naturally sprightly, it is now dull. These present conditions contrasted with those which are common to it, show that it is *out of health*. If they have been brought about by high feeding, then the fattening process is the cause of it, and the animal is too fat for edible purposes; he is *poisoned*; he has *begun* to die. Keep him under the process till you have reached its utmost limit, and you kill him. Many are the animals which are fattened to a degree totally unfitting them for the uses for which they were made. Thus, the ox, whose organization especially fits him for locomotion at heavy draft, slow, laborious, patient motion - is often fattened to a degree utterly subversive of such ends. Not unfrequently is he fattened to a degree that well nigh forbids locomotion *without drafts*. So also of the cow,

whose qualities or uses are to bear young and give milk. She is often fed to a degree and fattened to an extent which subverts her constitutional purpose. She comes to be sterile, and the secretion of milk ceases. So also of the sheep; it is not very unfrequent to see this animal lose, or *shed its fleece* by reason of the change in its health consequent on fattening; *for it is never to be forgotten that, conditions being the same, that animal is said to be fattening whose weight increases.* So also of the horse; it is very common to see him diminish in strength, power, activity, as he increases in weight. and also to see him fall dead or half dead in his tracks by reason of being put to tasks which in his fattened or diseased state - for these terms are synonymous - he is incapable of performing.

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"Now, there is a great difference in the *quality* of flesh of animals which are *fat* and which are *fattened*. The former state or condition *may* be consistent with health. In such cases, however, the cellular tissue bears just proportion to the fibrous, the membranous, the nervous, and bony tissues, and does not impair the health of the animal, being the product of vigorous assimilation under circumstances favorable to its activities. Not a farmer living is ignorant of the fact that the beasts he fattens could never be made to reach their enormous accumulations under conditions which would allow of the freedom of *their instincts*. This wondrously delicate force which takes charge of life in them, under any fair chance of expressing itself, would warn them successfully. Could it achieve it in no other way, it would *cloy* them till proper depletion had taken place. Nature is too strong in them for any such folly. It is only when man interposes and takes them from under the control of the laws of health, and places them under the sway of the law of sickness, that these accumulations of fatty matter are produced. They are *fattened* by means inconsistent with the natural habits of the animal, violative of all, or nearly all the laws of its organization, and productive of, not a disproportion of cellular tissue to the other tissues, but an aggregation of waste matter in the adipose cells, in whose presence there is unmistakable evidence of disease. We affirm, then, that of necessity all stall-fed, all sty-fed, all

pen-fed and all coop-fed animals, from the fattened ox to the crammed turkey, are diseased that are fattened above the degree in bulk and weight which they would increase were they in the enjoyment of habits natural to them. All increase is *mere* OBESITY - such a disease as in human being would challenge the largest and most liberal skill of the medical profession, and which would kill thousand and tens of thousands of animals, were not the knife drawn across their throats beforehand.

"We assert this because the laws which govern the lives of herbivorous animals, when in natural states, subject their bodies, in their various particles, to constant,

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steady, and perpetual change. Every hour the wearing out of particles is as certain to go on as the removal of particles is certain to go on. To institute conditions for any animal whereby the elimination of these waste matters from the system is not only interfered with, but absolutely hindered, and which, from being hindered, are compelled to remain within its walls, lodged in the various tissues, or floating in the blood, is of necessity to produce disease, and certain to insure that the disease shall become general, affecting the whole structure. This is the statement. What are the *facts*?

"1. All animals which by natural constitution and habit are given to active exercise, thereby with other means keeping themselves healthy, in order to be heavily fattened have to be prohibited such exercise, and so become diseased. Thus the ox is shut up in a stall, the hog in a pen, the sheep in a small lot, the turkey in a coop, the calf in a stable; and as if the prohibition of exercise was not enough, in most instances *light* - one of the most powerful agents in nature in working perfect changes in the animal frame - is shut off. Air also, which is absolutely essential to healthy life, is only given in small quantities, so as to check molecular changes; and as if these were not sufficient, common salt, which as a poison is only inferior to alcoholic poison in arresting the metamorphoses of the tissues and retaining in the body effete matter, is given daily with their food. Such *are the conditions of preparation* to be eaten, with which we

surround them. Now, what are their *actual* conditions when they are sent to the butcher?

"2. On examination of the chest and abdomen, there are found *oftener* than otherwise in the ox, hog, and sheep, (1), enlargement of the *heart*, with fatty deposit in large quantities on its external covering, and about its orifices, (2), severe congestion of the lungs, so much that whole lobes are useless, with high degree of irritation of the kidneys; and in the *hog*, at least ninety-five in one hundred have *ulcers on the liver*, from the size of an ounce bullet to a hen's egg. If this fact is doubted, one has but to consult the Cincinnati

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pork-dealers to find the basis of the statement. Of the ox and cow, as they come to market - independent of age - five out of six will be found to have decayed teeth, ulcerated or inflamed gums, and not unfrequently, like the hog, ulcerated liver and diseased lungs. Of the *crammed* turkey, goose, hen, and duck, it may be said that invariably they have *swollen* liver, caused by its inability to perform its depuratory office; and hence the rapidity of fattening of the animals, the accumulation of fat being nothing more than an aggregation of matters which have no place in the organism, and whose retention provokes fever, sickness, death.

"As far as such conditions are found to exist, they settle the quality of the flesh of such animals beyond all doubt. It is poisonous, and of such a nature, too, to be easily taken into the human system and poison it. It is not at all difficult to account for the prevalence of *scrofula*, when it is remembered that fattened flesh is the staple of our tables. It is quite as easy to account for a large majority of the inflammatory diseases which are so common in the West and the South. Depend on it, that climate influences have had to bear in a large degree the responsibility of diseases which were attributable to conditions of blood consequent on eating *poisoned* meat." It is quite bad enough to eat meats at all, however favorable the conditions of health in which animals are placed while living; but to take an ox, sheep, or swine, and shut him up in a dark place, ill-ventilated, and where exercise is impossible, and thus keep him for months, in order to fit him to be eaten by man, is so thoroughly

monstrous to one's *moral* sense as to admit of no justification whatever.

"3. No organ of secretion in the animal can be functionally deranged without producing *general* sickness. In human pathology this is well understood. A diseased liver sickens the whole man, and the whole man shows it. He has headache, loss of appetite, pain in his bones, constipation of the bowels, chills and fever, furred tongue, high-colored or colorless urine, labored breathing, dim sight, tremulous hands, ill temper, confusion of ideas, impairment of memory, and loss of

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strength. Let an ox show these or like symptoms, as far as his organization will allow; let him die, and make him a *post-mortem* examination, and find only ulceration of the liver - is not the cause of his sickness explained? Yet farmers and butchers, and meat-dealers, and meat-eaters, are constantly in the habit of killing animals, finding their livers abscessed, throwing them away, and putting the general carcass into the barrel for use.

"4. The flesh of animals fattened under such circumstances being poisonous, no culinary process can change it. It defies the kitchen as it does the laboratory. Boil it, bake it, roast it, fry it, stew it, fricassee it, make sausage of it, make mince-meat of it, salt it, spice it, and you have lost labor. The meat *itself* is poisonous, and there is only one way to be rid of the poison, and that is to be rid of the meat.

"5. To a meat-eater connoisseur in deciding the quality of the flesh to be served as food - the extent to which the meat is poisoned is the measure of its goodness - "the tenderness," "the deliciousness," "the sweetness" of the flesh being present to the taste just to the degree in which the poison has penetrated and become part of the tissue. To decide this question and prove the assertion *true*, ask *butchers*, hotel-keepers, Saloon-keepers, cooks, stewards on steamers, each and all, if they do not value flesh of animals, without exception, just in proportion to their fatness. They may, perhaps, prefer the lean meat to the fat of the animal, but they uniformly prefer their lean meat of a fattened to the lean meat

of an unfattened animal, and for the cause stated above. Such are some of the reasons why we will not eat the *flesh* of animals nor feed it to our children. Will you listen further?

"*To the use of flesh-meats do we charge in large measure the prevalence of drunkenness in the United States.* This frightful evil, which has left its blood-stain on the door-post of every household in the land, has met the uncompromising hostility of good men and women for the last thirty years; and much as they have done, they have only kept it at bay. They have not conquered it; they have not even crippled it; it is rampant

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to-day, defying them to battle. There is a *reason* for this persistence of *the people* in the use of the strong drinks. It has been accounted for on a variety of grounds, but these have all proved insufficient and ultimately unsatisfactory. But from this stand-point, the whole evil becomes perceptible. Meat is in the United States *the staple* of our food. No family, unless vegetarian, does without it. In the majority of families it is eaten three times a day, and from the oldest to the babe tied in a chair, the members eat it. It has its adjuncts or correspondents; these are spices, such as pepper, black and cayenne; mustard, horse-radish, common salt, butter, tea, coffee and chocolate. Of vegetables and fruits which are *edible*, there are aside from potatoes a minimum quantity. Add to this list *fermented* bread, and you have the framework of a dietary; but enlarge it, or diminish it as you will on no consideration is *meat* to be dispensed with. Now, when in addition to this universal and habitual use of meat is taken into account that it excites the nervous system, increases the heart's action, pushes the digestive and assimilative organs to undue effort; in fine that its presence in the stomach and as pabulum to the blood rouses the whole vital machinery to exalted and extraordinary exhibition, causing more power to be spent than occasion warrants, how far does one's imagination need to wander beyond the limits of fact, to take on the impression that whenever the hour of *reaction* comes, and depression takes the place of previous exaltation, the subject will

find within him a clamor for strong drink. The correctness of this view can be tested in several ways.

"1. Take a meat-eater, whose habit is to eat three times a day. Cause a delay of an hour in his breakfast or dinner and watch the effects on him. If he does not show up to a degree which the meat excites his brain and stimulates his nervous system, generally the same symptoms that a brandy-drinker does who fails to get his dram at the usual time; the same symptoms that a smoker of cigars does who fails to get his Havana after breakfast; the same, or very similar symptoms that an opium-eater does, who is disappointed

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in chewing at his usual time his drug, then the test may be considered at fault, and so far the argument a failure. But if he does show the grand features which all indulgers in stimulants and stimulo-narcotics show, how is this correspondence to be accounted for, except on the hypothesis that, in using meat, the eater trains his nervous system, and in fact his whole body, to such morbid conditions as to make it not only *easy* for him to acquire the habit of drinking intoxicating liquors, but unless countervailing forces are mightily at work in his *moral nature*, to render it *inevitable* that he should acquire such habit. Most persons who form the *habit* of using spirituous liquors - whether distilled or fermented - begin to form it *early* in life, when the moral sense is imperfectly cultured. There is no substance in nature more revolting to unperverted human instinct than alcohol. By what means is it, then, that the young form a liking for it? Are we told that it is outside influence that does it -- the power of persuasion and of personal example? This cannot be. Children are not persuaded into the habitual use of Epsom salts, castor oil, calomel, and jalap. These substances are *disgusting*, and authority is required to induce them to take them. Alcohol mixtures are not less so to undepraved tastes. How, then, do the young learn to drink the disgusting stuff with evident pleasure? How? by previous training and education of the appetite. Habituated at the table to food whose legitimate effect is to create abnormal desire for stimulants, they are all ready to swear fealty to the King and CHIEF of them all.

"It would require the exercise of authority in an extreme degree on the part of a father to make a child who had never eaten meat and table condiments, had never chewed nor smoked tobacco, had never drank tea or coffee, like alcoholic mixture of any sort; and even then it would require great perseverance and unremitting application to do it. Indeed, it may well be questioned whether he *could succeed at all* if allowed his child such food as vegetarians eat. But educated to such dietetics as children usually are, powder is not more ready for explosion than they are to

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"like liquors," when once the opportunity is given. Thousands and tens of thousands of brilliant young men have been sacrificed at the shrine of drunkenness, whose brows were wreathed with garlands for the sacrifice at their parents' table. The indirect results of eating *fattened* meat are therefore, if possible, more frightful to contemplate than the direct results. The poison entering the circulation seems specially to affect the brain, so that meat-eaters are proverbially excitable, irritable, easily wrought to anger, are almost universally given to sexual excess, though it may be within the conjugal pale, and make *gods of their bellies*. This is their character in the department of the *propensities*. In the sphere of the intellect, compared with what they might be were they *vegetarians*, they are superficial, partial, and unphilosophic. To the unnatural excitement consequent on the eating of poisoned flesh is attributable the slow growth of Christian civilization. Nine men in ten are *blunderers*. They make mistakes oftener by far than successes. They see falsely, hear partially, comprehend imperfectly, execute deficiently. They are falsely related to the laws of life, to the principles of *truth*, to the facts that are about them. Illusion is the atmosphere in which they dwell. They are the victims of *poisoned FOOD*, as truly and to all intents and purposes as essentially as the drunkard is to poisoned BEVERAGE. The abnormal exhibitions are different, but none the less deplorable. The world suffers to-day more from meat-eating than from dram-drinking in all those higher considerations which affect its redemption, because meat-eating is the base of all the perversity which the appetite and the passions

show. Vegetarians do not chew, smoke, or snuff tobacco; nor drink strong drinks, tea, or coffee; nor chew or smoke opium; nor take poisoned medicines; nor eat highly seasoned food. On the other hand are they thus habituated, on becoming vegetarians *they put these all away*, while the reverse of the picture is true of eaters of flesh; *they* drink tea and coffee, eat pepper and salt; the vast majority chew or smoke, and take drugs; many of

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them drink ardent spirits are proud self-willed, selfish, haughty, passionate, vengeful, lustful, and utterly at fault in making harmonious growth of character."

COOKERY

At a convention of the friends of health reform held at Battle Creek, Mich., Dec. 22, 1864, a committee of twelve ladies, practical cooks, was appointed to prepare recipes for cooking, for the first number of the series of pamphlets entitled, *How to Live*.

At a meeting held Jan. 2, 1865, with Maria L. Chase in the chair, and Adelia P. Patten secretary, the committee made the following report which was unanimously accepted:

Your committee beg leave to report that they have examined the works on cookery by Dr. R. T. Trall, Dr. F. W. Hurd, and by Mrs. M. M. Jones, and find them works of great excellence; yet neither one of them singly, in our judgment, fully adapted to general family use. We therefore present the following recipes as the result of our investigations and experience. We have copied many of the recipes from the above named works verbatim; others we have changed where we thought they could be improved for general use, and some are original with us. This is offered only as an approximation to what is needed. We shall be happy to receive, from any friends of health reform, suggestions and recipes, which, if considered valuable, are promised a place in future numbers of *How to Live*.

Mrs. A. B. LOCKWOOD,
" M. J. LOUGHBORO,

Mrs. E. WALKER,
" E. JONES,

" C. A. CORNELL,
"M. J. SAWYER,
" ANN J. KELLOGG,
Miss ANNA M. DRISCALL,
Adjourned *sine die*

"H. SMITH,
" M. D. AMADON,
" JANE E. BUCK,
Miss A. M. Smith,

ADELIA P. PATTEN, *Secretary*.

BREAD. UNLEAVENED BREAD

GEMS. - Into cold water stir Graham flour sufficient to make a batter about the same consistency as that used for ordinary griddle cakes. Bake in a *hot* oven, in the cast-iron bread pans. The pans should be heated before putting in the batter.

NOTE. - This makes delicious bread. No definite rule as to the proportions of flour and water can be given, owing to the difference in the absorbing proportion of various kinds of flour. If too thin, the cakes will be hollow; if too thick, not so light. A little experience will enable any person to approximate the right proportions with sufficient exactness. The flour should be stirred into the water very slowly, in the same manner as in making mush. If hard water is used, they are apt to be slightly tough. A small quantity of sweet milk will remedy this defect.

GRAHAM BISCUIT. - Pour boiling water on Graham flour, stirring rapidly till all the flour is wet. Too much stirring makes it tough. It should be about as thick as can be stirred easily with a strong iron spoon. Place the dough, with plenty of flour, upon the moulding board, form it into a roll, and slice with a knife into cakes three-fourths of an inch thick, and bake in a hot oven.

GRAHAM BISCUIT. - (*Another form.*) Stir into cold water Graham flour enough for a rather soft dough; knead it five minutes, roll three-fourths of an inch thick, and cut into cakes with a common biscuit cutter. Bake from twenty to thirty minutes in a hot oven.

WHEAT MEAL CRISPS. - Make a very stiff dough of Graham flour and cold water; knead thoroughly, roll very thin, and bake from ten to twenty minutes in a hot oven.

STEAMED BREAD. - Make mush as for the table - Graham, hominy, or corn-meal mush - as preferred. When cool, to one quart add one pint of hot, boiled potatoes mashed through a colander, half a cup of molasses, one tea-cup of boiling milk, and equal parts of Indian meal and Graham or rye flour sufficient to

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make a rather soft dough. Place it in a deep basin or pan; smooth it evenly over the top; cover it tightly and steam four hours.

RYE AND INDIAN BREAD. - Take one part rye meal, or coarse wheat meal, and two parts of Indian; pour boiling water, or sweet milk, over the Indian, and stir it till the whole is sufficiently wet to work in the meal without adding any more water, and then, when about milk warm, work in the meal. Should the dough be too stiff, add as much warm, *but not hot*, water as may be necessary; bake in a round iron dish from three to five hours. This bread, when new, or a day or two old, may be sliced and toasted; it is very sweet and wholesome. The crust is apt to fall off; this may be wet in water and put in a stone jar with some moderately tart apples, peeled and sliced, nicely covering the apples with the crust; then add a little water, and cover the dish with a tightly fitting cover; set it on the stove till the apples are cooked, and then take the crust off into the plates; sweeten the apples to suit the taste, and spread it over the crust. This is an excellent dish, if care has been taken to prevent burning the crust.

CORN BREAD. - One pint of corn meal, one quart of milk; boil the milk and scald the meal thoroughly; beat up three eggs; thin your dough to a batter with cold milk; add a piece of butter half as large as an egg; put in your eggs, with a little salt, pour in shallow pans, and bake brown.

CORN CAKE. - Pour one quart boiling water on one quart corn meal, and stir quickly. Wet the hands, and form the dough into small round cakes one-half of an inch thick. Bake in a hot oven. The addition of a few raspberries, huckleberries, or any sub-acid fruit, is a decided improvement. Sweet apples, chopped fine, are also excellent.

CORN MEAL GEMS. - Stir slowly into one quart of new milk, corn meal sufficient to make a thin batter. Bake in a hot oven in the bread pans.

SNOW CAKE. - Take one part of Indian meal and two

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parts of dry snow; or if the snow be moist, use equal parts of meal and snow; add little sugar; mix well in a cold room. Fill the pans rounding full, and bake immediately in a very hot oven. This makes an excellent cake.

RUSK. - Bread and crackers which are too old for the table, may be used for this. Dry them thoroughly in an oven; when dry, break in a mortar and grind coarsely in a hand or coffee mill. It can be eaten when soaked in milk or warm water, and is relished by almost every one. This is a *standard* article for the table.

FINE FLOUR GEMS. - Gems made of fine flour in the same manner as of Graham, the batter being rather stiffer, however, say about like ordinary bread sponge, and baked in the bread pans, are as light, and far sweeter, than any soda biscuit, and by all who have tasted them, are pronounced excellent.

PUFFS. - One pint of sweet milk, three eggs, twelve heaping tablespoonfuls of fine flour. Beat the eggs thoroughly, make a smooth paste of the flour and part of the milk, add the eggs and the remainder of the milk, and bake in the bread pans in a quick oven.

LEAVENED BREAD

GRAHAM BREAD. - Into three pints of warm water stir Graham flour sufficient to make a batter about as thick as can be well stirred with a spoon. To this add two large spoonfuls of hop yeast. Cover and set in a warm place to rise. When light stir again, and let it rise the second time. This will make two ordinary loaves of bread. Put into tins and set in a warm place about ten minutes, or till it begins to rise a third time. Bake about one hour.

NOTE. - If mixed too thick the bread will be dry and hard; or if it gets too light before baking, it is not so good; but made just right,

it will be nearly as fine-grained and spongy as the best fine flour bread.

SWEET BROWN BREAD. - Take one quart of rye flour, two quarts of coarse Indian meal, one pint wheat meal

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half a teaspoon of molasses or brown sugar, and one gill of potato yeast. Mingle the ingredients into as stiff a dough as can be stirred with a spoon, using warm water for wetting. Let it rise several hours, or over night; then put it in a large deep pan, and bake five or six hours. This would be a much more wholesome "wedding cake" than we are accustomed to have proffered us on certain interesting occasions.

BUNNS. - One cup sugar, three pints of milk, one cup yeast, and flour enough for a batter like common bread "sponge." Let it stand over night, then add one cup sugar, one cup of butter; mould like biscuit, and let it rise again before baking.

POTATO OR HOP YEAST. - Wash, pare, and grate, one dozen large potatoes. Boil two large handfuls of hops in five pints of water, and strain it on to the grated potatoes. Add a teacupful of sugar and one-half teacup of salt. Put all in a tin pail or pan, and set into a kettle of boiling water, and stir occasionally till thoroughly cooked. When nearly cool add a pint of good yeast and let it rise. One tablespoonful of this yeast is sufficient for an ordinary loaf of bread. If in a cool place it will keep several months in summer without souring.

MUSHES AND PORRIDGES

GRAHAM PUDDING. - This is made by stirring flour into boiling water, as in making hasty pudding. It can be made in twenty minutes, but is improved by boiling slowly an hour. Care is needed that it does not burn. It can be eaten when warm or cold, with milk, sugar, or sauce, as best suits the eater.

When left to cool, it should be dipped into cups of dishes to mold, as this improves the appearance of the table as well as the dish itself. Before molding, stoned dates, or nice apples thinly

sliced, or fresh berries, may be added, stirring as they are dropped in. This adds to the flavor, and with many does away with the necessity for salt or some rich sauce to make it eatable.

Of all Preparations for food, this stands next to good

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bread; and to those who live simply, and whose purpose it is to live healthfully, this dish, next to bread, comes to be a staple article on the table, and is liked for its intrinsic merits alone.

When cold, cut in slices, dip in flour, and fry as griddle-cakes. It makes a most healthful head-cheese.

GRAHAM MINUTE PUDDING. - A very palatable dish may be made very quickly, by stirring Graham flour into boiling milk, after the manner of hasty pudding, letting it cook for five or ten minutes.

CRACKED WHEAT. - Take clean, plump winter wheat, or if this is not to be had, the *best* that can be. Run it through a hand-mill, cracking the grain more or less, according to taste. In four quarts of boiling water stir one quart of the grain, and cook moderately for four or five hours in a tin or earthen vessel set in a kettle of boiling water. Serve and eat, the same as Graham pudding.

SAMP. - This is merely a very coarse hominy - the grains of corn being ground or broken into very coarse particles. It should be washed several times, and the water poured through a sieve to separate the hulls; and it requires boiling five or six hours.

This is cooked precisely the same as the cracked wheat, or wheaten grits. It is particularly adapted to those who have long suffered from habitual constipation. To persons unaccustomed to the grain, the effect on the bowels is decidedly laxative. The meal must be fresh ground, and made of well-cleaned and plump grain.

INDIAN MEAL MUSH. - This is corn meal stirred very gradually into boiling water, so as to prevent lumping. It should be cooked from one to two hours.

BOILED RICE. - Put one pint of plump "head rice," previously picked over and washed, into three quarts of boiling water; continue the boiling fifteen or twenty minutes, but avoid stirring it

so as to break up or mash the kernels; turn off the water: set it uncovered over a moderate fire, and steam fifteen minutes. Rice is "poor stuff" without salt, say the cooks, and

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cook-books. If you find it so, reader, try a little syrup or sugar.

RICE AND MILK MUSH. - Boil a pint of clean head rice fifteen or twenty minutes; pour off the water; add a little milk - mixing it gently so as not to break the kernels - and boil a few minutes longer.

MILK PORRIDGE. - Place a pint and a half of new milk, and half a pint of water, over the fire; when just ready to boil, stir in a tablespoonful of flour, wheat-meal, oat-meal, or corn-meal, previously mixed with a little water; after boiling, pour it on bread cut into small pieces.

WHEAT MEAL PORRIDGE. - Stir gradually into a quart of boiling water half a pound of wheat-meal, and boil ten or fifteen minutes. It may be seasoned with a little milk or sugar.

WHEAT MEAL GRUEL. - Mix two tablespoonfuls of wheat-meal smoothly with a gill of cold water; stir the mixture into a quart of boiling water; boil about fifteen minutes, taking off whatever scum forms on the top. A little sugar may be added if desired.

INDIAN-MEAL GRUEL. - Stir gradually into a quart of boiling water two tablespoonfuls of Indian-meal; boil it slowly twenty minutes. This is often prepared for the sick, under the name of "water-gruel." In the current cook-books, salt, sugar, and nutmeg are generally added. Nothing of the sort should be used, except sugar.

PIES AND PUDDINGS

POTATO PIE CRUST. -Boil one quart dry, mealy potatoes. The moment they are done mash them, and sift through a colander. Stir thoroughly together one cup of Graham flour, and one cup of white flour, then add the potatoes, rubbing them evenly through the flour in the same manner as the shortening in common

pie crust. Have ready one cup corn meal; pour over it one and one-third cups boiling water, stirring it till all the meal is wet, then add it to the potatoes and

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flour, mixing only till thoroughly incorporated together. No more flour should be added. The moulding-board should be well covered with dry flour, however, as it is slightly difficult to roll out. It should be rolled very thin, and baked in a moderate oven.

NOTE. - It is very essential that the above conditions should all be complied with. Bear in mind that the potatoes must be *hot*, and mixed immediately with the flour; the water be poured, while *boiling*, upon the corn meal, and the whole mixed together very quickly and baked immediately. Inattention to any of these requisites will be quite apt to insure a failure.

CREAM PIE CRUST. - Take equal quantities of Graham flour, white flour, and Indian meal; rub evenly together, and wet with very thin sweet cream. It should be rolled thin and baked in an oven as hot as for common pie crust.

CREAM PIE CRUST. - (Another form) - Mix Graham flour with sweet cream, and proceed as above. Canal may be used in the place of Graham flour if preferred.

PUMPKIN PIE. - Select a pumpkin which has a deep rich color, and firm, close texture. Stew and sift in the ordinary manner; add as much boiling milk as will make it about one-third thicker than for common pumpkin pie. Sweeten with equal quantities of sugar and molasses, and bake about one hour in a hot oven.

NOTE. - Those who will try this method will be surprised to find how delicious a pie can be made without eggs, ginger, or spices of any kind. The milk being turned boiling hot upon the pumpkin, causes it to swell in the baking, so that it is as light and nice as though eggs had been used.

SQUASH PIE. - This is even superior to pumpkin, as it possesses a richer, sweeter flavor, and is far preferable. It is made in precisely the same manner as pumpkin pie.

CUSTARD PIE. - One pint and a half of milk, three eggs, and a large tablespoonful of sugar; maple is preferred by many for its better flavor.

SWEET APPLE PIE. - Pare mellow, sweet apples, and grate them upon a grater. A very large grater is necessary for this purpose. Then proceed as for pumpkin pie.

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SOUR APPLE PIE. - Take nice, tart apples - spitzenbergs are best, although pippins, greenings, russets, etc., are excellent. Slice them; fill the under crust an inch thick; add sugar or molasses, and a spoonful or two of water; cover with a thin crust, and bake three-fourths of an hour in a moderate oven.

APPLE PUFFS. - Make a crust the same as for cream pie crust, using rather thicker cream; roll an eighth of an inch thick, and cut out in small round cakes with a common biscuit cutter; take one of these, wet it around the edge, and place in the center a spoonful of apple sauce. Take another and cut with a small cracker cutter a hole in the center about one inch in diameter; place the ring which is left upon the first one, and pinch the edges tightly together. Bake in a quick oven.

NOTE. - These, if rightly made, are very nice. Any kind of fruit may be used in place of apple sauce, by stewing it, and simmering down till very little juice remains.

BAKED APPLE PUDDING. - Pare, core, and slice about two quarts nice tart apples. Add to them one teacupful of Indian meal, one cup Graham flour, and stir together. Pour over them three-fourths of a cup of sugar dissolved in one cup cold water, or sweet milk, stirring till all the flour is wet. Butter or flour a deep basin or pan to prevent sticking, and turn the mixture into it, smoothing it evenly over the top. Then spread smoothly over it a batter made by stirring together half a cup of cold water, or sweet milk, three tablespoonfuls of Indian meal, three ditto of Graham flour, and one tablespoonful sugar. Bake about two hours and a half.

NOTE. - This is to be eaten with sweetened cream or a sauce made by stirring into one quart boiling milk, two heaping

tablespoonfuls of corn starch, moistened with cold milk, letting it boil for five or ten minutes afterward. Sweeten according to taste.

RUSK PUDDING. - One and one-third cups rusk, half a cup sugar, two cups sweet apples, sliced, two quarts milk. Stir together and bake two hours and a half.

BAKED INDIAN PUDDING. - Two quarts sweet milk, one heaping teacupful of Indian meal, one-third cup

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molasses, one-third cup sugar. When the milk is boiling hard, dip out one half of it, and into the remainder stir the meal slowly, taking care that no lumps remain in it. Add the rest of the milk, the sugar and molasses, and bake about two hours, or until it is a bright cherry color. Stir once or twice the first half hour, but not afterward.

RICE AND APPLE PUDDING. - Boil half a pound of rice in milk till it is soft; then fill the pudding dish half full of apples, which have been pared and cored; sweeten with brown sugar or molasses; put the rice over the fruit as a crust, and bake one hour.

APPLE DUMPLINGS. - Make a dough in the same manner as for cream pie crust, roll a little thicker than for pies, and make up the dumplings by putting an apple, pared, cored, and quartered, to each. Steam or bake one hour.

GREEN CORN PUDDING. - To one quart of grated ears of sweet corn, add a teacupful of cream, one gill of milk, a tablespoonful of flour, and two ounces of sugar; mix all together, and bake an hour and a half.

SWEET APPLE PUDDING. - Pare and core the apples, chop them fine, and stir them into a batter made of sweet cream, or milk, eggs, and flour, - say three eggs to a quart of cream, or milk, and flour enough to make it not very thick; stir well, and bake on buttered tins or pudding dishes. This needs to bake two or three hours. Serve with sweetened cream.

CRACKED WHEAT PUDDING. - Boil wheaten grits till quite soft, then dilute the mush with milk to the proper consistency. It should be rather thin; sweeten and bake one hour.

IMITATION, CORN STARCH PUDDING. - Take one quart of milk; boil two-thirds of the milk and thicken the other third with flour to quite a thick, smooth paste; add the yolks of two eggs well beaten, and stir into the boiling milk - it will cook in a minute; have ready some cups previously wet in cold water, fill them to the required depth with the mixture; when cool

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enough to turn out without breaking, turn them bottom upwards on a plate. The whites of the eggs with white sugar boiled in milk making a good sauce.

POP OVERS. - Two eggs, two cups of milk, two even cups of flour, and a piece of butter a little larger than a nutmeg. Bake in cups, or the gem pans. Serve with sweetened cream.

FRUIT PUDDING. - One quart of Indian meal, one cup of molasses, one cup of fruit, one quart of boiling water or milk. Stir all together, and steam three hours. This is to be eaten with the same kind of sauce as for baked apple pudding.

FRUITS

BAKED APPLES. - The best baking apples are moderately tart, or very juicy sweet ones. The former, of ordinary size, will bake in about thirty minutes; the latter in about forty-five minutes. Select for baking apples of nearly equal size; wipe them dry and clean; put a very little water in the bottom of the baking vessel, and place them in a hot oven.

BAKED APPLES (Another Form.) - Take moderately sour apples, cut out the stem and blow end, wash them, fill the cavities with sugar, and place in a pie tin with little water. When done, take up on plates and dip the juice arising from the apple and sugar over them. They are better than preserves.

BAKED APPLES (Another form.) - Pare and core tart apples. Lay the quarters evenly on a pie tin. Bake till done. Slip them carefully into a deep plate and put on them sugar and cream.

STEWED GREEN APPLES. - Apples for stewing should be well flavored and juicy. Sweet apples, when stewed, turn more or

less dark colored, and hence do not appear as well as tart ones on the table, though some persons prefer them. Pare, core, and quarter; put a little water to them, and boil moderately till soft, and add sufficient sugar to suit taste - more or less, according to the acidity of the fruit. Some cooks flavor them

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with lemon; others with a small portion of peaches or other fruit. Good apples, however, are good enough in and of themselves.

BOILED APPLES. - Select tart mellow apples. Boil in water sufficient to cover them, with the addition of sugar or molasses. When tender, remove into a vegetable dish, carefully simmer down the syrup and pour over the apples.

STEAMED SWEET APPLES. - Select apples of uniform size, remove the stem and blow end, place in an earthen dish in a steamer, steam until a fork will pass through them easily. They will be very juicy and delicious.

STEWED DRIED APPLES. - Select rich, mellow, flavored fruits, which are clear from dark spots or mould. Wash and pick the pieces, boil in just water enough to cover them over a slow fire, without stirring, till partially softened; then add sugar or molasses and continue the boiling till done.

CIDER APPLE-SAUCE. - Six gallons sweet cider boiled down to three, add one and a half pounds sugar. This is sufficient for one bushel of apples. Some prefer the apples dried a very little, this keeps them from falling to pieces.

CIDER APPLE SAUCE. - Take six quarts sweet apples quartered and cored, pour over them one and-one half pints boiling water, and cook slowly. When about one-third done add one-half cup sugar and three-fourths of a pint of boiled cider or apple syrup, and cook till they can be pierced easily with a fork.

NOTE. - These proportions make a much better sauce than where *more* boiled cider is used. We wish this dish might be brought into more general use. If properly cooked it is excellent. Every one in the country knows how boiled cider is made, but every one in the city is not supposed to, from the fact that it is a commodity rarely met with in the city markets. It is made by taking new, sweet

cider fresh from the press, and boiling it down till it is about the consistency of common molasses. It is more wholesome than sugar and added to apples in this way it is much more palatable.

APPLE BUTTER. - Boil cider made from sweet apples down to about the consistency of very thin

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molasses. Pare and core sweet or sour apples, as preferred, sufficient for the quantity of cider, and cook to a pulp. While the cider is boiling hot, add the pulp, and continue boiling, without cessation four hours, or longer, according to the thickness desired. Constant stirring from the time the pulp is added, is necessary to prevent burning. Apple butter made in this way, and boiled down very thick, will keep for years without spices, and is very nice.

IMITATION OF STRAWBERRIES.- Take tart apples suitable for eating. Chop not very fine; sprinkle sugar over them and add cream. Sweet apples are good served in this way. This is an excellent dish.

PEARS. - Pears may be baked, boiled, or stewed in the same manner as apples. Some varieties of small, early, and sweet pears are very delicious boiled whole without paring, and sweetened with syrup. The large pears are usually selected for baking.

UNCOOKED PEACHES. - When we have peaches as good and ripe as all peaches ought to be, the best way to prepare them is this: Peel them; cut the fruit off the stones in quarters, or smaller pieces; fill the dish; sprinkle on sugar, and add cream if desired.

BOILED PEACHES. - They should be pared - except when the skins are very smooth, clean and tender - but not pitted; boiled moderately till sufficiently cooked, and then sweetened.

STEWED DRIED PEACHES. - Wash, and soak in cold water over night. In the morning, sweeten and bring to a boil for a few minutes. Blackberries, raspberries, and indeed, all dried fruits are prepared in the same manner. They should be carefully looked over, washed, and set to soak in cold or tepid water, for two or three hours. Then stew in the same water till soft. Sweeten just before taking from the fire, and, when done, stir in a little flour to thicken the juices.

CHERRIES. - Stewing is the only proper method for cooking this fruit. Remove the stalks from the cherries; pick them over carefully, rejecting all unsound

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ones; put them into a pan, with a very little water, and sugar in the proportion of about three ounces to a pound of cherries; simmer them slowly over the fire, shaking the pan round occasionally till done. If a richer article is wanted take the cherries out with a colander spoon, and keep them in a basin till cold; reduce the sweetened water to the consistency of syrup, and put it over the cherries.

QUINCES. - It has been said that quinces commend themselves more to the sense of smell than taste; hence are better to "adorn" other preparations than to be prepared themselves. When stewed till quite tender, and sweetened, they are, however, a very pleasant, yet rather expensive kind of sauce. In the form of marmalade, they are a better seasoning for bread, cakes or puddings, than butter.

GRAPES. - Good, ripe, well-cultivated Delawares, Isabellas, and Catawbas are incomparably superior in dietetic character, without "the interference of art." What a blessing it would be to the human race if all the vineyards in the world were made to supply wholesome food for children, instead of pernicious poison for adults!

CURRANTS. - Green currants, when half or two-thirds grown, are more mild flavored and pleasant than when fully ripe; nor do we find them often disagreeing with ordinary dyspeptics. They require stewing but a short time, and moderately sweetening. The best currants, when quite ripe, may be eaten uncooked, with a sprinkling of sugar.

PLUMS. - These must be managed according to their character and flavor. Many varieties are too sour to be eaten without stewing, and the addition of considerable sugar. Some kinds, however, are sweet and luscious enough to require neither.

STEWED CRANBERRIES. - Wash and pick the berries; stew them in just as little water as will prevent their burning, till they become soft; then add half a pound

of sugar to a pound of the fruit, and simmer a few minutes.

STRAWBERRIES. - Serve with sugar and cream.

TOMATOES . - Take nice ripe tomatoes, peel and slice, then serve with cream and sugar. This is very nice.

TOMATOES - STEWED. - Pour over the tomatoes scalding water, and take off the skins; and when a quantity is to be cooked, slice and put into a kettle without water; warm very slowly at first; stew slowly three quarters of an hour; and while stewing, add, to suit the taste, coarse ground baker's crackers. Sugar may be added as a seasoning, if desired.

For a small quantity, prepare the tomatoes as before, put them into a spider with an equal bulk of broken, fresh, brown bread; add a little water, a very little fresh butter, cover closely, and stew fifteen or twenty minutes, or until thoroughly cooked.

TOMATO TOAST. - A very desirable dish is made by toasting brown bread, laying it in a dish, and pouring over it tomatoes stewed as in the first instance, without the addition of crackers. Green tomatoes may be substituted for ripe ones, and are preferred by some persons.

VEGETABLES

DRIED BEANS. - Pick the beans over carefully, wash them perfectly clean, cover them about three inches deep with cold water, and let them soak all night. Early in the morning place them over the fire, leaving upon them all the water that may remain unabsorbed and adding enough more to cook them in. Let them *simmer* slowly all the forenoon, but do not allow them to *boil*. When done if any seasoning is desired, a little sweet cream is sufficient. To bake them, take them from the fire about an hour before they are done, place them immediately in a deep pan, and bake one hour in a very hot oven.

NOTE. - Those who will try this method will be surprised to find how much superior it is to the ordinary way of cooking them.

BEAN PORRIDGE. -This is made by cooking dried beans in plenty of water till they are quite boiled to pieces. Add cream and a very little flour.

BOILED GREEN BEANS. - The common garden, kidney, and lima beans are all excellent dishes, prepared by simply boiling till soft without destroying the shape of the seed. A little milk or cream may be stirred in when they are cooked sufficiently, if any seasoning is desired. They usually require boiling an hour and a half.

STRING BEANS. - When very young, the pods need only to be clipped, cut finely, and boiled till tender. When older, cut or break off the ends, strip off the strings that line their edges; cut or break each pod into three or four pieces, and boil. When made tender, a little cream or milk may be simmered with them a few minutes.

SUCCOTASH. - Take green sweet corn and green beans, cut the corn from the cobs, and when the beans have been cooking about three-quarters of an hour add it to them, letting it cook about three-quarters of an hour longer. If any one desires a richer article, a little sweet cream may be added.

BOILED GREEN CORN. -The only corn fit for boiling green, is the sweet or evergreen corn. It should be simply husked, the silk removed and the ears plunged into boiling water and boiled from twenty to thirty minutes.

STEWED CORN. - Cut the corn from the cob, boil it in just water enough to prevent burning. When done, add a little rich milk or sweet cream, and a trifle of sugar.

BOILED GREEN PEAS. - Washing green peas seems to extract much of their sweetness. If care be taken in shelling them they will not need washing. Immediately after shelling them put in boiling water sufficient to cover them, and boil from twenty to thirty minutes. When the pods are fresh and green, if they are washed and boiled in as little water as will cover

them for fifteen or twenty minutes, and the juice added to the peas, it will improve the flavor. Sweet milk or cream is the only admissible seasoning.

BOILED POTATOES. - Wash and trim the potatoes, put them in boiling water, with not more water than is sufficient to cover them; boil moderately until they are softened so that a fork will readily penetrate them; pour off the water and let them stand till dry. All who would have potatoes well cooked must observe the following particulars: Always take them out of the water the moment they are done. Ascertain when they are done, by pricking with a fork, and not leave them to crack open. When cooked in any way, they become heavy and watery by cooking them after they are once softened through. They should be selected of an equal size, or the smallest should be taken up as fast as cooked. The water should not stop boiling, as it will tend to make them watery. Old potatoes are improved by soaking in cold water several hours or over night, before cooking. They should never remain covered after having been roasted or boiled, to keep them hot.

MASHED POTATOES. - Pare and wash the potatoes; drop them into water which is boiling very hard; let them boil moderately till done. As soon as they will pierce easily with a fork, pour off the water, place them over the fire again for a couple of minutes till perfectly dry, then mash them till they are entirely free from lumps. If any seasoning is desired a little rich milk or sweet cream is sufficient.

BROWNED MASHED POTATOES. - Prepare the same as mashed potatoes above; turn them immediately into a deep platter or dripping pan, smooth them evenly and place in a hot oven till browned.

POTATO BALLS. - Take mashed potatoes, either cold or hot, and form them into small round cakes of three-fourths of an inch in thickness. Place them in a hot oven, and let them remain till well browned.

STEWED POTATOES. - Cut cold boiled potatoes into
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thin slices, cover with milk or diluted sweet cream, and stew slowly till warmed through.

CHOPPED POTATOES. - Place cold boiled potatoes in a wooden bowl; chop them with a chopping-knife till very fine; turn

them into a deep platter; add milk till they are nearly covered, and bake in a moderately hot oven half an hour; stir them occasionally at first, then let a nice brown crust form upon them.

BROWN SLICED POTATOES. - Cut cold boiled potatoes into slices one-third of an inch in thickness; lay them on a platter in a hot oven till both sides are moderately browned.

BROWNEED POTATOES. - Boil potatoes of a nearly uniform size till about two-thirds done; pour off the water; remove the skins; place them in a hot oven, and bake till done. When baked potatoes are wanted in haste, this is a very quick and excellent method.

BREAKFAST POTATOES. - Pare and wash the potatoes. Cut them in pieces one-third of an inch in thickness; boil in as little water as possible, so that it will nearly all be evaporated in cooking. When done, add a small quantity of sweet cream or milk thickened with a little flour.

BOILED SQUASH. - Winter squash should be pared, cleaned inside, cut into small pieces, and boiled, or steamed, which is better. When done, mash and season with sugar, and it is ready for the table.

BAKED SQUASH. - Take winter squash, cut in halves, partially clean them inside, and bake slowly in an oven an hour and a half; then scrape the inner surface and remove the squash from the rind - which has served as a dish in baking - mash and serve for the table Or, cut the squash into several pieces, clean inside, and bake slowly. Eat the same as bread or baked potatoes.

MASHED PARSNEPS. - Wash them thoroughly, and remove the skins by scraping, split them into halves, or quarters, and boil till tender. When done, mash them the same as potatoes.

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BROWNEED PARSNEPS. - Cold parsneps may be cut into pieces one-half inch in thickness, and browned in the oven the same as potatoes, or fried on a griddle. They are nice for breakfast.

STEWED PARSNEPS. - Wash, scrape, and cut the parsneps into thin slices. Stew them in just water enough to prevent their burning. When nearly cooked, add a little boiling milk, and thicken

with a small quantity of flour wet with cold milk. Let them simmer fifteen minutes.

CARROTS. - Carrots may be boiled, stewed, or browned, in the same manner as parsneps. When stewed they are a favorite dish with many persons.

BOILED TURNIPS. - When turnips are sweet and tender, they are best if boiled whole till soft, and then sent immediately to the table. If any are allowed to boil too long they become bitterish. An hour is the medium time. They are less watery and better flavored when boiled with their skins on, and pared afterward.

MASHED TURNIPS. - This is the best method of preparing watery turnips, and a good way of cooking all cookable kinds. Pare, wash, and cut them in slices; put them in just enough boiling water to cover them; let them boil till soft; pour them into a sieve or colander and press out the water; mash them with fresh milk or sweet cream until entirely free from lumps; then put them into a saucepan over the fire, and stir them about three minutes.

STEWED TURNIPS. - Wash and pare your turnips, divide them into small pieces, and slice very thin. Put them into a stewpan with water sufficient to cook them. Cover close, and let them boil till all the water is evaporated. Then add a little salt, with cream or butter. Either is good.

BOILED CABBAGE. - Take off the outer leaves; cut the head in halves or quarters, and boil quickly in a large quantity of water till done; then drain and press

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out the water, and chop fine. Cabbage requires boiling from half an hour to an hour.

STEWED CABBAGE. - Slice the cabbage very fine, pour over it boiling water, nearly sufficient to cover it. Let it cook quickly till tender. Add boiling milk and thicken with flour wet with cold milk. Let it simmer fifteen minutes. This is excellent.

CAULIFLOWER. - Cut off the green leaves; plunge the heads in boiling water and then cook from twenty minutes to half an hour. Split the heads open and lay them in halves in vegetable

dishes, and cover with a sauce made with boiling milk, thickened with flour wet with cold milk, and boiled till well cooked.

GREENS. - Spinach, beet-tops, cabbage sprouts, mustard leaves, turnip leaves, cowslips, dandelions, and deerweed, are all excellent for greens. They all require to be carefully washed and cleaned. Spinach should be washed repeatedly. All the cooking requisite is boiling till tender, and drain on a colander. Lemon juice is the only admissible seasoning.

BOILED BEETS. - Wash the roots carefully; avoid scraping, cutting or breaking the roots, as the juice would escape and the flavor be injured; put them into a pan of boiling water; let them boil one or two hours according to size; then put them in cold water and rub off the skin with the hand, and cut them in neat slices of uniform size. Good beets are sweet enough intrinsically, and need no seasoning.

CHOPPED BEETS. - Boil them whole. Peel and chop fine. Season with butter or a little salt.

BAKED BEETS. - Wash the roots clean, and bake whole till quite tender; put them in cold water; rub off the skin; if large, cut them in round slices, but if small, slice them lengthwise. If any seasoning is insisted on, lemon-juice is the most appropriate. When baked slowly and carefully, beet-root is very rich, wholesome, and nutritious. It usually requires baking four or five hours.

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STEWED ASPARAGUS. - Cut the tender parts of the stalks into pieces of half an inch in length. Wash them; put them in enough boiling water to cook them without burning, and when nearly done add a small quantity of sweet cream or milk thickened with flour.

DISEASE AND ITS CAUSES. Chapter 1 [EGW]

BY ELLEN G. WHITE.

SINCE the fall of Eden, the race has been degenerating. Deformity, imbecility, disease, and human suffering have been pressing heavier and heavier upon each successive generation since

the fall, and yet the masses are asleep as to the real causes. They do not consider that they themselves are guilty, in a great measure, for this deplorable state of things. They generally charge their sufferings upon Providence, and regard God as the author of their woes. But it is intemperance, to a greater or less degree, that lies at the foundation of all this suffering.

Eve was intemperate in her desires when she put forth the hand to take of the fruit-forbidden tree. Self-gratification has reigned almost supreme in the hearts of men and women since the fall. Especially has the appetite been indulged, and they have been controlled by it, instead of reason. For the sake of gratifying the taste, Eve transgressed the command of God. He had given her everything her wants required, yet she was not satisfied. Ever since, her fallen sons and daughters have followed the desires of their eyes, and of their taste. They have, like Eve, disregarded the prohibitions God has made, and have followed in a course of disobedience, and, like Eve, have flattered themselves that the consequence would not be as fearful as had been apprehended.

Man has disregarded the laws of his being, and disease has been steadily increasing. The cause has

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been followed by the effect. He has not been satisfied with food which was the most healthful; but has gratified the taste even at the expense of health.

God has established the laws of our being. If we violate these laws, we must, sooner or later, pay the penalty. The laws of our being cannot be more successfully violated than by crowding upon the stomach unhealthy food, because craved by a morbid appetite. To eat to excess, of even simple food, will eventually break down the digestive organs but add to this the eating in too great an amount of food, and that unwholesome, and the evil is greatly increased. The constitution must become impaired.

The human family have been growing more and more self-indulgent, until health has been most successfully sacrificed upon the altar of lustful appetite. The inhabitants of the Old World were intemperate in eating and drinking. They would have flesh meats

although God had given them no permission to eat animal food. They ate and drank to excess, and their depraved appetites knew no bounds. They gave themselves up to abominable idolatry. They became violent, and ferocious, and so corrupt that God could bear with them no longer. Their cup of iniquity was full, and God cleansed the earth of its moral pollution by a flood. As men multiplied upon the face of the earth after the flood, they forgot God, and corrupted their ways before him. Intemperance in every form increased to a great extent.

The Lord brought his people out of Egypt in a victorious manner. He led through the wilderness to prove them, and try them. He repeatedly manifested his miraculous power in their deliverances from their enemies. He promised to take them to himself, as his peculiar treasure, if they would obey his voice, and keep his commandments. He did not forbid them to eat the flesh of animals, but withheld it from them in a great measure. He provided them food which was the most healthful. He raised their bread from heaven, and gave them purest water from the flinty rock. He made a covenant with them if

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they would obey him in all things, he would preserve them from disease.

But the Hebrews were not satisfied. They despised the food given them from heaven, and wished themselves back in Egypt where they could sit by the flesh-pots. They preferred slavery, and even death, rather than to be deprived of meat. God, in his anger, gave them flesh to gratify their lustful appetites, and great numbers of them died while eating the meat for which they had lusted.

Nadab and Abihu were slain by the fire of God's wrath for their intemperance in the use of wine. God would have his people understand that they will be visited according to their obedience or transgressions. Crime and disease have increased with every successive generation. Intemperance in eating and drinking, and the indulgence of the baser passions, have benumbed the nobler faculties. Appetite, to an alarming extent, has controlled reason.

The human family have indulged an increasing desire for rich food, until it has become a fashion to crowd all the delicacies possible into the stomach. Especially at parties of pleasure is the appetite indulged with but little restraint. Rich dinners and late suppers are partaken of, consisting of highly seasoned meats with rich gravies, rich cakes, pies, ice cream etc.

Professed Christians generally take the lead in these fashionable gatherings. Large sums of money are sacrificed to the gods of fashion and appetite, in preparing feasts of health-destroying dainties to tempt the appetite, that through this channel something may be raised for religious purposes. Thus, ministers, and professed Christians, have acted their part and exerted their influence, by precept and example, in indulging in intemperance in eating, and in leading the people to health-destroying gluttony. Instead of appealing to man's reason, to his benevolence, his humanity, his nobler faculties, the most successful appeal that can be made is to the appetite.

The gratification of the appetite will induce men to give means when otherwise they would do nothing.

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What a sad picture for Christians! With such sacrifice is God well pleased? How much more acceptable to him was the widow's mite. Such as follow her example from the heart, will have well done. To have the blessing of Heaven attend the sacrifice thus made, can make the simplest offering of the highest value.

Men and women who profess to be followers of Christ, are often slaves to fashion, and to a gluttonous appetite. Preparatory to fashionable gatherings, time and strength, which should be devoted to higher and nobler purposes, are expended in cooking a variety of unwholesome dishes. Because it is fashion, many who are poor and dependent upon their daily labor, will be to the expense of preparing different kinds of rich cakes, preserves, pies, and a variety of fashionable food for visitors, which only injure those who partake of them; when, at the same time they need the amount thus expended, to purchase clothing for themselves and children. This time occupied in cooking food to gratify the taste to the

expense of the stomach, should be devoted to the moral and religious instruction of their children.

Fashionable visiting is made an occasion of gluttony. Hurtful food and drinks are partaken of in such a measure as to greatly tax the organs of digestion. The vital forces are called into unnecessary action in the disposal of it, which produces exhaustion, and greatly disturbs the circulation of the blood, and as a result, want of vital energy is felt throughout the system. The blessings which might result from social visiting, are often lost, for the reason that your entertainer, instead of being profited by your conversation, is toiling over the cook-stove, preparing a variety of dishes for you to feast upon. Christian men and women should never permit their influence to countenance such a course by eating of the dainties thus prepared. Let them understand that your object in visiting them is not to indulge in appetite, but that your associating together, and interchange of thoughts and feelings, might be a mutual blessing. The conversation should be of that elevated, ennobling

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character which could afterward be called to remembrance with feelings of the highest pleasure.

Those who entertain visitors, should have wholesome, nutritious food from fruits, grains, and vegetables, prepared in a simple, tasteful manner. Such cooking will require but little extra labor or expense, and, partaken of in moderate quantities, will not injure any one. If worldlings choose to sacrifice time, money, and health, to gratify the appetite, let them do so, and pay the penalty of the violation of the laws of health; but Christians should take their position in regard to these things, and exert their influence in the right direction. They can do much in reforming these fashionable, health and soul-destroying customs.

Many indulge in the pernicious habit of eating just before sleeping hours. They may have taken three regular meals; yet because they feel a sense of faintness, as though hungry, will eat a lunch, or fourth meal. By indulging this wrong practice, it has become a habit, and they feel as though they could not sleep

without taking a lunch before retiring. In many cases, the cause of this faintness is because the digestive organs have been already too severely taxed through the day in disposing of unwholesome food forced upon the stomach too frequently, and in too great quantities. The digestive organs thus taxed become weary, and need a period of entire rest from labor to recover their exhausted energies. A second meal should never be eaten until the stomach has had time to rest from the labor of digesting the preceding meal. If a third meal be eaten at all, it should be light, and several hours before going to bed.

But with many, the poor tired stomach may complain of weariness in vain. More food is forced upon it, which sets the digestive organs in motion, again to perform the same round of labor through the sleeping hours. The sleep of such is generally disturbed with unpleasant dreams, and in the morning they awake unrefreshed. There is a sense of languor and loss of appetite. A lack of energy is felt through the entire system. In a short time the digestive organs are worn out, for they have had no time to rest. These become

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miserable dyspeptics, and wonder what has made them so. The cause has brought the sure result. If this practice be indulged in a great length of time, the health will become seriously impaired. The blood becomes impure, the complexion sallow, and eruptions will frequently appear. You will often hear complaints from such, of frequent pains and soreness in the region of the stomach, and while performing labor, the stomach becomes so tired that they are obliged to desist from work, and rest. They seem to be at a loss to account for this state of things; for, setting this aside, they are apparently healthy.

Those who are changing from three meals a day, to two, will at first be troubled more or less with faintness, especially about the time they have been in the habit of eating their third meal. But if they persevere for a short time this faintness will disappear.

The stomach, when we lie down to rest, should have its work all done, that it may enjoy rest, as well as other portions of the body.

The work of digestion should not be carried on through any period of the sleeping hours. After the stomach, which has been overtaxed, has performed its task, it becomes exhausted, which causes faintness. Here many are deceived, and think that it is the want of food which produces such feelings, and without giving the stomach time to rest, they take more food, which for the time removes the faintness. And the more the appetite is indulged, the more will be its clamors for gratification. This faintness is generally the result of meat-eating, and eating frequently, and too much. The stomach becomes weary by being kept constantly at work, disposing of food not the most healthful. Having no time for rest, the digestive organs become enfeebled, hence the sense of "goneness," and desire for frequent eating. The remedy such require, is to eat less frequently and less liberally, and be satisfied with plain, simple food, eating twice, or, at most, three times a day. The stomach must have its regular periods for labor and rest, hence eating irregularly and between meals, is a most pernicious violation of the

laws of health. With regular habits, and proper food, the stomach will gradually recover.

Because it is the fashion, in harmony with morbid appetite, rich cake, pies, and puddings, and every hurtful thing, are crowded into the stomach. The table must be loaded down with a variety, or the depraved appetite cannot be satisfied. In the morning, these slaves to appetite often have impure breath, and a furred tongue. They do not enjoy health, and wonder why they suffer with pains, headaches, and various ills. The cause has brought the sure result.

In order to preserve health, temperance in all things is necessary. Temperance in labor, temperance in eating and drinking.

Many are so devoted to intemperance that they will not change their course of indulging in gluttony under any considerations. They would sooner sacrifice health, and die prematurely, than to restrain the intemperate appetite. And there are many who are ignorant of the relation their eating and drinking has to health. Could such be enlightened, they might have moral courage to deny

the appetite, and eat more sparingly, and of that food alone which was healthful, and by their own course of action save themselves a great amount of suffering.

Efforts should be made to preserve carefully the remaining strength of the vital forces, by lifting off every over-tasking burden. The stomach may never fully recover health, but a proper course of diet will save further debility, and many will recover more or less, unless they have gone very far in gluttonous self-murder.

Those who permit themselves to become slaves to a morbid appetite, often go still further, and debase themselves by indulging their corrupt passions, which have become excited by intemperance in eating and in drinking. They give loose rein to their debasing passions, until health and intellect greatly suffer. The reasoning faculties are, in a great measure, destroyed by evil habits.

I have wondered that the inhabitants of the earth were not destroyed, like the people of Sodom and Gomorrah,

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I have seen reason enough for the present state of degeneracy and mortality in the world. Blind passion controls reason, and every high consideration with many is sacrificed to lust.

The first great evil was intemperance in eating and drinking. Men and women have made themselves slaves to appetite.

Pork although one of the most common articles of diet, is one of the most injurious. God did not prohibit the Hebrews from eating swine's flesh merely to show his authority, but because it was not a proper article of food for man. It would fill the system with scrofula, and especially in that warm climate produced leprosy, and disease of various kinds. Its influence upon the system in that climate was far more injurious than in a colder climate. But God never designed the swine to be eaten under any circumstances. The heathen used pork as an article of food, and American people have used pork freely as an important article of diet. Swine's flesh would not be palatable to the taste in its natural state. It is made agreeable to the appetite by highly seasoning, which makes a very bad thing worse. Swine's flesh above all other flesh-meats, produces a bad state of the blood. Those who eat freely of pork can but be

diseased. Those who have much out-door exercise do not realize the bad effects of pork eating as those do whose life is mostly indoors, and whose habits are sedentary, and whose labor is mental.

But it is not the physical health alone which is injured by pork-eating. The mind is affected, and the finer sensibilities are blunted by the use of this gross article of food. It is impossible for the flesh of any living creature to be healthy when filth is their natural element, and when they will feed upon every detestable thing. The flesh of swine is composed of what they eat. If human beings eat their flesh, their blood and their flesh will be corrupted by impurities conveyed to them through the swine.

The eating of pork has produced scrofula, leprosy and cancerous humors. Pork-eating is still causing the most intense suffering to the human race. Depraved

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appetites crave those things which are the most injurious to health. The curse, which has rested heavily upon the earth, and has been felt by the whole race of mankind, has also been felt by the animals. The beasts have degenerated in size, and length of years. They have been made to suffer more than they otherwise would, by the wrong habits of man.

There are but few animals that are free from disease. Many have been made to suffer greatly for the want of light, pure air, and wholesome food. When they are fattened, they are often confined in close stables, and are not permitted to exercise, and to enjoy free circulation of air. Many poor animals are left to breathe the poison of filth which is left in barns and stables. Their lungs will not long remain healthy while inhaling such impurities. Disease is conveyed to the liver, and the entire system of the animal is diseased. They are killed, and prepared for the market, and people eat freely of this poisonous animal food. Much disease is caused in this manner. But people cannot be made to believe that it is the meat they have eaten, which has poisoned their blood, and caused their sufferings. Many die of disease caused wholly by meat-eating, yet the world does not seem to be the wiser.

Because of those who partake of animal food do not immediately feel its effects, is no evidence it does not injure them. It may be doing its work surely upon the system and yet the persons for the time being realize nothing of it.

Animals are crowded into close cars, and are almost wholly deprived of air and light, food and water, and are carried thus thousands of miles, breathing the foul air arising from accumulated filth, and when they arrive at their place of destination, and are taken from the cars, many are in a half starved, smothered, dying condition, and if left alone, would die of themselves. But the butcher finishes the work, and prepares the flesh for market.

Animals are frequently killed that have been driven quite a distance for the slaughter. Their blood has become

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heated. They are full of flesh, and have been deprived of healthy exercise, and when they have to travel far, they become surfeited, and exhausted, and in that condition are killed for market. Their blood is highly inflamed, and those who eat of their meat, eat poison. Some are not immediately affected, while others are attacked with severe pains, and die from fever, cholera, or some unknown disease. Very many animals are sold for the city market, known to be diseased by those who have sold them, and those who buy them for the market are not always ignorant of the matter. Especially in larger cities this is practiced to a great extent, and meat-eaters know not that they are eating diseased animals.

Some animals that are brought to the slaughter seem to realize what is to take place, and they become furious, and literally mad. They are killed while in that state, and their flesh prepared for market. Their meat is poison, and has produced, in those who have eaten it, cramp, convulsions, apoplexy, and sudden death. Yet the cause of all this suffering is not attributed to meat. Some animals are inhumanly treated while being brought to the slaughter. They are literally tortured, and after they have endured many hours of extreme suffering, are butchered. Swine have been prepared for market even while the plague was upon them, and their poisonous

flesh has spread contagious diseases, and great mortality has followed.

TELEGRAPH DISPATCHES FROM THE MOUTH TO THE STOMACH

Office of the Mouth: at one end of the line.
Office of the Stomach: at the other end of it.

DISPATCH

Inquiry. Mouth to Stomach; "Are you ready for breakfast?"

Stomach. Yes. What are you going to send?"

Mouth. "You will see. Prepare!" The table bell rings. Body hurries - drops into a chair. Mouth

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opens, and down goes, as quickly as possible, a cup of coffee at a temperature of 145 degrees of Fahrenheit. It burns the Esophageal track as it passes it, and when it gets into the Stomach, burns it, and the Stomach contracts, and shrivels, and cringes, and finally screeches - and the

Mouth says; "Halloo! What is the matter?"

Stomach. "Matter! Enough, I should think. Do you not know that I cannot endure *Slush* at 140 to 160 degrees of heat?"

Mouth. "Oh, never mind! Here comes some beef steak with hot fried potatoes, hot rolls, and poor butter. Some salad with vinegar, some buckwheat cakes and molasses. These will heal it."

Stomach. "Stop! What earthly use is there in sending these down here all at a time? They'll make a hodge podge.

Mouth. "Here comes some more coffee."

Stomach. "Hold on! Wait! Give me some water!"

Mouth. "Water! water, when you can get coffee? You must be crazy - water has no nourishment in it. One wants water only when one is dry."

Stomach. "I am thirsty. Give me some *water!*"

Mouth. "Cannot do it - they haven't any water up here. If they have, it is hot and I doubt if they have any of that. Persons do not like water, and you, O stomach, are eccentric: so stop complaining

and get ready for some more food - 'take the good the gods provide you,' and be content. Are you ready! I am in a hurry. Up here, time is money. I have to furnish you with material out of which strength is to be gotten for the body's use to-day, and I have *ten minutes* allowed me for this purpose. Now, the afterpart is your look out, not mine. Take notice! are you ready? Here comes apple pie, fried chickens, tripe, tomato catsup, boiled ham, minute pudding, corn bread, and pickles; pepper, salt, gravy, mince pie, another cup of coffee - so look out!"

Stomach. "Look out! Oh, murder! What am I to do? Do! I must grind away at it, like a horse in a bark-mill, till I am worn out. Under such a condition

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of things as this, I shall break down in a fourth part of the time which I *might* work; but then the mouth - and for that matter the heart, too, will be *still* and I shall be at peace!" - *Prairie Farmer*.

VALUABLE SELECTIONS

Our friend and brother, B. Salisbury, Adams' Center, Jeff. Co., N. Y., sends us the Health Journal for 1840, from which we select the following:

DIET. - By the wonderful process of digestion, food and drink are converted into thought and feeling - are manufactured into mind and soul. Is it then unreasonable to suppose that different kinds of food produce different kinds of mind? Reasonable or unreasonable it is nevertheless the *fact*. Oysters are proverbial for exciting a certain class of feelings proportionately more than other feelings, or the intellect. Other kinds of food are known to have a similar effect. Rollin, the celebrated historian, says, that in training the pugilists for the bloody arena, to whom a ferocious spirit, and great physical strength, were the chief requisites, they were fed exclusively on *raw flesh*. Will not this explain the ferocity of beasts of prey; the mildness of the lamb and the dove; the blood-thirsty, revengeful spirit of the savage Indian; the mild and pacific disposition of the Chinese and Hindoo. Intoxicating drinks excite

the animal organs, located in the base of the brain, more than they do the intellectual or moral faculties. This is unquestionably the fact with every thing heating in its nature; such as condiments, flesh, tea, coffee, and high-seasoned or highly-stimulating food of any kind. And it will be found that animal food, by keeping the body in a highly excited, not to say feverish state, is calculated unduly to excite the animal organs, thereby withdrawing strength from the top and front of the brain, but imparting physical strength, and concentrating the energies of the system, thereby wearing it out the sooner; and also that vegetable food, by reducing the inflammation of the

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blood, and keeping the system cool, promotes clearness of thought, quietness of feeling, placidity of mind, and moral and elevated feeling, and develops the nervous temperament, thus producing a tendency to intellectual pursuits.

This subject opens up a vast field for observation, and nothing but facts can guide us to the proper results. Let observations be made, experiments instituted, and the results recorded; and a vast amount of good will flow from them. If you wish to distinguish yourself intellectually, you must regulate the quantity and quality of your food and drink in accordance with the established laws of physiology, or your wings of fame will be melted in the heat of animal indulgence.

TOO MUCH EATING. - One of the noble effects of civilization and refinement is to make gluttons of the human species. As the state of society improves, the mode of living becomes more and more artificial. What were luxuries or extravagances fifty or hundred years ago, are now matters of course, the mere necessaries of life. Our ancestors who confined themselves to a very simple diet and to a little variety of dishes, were seldom tempted to eat too much; that is rarely done when the palate is not solicited by a diversity of viands. But it is next to impossible for the people of this age to avoid injuring themselves by too much indulgence at the table. They are led into excess by an artificial appetite and all the enticements of cookery. Cookery, by

the way, is too much of a science for the good of the public; and of all literary productions (with the exception of a few late novels), we think *cookery books* are the least profitable. Every new dish presented is so much added to the bills of mortality. The kitchen is the vestibule of the grave-yard; the cook is purveyor to the undertaker. Plutarch says that his countrymen, the Boeotians, were remarkable for their stupidity because they ate too much: they were good trencher-men, and were good for nothing else; and this is generally the case with

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the great eaters of every age and country. - *Franklin Register*.

PRUSSIC ACID has been obtained from the leaves of *green tea*, in so concentrated a state, that one drop killed a hog almost instantaneously. A strong infusion of souchong tea, sweetened with sugar, is as effectual in poisoning flies as the solution of arsenic, generally sold for that purpose. Let tea-drinkers examine the above facts, and ascertain how much poison they annually consume in the form of the single article of tea.

ECONOMY. - "O, eat it up, dear, eat it up," says mamma. "I can't ma, I've eat enough." "O yes, dear, eat up what's in your plate, so that it needn't be lost! How common a practice that is! stuffing children beyond the wants of nature, and making them gluttons all their lives, so that the scraps need not be lost! Precious economy this!

It seems as if the grand experiment of mankind had ever been to ascertain how far they can transgress the laws of life - how near they can approach to the very point of death, and yet not die, - at least, so suddenly and violently, as to be compelled to know that they have destroyed themselves. - *Graham*.

THREE important secrets of health are, early rising, personal cleanliness, and leaving the table with a stomach unoppressed. There may be sorrows in spite of those, but they will be less with them, and nobody can be truly comfortable without them.

If you masticate your food thoroughly, you will find little occasion for drink with your meals.

HOW TO LIVE [NUMBER TWO]

IN this number we give entire Dr. Jackson's Lecture on Diphtheria, which constitutes No. 5, of the series of Health Tracts, for sale by F. Wilson Hurd & Co., Dansville, N. Y.

We also give No. 3, of the same series, entitled, How to Take Baths, by Miss Dr. Austin. J.W.

DIPHTHERIA;

ITS CAUSES, TREATMENT, AND CURE. By JAMES C. JACKSON, M. D.

The word "diphtheria" is derived from two Greek words, signifying a membrane. The same was given by M. Brettonneau to a class of diseases which are characterized by a tendency to the formation of false membranes, and affect the mucous membranes and sometimes the skin. It is not a contagious, nor an infectious disease, but only epidemic.

The causes that produce it are of two classes:

First, the Predisposing, of those which operate to fit the organism to take on such abnormal conditions as are indicated by the disease.

Second, The Proximate, or those which immediately operate to produce these conditions.

The predisposing causes are to be found in the general habits of life common to the people of our country. Till attention is called to it, thinking persons are not aware how uniformly and strikingly similar the habits of all children are. As for instance, in the

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sphere of dietetics, almost all children eat the same kinds of food, prepared in nearly the same ways.

Culinary preparations, at the beginning of the autumnal season, and so on through the winter and spring, partake largely of oleaginous materials. Butter is one of these, and is used largely; fat pork is another, and lard another. So also, sugar, or syrup is used largely, and so, as a condiment, is common salt. Now, with grains, vegetables and fruits as a base for our food, with butter and lard

intermixed, and flesh-meats, as staple articles of diet, together with narcotic beverages, in more or less use, the condition of the blood, of the fleshy tissues, and of the nervous systems of children are such as greatly to predispose them, under circumstances unfavorable to health, to take on diseases of the mucous membrane. Add to these predisposing influences those which grow out of confinement in school-rooms, where the occupants are compelled for hours to sit upon benches and study, while the air which they breathe is quite impure, or, if not so, is of such a temperature that the stratum in which their feet are bathed, is from five to ten degrees lower than that which envelopes their heads, and you have another predisposing cause to the production of this disease. To this add another in dress, and you have efficient causes enough to predispose the bodies of such persons to take on the disease.

Consider with me now the proximate causes. These may be regarded in the main as two;

First, Sudden and great changes in the degree of temperature of the atmosphere.

Second, Suppression thereby of the circulation of the blood on the external surface of the body, and the forcing of it thereby violently upon the internal skin, or, as it is called, the mucous membrane, thus inducing severe congestion at the throat, in the case of such persons, as by the operation of the predisposing causes before alluded to, have had their vital resistance weakened, and so are specially fitted to take on such congestion. Under the general habits of living, common to our adult and child population, therefore,

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and the imperfect action of the inherent forces of the living organism in the department of the circulation of the skin, together with the sudden changes of temperature common to our climate, in the autumnal, winter, and spring seasons of the year, are to be found the efficient causes for the existence of this disease.

It is a curious fact which statistics most certainly show, that of adult persons or children who take the disease, females as

compared with males, in the best ratio, rank as two to three, and in the worst ratio they rank as three to four. Thus, under the most favorable view, two-thirds of the persons attacked are females, and under the most unfavorable view, three-fourths of females. It is easy to account for this from two simple considerations:

First, In the case of adult females, women eat nearly as much carbonaceous material for food, as men, yet they live so as to get very much less pure, and very much more impure air than men. As a consequence, their blood becomes less perfectly aerated, or oxygenated, as it is termed. From want of aeration, it becomes foul; its constituents being made up largely of materials which have been separated from the solid tissue, and received into the blood with a view of being passed through the various eliminatory departments, which are the lungs, the bowels, the kidneys, and the skin. Not being carried off as they should be, they become acrid and poisonous. When under sudden changes of the temperature, therefore, the blood is forced from the capillary blood vessels of the skin back upon the capillary vessels of the mucous membrane, the impurities in the blood become a source of irritation and inflammation.

In the case of children, the dress of girls may account for the preponderance in numbers of those who take the disease. Has your attention ever been directed to the unhealthy way in which, for the most part, parents dress their girls, especially during the colder seasons of the year? A boy has thick covering for his feet and legs in the shape of high-topped boots, with thick soles, and woolen stockings, and a pair of

pantaloon coming over his boots down to the ankle. A girl has a pair of calf-skin bootees, with stockings, a pair of pantalettes coming a little below the knees, together with a short skirt, which serves no other purpose in the world, save to hide her nakedness, but that of so arranging the lower portion of her body as to bathe it continually in air, which, if of low temperature, must necessarily produce constant and uninterrupted chilliness of the surface. As an illustration of the truth of this view, one has but to carry an

umbrella over his head when currents of cold air exist, to find how much sooner, with the umbrella, the upper part of the body becomes chilled, than if he did not have it. Now, thus to chill the lower extremities from want of proper clothing, and by means of the ill adaptation of such clothing as the girl wears, is to force circulation to the upper portions of the body, and, when the temperature is cold, to drive the blood from the external surface of the upper extremities to their internal surfaces, thus producing the congestions which are termed diphtheritic.

What, then, is Diphtheria? It is a disease of the mucus membrane of the throat and air passages, caused by their sudden inflammation. So far it is like croup, and stimulates common influenza, as this is often seen in its incipient stages. The points of difference between these diseases and Diphtheria are frequently noticeable in their incipient stages, but become more obvious in their advanced stages, through the more complicated conditions in Diphtheria, than in croup, influenza or scarlet fever. Persons taken with croup, nine times out of ten show like symptoms; so they do in cases of influenza and scarlet fever. In croup, especially may the disease be said to be local, scarcely dependent upon any general derangement of the organism. Children may be, to all appearance, very healthy, and almost instantaneously show croupy symptoms. Influenza is almost always preceded by headache. In scarlet fever, a child, as a condition precedent to any exhibition of difficulty of the throat, in a majority of instances, shows disturbed condition of digestion. I have never seen one taken down with

scarlet fever, who, as a condition precedent to its unmistakable manifestation, did not show more or less irritation of the digestive organs, for some time previous. The complications of Diphtheria are as numerous and as variable as the persons attacked by it, and they differ very much by reason of the temperament, age, special condition of sex at the time of being taken down, etc. I have seen persons, both children and adults, attacked with Diphtheria, exhibit some or other of the following symptoms: Very sudden vertigo, with blindness; very sudden nausea, with vomiting; very sudden

ringing in the ears, with deafness; excessive palpitation of the heart with great faintness; the most violent neuralgic pains in the lower portions of the legs, especially in the heels; sudden and unconquerable desire for stool, with diarrheic flow; violent pain in the bladder, with great difficulty of making water: irregular, painful and sudden menstruation; chills, as severe as those in the chilled state of fever and ague; great mental irritability, producing mental excitement without cause, in some cases indicating great fearfulness, in others, an audacity unusual, amounting, in a few instances, to temporary aberration of mind, in other cases exhibiting immoderate and excessive laughter; very difficult and painful respiration, in some cases amounting in severity to the worst cases of asthma, - in all such instances, however, these varied symptoms last but a little while, and pass away to be followed by peculiar conditions of inflammation of the throat and air passages, now known to be unmistakable exhibitions of Diphtheria. No such varied introductory exhibition of morbid conditions has it been my lot to witness in connection with any other disease. For the most part, the symptoms of any disease are, with slight modifications, the same in all persons. Scarlet fever, croup, bilious colic, fever and ague, typhoid fever, whooping cough, yellow fever, acute dyspepsia, inflammatory rheumatism, inflammation of the bowels, dysentery, and so on, show nearly, in all persons, the same morbid conditions, as to enable physicians of any experience, to determine, almost instantly, when brought within the range of observation,

what the matter is with the person or persons affected.

But so far as my experience has gone, the introductory stages of Diphtheria are quite likely to be different in different persons. Thus, out of the great number of adults whom I have treated, I might specify the following. A German hired girl, at work in my family, was taken with sudden blindness and vertigo, and fell to the floor. In thirty minutes the symptoms of Diphtheria were unmistakable. A German hired man, who had not been sick in ten years, to my great dis-service, upon splitting wood, and stooping over to pick up a stick, was taken with such violent congestion of the lungs as with

great difficulty to breathe. In half an hour Diphtheria was most manifest. A gentleman sustaining intimate business relations to me, and a member of my family, was taken all of a sudden with violent coughing. In a very little time the diphtheritic symptoms were in full exhibition. A woman cleaning house for me, was taken with violent pains in her heels, and in a little while showed particular affection of the throat.

Children whom I have treated, have been attacked with a great variety of morbid conditions; some complaining of darting sharp pains in the eyes, some of ringing in the ears, some of pains in the bowels, others of chills running up and down their backbones, pains in their legs, and so on.

My treatment of this disease began years ago. At the outset I had in my own mind no very clear explanation to offer of the causes of the disease, and therefore I could not satisfy myself as to its nature. I, however, saw the unsuccessful results of the course then pursued by physicians of the Allopathic school, and in view of their want of success, pursued a course of treatment converse to theirs. They seemed desirous to produce relief by increased action of the mucous tissue of the stomach and bowels. Some of them, therefore, gave emetics, but most of them gave cathartics. As most of their patients died, I saw no use in pursuing that course, so I turned my attention to the external skin, and sought to produce changes in the

circulation of that structure, hoping thereby to produce the desired end. I know of but few men who have treated so many cases of Diphtheria as my associates at Our Home, and myself. We have never yet lost a case. We have been the means of saving many persons who were considered to be in advanced stages of the disease, and many more, who, having taken the disease, passed under our care in its incipient stages, and were saved, though they were members of families wherein from two to five persons had previously died under the drug-medicating plan of treatment.

Our success has been so great, while as yet our plan of treatment has been so simple, as really to introduce a decided

change in the medical practice in this particular disease, in this locality. I do not know of a physician of any school in the town, who has not practically abandoned the administration of cathartics in cases of Diphtheria, and with such modifications of our plan of treatment as his own individuality would naturally prompt him to make, adopted, in fact, our method. The result has been that, whereas great numbers of persons four years ago died of the disease in this town, and whose deaths caused a real panic among the people, the disease has come no more to be feared than any other morbid condition of body common to our people. Owing to our residence here, and as the result of our teachings on the subject of health, or to some silent influence affecting the views of the people of this town, there is much more care given to the conditions of living of children, especially in the cold seasons of the year, than formerly. This of itself, in my judgment, is a very great security, for it stands to reason that if one can manage the predisposing causes, he need not fear the proximate causes of disease. The best course to be pursued in any family, or in any community, in respect to this fearful scourge, is that of prevention, and to look well after the general habits of life is greatly to add to the securities against its appearance.

There is one feature connected with its exhibition and progress to which I feel bound to call public attention. It is its greater prevalence in families which

are hereditarily scrofulous, and thereby predisposed to diseases of the throat and air passages of the lungs, than in families not thus affected. I have been able by personal advice, and personal examination in this direction, to forewarn parents of the liabilities under which they themselves and their children rested. A scrofulous child, permitted to eat pork, and if a girl, to dress and live as do most children in our society, is predisposed to take on diseases of the air-passages, and when diphtheritic conditions of these exist, is as sure almost to die as he or she is to be attacked. Nothing, under such circumstances, saves the child, but the possession on its part of great vitality, and medical administration marked by great

judiciousness and care. The public does not know it, but it is none the less a fact, that scrofula has come to be a household disease in the United States. I can pick out a scrofulous man or woman or child just as far as I can see them. Such persons, more likely than not, are high livers, eat gross and high-seasoned foods, and in great quantities, and are therefore liable to take on inflammatory diseases, and to have these located in or about the throat and air passages.

To live so as to be able to avoid disease is a very great attainment. That it can be done, and to such degree as to lessen, in a very large measure, the number of persons who are likely to suffer from diphtheritic inflammation, is as certain my own mind, as is the existence of the law of gravitation. There is no need, in the first place, of our children, nor of ourselves, having this disease, and in the second place, if, by reason of some carelessness on our part, in the way of simple, uncomplicated exposure, we find ourselves or our children attacked with it, there is no more need of our or their dying with it, than from a common cold in the nose. Two things we only want to know; one is how to live so as to keep our bodies in the best possible relations to life; and second, if from causes that are unhealthful we become sick, and Diphtheria is the form of our sickness, to know how to treat it in view of the causes that have produced it.

My method of treatment has been as follows: When

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I repeat that out of the hundreds of cases which have come under my professional handling, I have never yet lost a case. I leave the public to estimate the value of the suggestions I now offer:

In all cases, no matter whether the subjects are children or adults, I have uniformly, as the first thing to be done, given a hot bath. Its temperature and duration were regulated by the age, sex, and vitality of the patient, the bath ranging from ninety-eight to one hundred and ten degrees, the person sitting in it from five to thirty minutes, always, however, until profuse sweating was produced. The bath I choose to make in such a way as to render it feasible to be given by any private family. Hence, it has been my

practice to give a sitz-bath, for which purpose any washtub will answer by putting a block under the backside so as to tip it forward a little, and filling it as full of water as possible without having it run over when the patient sits down in it, and taking a common keeler, or pail, if the former cannot be had, and fill it up partly full of warm water, for the purpose of immersing the feet, setting it down in front of the sitz-bath. I then place the patient in a sitting posture and wrap a heavy blanket round him in front, bringing it across his shoulders in the rear, and tucking it smoothly down. Then I bind his head in the shape of a wreath or band with a towel wet in cold water, and let him sit till perspiration is induced. If the patient is a child, quite small, the arrangements must be made to suit size and age. In many instances an attendant is directed to kneel down, and lifting up one side of the blanket, dip his or her hand in water and rub the upper portion of the chest of the person. If sweating is not readily induced, some of the water is dipped out, and hotter water poured in until as high temperature is raised as the patient can bear. I have never had a case where the primary symptoms were not mitigated, in some measure, as soon as increased action of the circulation by the skin was manifest.

Upon taking the person out, my uniform practice has been to pack him. This, as most of my readers will know, consists of spreading upon a bed two or three

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woolen blankets, or a woolen blanket and comfortable, the woolen blanket at the top, and over these one or two linen sheets wet in cool water, and left so wet as simply not to drip, and upon coming out having him lie down and be enveloped in this wet sheet from head to foot, with additional cloths laid over the chest, and coming up close round the throat, these being cold or hot, as my own judgment, derived from the sensations of the patient, might dictate. In this envelopment, just taken out of a hot bath, he feels very pleasant bodily sensations. The effect upon the nervous system is decidedly sedative, so much so, as in a majority of instances, to induce sleep. If sleep is induced, I allow the nap to continue undisturbed, even though it be prolonged for three, four, or five

hours. If the person does not go to sleep, I generally permit the pack to continue from forty--five minutes to an hour and a half, as the patient's sensations may indicate.

During the period that the patient is in the bath, and while being put in the pack, the room is kept thoroughly warm, but upon being wrapped up in the wet sheet, the windows are opened, and thorough ventilation and lowering of temperature is secured, so that he may be sure to have the coldest air that can be given to him.

When ready to come out of the pack, the windows are shut, the temperature of the room raised, and when well warmed, the envelopments are thrown off, the patient lying upon the bed, an attendant proceeds to rub him with dry towels, until all moisture is removed from the body, and then rubs with the dry hand over the entire body until the skin is dry and velvety.

I then wrap the patient's throat and chest in wet bandages. These are made so as to fit the parts well, and are covered by dry ones of the same shape as the wet. Thus enveloped, the patient is placed in bed, with a wet cap upon his head, and hot flat-irons, or a jug of hot water, or hot dry woolen blankets at the feet. An attendant is placed in charge of the room, which,

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if very much exposed to light, is shaded, and perfect quiet, if possible, thereafter is insured.

It gives me pleasure to say that, whether in my own Cure, or at the houses of private families, I have never found this treatment to fail in mitigating the severities of the attack, no matter in what form it has appeared.

The course pursued afterward has been nearly as follows. qualified somewhat, as I have before said, with reference to the age, sex, and vital power of the subject:

First, having induced, I have sought to keep up thorough circulation on the entire surface.

Second, to insure it in plentiful degree at the extremities, my object being two-fold - to relieve the overburdened internal blood-vessels, and especially those of the mucous membrane; and second,

to relieve the blood-vessels of the lungs, throat, and head. To do this, frequent application of warm cloths, wet or dry, to the extremities, or rubbing them with the dry warm hand has been practiced.

Next, freedom from mental anxiety, to as perfect a degree as possible, and to this end no visitors in the room, and no change of attendants, except such as was originally provided for. The practice of having half a dozen different persons have charge of a patient suffering from diphtheritic inflammation, is productive of such mental disturbance as, in many instances, to amount to *anxiety* of mind, and directly tends to, and not unfrequently produces cerebral congestion. From the family, therefore, two or three persons must be chosen to have the entire care of the case, until all danger is past, and no other members of the family must, on any pretence whatever, enter the room, unless desired to be seen by the patient.

Next, comes the giving of food. Whether infant, child, or adult, male or female, I never allow a particle of food to be given, until I am sure that nature has reacted sufficiently to establish healthful circulation, and quite natural conditions of the nervous system. In some instances, I have made my patients go three days, in others four days, without taking a particle of food, permitting them, however, in the meanwhile, to

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drink freely of soft water. Until one tries it, he is not aware how well a person, whose organism is under inflammatory conditions, will find hunger assuaged by the free use of soft water taken internally. When the collective symptoms indicate such change as to relieve the patient from all danger, food may be given; but this should be of a fluid form, and should not be of a carbonaceous character.

Connected with the treatment, the furnishment of pure air is of prime importance. The disease is essentially one derived from imperfect aeration of blood, with imperfect elimination of waste matter. If then, the treatment can be of such a nature as to set the eliminative organs, especially the skin, which is the structure

generally at fault, at work, and thus secure the thorough removal of waste materials from the blood, and the solid tissues, while at the same time, the blood is properly aerated, there can be no failure of recovery to the subject. I have no doubt that one of the best things that could be done, in the treatment of this disease, were it readily practicable, would be the inhalation of oxygen gas. In default, however, of means to do this, the next best thing, as a curative, is to secure the free use of pure atmospheric air, which by the way, would be, if freely used, a great preventive. I take it upon me, therefore, always to secure thorough ventilation, even though I have to knock a pane of glass out of the room where the sick person lies or punch a hole through the wall so as to let the air in. The attempt, on the part of doctors and nurses, to have sick persons do well under their treatment in the absence of pure air, is characterized by such folly as to make one wonder why it is so persistently pursued.

There are some other points connected with the treatment of Diphtheria, to which it may be well for me to allude. One is, that many persons who are killed by the disease, die from suffocation, this resulting from the formation of what the doctors call a "false membrane" in the air passages. This false membrane is formed out of thick mucus, secreted from the mucous glands, and almost immediately

thereupon forms into a thick imperfectly organized membranous shape, filling up the cavities of the air tubes, and thus rendering it impossible for the patients to breathe. The method of treatment, which I have pursued has had the effect, while increasing the flow, to render the expectoration of the mucus perfectly within the control of the patient, and it has been wonderful to myself and to others to observe the quantities that have been thus secreted and coughed up in the course of twelve hours. Some of my patients have raised a quart, others half a gallon; one man in the course of forty-eight hours not less than six quarts of this slippery-elmish substance, and lost nine pounds in weight. The man's tissues must have been as foul as corruption itself. No other treatment that I

have ever been made acquainted with, has seemed to produce this effect, which I consider of great importance.

Another consideration worthy of attention, is the danger of relapse. It has been my practice, therefore, to keep my patients free from physical or mental fatigue for some days, and some of them for weeks after all danger seems to have passed away. For many of them, upon convalescence, show nearly the same conditions that persons do who have been taken with congestive chills, or with typhoid fever and recovered. There can be no doubt that in many instances of diphtheritic attack, the cerebral disturbance is very great, the brain and lungs, and sometimes the liver and bowels being excessively congested, and that by the rapidity with which these organs have been relieved by the determination of blood to the surface, has recovery to the patient been insured.

Thus, have I tried, in common phrase, so that the most unlearned or unlettered person may understand me, to mark out the views which I cherish, and the course I pursue in the treatment of Diphtheria.

Besides the cases treated personally by myself and associates, Miss Dr. Austin and myself have received hundreds of letters from persons, who, having followed our directions in the main, have succeeded in the recovery of their patients. Some of these patients

have been men, others women, others children, and, with slight modifications, they all tell the same story as to the results produced. Whenever my method of treatment has been taken in the early stages, and has been the only treatment pursued, it has been successful. To apply it to scrofulous children in the more advanced stages of the disease, and especially where these have been previously drugged, is to render the probability of success much less than it would otherwise be. But early attention to it, and a persistent following of it, I am satisfied will save a great majority of children who may be so unfortunate as to be attacked. It is far better so to bring up children as to reduce their liabilities to so low a point as practically to amount to nothing, than it is to rear them

in such a way as to have them greatly exposed to take disease, and when taken sick, almost sure to die.

HOW TO TAKE BATHS

BY MISS HARRIET N. AUSTIN, M. D.

To many persons the descriptions and explanations below may seem unnecessarily minute, but they will not, I think, to him who has had much experience in giving instructions for home-treatment. He who has seen persons attempt to take Sitz-Baths in wash-bowls, to take Half-Baths without undressing, to give a Dripping-Sheet by wetting one corner of the sheet in cold water, or to give hot fomentations with a small linen towel, or a bit of flannel as large as his two hands, has learned how crude are the notions of the people in regard to the whole matter of water treatment. A vast deal of injury has been done in this method of treatment, as well by the bungling use of appliances, which, if skilfully used, would have been entirely proper, as by the use of such as were wholly unsuited to the person to whom they were administered.

We do not give *heroic* treatment. We do not believe

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in it. Our baths are all mild, and given at not very frequent intervals. The first thing to be done when a bath is to be given is to prepare the room, making it of a *comfortable temperature*. The second is to prepare the bath, using *soft water*, and making it of the *right temperature, as indicated by a thermometer*. Persons sometimes ask us to explain what we mean by certain temperatures, so that they can get along without a thermometer. This is impossible. The terms hot, cold, warm, tepid are so indefinite, and convey so different impressions to different persons, as to be entirely unreliable in giving directions. What is hot to one person is cold to another, in the morbid states through which sick persons pass. And the sensations of healthy persons are so variable that they cannot be relied upon to temper baths by the touch, for those with whom a slight change is of consequence. Of course the line where cold passes into tepid, or tepid into warm, is inappreciable, but in

general terms I should consider a bath at 75 degrees Fahrenheit cold, at 85 degrees tepid, at 95 degrees warm, and at 105 degrees hot. The idea that the hotter a person is, the colder should be his bath, is productive of great mischief. The true rule is exactly the reverse of this. That is, a person in a *high fever* should have his bath at a *higher temperature* than if he had no fever; for what, in the latter case, would be a pleasant temperature to him, might be shockingly cold in the former. So, while in such conditions a bath at 90 degrees would subdue the fever, one at 75 degrees would be likely to produce violent reaction, and in half an hour the fever would be higher than before. ¹¹

Having the bath ready, the next thing is to get the patient ready. One who is suffering from acute disease may often, when feeling nervous, and restless, and exhausted, be greatly refreshed and soothed by the administration of a bath. But persons who are

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taking a course of treatment for chronic ailments, or those who simply bathe for cleanliness, should never take their baths when *tired*. Baths are always most beneficial in their effects when taken with the body at its highest point of vigor. Hence, as a rule, ten or eleven o'clock in the day is the best hour for bathing. When this is impracticable, the hours of rising or retiring are unobjectionable. No bath should be taken immediately *after or before a meal*. Care should be taken to have the *feet warm* on coming for a bath. In cases where they are habitually cold and cannot be warmed by exercise, it is often well to take a warm foot-bath for a few minutes before a general bath or pack. Next, the patient lays aside all his clothing, and *wets his forehead and top of the head* in the bath or cool water; and if the bath is continued beyond a few minutes, like a Sitz-Bath, a wet towel or cap should be kept on the head. If the bath is to be *reduced*, as we very frequently do, as reducing a half or Sitz-Bath from 90 degrees to 85 degrees or 80 degrees, the patient rises out of the water while the attendant pours in cold water. *Soap* should never be used except for persons who bathe very seldom, or who are very dirty. When a person comes from any general bath, that is, having the whole surface bathed, he should be instantly enveloped

in his *wiping sheet*, and himself and the attendant should fall to rubbing vigorously. Sheets should be made specially for bathing purposes. A common cotton bed sheet will answer for wiping; for a sheet of some kind must be used, towels after a general bath being entirely unfit, and *crash towels* quite out of the question. But for packing or dripping sheets, *use linen*, and have the sheet not longer than to reach from the person's head to his heels. The fabric may be coarse and heavy, but must be *soft and smooth*.

As soon as the skin is thoroughly dried after a bath, the sheet is removed, and the rubbing continued briskly and gently over the whole surface *with the dry hands*, for four or five minutes. A healthy person can do his own rubbing, but the invalid is greatly benefited by having an assistant. And every thing that this person has to do in administering the treatment, should be

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done with energy and expedition, not leaving the patient in a shivering, uncomfortable state for even the shortest length of time.

After getting through with the bath, *immediate* means must be taken to establish *thorough and permanent reaction*. If the person has a good degree of strength, he may go out well dressed for a brisk walk, or to split wood, or fodder the cattle, or do anything which will keep him stirring. But in the case of very delicate persons, it is often better, particularly if the weather is inclement, to *go to bed*, well covered up, with a cool cloth on the head, and a warm blanket at the feet, if needful, and lie for an hour or two, till the circulation becomes entirely quiet. And sometimes comparatively strong persons do well to follow this course, and get up and take their exercise afterward. If a person uses these means, and still grows chilly thirty or sixty minutes after the bath, or if after an hour or two he feels an unusual languor or exhaustion, his bath has done him *harm instead of good*.

GENERAL BATHS

The HALF-BATH, so called because about half the person is immersed in water, is taken in a tub about four and a half feet long,

twenty-six inches broad toward the widest end, and gradually tapering till it is no more than fifteen inches broad toward the other end, and eleven or twelve inches high. At least, this is a convenient size and shape. Ours are made with staves and hoops, and sit on wooden horses about twenty inches high, with a hole stopped with a plug in the bottom, at the small end. The bath is prepared at the right temperature, about six inches deep; the patient wets his head and steps into it, sitting down in the broad end of the tub, with his feet extended toward the narrow end. To have it done just right, there should be two attendants, one to rub the patient's legs, and the other to rub his back and arms, while he rubs the front part of his body. The rubbing should be done lightly and briskly, dipping the water up on the body with the hands very frequently. The

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common time to continue the bath is for two minutes, though to gain a particular end it is often continued much longer.

In an institution where all the apparatus is at hand, this is one of the most convenient, pleasant, and efficient forms of bath.

The **PLUNGE** is taken in a tub four or five feet deep, nearly filled with water, and so narrow that the person can place a hand on each side of the tub, leap in, crouch down till the water rises to his chin, and then leap out. This is a very pleasant, and, if taken cold, a very exhilarating form of bath. When arranged, as we have it at **Our Home**, so that the temperature of the water can be raised to about 75 degrees or 80 degrees, it is one of the best baths which a robust, healthy person can take for cleanliness, daily or tri-weekly.

The **DRIPPING-SHEET** will, perhaps, be found to be more practicable for invalids in families, than any other form of bath. It requires but little water, can be taken on the nicest carpet, and if mild in its temperature, produces very mild reactions. An oil-cloth should be spread on the floor or carpet, and the sheet put in a pail half full of water. The patient stands in the middle of the cloth, and the attendant raises the sheet by two of the corners and throws it around him, so as to completely envelop him from his neck to his feet, and immediately falls to rubbing him vigorously with both hands, over the sheet. If desired, the sheet can be partly relieved of

the water by squeezing through the hand, as it is raised from the Pail. It is common to apply the sheet twice; first in front, lapping it behind, rubbing one minute, then removing, dipping in the water again, and putting around from behind, and rubbing another minute. A very feeble person can take this bath sitting on a stool, if need be; but in that case there should be two persons to rub outside the sheet. Or a strong person can take it alone, as he can reach nearly every part of his person to rub, and can wash his back by drawing the sheet across it. It is an excellent bath.

The PAIL-DOUCHE should be taken in a room where a portion of the floor is lower than the main part, and

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from which the water is carried off by a drain. From one to six pails full of water may be used. The person stands on the depressed floor, and the attendant, standing four or five feet away, takes up a pail and dashes the water with considerable force, at three or four dashes, over him, letting it strike near the upper part of the body, and so run down and cover him; the recipient meantime turning slowly round, so as to receive the water on all parts of the body. This is a very pleasant bath, if not taken below 80 degrees, and entirely unobjectionable to be used daily for cleanliness by persons in health.

The *Towel-Washing* has no advantage over the dripping-sheet, except in instances where it is used simply for cleanliness and is more convenient, or where the person is too feeble to sit up. One who is *very* feeble may be bathed in this way without fatigue or exertion. The nurse uncovers an arm, or a leg, or a small portion of the body at a time, partially wrings a soft towel out of tepid water, and washes the part quickly and gently, wipes with a soft towel, rubs with the warm, dry hand, covers again, and so proceeds till the whole surface is washed. Or, if this is too much at one time, the operation may be suspended an hour or two. Patients who are feverish are often greatly soothed and comforted by having the back bathed in this way several times in a day, or even by having the face, hands, and feet bathed. Water may be used more freely by spreading a dry sheet or blanket under the patient to protect the

bed. If the patient is able to get up for his bath, the dripping sheet should be used instead of a towel.

THE PACK

Preparation is made for the PACK on a bed or lounge, the pillow lying in its place, and two warm comfortables and a woolen blanket, or as many blankets as will amount to these in quantity, being spread outside. Over these is spread the wet sheet, slightly wrung, and so high up that it will reach but a few inches below the knees, and may be wrapped around

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the head. The patient immediately places himself upon this, on his back, his arms at his sides, and the attendant quickly brings the corner of the sheet over from the further side, under the chin, and tucks it under the near shoulder, and up close to the neck, and then all along down the body to the bottom of the sheet. Then the opposite side of the sheet is spread over and tucked under in the same way. Then one side of the blanket, then the other, and so on of the comfortables, being sure to make these snug around the feet. If there is liability that the feet will grow cold, they should be wrapped in a warm blanket or have a bottle of hot water placed near them, outside the blanket. Sometimes we wrap them in flannel folded and wrung out of hot water; and very frequently, when persons have local congestions, as of the lungs, liver, or throat we place over the part, hot, wet flannels when we put them in pack. I have known persons who could not take a pack in the ordinary way without chilling, have them administered with great benefit by placing a strip of hot flannel up and down the back-bone, inside the wet sheet. A cool wet towel should be laid on the forehead, and the person left entirely quiet, and in three times out of four he will go to sleep and get a delicious nap. He should not be left alone, however, unless he is accustomed to it, as he may become very nervous on finding himself alone and helpless. The rule of remaining in the pack, if the patient is quiet, is till he feels thoroughly warm; say from twenty-five to sixty minutes. It is usual

to give persons some form of general bath, as described above, the moment he is taken out of pack; though with feeble persons we sometimes throw the dry sheet round them instead, and wipe immediately. On such one may take a towel-washing, lying still, and being only partly uncovered at a time.

LOCAL BATHS

The **SITZ-BATH** may be taken in a common-sized wash-tub, though we have tubs made on purpose, which are higher at the back, with so much water as nearly to fill the tub when the person sits down. The

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person should remove all his clothing, except his shoes and stockings, and be well wrapped up in his bath with a comfortable. Many times it is desirable to undress the feet also, and take a warm foot-bath while a tepid sitz-bath is taken. In this case, the feet should be dipped into the cool water when taken out of the warm-bath. A cool wet cloth or cap should be worn on the head. This bath is continued from five to ninety minutes, to meet condition; though the more usual time is from fifteen to thirty minutes.

The **SHALLOW BATH** may be taken in any tub sufficiently large to allow the person to be immersed in water to the hips, as he sits or stands in it. The upper portion of the body should be covered with a blanket or warm wrapper. This bath is continued from five to thirty minutes. Sometimes, however, it is taken sitting, in a half-bath tub, an attendant rubbing the limbs, and in such cases it is continued from one to five minutes.

The **HAND-WASHING** is performed by dipping the hands frequently in a vessel of warm water, and rubbing vigorously a limited portion of the surface, as over the chest, abdomen, liver, spleen, or spinal column. Severe congestions are sometimes relieved by this process - dipping the hands alternately in cold and hot water, and continuing it ten to twenty minutes.

FOOT-BATHS are made from one to five inches in depth, in a keeler or common pail, and are continued from five to twenty

minutes. HAND-BATHS taken alone or with foot-baths are often beneficial.

When FOMENTATIONS are to be applied to any part of the trunk of the body, the better plan is to double a woolen blanket and spread it in a bed, and let the patient undress and lie down upon it. A flannel folded to about six thicknesses is then wrung out of hot water and placed upon the part to be fomented; the blanket is brought over it, first from one side and then the other, and then the bed clothes spread over all. The cloth should be applied at such a temperature as to feel decidedly warm, or pleasantly (not unpleasantly) hot; and should be replaced by a fresh one as often as it grows cool - say from six or eight to

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twelve or fifteen minutes. The head must be kept cool and the feet warm. The applications may be continued from ten minutes to two hours, as occasion requires. On finally removing the flannel cloth, the part fomented must be washed off with cool water - say at 85 degrees - unless a cool bath is to follow, or a cool bandage or compress is to be applied. Here is an important point. Whenever water is applied to any part, or the whole, of the body at so high a temperature as to relax the coats of the capillaries and distend them with blood, it must be followed by an application at so low a temperature as to constrict the vessels and restore their tone. Otherwise there is great liability to take cold. Hence the old-fashioned way of "soaking the feet in hot water," on going to bed at night, for a cold, had to be done with great care to avoid adding to the cold. If the hot bath had been followed by a cold one, there would have been no difficulty.

SWEATING

One of the most convenient and efficient methods of inducing sweating is to place the patient in a sitz-bath, with a foot-bath; letting both be as warm as can well be borne. He must be well covered with a comfortable, and as the baths gradually cool, hot water can be added. The head must be kept well wet with cold

water, and watch kept that the patient does not grow faint. When perspiration is thoroughly established, he may take a half-bath or dripping-sheet, and go to bed. If it is desired to check the perspiration entirely a good way is to commence the half-bath as high as 90 degrees, and gradually reduce it to 80 degrees, or lower. One of the safest and most effectual modes of breaking up a severe cold for a robust person, is to place him in a hot-bath till he sweats profusely, and then transfer him immediately to a pack at about 80 degrees, and follow this by a dripping-sheet, and send him to bed with but little to eat for two or three days. If there is congestion of the throat or lungs, it is sometimes well to foment the parts while in the hot-bath. Such a course

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as this is a considerable tax upon the strength, and should be followed by, at least, several hours' repose in bed. If, after going to bed, the sweating continues too long, it should be checked by a cold bath; or, if it continues at all, it is well to rub off the surface with a wet towel on rising.

EMETICS

Of warm water should be administered at the temperature most sickening to the patient, probably about 90 degrees. The draughts should be taken at short intervals, not allowing time for the absorbents of the stomach to take up the water to any great extent. It may be needful to give anywhere from a pint to four quarts.

INJECTIONS

When used daily for cathartic purposes, should be taken at a regular hour, one hour after breakfast being a very suitable time, at a temperature of 85 degrees. If there is particular inactivity of the bowels, the enema may be rendered more efficacious by lying down, having the water slowly injected, and retaining it fifteen or twenty minutes, if necessary, for this purpose pressing externally with a folded towel. Some author has said that it is better to lie upon the right side in taking an injection, and it would seem from

the conformation of the intestines, that there might be a reason in this. Where there is obstinate constipation, it is sometimes useful to take a small cold injection, to be retained on going to bed at night.

BANDAGES

To be worn next the body, should be made of heavy, soft linen. The outer, dry bandage may be made of common cotton muslin, cotton jean, cotton flannel, or if necessary to keep the person warm, woolen flannels. Both the outer and inner bandage should be made double. The rule for wetting the bandage in chronic ailments is, before it gets dry -say three to five times in twenty-four hours. In acute diseases, particularly if there is much fever, they may need wetting much

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oftener. It is not necessary that they be wet in very cold water, if this is unpleasant, but the water should be cool.

ABDOMINAL BANDAGES may be made about six inches wide, and sufficiently long to wind twice around the body, or only long enough to pass around the body once, and meet in front. In the latter case they should be wide enough to cover the stomach and abdomen, and need to be fitted to the form by inserting gores in the lower part, or taking seams in the upper part.

THE WET JACKET is fitted nicely to the form, having armholes, and coming up snugly round the neck, and may reach only to the waist, or it may come to the hips. In this form they are admirable worn in fevers. They should be made to lap in front, thus covering the chest with four thicknesses of wet linen and of dry cotton. These, as well as the abdominal bandages, may be left dry across the back, if they cause chilliness. In both cases, also, the outer bandage should extend a little over the edge of the wet one.

The **THROAT BANDAGE** should be about three inches wide, and made to pass once or twice around the neck.

COMPRESSES are limited bandages, as a folded wet towel, worn over the throat, or chest, or stomach, or liver, and so covered with a dry bandage as to be kept warm.

THE WET CAP

Is made by taking a piece of linen long enough to measure round the head, just above the ears, and from three to four inches wide when doubled. This is sewed together at the ends, and gathered at the upper edge into a round crown-piece. It is wet in cold water, and worn on the top of the head, coming down on the forehead, and must be re-wet as often as it becomes dryish. It does not add particularly to the attractiveness of one's appearance, but is exceedingly comfortable where one suffers from heat in the head, from chronic congestion, or to be worn in the study or library when thinking is not easy.

DISEASES AND ITS CAUSES. Chapter 2 [EGW]

BY ELLEN G. WHITE.

MEN and women, by indulging the appetite in eating rich and highly-seasoned foods, especially flesh-meats, with rich gravies, and by using stimulating drinks, as tea and coffee, create unnatural appetites. The system becomes fevered, the organs of digestion become injured, the mental faculties are beclouded, while the baser passions are excited, and predominate over the nobler faculties. The appetite becomes more unnatural, and more difficult of restraint. The circulation of the blood is not equalized, and becomes impure. The whole system is deranged, and the demands of appetite become more unreasonable, craving exciting, hurtful things, until it is thoroughly depraved.

With many, the appetite clamors for the disgusting weed, tobacco, and ale, made powerful by poisonous, health-destroying mixtures. Many do not stop even here. Their debased appetites call for stronger drink, which has a still more benumbing influence upon the brain. Thus they give themselves up to every excess until appetite holds complete control over the reasoning faculties; and man, formed in the image of his Maker, debases himself lower than the beasts. Manhood and honor are alike sacrificed to appetite. It required time to benumb the sensibilities of the mind.

It was done gradually, but surely. The indulgence of the appetite in first eating food highly seasoned, created a morbid appetite, and prepared the way for every kind of indulgence, until health and intellect were sacrificed to lust.

Many have entered the marriage relation who have not acquired property, and who have had no inheritance. They did not possess physical strength, or mental energy, to acquire property. It has been just such ones who have been in haste to marry, and who have taken upon themselves responsibilities of which they

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had no just sense. They did not possess noble, elevated feelings, and had no just idea of the duty of a husband and father, and what it would cost them to provide for the wants of a family. And they manifested no more propriety in the increase of their families than that shown in their business transactions. Those who are seriously deficient in business tact, and who are the least qualified to get along in the world, generally fill their houses with children; while men who have ability to acquire property generally have no more children than they can well provide for. Those who are not qualified to take care of themselves should not have children. It has been the case that the numerous offspring of these poor calculators are left to come up like the brutes. They are not suitably fed or clothed, and do not receive physical or mental training, and there is nothing sacred in the word, home, to either parents or children.

The marriage institution was designed of Heaven to be a blessing to man; but in a general sense it has been abused in such a manner as to make it a dreadful curse. Most men and women have acted, in entering the marriage relation, as though the only question for them to settle was whether they loved each other. But they should realize that a responsibility rests upon them in their marriage relation farther than this. They should consider whether their offspring will possess physical health, and mental and moral strength. But few have moved with high motives, and with elevated considerations - that society had claims upon them which they could not lightly throw off - that the weight of their families' influence would tell in the upward or downward scale.

Society is composed of families. And heads of families are responsible for the molding of society. If those who choose to enter the marriage relation without due consideration were alone to be the sufferers, then the evil would not be as great, and their sin would be comparatively small. But the misery arising from unhappy marriages is felt by the offspring of such unions. They have entailed upon them a life of living misery; and though innocent, suffer the consequences

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of their parents' inconsiderate course. Men and women have no right to follow impulse, or blind passion, in their marriage relation, and then bring innocent children into the world to realize from various causes that life has but little joy, but little happiness, and is therefore a burden. Children generally inherit the peculiar traits of character which the parents possess, and in addition to all this, many come up without any redeeming influence around them. They are too frequently huddled together in poverty and filth. With such surroundings and examples, what can be expected of the children when they come upon the stage of action, but that they will sink lower in the scale of moral worth than their parents, and their deficiencies in every respect be more apparent than theirs? Thus has this class perpetuated their deficiencies, and cursed their posterity with poverty, imbecility, and degradation. These should not have married. At least, they should not have brought innocent children into existence to share their misery, and hand down their own deficiencies, with accumulating wretchedness, from generation to generation, which is one great cause of the degeneracy of the race.

If women of past generations had always moved from high considerations, realizing that future generations would be ennobled or debased by their course of action, they would have taken their stand, that they could not unite their life interest with men who were cherishing unnatural appetites for alcoholic drinks, and tobacco which is a slow, but sure and deadly poison, weakening the nervous system, and debasing the noble faculties of the mind. If men would remain wedded to these vile habits, women should have

left them to their life of single blessedness, to enjoy these companions of their choice. Women should not have considered themselves of so little value as to unite their destiny with men who had no control over their appetites, but whose principal happiness consisted in eating and drinking, and gratifying their animal passions. Women have not always followed the dictates of reason instead of impulse. They have not felt in a high degree the responsibilities resting upon them, to

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form such life connections as would not enstamp upon their offspring a low degree of morals, and a passion to gratify debased appetites, at the expense of health, and even life. God will hold them accountable to a large degree for the physical health and moral characters thus transmitted to future generations.

Men and women who have corrupted their own bodies by dissolute habits, have also debased their intellects, and destroyed the fine sensibilities of the soul. Very many of this class have married, and left for an inheritance to their offspring, the taints of their own physical debility and depraved morals. The gratification of animal passions, and gross sensuality, have been the marked characters of their posterity, which have descended from generation to generation, increasing human misery to a fearful degree, and hastening the depreciation of the race.

Men and women who have become sickly and diseased, have often in their marriage connections selfishly thought only of their own happiness. They have not seriously considered the matter from the standpoint of noble, elevated principles, reasoning in regard to what they could expect of their posterity, but diminished energy of body and mind, which would not elevate society, but sink it still lower.

Sickly men have often won the affections of women apparently healthy and because they loved each other, they felt themselves at perfect liberty to marry, neither considering that by their union the wife must be a sufferer, more or less, because of the diseased husband. In many cases the diseased husband improves in health, while the wife shares his disease. He lives very much upon her

vitality, and she soon complains of failing health. He prolongs his days by shortening the days of his wife. Those who thus marry commit sin in lightly regarding health and life given to them of God to be used to his glory. But if those who thus enter the marriage relation were alone concerned, the sin would not be so great. Their offspring are compelled to be sufferers by disease transmitted to them. Thus disease has been perpetuated from generation to generation. And many charge all

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this weight of human misery upon God, when their wrong course of action has brought the sure result. They have thrown upon society an enfeebled race, and done their part to deteriorate the race, by rendering disease hereditary, and thus accumulating human suffering.

Another cause of the deficiency of the present generation in physical strength and moral worth, is, men and women uniting in marriage whose ages widely differ. It is frequently the case that old men choose to marry young wives. By thus doing the life of the husband has often been prolonged, while the wife has had to feel the want of that vitality which she has imparted to her aged husband. It has not been the duty of any woman to sacrifice life and health, even if she did love one so much older than herself, and felt willing on her part to make such a sacrifice. She should have restrained her affections. She had considerations higher than her own interest to consult. She should consider, if children be born to them, what would be their condition? It is still worse for young men to marry women considerably older than themselves. The offspring of such unions in many cases, where ages widely differ, have not well-balanced minds. They have been deficient also in physical strength. In such families have frequently been manifested varied, peculiar, and often painful, traits of character. They often die prematurely, and those who reach maturity, in many cases, are deficient in physical and mental strength, and moral worth.

The father is seldom prepared, with his failing faculties, to properly bring up his young family. These children have peculiar

traits of character, which constantly need a counteracting influence, or they will go to certain ruin. They are not educated aright. Their discipline has too often been of the fitful impulsive kind by reason of his age. The father has been susceptible of changeable feelings. At one time over indulgent, while at another he is unwarrantably severe. Every thing in some such families is wrong, and domestic wretchedness is greatly increased. Thus a class of beings have been thrown upon the world as a burden

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to society. Their parents were accountable in a great degree for the characters developed by their children, which are transmitted from generation to generation.

Those who increase their number of children, when if they consulted reason, they must know that physical and mental weakness must be their inheritance, are transgressors of the last six precepts of God's law, which specify the duty of man to his fellow man. They do their part in increasing the degeneracy of the race, and in sinking society lower, thus injuring their neighbor. If God thus regards the rights of neighbors, has he no care in regard to closer, and more sacred relationship? If not a sparrow falls to the ground without his notice, will he be unmindful of the children born into the world, diseased physically and mentally, suffering in a greater or less degree, all their lives? Will he not call parents to an account, to whom he has given reasoning powers, for putting these higher faculties in the background, and becoming slaves to passion, when, as the result, generations must bear the mark of their physical, mental, and moral deficiencies? In addition to the suffering they entail upon their children, they have no portion but poverty to leave to their pitiful flock. They cannot educate them, and many do not see the necessity, neither could they if they did, find time to train them, and instruct them, and lessen, as much as possible, the wretched inheritance transmitted to them. Parents should not increase their families any faster than they know that their children can be well cared for, and educated. A child in the mother's arms from year to year is great injustice to her. It lessens, and often destroys, social enjoyment, and increases domestic

wretchedness. It robs their children of that care, education, and happiness, which parents should feel it their duty to bestow upon them.

The husband violates the marriage vow, and the duties enjoined upon him in the word of God, when he disregards the health and happiness of the wife, by increasing her burdens and cares by numerous offspring. "Husbands, love your wives, even as Christ also loved the church, and gave himself for it. So

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ought men to love their wives as their own bodies. He that loveth his wife loveth himself. For no man ever yet hated his own flesh, but nourisheth and cherisheth it, even as the Lord the church."

We see this holy injunction almost wholly disregarded, even by professed Christians. Everywhere you may look, you will see pale, sickly, careworn, broken-down, dispirited, discouraged women. They are generally over-worked, and their vital energies exhausted by frequent child-bearing. The world is filled with images of human beings who are of no worth to society. Many are deficient in intellect, and many who possess natural talents do not use them for any beneficial purposes. They are not cultivated, and the one great reason is, children have been multiplied faster than they could be well trained, and have been left to come up much like the brutes.

Children in this age are suffering with their parents, more or less, the penalty of the violation of the laws of health. The course generally pursued with them from their infancy, is in continual opposition to the laws of their being. They were compelled to receive a miserable inheritance of disease and debility, before their birth, occasioned by the wrong habits of their parents, which will affect them in a greater or less degree through life. This bad state of things is made every way worse by parents' continuing to follow a wrong course in the physical training of their children during their childhood.

Parents manifest astonishing ignorance, indifference, and recklessness, in regard to the physical health of their children, which often results in destroying the little vitality left the abused

infant, and consigns it to an early grave. You will frequently hear parents mourning over the providence of God which has torn their children from their embrace. Our heavenly Father is too wise to err, and too good to do us wrong. He has no delight in seeing his creatures suffer. Thousands have been ruined for life because parents have not acted in accordance with the laws of health. They have moved from impulse, instead of following the dictates of sound judgment,

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constantly having in view the future well being of their children.

The first great object to be attained in the training of children is soundness of constitution which will prepare the way in a great measure for mental and moral training. Physical and moral health are closely united. What an enormous weight of responsibility rests upon parents, when we consider the course pursued by them, before the birth of their children, has very much to do with the development of their character after their birth.

Many children are left to come up with less attention from their parents, than a good farmer devotes to his dumb animals. Fathers, especially, are often guilty of manifesting less care for wife and children than that shown to their cattle. A merciful farmer will take time, and devote especial thought as to the best manner of managing his stock, and will be particular that his valuable horses shall not be overworked, overfed, or fed when heated, lest they be ruined. He will take time and care for his stock, lest they be injured by neglect, exposure, or any improper treatment, and his increasing young stock depreciate in value. He will observe regular periods for their eating, and will know the amount of work they can perform without injuring them. In order to accomplish this, he will provide them only, the most healthful food, in proper quantities, and at stated periods. By thus following the dictates of reason, farmers are successful in preserving the strength of their beasts. If the interest of every father, for his wife and children, corresponded to that care manifested for his cattle, in that degree that their lives are more valuable than the dumb animals, there would be an entire reformation in every family, and human misery be far less.

Great care should be manifested by parents in providing the most healthful articles of food for themselves and for their children. And in no case should they place before their children food which their reason teaches them is not conducive to health, but which would fever the system, and derange the digestive organs.

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Parents do not study from cause to effect in regard to their children, as in the case of their dumb animals and do not reason that to overwork, to eat after violent exercise, and when much exhausted and heated, will injure the health of human beings, as well as the health of dumb animals, and will lay the foundation for a broken constitution in man, as well as the beasts.

If parents or children eat frequently, irregularly, and in too great quantities, even of the most healthful food, it will injure the constitution; but in addition to this, if the food is of an improper quality, and prepared with grease and indigestible spices, the result will be far more injurious. The digestive organs will be severely taxed, and exhausted nature will be left a poor chance to rest, and recover strength, and the vital organs soon become impaired, and break down. If care and regularity is considered needful for dumb animals, it is as much more essential for human beings, formed in the image of their Maker, as they are of more value than the dumb creation.

The father in many cases, exercises less reason, and has less care, for his wife, and their offspring, before its birth, than he manifests for his cattle with young. The mother, in many cases previous to the birth of her children, is permitted to toil early and late, heating her blood, while preparing various unhealthy dishes of food to suit the perverted taste of the family, and of visitors. Her strength should have been tenderly cherished. A preparation of healthful food would have required but about one-half of the expense and labor, and would have been far more nourishing.

The mother, before the birth of her children, is often permitted to labor beyond her strength. Her burdens and cares are seldom lessened, and that period, which should be to her of all others, a time of rest, is one of fatigue, sadness, and gloom. By too great

exertion on her part, she deprives her offspring of that nutrition which nature has provided for it, and by heating her blood, she imparts to it, a bad quality of blood. The offspring is robbed of its vitality, robbed

of physical and mental strength. The father should study how to make the mother happy. He should not allow himself to come to his home with a clouded brow. If he is perplexed in business, he should not, unless it is actually necessary to counsel with his wife, trouble her with such matters. She has cares and trials of her own to bear, and she should be tenderly spared every needless burden.

The mother too often meets with cold reserve from the father. If everything does not move off just as pleasantly as he could wish, he blames the wife and mother, and seems indifferent to her cares and daily trials. Men who do this, are working directly against their own interest and happiness. The mother becomes discouraged. Hope and cheerfulness depart from her. She goes about her work mechanically, knowing that it must be done, which soon debilitates physical and mental health. Children are born to them suffering with various diseases, and God holds the parents accountable in a great degree; for it was their wrong habits which fastened disease on their unborn children, under which they are compelled to suffer all through their lives. Some live but a short period with their load of debility. The mother anxiously watches over the life of her child, and is weighed down with sorrow as she is compelled to close its eyes in death, and she often regards God as the author of all this affliction, when the parents in reality were the murderers of their own child.

The father should bear in mind that the treatment of his wife before the birth of his offspring will materially affect the disposition of the mother during that period, and will have very much to do with the character developed by the child after its birth. Many fathers have been so anxious to obtain property fast that higher considerations have been sacrificed, and some men have been criminally neglectful of the mother and her offspring, and too frequently the life of both have been sacrificed to the strong desire

to accumulate wealth. Many do not immediately suffer this heavy penalty for their wrong doing, and are asleep as to the result of their course. The condition

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of the wife is sometimes no better than that of a slave, and sometimes she is equally guilty with the husband, of squandering physical strength, to obtain means to live fashionably. It is a crime for such to have children, for their offspring will often be deficient in physical, mental, and moral worth, and will bear the miserable, close, selfish impress of their parents, and the world will be cursed with their meanness.

It is the duty of men and women to act with reason in regard to their labor. They should not exhaust their energies unnecessarily, for by doing this, they not only bring suffering upon themselves but, by their errors, bring anxiety, weariness and suffering upon those they love. What calls for such an amount of labor? Intemperance in eating, and in drinking, and the desire for wealth have led to this intemperance in labor. If the appetite is controlled, and that food only which is healthful be taken, there will be so great a saving of expense, that men and women will not be compelled to labor beyond their strength, and thus violate the laws of health. The desire of men and women to accumulate property is not sinful if in their efforts to attain their object they do not forget God, and transgress the last six precepts of Jehovah, which dictate the duty of man to his fellow man, and place themselves in a position where it is impossible for them to glorify God in their bodies and spirits which are his. If in their haste to be rich they overtax their energies, and violate the laws of their being, they place themselves in a condition where they cannot render to God perfect service, and are pursuing a course of sin. Property thus obtained is at an immense sacrifice.

Hard labor, and anxious care, often make the father nervous, impatient, and exacting. He does not notice the tired look of his wife, who has labored with her feebler strength, just as hard as he has labored with his stronger energies. He suffers himself to be hurried with business, and through his anxiety to be rich, loses in a

great measure the sense of his obligation to his family, and does not measure aright his wife's power of endurance. He often enlarges his

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farm, requiring an increase of hired help, which necessarily increases the house work. The wife realizes every day that she is doing too much work for her strength, yet she toils on thinking the work must be done. She is continually reaching down into the future, drawing upon her future resources of strength and is living upon borrowed capital, and at the period when she needs that strength, it is not at her command; and if she does not lose her life, her constitution is broken, past recovery.

If the father would become acquainted with physical law, he might better understand his obligations, and his responsibilities. He would see that he had been guilty of almost murdering his children, by suffering so many burdens to come upon the mother, compelling her to labor beyond her strength before their birth, in order to obtain means to leave for them. They nurse these children through their suffering life, and often lay them prematurely in the grave, little realizing their wrong course has brought the sure result. How much better to have shielded the mother of his children from wearing labor, and mental anxiety, and let the children inherit good constitutions, and give them an opportunity to battle their way through life, not relying upon their father's property, but upon their own energetic strength. The experience thus obtained would be of more worth to them than houses and lands, purchased at the expense of the health of mother and children.

It seems perfectly natural for some men to be morose, selfish, exacting, and overbearing. They have never learned the lesson of self-control, and will not restrain their unreasonable feelings, let the consequences be what they may. Such men will be repaid, by seeing their companions sickly, and dispirited, and their children bearing the peculiarities of their own disagreeable traits of character.

It is the duty of every married couple to studiously avoid marring the feelings of each other. They should control every look,

and expression of fretfulness, and passion. They should study each others' happiness, in small matters, as well as in large,

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manifesting a tender thoughtfulness, in acknowledging kind acts, and the little courtesies of each other. These small things should not be neglected, for they are just as important to the happiness of man and wife, as food is necessary to sustain physical strength. The father should encourage the wife and mother to lean upon his large affections. Kind, cheerful, encouraging words from him, with whom she has entrusted her life-happiness, will be more beneficial to her than any medicine; and the cheerful rays of light such sympathizing words will bring to the heart of the wife and mother, will reflect back their own cheering beams upon the heart of the father.

The husband will frequently see his wife care-worn and debilitated, growing prematurely old, in laboring to prepare food to suit the vitiated taste. He gratifies the appetite, and will eat and drink those things which cost much time and labor to prepare them for the table, and which have a tendency to make those who partake of these unhealthy things, nervous and irritable. The wife and mother is seldom free from the headache, and the children are suffering the effects of eating unwholesome food, and there is a great lack of patience and affection with parents and children. All are sufferers together, for health has been sacrificed to lustful appetite. The offspring, before its birth, has transmitted to it disease, and an unhealthy appetite. And the irritability, nervousness, and despondency, manifested by the mother, will mark the character of her child.

In past generations, if mothers had informed themselves in regard to the laws of their being, they would have understood that their constitutional strength, as well as the tone of their morals, and their mental faculties, would in a great measure be represented in their offspring. Their ignorance upon this subject, where so much is involved, is criminal. Many women never should have become mothers. Their blood was filled with scrofula, transmitted to them from their parents, and increased by their gross manner of

living. The intellect has been brought down, and enslaved to serve the animal appetites, and

children, born of such parents, have been poor sufferers, and of but little use to society.

It has been one of the greatest causes of degeneration in generations back, up to the present time, that wives and mothers who otherwise would have had a beneficial influence upon society, in raising the standard of morals, have been lost to society through multiplicity of home cares, because of the fashionable, health-destroying manner of cooking, and also in consequence of too frequent child-bearing. She has been compelled to needless suffering, her constitution has failed, and her intellect has become weakened, by so great a draught upon her vital resources. Her offspring suffer her debility, and society has thrown upon them a class poorly fitted, through her inability to educate them, to be of the least benefit.

If these mothers had given birth to but few children, and if they had been careful to live upon such food as would preserve physical health, and mental strength, so that the moral and intellectual might predominate over the animal, they could have so educated their children for usefulness, as to have been bright ornaments to society.

If parents in past generations had, with firmness of purpose, kept the body servant to the mind, and had not allowed the intellectual to be enslaved by animal passions, there would be in this age a different order of beings upon the earth. And if the mother, before the birth of her offspring, had always possessed self-control, realizing that she was giving the stamp of character to future generations, the present state of society would not be so depreciated in character as at the present time.

Every woman, about to become a mother, whatever may be her surroundings, should encourage constantly a happy, cheerful, contented, disposition, knowing that for all her efforts in this direction she will be repaid ten-fold in the physical, as well as the moral character of her offspring. Nor is this all. She can by habit

accustom herself to cheerful thinking, and thus encourage a happy state of mind, and cast a cheerful reflection of her own happiness or spirit upon

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her family, and those with whom she associates. And in a very great degree will her physical health be improved. A force will be imparted to the life springs, the blood will not move sluggishly, as would be the case if she were to yield to despondency, and gloom. Her mental and moral health are invigorated by the buoyancy of her spirits. The power of the will can resist impressions of the mind, and will prove a grand soother of the nerves. Children who are robbed of that vitality which they should have inherited of their parents should have the utmost care. By close attention to the laws of their being, a much better condition of things can be established.

The period in which the infant receives its nourishment from the mother, is critical. Many mothers, while nursing their infants, have been permitted to over labor, and to heat their blood in cooking, and the nursling has been seriously affected, not only with fevered nourishment from the mother's breast, but its blood has been poisoned by the unhealthy diet of the mother, which has fevered her whole system thereby affecting the food of the infant. The infant will also be affected by the condition of the mother's mind. If she is unhappy, easily agitated, irritable, giving vent to outbursts of passion, the nourishment the infant receives from its mother, will be inflamed, often producing colic, spasms, and, in some instances, causing convulsions and fits.

The character also of the child is more or less affected by the nature of the nourishment received from the mother. How important then that the mother, while nursing her infant, should preserve a happy state of mind, having the perfect control of her own spirit. By thus doing, the food of the child is not injured, and the calm, self-possessed course the mother pursues in the treatment of her child has very much to do in molding the mind of the infant. If it is nervous, and easily agitated, the mother's careful

unhurried manner will have a soothing and correcting influence, and the health of the infant can be very much improved.

Infants have been greatly abused by improper treatment.

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If it was fretful, it has generally been fed to keep it quiet, when, in most cases, the very reason of its fretfulness was because of its having received too much food, made injurious by the wrong habits of the mother. More food only made the matter worse, for its stomach was already overloaded.

Children are generally brought up from the cradle to indulge the appetite, and are taught that they live to eat. The mother does much toward the formation of the character of her children in their childhood. She can teach them to control the appetite, or she can teach them to indulge the appetite, and become gluttons. The mother often arranges her plans to accomplish a certain amount through the day, and when the children trouble her, instead of taking time to soothe their little sorrows, and divert them, something is given them to eat, to keep them still, which answers the purpose for a short time, but eventually makes things worse. The childrens' stomachs are pressed with food when they had not the least want of food. All that was required was a little of the mother's time and attention. But she regarded her time altogether too precious to devote to the amusement of her children. Perhaps the arrangement of her house in a tasteful manner for visitors to praise, and to have her food cooked in a fashionable style, are with her higher considerations than the happiness and health of her children.

Intemperance in eating and in labor debilitates the parents, often making them nervous, and disqualifying them to rightly discharge their duty to their children. Three times a day parents and children gather around the table, loaded with a variety of fashionable foods. The merits of each dish has to be tested. Perhaps the mother had toiled till she was heated, and exhausted, and was not in a condition to take even the simplest food till she had first had a period of rest. The food she wearied herself in preparing was wholly unfit for her at any time, but especially taxes

the digestive organs when the blood is heated and the system exhausted. Those who have thus persisted in violating

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the laws of their being, have been compelled to pay the penalty at some period in their life.

There are ample reasons why there are so many nervous women in the world, complaining of the dyspepsia, with its train of evils. The cause has been followed by the effect. It is impossible for intemperate persons to be patient. They must first reform bad habits, learn to live healthfully, and then it will not be difficult for them to be patient. Many do not seem to understand the relation the mind sustains to the body. If the system is deranged by improper food, the brain and nerves are affected, and slight things annoy those who are thus afflicted. Little difficulties are to them troubles mountain high. Persons thus situated are unfitted to properly train their children. The life will be marked with extremes, sometimes very indulgent, at other times severe, censuring for trifles which deserved no notice.

The mother frequently sends her children from her presence, because she thinks she cannot endure the noise occasioned by their happy frolics. But with no mother's eye over them to approbate, or disapprove, at the right time, unhappy differences often arise. A word from the mother would set all right again. They soon become weary, and desire change, and go into the street for amusement, and pure, innocent minded children are driven into bad company, and evil communications breathed into their ears corrupt their good manners. The mother often seems to be asleep to the interest of her children until she is painfully aroused by the exhibition of vice. The seeds of evil were sown in their young minds, promising an abundant harvest. And it is a marvel to her that her children are so prone to do wrong. Parents should begin in season to instill into infant minds good and correct principles. The mother should be with her children as much as possible, and should sow precious seed in their hearts.

The mother's time belongs in a special manner to her children. They have a right to her time as no others can have. In many cases

mothers have neglected to discipline their children, because it would

require too much of their time, which time they think must be spent in the cooking department, or in preparing their own clothing, and that of their children, according to fashion, to foster pride in their young hearts. In order to keep their young children still, they have given them cake, or candies, almost any hour of the day, and their stomachs are crowded with hurtful things at irregular periods. Their pale faces testify to the fact, that mothers are doing what they can to destroy the remaining life forces of their poor children. The digestive organs are constantly taxed, and are not allowed periods of rest. The liver becomes inactive, the blood impure, and the children are sickly, and irritable, because they are real sufferers by intemperance, and it is impossible for them to exercise patience.

Parents wonder that children are so much more difficult to control than they used to be, when in most cases their own criminal management has made them so. The quality of food they bring upon their tables, and encourage their children to eat, is constantly exciting their animal passions, and weakening the moral and intellectual faculties. Very many children are made miserable dyspeptics in their youth by the wrong course their parents have pursued toward them in childhood. Parents will be called to render an account to God for thus dealing with their children.

Many parents do not give their children lessons in self-control. They indulge their appetite, and form the habits of their children in their childhood, to eat and drink, according to their desires. So will they be in their general habits in their youth. Their desires have not been restrained, and as they grow older, they will not only indulge in the common habits of intemperance, but they will go still further in indulgences. They will choose their own associates, although corrupt. They cannot endure restraint from their parents. They will give loose rein to their corrupt passions, and have but little regard for purity or virtue. This is the reason why there is so

little purity and moral worth among the youth of the present day, and is the great cause why men and women

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feel under so little obligation to render obedience to the law of God. Some parents have not control over themselves. They do not control their own morbid appetites, or their passionate tempers, therefore they cannot educate their children in regard to the denial of their appetite, and teach them self-control.

Many mothers feel that they have not time to instruct their children, and in order to get them out of the way, and get rid of their noise and trouble, they send them to school. The school-room is a hard place for children who have inherited enfeebled constitutions. School-rooms generally have not been constructed in reference to health, but in regard to cheapness. The rooms have not been arranged so that they could be ventilated as they should have been without exposing the children to severe colds. And the seats have seldom been made so that the children could sit with ease, and keep their little, growing frames in a proper posture to ensure healthy action of the lungs and heart. Young children can grow into almost any shape, and can, by habits of proper exercise and positions of the body, obtain healthy forms. It is destructive to the health and life of young children for them to sit in the school-room, upon hard ill-formed benches, from three to five hours a day, inhaling the impure air caused by many breaths. The weak lungs become affected, the brain, from which the nervous energy of the whole system is derived, becomes enfeebled by being called into active exercise before the strength of the mental organs is sufficiently matured to endure fatigue.

In the school-room the foundation has been too surely laid for diseases of various kinds. But more especially, the most delicate of all organs, the brain, has often been permanently injured by too great exercise. This has often caused inflammation, then dropsy of the head, and convulsions with their dreaded results. And the lives of many have been thus sacrificed by ambitious mothers. Of those children who have apparently had sufficient force of constitution to survive this treatment, there are very many who carry the effects of

it through life. The nervous energy of the brain becomes so weakened, that after they

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come to maturity, it is impossible for them to endure much mental exercise. The force of some of the delicate organs of the brain seems to be expended.

And not only has the physical and mental health of children been endangered by being sent to school at too early a period, but they have been the losers in a moral point of view. They have had opportunities to become acquainted with children who were uncultivated in their manners. They were thrown into the society of the coarse and rough, who lie, swear, steal, and deceive, and who delight to impart their knowledge of vice to those younger than themselves. Young children if left to themselves learn the bad more readily than the good. Bad habits agree best with the natural heart, and the things which they see and hear in infancy and childhood are deeply imprinted upon their minds, and the bad seed sown in their young hearts will take root, and will become sharp thorns to wound the hearts of their parents.

During the first six or seven years of a child's life special attention should be given to its physical training, rather than the intellect. After this period, if the physical constitution is good, the education of both should receive attention. Infancy extends to the age of six or seven years. Up to this period children should be left like little lambs, to roam around the house, and in the yards, in the buoyancy of their spirits, skipping and jumping free from care and trouble.

Parents, especially mothers, should be the only teachers of such infant minds. They should not educate from books. The children generally will be inquisitive to learn the things of nature. They will ask questions in regard to the things they see and hear, and parents should improve the opportunity to instruct, and patiently answer, these little inquiries. They can in this manner get the advantage of the enemy, and fortify the minds of their children, by sowing good seed in their hearts, leaving no room for the bad to take root. The

mother's loving instructions at a tender age is what is needed by children in the formation of character.

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The first important lesson for children to learn is the proper denial of appetite. It is the duty of mothers to attend to the wants of their children, by soothing and diverting their minds, instead of giving them food, and thus teaching them that eating is the remedy for life's ills.

If parents had lived healthfully, being satisfied with simple diet, much expense would have been saved. The father would not have been obliged to labor beyond his strength, in order to supply the wants of his family. A simple nourishing diet would not have had an influence to unduly excite the nervous system, and the animal passions, producing moroseness and irritability. If he had partaken only of plain food, his head would have been clear, his nerves steady, his stomach in a healthy condition, and with a pure system, he would have had no loss of appetite, and the present generation would be in a much better condition than it now is. But even now, in this late period, something can be done to improve our condition. Temperance in all things is necessary. A temperate father will not complain if he has no great variety upon his table. A healthful manner of living will improve the condition of the family in every sense, and will allow the wife and mother time to devote to her children. The great study with the parents will be in what manner can they best train their children for usefulness in this world, and for Heaven hereafter. They will be content to see their children with neat, plain, but comfortable garments free from embroidery and adornment. They will earnestly labor to see their children in the possession of the inward adorning, the ornament of a meek and quiet spirit, which is in the sight of God of great price.

Before the Christian father leaves his home, to go to his labor, he will gather his family around him, and bowing before God will commit them to the care of the Chief Shepherd. He will then go forth to his labor with the love and blessing of his wife, and the love of his children, to make his heart cheerful through his laboring

hours. And that mother who is aroused to her duty, realizes the obligations resting

upon her to her children in the absence of the father. She will feel that she lives for her husband and children. By training her children aright, teaching them habits of temperance and self-control, and in teaching them their duty to God, she is qualifying them to become useful in the world, to elevate the standard of morals in society, and to reverence and obey the law of God. Patiently and perseveringly will the godly mother instruct her children, giving them line upon line, and precept upon precept, not in a harsh, compelling manner, but in love, and in tenderness will she win them. They will consider her lessons of love, and will happily listen to her words of instruction.

Instead of sending her children from her presence, that she may not be troubled with their noise, and be annoyed with the numerous attentions they would desire, she will feel that her time cannot be better employed than in soothing, and diverting their restless active minds with some amusement, or light, happy employment. The mother will be amply repaid for her efforts in taking time to invent amusement for her children.

Young children love society. They cannot, as a general thing, enjoy themselves alone, and the mother should feel that, in most cases, the place for her children, when they are in the house, is in the room she occupies. She can then have a general oversight of them, and be prepared to set little differences right when appealed to by them, and correct wrong habits or the manifestation of selfishness or passion, and can give their minds a turn in the right direction. That which children enjoy, they think mother can be pleased with, and it is perfectly natural for them to consult mother in little matters or perplexity. And the mother should not wound the heart of her sensitive child by treating the matter with indifference, or by refusing to be troubled with such small matters. That which may be small to the mother is large to them. And a word of direction, or caution, at the right time, will often prove of

great value. An approving glance, a word of encouragement and praise

from the mother, will often cast a sunbeam into their young hearts for a whole day.

The first education children should receive from the mother in infancy, should be in regard to their physical health. They should be allowed only plain food of that quality that would preserve to them the best condition of health, and that should be partaken of only at regular periods, not oftener than three times a day, and two meals would be better than three. If children are disciplined aright, they will soon learn that they can receive nothing by crying or fretting. A judicious mother will act in training her children, not merely in regard to her own present comfort, but for their future good. And to this end, she will teach her children the important lesson of controlling the appetite, and of self-denial, that they should eat, drink, and dress in reference to health.

A well-disciplined family, who love and obey God, will be cheerful and happy. The father, when he returns from his daily labor, will not bring his perplexities to his home. He will feel that home, and the family circle, are too sacred to be marred with unhappy perplexities. When he left his home, he did not leave his Saviour and his religion behind. Both were his companions. The sweet influence of his home, the blessing of his wife, and love of his children, make his burdens light, and he returns with peace in his heart, and cheerful encouraging words for his wife and children, who are waiting to joyfully welcome his coming. As he bows with his family, at the altar of prayer to offer up his grateful thanks to God, for his preserving care of himself and loved ones through the day, angels of God hover in the room, and bear the fervent prayer of God-fearing parents to Heaven, as sweet incense, which are answered by returning blessings.

Parents should impress upon their children that it is sin to consult the taste, to the injury of the stomach. They should impress upon their minds that by violating the laws of their being, they sin

against their Maker. Children thus educated will not be difficult of restraint. They will not be subject to irritable,

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changeable tempers, and will be in a far better condition of enjoying life. Such children will the more readily and clearly understand their moral obligations. Children who have been taught to yield their will and wishes to their parents, will the more easily and readily yield their will to God, and will submit to be controlled by the Spirit of Christ. Why so many who claim to be Christians, have numerous trials, which keep the church burdened, is because they have not been correctly trained in their childhood, and were left in a great measure to form their own character. Their wrong habits, and peculiar unhappy dispositions, were not corrected. They were not taught to yield their will to their parents. Their whole religious experience is affected by their training in childhood. They were not then controlled. They grew up undisciplined, and now, in their religious experience, it is difficult for them to yield to that pure discipline taught in the word of God. Parents should, then, realize the responsibility resting upon them to educate their children in reference to their religious experience.

Those who regard the marriage relation as one of God's sacred ordinances, guarded by his holy precept, will be controlled by the dictates of reason. They will consider carefully the result or every privilege the marriage relation grants. Such will feel that their children are precious jewels committed to their keeping by God, to remove from their natures the rough surface by discipline, that their lustre may appear. They will feel under most solemn obligations to so form their characters that they may do good in their life, bless others with their light, and the world be better for their having lived in it, and they be finally fitted for the higher life, the better world, to shine in the presence of God, and the Lamb forever.

Fashion makes people visit when they had rather stay at home, eat when they are not hungry, and drink when they are not dry. She ruins health, and makes fools of her followers.

PARTICULAR DIRECTIONS TO PARENTS AND GUARDIANS

PARENTS have a responsibility in regard to their offspring originating prior to their birth. Their own state of health - the health of father and mother - has a very important bearing upon the constitutions of their yet unborn children. If a father's nervous system has been marred and broken by habits which are at war with nature's law, the children following him will be more or less unhappily affected. While, then, he is doing wrong to himself, he is doing wrong and bringing suffering to his posterity. If a mother's system has been weakened by violations of law, her children will be obliged to participate with her in suffering the penalty. And, having received the inheritance of disease or debility before birth, they must, more or less, be partakers of it through life. Parents have also a heavy responsibility on them, touching the moral character given to their children before birth. If parents are accustomed to undue indulgence in any of the natural propensities, - in eating or drinking, or any other animal appetite, - their children may inherit appetites of the same kind, possessing a similar degree of undue activity and moral tendency.

In the same way children are affected in their dispositions. A child, after birth, and more or less through life, will give a living illustration of the feelings and immediate character of his mother during the period of her pregnancy. If the mother, during that period, especially the latter part of it, indulge a gloomy, evil-foreboding state of mind, her child will give proof of it in after life. If she indulge a peevish, or fretful, or crying disposition, her child will give her ample testimony to the fact after birth. Some have inherited, directly from a mother, an almost unconquerable appetite for strong drink; some for tobacco; others, an almost uncontrollable inclination to theft; not because their mothers, in all cases, were habitual drinkers or thieves, but because they suffered strange appetites and feelings to affect them strongly some

time during their pregnancy. Some physicians would deny the truth of these facts strongly, but no one who has taken the pains of

observing facts touching this matter, will be found in that category, for facts are unconquerable things. The inspired proverb, - "Train up a child in the way he should go, and when he is old he will not depart from it," - contains a great practical truth as a general rule; but, under the most judicious discipline, the child will bear, in greater or less degree, the moral complexion and physical appetites which his mother gave him before she gave him birth.

Fathers, as well as mothers, and all those with whom a mother may associate, are involved in this responsibility. The father should remember that his manner and treatment of his wife during her pregnancy has much to do with the disposition she may possess during that period. He should be careful to remove, so far as possible, every source, real or imaginary, of uneasiness, unhappiness, peevishness, or gloominess, from her way. He should take pains to make her happy and cheerful: and see that every appetite which comes up is, if possible, forthwith, gratified. If that appetite should be for strong drink, it had better be gratified to the full, rather than that she give, by that continued longing, an indelible imprint of that kind upon her offspring.

In the light of these truths, what tremendous responsibilities are evidently laid upon parents! The physical appetites, mental inclinations, and moral feelings, in a very large degree, are enstamped on the character of children so deeply in this way, that they may remain visible in all after life. If through the moroseness of the father, the mother be driven into a desponding, discouraged and lifeless state of feeling, her child may bear traces of the same features of ill feeling for life. If she indulge in an irritable or ill-tempered disposition, she will probably mark these characteristics on her offspring. If, on the other hand, she indulge a habit of great levity, trifling or recklessness, she will probably see more or less of her own likeness in her child.

Responsibilities of unmeasured extent also are laid on parents, in regard to the influence of a right physical training of their children for the security of health, during childhood and youth. One great cause of the feebleness of constitution with which the

great body of community is at this day afflicted, may be found in the total ignorance or recklessness of parents and guardians of the laws of health, as applied to those under their care. To look in upon many domestic circles, and see how the children are managed, is enough to move a heart of marble with sorrow for the children, and with indignation toward their parents. The children may be seen, about every hour in the day, with a lunch of bread, or pie, or cake in hand. Their young and tender stomachs are kept in continual confusion and toil. Consequently, a deranged tone and action of that organ must exist, which prepares the way for other unnatural habits of eating and drinking, and lowers the tone of mental sprightliness and moral feeling.

Children should eat only three times a day. They should be brought under the same dietetic rules which are laid down for all persons. It requires about as much time for their organs to digest food as is required for grown persons. And, if the digestive process be hurried and confused, their food does not nourish them as well, and they cannot grow as strong and robust. Little, new-born infants' constitutions are not unfrequently ruined for life, by mismanagement. Because the child cries a little, it must be dosed with a little peppermint, or anise-essence, or paregoric, or some other stimulating article, which begins at once to derange its stomach; and through its stomach, its whole system is injured, and perhaps for life. And if the inquiry should be made, in after years, what can be the cause of such a feeble, slender constitution? an enlightened observer might be able to reveal the secret, by showing the treatment it received in its infancy.

A systematic diet should always be adopted by mothers and nurses at the very dawn of the child's existence. In the first place, after birth, a little cold

water only should be put into the child's mouth. The habit of beginning to give some stimulant, as though the Creator of the child had given it only half life enough, is perfectly murderous; instead of giving it a chance to live of itself, a course is taken which is adapted to kill it; or, if not kill it, to maim the little constitution

for life. If the writer of this could be heard, he would "cry aloud, and spare not," in the ear of every nurse, with the little being in her arms **LET THAT CHILD LIVE!** The Creator gave it natural life; he made it to live: and it will live, if not killed. If it be necessary to give the child any nourishment before it can obtain it from the mother, it might take a little slippery-elm water, or something of that mild and simple nature: but, if it can draw its first nourishment from the fountain which the Author of its being has provided, it is better.

Babes should be nursed but three times a day. This may seem a preposterous rule; but let us reason together upon it. The food which nature has provided for the child is adapted to its age and capacity for digesting: and it requires about the same length of time for the infant to digest its meal as it does the man of ripe age to digest his; and the various steps in the digestive process are the same in both cases. Then, if five hours are required to complete the process well, why disturb it till it is finished? By letting the child have only its regular breakfast, dinner and supper, it digests its food well, and is well nourished by it. But, adopt the course usually taken, and the little one's stomach is kept confused and oppressed, and its system is but half nourished from the same quantity of food which would be requisite under a regular system. As infants are usually treated, they are subject to repeated vomiting, colic, and, not infrequently, fits; and the cause is obvious: the stomach has been overloaded. Only feed infants right, and there is no reason why they should vomit, any more than grown persons. What danger can there be of a child's suffering from want of food before the expiration of the five hours between meals, when they not unfrequently go from twelve to twenty-four

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hours, and sometimes longer, after birth, before they take any substantial nourishment? The idea that a child will suffer hunger, if it does not take food oftener than once in five hours during the day, is all nonsense; and, worse than this, great injury is done by such a notion. The "little and often" system is destructive - contrary to the

laws of health - contrary to true philosophy and reason; and should forever be abandoned.

As infants are now treated, they have but a small chance for life. By confusing and fretting their stomachs, they have wind, and colic, and heart-burn, and other distress; then, if they cry, they are put to the breast, and nursed so full that they cannot cry. They become so oppressed as to produce stupefaction of brain and nerves; and then, if at all restless, they are put into the cradle and rocked from side to side, till they have no senses left. Then the child, from extreme pressure of the stomach, vomits - Nature's kind effort to save it from fits and death. Then the mother or nurse exclaims, - "What a healthy child! See how it vomits!"

Why does the child vomit? Because the abused stomach rebels against its ill-treatment, and tries to save itself. What sort of symptom of health would it be in an adult to go along the street vomiting up his dinner? Would the old ladies put their heads out of their windows, and exclaim, - "Oh, what a healthy man that is!" The stomach of the child should be so well treated that there should be no occasion for its vomiting. It should have a full breast on which it can depend for a full meal, three times during the day, and never be nursed during the night. If the breast be scanty in its allowance, the child must nurse what it can get, and have its meal finished by a little diluted sweetened new cow's milk. Then let it be gently moved about for awhile, and finally go to sleep.

In this way the stomach has time to digest its food, and time to gather up its forces for another regular meal. Its meals should be about the times of regular meals for adults. Under this course, there would be little occasion to use those rocking brain-destroyers.

Cradles could then be broken up for fuel - a much better purpose than their present use. If any old ladies think they have more wisdom, let them attend the school of natural law another term: let them study Nature, and demonstrable facts. This matter has been tested. Since entering the medical profession, nearly thirty years ago, it has been my determination to examine and test these and other matters pertaining to this general subject. And these

truths, as demonstrated by myself and others of my acquaintance, fully sustain and justify my position.

The most healthy and robust children which have ever come under my observation, were brought up in the way here advised. No failure in this experiment has ever come under my knowledge. Let those mothers try it who really wish for healthy children. Let the child have all it wants three times a day. Do not half nurse or feed it, and thus starve it to death, and then cry out condemnation: but give it a full breast or make up a full meal by feeding; keep it awake an hour, and then let it sleep, if it choose, till within a short space of another meal. Keep it clothed in accordance with the weather and the season, and give it free air to breathe; and not keep it staved up in a room hot enough to roast beef, where the oxygen is all consumed by the fire and respiration, and no fresh air is admitted.

If infants from the first were treated in this way, they would not only be more healthy, but altogether more quiet, and easy to be taken care of. Then, instead of putting the child to the breast to stop its mouth and get rid of its crying, it would feel better, and be far less likely to cry. And generally, instead of worrisome nights, - usually caused by a disturbed stomach, - it would sleep quietly till morning; and the mother with it. The food of the infant, taken just before it sleeps, or in the night, interferes with its quiet rest; just as the rest of an adult person is disturbed from a similar cause. This method has been tried, and proved successful; let others try it.

A gentleman recently informed me of a test he had made in this matter. A child fell into his hands who

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lost its mother at its birth. He found himself obliged to bring it up by hand. He began and continued his undertaking, by giving the child as much milk, properly prepared, as it would receive three times a day, and no more. He said, - "A more healthy, thriving, robust child I never saw. It was subject to none of the ordinary illnesses of children, has continued in perfect health up to the present time, and is now twelve years of age." A relative informs me that his family physician in Vermont is bringing up his children

in this way, from their birth; and that they are unusually healthy and vigorous.

When the children are old enough to take solid food, they should have only three meals a day. If they eat oftener, their stomachs will be deranged, and their food will not so well nourish them. If any mother will take pains to look at the laws of digestion, she will at once see that no child can take food oftener than once in five hours, without interfering with a previous meal, and injuring the healthful operation of the digestive organs. Those young people who have been brought up on the exclusive system of eating but three times a day, have been found to be more than ordinarily strong and healthy. While others have been afflicted with worms, colic, cholera-morbus, and a host of other ailments common to the young in general, they have usually escaped.

Why, then, will mothers suffer their children to violate the laws of their natures, and expose themselves to suffer the penalty of those violated laws? Will a mother have such a tender concern for her offspring's gratification, as to suffer it to destroy its own comfort and health, and perhaps life? It is often said, "My child has no appetite for breakfast; therefore it must have a lunch before dinner." But this is a sure way of prolonging the difficulty; the child will never be likely to have an appetite for breakfast, as long as this irregular and unlawful course is indulged; and especially as long as the child knows that he may depend on the precious lunch. Let the child go from breakfast-time till dinner and it will not be long before he will eat his regular breakfast.

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If parents would secure for their children a healthy appetite and a sound constitution, let them rigidly insist on their eating but three times a day, using simple food, and having other things in keeping with nature's laws; and, so far as all human means are concerned, they may be sure of accomplishing their purpose.

The almost continual hankering for food which many children have, arises wholly from a habit of constant eating. If their eating were reduced to a regular habit, their appetite would become regular. This irregular appetite is not natural; it is created, and

unhealthy. If we get into a habit of eating seven times a day, we shall hanker after food as many times. If we once establish a habit of eating but three times a day, we shall want food only as many times.

Now, what will mothers and nurses do? Will they begin with the infant by a regular system, and continue it? or will they go on in the old beaten path, to the injury of those they profess to love and cherish? Will they make a mock of paternal love and fondness, by unrestrained and unlimited indulgence? or will they love so sincerely as to keep the child from every hurtful thing? That pretended love, which, knowing the evil consequences at all hazards, seeks only to gratify, proves its own falseness. Shame - SHAME on that mother's love which passes heedlessly by her child's chief and ultimate good, to indulge it in a momentary gratification, or to save herself the trouble of controlling its solicitations! Shame on that mother's humanity, even, whose refined and tender sympathy cannot refuse indulgence where health, and, it may be, life are at stake! If mothers and fathers have a substantial affection for their offspring, let them manifest it under the dictates of reason and common sense, - let them seek their permanent good. If those having the care of children would be able to give a final account of their guardianship in peace, let them, next to their morals, seek, for those under their charge, soundness of constitution. And, in doing this, they do perhaps as much for their morals as could be done through any other means; for physical and moral health are closely allied.

HOW TO USE WATER

WE take the following from Dr. Jackson's lectures on the use of water upon the human body, published in the *Laws of Life* for April, 1860:

"THE QUALITY OF WATER TO BE USED. - Water, to be of the highest benefit when used either by the healthy or the sick, should be *pure* and *soft*. By *purity* I mean freedom from impregnation by mineral substances, or earthly salts, or the infusion

of vegetable matter, either or all of which render it more or less unfit for external or internal application. There never was a greater mistake in the use of an agent whose natural and ordinary effect is to promote human health, than is made by those who are led to believe that water impregnated with earthy and medicinal substances is more beneficial than water which is entirely free from them. Hence the popular belief that to wash the body in medicated water, or to use it as a drink, is superior to the use of pure water, leads to most doleful results. Water, therefore, which is to be used for bathing, or for drinking purposes, should be as free from all substances which do not enter essentially into its composition, as it is possible to obtain it. Hence in addition to its *purity* it should be *soft*.

"Hard water is neither fit to use as a detergent, nor as a diluent. Its unfitness for external use upon the body is readily perceived by whoever applies it for any length of time. For, the skin which in its healthy conditions is soft and velvety to the touch, and feels to one who has the sense of touch nicely developed, as if it were covered with oil, and then rubbed with the softest material till it is polished like Mahogany, when it is washed for any length of time in hard water, loses that softness, and acquires in its stead a roughness and harshness which is very unpleasant to the sight and to the touch. Housewives who have their hands much in water, know the difference between the effects upon their skin, of hard and soft water. In one instance the skin of the hands becomes dry, and readily cracks, making them sore: in the other, the hands are soft,

the skin pliable and smooth. It is a very great mistake, therefore, on the part of persons who are in health, ever to use hard water for purposes of bathing: and however desirable it is to have what in common language is known as 'living water' - whether from a running brook, or a living spring, or a bubbling, boiling well - over water which is stagnant, by having been gathered and confined in a reservoir, still the difference is in favor of the latter when it is soft, and the running water is hard. Thus, if a family has near its dwelling a living spring of hard water, and in one corner of the

house a well-built cistern in which water from the clouds is caught and kept pure, the fact that the rain-water has been for some time confined in a cistern, while the water from the spring is constantly fresh, does not overthrow the superiority of the rain-water - its softness being a quality which makes up for any lack of freshness that it may have. To satisfy one that this view is correct, it needs only to be used for the purposes of bathing a sufficient length of time to show its effects.

"WATER AS A DRINK.- It is not only for its effects upon the skin and indirectly upon the organs lying immediately subjacent to the skin, that water should be pure and soft; but, if possible, its effects upon the *internal* structure of the body, when taken as a drink, render it more imperatively necessary that pure and soft water should be used. Eighty per cent. of the human creature is made up of water. Thus, if you take a person weighing a hundred pounds, and place him where all the fluids in his body shall be removed, and you have left the actual dry material of which he is composed, he will be reduced in weight to twenty pounds. Now, for all this organic use, this great life-sustaining purpose, nothing but *pure* water will serve. Just to the degree that there is in it any material which does not enter essentially into the formation of this remarkable substance, is it spoiled for the uses to which we wish to put it. You can have no lime, soda, magnesia, arsenic, sulphur, nor any other medicinal substances in it; - nor the essences of vegetable substances, without rendering it unfit for the purposes for

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which it is intended in the great constructive policy of Nature; as applied to the human body. This proposition being correct, we only need to go one step further to demolish entirely the popular belief in the virtues of medicinal springs. And this can be done easily enough whenever the occasion for doing it shall be appropriate. But my purpose at this time is to state my objections, not against the use of waters which are usually termed medicinal but against the use of waters which are not so considered, but are generally regarded as fit for use in the common purposes to which water is put as a drink, and in the preparations of our food. In other words,

I wish to call your attention to the unfitness of all waters which are simply *hard*, for use as a drink, and for the purposes of cookery.

"On no single point is there need of enlightenment more than on this, of the superior quality of soft over hard water as a hygienic agent. Not only is hard water productive in many instances of diseased kidneys, irritation of the bladder, mucous dyspepsia, and scrofulous development, but as I have said before, its effects on the skin are to leave it rough, causing it to put on a dry, scaly appearance, making it to crack - and its effects on the mucous membrane are even worse, creating an irritation of that texture, serving to introduce dyspeptic conditions, sore throat, nasal catarrh, inactivity of the liver, costiveness, piles, and headache. Persons using it as a daily drink, never mingling it with anything else, would be marked over whole districts of country by habitual constipation, by dry skin, by shrivelled muscle, and are therefore, as if by instinct, led to avoid its use, unless modified by articles such as milk, sugar, tea, coffee, and alcoholic mixtures. I have known persons taking hygienic treatment for constipation of the bowels, whom physicians had utterly failed to cure by any hydropathic appliance, and have been compelled to resort to medicines, immediately relieved on the use of pure soft water as a drink. But this is only *half* its value. Its power as a solvent, as well as a tonic, its gentle and invigorating effect on free mucous surfaces, thus indirectly securing the health of all *the senses*, whose niceties of action

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depend on the health of the mucous tissue, are evidences of its advantage as a hygienic agent.

"We who are so artificially educated in all that pertains to the nicety of perception by the special senses, know very little of the instinctive dislike which the unperverted taste would show toward hard water as a drink. The animals might teach us on this point. Horsemen, who study the natural conditions of their horses, and seek to preserve their health, are very particular in procuring soft water for them to drink, they having been taught that the taste of the horse is so perfect and nice in this matter, as to cause him even

when thirsty, to refuse to drink at hard-water springs, and go for miles till he can find soft water. Besides, horsemen say that the remote effects of hard water as a drink for the horse, are, that instead of a glossy, sleek appearance of the hair which the horse shows when in the habit of drinking soft water, there arises a staring, dry, and apparently half-deadened condition of the hair and skin, making the grooming of the animal doubly difficult.

"I am satisfied that right views and a practical reformation on this point on the part of the people, would do much toward introducing them to better conditions of health, even though other things should remain as at present. And I should advise every family who may read this lecture, and who use hard water either for drink or for culinary purposes, to take measures immediately to supply themselves with soft water in abundant quantities; and if it can only be obtained by being caught in reservoirs as it falls from the clouds, to filter it before it is used. Filtered rain-water is perfectly unobjectionable as a drink; and an expenditure of from five to twenty dollars in the purchase of a filter, would secure to any family in this land the means of purifying all the water they might need for drink and for cooking purposes."

I will praise Thee, for I am fearfully and wonderfully made. Ps. 139:14.

COLD BATHING

THE following is taken from an editorial in the *Laws of Life* for Feb., 1862:

"In the treatment of diseases by hygienic means, we apply water at different temperatures, and of course comparatively cold, at sometimes at such a degree of cold as to produce a decidedly stimulating effect; but not for the mere purpose of making the patient *feel better* immediately. The object in such applications is to induce changes in the structures of the tissues, or in the nervous or circulatory relations of the system, such as shall result in more healthful conditions. In this we feel justified, which we could not do in summoning into action an extra amount of vitality, that it might

be expended in work; unless, indeed, it should be in an emergency which demanded, and was worthy, a sacrifice. Yet it is not a difficult thing to do, and there is no doubt that it has been done, in thousands of instances, by Water Cure physicians, and in as many more by invalids on their own responsibility, in applying water for the purpose of inducing healthful changes, to summon up vital action to a destructive degree. It is as true of the method of treatment as it is of the Allopathic, that a patient may be undergoing a most successful cure by it, and that by the time he is cured, he will die. There is no contradiction here. Morbid conditions may be overcome by means which exhaust the constitutional powers, and leave nothing for the person to live upon.

"As great a mistake has been made in regard to the propriety of severe friction applied to the skin, as in the matter of cold bathing. To a considerable extent the flesh-brush has been used separate from the application of water; and as a general thing, persons using cold baths take pains to get the coarsest, roughest linen obtainable for wiping the body. The tendency of harsh friction of the skin is to destroy its sensitiveness and healthfulness. One who, at first, can only bear the flesh-brush applied in the gentlest manner, can, after a few months, use it with as much impunity on

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his own skin as he could upon that of a rhinoceros; and he thinks, may be, that he has gained something by the change; whereas he has actually destroyed the natural sensibility of the very delicate nerves which are distributed so abundantly upon the inner layer of the skin. The human body was never intended to be as hardy as that of the rhinoceros. If it had been, it would have shown that conditions without having to be put through such an artificial process. All friction applied to the body after a bath, should be of the gentlest character. The linen used for wiping may be coarse, but it should be soft and pliable, and rubbing with the dry hand afterward should be brisk, but gentle."

HINTS ON BATHING. BY DR. J. H. HERO

In a former communication we referred to the common error among Hydropathic people generally, of using too severe home treatment. In *our* section of the country we know such to be the case.

Notwithstanding all that has been said of *water* as an innocuous remedy, every one knows, or ought to know, that the human system may be very badly injured by the injudicious use of this valuable agent.

We have known several persons within a year or two past, who have been ever treated by *water*, and they are always bad cases to manage. Where the nervous system has been overwhelmed with depression by too heavy treatment, too many baths, and at too low a temperature, there is always danger of fatal congestion in some one or more of the vital organs. Physicians should never yield to the importunities of patients who are desirous of taking *heroic* treatment, but nicely weigh the amount of vitality in each case. If reaction takes place readily, the baths may be increased in number, and the temperature lowered with safety; but if reaction is slow and feeble, the baths must be mild and few.

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One important fact, which every person who practices *water-cure* ought to understand, is that reaction commences at the very moment a person begins to bathe. We mention this fact because we find that many have an idea that reaction does not commence until the bathing is over. Thus it is plainly to be seen, that if we use very cold water and our baths are protracted, there is danger of exhausting the reactive power during the operation, so that by the time we are fairly rubbed up, we commence being chilly. In consequence of this principle, every feeble person unaccustomed to using water, should commence with tepid baths of short duration; or, if cold water is used, it should be in very small quantities, and the baths short. It is far better for such persons, when they wish to take sitz-baths, to commence them at 85 degrees or so, five minutes, and lengthen their duration and lower the temperature gradually,

than to begin with baths at 60 degrees twenty minutes, as I have frequently known persons to do.

If such rules were observed at the commencement of a course of water treatment in every case, we should hardly hear of a person who had used water without being benefited by it. The truth is, in feeble cases the system must become adapted to the use of water by degrees.

We do not expect to lay down rules by which persons who have long standing chronic diseases fixed upon them can treat them successfully without the aid of a physician; for the changes which take place during the treatment of such cases, the kind of diet and exercise necessary, etc., etc., all need to be managed by the experience of a good practitioner.

But we do think that much good may be done by saying to the readers of this Journal, be careful how you treat those of delicate constitutions affected with chronic disease. Always have your baths short and at a mild temperature, at the commencement of treating such cases. In this way you will certainly do no harm, and if the patient bears it well, you can easily use more treatment; but by treating the patient too severely at first, you may place him in such a condition

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for a time, as to be unable to bear even mild treatment to advantage. We much rather take patients into our establishment who never used water at all, than take those who have, without discretion, used too severe treatment. - *Water-cure Journal for 1855.*

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HOW TO LIVE [NUMBER THREE]

THIS NUMBER

THE first article in this number is taken from the Home Book of Health, a work of 1046 pages, by John C. Gunn, M. D. The writer, no doubt, is regarded by the most able and zealous health reformers, as behind the times; yet as he is so far in advance of the popular practice, and the people generally, we let him speak.

The second, entitled, Cure Without Drugs, is from the Philosophy of Health, by L. B. Coles, M. D., Fellow of the Massachusetts Medical Society, and member of the Boston Medical Association.

The article in Number two, headed, Particular Directions to Parents and Guardians, should have been credited to this excellent work, The Philosophy of Health.

The third, Drugs, is from Water-Cure for the Million, by R. T. Trall, M. D., an excellent work for the common people.

Other articles to this number are in harmony with these upon the drug question, all of which agree with the motto upon the first page of the cover relative to that poor woman who, more than eighteen centuries ago, was reduced to poverty, and came so near to losing her life, by the doctors. J.W.

GUNN'S REMARKS

"I have been taught this valuable lesson, 'that many men may be given to profound thought, and possess extensive knowledge, united with sterling honesty, being by nature endowed with the highest order of talents, and yet be wanting in good common sense' or in other words, 'showing the importance of a sound judgment, with close observation of men and things, which constitute the chief corner stone or paramount foundation in the successful practice of medicine, or in fact any thing else.' Men may theorize finely, but at the bed-side practice unsuccessfully; in preference to such persons, give me a good old woman with her teas and simples, and I will trust the rest to nature. The skillful physician, and one who had had experience in his profession, although he uses medicine, can hardly be said to use it as a curative, but rather to remove obstructions, or to arrest the progress of diseased action. For cure, he looks to the strength of the constitution which remains; to the powers of nature to rally; to diet, drinks, sleep, exercise, change of air, hope, cheerfulness, ect.; but the reverse is the case with ignorance, or those who have had no experience. Medicine is entirely looked to as means to effect a cure, and in proportion to

their ignorance will be their confidence in drugs, and an utter want of faith in the use of simples, good nursing, the influence of the mind, and above all, the restorative power of nature. This clearly explains why it is, that the most distinguished physicians feel the deepest conviction of the uncertainty of medicine. At every step they find it necessary to exercise great caution as, notwithstanding the experience of three hundred years, the medical profession are still doubtful whether the remedies daily used act in unison and harmony with the laws of animal life. This, with many other mysteries not yet clearly explained, has been deplored by the best and wisest men that have adorned the profession of medicine, and as an evidence of this fact, however, mortifying it may be to acknowledge it, all

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the metallic preparations are uncertain, and it depends on the state of the stomach whether they have any action at all, they not unfrequently operating with dangerous violence. I will refer you to the work of Dr. Chapman, professor in the Medical School of Philadelphia, which says: 'Taking drugs habitually conduces to destroy the stomach. Every ache or discomfort, real or imaginary, must be relieved by a recurrence to some supposed remedy, till finally the powers of the stomach are worn out, and derangements, functional or structural, take place. It would be salutary were such people constantly to bear in mind the epitaph of the Italian count, who fell a victim to his bad habits.

" I was well -
wished to be better,
Took physic and died.'

"Nor can the profession escape the imputation of lending its contribution to this mischief. When called to a case of such obscurity, that no distinct idea can be formed of it, how often do we go on groping in the dark, pouring down drugs empirically, till the stomach gives way, and its derangements are added to the pre-existing affection, by which the case is made of greater complexity

and enhanced difficulty of cure. 'It is not easy,' says the doctor, 'always to avoid this course, from the ignorance or prejudice of mankind.'²

"The predominant estimate of the profession, even among the most enlightened people, leads to the delusive supposition, that the *Materia Medica* has a remedy for every disease, and that the want of success under any given circumstances, is owing to the poverty of resource of the practitioner in attendance. Confidence is soon withdrawn should he intermit his exertions, which perceiving, he too often multiplies his administrations to avoid a dismissal, or the bringing in of some other doctor, who, it is expected will bring forth a fresh supply of physic. The consultation ended, the new doctor brings forth his new prescriptions of more drugs, etc. With this new armory

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of deadly weapons, he enters the field; and exasperation of the case follows. Not satisfied, however, further trials of new physicians are still made, and these are a repetition of the same proceeding; the catastrophe is complete, for the patient dies. This, which might by some be suspected as a sketch of fancy, says Dr. Chapman, 'I have frequently seen and deplored, convinced he was falling a victim to these very practices.' The Emperor Hadrian deliberately prepared the following as an inscription for his tomb:

" 'It was the multitude of physicians that killed the emperor.'

"And let me say to you, from experience and a desire to inculcate lessons of truth, which you will find useful, avoid as much as you can, dosing and drugging, and depend upon what I say to you, that thousands are killed by physic, and the daily and constant use of things by which the stomach is worn out.

"Then let me, for the last time, implore you, in the language of soberness and truth, to depend more on diet, on exercise, on traveling, on change of climate, on amusement, on the presentation of new objects, by temporary abstraction from the cares of business, or, in other words, give the mind rest, for many persons are not aware that by confining themselves to counting-houses, stores, and offices, with scarcely any exercise being allowed the

body during the day, and no rest of mind, by changing their thoughts by some agreeable and useful amusement, calculated to cheer and keep up the healthy action of the system, (for I before plainly and clearly explained to you the effects which the mind produces upon the body), - they are bringing upon themselves very severe forms of ill-health, and that perhaps for life. Hence the reason of so many sickly and pale faces, we see pass along our crowded cities, and so much dyspepsia, saying nothing of many other well-known diseases of mankind. Forgetting that *exercise is the source of health*, all seem to be imbued with the single idea of accumulating wealth, and not *health*. What is money worth to us,

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if we are thereby to lose our health? How many do we see who toil from day to day, like slaves, for the purpose of leaving a large sum of money to their children, and when they have succeeded in doing so, they die without having scarcely attained their fortieth year? How many thousands yearly are sent to their long account, by the constant use or abuse of medicines; for it seems to be the order of things, at the present day, that cures are to be effected, not by the recuperative powers of nature, but by the quantity of drugs or medicines swallowed, that every slight disease must be followed up by some active poison - '*for medicines are poisons*' - instead of using such simple remedies as teas, cold bathing, together with a thousand simples, which, if properly used, assist nature to perform the cure handsomely and completely.

"Poor human nature! How fearfully does it deceive itself, when it flies to drugs to relieve every disease. Look into our large and commercial cities where more work is done with the head than the hands; where every kind of food for the passions is not only superabundant in quantity, but of the most stimulating quality, and there thousand who never labor at all, are found, who, through the unnatural degree of excitement kept up in the brain and nervous system, by the full play of the passions, sustain very great injury to their health. An attentive examination of every class of society well convinces us, that in proportion as the intellect is highly cultivated, improved, and strongly excited, the body suffers till a period at

length arrives, when the corporeal deterioration begins to act on the mental powers, and the proud man finds that the elasticity of the mind may be impaired by pressure too long continued, and that like springs of baser metal, it requires occasional relaxation and rest, instead of dosing and drugging. I do not know, nor do I believe that this disease has ever been described before by any medical writer. I allude to that wear and tear, or state of body and mind, intermediate between that of sickness and health, but nearer the former than the latter, to which I am unable to give a satisfactory name, although it is hourly

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felt by tens of thousand in the world. It is not curable by physic, although it makes much work for the doctors, and in the end, by dosing and drugging, a profitable business for the grave-digger. It is that wear and tear of the living machine, mental and corporeal, which results from over-strenuous labor, or exertion of the intellectual faculties, or rather corporeal powers; for, rest assured that vivid excitement and tempestuous mental emotion, can not last long, without the physical fabric. For the animal and the intellectual, or, in other words, the material and spiritual portions of our being, are distinct essences, and the former will survive the latter in another and better existence. But on the earth, they are linked in the strictest bonds of reciprocity, and are perpetually influenced one by the other. See that pale cheek, that eye that has lost its lustre that care-worn countenance, that languid step, that flaccid muscle, with great weakness, and the indisposition to exertion, and you will behold the results of a mind worn down by the cares and disappointments of life, and a body exhibiting a faithful picture of its influence upon it. To discover truth in science, the most learned will admit is very often difficult; but in no science is it more difficult than in that of medicine. Independent of the common defects of medical evidence, our self-interest, our self-esteem, our prejudices, and not unfrequently our ignorance, will hide the truth from our view, and we ascribe all to art, and but little to the operations of Nature. The mass of testimony is always on the side of art, and although we believe we are right in our

reasoning, we only pursue the old course that has been instilled into our minds through training and education.

"Observe the young physician of the present day, who goes forth from the medical college, with his diploma in his pocket, with rather more pride than common sense, having passed through his studies with the rapidity of a locomotive, believing if he does not cure every disease it is his own fault; but time and experience will show him differently, when his cheeks are wrinkled with the cares and troubles which a professional

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life always confers, and when he will have learned by sad experience, that disease is controlled by Nature alone; that her laws must be consulted, if he expects to practice successfully. Thousands of persons would have no doubt been now living, had their cases been tested with more simple remedies; for a long experience has fully convinced me that the healing art depends on the preservation of the restorative power, and if this once be lost, the healing office is at an end. I have before told you, in my 'Domestic Medicine,' that health is to be restored by assisting Nature instead of retarding her operations. All the physician can do, is merely to regulate the *vis medicatrix naturee* - the self-preserving energy 'by being excited when languid, restrained when vehement, by changing morbid action, or obviating pain or irritation when they oppose its salutary courses, *'in simplici salus,'* or in other words, *there is safety in simples.*

"I am not fond of introducing Latin phrases, but when I follow it with the translation, I trust my reader will pardon me. In my writings for the people, I wish to be plain and comprehensive, at the same time to expose all quackery and concealment, for we live in an age when every branch of human knowledge is reduced to principles of common sense, and when the more important sciences are no longer clothed in mystery, when all the sources of information are open to every one who may wish to read and think for himself. The present age is favorable to every species of improvement; darkness, superstition, and ignorance have passed away, and we live under the first general dawn of the human mind. Every day produces some new discoveries made in nearly all the

sciences, which look more like magic than human agency. The healing art is likewise improving, and we are abandoning the active remedies which have been used to too great an extent by fanatics, and begin to turn our attention to the great *volume* of *Nature*, which, upon diligent research, will amply repay us with the blessings of health. The time has arrived when the people of this country begin to read and think for themselves, to learn things and not words. To exercise their judgments

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in matters which concern their welfare and that of their families, instead of paying other people to think for them.

"All men and women who possess good common sense should exercise their judgments, in matters that concern their health, and that of their families. They do know, or if they do not know they should know, their own constitutions best, and study the economy of *health*, not depending on dosing and drugging to the exclusion of exercise, diet, change of air, restoring the mind by innocent amusements, which were intended by the Deity for our happiness, but by a due course of training, as we do our animals, for man is an animal only of a higher grade.

"Therefore, instead of using medicines daily, which destroy the constitution and leave the whole body worn out, a living thermometer to every change, be your own guide, only be guided by reason and common sense. From the abuse of medicines, thousands on thousands die annually, from a wild and infatuated course of swallowing medicines daily, without reflecting that they are taking poison.

"Unfortunately for mankind, yet most fortunately for physicians, the people can not ascertain how many valuable lives are yearly destroyed by the constant dosing and drugging system. I know many persons who have so habituated themselves to the use of medicines that they can not have an operation without taking some purgative.

"It is said of the celebrated Dr. Radcliffe, that he was not in the habit of paying his debts without much following and importunity, nor then, if any chance appeared of wearing out the patience of

his creditors. A poor man who had been doing some paving for the doctor, after a long and tedious calling, at last caught him just getting out of his carriage near his own door, at Bloomsbury Square, London, and dunned him for his bill. 'Why, you rascal,' said the doctor, 'do you intend to be paid for such a piece of work as this? Why, you have spoiled my pavement and then covered it with earth to hide the poor work.' 'Doctor,' said the poor man, 'mine is not the only piece of bad work

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that the earth hides.' 'Well,' said the doctor, there is much truth in what you have said,' and at once discharged the poor fellow's bill.

"Dr. Shipper, one of the most distinguished medical gentlemen of Philadelphia, and a teacher of medicine in the old medical college of that city for more than forty years, says, 'If you find it necessary to have recourse to medicine, there are three kinds which you may make use of with safety: viz., a tranquil mind, exercise, and a temperate diet. 'There,' said the venerable and most experienced of physicians, 'are the best remedies I have ever prescribed.'

"The celebrated French physician, Dumoulin, on his death bed, when surrounded by three of the most distinguished medical men of Paris, who were regretting the loss which the profession would sustain in his death, said: 'My friends, I leave behind me three physicians much greater than myself.' Being much pressed to name them (each of the doctors supposing himself to be one of them), he answered, '*water*, exercise and diet.' The practice of every experienced and judicious physician becomes more and more simple as long as he lives. An old physician who administers much medicine is the worst kind of a quack, for his experience ought to have taught him that there are thousands of prescriptions, yet but few remedies. The distinguished Dr. Radcliffe said, 'that the whole mystery of physic might be written on half a sheet of paper.'

"The opinions of some of the greatest medical men who have ever lived, are sufficient to convince us that one of Burns' 'Two Dogs' was right, when he said:

'But human bodies are sic fools For all their colleges and schools.'

"The late professor of Materia Medica in Brown University, after half a century of professional labor, says, 'What a farrago of drugs has been and is daily used by many physicians; I have really seen,' said the professor, 'in public, as well as in private practice, such a jumble of things thrown together, and so

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much medicine administered unnecessarily, that it would have puzzled Apollo himself to know what it was designed for.'

"A certain practitioner said that the quantity, or rather the complexity, of the medicines which he gave his patients, was always increased in a ratio with the obscurity of the case. 'If,' said he, 'I fire a great portion of shot, it will be very extraordinary if some do not hit the mark.'

"A patient in the hands of such a man is certainly no better situated than the Chinese Mandarin, who upon being attacked with any disorder, calls in twelve or more doctors; after which he swallows at one dose, their several prescriptions. Instead of such wild theories, it would be better to tread the path pointed out by a strict observance of Nature, simple prescriptions and simple remedies; for it seems that the human constitution or corporeal frame, was not thus intricately, and wonderfully formed, to require, in repairing, what some physicians term the *broad-ax* or in other words, the most active and powerful remedies. It is well known that some of our active remedies, when used to too great an extent, produce disease more difficult to cure than that which they were designed to obviate.

"So, always avoid as much as possible dosing and drugging. When I was a young man commencing the practice of medicine, I was sure of curing every disease by active remedies and administering a great deal of physic, but in a few years I found, by experience, that I was in a thousand instances mistaken. I lost half my confidence in many remedies, and this must be the conclusion of every rational and experienced practitioner of medicine, for as he grows old in his profession, he becomes the more convinced of

the uncertainty of medicines; and although he has a thousand prescriptions, among them are but few remedies. A wealthy city merchant, who resided in London and lately retired from business, called upon Sir Astley Cooper, to consult with him upon the state of his health. The patient was not only fond of the good things of this world, but indulged in high living to a

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great excess. This was soon perceived by this eminent man, who thus addressed him: 'You are a merchant, sir, and possess an entire knowledge of trade, but did you ever know of an instance in which the imports exceeded the exports, that there was not a glut in the market? That is the way with you, sir. Take more exercise and eat less, drink no wines or spirituous liquors of any kind.' The gentleman took the hint, and has since declared the doctor's knowledge of the 'first principles of commerce and his mode of giving advice, rendering it so clear to the most humble capacity, has not only enabled him to enjoy good health, but prolonged his life for many years.' It was the opinion of Dr. Rush, 'that if the same amount of care had been taken to instruct and improve the human species, that has been bestowed upon domestic animals during the last century, there would have been but little need or use for medicines.' Man has not been sufficiently considered as an animal. If we paid as much attention to our children as we do to our horses, they would be more healthy, their intellectual powers be in a greater state of preservation, and cultivated at a later period in life. It is highly necessary that man should be attentive to the regulation of his animal appetites. Education commences in the cradle and terminates only in the grave. I am convinced that the mind of man might, like the sun, grow larger at its setting, and shed a more beautiful light at the period of its decline. A remarkable instance of this kind is evinced in the celebrated Jeremy Bentham and John Howard, whose lives were devoted to acts of charity and deeds of benevolence; and furnish examples of the efficacy of controlling the animal appetites in prolonging life.

"The possession of a sound mind in a sound and symmetrical body, was esteemed by the ancients to be the greatest blessing

which man could enjoy. This truth being proclaimed so long ago, renders it very strange that mankind have not profited by it and endeavored by every means in their power, to secure a healthy body; for the powers of mind, the evenness of

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the temper, the kindness of the disposition, all depend upon the state of our physical frames.

"Providence puts into our hands the means of preserving health, and this gift involves a solemn responsibility. Health will be counted among those talents for the use of which we are to answer to our Creator; and it is our duty to become acquainted with those laws which regulate and govern it. This is properly termed physical education, and it should be so instilled into our minds, as to render the subject perfectly familiar to us all; for there is but little doubt that we bring most of our diseases upon ourselves by imprudence, and the want of a proper knowledge how to ward them off; and if not the effect of our own neglect, they are traceable to ignorance or a want of proper management by our parents or the guardians of our youth, and not unfrequently entailed upon us by them. Then he assured that Nature will, sooner or later, call us to an account for a violation of her laws. It is true, for a time we may escape, but the debt and its interest are both accumulating, and which must at last be paid. How many charge Nature with that which has accumulated through neglect of the economy of health, by which many evils might be obviated, life prolonged to a good old age, and a large amount of physical suffering diminished. Young persons should be taught the value of health and the means of preserving it, by the subjugation of every immoderate desire, appetite, or passion, by which they may prolong life, and with proper precaution, live almost uninterruptedly in a perfect state of health.

"A knowledge of the circumstances upon which health depends, is one of the most important parts of the moral and intellectual education of youth. We should open the fountains of knowledge to the young on these subjects, so they may have in store useful information, and start them, well equipped, on the voyage of life,

prepared to ward off disease, and prepared to strengthen, if necessary, a weakly constitution, so well understanding this part of their education that they may be useful, in cases of sudden emergency, to the afflicted. The four ordinary secrets of health are,

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temperance in avoiding all intoxicating liquor, exercise, personal cleanliness, regular hours, and rising from the table with the stomach unoppressed.

"There may be slight indisposition in spite of the observance of these rules, but you will find all diseases much milder. By observing them, you have an assurance, almost, that you will escape disease altogether. Most of the ancient philosophers may be named as patterns of health, temperance, and long life. Pythagoras restricted himself to vegetable diet altogether; his dinner being bread, honey, and water. He lived upward of eighty years. His followers adopted the same diet, and with results equally striking.

"It is well known that early Christians also, were remarkable for temperance and longevity, too, when not removed by persecution. Matthew, for example, according to Clement, lived upon vegetable diet. The eastern Christians, that retired from persecution into the deserts of Egypt and Arabia, allowed themselves but twelve ounces of bread per day as their only solid food, with water alone for drink, yet they lived long and happy. St. Anthony lived one hundred and five years; Simon Stylites, one hundred and nine; James the Hermit, one hundred and four; Saint Jerome, one hundred; Epaphanus, one hundred and fifteen; Romauldus and Arsenius, each one hundred and twenty years. And I now conscientiously give you my opinion, founded on long observation and reflection, that if there was not a single physician, surgeon, apothecary, chemist, druggist or drug, on the face of the earth, there would be less sickness and less mortality than now takes place, we would depend more on the simples of nature than on the dosing and drugging system, which has occasioned, more than any one thing, so much degeneracy of the human body of the present race; and thousands daily die victims to medicine who might have lived to a good old age, had they but trusted to Nature and simple

remedies. By a proper course of temperance in all things no matter under what circumstances or climate we may be placed, our health will be secure, our longevity will be increased, and our happiness established; for where

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there is no temperance there is no moral virtue, nor any security against crime; for where spirituous liquors are used, the mind is under a state of animal excitement, the judgment is marred by false and imperfect reasoning, and the consequences thereof are habits which morally and physically, destroy health. Then taste not, handle not, the unclean thing. When it is used, the passions become wild as the winds, and raging as the waves. Without it, the mind is calm and tranquil, seeing all things in their proper light. In a word, happiness cannot exist where temperance is not, and let me assure you that most of our diseases and interruptions of health are the effects of intemperance - and I have no doubt, that by proper caution in avoiding stimulating drinks, we may live in a great measure uninterruptedly free from disease, notwithstanding the constitution may be reduced in strength and vigor, from being born of unhealthy or intemperate parents, which inherited misfortunes may be entirely overcome by diet, exercise, change of climate, and a perfect system of temperance in avoiding all spirituous liquors. These laws should be strictly observed through life, for there are very few individuals totally exempt from some predisposition to a particular disease which may trouble them while life lasts.

"Civilization and its attending consequences, not only bring with them many pleasures, but they also produce corresponding evils. As society is restrained, and complicated, as the luxuries of life increase, and as indolence and a want of proper muscular action prevail, the constitution becomes enfeebled, and bodily and mental development retarded. Many, and indeed most of our diseases were unknown to our aboriginal inhabitants. The stately Indian roamed the forest, ascended the mountain height, and leaped over the precipice in pursuit of game, or lay upon the earth, during heat and cold, summer and winter, almost destitute of clothing; still

consumption, dyspepsia, and gout, with many of the common diseases of civilized life, were unknown to him. The shepherd too, in his pastoral life, guarded his flock and sung his wild notes, without

stricture of the breast, or pain in the lungs. It is therefore a matter of the utmost importance, in the education of a youth, to teach him how far the luxuries and habits of civilized life, and its dissipations tend to shorten, or render it miserable, in order that he may correct his ways, and thus avoid premature suffering, or early death. No nation can be powerful, whose inhabitants are either mentally, morally, or physically enfeebled. It is true that the habits of the people of the United States have made but few inroads upon their bodily developments, but still we have no evidence that this state of things will continue. Already they are beginning to depart from the simplicity of their forefathers, and as the population becomes more dense - which is the case every day, from the immense immigration to this country, and as wealth accumulates in the hands of the few, and the many are shut up in manufactories, and the opportunities of intemperance of thousands, worn to death by the toils necessary to procure subsistence - the frame must continue to lose tone and elasticity through succeeding generations. It is already a common observation in our country, that men of talents and persevering industry, in the professions, or among statesmen, or among merchants, spring from amidst those who are accustomed to a country life, where the various luxuries and dissipations of cities are comparatively unknown.

"In order to guard with any degree of certainty, against those diseases, we should have a knowledge of the laws which govern the animal economy. Without it we would be groping our way in the dark, anxious no doubt to discover the right passage, but afraid that we were departing further from it.

"That is the case with men and women who do not possess that *most important* of all commodities, *common sense*. Now every man who has ever reflected upon this subject, for one moment, must know that there are certain kinds of constitutions, or forms, in which

certain maladies are extremely liable to be implanted, or, in other words, entailed upon the offspring by the parent. Now, if this constitution, or make, be kept from the influence of causes such as may excite the diseases

to which it is predisposed into action, it may pass on through a long life, without exhibiting any of the marks of the disorder which destroyed those that immediately preceded it; and the truth is, it may even become so changed by proper exercise and habits, and even a union with a healthy person, that no common exciting cause can produce the disease to which it was previously exposed.

"To illustrate my meaning on this subject more clearly, many of our most talented youth of both sexes die, at an early period, of consumption.

"This disease is hereditary in many families, that is, the same kind of structure, descends from the parent to the child; who not only resembles the father or mother, in shape and countenance, but the structure of the lungs is almost precisely the same. If exposed to sudden vicissitudes of temperature, or kept for six or eight hours, in a hot ill-ventilated room, breathing the impure air, which has already passed several times through the lungs of others, he will probably fall a victim to the same disease of his parent. The structure of the lungs was like his or hers, the most delicate portion of the system, and hence these organs were the most liable to disease. Now we often see that exercise in the open air, change of climate, nutritious diet, proper raiment, and avoiding all causes which predispose to these diseases, produce good health; we know, or ought to know, that proper exercise expands the chest, promotes the easy circulation of the blood, and develops the muscular growth, without exhausting the system.

"You will perceive by my remarks, my desire to point out to you the importance of a strict attention to the peculiarities of the constitution, for I honestly believe that two-thirds of the diseases to which the human family are subject, can be removed by simple remedies, proper training, in other words, a correct course of exercise, diet, temperance, and change of climate, before it is too

late; particularly a sea voyage, which generally gives a freshness and transparency to the skin, resembling the freshness of youth. The great misfortune is, that thousands of persons who

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are diseased, put off these remedies until it is too late, or after medicine has done its fatal work and the doctor, by way of getting rid of his responsibility, advises a sea voyage, or change of climate.

"I shall now conclude my remarks with these solemn admonitions, that health and happiness can never exist where temperance is not, and where piety is not a frequent visitor. There is no solace or balm against the cares, disappointments, and vicissitudes of life. All that is bright in the hope of youth, all that is calm and blissful in the meridian of life, all that is soothing in the vale of years, are derived from temperance and religion. The first wards of disease, the second calms and tranquilizes the mind under every affliction. This friendly visitor of the cross soothes the mind, and throws around the bed of sickness the arms of divine mercy. Solitary indeed is that couch where the emaciated, strengthless form is stretched, unaccompanied by these dawns of eternal day. No starlight brightness, no cherub wings are hovering around his dying pillow. In vain are the arms of friendship extended, or the bosom of love opened; the rays of hope may gleam for a brief moment in the horizon of his mind, but alas! they are cold and cheerless; no vivifying influence passes over his feverish brain; no holy gust of ecstatic joy sublimates the mind, and in quick succession, the past, the present, and the future is before him, and, at a glance, he views the false colorings of the world. The trembling soul dreads the future. No uplifted arm makes strong the soul, nor points with unerring truth the bright way to the mansions of eternal bliss, and he cries, 'How hard it is to die! All is lost!' " - *Home Book of Health, pp.26-40.*

CURE WITHOUT DRUGS

AMONG the common people, the wide distinction between Prevention and Cure has not been generally recognized. They are

apt to think that all books relating to the laws of life and health, must of course be treatises on diseases and cures by drugs. They

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are, at least, often more eager to obtain reading matter in some contemptible quack-doctor book, which professes to teach them how to doctor themselves, than they are to get books to show how they destroy health and life, and how to prevent diseases, broken constitutions, and premature death. They regard CURE infinitely more important than PREVENTION. As a general rule, they more highly value a physician, who, instead of warning them against the evils of violated law, will let them go on unmolested till they have ruined themselves, and then will be on hand to drug them thoroughly, even unto death, than they will that man who has the moral courage, in the cause of humanity, to peril his reputation to prevent them from encountering needless suffering, and an early grave.

They want their false appetites and ruinous indulgences to be let alone; and when health is gone, as a consequence, they want a doctor, or doctor book, to prescribe drugs which promise to restore health, in spite of their continuing the indulgence which caused it. Or, if they set aside the cause for a short space, they want to be so thoroughly drugged that Nature may never dare to make such another outcry, so that they may turn to their sins with hopeful impunity. At all events, they consider health a secondary matter - a matter comparatively of small importance until it is ruined, and then mourn over their pains and sufferings, when it is too late to make amends. They practically consider the old proverb to be obsolete, "An ounce of prevention is worth more than a pound of cure." They go on with their unnatural indulgences, undermining their physical vitality, until Nature, unable to bear abuse any longer, gives signs of woe; then they resort, perhaps, to cures which only cure by death. The first step toward the cure of diseases is effected

BY REMOVING CAUSES

Unless the original cause of any given disease be removed, there is no successful way of obtaining a permanent cure; and by the removal of the original cause, perhaps in more than nine cases out of ten,

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Nature will remove the difficulty without the aid of any kind of medicine. It is the most consummate quackery to prescribe medicine to cure disease, while the cause that produced it is not abandoned. If a liver complaint, or kidney complaint, or any other glandular derangement shall occur, which has been produced by tobacco, coffee, tea, or any other narcotic or stimulant, it is an outrage on all common sense, as well as science, to prescribe remedies while indulgence in these false luxuries is continued. They must be abandoned, or health give up; and it is folly to inquire which should be relinquished, for they are all hurtful, and should be rejected.

Here comes a lady with prostrated nervous system; and from this arises a diversity of complaints, - dyspepsia in its various forms and the hundreds of attendant sufferings, sick headaches, and nervous headaches, with their periodical visits, goneness at the stomach and palpitation of the heart; - any, and all of these, and many more, have grown out of the long-continued use of stimulating drinks. Her dear wicked luxuries of coffee and teas, - especially the green teas, - by their intoxicating power on the nerves, have gradually and imperceptibly worn out their healthy tone; they are now in a morbid and irritable state, laying a broad foundation for ill health in a variety of forms. If the liver is the point to which her illegal living has directed its force, and her immediate sufferings arise from a torpid condition of that gland, accompanied with its usual attendant, a sluggish condition of bowels, she runs after some nostrum in the form of anti-bilious pills, or other quackery. She takes her pills, which force a temporary action that is generally followed by greater prostration of nervous force, giving the liver greater torpidity, and still continues her luxuries of coffee and tea.

This is like a man's holding his hand in the fire till the skin is removed, calling on the doctor for a salve, while he is still holding his hand in the flame. If he wants the burned skin to be removed and a new one to take its place, he must take the hand out of the fire; he must put away the original cause. When he will

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do this, Nature will want little help to bring things again to their right bearings. But if he continues the cause, he may tax the skill of the whole medical world, and find no relief. If he will continue to violate law, he must meet the damages. But if he will cease rebelling against Nature, put away his weapons of warfare, desist from destroying her vital forces, and let her have her own way, she will put forth her very best efforts to set everything right. Nature always goes for health; and so zealous is she in her undertakings, and so certain of the best possible issue, that we may rest assured that on her part no pains will be spared, and on our part no risk is run.

As before remarked, probably in nine cases out of ten of all the diseases in the world, especially those of chronic form, when the primary cause is removed, Nature requires no help from medical agents, and will perform her work of cure better without than with them. Where medicines are not really needed, they do harm instead of good; for all medical agents are unnatural to the laws of healthy life. The philosophy of allopathic cure consists in creating an unnatural condition of the animal economy, in opposition to the existing one. A morbid condition now exists; another morbid condition is instituted in order to overcome and expel it. And if the medicine succeed in removing it, still Nature must remove the unnatural condition produced by the medicine; and if Nature alone can remove any existing disease by having its cause put away, she will come out better in the end, than she will if two morbid conditions, instead of one, are thrown in her way.

My own department of the medical profession has been, in many instances, deficient in attention to the laws which belong to health. The study of Pathology, or the laws which govern diseased life, do not, as a general rule, direct sufficient attention to laws

which govern healthy life. The Homoeopaths, and Hydropaths give much attention to this subject. If a man comes to them for medical aid, they look into the history of the case. They inquire into his habits of eating and drinking; carefully note all his physical

errors and proscribe everything which is in conflict with the laws of health. In this way they put their patients upon the resources of Nature. While their medicines, to say the least of them, are not drugging the patients to death, they are giving the powers of Nature an opportunity to exert their healing forces and this fact probably forms the principle basis of their success. Nature gets a chance to put forth healing energies, which drugging has sometimes, nay, often, prevented.

Cases have often come under observation where persons affected with chronic diseases have been taking drugs prescribed by their physician, while at the same time they were indulging unnatural appetites in sufficient degree to account for all the attendant morbid symptoms. Several cases of prostrated health, from the use of tobacco, have fallen under notice, where several members of the faculty have been consulted, each recommending his remedies but not one of them so much as intimating that tobacco possessed deadly properties. Even those who have noticed its deadly effects at all, have generally only half condemned the practice, and merely recommended the lessening of the quantity, instead of entire and eternal abstinence from it. The prescribing of medicine to cure a disease which is the product of an unnatural habit unrelinquished, is of all kinds of quackery in the world the most enormous and inexcusable.

More than nineteen-twentieths, probably, of all the diseases of which complaint is made, are created, directly or indirectly, by the people who suffer from them; and, as a general rule, if they will cease creating the disturbance, Nature will recover herself better without medicines than with them. A portion of their diseases they create directly, by interference with natural law, without any other agency. Another portion of diseases are created indirectly. There are morbid conditions of the atmosphere, and also contagions,

which cannot always be wholly avoided; but, as a very general rule, these would touch us lightly, if at all, if we would not, by impairing the tone of natural vitality, open the door of the "house we live in," and

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invite them in. As fearful as are the ravages of the cholera, it is comparatively little to be feared, if we will continually pay obedience to all the laws of organic life. But if we will abuse the powers of our own vitality, we may expect cholera, or any other epidemic or contagious disease, to walk in and take such a possession as may prove fatal.

The great majority of fatal cases of cholera, were made so by the intemperance of its victims. Many who used no spirituous liquors, used tobacco. Many who used no tobacco, had destroyed the equilibrium of their electric forces, circulating in the nervous system, by strong teas and coffees. Perhaps they had eaten luncheons and late suppers, or had taken largely of meats and condiments.

If we take such a natural course of habitual living as to secure a healthy and even-balanced circulation of the blood, and especially of the electric current of the body, we shall be in comparatively little danger from hurtful atmospheric influences. Neither cholera or any other morbid agency can find much chance to pray upon us. But if we derange the functions of our organism, though we may seem to do so with impunity to-day, yet to-morrow other destructive causes may enter, with deadly weapons.

Hence we can see, if those who are suffering ill health will read and inform themselves on the natural laws of healthy life, and cease violating them altogether, Nature will generally perform a cure. If we create a majority of all our diseases by intemperate habits, we certainly can quit those habits and let the system recover itself. Seeking for remedies short of this, is the very worst of folly. It is spending time and money to no purpose, and wasting the vital energies by medicines, which, when they cannot effect good, are only increasing disease and hastening premature death. If, instead of resorting to drug-shops and quack-doctor books, men would see

that all violations of natural law were put away, so that no embarrassment should oppress Nature, they would not only save themselves from a vast waste of money, but from

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many a ruined constitution and loss of life, which silver and gold cannot replace.

Oh, what consummate fools some people are! If we recommend them a book on the laws of health, they will call it quackery, a catchpenny, or a humbug. Or, if we tell them at the bedside, that all they really need is abstinence from disobedience to some law of health - that they do not need drugs - they will think us ignoramuses, and probably send for some doctor, so destitute of skill or honesty, that he will abundantly gratify them with medicines. The efforts of an honest man they cannot appreciate; but the man who will furnish them with a doctor book, promising to show them how to cure themselves with medicines - the man who will really humbug for money - they will regard as a benefactor to the race. The man who will make a display of powders and drops which are only preparing them to drop into the grave, is at once reckoned one of the most skillful doctors of the age.

The man who has not moral courage to repel the temptations which such ignorance furnishes, is not fit for the profession. The man who will seek a reputation at the peril of community, has not that degree of honesty which could prepare him for a station of such responsibility. He is obtaining money under false pretences, and even bartering the life that has been intrusted to his hands, for paltry gain. Nay; he is worse than a highway robber and murderer. He meets you, not in bold frank attitude of his real character, as does the highwayman, letting you understand at once your danger and need of preparation for defence, but comes to you in the meanest hypocrisy, pretending to be devoted to the cause of humanity and the relief of human suffering, while he is willing to let you go on in your course of self-destruction; and then, instead of seeking to show you wherein you have departed from Nature's

path, and turn you back into it again, will deal out needless drugs for money and a reputation, which push you into the grave.

Considering the ignorance of the people and their fondness for drugs - the abundance of quackery and

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the contingencies attending the administration of all medical agents - the increased indifference of the people toward the laws of health because there are plenty of doctors and medicine on hand - it is pretty safe to conclude, setting aside the benefits of skillful surgery, that the standard of health and longevity would be far above its present position, if no medicines had ever been known in the land, and not a physician had ever set foot upon its soil. The existence of medicines and physicians will probably continue to do more harm than good, until the friends of humanity will take more interest in diffusing among the people a knowledge of the laws of the human system which relate to practical life, and the people themselves shall wake up to their own highest earthly interests in this matter, and those of their rising posterity. Then, and not till then, probably, will doctors and the medicines become, on the whole, blessings to community.

The second step toward the cure of disease is effected

BY TEMPORARY ABSTINENCE

As a general rule, keep the stomach in right action, and the whole system will be right. This organ is very much exposed to hurtful influences, some of which cannot always be avoided. Although, as a very general rule, - a rule with few exceptions, - its maladies can be avoided by a knowledge of its peculiar functions and laws, yet it may possibly, by the strictest care, become deranged, and the whole system be put into liability to suffering. Its lining membrane may become coated with a viscid mucous secretion, or its nervous tone may be temporarily prostrated, so that a healthy appetite may be gone, and the whole system brought under some form of fever. If, on the approach of the disturbance, abstinence from ordinary food be rigidly adhered to for a day or

two, the stomach may free itself from its causes of oppression. If, instead of resorting to emetics and cathartics, as is frequently done, the person affected would cease all ordinary eating, and live on mere Indian gruel, till the stomach could have time to clear itself from its mucous

coating, or gather up its electric vigor, the whole difficulty might come to an end; a protracted sickness, severe drugging, a large bill, and perhaps a premature grave, might be avoided.

A popular idea exists, that when the stomach gets deranged, the bile has entered it, and must be dislodged. Hence, they will take emetics, throw up bile in the course of vomiting, and thus seem to prove their notions correct. Whereas, the bile rarely comes up hill into the stomach except by the effort of vomiting. The bile they see is brought up from below, from the second stomach, or duodenum, by the severe reverted action of the stomach, calling into its sympathy its associated organs. The stomach would not much better bear bile introduced into it, without vomiting, than it would bear a decoction of tobacco on its first introduction. It would set up rebellion against it, and throw it off with almost as much earnestness, as it would against a solution of tartar emetic.

Whenever the stomach has lost its tone, or become oppressed by wrong eating, the only cure that can suffice, consists in temporary abstinence from food. Hundreds of thousands have sick headache, nervous headache, heartburn, sour stomach, and other ailments which are, if not caused, greatly enhanced by bolting down the food without stopping to masticate it; and the poor foolish sufferers will swallow quarts of pills, neutralizing salts, emetics, syrups, and a host of other things, in hope of cure; - and they make about the same progress that a man would to drink himself drunk every day, and sleep himself sober every night. As long as they will swallow their food whole, they may expect to suffer. When they will cease insulting their stomachs by their swinish eating, they will find by short fasting, that organ to regain its strength.

But fast eating is not the only promoter of gastric disturbance. The taking of condiments with meats is a crime against the

stomach. Instead of leaving that organ free to carry on its own vital functions, they throw in pepper, and ginger, and spice, and mustard. All these are as truly destructive to its tone and healthy action, as alcohol. They produce unnatural

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excitement, and weaken natural strength. The taking of mustard with meats is a very popular habit, and one that is directly against health. If any one would inquire which he had better take, mustard or pulverized Spanish blistering flies, let him test their strength. Put a poultice of mustard on one arm, and a plaster of flies on the other, and see which can be borne the longest. This test will prove that the use of flies on meats would be less hurtful than the mustard. If these stomach complaints are produced by these unnatural and unnecessary agents, and a cure is desired, let them dismiss these things at once, and fast until Nature can perform a cure.

Vast disturbance is the direct effect of various stimulants. There are ladies suffering from various forms of dyspepsia and its often accompaniment, consumptive cough, which has been, to say the least, greatly increased by stimulating drinks. They have created great fondness for their favorites, coffee and tea. They love their intoxicating power, as truly as the drunkard loves his liquors, and for precisely the same reason; because they spur up Nature - quicken a mind that is drooping under the reaction of a former excitement - produce a cheering sensation on the jaded nervous system. Tell them about abandoning such a habit and, as in the case of the rum and tobacco drunkard, you might sooner succeed in persuading them to abandon the Christian faith. They will be found more firmly wedded to this worldly lust, than they are to a healthy body, a sound mind, or a sanctified heart. An unnatural animal passion rules the day, over better judgment, reason, conscience, and all the higher powers of nature. Health, with all its attendant blessings on the soul, is worth something, but their gratified passion is valued more.

But they cannot have this and health too, after symptoms of suffering show themselves. They must be content to suffer on, or

put away their idol appetites. The best cure for periodical or protracted headache, is ceasing to create or foster the complaint. The best drops for consumptive cough consists in dropping the foolish habits which produce it, or keep it in existence.

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Let them cease destroying the tone of the nervous system, from which arise a host of complaints, and these complaints will soon disappear. While this portion of our being is kept in tune, there is but little danger of much derangement. But get this out of tune, and there is scarcely any trouble that may not arise. - *Philosophy of Health*, pp. 169-182.

DRUGS

Hygienic medication - commonly called *Water-Cure*, *Hydrotherapy*, *Hygeopathy*, or more properly *Hygeio-Therapy* - is based on the fundamental principle that all curative virtue is inherent in the living organism; and that all that remedial agents can or should do, is to supply favorable conditions for the successful exertion of that power. Those conditions can never be supplied by the administration of drug-poisons, which are themselves incompatible with living structures, and which only cure (or rather *change*) one disease by producing another. They are found in such materials and influences as the organism *uses* in its normal state; not in such things as it *rejects*. *Food, water, air, light, temperature, exercise and rest, sleep, clothing, electricity, passionnal influences*, etc., are necessary and useful to, and usable by, the living system, in its state of health; and they constitute, also, its proper *materia medica* in all its conditions of disease.

So far from being a "one-ideaism" - as many charge, who regard the system as literally a *Water-Cure*, and *cold* water at that - Hygienic medication embraces all the *useful* things in the world - every curative agent in the universe. It adopts whatever nature *appropriates*, and discards only what nature *rejects*. The "one-ideaism" is all on the other side. The term may well be retorted upon those whose remedial agents are, *whatever nature abhors and rebels against*,

and whose only idea of a *medicine* is an animal, vegetable, or mineral *poison*.

The system of the healing art which I advocate and

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practice, not only repudiates all the remedies of the drug schools, but denies the philosophy on which their employment is predicated. It charges their practice with being *destructive*, and their theory with being *false*. It ignores all the fundamental premises of all drug-medical systems, and declares the truth to be the exact contrary of what they teach.

To illustrate: it is taught in all their books and schools, that nature has provided remedies for diseases in the things *outside of the domain of organic life*. The truth is exactly the contrary. Nature has provided *penalties* - and among them sickness - as the consequences of disobedience to organic law; but she has not provided *remedies to do away the penalties!*

It is also taught, in all their books and schools, that disease is an entity, a thing foreign to the living organism, and an enemy to the life-principle. The truth is exactly the contrary. Disease is the *life-principle itself at war with an enemy*. It is the defender and protector of the living organism. It is a process of purification. It is an effort to remove foreign and offensive materials from the system, and to repair the damages the vital machinery has sustained. It is *remedial effort*. Disease, therefore, is not a foe to be subdued, or "cured," or killed; but a friendly office, to be directed and regulated. And every attempt to cure or subdue disease with drug-poisons, is nothing more nor less than a war on the human constitution.

It is further taught, in all the books and schools of the drug-systems, that medicines have specific relations to the various parts, organs, or structures of the living system; that they possess an inherent power to "elect" or "select" the part or organ on which to make an impression; and that, in virtue of this "special" "elective" or "selective" affinity, certain medicines act on the stomach, others on the bowels, others on the liver, others on the brain, others on the skin, others on the kidneys, etc. This absurd notion is the groundwork of the classification of the *materia medica* into emetics,

cathartics, colagogues, narcotics and nervines, diaphoretics, diuretics, etc. Now the truth is exactly the contrary. So far from there being

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any such ability on the part of the dead, inert drug - any "special affinity" between a poison and living tissue - the relation between them is one of absolute and eternal antagonism. *The drugs do not act at all.* All the action is on the part of the living organism. And it ejects, rejects, casts out, expels, as best it can, by vomiting, purging, sweating diuresis, etc., these drug-poisons; and the doctors have mistaken this warfare *against* their medicines for their action on the living system.

The treatment of diseases with drugs ever was, now is, and always must be, uncertain and dangerous experimentation. It never was and never can be reduced to reliable practical rules. An art is the application of the principles of a science to specific results. And a science is an arrangement of ascertained principles in their normal order and relations. These principles constitute the premises of the system which is made up of the science and the art. But in medicine according to the philosophy of all the drug schools, every one of its fundamental premises is false; hence its science is false, and its practice must be false also.

On the contrary, the treatment of diseases with normal or Hygienic agencies and materials is founded on the demonstrable laws of physiology, and reducible to fixed and invariable rules of practice, and it affords the data for a true Medical Science and a successful Healing Art.

Wherever and by whomsoever this system is understood, it is adopted. Just so fast as people become thoroughly acquainted with it, they abandon all the systems of drug-medication. Thenceforth they have very little need of the physician, and never patronize the quack. They will not be killed by *regular*, nor imposed upon by irregular, physicians.

But an imperfect and superficial acquaintance with its fundamental principles causes many persons to err in the management of its agents and processes. The scarcity of properly

educated Hygeio-Therapeutic physicians, and the incompetency and charlatanism of some who assume the title of Water-Cure doctors, have rendered it necessary, for the great majority

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who approve our system, to be their own physicians. Very few of them, however, have time, opportunity, and inclination to study our larger works; and for the benefit of such I have arranged this little tract. Attention to the rules and principles herein stated and briefly illustrated will, I am confident, enable any person of ordinary tact and judgment to manage all ordinary maladies successfully, and to avoid doing any very serious injury in any case.

HYGIENIC AND DRUG MEDICATION CONTRASTED

All that I have said, shall say, or can say against drug-medication, and in favor of the Hygienic system, is more than confirmed by the standard authors and living teachers of the drug system. I will give a few specimens of their testimonies on these points. And first, let me introduce to the reader some of the most eminent of the living professors of our Medical Colleges:

"LOOK ON THIS PICTURE."

Said the venerable Professor Alex. H. Stephens, M. D., of the New York College of Physicians and Surgeons, in a recent lecture to the medical class: "The older physicians grow, the more skeptical they become of the virtues of medicine, and the more they are disposed to trust to the powers of nature." Again: "Notwithstanding all of our boasted improvements, patients suffer as much as they did forty years ago." And again: "The reason medicine has advanced so slowly, is because physicians have studied the writings of their predecessors, instead of nature.

The venerable Professor Jos. M. Smith, M. D., of the same school, testifies: "All medicines which enter the circulation, *poison the blood* in the same manner as do the poisons that produce disease." Again: "drugs do not cure disease; disease is always cured by the *vis medicatrix naturae*." And again: "Digitalis has *hurried*

thousands to the grave." Dr. Hosack, formerly a Professor in this College, used to say that it

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derived its name from the fact that it *pointed the way to the grave*. And yet again: "Prussic acid was once extensively used in the treatment of consumption, both in Europe and America; but its reputation is now lost. Thousands of patients were treated with it, but *not a case was benefited*. On the contrary *hundreds were hurried to the grave*."

Says Professor C. A. Gilman, M. D., of the same school: "Many of the chronic diseases of adults are caused by the *maltreatment* of infantile diseases." Again: "Blisters nearly always *produce death* when applied to children." Again: "I give mercury to children when I wish to *depress* the powers of life." And again: "The application of opium to the true skin of an infant is very likely to *produce death*." And yet again: "A single drop of laudanum will often *destroy the life* of an infant." And once more: "Four grains of calomel will often *kill an adult*." And, finally: "A mild mercurial course, and mildly *cutting a man's throat*, are synonymous terms.

Says Professor Alonzo Clark, M. D., of the same school: "From thirty to sixty grains of calomel have been given very young children for croup." Again: "Apoplectic patients, who are *not bled*, have double the chance to recover than those who are bled." And again: "Physicians have learned that *more harm than good* has been done by the use of drugs in the treatment of measles, scarlatina, and other self-limited diseases." And yet again: "My experience is, that croup *can't well be cured*; at least, the success of treatment is very doubtful. A different mode of treatment is introduced yearly, to be succeeded by another the next year." Once more: "Ten thousand times ten thousand methods have been tried, *in vain*, to cure diabetes." Still another: "In their zeal to do good, physicians have done much harm. They have *hurried many to the grave* who would have recovered if left to nature." And, finally: "All of our curative agents are poisons; and, as a consequence, *every dose diminishes the patient's vitality*."

Says Professor W. Parker, M. D., of the same school: "I have *no confidence* in gonorrhoeal specifics."

Again: "Nearly all cases of urethral stricture are *caused* by strong injections." And again: "The usual treatment of syphilis, by mercury, causes atheromatous deposits in the coats of the arteries, *predisposing to apoplexy*." And yet again: "It must be confessed that the administration of remedies is conducted more in an *empirical* than in a rational manner." Once more: "The pains of which patients with secondary and tertiary syphilis complain are not referable to the syphilitic poison, but to the *mercury* with which they have been drugged." And, finally: "Of all sciences, medicine is the most uncertain."

Says Professor E. H. Davis, M. D., of the New York Medical College: "Tablespoonful doses - 480 grains - of calomel have been given in cholera." Again: "The *modus operandi* of medicines is still a very obscure subject. We know they operate, but exactly *how* they operate is entirely unknown." And again: "The vital effects of medicines are very little understood; it is a term used to *cover our ignorance*."

Says Professor E. R. Peaslee, M. D., of the same school: "The administration of powerful medicines is the most fruitful cause of derangements of the digestion." Again: "The giving of morphine, or other sedatives, to check the cough in consumption, is a *pernicious practice*."

Says Professor Horace Green, M. D., of the same school: "The confidence you have in medicine will be dissipated by experience in treating diseases." Again: "Cod-liver oil has *no curative power* in tuberculosis."

Says Professor H. G. Cox, M. D., of the same school: "There is much truth in the statement of Dr. Hughes Bennett, that blood-letting is *always injurious*, and *never necessary*, and I am inclined to think it entirely correct." Again: "Bleeding in pneumonia *doubles the mortality*." And again: "Calomel does *no good* in pneumonia." And yet again: "The *fewer remedies* you employ *in any disease*, the *better for your patient*." And once more: "Mercury is a sheet-anchor in fevers; but it is an anchor that *moors your patient to the grave*."

Says Professor B. F. Barker, M. D., of the same school: "The drugs which are administered for the cure of scarlet fever and measles, *kill far more than those diseases do*. I have recently given *no medicine* in their treatment, and have had excellent success." Again: "I have known several ladies become *habitual drunkards*, the primary cause being a taste for stimulants, which was acquired in consequence of alcoholic drink being administered to them as medicine." And again: "I am inclined to think that mercury, given as an aplastic agent, does *far more harm than good*." And yet again: "I incline to the belief that bleeding is *injurious* and *unnecessary*." Once more: "There is, I am sorry to say, as much empiricism *in the medical professions* as out of it." And finally: "Instead of investigating for themselves, medical authors have *copied the errors* of their predecessors, and have thus retarded the progress of medical science, and perpetuated error."

Says Professor J. W. Carson, M. D., of the same school: "It is easy to destroy the life of an infant. This you will find when you enter practice. You will find that a slight scratch of the pen, which dictates a little too much of a remedy, *will snuff out the infant's life*; and when you next visit your patient, you will find that the child which you left cheerful a few hours previously, is *stiff and cold*. Beware, then, how you use your remedies!" Again: "We do not know whether our patients recover because we give medicine, or because nature cures them. Perhaps *bread pills* would cure as many as medicine."

Says Professor E. S. Carr, M. D., of the New York University Medical School: "All drugs are more or less adulterated; and as not more than one physician in a hundred has sufficient knowledge in chemistry to detect impurities, the physician seldom knows just how much of a remedy he is prescribing." Again: "Mercury, when administered in any form, is taken into the circulation, and carried to every tissue of the body. The effects of mercury are not for a day, but *for all time*. It often lodges in the bones, occasionally causing pain *years after it is administered*. I have often

detected metallic mercury in the bones of patients who had been treated with this *subtle poisonous agent*."

Says Professor S. St. John, M. D., of the same school: "All medicines are *poisonous*."

Says Professor A. Dean, LL. D., of the same school: "Mercury when introduced into the system, *always acts as a poison*."

Says Professor Martin Paine, M. D., of the same school: "Our remedial agents are themselves *morbific*. Again: "Our medicines act upon the system in the same manner as do the *remote causes of disease*." And again: "Drug medicines do but cure one disease by producing another."

Says Professor S. D. Gross., M. D., late of the New York University Medical School, now of Louisville (Ky.) Medical College: "Of the essence of disease very little is known; indeed, nothing at all."

Such being the deliberate assertions, declarations, and confessions of those who advocate, teach, and practice the drug system, let us see next what they say of the system which we advocate, and which they oppose.

"AND NOW LOOK ON THIS."

Says Professor Parker: "As we place more confidence in nature, and less in preparations of the apothecary, *mortality diminishes*." Again: "Hygiene is of *far more value* in the treatment of disease than drugs. And again: "I wish the *materia medica* was in Guinea, and that you would study *materia alimentaria*." And yet again: You are taught learnedly about *materia medica*, and but little about diet." Once more: "We will have *less mortality* when people eat to live." And finally: "I have cured granulations of the eyes, in chronic conjunctivitis, by Hygienic treatment, after all kinds of drug-applications had failed."

Says Professor Carson: "Water is the best *diaphoretic* we have." Again: "My preceptor used to give colored water to his patients; and it was noticed that those who took the water *recovered more rapidly* than

those of another physician, who had bled his patients."

Says Professor Clark: "Pure cold air is the *best tonic* the patient can take." Again: "Many different plans have been tried for the cure of consumption, but the result of all have been unsatisfactory. We are not acquainted with any agents that will cure consumption. We *must rely on Hygiene.*" And again: "*Cream is far better* for tubercular patients than cod-liver oil, or any other kind of oil." And yet again: "In scarlet fever you have nothing to *rely on* but the *vis medicatrix naturae.*" Once more: "A hundred different and unsuccessful plans have been tried for the cure of cholera. I think I shall leave my patients, hereafter, nearly entirely to nature; as I have seen patients abandoned to die and left to nature, recover while patients who were treated died." And, finally: "A sponge-bath will often *do more to quiet* restless, feverish patients than an anodyne."

Says Professor Barker: "The more *simple* the treatment in infantile diseases, the *better the result.*"

Says Professor Peaslee: "Water constitutes about eight-tenths of the weight of the human body, and is its *most* indispensable constituent." Again: "Water is the only necessary - the only natural - drink."

Says Professor Gilman: "Every season has its fashionable remedy for consumption; but Hygienic treatment is of *far more value* than all drugs combined." Again: "Cold affusion is the *best antidote* for narcotic poisoning. If the medical profession were to learn and appreciate this fact [Why don't they learn it? - R. T. T.], the number of deaths from narcotism would be diminished one-half." And again: "The continued application of cold water has more power to *prevent inflammation* than any other remedy." And yet again: "The application of water to the external surface of the abdomen, is of *great importance and value* in the treatment of dysentery. I have also *cured* adults by this means alone." Once more: "Water is equal in efficacy, as a diuretic, *to all other* diuretics combined. Water is *the* thing that produces diuresis; all other means are subordinate." And finally: "Water is the *best febrifuge* we have."

Says Professor Smith: "The vapor of warm water is the *most efficacious expectorant* we have." Again: "Abstinence from food is one of the *most powerful antiphlogistic* means."

To the above testimonials against the drug system, and in favor of the Hygienic, I will add the opinions of a few of the standard authors of the Allopathic school:

LOOK ON THIS ALSO

"I have no *faith* whatever in medicine." Dr. BAILIE, of London.

"The medical practice of our day is, at the best a most *uncertain* and unsatisfactory system; it has *neither philosophy nor common sense* to commend it to conscience."

Professor EVANS, Fellow of the Royal College, London.

"Gentlemen, ninety-nine out of every hundred medical facts are *medical lies*; and medical doctrines are, for the most part, *stark, staring nonsense*."

Professor GREGORY, of Edinburgh, Scotland.

"I am incessantly led to make an apology for the instability of the theories and practice of physic. Those physicians generally become the most eminent who have most thoroughly emancipated themselves from the tyranny of the schools of medicine. Dissections daily convince us of our *ignorance of disease*, and cause us to blush at our prescriptions. What *mischiefs* have we not done under the belief of *false facts* and *false theories*! We have assisted in *multiplying diseases*; we have done more: we have *increased their fatality*."

BENJAMIN RUSH, M. D., Formerly Professor in the first Medical College in Philadelphia.

"It cannot be denied that the present system of medicine is a *burning shame* to its professors, if indeed a series of vague and uncertain incongruities deserves to be called by that name. How rarely do our medicines do good! How often do they make our

patients *really worse*! I fearlessly assert that in most cases the sufferer would be *safer without a physician* than with one. I have seen enough

of the *mal-practice* of my professional brethren to warrant the strong language I employ."

Dr. RAMAGE, Fellow of the Royal College, London.

"Assuredly the uncertain and most unsatisfactory art that we call medical science, is *no science at all*, but a jumble of inconsistent opinions; of conclusions hastily and often incorrectly drawn; of facts misunderstood or perverted; of comparisons without analogy; of hypotheses without reason, and theories not only useless, but *dangerous*."

Dublin Medical Journal

"Some patients get well with the aid of medicine; more without it; and still more *in spite of it*."

Sir JOHN FORBES, M. D., F. R. S. Physician to Queen Victoria.

"Thousands are annually *slaughtered* in the quiet sick room. Governments should at once either banish medical men, and proscribe their *blundering art*, or they should adopt some better means to protect the lives of the people than at present prevail, when they look far less after the practice of this *dangerous profession*, and the *murders* committed in it, than after the lowest trades."

Dr. FRANK, an eminent European author and Practitioner.

"Let us no longer wonder at the lamentable want of success which marks our practice, when there is scarcely a sound physiological principle among us. I hesitate not to declare, no matter how sorely I shall wound our vanity, that *so gross is our ignorance* of the real nature of the physiological disorder called disease, that it would, perhaps, be better to do nothing, and resign the complaint into the hands of nature, than to act as we are frequently compelled to do, without knowing the why and the wherefore of our conduct, at the obvious risk of *hastening the end of our patient*."

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M. MAGENDIE, the eminent French Physiologist and Pathologist.

"I may observe, that, of the whole number of fatal cases in infancy, a great proportion occur from the inappropriate or undue application of *exhausting remedies*."

Dr. MARSHALL HALL, the distinguished English Physiologist.

"Our actual information or knowledge of disease does not increase in proportion to our experimental practice. Every dose of medicine given is a *blind experiment upon the vitality* of the patient."

Dr. BOSTOCK, author of the "History of Medicine."

"I wish not to detract from the exalted profession to which I have the honor to belong, and which includes many of my warmest and most valued friends; yet it can not answer to my conscience to withhold the acknowledgment of my firm belief, that the medical profession (with its prevailing mode of practice) is productive of *vastly more evil than good*; and were it absolutely abolished, mankind would be *infinitely the gainer*."

FRANCIS COGGSWELL, M. D., of Boston.

"The science of medicine is a *barbarous jargon*, and the effects of our medicines on the human system in the highest degree *uncertain*, except, indeed, that they have *destroyed more lives* than war, pestilence, and famine combined."

JOHN MASON GOOD, M. D., F. R. S. Author of "Book of Nature," "A system of Nosology," "Study of Medicine,." etc.

"I declare, as my conscientious conviction, founded on long experience and reflection, that if there was not a single *physician, surgeon, man-midwife, chemist, apothecary, druggist*, nor *drug* on the face of the earth there would be *less sickness* and *less mortality* than now prevail."

JAMES JOHNSON, M. D., F. R. S., Editor of the *Medico-Chirurgical Review*.

These extracts, which might very easily be extended so as to fill a large volume, shall conclude with the following confession and declaration deliberately adopted and recorded by the members of the National

Medical Convention, representing the *elite* of the profession of the United States, held in St. Louis, Mo., a few years ago:

"It is wholly incontestable that there exists a widespread dissatisfaction with what is called the regular or old allopathic system of medical practice. Multitudes of people in this country

and in Europe express an utter want of confidence in physicians and their physic. The cause is evident: *erroneous theory* and, springing from it, *injurious*, often - *very* often - FATAL PRACTICE! Nothing will now subserve the absolute requisitions of an intelligent community but a medical doctrine grounded upon *right reason*, in harmony with, and avouched by the *unerring laws of nature* and of the vital organism, and authenticated and confirmed by successful results."

And now, since the assembled wisdom of the medical profession of this country has condemned its own system "as erroneous in theory" and "fatal in practice," let us turn to the processes and appliances of the Hygeio-Therapeutic system. - *Water-Cure for the Million*, pp. 3-12.

POISONS

"IT does not take a man with a divining rod to tell that the same general law which wards off disease, is that by which disease is cured, and that any knowledge which one has, by means of which he can cure the sick is of no avail unless it also includes a knowledge of means by which when a person is cured, he may 'stay cured.' For it is palpably absurd to be shut up to the necessity of curing people constantly. Such a process is only a sham. In reality there is no cure. It is merely a labor quite unfruitful of benefits. - Without health no man can be as great as Nature designs him to be. Philosophically speaking, as well as practically, Health is wealth. - Without it the highest mental culture can never be attained, for in its absence the closest application of one's intellectual powers cannot be exercised. Without health there

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cannot be a thorough moral discipline or religious growth, for to the degree that one is sick does he lack power of control over his passions, as well as over the emotions of his higher nature. There is no curse on this earth this day so heavy upon the people as the loss of health. It makes those who suffer it so dependent, so miserable, placing them on a charity list, where if they are not dependent for

bread, they are for other little things, which, good in themselves, sicken and sadden when daily had under circumstances inevitably calculated to press home to those to whom they are tendered the conviction of their own nothingness.

"Many of the ablest medical writers admit the impossibility of curing chronic diseases by medicine. Many more admit it in their daily practice, who have patients to whom they give no medicine, recommending instead, means entirely hygienic. In acute diseases, drug doctors speculate and experiment more extensively, but in this department men occasionally arise who have the magnanimity to admit that they can calculate with no certainty on their medicines, these utterly failing under the most favorable combination of symptoms to exhibit those effects, for the production of which it is supposed they are specifically adapted.

"Thus calomel, opium, quinine, lobelia, belladonna, aconite, toxicodendron, arsenic, iodine, podophyllin and the other poisons whose name is legion, and in whose tails there are a thousand stings, are daily given, and specific effects are looked for and calculated upon, but exactly opposite effects are produced. Am I not right? If not, how then is opium given to induce sleep, and the patient made all the more wakeful for it? Is it not a common fact that calomel when administered with a view to excite the liver to increased action, produces as a result greater inactivity of that organ? Do not physicians daily give cathartics to relieve costiveness, and thereby making it a permanent condition of the bowels? Do they not give brandy to tone up the stomachs of dyspeptics, and thereby, oftener than otherwise produce complete loss of

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tone of that organ? Do they not give cantharides to cure dropsy, and then have to commence the process of tapping, and keep it up till the patient dies? Do they not give iodine to reduce enlarged lymphatics, and have suppuration of the glands follow its administration? Do they, or do they not get results such as the books tell about, in half the cases they treat? I do not ask if their patients live through the attacks of their diseases and the administrative attendance of their physicians. That is not just now

the question, but do these medicine-givers with their so called specifics get specific effects?

"In a monograph on Typhus Fever published in 1831, Prof. Nathan Smith, of Yale College says: 'I am clearly of opinion, that we had better leave Typhus Fever to cure itself, as medicines, especially powerful ones, are more likely to do harm than good.' The Prof. was right. Drugs kill, or if they do not kill, they tend to kill, and so do more harm than good. - Think of the curative properties of poisons. - What makes arsenic everywhere labelled a poison? Why, by universal consent is prussic acid stamped, labelled, and considered a poison? - Why do legislators pass enactments forbidding druggists to sell arsenic or other drugs without labelling them so plainly when done up as to leave no possible ground for mistake that they are poisons? Is it not because the legitimate effects of them on the human body is to destroy its vitality and kill it? Then by what cunning, or skill, or power of transmutation, is it that a man with a piece of parchment in his office hung on the wall, written all over in Latin characters, can take these substances and introduce them into the body, set them going into the circulation and have them tend to cure, and not to kill. Is it that by their introduction they are chemically altered? This is not the fact. Persons who are killed by arsenic show its presence in their stomachs on post mortem examination. Persons who have taken mercury, have had it pass from the body through the skin in a natural state. Persons who have had iodine administered for scrofula, have had the smell unmistakably exhibited in their puss. - Those

who have taken oil of turpentine, have months, yes, years after taking it, sent forth its odor in their urine. Sick persons have taken the wine of colchicum, and have tasted it plainly a year after its administration. Persons after taking lobelia have had its presence exhibited, and usual effects shown, years after it was given. Opium eaters are liable to attacks of lethargy for years after giving up its use. Men have gone from the East to the West, traveled through it,

and returned to have the Western fever, eighteen months after their return and die from it. Men go into a room where typhus fever is, and come out without injury; others go in, come out, are taken sick and die. Men settle down on the edge of a stagnant mill-pond, and in a little while have intermittent fever. - Men take some little pills of strychnine from the hands of a physician, and are smitten with paralysis for life. Boys chew and smoke tobacco, and are palsied, smitten in their early budding. What in the name of Heaven do these facts prove, but that poison is poison everywhere, always is poison, that its effects are modified by the vitality of the person taking it, and not by any change undergone, and that the worst possible use you can put a sick man to, is to give him medicine, that if you want to kill him you have only to drug him, and if you do not kill him, you will waste away all the greenness and freshness of his existence, so that life looks to him as desolate as a burned prairie."

--DR. JACKSON, *Laws of Life*, for Aug., 1862.

THE DOCTOR

"THE following 'Composition' was recently read before a College in Wisconsin, by one of the young lady students.

"He came to our house, - the doctor. Happy the homes which he never enters; yet how many have watched for his coming, and have felt the moments were ages while they waited. Their thoughts turn from the dear one prostrated by disease, to the doctor. The sick one sighs, and his pain increases as he thinks

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of the hours that must intervene before the doctor comes; and when he feels his pulse throbbing beneath the touch of that one, and knows that *his* ear is listening to his complaint, how confidently he speaks. How carefully the attendant notes the doctor's directions. How unquestioning the faith of the patient, as he swallows the nauseous mixture. Very poisonous it may be, but he expects it will cure, because the doctor gives it, though if he had

been well, and had swallowed as much poison by accident, he would have feared death. Oh! who will tell us where the magic lies, by which the doctor can so change the action of the vilest drugs. Are these death-dealing potions aimed only at the disease, and will they dislodge the enemy and leave the citadel in which he had entrenched himself unharmed? Bombs and cannon may drive out the foe, but heaps of mouldering ruins will greet the conqueror as he enters the city.

"And is this all the virtue the healing art possesses? Nay: degrade it not thus. The instincts of man concerning its mission are true. It would alleviate pain and banish disease, and it would do this by eliminating its causes, and that, in such a harmless yet effectual manner, that the body would be like a well cultivated garden, where the extraction of the weeds leaves each plant room or development, and beautiful growth.

"Hygeia's form is not marred by disease, invited by abnormal gratification; a stomach with endless craving has not stolen the roses from her cheeks and left sallowness instead. She has not the lack-lustre eye of a dyspeptic; neither is her step that of the invalid. She leads her followers in pleasant paths, and from her lips they are taught lessons of self-knowledge. But the multitude, listening to siren voices promising greater pleasure in self-gratification, wander in ignorance, despising her counsel; and the doctor either enveloped in the same ignorance which surrounds them, seeks a panacea for their woes, by divining deep in poison's Stygian waters, loving himself to wallow in the same mire, or else he fears the cry of public opinion will be against him, should he follow out his own convictions.

"In thus rendering tangible thoughts that *would* come, we vent no spleen against the Medical Profession. It is a noble one. Would that its practitioners were all worthy exponents of its elevated character. But when we saw the doctor come in our house, we saw him take an ignited roll of poisonous weed from his mouth which he had left lying on the gate post. But not there could he lay aside the defilement caused by his cigar. Saturated within with the juice

of the weed, scented without by its vapor, with his mind under its influence, he approaches his patient. Shall we say to point out the road to health? Can *he* talk of habits at variance with physiological law to whom the maxim 'physician heal thyself' is so applicable? It must indeed be far easier to compound powders, and departing leave '*something to take.*' And see! as he goes, he is not forgetful as he passes the gate post. Oh, shade of Esculapius, may such ignoble disciples of thine be few! - A. M., Laws of Life for April, 1863.

INFANTS

Their Improper Nursing and Medication. ³¹
BY MRS. ELIZA DE LA VERGNE, M. D.

THE improper treatment of infants, is one of the greatest evils of the present age, literally a "crying evil," and one which requires immediate reform. It is a subject in which every female should feel a deep and active interest, and every woman in the land should respond to the call for reformation. In the cause of infantile humanity, woman may use her noblest powers without being told by the sterner sex that she is out of her sphere. And can she exert herself, either mentally or physically, in a cause which will repay her better?

I look upon infants as a class of beings who are

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obliged to suffer from the prevailing principle that "might is right." It is a matter of surprise to many that hundreds and thousands of young children yearly become victims to disease and death; but it is much more surprising that so many survive the outrageous nursing and medication to which they are subjected. From the hour of their birth the poor little creatures are treated as though their stomachs were lined with gutta percha instead of a delicate mucous membrane. In this enlightened age, nature's laws are considered superfluous, and science and physicians must take their place. Nature, in the olden time, did her own work without assistance, but is now supposed to be superannuated and unfit for duty. Art now comes along with her saddle-bags and instruments of torture -

more numerous than those of the inquisition - and informs the astonished world that she has just graduated, and is prepared to treat all fleshly ills scientifically. In accordance with this principle, infants are born and nurtured in direct antagonism to every physiological law. From the hour of its birth, the little creature is tortured in various ways; first, it is tightly dressed, then fed with molasses and water to "move its bowels," which organs have previously been so tightly compressed by an irritating flannel bandage, that it is a mystery how they ever move at all.

It would seem if the *Creator* intended such bracing he would have supplied a bony frame-work similar to that which protects the lungs. The infant is now placed in bed with its head closely covered, lest the fresh air should get access to the lungs and give it cold. After a short time, serious fears are entertained that the babe will starve before the mother is able to supply it with its natural food, therefore some unnatural fluid is poured into its stomach, which soon produces pain and other difficulties; these must be relieved by catnip tea, peppermint, or gin. All these things are prepared with sugar, which cannot digest properly, thus increasing the suffering it was intended to relieve. Very frequently, after this course, the poor babe is unable to sleep; then comes Godfrey's cordial, paregoric, or laudanum, until the poor little

creature falls into a stupid slumber, much to the delight of the officious attendant. If the anxious young mother suggests the danger of these preparations, she is assured by some good old aunt or nurse, that all babies take these things, and no harm can possibly arise if there is not too much given, but what quantity is "too much" is not definitely stated. In many cases, where an infant's system has been thus outraged, and the little one refuses all consolation, some ingenious mind is suddenly seized with the idea that the babe "wants something" it has not had, therefore, all known articles of diet are brought in requisition. I knew a case where clams, oysters, brandy, wine and ice-cream were fed to an infant not three weeks old, but after trying each of these articles it cried more piteously than before, and the discovery was finally

made that the child inherited dyspepsia, which was aggravated by the mistaken kindness of its friends.

Many infants are fed with fat meat, vegetables and pastry, before they are six months old, attended by extra courses or medicine to remove the obstructions which these articles of food produce. I called on a lady of my acquaintance a short time since, and found her babe of thirteen months, making an entire meal of fat ham, because it wanted it, the mother said, and would eat everything its parents did. On trying to convince her of the injurious effects of such diet, she replied that *her* mother had given all of her children such food, and never lost one yet. Very true; they are all living, but a more unhealthy, scrofulous family it would be difficult to find. The babe of whom I speak has had a number of painful boils and eruptions on the head, and if it lives to womanhood, must be afflicted by this inherited evil till life becomes a burden. It is too true that improper diet for the child is one of the most prolific causes of debility, disease, and even deformity in the adult. A large number of cases have come under my own observation where the feeding, dosing, and drugging with all kinds of abominations, have laid the foundation of misery and suffering through childhood, and finally, on arriving at adult age, have become parents and transmitted their diseases

to another generation, thus perpetuating the curse. Were I to enter into the details of drug-medication, it would fill a large volume, therefore I shall not attempt it, but will merely give a few simple suggestions as they present themselves to my mind. It is true, very few children of the present time inherit a healthy constitution; but admitting this, I insist that much depends on their treatment after birth and through childhood. A delicate and sickly child may become comparatively strong and healthy by strictly hygienic treatment, while a naturally healthy one may sink into an early grave by unhealthy food and medication. A short time ago I saw an infant of two months who had been troubled with a bad diarrhea from its birth. Its mother said she fed it with the most concentrated food, such as fine flour boiled in milk, crackers, arrowroot, etc., but

it continued to grow worse, - she had carefully kept it from the fresh air, fearing it might take cold, and almost smothered it with flannels. This mother was actually killing her babe with kindness, and thousands are daily doing the same thing; they are so anxious to do right, that they do all wrong. The question now is, how is this great evil to be obviated? Is it by employing a skillful physician? Is it by allopathy, or homeopathy, or any other system of medication? These have all been tried and found wanting, I appeal now to mothers! If you had a rare exotic sent you from some far-off land by some dear friend, would you consign it to the care of one who did not know how to rear the plants of his own garden? Would you not rather study its nature, its wants and its habits yourself, watch it with jealous care lest some rude blast should mar its beauty and nip its tender buds ere they had unfolded their delicate petals to your admiring eye? But you would bring into existence a being of far more importance than all the exotics of the eastern clime, and place it in the care of those who - for aught you know - are ignorant and unprincipled, who understand not the nature of this God-given treasure, and have no natural tie to bind them to it. If your darling babe becomes ill, you send for a physician,

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who perhaps prescribes some nauseating dose, and departs without one word of advice with regard to its daily habits. It frequently happens that the physician is a young man, and what does he know about babies or their management? I believe it to be woman's exclusive privilege to be not only a mother to her child, but its physician also. Let mothers be educated in all that concerns their life and health, let them study their own nature well, and learn that knowledge gives the highest order of power, and they will have no need to call in a physician for their children! If mothers would seriously reflect on the importance of a physiological education, I know they would begin earnestly and faithfully to prepare not only themselves, but their daughters, for the high and holy mission which is theirs to fulfill; then when these little sunbeams were given to light their earthly pathway, they would feel that they were responsible for the future health and happiness of such priceless

treasures. No stranger's hand would be permitted to perform those services for the loved ones which a mother's deep affection alone could prompt, and understanding the mechanism and needs of the human system, she could do more for the suffering invalid than all the doctors in the universe. Truly shall her "children rise up and call her blessed." I cannot do justice to this subject in these few pages, but will say to my sisters, "be up and doing," and may Heaven's blessing descend on this reform. - *Water-Cure Journal for October, 1855.*

Says Dio Lewis:- "It is not an uncommon remark among physicians, in speaking of consumption, as of other diseases, - 'she has been so much poisoned or exhausted, by drugs, that I fear nothing can be done for her.' Or this, - 'the disease is conquered and he will recover, if he can rally from the effects of the medicine.' There is a certain cachectic condition, which the discriminating medical man at once recognizes as the result of drugs. That mercury has produced a vast amount of consumptive diseases, it would be easy to prove by numerous authorities."

DISEASE AND ITS CAUSES. Chapter 3 [EGW]

BY ELLEN G. WHITE.

THE human family have brought upon themselves diseases of various forms by their own wrong habits. They have not studied how to live healthfully, and their transgression of the laws of their being has produced a deplorable state of things. The people have seldom accredited their sufferings to the true cause - their own wrong course of action. They have indulged in intemperance in eating, and made a god of their appetite. In all their habits they have manifested a recklessness in regard to health and life; and when, as the result, sickness has come upon them they have made themselves believe that God was the author of it, when their own wrong course of action has brought the sure result. When in distress they send for the doctor, and trust their bodies in his hands, expecting that he will make them well. He deals out to them drugs, the nature of which they know nothing, and in their blind

confidence they swallow anything that the doctor may choose to give. Thus powerful poisons are often administered which fetter nature in all her friendly efforts to recover the abuse the system has suffered, and the patient is hurried out of his life.

The mother who has been but slightly indisposed, and who might have recovered by abstinence from food for a short period, and a cessation from labor, having quiet and rest, has, instead of doing this, sent for a physician. And he who should be prepared to understandingly give a few simple directions, and restrictions in diet, and place her upon the right track, is either too ignorant to do this, or too anxious to obtain a fee.

He makes the case a grave one, and administers his poisons, which, if he were sick, he would not venture to take himself. The patient grows worse, and poisonous drugs are more freely administered, until nature

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is overpowered in her efforts, and gives up the conflict, and the mother dies. She was drugged to death. Her system was poisoned beyond remedy. She was murdered. Neighbors and relatives marvel as the wonderful dealings of Providence in thus removing a mother in the midst of her usefulness, at the period when her children need her care so much. They wrong our good and wise heavenly Father when they cast back upon him this weight of human woe. Heaven wished that mother to live, and her untimely death dishonored God. The mother's wrong habits and her inattention to the laws of her being, made her sick. And the doctor's fashionable poisons, introduced into the system, closed the period of her existence, and left a helpless, stricken, motherless flock.

The above is not always the result which follows the doctor's drugging. Sick people who take these drug-poisons do appear to get well. With some, there is a sufficient life-force for nature to draw upon, to so far expel the poison from the system that the sick, having a period of rest, recover. But no credit should be allowed the drugs taken, for they only hindered nature in her efforts. All the credit should be ascribed to nature's restorative powers.

Although the patient may recover, yet the powerful effort nature was required to make to induce action to overcome the poison, injured the constitution, and shortened the life of the patient. There are many who do not die under the influence of drugs, but there are very many who are left useless wrecks, hopeless, gloomy, and miserable sufferers, a burden to themselves and to society.

If those who take these drugs were alone the sufferers, then the evil would not be so great. But parents not only sin against themselves in swallowing drug-poisons, but they sin against their children. The vitiated state of their blood, the poison distributed throughout the system, the broken constitution and various drug-diseases, as the result of drug-poisons, are transmitted to their offspring, and left them as a wretched inheritance, which is another great cause of the degeneracy of the race.

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Physicians, by administering their drug-poisons, have done very much to increase the depreciation of the race, physically, mentally, and morally. Everywhere you may go you will see deformity, disease and imbecility, which in very many cases can be traced directly back to the drug-poisons, administered by the hand of a doctor, as a remedy for some of life's ills. The so-called remedy has fearfully proved itself to the patient, by stern suffering experience, to be far worse than the disease for which the drug was taken. All who possess common capabilities should understand the wants of their own system. The philosophy of health should compose one of the important studies for our children. It is all-important that the human organism be understood, and then intelligent men and women can be their own physicians. If the people would reason from cause to effect, and would follow the light which shines upon them, they would pursue a course which would insure health, and mortality would be far less. But the people are too willing to remain in inexcusable ignorance, and trust their bodies to the doctors, instead of having any special responsibility in the matter themselves.

Several illustrations of this great subject have been presented before me. The first was a family consisting of a father and

daughter. The daughter was sick, and the father was much troubled on her account, and summoned a physician. As the father conducted him into the sick room, he manifested a painful anxiety. The physician examined the patient, and said but little. They both left the sick room. The father informed the physician that he had buried the mother, a son and daughter, and this daughter was all that was left to him of his family. He anxiously inquired of the physician if he thought his daughter's case hopeless.

The physician then inquired in regard to the nature and length of the sickness of those who had died. The father moanfully related the painful facts connected with the illness of his loved ones. "My son was first attacked with a fever. I called a physician. He said that he could administer medicine which

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would soon break the fever. He gave him powerful medicine, but was disappointed in its effects. The fever was reduced, but my son grew dangerously sick. The same medicine was again given him, without producing any change for the better. The physician then resorted to still more powerful medicines, but my son obtained no relief. The fever left him, but he did not rally. He sank rapidly and died.

"The death of my son so sudden and unexpected was a great grief to us all, but especially to his mother. Her watching and anxiety in his sickness, and her grief occasioned by his sudden death, were too much for her nervous system, and my wife was soon prostrated. I felt dissatisfied with the course pursued by this physician. My confidence in his skill was shaken, and I could not employ him a second time. I called another to my suffering wife. This second physician gave her a liberal dose of opium, which he said would relieve the pains, quiet her nerves, and give her rest, which she much needed. The opium stupefied her. She slept, and nothing could arouse her from the death-like stupor. Her pulse and heart at times throbbed violently, and then grew more and more feeble in their action, until she ceased to breathe. Thus she died without giving her family one look of recognition. This second

death seemed more than we could endure. We all sorrowed deeply but I was agonized and could not be comforted.

"My daughter was next afflicted. Grief, anxiety and watching, had overtaken her powers of endurance, and her strength gave way, and she was brought upon a bed of suffering. I had now lost confidence in both the physicians I had employed. Another physician was recommended to me as being successful in treating the sick. And although he lived at a distance, I was determined to obtain his services.

"This third physician professed to understand my daughter's case. He said that she was greatly debilitated, and that her nervous system was deranged, and that fever was upon her, which could be controlled, but that it would take time to bring her up from her present state of debility. He expressed perfect

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confidence in his ability to raise her. He gave her powerful medicine to break up the fever. This was accomplished. But as the fever left, the case assumed more alarming features, and grew more complicated. As the symptoms changed, the medicines were varied to meet the case. While under the influence of new medicines she would, for a time, appear revived, which would flatter our hopes, that she would get well, only to make our disappointment more bitter as she became worse.

"The physician's last resort was calomel. For some time she seemed to be between life and death. She was thrown into convulsions. As these most distressing spasms ceased, we were aroused to the painful fact that her intellect was weakened. She began slowly to improve, although still a great sufferer. Her limbs were crippled as the effect of the powerful poisons which she had taken. She lingered a few years a helpless, pitiful sufferer, and died in much agony."

After this sad relation the father looked imploringly to the physician, and entreated him to save his only remaining child. The physician looked sad and anxious, but made no prescription. He arose to leave saying that he would call the next day.

Another scene was then presented before me. I was brought into the presence of a female, apparently about thirty years of age. A physician was standing by her, and reporting, that her nervous system was deranged, that her blood was impure, and moved sluggishly, and that her stomach was in a cold, inactive condition. He said that he would give her active remedies which would soon improve her condition. He gave her a powder from a vial upon which was written, Nux vomica. I watched to see what effect this would have upon the patient. It appeared to act favorably. Her condition seemed better. She was animated, and even seemed cheerful and active.

My attention was then called to still another case. I was introduced into the sick room of a young man who was in a high fever. A physician was standing by the bedside of the sufferer with a portion of medicine

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taken from a vial upon which was written Calomel. He administered this chemical poison, and a change seemed to take place, but not for the better.

I was then shown still another case. It was that of a female, who seemed to be suffering much pain. A physician stood by the bedside of the patient, and was administering medicine, taken from a vial, upon which was written, Opium. At first this drug seemed to affect the mind. She talked strangely, but finally became quiet and slept.

My attention was then called to the first case, that of the father who had lost his wife and two children. The physician was in the sick room, standing by the bedside of the afflicted daughter. Again he left the room without giving medicine. The father, when in the presence of the physician alone seemed deeply moved, and he inquired impatiently, "Do you intend to do nothing? Will you leave my only daughter to die?" The physician said, -

"I have listened to the sad history of the death of your much loved wife, and your two children, and have learned from your own lips that all three have died while in the care of physicians, while taking medicines prescribed and administered by their hands.

Medicine has not saved your beloved ones, and as a physician I solemnly believe that none of them need, or ought to have died. They should have recovered if they had not been so drugged that nature was enfeebled by abuse, and finally crushed." He stated decidedly to the agitated father "I cannot give medicine to your daughter. I shall only seek to assist nature in her efforts, by removing every obstruction, and then leave nature to recover the exhausted energies of the system." He placed in the father's hand a few directions which he enjoined upon him to follow closely.

"Keep the patient free from excitement, and every influence calculated to depress. Her attendants should be cheerful and hopeful. She should have a simple diet, and should be allowed plenty of pure soft water to drink. Bathe frequently in pure soft water followed by gentle rubbing. Let the light, and air, be freely

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admitted into her room. She must have quiet, and undisturbed rest."

The father slowly read the prescription, and wondered at the few simple directions it contained, and seemed doubtful of any good resulting from such simple means. Said the physician,

"You have had sufficient confidence in my skill to place the life of your daughter in my hands. Withdraw not your confidence. I will visit your daughter daily, and direct you in the management of her case. Follow my directions with confidence, and I trust in a few weeks to present her to you in a much better condition of health, if not fully restored."

The father looked sad and doubtful, but submitted to the decision of the physician. He feared that his daughter must die if she had no medicine.

The second case was again presented before me. The patient had appeared better under the influence of nux vomica. She was sitting up, folding a shawl closely around her, and complaining of chilliness. The air in the room was impure. It was heated and had lost its vitality. Almost every crevice where the pure air could enter was guarded to protect the patient from a sense of painful chilliness, which was especially felt in the back of the neck and

down the spinal column. If the door was left ajar, she seemed nervous and distressed, and entreated that it should be closed, for she was cold. She could not bear the least draught of air from the door or windows. A gentleman of intelligence stood looking pityingly upon her, and said to those present, -

"This is the second result of nux vomica. It is especially felt upon the nerves, and it affects the whole nervous system. There will be, for a time, increased forced action upon the nerves. But as the strength of this drug is spent, there will be chilliness, and prostration. Just to that degree that it excites and enlivens, will be the deadening, benumbing results following."

The third case was again presented before me. It was that of the young man to whom was administered calomel. He was a great sufferer. His lips were

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dark and swollen. His gums were inflamed. His tongue was thick and swollen, and the saliva was running from his mouth in large quantities. The intelligent gentleman before mentioned looked sadly upon the sufferer, and said, -

"This is the influence of mercurial preparations. This young man had remaining, sufficient nervous energy, to commence a warfare upon the intruder, this drug-poison to attempt to expel it from the system. Many have not sufficient life-forces left to arouse to action, and nature is overpowered and ceases her efforts, and the victim dies."

The fourth case, the person to whom was given opium, was again presented before me. She had awakened from her sleep much prostrated. Her mind was distracted. She was impatient and irritable, finding fault with her best friends, and imagining that they did not try to relieve her sufferings. She became frantic, and raved like a maniac. The gentleman before mentioned looked sadly upon the sufferer, and said to those present, -

"This is the second result from taking opium." Her physician was called. He gave her an increased dose of opium which quieted her ravings, yet made her very talkative and cheerful. She was at peace with all around her, and expressed much affection for

acquaintances, as well as her relatives. She soon grew drowsy and fell into a stupefied condition. The gentleman mentioned above, solemnly said, -

"Her conditions of health are no better now than when she was in her frantic ravings. She is decidedly worse. This drug-poison, opium, gives temporary relief of pain, but does not remove the cause of pain. It only stupefies the brain, rendering it incapable of receiving impressions from the nerves. While the brain is thus insensible, the hearing, the taste, and sight are affected. When the influence of opium wears off, and the brain arouses from its state of paralysis, the nerves, which had been cut off from communication with the brain, shriek out louder than ever the pains in the system, because of the additional outrage the system has sustained in receiving this poison. Every

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additional drug given to the patient, whether it be opium, or some other poison, will complicate the case, and make the patient's recovery more hopeless. The drugs given to stupefy, whatever they may be, derange the nervous system. An evil, simple in the beginning, which nature aroused herself to overcome, and which she would have done had she been left to herself, has been made ten-fold worse by the drug-poisons being introduced into the system, which is a destructive disease of itself, forcing into extraordinary action the remaining life-forces to war against and overcome the drug-intruder."

I was brought again into the sick room of the first case, that of the father and his daughter. The daughter was sitting by the side of her father, cheerful and happy, with the glow of health upon her countenance. The father was looking upon her with happy satisfaction, his countenance speaking the gratitude of his heart, that his only child still was spared to him. Her physician entered, and after conversing with the father and child for a short time, arose to leave. He addressed the father, thus, -

"I present to you your daughter restored to health. I gave her no medicine that I might leave her with an unbroken constitution. Medicine never could have accomplished this. Medicine deranges

nature's fine machinery, and breaks down the constitution, and kills, but never cures. Nature alone possesses the restorative powers. She alone can build up her exhausted energies, and repair the injuries she has received by inattention to her fixed laws."

He then asked the father if he was satisfied with his manner of treatment. The happy father expressed his heart-felt gratitude, and perfect satisfaction, saying, -

"I have learned a lesson I shall never forget. It was painful, yet it is of priceless value. I am now convinced that my wife and children need not have died. Their lives were sacrificed while in the hands of physicians by their poisonous drugs."

I was then shown the second case, the patient to whom nux vomica had been administered. She was

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being supported by two attendants, from her chair to her bed. She had nearly lost the use of her limbs. The spinal nerves were partially paralyzed, and the limbs had lost their power to bear the weight of the person. She coughed distressingly, and breathed with difficulty. She was laid upon the bed, and soon lost her hearing, and seeing, and thus she lingered awhile, and died. The gentleman before mentioned looked sorrowfully upon the lifeless body, and said to those present, -

"Witness the mildest and protracted influence of nux vomica upon the human system. At its introduction, the nervous energy was excited to extraordinary action to meet this drug-poison. This extra excitement was followed by prostration, and the final result has been paralysis of the nerves. This drug does not have the same effect upon all. Some who have powerful constitutions can recover from abuses to which they may subject the system. While others, whose hold of life is not as strong, who possess enfeebled constitutions, have never recovered from receiving into the system even one dose, and many die from no other cause than the effects of one portion of this poison. Its effects are always tending to death. The condition the system is in, at the time these poisons are received into it, determine the life of the patient. Nux Vomica can cripple, paralyze, destroy health forever, but it never cures."

The third case was again presented before me, that of the young man to whom had been administered calomel. He was a pitiful sufferer. His limbs were crippled, and he was greatly deformed. He stated that his sufferings were beyond description, and life was to him a great burden. The gentleman whom I have repeatedly mentioned, looked upon the sufferer with sadness and pity, and said, -

"This is the effect of calomel. It torments the system as long as there is a particle left in it. It ever lives, not losing its properties by its long stay in the living system. It inflames the joints, and often sends rottenness into the bones. It frequently manifests itself in

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tumors, ulcers, and cancers, years after it has been introduced into the system."

The fourth case was again presented before me, - the patient to whom opium had been administered. Her countenance was sallow, and her eyes were restless and glassy. Her hands shook as if palsied, and she seemed to be greatly excited, imagining that all present were leagued against her. Her mind was a complete wreck, and she raved in a pitiful manner. The physician was summoned, and seemed to be unmoved at these terrible exhibitions. He gave the patient a more powerful portion of opium, which he said would set her all right. Her ravings did not cease until she became thoroughly intoxicated. She then passed into a death-like stupor. The gentleman mentioned, looked upon the patient and said sadly, -

"Her days are numbered. The efforts nature has made have been so many times overpowered by this poison, that the vital forces are exhausted by being repeatedly induced to unnatural action to rid the system of this poisonous drug. Nature's efforts are about to cease, and then the patient's suffering life will end."

More deaths have been caused by drug-taking than from all other causes combined. If there was in the land one physician in the place of thousands, a vast amount of premature mortality would be prevented. Multitudes of physicians, and multitudes of drugs, have cursed the inhabitants of the earth, and have carried thousands and tens of thousands to untimely graves.

Indulging in eating too frequently, and in too large quantities, overtaxes the digestive organs, and produces a feverish state of the system. The blood becomes impure, and then diseases of various kinds occur. A physician is sent for, who prescribes some drug which gives present relief, but which does not cure the disease. It may change the form of disease, but the real evil is increased tenfold. Nature was doing her best to rid the system of an accumulation of impurities, and, could she have been left to herself, aided by the common blessings of Heaven, such as

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pure air and pure water, a speedy and safe cure would have been effected.

The sufferers, in such cases, can do for themselves that which others cannot do as well for them. They should commence to relieve nature of the load they have forced upon her. They should remove the cause. Fast a short time, and give the stomach chance for rest. Reduce the feverish state of the system by a careful and understanding application of water. These efforts will help nature in her struggles to free the system of impurities. But generally the persons who suffer pain become impatient. They are not willing to use self-denial, and suffer a little from hunger. Neither are they willing to wait the slow process of nature to build up the overtaxed energies of the system. But they are determined to obtain relief at once, and take powerful drugs, prescribed by physicians. Nature was doing her work well, and would have triumphed, but while accomplishing her task, a foreign substance of a poisonous nature was introduced. What a mistake! Abused nature has now two evils to war against instead of one. She leaves the work in which she was engaged, and resolutely takes hold to expel the intruder newly introduced into the system. Nature feels this double draft upon her resources, and she becomes enfeebled.

Drugs never cure disease. They only change the form and location. Nature alone is the effectual restorer, and how much better could she perform her task if left to herself. But this privilege is seldom allowed her. If crippled nature bears up under the load, and finally accomplishes in a great measure her double task, and

the patient lives, the credit is given to the physician. But if nature fails in her effort to expel the poison from the system, and the patient dies, it is called a wonderful dispensation of Providence. If the patient had taken a course to relieve overburdened nature in season, and understandingly used pure soft water, this dispensation of drug-mortality might have been wholly averted. The use of water can accomplish but little, if the patient does not feel the necessity of also strictly attending to his diet.

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Many are living in violation of health, and are ignorant of the relation their habits of eating, drinking, and working, sustain to their health. They will not arouse to their true condition, until nature protests against the abuses she is suffering, by aches and pains in the system. If, even then, the sufferers would only commence the work right, and would resort to the simple means they have neglected - the use of water and proper diet, nature would have just the help she requires, and which she ought to have had long before. If this course is pursued, the patient will generally recover without being debilitated.

When drugs are introduced into the system, for a time they may seem to have a beneficial effect. A change may take place, but the disease is not cured. It will manifest itself in some other form. In nature's efforts to expel the drug from the system, intense suffering is sometimes caused the patient. And the disease, which the drug was given to cure, may disappear, but only to re-appear in a new form, such as skin diseases, ulcers, painful diseased joints, and sometimes in a more dangerous and deadly form. The liver, heart, and brain, are frequently affected by drugs, and often all these organs are burdened with disease, and the unfortunate subjects, if they live, are invalids for life, wearily dragging out a miserable existence. Oh, how much that poisonous drug cost! If it did not cost the life, it cost quite too much. Nature has been crippled in all her efforts. The whole machinery is out of order, and at a future period in life, when these fine works which have been injured, are to be relied upon to act a more important part in union with all the fine works of nature's machinery, they cannot readily and strongly

perform their labor, and the whole system feels the lack. These organs, which should be in a healthy condition, are enfeebled, the blood becomes impure. Nature keeps struggling, and the patient suffers with different ailments, until there is a sudden breaking down in her efforts, and death follows. There are more who die from the use of drugs, than all who would have died of disease had nature been left to do her own work.

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Very many lives have been sacrificed by physicians' administering drugs for unknown diseases. They have no real knowledge of the exact disease which afflicts the patient. But physicians are expected to know in a moment what to do, and unless they act at once as though they understood the disease perfectly, they are considered by impatient friends, and by the sick, as incompetent physicians. Therefore, to gratify erroneous opinions of the sick and their friends, medicine must be administered, experiments and tests tried, to cure the patient of the disease of which they have no real knowledge. Nature is loaded with poisonous drugs which she cannot expel from the system. The physicians themselves are often convinced that they have used powerful medicines for a disease which did not exist, and death was the consequence.

Physicians are censurable, but they are not the only ones at fault. The sick themselves, if they would be patient, diet and suffer a little, and give nature time to rally, would recover much sooner without the use of any medicine. Nature alone possesses curative powers. Medicines have no power to cure, but will most generally hinder nature in her efforts. She, after all, must do the work of restoring. The sick are in a hurry to get well, and the friends of the sick are impatient. They will have medicine, and if they do not feel that powerful influence upon their systems, their erroneous views lead them to think they should feel, they impatiently change for another physician. The change often increases the evil. They go through a course of medicine equally as dangerous as the first, and more fatal, because the two treatments do not agree, and the system is poisoned beyond remedy.

But many have never experienced the beneficial effects of water, and are afraid to use one of Heaven's greatest blessings. Water has been refused persons suffering with burning fevers, through fear that it would injure them. If, in their fevered state, water had been given them to drink freely, and applications had also been made externally, long days and nights of suffering would have been saved, and many precious lives spared. But thousands have died with

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raging fevers consuming them, until the fuel which fed the fever was burnt up, the vitals consumed, and have died in the greatest agony, without being permitted to have water to allay their burning thirst. Water, which is allowed a senseless building to put out the raging elements, is not allowed human beings to put out the fire which is consuming the vitals.

Multitudes remain in inexcusable ignorance in regard to the laws of their being. They are wondering why our race is so feeble, and why so many die prematurely. Is there not a cause? Physicians who profess to understand the human organism, prescribe for their patients, and even for their own dear children, and their companions, slow poisons to break up disease, or to cure slight indisposition. Surely, they cannot realize the evil of these things or they could not do thus. The effects of the poison may not be immediately perceived, but it is doing its work surely in the system, undermining the constitution, and crippling nature in her efforts. They are seeking to correct an evil, but produce a far greater one, which is often incurable. Those who are thus dealt with, are constantly sick, and constantly dosing. And yet, if you listen to their conversation, you will often hear them praising the drugs they have been using, and recommending their use to others, because they have been benefited by their use. It would seem that to such as can reason from cause to effect, the sallow countenance, the continual complaints of ailments, and general prostration of those who claim to be benefited, would be sufficient proofs of the health-destroying influence of drugs. And yet many are so blinded they do not see that all the drugs they have taken have not cured them, but made

them worse. The drug invalid numbers one in the world, but is generally peevish, irritable, always sick, lingering out a miserable existence, and seems to live only to call into constant exercise the patience of others. Poisonous drugs have not killed them outright, for nature is loath to give up her hold on life. She is unwilling to cease her struggles. Yet these drug-takers are never well.

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The endless variety of medicines in the market, the numerous advertisements of new drugs and mixtures, all of which, as they say, do wonderful cures, kill hundreds where they benefit one. Those who are sick are not patient. They will take the various medicines, some of which are very powerful, although they know nothing of the nature of the mixtures. All the medicines they take only make their recovery more hopeless. Yet they keep dosing, and continue to grow worse until they die. Some will have medicine at all events. Then let them take these hurtful mixtures, and the various deadly poisons, upon their own responsibility. God's servants should not administer medicines which they know will leave behind injurious effects upon the system, even if they do relieve present suffering.

MEDICINES. - The brains of thousands of men, and ten thousands of children, have been debilitated, and their minds clouded with thick mist, and in many cases, totally darkened by those powerful, life-killing drugs, employed as healing agents. How many mothers, in order to make their little ones sleep, have blunted their moral sensibilities, and rendered their intellects obtuse, by dosing them with laudanum, "Godfrey's cordial," and other medicines. If men would observe the laws of life and health, they would never require medicine, and in most cases where they take it they would do better without it, if they began in season to practice abstinence, and not carelessly and ignorantly augment the disease. And if our physicians, instead of confining themselves to the cure of diseases, would lecture and inform the people how to preserve their health, though they might make less money, they would save suffering humanity a vast amount of misery and premature death. "An ounce of prevention is worth a pound of cure." But owing to

the bad organization of society, men have no time to attend to their health, in consequence of which, the violated laws of nature compel them to find time to be sick, and to die sooner than they otherwise would. - *Sel.*

HOW TO LIVE [NUMBER FOUR]

RESPIRATION: OR THE FUNCTION OF THE LUNGS

"IT is, doubtless, a matter of general knowledge, that, according to modern chemistry, the atmosphere is composed of several gases or kinds of air, and a considerable quantity of water in the state of vapor. Pure air, however, according to the statements of chemistry, consists of twenty parts of oxygen gas, and eighty parts of nitrogen, or azote. But by means of the chemical changes of composition and decomposition which are continually going on in nature, various gases are evolved, and become more or less diffused throughout the atmosphere; some of which are too subtle to be detected by the closest scrutiny of the chemist, and others are so volatile and light that they ascend to the upper regions of the atmosphere, where they probably undergo new changes and enter into new forms. Some, however, enter into combinations near the earth's surface, and are of sufficient specific gravity or weight to remain in the lower region of the atmosphere. Of these, about one per cent. of carbonic acid gas, formed by a chemical combination of certain proportions of oxygen and carbon, is always and universally present.

"The oxygen and azote of the atmosphere are not chemically combined as in nitric acid, but intimately mixed together; so that, when a portion of the oxygen of a given volume of air is consumed, the remaining oxygen diffuses itself equally throughout the whole volume, as fast as the consumption takes place. This law of nature, established by a wise and benevolent Creator, is of immense importance to all living bodies, both animal and vegetable.

"Now, in regard to the changes which take place in the lungs, there are certain phenomena or facts attending respiration, on which physiologists have built their theories of the function. In the first place, the venous blood goes from the heart to the lungs, with a dark purple color, and unfitted for the purposes of nutrition in the system, and returns from the lungs to the heart with a bright red color, and possessed of all the properties requisite for supplying the general wants of the vital economy. In the next place, the air goes into the lungs composed of about seventy-nine or eighty parts of azote, nineteen or twenty parts of oxygen, and one per cent. of carbonic acid gas; and returns from the lungs with about the same proportion of azote, five or six parts of oxygen, and thirteen or fourteen parts of carbonic acid gas. In some way or other, therefore, the oxygen of the inspired air suffers a great diminution of volume in the lungs, and a volume of carbonic-acid gas is produced, equal, or nearly equal, to the loss of oxygen."

"The function of the lungs may be considered as two-fold. As depurating or cleansing organs, they eliminate the impurities of the blood, in a manner corresponding with the functions of the external skin and the mucous membrane generally, and with all the excretory organs of the body; and as organs of nutrition, they digest the air, and convert a portion of it into the substance of the blood.

"As depurating organs, the lungs by a vital process continually excrete from the venous blood, and perhaps also from the chyle, in their capillary vessels, certain substances, the elimination of which is necessary to prepare those fluids for the nutrient purposes of the system. As soon as the excreted substance or substances are thrown into the air-cells, the matter composing them yields to the affinities of inorganic chemistry, and issues from the lungs in the form of vapor, of carbonic-acid gas, etc. The vapor thrown from the lungs in this manner, sometimes amounts to nearly a quart of water in twenty-four hours. A portion of this is supposed to come from the chyle. The quantity of carbonic-acid gas discharged from the lungs in

the twenty-four hours is also very considerable. This gas is unfit for animal respiration, and when inhaled into the lungs without a mixture of atmospheric air, it soon causes suffocation, esphyxia, and death. This effect, however, is owing to its negative rather than to its positive qualities, or to the absence of oxygen, by which alone animal respiration is supported; for carbonic acid gas can be introduced freely into the stomach without having any of the effects of a poison upon the system. It is by the consumption of the oxygen of the air, and the generation of this gas by the burning of charcoal in an open vessel in a tight room, that life is often destroyed; and for the same reason, a large number of people in a close or ill-ventilated room, by their continued respiration and perspiration, render the air very impure and unwholesome; and were it not for a wise and benevolent arrangement in the general economy of nature, in regard to this gas, all animals would soon be destroyed by it. Being specifically heavier than atmospheric air, it sinks below the nostrils and mouth of the animal during the little pause which follows expiration, and thus is prevented from being drawn into the lungs again in the succeeding act of inspiration. Descending toward the earth, it becomes diffused through the atmosphere, and during the day it is taken up by the vegetable organs of nutrition, and decomposed, the oxygen being set free, and the carbon retained and converted to vegetable substance. During the night, or prevalence of darkness, however, plants, like animals, are said to give off carbonic-acid gas. But it is supposed that their consumption of it during the day is sufficient to preserve the atmosphere in a state proper for animal respiration.

"When the blood in the capillary vessels of the lungs is purified in the manner I have described, it is prepared to receive a portion of the digested and assimilated air. This is also a purely vital process. The lungs are constantly receiving fresh supplies of aeriform aliment, which, like the food received into the stomach, consist of certain adapted proportions of nutritious and innutritious substances, and although

expiration always immediately follows inspiration, yet the lungs are never entirely exhausted, but a considerable volume of air always remains in them, much larger than that which is inhaled at an ordinary inspiration.⁴ 1 The air which we expire, therefore, is probably very little, if any of it, that which was received by the immediately preceding inspiration. But each successive volume of inspired air probably displaces an equal volume of the retained air which has been acted on by the digestive powers of the lungs; and thus something like an aerial circulation, or the gradual process of digestion in the alimentary cavity, takes place in these organs."

"The quantity of oxygen consumed by an individual is said to vary with the nature and degree of exercise, state of mind, degree of health, kind of food, temperature of the atmosphere, etc. Much more is consumed when the weather is cold than when it is warm, more during digestion than when the stomach is empty, and less is consumed when the food is vegetable than when it is animal, less when the body is at rest than when in action, and less when the mind is calm than when it is disturbed. The average quantity, however, is supposed to be about two pounds and eight ounces, Troy weight, per day."

"In suffering this two-fold function of the lungs, the chyle and dark purple venous blood become converted into bright red arterial blood, fitted to supply all the wants of the vital economy. And the more completely the function of the lungs is fulfilled, the more richly is the blood endowed with those delicate properties which gratefully exhilarate every part where the living current flows, healthfully invigorating all the organs, and giving increased elasticity to all the springs of action in the system, causing every function to be more perfectly performed, imparting buoyancy to the animal spirits, and delightfully exciting and facilitating the intellectual operations."

"We have seen that in the function of respiration, or breathing, a vital process is continually going on, by which a portion of the air received into the lungs is digested and incorporated with the blood, not as oxygen, but as a vitally assimilated principle of the living

blood, and that by this function of the lungs, the grand process of digestion is completed, and the arterial fluid is fitted for all the purposes of the system in the great function of nutrition. We have seen also that pure air is composed of twenty parts of oxygen and eighty parts of azote, by volume or measure, and that the lungs, as living organs, are constitutionally adapted to air consisting of precisely these proportions; and consequently every deviation from this point towards an excess either of azote or oxygen, is injurious to the lungs and to the physiological interests of the body. Hence, it is of the utmost importance that the lungs should be constantly supplied with pure air, not only for the preservation of their own health, but for the preservation of the integrity of their function, the health of their blood, and the general welfare of the system. But we have seen that the whole external skin performs a function which, in many respects, closely resembles that of the lungs, and that it not only appears to consume a portion of the oxygen of the air, but also, like the lungs, is continually eliminating the excreted impurities of the blood, among which the chemist detects a considerable quantity of carbonic-acid gas, which, when received into the lungs without a mixture of atmospheric air, is almost instantly destructive to life, causing an immediate suspension of all the powers of animal life; and if relief is not promptly afforded, organic life is very soon destroyed. Carbonic-acid gas is formed in considerable quantities by decaying vegetable matter. Living vegetables also give it off during the night, but consume it during the day. Much the greatest source of it, however, is animal respiration and perspiration. Hence, crowded assemblies in churches, theatres, hospitals, prisons, etc., rapidly consume the oxygen of the air, and produce carbonic-acid gas; and consequently if such places are not well ventilated, the air will soon

become impure, causing difficulty in breathing, vertigo or dizziness of the head, nausea, faintness, trembling, relaxation of the voluntary muscles, slow and feeble pulse, spasms, asphyxia, and death. In this manner the lives of many have been destroyed; but a vastly greater number has been cut off by plagues, and putrid and

typhus and other fevers, brought on, or excessively aggravated by impure air. And it is principally owing to the effect which a dense population has on the atmosphere, and to the want of proper ventilation, that cities are less healthy than the country.

"We see, therefore, that it is of very great importance that our habitations should be so situated and so constructed as to admit a perfect ventilation in every part, and that our bedrooms in particular should be large and airy, and that too many persons should not sleep in the same room. We perceive also that it is of great importance that every person should have frequent and free access to the pure open air, and it is equally important that at such times every one should be capable of drinking in the sweet breath of heaven without the least restraint; of inflating the lungs fully and deeply, and freely expanding the chest without any artificial restriction whatever.

"The effect of such a respiration of pure air is truly wonderful. When the careful mother has been shut up in her nursery, or confined to her house for a number of days in succession, diligently attending to maternal duties or domestic concerns, till she begins to feel a nervous oppression and a dull headache coming upon her, if she breaks away from her confinement, and walks or rides in the pure open air, even for a few minutes, she feels a new life and a new spirit entering into her blood, and diffusing itself throughout her whole system; her languor, and depression, and headache, are dispelled, her eye becomes bright and sparkling, her countenance animated, her form more erect and stately, and her step more elastic and graceful; and she returns to her domestic empire and household duties almost a new creature, and seems to carry with her into that empire and through all those duties a new and salubrious atmosphere; and if she is

a nursing mother, her babe will be almost equally benefited by the consequent improvement of its natural food. Nor are such advantages confined to the mother. Every female, and every studious and sedentary person, and every invalid that is able to

move or to be moved in the open air, should endeavor to be abroad in it as frequently as propriety and duty will admit.

"The air bath, as Dr. Franklin calls it, is exceedingly salutary to every one in health, and to almost every invalid. If the whole skin may be considered a breathing organ, then should it not only be kept clean, but for its own health and vigor, and the health and vigor of the whole system, it should be permitted to receive the full and free embraces of the pure air at least twice in the twenty-four hours. Every morning and evening the whole body should be exposed freely to the air, and the skin exercised with the flesh-brush, a coarse towel, or with the hand; and five or ten minutes spent in such exposure and exercise in the morning will prove very salutary to every one who has not gone too far in disease to bear it. Let it always be remembered that man was made for the open air; it is his natural dwelling place, and the habit of cooping up in ceiled houses is always in some measure detrimental to the physiological interests of the human constitution.

"If there be one class of human beings to whom pure air is more essential than any other, it is young children; they soon droop and become puny and diseased if they are confined to impure air; and on the other hand, few things serve so much to impart health and vigor to sickly and puny children as free access to the pure open air of heaven. Nurseries ought, therefore, to be thoroughly ventilated every day, and kept perfectly sweet and clean, and the air of them should not be consumed by too many lungs; and infants should be carried abroad as early and as freely as prudence will allow. And when children become old enough to run alone, they should be daily taken into the open air when the weather is pleasant.

"Aged people also require great purity of air; and

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strict attention should be paid to the thorough ventilation of their rooms; and so long as they are able to walk or ride abroad, they should, when the weather is not too inclement, daily visit the open air; and when they can no longer do this, their habitations should be more frequently ventilated.

"In regard to the benefit to be derived from a change of climate, there is probably much popular error of opinion. Invalids, trusting too exclusively to the salubriousness of the country or sea air, or of a mild climate, wholly or mostly neglect to attend to their diet and regimen in general, and consequently a large portion of those who travel in pursuit of health either die abroad, or return home little or no better than they went; whereas, if they would avail themselves of the advantages of a correct regimen throughout, as well as of pure air and a mild climate, they would far more generally recover health. As a general rule, therefore, the air and climate of any portion of the United States, under a strictly correct general regimen, are much better for invalids of every description, than any other climate in the world with an entire disregard to regimen." *Graham's Lectures.*

THE RESPIRATORY SYSTEM

RESPIRATION essentially consists in the interchanging of certain elementary principles contained in the blood, for those contained in atmospheric air. The lungs, and the skin, form the medium through which this interchange is made.

THE LUNGS consist of an infinite number of small cells. Connected with these are small tubes, branching out from the bronchial tubes, and these tubes branching from the trachea, or windpipe. At every inspiration of air, these cells become filled. At every expiration of air, these cells are nearly emptied. When air is received into the lungs, the blood sent from the right ventricle of the heart meets it. Here the carbon of the blood is thrown off in the form of carbonic-acid gas; while the oxygen of the air taken

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into the lungs, is taken into the circulation of the blood, and carried to every part of the body. Together with receiving oxygen, electricity is also received and distributed throughout the body.

The amount of nourishment derived from food, bears a close relation to the amount of oxygen received into the circulation. The oxygen is also essential in giving heat to the body. The carbon of

the blood becomes united with the oxygen, the oxygen consuming the carbon and forming carbonic-acid gas; therefore the amount of natural heat depends on the amount of oxygen received into the lungs, and the amount of carbon of our food; by which, uniting with the oxygen of the air, animal heat is at once generated. The amount of air breathed, also, has to do with physical strength. The eagle is an animal of great physical power; it inhales a very large amount of air. The oxygen, essential to nutrition, and the electricity, essential to nervous force, are taken into its lungs in very large proportions.

The blood from the veins, conveyed to the lungs, is of dark color, on account of the carbon it contains. Here an excess of carbon is given off in the form of carbonic-acid gas, and a corresponding amount of oxygen from the air is taken in. This process of exchanging carbon for oxygen, changes the color of the blood; it gives to it a bright crimson complexion, which it retains till its oxygen is dispersed to the remotest parts of the body; then the blood is taken again, comparatively deoxydized, into the veins to be returned to the heart and lungs. The blood and air in the lungs meet and exchange their gases through the medium of a thin, delicate membrane, which prevents the blood from entering into the air-cells. When the membrane is ruptured, there is bleeding at the lungs.

It can easily be conceived, from these facts, how important to the welfare of the whole system is the breathing of good air. If the atmosphere which we breathe is impregnated with hurtful gases, their influence is carried through the blood to every part of the body. If we are shut up in a close room, especially

for the night, where the occasional opening of the door cannot be depended on for relief, we use up all the vital properties of the air in the room, consume all the oxygen, and give off carbonic-acid gas; so that it becomes very offensive to one just entering the room, and very unhealthy to breathe over and over by the individual occupying it. We cannot be too careful to have a free circulation of air in our sleeping apartment. Every school-room should have a

ventilation at the top of the room, where the bad air which rises can pass off, and give room for a fresh supply.

If we are compelled to breathe air that is hurtful, it weakens the lungs, exposes them to disease engendered in their own cavities, or to disease carried to them from abroad. Many cases of bleeding at the lungs and of consumption have been induced by protracted causes of this kind. Whenever we find a sleeping-room whose effluvia is unpleasant, we may know that its occupant is subjecting not only his lungs, but his whole system, to influences that are destructive to health, and ultimately to life itself. No air is fit to be breathed that has parted with its due proportion of oxygen, or is unduly charged with carbonic acid gas. Unless the air to be breathed retains its natural equilibrium of elements, it is unfit for the healthy purposes of respiration.

Consumption of the lungs has several different causes. One consists of those things which directly prostrate the vital forces: such as bad air, already described, and air vitiated by poisonous vapors, which directly enervate the texture of the lungs. Tobacco-smoke is one of those poisonous vapors, which not only weaken and irritate the air-cells of the lungs, but, meeting the blood as it comes up to receive its oxygen, sends its narcotic essence throughout the whole course of the blood-vessels. Anything, indeed, whether received into the system through the lungs, or in any other way, which weakens the powers of life, predisposes to consumption, as well as other forms of disease. A large proportion of consumptions arise from severe and protracted cases of dyspepsia. Sometimes

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foreign substances, dust and other hurtful matters, obtain access to the lungs, and irritate and inflame them. Vast damage has also, in past times, been done by pressing the lungs out of their place, and oppressing their expansion by lacing; on which subject it is not now necessary to enlarge.

THE SKIN is also an organ of respiration. As the arterial blood flows out through the arteries into the capillary vessels, which unite the arteries and veins it then gives off a portion of its elements to

the atmosphere. It gives off a portion of carbon in carbonic-acid gas, and receives a portion of oxygen from the surrounding air. It also transmits electrical influences which communicate between the body and the atmosphere. The healthful condition and action of the skin is greatly essential to health. Bad air will have its influence. Miasmatic influences take advantage of the fact that the skin holds, in a great degree, the destiny of the body. If the action of the skin be retarded by having its pores and capillaries obstructed, there will at once be disturbance throughout the whole system.

There is great sympathy between the skin and the internal organs. When the functions of the skin are deranged, there is disturbance in the action of the kidneys, which secrete from arterial blood, elements which are not further needed. It also influences the liver, whose office is, the secreting and carrying off of matter collected from the blood circulating in the veins. The lungs, too, hold a close sympathy with the action of the skin. The whole system feels, when the skin suffers. Hence the importance to be attached to keeping the pores unclogged, by suitable washing, and unembarrassed by wrong sleeping arrangements. There should be needful bathing, but not excessive; the pores kept open, but not stimulated beyond their due action; and entire abstinence from the false and hurtful luxury of feather beds. - *Philosophy of Health*.

If pure air be not breathed and cleanliness attended to, we shall have disastrous results. - *Health Journal*.

BREATHING IMPURE AIR

IT is not, however, in private rooms and offices only, that the occupants are exposed to the breathing of impure air, but also in churches and factories, where persons congregate in large numbers.

There has always seemed to me to be a very irreligious *air* in our houses of public worship. These are sacred places, - temples, as they used to be termed, - where people expect, or which they visit as if they did expect, to meet the Divine Presence, and be blessed by it. Just what fatuity has rested upon Christians up to this time to induce them to believe that between nature and revelation, there

exists a feud, showing itself in actual hostility, and that, in order to be pious, they must take sides with revelation against nature, I know not; but that they act as if they were under special obligations to be unnatural in order to be religious, is as obvious to a close observer as any thing can be. This feeling works itself out in every direction; and in none can it be more plainly seen than in the way in which religious persons, on a Sabbath day, relate themselves to health and its laws. Why meeting-houses should be built so that congregations shall be compelled to breathe impure air all the time, and, as is now-a-days becoming fashionable, be shut out from the sunlight, and deprived of its healthy and exhilarating effects, seems strange to a candid and sincere mind; yet not one church in a hundred can be found so constructed as to enable its occupants to have any thing like pure air to breathe, or fair opportunity to enjoy the sunlight. They huddle themselves together in close pens like sheep, and do but little else than breathe each other's breaths, and listen with a very superficial devotion to the services of the hour; going away as little impressed thereby as is possible, and not one in five hundred of them partaking of the anointing of the minister, which, if he is a good man, will have been given him by God for their especial benefit. Really, I do not suppose that the ministers of the gospel, who undertake to represent the divine will, to expound the divine word,

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and exhibit the divine life, to the people among whom they are placed, are successful in communicating their own spiritual gifts to one in a hundred of those, who, from Sabbath to Sabbath, gather in the churches of our land. This is very deplorable; for just to the degree that a public representative of the divine will and the divine life finds himself unable to communicate his gifts to those who need them, in the relation an unhappy one, and fraught with injurious results both to himself and the people of his charge. No man can ever have a great spiritual endowment conferred upon him by the Divine Wisdom for a given end, who is not himself the worse for that endowment, if he finds himself unable to accomplish the end. Power of any kind bestowed upon a human

creature for any purpose, has, if anything prevents it from being used for such purpose, an ill tendency; and he who carries it about is necessarily the worse for having it imposed upon him. Every minister who stands in the pulpit, and cannot reach the hearts of his people, is made unhappy in spirit thereby.

One of the laws which God has established for the transmission of spiritual life from one man to another, is that the conditions of both such persons shall be in conformity with physical law. If a minister be a sickly man, suffering under bodily infirmity, and seeks to communicate from the pulpit, not simply the divine will, but the divine affection, he is, by the very nature of things, a less efficient agent for this purpose than he would be if his conditions were those of perfect health. Neither his brain nor his heart can become a medium for the transmission of the divine bestowments, as they would if his physical nature were rightly related to health. If his congregation is made up chiefly of invalids, and he is a robust man, they can never receive such impressions from him as they could if they were in health. If both the minister and the people are free from any bodily sickness, and yet gather themselves together under such circumstances, and in such relations to their physical comfort, or to the operation of any of the laws of physical health, as to render these more or less inefficient,

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they, by these very conditions, rear barriers to their own receptivity, that may be found impregnable and impassable.

This is very plainly seen in other directions. If a man becomes intoxicated by having introduced alcoholic poison into his blood, so as to effect his brain, the presence of such poison is a complete bar to his reception of any thing like spiritual impressions from on high, and is so regarded. God's spirit not only *does not* work in the heart of a drunken man, but, while he is drunk, it cannot. Suppose, then, that a congregation come together with a view of being spiritually benefited, and the relation of the air they breathe to the blood that circulates in their veins is such as seriously to impair its electric, magnetic, and nutritive conditions; how, in such a condition of this great vital fluid, can they hope, for a moment, to

have anything like healthy conditions of brain? And, if they cannot have these, how can they have their emotional natures rendered particularly susceptible to divine impressions? A man breathing carbonic-acid gas in a church, instead of atmospheric air, can in no wise be so related to the perception of truth, or the reception of the divine love, as he would or could be if his physical conditions were changed, and he were permitted to breathe atmospheric air instead of carbonic-acid gas. There are, then two great ill results flowing from the breathing of impure air in houses of worship; one, that the health of those who breathe it is impaired thereby, and the foundation laid in many instances for positive disease; and the other, that the spiritual conceptions of the persons breathing such air are greatly blunted, if not, for the time being, destroyed.

It is very seldom that a hundred persons can be gathered together without having a considerable number of them suffering under more or less advanced stages of pulmonary disease. Recollect that scrofula is a household disease, to be found in almost every family. Recollect, also, that the ultimate manifestation of scrofula is pulmonary consumption, and that the intermediate stages of its progress show more or

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less involvement of the pulmonary organs. From this point, one can judge of the correctness of my statement, that very few congregations of a hundred persons can be found, without having a considerable number of them laboring under pulmonary consumption, in its early or advanced stages, by the practical exhibitions made upon such occasions. How seldom is it that a congregation assembled together on the Sabbath is not disturbed by the coughing and expectoration of one, two, three, or half a dozen of its members, in various parts of the house! Shut up all the windows, close all the doors, rarefy the air so that there shall be but slight opportunity for getting oxygen into the lungs, and then set this congregation of one hundred or five hundred, as the case may be, to breathing. In ten minutes, the air becomes foul; the oxygen is more or less consumed; carbonic vapor from the lungs mingles with the body of gaseous fluid to be taken in at every respiration;

and so do the consumptive particles emitted from the lungs of those having the disease. God only knows how many persons have begun to be consumptive from just such exposure as this, when attendant on his worship. There are various ways of committing murder; and there are also various ways of committing suicide. The wickedness of such a mode as this is heightened by the outward sacredness given to the action by the occasion. It is as much worse for a man to violate the laws of life and health when he is engaged in some special act of piety, than it would be were he not so engaged, as it is for him to be a hypocrite instead of being simply disingenuous.

I confess that I have a liking for public worship: I feel that to myself it might always be a means of great benefit. But I hold in such disfavor the arrangements made for its enjoyment, because of the disregard of the laws of life and health manifested under the present order of things, that only when important occasions urge upon me to do it, do I venture into a house of public worship.

School-houses used formerly to be built without any reference whatever to the necessity of having pure

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air; but a better state of things is gradually coming to exist, and improved ventilation is now secured.

Girls suffer much more than boys, both in factories and in schools, under the influence of causes predisposing to consumptive disease, by reason of the very foolish and wicked fashion which obtains throughout Christendom in respect to their style of dress.

It is sometimes the case that children, if not particularly instructed to the contrary, find their way to that most unhealthy and undesirable attachment to a household, the privy, for purposes or amusement and play. It is well that parents should be thoughtful about the matter; for, from want of knowledge how to deodorize the mass of defecation that accumulates in the privy vault, the air of such a place becomes exceedingly unhealthy, and furnishes as effective an influence in deranging the healthy conditions of the blood, and determining any latent poison that may be in the system into active exercise, as any mass of decomposable matter could

possibly do. Young children, therefore, should not be permitted to make such a place a point for assemblage for any purpose other than that which nature institutes; and then they should be taught to make their stay there as short as circumstances will permit. Privies might be built so that there would be little or no effluvia into the body of the house; but carelessness prevails in this matter, and will continue to prevail, until a very much better philosophy, in regard to the means of preserving health and preventing disease, obtains on the part of those who have it in charge. - *Jackson on Consumption*.

VENTILATION OF CHURCHES

THE particles of matter which compose the human body are constantly changing. None of us possess to-day exactly the same bodies that were ours yesterday. A portion of their substance has been cast off and replaced by new. In the muscles, the bones, all the tissues which enter into our structure, particles which are worn out and can no longer subserve the

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purposes of life, are being taken up and passed in fluid form into the blood, by the circulation of which they are carried to those organs whose office it is to separate them from it and excrete, or throw them out of the system. These organs are the lungs, liver, kidneys, the lining membrane of the intestines and the external skin. This waste is made good by new particles, which are also carried by the blood to every minute portion of the body, wherever it circulates, and appropriated as they are needed. It is thus that food nutrifies and builds up the body after passing through the various processes of digestion, and being converted into blood. But the lungs act a not less important part in the animal economy as organs of nutrition, than the stomach. Atmospheric air is absolutely necessary to the continuance of life because a portion of its substance is being constantly taken into the system through the lungs, digested as it were, and assimilated. Without it a man can live but a very short time. When we consume air in this way we do not create a vacuum. We expire air from the lungs as often as we

inspire it; but that which is expired is quite different in its nature from that which is inspired. The oxygen, that property of air, which contributes to the support of life, is removed in large degree, and the place supplied by a gas which has no nutrient qualities whatever. The atmosphere in its natural state is exactly adapted to the wants of man. That is, the different gases which make it up are mixed in just such proportion as is adapted when breathed by him to keep him alive and in health. For he cannot live and breathe pure oxygen. - It has to be diluted, and is mixed with a gas which seems neutral in its character, or to serve no other purpose than as a diluent. But the moment that the character of the air becomes changed it is unhealthful, and its unwholesomeness is in proportion to the change. If a person should go into a room filled with atmospheric air, and close it tightly, as soon as he had performed the act of respiration once, he would have changed the character of the air, but by no means to that degree that it would become changed in half an hour. He would gradually exhaust the oxygen till the

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quantity he could get by breathing would be too small to support life, and then he would die.

Here is an explanation of much of the drowsiness, stupidity and headache felt in church gatherings, and the lassitude and exhausted feeling felt afterward. Men are blamed for sleeping in church when the atmosphere of the place absolutely forbids their keeping awake, for some constitutions and temperaments more than others, yield with readiness to this influence. Men and women blame *themselves* for stupidity and indifference in meeting, when the quality of their blood is such from lack of air that it is impossible for them to be attentive and interested. Ministers are criticised for lack of originality of thought, force and earnestness in the delivery of their sermons, when the condition of their brains is such, for want of oxygenation of the blood which passed through them, that clearness of thought *cannot* be had. No matter how talented a man may be *abstractly*, his mind and body are so related that while he goes directly counter to the laws which God has established for the

sustainment of his body, it cannot be a good medium for his mind to operate through.

It is almost impossible to find a well ventilated church. *Intelligent* congregations sit Sunday after Sunday in an atmosphere which it is a *shame* to breathe. And if they did not realize what they are doing, it would be absolutely wicked. Besides, it is filthy. From one to five hundred persons sit from two to three hours every Sabbath and breathe over and over again the impurities which are exhaled from each other's lungs and skin, without an opening so large as a knitting needle to allow their escape from the room. There is great need of reform in this matter. It is very easy, if there is no other means of ventilation, to drop each window a few inches from the top, thus securing a free circulation of pure air all through the house. - I wish every minister in the country would preach one sermon on the sinfulness of abusing God's gift of air, and then insist henceforward on having plenty of it to breathe during his public ministrations. By doing so he would remove one cause of ill health,

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and take a step toward teaching his people to honor God in their physical habits. - *Letter Box, Jan., 1859.*

VENTILATION

It is much to be regretted, that in connection with the various improvements, which the style of building and the internal arrangement of our houses, have undergone within the last ten years, more attention has not been paid to the means of insuring a free ventilation throughout every apartment. In the large and sumptuous dwellings of the rich, the wide halls, lofty ceilings, and free communication existing between the principal apartments, prevent, it is true, most of the causes of complaint in this respect; but in the more numerous and humble dwellings, occupied by the laborer, as well as by the industrious mechanic and artisan, and in the buildings appropriated for workshops, stores, and warehouses, the means of ventilation, have, in too many cases, been sadly

neglected. As a necessary consequence, cleanliness is prevented, and the health and comfort of the inhabitants and inmates, prejudiced to a greater or less extent. A free circulation of air, in and about a building, is of too much importance to allow of its being sacrificed, from motives of economy, avarice, or mere convenience. Air, when it is confined for any time within a room, or rendered stagnant by any other means, soon becomes, not only unfitted for respiration, but absolutely destructive to life. Under such circumstances, its composition is quickly changed from various causes; while at the same time, it is loaded with dust and deleterious exhalations given out by the human body, even in health, or produced from the decomposition of animal or vegetable substances. Every one who has entered a room that has been completely shut up even for a few days, whether inhabited or not, must have been struck with the peculiar smell of the air in it, and experienced the disagreeable sensation caused by its admission into the lungs. The walls and furniture are soon covered with a damp mold, every

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thing within the apartment of a perishable nature, falls quickly into decay, and affords materials for the still further vitiation of the atmosphere. Many complain of the unpleasant smell and dampness of their houses, without suspecting for a moment that this is merely the result of defective ventilation.

It is all-important, therefore, that the air from without should be allowed to enter freely into every part of a building, if not in a continued current, at least at frequent intervals, so as fully to expel that previously existing in the several departments. The causes of deficient ventilation are either the location of the building in narrow crowded courts or alleys - the want of a free communication between the different rooms, in each story - the improper position of the doors and windows, or the want of an open space of sufficient extent in the rear of the house, in consequence of which, the free circulation of the air is entirely prevented. The healthiness of a dwelling is increased very

considerably, by allowing to it a capacious yard, which may either be well paved, laid down in grass, or cultivated as a flower garden.

In the largest and best constructed houses, ventilation should be promoted by leaving the doors and windows open several hours during the day, in fair weather and when the air is driest. Even in winter a proper opportunity should be taken, during the day, to admit freely the external air in every apartment of the house, especially the bedrooms; the ventilation of workshops and manufactories can be maintained by proper furnaces, which, while they supply a current of heated air for warming the apartment, cause its atmosphere to be constantly renewed. - *Journal of Health*.

Clean houses, clean raiment, clean and wholesome food and drink, are essentially necessary to comfort, to constitute us Christians, and to protect us against pollution. Unclean clothing, unwholesome food and drink, prepare the way to a life of impurity. - *Health Journal*.

CAUSES OF CONSUMPTION

SIR JAMES CLARK says, "It may be fairly questioned, whether the proportion of cures of confirmed consumption is greater at the present day than in the time of Hippocrates; and although the public may continue to be the dupes of boasting charlatans, I am persuaded that no essential progress has been made or *can be made* in the cure of consumption, until the disease has been treated upon different principles from what it hitherto has been. If the labor and ingenuity which have been misapplied in fruitless efforts to cure an irremediable condition of the lungs, had been rightly directed to the investigation of the causes and nature of tuberculous disease, the subject of our inquiry would have been regarded in a very different light, from that in which it is at the present period."

While I shall not attempt a discussion of all the causes of phthisis pulmonalis, I shall, in a brief and familiar way, consider the more obvious sources of this terrible malady, and particularly those which all classes - even the poorest - may remove or avoid.

IMPURE AIR A CAUSE OF CONSUMPTION. - In discussing the causes of disease, whose principal expression is in the lungs, nothing can be more legitimate than a consideration of the air we breathe. In full respiration, it penetrates every one of the many millions of air-cells.

DUST. - Every species of dust must prove injurious. Workers in those factories where tools are ground and polished, soon die of pulmonary disease. The dust of cotton and woollen factories, that of the street and that which is constantly rising from our carpets, are all mischievous. M. Benoiston found among cotton spinners the mortality from consumption, 18 per thousand per annum; coal men, 41; those breathing an atmosphere charged with mineral dust, 30; dust from animal matter, as hair, wool, bristles, feathers, 54 per thousand; of these last the greatest mortality was among workers in feathers; least among workers in wool. The average liability to consumption among

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persons breathing the kinds of dust named, was 24 per thousand, or 2-40 per cent. In a community where many flints were made, there was great mortality from consumption, the average length of life being only 19 years.

GASES. - Among the poisonous gases which infect our atmosphere, carbonic acid deserves special consideration. The principal result of all respiration and combustion, it exists in minute quantities everywhere, but when it accumulates to the extent of two or three per cent., it seriously compromises health. I have seen the last half of an eloquent sermon entirely lost on the congregation. Carbonic acid had so accumulated, that it operated like a moderate dose of opium. No peroration would arouse them. Nothing but open windows could start life's currents. In lectures before Lyceums, I often have a quarrel with the managers about ventilation. There is, even among the more intelligent, a strange indifference to the subject.

As this work is not designed to guide architects in the construction of buildings, I will not indicate, as I have done in another work, the best known means for ventilation.

The following fact graphically illustrates the influence of carbonic acid on human life.

THE SUICIDE. - A young Frenchman, M. Deal, finding his hopes of cutting a figure in the world rather dubious, resolved to commit suicide, but, that he might not leave the world without producing a sensation, and flourishing in the newspapers, he resolved to kill himself with carbonic acid. So, shutting himself in a close room, he succeeded in his purpose, leaving to the world the following account, which was found near his dead body the next morning:

"I have thought it useful in the interest of science to make known the effects of charcoal upon man. I place a lamp, a candle, and a watch on my table, and commence the ceremony.

"It is a quarter past ten; I have just lighted the stove; the charcoal burns feebly.

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"Twenty minutes past ten; the pulse is calm, and beats at its usual rate.

"Thirty minutes past ten; a thick vapor gradually fills the room: the candle is nearly extinguished; I begin to feel a violent headache; my eyes fill with tears; I feel a general sense of discomfort; the pulse is agitated.

"Forty minutes past ten; my candle has gone out; the lamp still burns; the veins at my temple throb as if they would burst; I feel very sleepy; I suffer horribly in the stomach; my pulse is at eighty.

"Fifty minutes past ten; I am almost stifled; strange ideas assail me. . . . I can scarcely breathe. . . . I shall not go far. . . . There are symptoms of madness. . . .

"Sixty minutes past ten; I can scarcely write . . . my sight is troubled. . . . My lamp is going out. . . . I did not think it would be such agony to die. . . . Ten . . . Here followed some quite illegible characters. Life had ebbed. On the following morning he was found on the floor."

THE BLACK HOLE OF CALCUTTA. - The famous case of the "Black Hole of Calcutta" has been so universally read that the facts are new to none; but the version of that terrible affair, by Mr.

HOLWELL, may be new to some of my readers. I believe no similar fact serves so well to impress the subject upon the public mind, and therefore reproduce his account, which appeared in the *Annual Register for 1758*.

"Figure to yourself the situation of a hundred and forty-six wretches, exhausted by continual fatigue and action, crammed together in a cube of eighteen feet, in a close sultry night in Bengal, shut up to the eastward and southward (the only quarters whence air could reach us) by dead walls, and by a wall and door to the north, open only to the westward by two windows strongly barred with iron, from which we could receive scarce any circulation of fresh air. We had been but a few minutes confined before every one fell into a perspiration so profuse, you can form no idea

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of it. This brought on a raging thirst, which increased in proportion as the body was drained of its moisture. Various expedients were thought of to give more room and air. To gain the former it was moved to put off their clothes; this was approved as a happy motion, and in a few moments every one was stripped - myself, Mr. Court, and the two young gentlemen by me, excepted. For a little while they flattered themselves with having gained a mighty advantage; every hat was put in motion to gain a circulation of air, and Mr. Baillie proposed that every man should sit down on his hams. This expedient was several times put in practice, and at each time many of the poor creatures whose natural strength was less than that of others, or who had been more exhausted, could not immediately recover their legs when the word was given to rise - fell to rise no more, for they were instantly trod to death or suffocated. When the whole body sat down, they were so closely wedged together, that they were obliged to use many efforts before they could get up again. Before nine o'clock every man's thirst grew intolerable, and respiration difficult. Efforts were made to force the door, but in vain. Many insults were used to the guard to provoke them to fire on us. For my own part, I hitherto felt little pain or uneasiness, but what resulted from my anxiety for the sufferings of those within. By keeping my face close

between two of the bars, I obtained air enough to give my lungs easy play, though my perspiration was excessive, and thirst commencing. At this period, so strong a urinous volatile effluvia came from the prison, that I was not able to turn my head that way for more than a few seconds at a time.

"Now everybody, except those situated in and near the windows, began to grow outrageous, and many delirious. *Water! water!* became the general cry. An old Jemmantdaar, taking pity on us, ordered the people to bring us some skins of water. This was what I dreaded. I foresaw it would prove the ruin of the small chance left us, and essayed many times to speak to him privately to forbid it being brought; but the clamor was so loud it became impossible. The

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water appeared. Words cannot paint the universal agitation and raving, the sight of it threw us into. I flattered myself that some, by preserving an equal temper of mind, might outlive the night; but now the reflection that gave me the greatest pain was, that I saw no possibility of one escaping to tell the dismal tale. *Until the water came, I had not myself suffered much from thirst, which instantly grew excessive.* We had no means of conveying it into the prison but by hats forced through the bars; and thus myself, and Coles, and Scott, supplied them as fast as possible. But those who have experienced intense thirst, or are acquainted with the cause of nature of this appetite, will be sufficiently sensible it could receive no more than a momentary alleviation; the cause still subsisted. Though we brought full hats through the bars, there ensued such violent struggles and frequent contests to get it, that before it reached the lips of any one, there would be scarcely a small teacupful left in them. These supplies, like sprinkling water on fire, only seemed to feed the flame. Oh! my dear sir, how shall I give you a just conception of what I felt at the cries and cravings of those in the remoter parts of the prison, who could not entertain a probable hope of obtaining a drop, yet could not divest themselves of expectation, however unavailing, calling on me by the tender considerations of affection and friendship. The confusion now

became general and horrid. Several quitted the other window (the only chance they had for life) to force their way to the water, and the throng and press upon the window was beyond bearing; many, forcing their way from the further part of the room, pressed down those in the passage who had less strength, and trampled them to death.

"From about nine to eleven I sustained this cruel scene, still supplying them with water, though my legs were almost broke with the weight against them. By this time I myself was nearly pressed to death, and my two companions, with Mr. Parker, who had forced himself to the window, were really so. At last I became so pressed and wedged up, I was deprived of all motion. Determined now to give everything up,

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I called to them, as a last instance of their regard, that they would relieve the pressure upon me, and permit me to retire out of the window to die in quiet. They gave way, and with much difficulty I forced a passage into the center of the prison, where the throng was less by the many dead, amounting to one-third, and the numbers who flocked to the windows; for by this time they had water also at the other window. I laid myself down on some of the dead, and recommending myself to Heaven, had the comfort of thinking my sufferings could have no long duration. My thirst now grew insupportable, and the difficulty of breathing much increased; and I had not remained in this situation ten minutes before I was seized with a pain in my breast, and palpitation of heart, both to the most exquisite degree. These obliged me to get up again, but still the pain, palpitation, and difficulty of breathing increased. I retained my senses notwithstanding, and had the grief to see death not so near me as I had hoped, but could no longer bear the pains I suffered, without attempting relief, which I knew fresh air would and could only give me. I instantly determined to push for the window opposite me, and by an effort of double the strength I ever before possessed, gained the third rank at it - with one hand seized a bar, and by that means gained a second, though I think there were at least six or seven ranks between me and the window. *In a*

few moments the pain, palpitation, and difficulty of breathing ceased, but the thirst continued intolerable. I called aloud, 'Water, for God's sake!' I had been concluded dead; but as soon as the men found me amongst them, they still had the respect and tenderness for me to cry out 'Give him water!' nor would one of them at the window attempt to touch it till I had drunk. But from the water I had no relief; my thirst rather increased by it; so I determined to drink no more, but patiently wait the event. I kept my mouth moist from time to time by sucking the perspiration out of my shirt sleeves, and catching the drops as they fell like heavy rain from my head and face; you can hardly imagine how unhappy I was if any of them escaped my mouth. . . . I was

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observed by one of my companions on the right, in the expedient of allaying my thirst by sucking my shirt sleeve. He took the hint, and robbed me from time to time of a considerable part of my store, though after I detected him, I had the address to begin on that sleeve first when I thought my reservoirs were sufficiently replenished, and our mouths and noses often met in contact. This man was one of the few who escaped death, and he has since paid me the compliment of assuring me, he believed he owed his life to the many comfortable draughts he had from my sleeves. No Bristol water could be more soft or pleasant than what arose from perspiration.

"By half-past eleven, the much greater number of those living were in an outrageous delirium, and others quite ungovernable; few retaining any calmness but the ranks near the windows. They now all found that water, instead of relieving their uneasiness, rather heightened it, and Air! air! was the general cry. Every insult that could be devised against the guard was repeated to provoke them to fire on us, every man that could, rushing tumultuously towards the windows with eager hopes of meeting the first shot. But these falling, they, whose strength and spirits were quite exhausted, laid themselves down, and quietly expired upon their fellows; others, who had yet some strength and vigor left, made a last effort for the windows, and several succeeded by leaping and

scrambling over the backs and heads of those in the first ranks, and got hold of the bars, from which there was no removing them. Many to the right and left sunk with the violent pressure, and were soon suffocated; for now a steam arose from the living and the dead, which effected us in all its circumstances, as if we were forcibly held by our heads over a bowl of strong volatile spirit of hartshorn until suffocated; nor could the effluvia of the one be distinguished from the other. I need not ask your commiseration when I tell you in this plight, from half an hour after eleven till two in the morning, I sustained the weight of a heavy man with his knees on my back, and the pressure of his whole body on my head; a Dutch sergeant, who had taken his

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seat on my left shoulder, and a black soldier bearing on my right: all which nothing would have enabled me to support, but the props and pressure equally sustaining me all round. The two latter I frequently dislodged by shifting my hold on the bars, and driving my knuckles into their ribs; but my friend above stuck fast, and, as he held by two bars, was immovable. The repeated trials I made to dislodge this insufferable incumbrance upon me, at last quite exhausted me, and toward two o'clock, finding I must quit the window or sink where I was, I resolved on the former, having borne truly, for the sake of others, infinitely more for life than the best of it is worth.

"I was at this time sensible of no pain, and little uneasiness. I found a stupor coming on apace, and laid myself down by that gallant old man, the Rev. Jervas Bellamy, who lay dead with his son, the lieutenant, hand in hand, near the southernmost wall of the prison. Of what passed in the interval, to the time of resurrection from this hole of horrors, I can give no account."

At six in the morning the door was opened, when only twenty-three out of the hundred and forty-six still breathed. These were subsequently revived.

As the subject of ventilation stands first in importance among those bearing on the prevention of consumption, I give one additional fact.

STEAMER "LONDONDERRY." This steamer left Liverpool for Sligo, on Friday, Dec. 2nd, 1848, with two-hundred passengers, mostly emigrants. A storm soon came on. The Captain ordered the passengers into the steerage cabin, which was eighteen feet long, eleven wide, and seven high. The hatches were closed, and a tarpaulin fastened over this only entrance to the cabin.

The poor creatures were now condemned to breathe the same air over and over again. Then followed a dreadful scene. The groans of the dying, the curses and shrieks of those not yet in the agonies of death, must have been inconceivably horrible. The struggling mass at length burst open the hatches, and the mate was called to gaze at the fearful spectacle. Seventy-two

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were already dead, many were dying, their bodies convulsed, the blood starting from their nostrils, eyes and ears.

It does not appear that the Captain designed to suffocate his passengers, but that he was simply ignorant of the fact that air which has passed to and fro in the lungs, becomes a deadly poison.

The "Black Hole of Calcutta," the "Steamer Londonderry," and a thousand other instances where immediate death has resulted from carbonic acid, constitute a terrible chapter in human suffering and death; but they are all as nothing compared with the millions who nightly sleep in unventilated rooms, from which they escape with life, but not without serious injury. As a medical man, I have visited thousands of sick rooms, and have not found in one hundred of them a pure atmosphere. I have often returned from church, seriously doubting whether I had not committed a sin, in exposing myself to its poisonous air. There are in our great cities, churches costing \$50,000, in the construction of which not fifty cents were expended in providing means for ventilation. Ten thousand dollars for ornament, but not ten cents for pure air. Parlors with furnace heat and many gas-burners (each of which consumes as much oxygen as several men) are made as close as possible, and a party of ladies and gentlemen spend half the night in them. In 1861 I visited a Legislative Hall. The Legislature was in session. I remained half an hour in the most impure air I ever

attempted to breathe. If the laws, which emanated from such an atmosphere, were good, it is a remarkable instance of the mental and moral rising above a depraved physical.

Our school-houses are, some of them, so vile in this respect, that I would prefer to have my son remain in utter ignorance of books, rather than to breathe during six hours of every day, such a poisonous atmosphere. Theatres and Concert rooms are so foul, that only reckless people continue to visit them. Twelve hours in a railway car exhaust one, not because of the sitting, but because of the devitalized air. While crossing the ocean in the Cunard "Africa" and again

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in the Collins "Baltic," I was constantly amazed that men who knew enough to construct such noble ships, did not know enough to furnish air to the passengers. The distresses of sea-sickness are greatly intensified by the sickening atmosphere which pervades the ship. Were carbonic acid black, what a contrast would be presented between the air of our hotels and their elaborate ornamentation.

It is hardly necessary to say, that every place I have mentioned, might be cheaply and completely ventilated.

A writer in *Chambers' Journal*, in reviewing the first volume of the Health of Town's Commission, says:

"The startling facts brought forward as to the *creation*, we may call it, of scrofulous affections by impure air, are new, and present some of the gloomiest features of the volume, inasmuch as they prove the fatal effects of the pernicious influences complained of, in the existence of a deteriorating population, diseased in themselves, and bequeathing disease to a still more wretched posterity. Joseph Toynbee, Esq., one of the witnesses examined, appears to have devoted special attention to this part of the subject. On being asked as to his observation of 'the effect of defective ventilation,' he replies - 'The defective ventilation appears to me to be the principal cause of the scrofulous affections, which abound to an enormous extent amongst our patients. When I have had a scrofulous patient come before me, I have always been able to trace this as one of the agents.' He cites the work of a French physician, M. Boudeloque,

in which it is stated 'that the repeated respiration of the same atmosphere is the cause of scrofula; that, if there be entirely pure air, there may be bad food, bad clothing, and want of personal cleanliness, but that scrofulous disease cannot exist.' The following facts are further quoted:- 'The development of scrofula is constantly preceded by the sojourn, more or less prolonged, in air which is not sufficiently freshened. It is impossible to deny that hereditary disposition, the lymphatic temperament, uncleanliness, want of clothing, bad food, cold and humid air, are of themselves circumstances non-effective for the production of scrofula.'

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" 'When it is seen, on the other hand, that this disease never attacks persons who pass their lives in the open air, and manifests itself always when they abide in an air which is unrenewed, and this, whatever may be the extent of other causes, it appears evident that the non-renewel of the air is a necessary condition in the production of scrofula. Invariably, it will be found on examination, that a truly scrofulous disease is caused by a vitiated air, and it is not always necessary that there should have been a prolonged stay in such an atmosphere. Often a few hours each day is sufficient; and it is thus that persons may live in the most healthy country, pass the greater part of the day in the open air, and yet become scrofulous, because of sleeping in a confined place, where the air has not been renewed. This is the case with many shepherds. It is usual to attribute scrofula, in their case, to exposure to storms, and atmospheric changes, and to humidity. But attention has not been paid to the circumstance that they pass the night in a confined hut, which they transport from place to place, and which protects them from wet; this hut has only a small door, which is closed when they enter, and remains closed also during the day; six or eight hours passed daily in a vitiated air, and which no draught ever renews, is the true cause of their disease. I have spoken of the bad habit of sleeping with the head under the clothes, and the insalubrity of the *classes* where a number of children are assembled together.' "

"An instance is adduced in corroboration: 'At three leagues from Amiens, lies the village of Oresmeaux; it is situated in a vast plain,

open on every side, and elevated more than 100 feet above the neighboring valleys. About sixty years ago, most of the houses were built of clay, and had no windows; they were lighted by one or two panes of glass fixed in the wall; none of the floors, sometimes many feet below the level of the street, were paved. The ceilings were low; the greater part of the inhabitants were engaged in weaving. A few holes in the wall, which were closed at will by means of a plank, scarcely permitted the air and light to penetrate into the workshop. Humidity

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was thought necessary to keep the threads fresh. Nearly all the inhabitants were seized with scrofula, and many families, continually ravaged by that malady, became extinct; their last members, as they write me, died, *rotten with scrofula.*' "

"A fire destroyed nearly a third of the village; the houses were re-built in a more salubrious manner, and by degrees scrofula became less common, and disappeared from that part.' Other facts are brought forward, all tending to prove the fatal effects of vitiated air, and the beneficial results of constantly pure atmosphere, not only on the health, but on the morals of the people. Other authorities - Dr. Blacke, Dr. Blakely Brown, Dr. Duncan, and Professor Alison - fully confirm these statements; in addition to which we are informed that 'defective ventilation may be considered one great cause of all the diseases of the joints which we so frequently meet with, as well as of the diseases of the eye and skin - shingles, lepra, and *porrigo*, or ringworm. Besides the eye, the ear is injuriously affected by vitiated air, which thus becomes the cause of many cases of deafness. It is a fact, that at least two times more of the children of the laboring classes are affected by the earache and deafness, than of children of the rich and better conditioned classes, less exposed to like influences."

"Every population throws off insensibly an atmosphere of organic matter excessively rare in country and towns, but less rare in dense than in open districts; and this atmosphere hangs over cities like a light cloud, slowly spreading, driven about, falling, dispersed by winds, washed down by showers. It is not *vitalis halitus*,

except by origin, but matter which has *lived*, is dead, has left the body, and is undergoing, by oxydation, decomposition into simpler than organic elements. The exaltations from sewers, church-yards, vaults, slaughter-houses, cess-pools, commingle in the atmosphere, as polluted waters enter the Thames; and not withstanding the wonderful provision of nature for the speedy oxydation of organic matter in water and air, accumulate, and the density of the poison (for in the

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transition of decay, it is a poison) is sufficient to impress its destructive action on the living, to receive and impart the processes of zymotic principles, to convert, by a subtile, sickly, deadly medium, the people agglomerated in narrow streets and courts, down which no wind blows, and upon which the sun seldom shines."

"A small quantity of organic matter can only escape with the carbon and aqueous vapor (37 1/2 ounces daily, according to Dalton) from the skin and lungs. The presence of a putrid atmosphere is perceived by the senses in parts of all towns; and Liebig, by operating on large masses of the atmosphere, has obtained ammonia, which is a product of the putrifaction of animal matter. The existence, therefore, in the atmosphere of animal matter, is incontestible; and, as it must be most dense in the densest districts, where it is produced in the greatest quantities, and the facilities for decomposing it in the sunshine, and sweeping it away by currents of wind, are the least, its effects - diseases and death - will be most evident in towns, and in the most crowded districts of towns. It is to this cause that the high mortality of towns is to be ascribed."

Consumption originates in the tubercular diathesis. This diathesis is produced by those agencies which deprave the blood and waste vitality. Of these agencies none is so universal and potent as impure air. When we consider that besides mingling momentarily with the blood of the entire system, it is in direct and constant contact with every part of the lungs, we cannot fail to deduce, that foul air must play a most important part in that local

expression of the tubercular taint known as pulmonary consumption.

Dr. Guy, in his examination, affirms: "This (deficient ventilation) I believe to be more fatal than all other causes put together." Dr. Guy showed that consumption was nearly twice as common among tradesmen as among the gentry, which he attributes to the bad ventilation of their stores.

Some of my lady friends in Boston, who are accustomed

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to pure air at home, greatly dread to "shop," because of the bad atmosphere found in the stores. I am not acquainted with three stores in Boston that are well ventilated. It is really touching to see the poor clerks, of either sex, with their pale, wan faces, languidly moving about in an atmosphere which is slowly poisoning them.

The distinguished Dr. Carpenter says: "Again the due elaboration of the fibrin of the blood is undoubtedly prevented by an habitually deficient respiration, and various diseases which result from the imperfect performance of this elaboration, consequently manifest themselves. The scrofulous (consumptive) diathesis is thus frequently connected with an unusually small capacity of the chest, (or lack of oxygen in the air.)"

Dr. Griscom says: "*Now it is not disputed, that matter, carried from the digestive organs, and thrown into the circulation, cannot be perfectly nutritive unless it be perfectly aerated or oxygenated.* This fact is fully established. A very small quantity of food, even when it is to a certain extent unwholesome, may possibly be assimilated, and with a due supply of air to ventilate it when it arrives in the lungs, may become highly nutritive; but the largest conceivable quantity of what is called nutritious food, taken into the stomach and there digested, can never be elaborated into nutritive blood without a due supply of air to arterialize it."

Prof. Alison, one of the highest authorities on this subject, remarks: "It is hardly possible to observe separately the effects on the animal economy of deficiency of exercise and of fresh air, these two causes being applied together, and often in connection with imperfect nourishment. But it is perfectly ascertained, on an

extensive scale, in regard to the inhabitants of large and crowded cities as compared with the rural population of the same climate; first, that their mortality is very much greater, especially in early life and the probability of life very much less; and secondly, that of this great early mortality in large towns, a very large proportion is caused by scrofulous disease. And from these two facts, it evidently follows that deficiency of fresh air and of exercise, are among

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the most important, because the most remediable of the causes from which the scrofulous diathesis arises."

Dr. Griscom concludes his excellent work on the "Uses and Abuses" of air, with the following remarks: "To those who have the care and instruction of the rising generation - the future fathers and mothers of men - this subject (ventilation) commends itself with an interest surpassing that of any other. Nothing can more convincingly establish the belief of the existence of something essentially and vitally wrong in the habits and circumstances of civilized life, than the appalling fact, that one-fourth of all who are born, die before reaching the fifth year, and that one-half the deaths of mankind occur under the twentieth year.

Let those who have these things in charge, answer to their own consciences how they have discharged their duty, in supplying to the young, the responsibility of whose lives they have assumed - **A PURE ATMOSPHERE - THE FIRST REQUISITE FOR HEALTHY BODIES AND SOUND MINDS.**"

CLAUDE BERNARD'S EXPERIMENTS. This eminent man made some interesting experiments upon animals, which illustrate an apparent paradox often observed in human life.

A sparrow placed in a bell-glass of given size, lived three hours; but at the end of the second hour, when there was still oxygen enough to sustain the bird another hour, if a fresh sparrow were introduced it expired immediately. Or if at the end of the second hour the sparrow was taken out of the bell-glass and allowed to fly about in pure air a few moments, and was then placed in the bell-glass again, where, but for this removal it would have lived an hour, it was instantly killed.

Some time since I had occasion to visit an establishment where one hundred and fifty girls, in a single room, were engaged in needle-work. Pale faced, with low vitality and feeble circulation, they seemed unconscious that they were breathing an atmosphere which at once produced in myself dizziness and a sense of suffocation. If I had remained a week, like

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them, I should have become unconscious of the vileness of the atmosphere.

Lewes mentions that two French women, one sick with typhoid fever, were in a room heated by a coke stove. The gas escaped from the stove. The well woman was suffocated and fell senseless on the floor, but the sick one retained her consciousness, and by loud cries brought assistance.

Lewes, in explaining this paradox says, "vitiating air will suffice for the respiration of a depressed organism as it would for that of a cold-blooded animal. In this depressed condition, less oxygen is absorbed, and therefore less is required in the air. When we enter a vitiated air, the breathing becomes laborious; the consequence is a depression of all the organic functions, and the breathing becomes easy again, because we no longer require so much oxygen, and we no longer produce so much carbonic acid. Were it not for this adjustment of the organism to the surrounding medium, by a gradual depression of the functions, continued existence in a vitiated air would be impossible. We see the vigorous bird perish instantly in air which would sustain an enfeebled bird for more than an hour."

Put a bird and a snake into an air-tight bell-glass. After a little time the bird will fall from its perch, dead. The air has been so exhausted that it no longer contains sufficient oxygen to maintain life in the warm-blooded animal, but the cold-blooded snake still lives and continues to live, until the oxygen is reduced to less than three per cent.

A young woman, exuberant with life, comes from the country to visit her city cousins. She finds them with pale faces, cold extremities, and general debility, but, apparently comfortable in a

furnace-heated, unventilated house, in which she must almost gasp for breath.

I frequently observe in the street-cars, ladies, with contracted waists and feeble vitality, breathing with indifference an atmosphere from which I am compelled to escape to the platform, even though I must stand in the rain.

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In each and all of these cases, the unconsciousness does not save from mischievous consequences. The poison operates, not only in lowering the vital tone, but in shortening the life, and in the production of numerous maladies.

FOUL AND DAMP CELLARS. The atmosphere of nearly every house is contaminated by emanations from a foul and damp cellar. If you breathe the air of an ordinary cellar, with senses fully awake, you are conscious it is far from pure. This air is constantly making its way into the rooms above. Without doubt, disease of the lungs, the organs most exposed to atmospheric poisons, may often depend, to some extent, upon this cellar atmosphere. The emanations from decaying potatoes, cabbages, turnips and other vegetable substances in a cellar, have often produced grave fevers. That these poisonous gases may affect the lungs I cannot doubt.

The thoughtful and earnest, will ask at once, "What can be done to remove this source of disease?" I reply: Line your cellars with cement, ventilate and drain them carefully, and keep them scrupulously clean. The frequent use of whitewash upon the walls, and over head, will prove an efficient antiseptic. The occasional use of a solution of chloride of lime in the corners and out-of-the-way places would prove an important addition.

But the true policy for those who reside in the country, is, to construct out-door cellars, in which the vegetables may be preserved. Once a week, what are needed for the house, may be brought in and deposited in a large box, so constructed as to preserve its contents from freezing. As the articles of food usually kept in a cellar are, in town and cities, purchased in small quantities, the out-of-doors cellar is there unnecessary.

The ground, about nearly every house, should be thoroughly underdrained, to the depth of three feet, with round two-inch tile, such as are used for agricultural purposes. The drains should be connected, and terminate in a common outlet a few rods from the house. This should be carefully guarded by grating,

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to prevent its being obstructed. The drains can be connected with the eave-gutters, so as to receive all the water that falls on the roof, not needed for the cistern. By such means, the ground near the house is kept dry; and, besides the greater healthfulness secured, is much improved for garden, lawn, fruit-yard and grapery. The soil under the house, preparatory to building, should be excavated as for a cellar, to the depth of one foot, and the open space filled with sand and charcoal. The part corresponding to the center of the house, should be elevated one or two feet above the line corresponding to the walls, and when the house is erected, the space under the walls should be left open, that the air may circulate freely under the building. It is very easy with ornamental wood or iron work to conceal the open space without lessening the circulation of the air. To keep the lower floor warm, it should be double, with an intervening space of a foot in which to pack some nonconductor.

If a cellar be suspected and is not susceptible of purification, it might be filled with sand, gravel and charcoal.

Dr. Bowditch, in his able address before the Mass. Medical Society, declared it as his conviction that a moist soil is a most fruitful source of consumption. In the light of such authority, the importance I have given to the subject of cellars - which are almost invariably damp - will not be deemed an exaggeration.

Dr. Bowditch arrives at the following conclusions:

First, consumption is not equally distributed over New England.

Second, Its greater or less prevalence depends very much upon the characteristics of the soil on, or near which the patients, affected with it, have resided.

Third, Moisture of the soil is the only known characteristic that, so far as our present investigations have gone, is connected with the consumption-breeding districts.

Dr. B. earnestly deprecates the indifference of the State, and the profession, to the question of location for towns. In another place he says:

"The public should correct its own views upon the

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whole subject of the planting of cities and villages. It should not allow speculators to run the risk of contaminating every family that may subsequently colonize a spot best fitted, perhaps, for the promotion of consumption. Now, the track of a railway, or the wit or reckless energy of the owner of some swamp, may be the sole reason for erecting a station house, and thereby promoting the early erection of dwelling houses near by, on localities totally unfit for human habitation."

In arousing the profession to its obligations, he uses the following language:

"We may meet with a patient, suffering under what is sometimes inaptly called the "pretubercular condition," where there is in the system - *a good-for-nothingness* - a languor, in fact, of body and soul, perhaps a slight dyspepsia, some emaciation and debility - a little cough, but without *physical* signs of pulmonary disease. If a patient has been residing under the circumstances named in this address, as promotive of consumption, *it will be our first duty to urge him to leave the spot.*"

"Still more should a removal be urged, if any, even the most trivial, of physical signs of pulmonary disease be found. A short distance, even half or quarter of a mile, may do much good; but I should prefer to have such a patient remove at once to one of the places already known, or which may hereafter be found to be drier and more favorable for him."

I take the liberty to express the hope that Dr. Bowditch will bring to the investigation of other causes of consumption his discrimination and patience.

MOISTURE IN THE ATMOSPHERE. It is the common belief that a dry atmosphere is most favorable to the consumptive. Many medical authors have advanced this assumption. It is, nevertheless, an error. In the British Isles, and in France, outside the cities and manufactories, the mortality from pulmonary diseases is much less than among the agricultural classes of this country. And, on the western shores of this continent, consumption is comparatively unknown.

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Our disadvantage in this comparison is attributable, in considerable part, to the lack of humidity in our atmosphere. Without the evidence of facts, we might, *a priori*, argue, that excessive dryness of the air would produce dryness and irritability of the air-passages. From time immemorial, watery vapor has been used as a remedy in irritation and inflammation of the respiratory organs.

A hundred times have my consumptive patients expressed surprise that the wet weather, in which I have insisted they should go out, as usual, has not injured them, - that they even breathe more freely than on pleasant days. Of course, I tell them, if the body is well protected, the more moist the air, the more grateful to the lungs.

There is no possible weather which can excuse the consumptive for keeping in-doors. Give him sufficient clothing, protect his feet carefully, and he may go out freely in rain, sleet, snow and wind. Ignorance of this fact has killed thousands.

That point of temperature at which the moisture of the air first becomes visible, is known as the dew-point. According to one authority, the mean dew-point of England, from the first of November to the last of March, is about 35 degrees; that of our Northern States about 16. Now suppose a house in England is kept at a temperature of 70 degrees, the drying power would there be represented by 35. A house with the same temperature in Albany, for example, would possess a drying power of 54. This great contrast in the atmosphere of the two countries is strikingly illustrated by the difference between the plump body and smooth

skin of the Englishman, and the lean, juiceless body, and dry, cracked skin of the Yankee. It is also shown by the well-known difference in the influence of house-heat upon furniture. Our chairs, and sofas, and wood-work, warp and shrink, while nothing of the sort occurs in England.

As we cannot increase the amount of moisture in the atmosphere of our continent, we must limit our practical efforts to the air of our houses. If we use a stove, its entire upper surface should be made a reservoir

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for water; ornamental work, of but little cost, may be used to conceal it. The furnace may be made to send up, with its heat, many gallons of water daily, in the form of vapor. In justice to stoves and furnaces, I must say here, that, in the facility to do this, they possess one advantage over open fire-places.

By adding artificial moisture in this way, to the air of our houses, we not only save our furniture from drying and shrinking, but protect our skin, eyes, nose, throat and lungs from undue dryness, and from the affections to which it would give rise. It is found necessary, in our cloth manufactories, to maintain a moist atmosphere in order to successful spinning. Intelligent managers have assured me that coughs and throat difficulties are comparatively rare in the spinning department.

We must all have observed, that, while the air of a hot kitchen is comfortable, that of a parlor at the same heat, from an air-tight stove, is almost suffocating. The kitchen has a hot stove, but the steam of its boiling kettles moistens the air.

Your country aunt, who has lived over her cooking-stove for years without serious inconvenience, after spending an afternoon in your parlor, heated by a stove or furnace, returns home "glad to get out of that hot, stifling air." And yet the thermometer may have indicated that the kitchen was ten degrees warmer than the parlor. The dry heat of the parlor produces headache, irritability, and perhaps a sense of stricture in the chest. If we would avoid these, a dry chapped skin, an irritable nervous system, and a dry hacking cough, we must add the needed humidity by artificial means.

Almost every writer on consumption regards humidity in the atmosphere as one of the principal causes of this disease. If the moisture is in such excess that it becomes visible in the form of fog, it may act prejudicially upon the respiratory apparatus; but, so long as its relations with the temperature are such that it remains in an invisible form, it must ever tend to preserve in the lungs a condition farthest from irritability.

Again, humidity in its influence upon the respiratory

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apparatus, is determined in considerable part by the clothing of the body. If insufficiently clad, and exposed to an excessive humidity, the general vitality may be so depressed, and the blood so driven from the surface, that disease of the lungs will result. But if the body be well guarded, moisture in the air, except when in great excess, and in very low temperatures, will ever serve to preserve in the respiratory apparatus, freedom from the dryness and irritability which constitute a prominent feature in most diseases of these organs. A striking illustration of its benefits is found in the comfort which phthisical persons derive from that condition of the atmosphere which accompanies a rain-storm in the summer, and again, by the relief which such patients experience in visiting the western shores of our continent, or an island in the ocean where the air is loaded with humidity.

FURNACES AND STOVES. Since the introduction of furnaces and stoves, diseases of the respiratory apparatus have greatly multiplied. The heat from these, dries the life juices out of the throat and lungs. When I am asked to see a consumptive, and find my patient in such an atmosphere, I begin by saying. "no treatment will save you if you continue to poison your lungs in this air."

If in the shutter of a dark room, you make a small aperture, you will observe in the jet of light, that the air of the best ventilated room is full of floating particles. In their ordinary condition they do not seriously injure the respiratory apparatus; but it has been shown by reliable observers, that when these motes are exposed to contact with a heated stove or furnace, they are carbonized and

become poisonous to throat, lungs and blood. If this be true, it is a new and good objection to stoves and furnaces. The common idea that the air itself may be burned by a hot stove, is not well founded.

I do not say it is impossible to ventilate a room warmed by furnaces or stoves; but, with the present ignorance on the subject of ventilation, and insensibility to atmospheric influences, not one house in a

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hundred thus heated, will be well ventilated. If the machinery by which the needed change of air may be secured, is left to the control of the occupants of the house, bad ventilation will be the rule.

OPEN FIRES VS. STOVES AND FURNACES. An open fire is number one among house blessings. If possible, it should be a wood fire with a large fire-place. Such a fire is a great luxury. It fills the family circle with satisfaction and sociability. To keep up the draught, the entire air of the room is constantly changed. Even if the room be small, and the company large, the excretions of the lungs and skin cannot so accumulate as to make the room smell close. Strange that people will not have this delightful blessing in their houses at any cost. Let them, if need be, go without silks, broadcloths, a piano, and finery of every kind, and have this excellent purifier and comfort in their homes. Who would not go miles to visit an old-fashioned log house with its great roaring fire? In whose childish reminiscences is not that crackling, rushing fire the most beautiful of memories? Why not have it all back again? If a small part of the money which we spend in foolish, mischievous fashions, were given to the re-introduction of this good old-fashioned blessing, we should all be healthier and happier.

Next to the wood fire, the open grate, with coal, is best; and, if the draught be good, it is a good ventilator.

In an institution for the treatment of weak chests which we shall soon open in Boston, we shall make open wood fires play an important part.

FIRES IN BEDROOMS. Most people think that sleeping in cold rooms is essential to health. This is a mistake. An open fire

greatly improves the atmosphere of a bedroom. By it, the air of the room is constantly changed. With it, the window will be kept open. With a fire, less bed clothing is needed - an important advantage, - for a large number of blankets not only interferes with circulation and respiration but prevents the escape of the gases which the skin is constantly emitting. Except there be wind, ventilation of any room depends upon a difference in temperature

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between the air inside and that outside. If the thermometer inside indicate a temperature 10 degrees below the freezing point, and outside the same, there will be no ventilation. All motion in the air originates in a difference of temperature between different points. If we would secure the constant introduction of air from the great ocean outside, into our bedrooms, we must raise the temperature within, considerably above that without.

NIGHT AIR. Consumptives, and all invalids, and indeed persons in health, are cautioned to avoid the night air. Do those who offer this advice forget that there is no other air at night, but "night air?" Certainly we cannot breathe day air during the night. Do they mean that we should shut ourselves up in airtight rooms, and breathe over and over again, through half the twenty-four hours, the atmosphere we have already poisoned? We have only the choice between night air pure, and night air poisoned with the exhalations from our skins and lungs, perhaps from lungs already diseased.

Many persons indulge a very silly dread of a draught. It is only by motion in the atmosphere that our lungs obtain the purest air. If at night the air move briskly directly over your bed, your lungs will receive precious supplies. If you cannot endure this direct draught, you must deny yourself a great luxury. I once thought that a draught at night directly over my head was a thing to be avoided. Now I seek it as one of the real blessings of life. My wife, who inherited a consumptive taint, was ever guarding against night air. Now she sleeps with two open windows at one end of the bed, and an open door at the other. Neither of us have had a cold for several years. Every one must exercise his own judgment and prudence. I

should be sorry were my words to lead any one into an injurious exposure. But among the many hundreds - I might say thousands, - whom I have advised to sleep with open windows, I have never known a single person to be seriously injured, even temporarily; and I may add, that almost without exception, so far as I have known, they would not return to their former

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habit of sleeping in unventilated rooms. At first you may contract a cold, but if you bathe freely in cold water, and employ vigorous friction upon the parts exposed while in bed, even this may be avoided. But after a few weeks' experience it will be quite unnecessary for the physiologist to lecture you on the subject. You will yourself take to exhorting your friends upon the importance of well ventilated bedrooms. One of the compensations of our great war, will be found in the conviction among a million returned soldiers that night air is not a poison, and that draughts are less dangerous than Minie balls.

Of course I am not unaware that what I have said on sleeping in a draught will meet with very general reprobation, but it is not the only case in which false education and prejudice have undertaken to ignore a great natural. I can adduce the experience of thousands in favor of a free exposure to night air and winds, and after a wide observation, I have never met one person who has tried such exposure for one month and spoken against it. A writer pertinently speaks on this point after the following fashion:

"Man acts strangely. Although a current of fresh air is the very life of his lungs, he seems indefatigable in the exercise of his inventive powers to deprive himself of the heavenly blessing. Thus, he carefully closes his bed-chamber against its entrance, and prefers that his lungs should receive the mixed effluvia from his cellar and larder, and from a patent little modern aquarius, in lieu of it. Why should man be so terrified at the admission of night air into any of his apartments? It is Nature's ever-flowing current and never carries the destroying angel with it. See how soundly the delicate little wren and tender robin, sleep under its full and immediate influence; and how fresh, and vigorous, and joyous, they

rise amid the surrounding dewdrops of the morning. Although exposed all night long to the heavens, their lungs are never out of order; and this we know by the daily repetition of their song. Look at the new-born hare, without any nest to go to. It lives and thrives and becomes strong and playful under the unmitigated inclemency of the falling dews of night.

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I have a turkey full eight years old that has not passed a single night in shelter. He roosts in a cherry tree, and is in primest health the year through. Three fowls, preferring his to the warm perches in the hen-house took up their quarters with him early in October, and have never gone to any other roosting-place. The cow and the horse sleep safely on the ground, and the roe lies down to rest on the dewy mountain-top. I myself can sleep all night long, bareheaded, under the full moon's watery beams, without any fear of danger, and pass the day in wet shoes, without catching cold. - Coughs and colds are generally caught in the transition from an over-heated room to a cold apartment; but there would be no danger in this movement, if ventilation were properly attended to, - a precaution little thought of now-a-days."

Dr. James Blake advises the consumptive to join with several friends, procure horses and wagons, and set off upon a long journey, sleeping in the open air, no matter what the weather. He seems to think this the only way in which it is possible to induce the consumptive sleep in the fresh air. Doctor Jackson gives the case of a consumptive young man (he does not state the condition of his lungs) who was cured by sleeping in the open air on a hay-sack. This advice and experience do not quite harmonize with the common terror of night air.

But while I believe that breathing the pure out-door air all night is an important curative means in this disease, I do not believe that sleeping in the open fields in a stormy night is the *best means* for securing pure night air, in the case of a feeble woman; on the contrary, I think it might be more pleasantly, and quite as effectually secured in a comfortable house with open windows and an open fire.

No doubt the lives of thousands would be saved by destroying their houses, and compelling them to sleep in the open air; not because houses are inevitable evils, but because they are so badly used. Windows are barred and closed, as if they keep out assassins; draughts defended against, as if they were bomb-shells; and the furnace-heat still more corrupts the air, which

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has done duty already - to how many lungs, for how many hours?

Let the consumptive thank God for the blessing of a house, but let him use it wisely. How my heart has ached, to see the consumptive patient put away in a bed, behind curtains, in an unventilated room, the doors and windows carefully closed, to shut out the very food for which the lungs and system were famishing!

I do not wonder that Blake, Jackson, and many others, have an out-door life of the wildest and most exposed sort to invalids of this class; but I do wonder that they have not equally insisted upon abundance of air for them, as pure as that of the fields and mountains, in their own homes, and in the midst of friends and comforts. - *Weak Lungs by Dio Lewis.*

SUNSHINE

How beautiful and enlivening is the sunlight! How it gladdens the eyes and stimulates the powers of all living creatures as it dawns upon the earth in its morning freshness! "It is the very life of nature, without which every thing material would fade and perish." Just in what way it acts upon plants or animals or men, to impart to them life and vigor, the wisdom of man is not yet to show, but it is known that neither can exist in any thing like normal conditions without an abundant supply of this element or agent. Plants will grow where there is but little light, but they will always be pale and sickly under such circumstances, and instinctively reach toward the light. Every person has seen illustrations of this in the case of vegetables growing in cellars. A potato will send out a vine two or three feet, entirely colorless, and with scarcely any development of leaves, and if there is any where in the apartments an aperture

letting in a ray of light, like a star shining in the darkness, the vine is sure to clamber toward it.

So it is known that human beings living in entire darkness, as in dungeons and mines, grow pale and feeble and diseased. A more pitiable class of human

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beings probably exists nowhere in our world than the miners in England - where man, women and children do not come to the surface of the earth and to the light for months together. These poor people who live in great cities, in streets so narrow that the sunshine never visits their apartments, or in basements, suffer greatly in health from lack of light, and their children are particularly liable to malformations and scrofulous development. In great hospitals in which some of the rooms are nearly destitute of light, it is found that the patients occupying these, recover in a proportion very much below that of those who occupy well-lighted rooms.

We pity the miner, those who are confined in dungeons and those who live in dark lanes. But there are thousands of the more favored classes, who, so far as the sunlight is concerned, might about as well live in dim basements as in their dwellings. Men build fine houses and take great care to have large windows with panes a little larger than their neighbors' and then cover them so constantly with blinds and drapery that the sun is not permitted to have a good, free open look into their sitting-rooms, parlors or chambers from May till November. At the Spring and Autumn house-cleaning, the house is thrown open for a short time, but the remainder of the year it is a semi-dungeon. Women live in such dim light till their eyes and whole systems become accommodated to it and they imagine that it is not only more pleasant, but better than broad day-light. They can not go out into the sunshine without shading themselves by some arrangement of carriage tops, sun-bonnets, umbrellas or parasols, without suffering. They have established a chronic, morbid relation to God's glorious gift of light. This is ruinous to health and elasticity of spirits. And all, in the first place, to save the colors in a carpet or to give a delicate

shade to the complexion. I would rather never see a carpet and have the complexion of a mulatto, and be permitted to have intimate acquaintance with sunshine, than to be mistress of the most magnificent palace that was ever erected, if I must keep the blinds closed and curtains down.

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Men built churches with large, high windows, as if while seeking to commune with Him who dwells in light, and in whom is no darkness at all, they meant to have a symbol of His spiritual presence in the floods of external light in which they should bathe. But instead, they cover the windows with blinds which are never intended to be opened, and are so arranged that they cannot be opened. For all practical purposes the house might as well have been lighted by two nine-panel windows of seven by nine glass. The "dim religious light" is appropriate in those churches whose object is to afford persons a place to mourn and confess their sins and repent in sack-cloth and ashes. If there are any, where the people go to rejoice and offer thanksgiving and praise, they should be well lighted. Light promotes gladness, and consequently healthiness of body and soul.

Undoubtedly one reason why exercise in the open air is more beneficial than in the house is because of the greater degree of light out of doors. Parents should let their children play freely in the sunshine. They always like it when left to themselves. It is cruel to keep little girls in the house, or send them out only in deep sun-bonnets. It is good to allow the warm rays to come down on their bare heads and necks and arms and feet. It is better for the digestion than salts - better for the intellect than spelling-books. It will be a happy day for children when mothers shall learn its value.
- *Letter Box.*

DEATH ON THE RAILROAD

NOTWITHSTANDING the great number of deaths from the casualties of railroad traveling - collisions, capsizings, running off the track, running under drawbridges, etc., - we believe many more

deaths result from being confined *in* the cars than from being tumbled *out* of them. In cold it seems to be a choice of evils - death by wounds and bruises without, or death from infection within.

Not long since, in a trip to and from Philadelphia, we examined three or four crowded cars, without

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finding a breath of fresh air. Every window was closed; and the red-hot stove, the effluvia from human bodies - not always of the cleanest - the smell of liquor, the scent of tobacco, and the smoke of two oil-lamps, commingling in one deep, thick, dank, suffocating stench, reminded one more of the valley of Gehenna than of accommodations for travelers.

We watched our opportunity, and the first vacancy on the window side of a seat came into our possession, and, presto, up went one window - a very little, however, so as not to excite alarm and provoke a controversy. Soon a large, portly, red-faced, gouty-looking individual took the other end of our pew. He was well bundled in coats and overcoats, his neck and face wrapped up in fur to his eyes; and of course he was very sensitive to the weather, and moreover, troubled with a "hacking cough." He was hardly fairly squared in his seat before he espied the raised window, or felt the "chilling blast" along the projecting peak of his florid proboscis. "Please to close the window - that window, sir; have the goodness to shut the window," were the hurried salutations he uttered half entreatingly, and rather more than half-commandingly. "Can't do it, sir; can't live so; do not like to breathe this air that has been breathed so many times already," was our hasty defense. We did, however, lest worse might come to worst, drop the window to within half an inch of the bottom, and so, by applying our inhaling apparatus close to the crevice, managed to maintain a communication with the surrounding atmosphere for the remaining fifty miles. But our friend did not have to sustain his dangerous proximity to fresh air long; for at the next depot a seat was vacated, which he readily seized, and where he seemed to have found a people of "one smell and one mind" on the subject of ventilation.

Such has ever been our experience on the railroads. Not one person in a hundred appears to know or care any thing about this subject. The editor of the *Tribune*, having recently *enjoyed* a trip to the West *a la railroad*, gives *vent* to his sensations on the subject in the following strain. We commend his remarks as

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well as our own to the attention of the conductors everywhere:

I went West over the Erie, and returned over the Pennsylvania Central - both excellent roads - the Erie I think the best managed and run of any long road in the country. In regularity, punctuality, and freedom from accident, it can hardly be exceeded. The Pennsylvania is not run so fast, especially toward this end, but is run regularly, safely, and is doing a large business. But the horrible recklessness of human health and life evinced in the want of ventilation on these as on most other roads, deserves the severest reprehension. Why do not Grand Juries take action on this wholesale slaughter? Every night sees hundreds of trains running this way and that, with thirty to fifty passengers in each car, so shut in that there is not so much pure air entering any one as three men need to breathe. Thus, in five minutes after the door has been closed, the whole atmosphere of the car is putrid, and every inmate is thence inhaling rank poison until the doors are opened again. Enter one of these cars as the train stops at a station, and the effluvia is enough to knock down a horse, though those who have deprived their preceptions by gradual acclimation to it may not mind it. The emigrant or second-class cars, being more densely crowded and less frequently opened, are especially noxious, and are doubtless causing thousands of typhus fevers and kindred diseases, of which the source is unsuspected by the sufferers. Messrs. Presidents, Directors and Superintendents! do you know that you are poisoning your customers by wholesale? If you don't, ask any tolerably educated physician to ride one night in your cars, and tell you what he thinks of their atmosphere. If you do know the fact, why do you persist in murdering people by the thousand? Don't talk about patent ventilators, but bore five hundred augerholes in the floor and roof of each passenger car at once, and see that these

are kept open until you can determine what to do next. Do something, and do it at once. - *Water-Cure Journal*.

VENTILATION

The evils resulting from breathing, night after night, an atmosphere becoming more and more vitiated as the morning approaches, probably equal, if they do not exceed, those resulting from the intemperate use of spirituous liquors. Indeed it is questionable whether a craving for stimulants has not been occasionally created by this abominable yet prevalent custom of keeping the windows of the sleeping apartment either entirely closed or opened but a "crack." They should be widely opened every night throughout the year, unless the weather is intensely cold, or the wind unusually violent, or some other valid reason exists for mitigating the draught.

Were this practice universally adopted, a surprising reduction would be quickly manifested in the frequency of morning headache and nausea, dyspepsia, chronic catarrh, croup, diphtheria, influenza, measles, scrofula, consumption, scarlet fever, small-pox, typhus fever, felon whitlow, erysipelas, and many other disorders, which are more often induced by an infected atmosphere than any other cause.

In recommending a draught I am not advocating a whirlwind or hurricane, but merely such a current of air as will supply the lungs during each night with from eight to ten thousand installments of pure, fresh, free oxygen, in a quantity fully equal to any possible demand of the human system. Stagnant air cannot supply the want, neither can air that is in motion, if it be not perceptibly so; nothing less than a draught, moderate but decided, and continuing throughout the night, can meet in every respect the requirements of health.

Of the many and remarkable advantages of sleeping in the open air, or what may be regarded as the same thing, I can speak from thirteen years' experience. Commencing the practice rather abruptly in the winter of 1850, and without suffering any serious

inconvenience from the initial trial, I became in a few weeks nearly as invulnerable to the assaults of a freezing cold blast as a salamander to fire. From that time to the present I have not once suffered from any pulmonary affection, and, except in very rare instances,

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have been utterly exempt from any illness that could be traced to a night-draught exposure. In short, a practice which . . . I have rigidly observed for a series of years, as one of the most important of all the means that I have hitherto adopted for indefinitely promoting health, strength, and development.

The following are a few examples to illustrate the importance of a thorough system of ventilation, in cases where little if any complaint had been made of inattention to this hygienic measure:

There was once in Glasgow an assemblage of buildings attached to a factory, which were occupied by about five hundred persons - one family in each room. For a long period an immense deal of sickness had pervaded the buildings, which the inmates seemed to regard as a mysterious dispensation of Providence, for they absolutely refused to adopt such sanitary expedients as had been repeatedly advised them. At length the proprietors of the establishment, despairing of ever making the inmates appreciate the importance of occasionally opening windows, resolved to apply a system of ventilation which should be thorough, continual, and utterly beyond the control of those subjected to it. They accordingly connected each room, by means of tubes, with the chimney of the factory furnace, and compelled every occupant, whether willing or unwilling, to expose daily and nightly to a draught of air. The result was that sickness of every kind rapidly diminished, and one disease, typhus fever, which had frequently raged as an epidemic, became for eight years "scarcely known to the place."

In 1842, at Norwood School, in England, scrofula made its appearance among six hundred children, and destroyed a great number of them. The disorder having been attributed to an insufficiency and bad quality of food, a scientific investigation was

made, and a decision given that the food was most abundant and good - that "defective ventilation and consequent atmospheric impurity" was the cause of the sickness. A thorough system of ventilation was immediately applied, and scrofula rapidly disappeared, nor did it ever recur, though the number of pupils was gradually increased to eleven hundred.

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In a hospital in Dublin, 2,944 deaths took place in four years. A better system of ventilation having been resorted to as a means of lessening the mortality, it was found that during the next four years the number of deaths was only 279.

The above facts are merely selected from a long array of a similar character, which tend to show the paramount importance of breathing an uncorrupted atmosphere. It is certainly no exaggeration to say, that were the public as particular as they should be, and easily might be, about the quality of that subtle fluid which enters and departs from an average pair of human lungs about a thousand times an hour, and nearly nine million times in a year, the bills of human mortality would be reduced one-third at least, and the average duration of human life be nearer seventy than forty. - *Sel.*

DISEASE AND ITS CAUSES. Chapter 4 [EGW]

BY ELLEN G. WHITE.

WHEN severe sickness enters a family, there is great need of each member giving strict attention to personal cleanliness, and diet, to preserve themselves in a healthful condition, and by thus doing, fortify themselves against disease. It is also of the greatest importance that the sick-room, from the first, be properly ventilated. This will be beneficial to the afflicted, and highly necessary to keep those well who are compelled to remain a length of time in the sick-room.

It is of great value to the sick to have an even temperature in the room. This cannot always be correctly determined, if left to the judgment of attendants, for they may not be the best judges of a

right temperature. And some persons require more heat than others, and would be only comfortable in a room which to another would be uncomfortably warm. And if each of these are at liberty to arrange the fires, to suit their

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ideas of proper heat, the atmosphere in the sick-room will be anything but regular. Sometimes it will be distressingly warm for the patient; at another time too cold, which will have a most injurious effect upon the sick. The friends of the sick, or attendants, who through anxiety, and watching, are deprived of sleep, and who are suddenly awakened in the night from sleep to attend in the sick-room, are liable to chilliness. Such are not correct thermometers of the healthful temperature of a sick-room. These things may appear of small account, but they have very much to do with the recovery of the sick. In many instances life has been periled by extreme changes of the temperature of the sick-room.

In pleasant weather the sick in no case should be deprived of a full supply of fresh air. Their rooms may not always be so constructed as to allow the windows or doors open in their rooms, without the draught coming directly upon them, and exposing them to take cold. In such cases windows and doors should be opened in an adjoining room, and thus let the fresh air enter the room occupied by the sick. Fresh air will prove more beneficial to the sick than medicine, and is far more essential to them than their food. They will do better, and recover sooner, deprived of food, than of fresh air.

Many invalids have been confined weeks and months in close rooms, shutting out the light, and pure, invigorating air of heaven, as though air was a deadly enemy, when it was just the medicine the sick needed to make them well. The whole system was debilitated and diseased for want of air, and nature was sinking under her load of accumulating impurities, in addition to the fashionable poisons administered by physicians, until she was overpowered, and broke down in her efforts, and the sick died. They might have lived. Heaven willed not their death. They died victims to their own ignorance, and that of their friends, and the

ignorance and deception of physicians, who gave them fashionable poisons, and would not allow them pure water to drink and fresh air to breathe, to invigorate the vital organs, purify the blood, and help nature in

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her task in overcoming the bad conditions of the system. These valuable remedies which heaven has provided, without money and without price, were cast aside, and considered not only as worthless, but even as dangerous enemies, while poisons, prescribed by physicians, were in blind confidence taken.

Thousands have died for want of pure water, and pure air, who might have lived. And thousands of living invalids, who are a burden to themselves and others, think that their lives depend upon taking medicines from the doctors. They are continually guarding themselves against the air, and avoiding the use of water. These blessings they need in order to become well. If they would become enlightened, and let medicine alone, and accustom themselves to outdoor exercise, and to air in their houses, summer and winter, and use soft water for drinking and bathing purposes, they would be comparatively well and happy, instead of dragging out a miserable existence.

It is the duty of attendants and nurses in the sick-room to have a special care of their own health, especially in critical cases of fever and consumption. One person should not be kept closely confined to the sick-room. It is safer to have two or three to depend upon, who are careful and understanding nurses, and these changing and sharing the care and confinement of the sick-room. Each should have exercise in the open air, as often as possible. This is important to the sick-bed attendants, especially if the friends of the sick are among that class who continue to regard air if admitted into the sick-room, as an enemy, and will not allow the windows raised, or the doors opened. The sick, and the attendants, are in this case compelled to breathe the poisonous atmosphere from day to day, because of the inexcusable ignorance of the friends of the sick.

In very many cases the attendants are ignorant of the wants of the system, and the relation which the breathing of fresh air

sustains to health, and the life-destroying influence of inhaling the diseased air of a sick-room. In this case the life of the sick is endangered, and the attendants themselves are liable to take on diseases, and lose health, and perhaps life.

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If fevers enter a family, often more than one have the same fever. This need not be, if the habits of the family are correct. If their diet is as it should be and they observe habits of cleanliness, and realize the necessity of ventilation, the fever need not extend to another member of the family. The reason of fevers prevailing in families and exposing the attendants, is because the sick-room is not kept free from poisonous infection, by cleanliness and proper ventilation.

If attendants are awake to the subject of health, and realize the necessity of ventilation for their own benefit, as well as that of the patient, and the relatives, as well as the sick, oppose the admission of air and light into the sick room, the attendants should have no scruples of conscience in leaving the sick-room. They should feel themselves released from their obligations to the sick. It is not the duty of one or more to risk the liability of incurring disease, and endangering their lives by breathing a poisonous atmosphere. If the sick will fall a victim to their own erroneous ideas, and will shut out of the room the most essential of Heaven's blessings, let them do so, but not at the peril of those who ought to live.

The mother, from a sense of duty, has left her family to administer in the sick room, where pure air was not allowed to enter, and has become sick by inhaling the diseased atmosphere, which affected her whole system. After a period of much suffering, she has died leaving her children motherless. The sick, who shared the sympathy and unselfish care of this mother, recovered, but neither the sick, nor the friends of the sick, understood that precious life was sacrificed because of their ignorance of the relation which pure air sustains to health. Neither did they feel responsibility in regard to the stricken flock, left without the tender mother's care.

Mothers sometimes permit their daughters to take care of the sick in illy ventilated rooms, and, as a result, have had to nurse them through a period of sickness. And because of the mother's anxiety and care for her child, she has been made sick, and frequently

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one or both have died, or been left with broken constitutions, or made suffering invalids for life. There is a lamentable catalogue of evils which have their origin in the sick room, from which the pure air of heaven is excluded. All who breathe this poisonous atmosphere violate the laws of their being, and must suffer the penalty.

The sick, as a general thing, are taxed with too many visitors and callers, who chat with them, and weary them by introducing different topics of conversation, when they need quiet, and undisturbed rest. Many have made themselves sick by overtaxing their strength. Their exhausted energies compel them to cease labor, and they are brought to a bed of suffering. Rest, freedom from care, light, pure air, pure water, and spare diet, are all that they need to make them well. It is mistaken kindness that leads so many, out of courtesy, to visit the sick. Often have they spent a sleepless, suffering night, after receiving visitors. They have been more or less excited, and the reaction has been too great for their already debilitated energies, and, as the result of these fashionable calls, they have been brought into very dangerous conditions, and lives have been sacrificed for the want of thoughtful prudence.

It is sometimes gratifying to the sick to be visited and to know that friends have not forgotten them in their affliction. But, although these visits may have been gratifying, in very many instances these fashionable calls have turned the scale when the invalid was recovering, and the balance has borne down to death. Those who cannot make themselves useful should be cautious in regard to visiting the sick. If they can do no good, they may do harm. But the sick should not be neglected. They should have the best care, and the sympathy of friends and relatives.

Much harm has resulted to the sick from the universal custom of having watchers, nights. In critical cases this may be necessary; but it is often the case that more harm is done the sick by this practice than good. It has been the custom to shut out the air

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from the sick room. The atmosphere of such rooms, to say the least, is very impure, which greatly aggravates the condition of the sick. In addition to this, to have one or two watchers to use of the little vital air which may find its way to the sick room through the crevices of doors and windows, is taking from them this vitality, and leaving them more debilitated than they would have been had they been left to themselves. The evil does not end here. Even one watcher will make more or less stir, which disturbs the sick. But where there are two watchers, they often converse together, sometimes aloud, but more frequently in whispered tones, which is far more trying and exciting to the nerves of the sick than talking aloud.

Many suffering wakeful nights are endured by the sick because of watchers. If they were left alone without a light, knowing that all were at rest, they could much better compose themselves to sleep, and in the morning they would awake refreshed. Every breath of vital air in the sick room is of the greatest value, although many of the sick are very ignorant on this point. They feel very much depressed, and do not know what the matter is. A draught of pure air through their room would have a happy invigorating influence upon them.

But if they are afraid of air, and shut themselves away from this blessing, the little that is allowed to reach them should not be consumed by watchers, or lamp-light. Attendants upon the sick should if possible leave them to quiet and rest through the night, while they occupy a room adjoining.

All unnecessary noise and excitement should be avoided in the sick room, and the whole house should be kept as quiet as possible. Ignorance, forgetfulness, and recklessness, have caused the death of many who might have lived, had they received proper care from judicious, thoughtful attendants. The doors should be opened and

shut with great care, and the attendants should be unhurried, calm, and self-possessed.

The sick room, if possible, should have a draught of air through it, day and night. The draught should not come directly upon the invalid. While burning

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fevers are raging, there is but little danger of taking cold. But especial care is needful when the crisis comes, and fever is passing away. Then constant watching may be necessary to keep vitality in the system. The sick must have pure, invigorating air. If no other way can be devised, the sick, if possible, should be removed to another room, and another bed, while the sick room, the bed and bedding are being purified by ventilation. If those who are well need the blessings of light and air, and need to observe habits of cleanliness in order to remain well, the sick are in still greater need of them in proportion to their debilitated condition.

A great amount of suffering might be saved if all would labor to prevent disease, by strictly obeying the laws of health. Strict habits of cleanliness should be observed. Many, while well, will not take the trouble to keep in a healthy condition. They neglect personal cleanliness, and are not careful to keep their clothing pure. Impurities are constantly and imperceptibly passing from the body, through the pores, and if the surface of the skin is not kept in a healthy condition, the system is burdened with impure matter. If the clothing worn is not often washed, and frequently aired, it becomes filthy with impurities which are thrown off from the body by sensible and insensible perspiration. And if the garments worn are not frequently cleansed from these impurities, the pores of the skin absorb again the waste matter thrown off. The impurities of the body, if not allowed to escape, are taken back into the blood, and forced upon the internal organs. Nature, to relieve herself of poisonous impurities, makes an effort to free the system, which effort produces fevers, and what is termed disease. But even then, if those who are afflicted would assist nature in her efforts, by the use of pure, soft water, much suffering would be prevented. But many, instead of doing this, and seeking to remove the poisonous matter

from the system, take a more deadly poison into the system, to remove a poison already there.

If every family realized the beneficial results of

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thorough cleanliness, they would make special efforts to remove every impurity from their persons, and from their houses, and would extend their efforts to their premises. Many suffer decayed vegetable matter to remain about their premises. They are not awake to the influence of these things. There is constantly arising from these decaying substances an effluvia that is poisoning the air. By inhaling the impure air, the blood is poisoned, the lungs become affected, and the whole system is diseased. Disease of almost every description will be caused by inhaling the atmosphere affected by these decaying substances.

Families have been afflicted with fevers, some have died, and the remaining portion of the family circle have almost murmured against their Maker because of their distressing bereavements, when the sole cause of all their sickness and death has been the result of their own carelessness. The impurities about their own premises have brought upon them contagious diseases, and the sad afflictions which they charge upon God. Every family that prizes health should cleanse their houses and their premises of all decaying substances.

God commanded that the children of Israel should in no case allow impurities of their persons, or of their clothing. Those who had any personal uncleanness were shut out of the camp until evening, and then were required to cleanse themselves and their clothing before they could enter the camp. Also they were commanded of God to have no impurities upon their premises within a great distance of the encampment, lest the Lord should pass by and see their uncleanness.

In regard to cleanliness, God requires no less of his people now, than he did of ancient Israel. A neglect of cleanliness will induce disease. Sickness and premature death, do not come without a cause. Stubborn fevers and violent diseases have prevailed in neighborhoods, and towns, that had formerly been considered

healthy, and some have died, while others have been left with broken constitutions to be crippled with disease for life. In many instances their own yards contained

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the agent of destruction, which sent forth deadly poison into the atmosphere, to be inhaled by the family, and the neighborhood. The slackness and recklessness sometimes witnessed, is beastly, and the ignorance of the results of such things upon health is astonishing. Such places should be purified, especially in summer, by lime, or ashes, or by a daily burial with earth.

Some houses are furnished expensively, more to gratify pride, and to receive visitors, than for the comfort, convenience and health of the family. The best rooms are kept dark. The light and air are shut out, lest the light of heaven may injure the rich furniture, fade the carpets, or tarnish the picture frames. When visitors are permitted to be seated in these precious rooms, they are in danger of taking cold, because of the cellar-like atmosphere pervading them. Parlor chambers and bedrooms are kept closed in the same manner and for the same reasons. And whoever occupies these beds which have not been freely exposed to the light and air, do so at the expense of health, and often even of life itself.

Rooms that are not exposed to light and air become damp. Beds and bedding gather dampness, and the atmosphere in these rooms is poisonous, because it has not been purified by light and air. Various diseases have been brought on by sleeping in these fashionable health-destroying apartments. Every family that prizes health above the empty applause of fashionable visitors, will have a circulation of air, and an abundance of light through every apartment of their houses for several hours each day. But many will follow fashion so closely, they become slaves to it, and would suffer sickness, and even death, rather than be out of fashion. They will reap that which they have sown. They will live fashionably, and suffer with diseases as the result, be doctored with fashionable poisons, and die fashionable deaths.

Sleeping rooms especially should be well ventilated, and the atmosphere made healthy by light and air. Blinds should be left

open several hours each day, the curtains put aside, and the room thoroughly aired.

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Nothing should remain, even for a short time, which would destroy the purity of the atmosphere.

Many families suffer with sore throat, and lung diseases, and liver complaints, brought upon them by their own course of action. Their sleeping rooms are small, unfit to sleep in for one night, but they occupy the small apartments for weeks, and months, and years. They keep their windows and doors closed, fearing they would take cold if there was a crevice open to let in the air. They breathe the same air over and over, until it becomes impregnated with the poisonous impurities, and waste matter, thrown off from their bodies, through the lungs, and the pores of the skin. Such can test the matter, and be convinced of the unhealthy air in their close rooms, by entering them after they have remained a while in the open air. Then they can have some idea of the impurities they have conveyed to the blood, through the inhalations of the lungs. Those who thus abuse their health, must suffer with disease. All should regard light and air as among Heaven's most precious blessings. They should not shut out these blessings as though they were enemies.

Sleeping apartments should be large and so arranged as to have a circulation of air through them, day and night. Those who have excluded the air from their sleeping rooms, should commence to change their course immediately. They should let in air by degrees, and increase its circulation until they can bear it winter and summer, with no danger of taking cold. The lungs, in order to be healthy, must have pure air.

Those who have not had a free circulation of air in their rooms through the night, generally awake feeling exhausted, feverish, and know not the cause. It was air, vital air, that the whole system required, but which it could not obtain. Upon rising in the morning, most persons would be benefited by taking a sponge-bath, or, if more agreeable, a hand-bath, with merely a wash-bowl of water. This will remove impurities from the skin. Then the

clothing should be removed piece by piece from the bed, and exposed to the

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air. The windows should be opened, and the blinds fastened back, and the air left to circulate freely for several hours, if not all day, through the sleeping apartments. In this manner the bed and clothing will become thoroughly aired, and the impurities will be removed from the room.

Shade trees and shrubbery too close and dense around a house are unhealthy; for they prevent a free circulation of air, and prevent the rays of the sun from shining sufficiently through. In consequence of this, a dampness gathers in the house. Especially in wet seasons the sleeping rooms become damp, and those who sleep in the beds are troubled with rheumatism, neuralgia, and lung complaints, which generally end in consumption. Numerous shade trees cast off many leaves, which, if not immediately removed, decay, and poison the atmosphere. A yard beautified with scattering trees, and some shrubbery, at a proper distance from the house, has a happy, cheerful influence upon the family, and, if well taken care of, will prove no injury to health. Dwellings, if possible, should be built upon high and dry ground. If a house be built where water settles around it, remaining for a time, and then drying away, a poisonous miasma arises, and fever and ague, sore throat, lung diseases, and fevers will be the result.

Many have expected that God would keep them from sickness merely because they have asked him to do so. But God did not regard their prayers, because their faith was not made perfect by works. God will not work a miracle to keep those from sickness who have no care for themselves, but are continually violating the laws of health, and make no efforts to prevent disease. When we do all we can on our part to have health, then may we expect that the blessed result will follow, and we can ask God in faith to bless our efforts for the preservation of health. He will then answer our prayer, if his name can be glorified thereby. But let all understand that they have a work to do. God will not work in a miraculous manner to preserve the health of persons who are taking a sure

course to make themselves sick, by their careless inattention to the laws of health.

HOW TO LIVE [NUMBER FIVE]

DR. TRALL ON CLOTHING

PHYSIOLOGICAL NATURE OF CLOTHING. - It is an obvious physiological fact, that the more the whole surface of the body is exposed to the external air, within certain limits, the more vigorous is its functional action performed, and the better is it enabled to preserve its own proper temperature, as well as to resist all morbid impressions from vicissitudes of weather, or the extremes of heat and cold. Clothing, therefore, which the usages of society, and the severity of climates render indispensable, should, as an invariable rule, be as light and loose as possible without bodily discomfort. We must, however, recollect that comfort is very much a matter of habit, and make a due discrimination between the natural sensation of health and the morbid sensitiveness produced by false customs. Some persons wrap their whole bodies in flannel under-garments, and yet are ready to go into a "shivering fit" at every unusual breath of cold air; while others eschew those garments entirely, and endure the coldest weather of this climate, with much less discomfort.

MATERIALS OF CLOTHING. - The substance principally employed in the manufacture of clothing in civilized countries are, linen, cotton, silk, wool, and hair or down. These materials which are bad conductors of caloric, afford the greatest immediate protection from cold, as woollens or flannels; but, for the same reason, they are more debilitating to the cutaneous function; they are only to be preferred in cases of temporary exposure, or in very cold climates, or as a "necessary evil" in persons whose external surface is

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debilitated by bad habits of dress, until its vigor can be restored by bathing and other hygienic processes. Cotton and linen are better adapted to temperate climates, especially during the warm season;

and linen for under-clothes, is the best of the two in hot weather. Flannel next the skin, I am persuaded, is invariably hurtful as a habit. When woolen clothing is worn it should be the outside garments; these may be of any quantity or thickness necessary to keep the body comfortable, while cotton or linen only comes in contact with the skin. The discrepancies among medical authors on this subject, are almost ludicrous; some advocating the use of flannel next the skin, at all times in all seasons; others condemning it as a fruitful source of colds, coughs, pulmonic and rheumatic affections etc. "As regards the chest," says Sir George Lefevre, "a very light woolen waistcoat should not be dispensed with even in the dog-days." I would much rather prohibit it in winter than prescribe it in summer. In the last cholera season (1849) the New York Board of Health, by authority of their Medical Council, recommended, as among the preventive measures, "the wearing of flannel next to the skin," during the hot weather of June, July and August. And on this hint a medical adventurer has since invented medicated aprons and bandages to keep the bowels warm, or, as the proprietor says "retain the animal heat," and thus prevent bowel complaints. These notions are too absurd for serious refutation. Silk is a bad conductor, and for this reason females find silk dresses very uncomfortable in very warm weather. Furs are worn in this country more for ornament than use. They are the warmest clothing materials known and by overheating the part of the body to which they are applied, render it extremely susceptible to cold. Fur neckcloths, caps, etc., are very pernicious.

COLOR OF CLOTHING. - In a strictly hygienic regulation of dress, color cannot be wholly disregarded. White colors reflect the rays of caloric; black absorbs them. Light-colored clothing is therefore more comfortable and sanitary in warm weather than dark-colored, because

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the former repels the heat, and the latter readily receives and retains it. Various experiments have shown that the heat-reflecting or heat-retaining property of different fabrics, varies exactly with their lighter or darker shades of color. This difference is, however,

much greater in the luminous rays of light, than in the non-luminous. When, therefore, we are not exposed to the sun, the subject of color is of less importance. The absorbing power of dark surfaces renders the skins of dark-colored animals, as well as of the darker persons or races of the human family, less liable to be scorched or blistered by the direct rays of the sun, than are those of a lighter color.

PARTICULAR GARMENTS. - Fashion seldom consults hygiene in the matter of dress. The hat is generally too stiff, heavy and hot. It ought to be as light, and soft as possible, and as thoroughly ventilated as a bed-chamber. This could easily be accomplished without marring its beauty. The common neck-stock or cravat is one of the worst articles known: by confining and heating the throat, it predisposes to colds, rheumatism, quinsy, bronchitis, etc. I have known several persons in New York city, who were habitually the subjects of two or three severe attacks of quinsy a year, entirely cured by exposing the neck in all weathers, and bathing it daily in cold water. That the natural clothing of an unshaven beard is a protection against affections of the throat and lungs, I have no doubt. But if we will render ourselves preternaturally susceptible by shaving, we would not aggravate the susceptibility by binding up the neck with tight clothing. Females are generally debilitated by too heavy an amount of clothing about the back and hips. The custom with some females of oiling the hair, then combing it very smooth, and fastening it in a bunch on the top of the head, is very injurious to the scalp and brain; in fact, a common source of headache and nervousness. Stockings of cotton and linen are better than flannel, except when the feet are exposed to both extreme cold and moisture. Garters are a common cause of varicose veins in the lower extremities.

Fur gloves are a bad article; so are india-rubber shoes, except as over-shoes to slip on temporarily. Straps for fastening the pantaloons tightly to the boot or shoe, I believe are almost or quite out of fashion; it is well they are so, for they render all the motions of the body stiff and awkward, and cause an injurious pressure to

be exerted on the knee-pan and shoulders. Several cases of synovitis, attended with extreme weakness of the muscles around the knee-joint, have lately come under my notice, produced, without any doubt, by wearing pantaloons straps. Suspenders, when the trowsers are loose and easy, are not objectionable; although the sailor, whose vocation requires the utmost freedom from all restraint in the muscles of the chest and upper extremities, finds it more convenient to support the trowsers by the tightened waistband.

Custom has dealt more cruelly with infants than with adults in the style of clothing. Swathing, bandaging from head to foot with the view of getting the body in shape, and bandaging the abdomen to prevent the child from becoming "pot-bellied." are fashions happily fast going into disrepute, under the teachings of hydropathic and physiological writers. The new-born infant wants no bracing or supporting from the clothes. All the clothing required in infancy and childhood is easy, loose, flowing garments, sufficient to preserve the requisite temperature.

BED AND BODY LINEN. - It is always of importance that the bed and body linen be well aired daily, and frequently changed. Strict attention to the depurating function of the skin, requires that the under-garment or shirt worn during the day, should never be slept in during the night. The sheets, too, which collect more or less of the matters of perspiration, should be well exposed to the air every day. How often the shirts worn in the daytime require changing, depends something on the amount of exercise, perspiration etc.; generally two or three times a week are advisable.

GENERAL RULES. - The first physiological rule of dress is, to have all garments as light in texture and

as loose in fashion as is consistent with bodily comfort, and as will admit of the most perfect freedom in the exercise of every muscle of the body. The second is, to observe regularity and uniformity. Boots, shoes, hats, caps, thin and thick stockings, gloves, mittens, neck-dresses, head-dresses etc., when worn at all, should be always worn under similar circumstances - not indiscriminately changed

or alternated. As intimated in a preceding chapter, inequality of clothing is a far more frequent cause of "colds," than deficient clothing. If a person exposes a part of the body usually protected by clothing to a strong current of cold air, he will take cold sooner than by an equal exposure of the whole body. - *Hydropathic Encyclopedia*.

DRESS OF CHILDREN

MANY of the most serious consequences are conferred on the human race by bad management in infancy, and not unfrequently many diseases may be attributed to the mode of dress adopted by parents and nurses for their children.

The state of infancy and childhood is impatient of restraint, through the restless activity incident to youth, which makes it delight to be in perpetual motion, and to see everything around it. See the happiness and delight a child expresses, by its features, every time it is undressed and rubbed with a soft hand; observe the pleasure it experiences as soon as it is taken out of the fetters in which it is bound. It instantly ceases crying; no sooner is it undressed, than it begins to smile, and to show signs of joy; even though it should be hungry now, it proves by its joy and its movements, that it wanted liberty still more than the breast. Bandage it up again, it becomes uneasy, its countenance is sad, and its cries are renewed. It should be borne in mind that the sole object of clothing a child is for warmth, and not for the purpose of giving support, as is generally supposed. Upon the first sight of a new-born infant, every one is struck with the idea of its weakness and helplessness: it is

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designed to be weak and tender in its infant state, as indeed is every other object around us. Take a survey of nature, from the first opening leaves of vernal flower, or the more delicate foliage of the sensitive plant, to the young lion or the elephant; they are all in their several orders, proportionably weak, and can not exist without some exterior support. But they stand in need of nothing but what

nature has prepared for them. If seed be cast into a proper soil, it wants only the surrounding elements to insure vigor and maturity. So if the tender infant be born of healthy parents, and at its full time, it is usually sufficiently strong, proper food and nursing are the elements whose fostering influence it requires; if it have these, it will need nothing more.

It is true, the new-born infant is very weak; but is it, therefore, to be tightly rolled, under the idea of supporting it, and giving it strength? A child is nothing more than a mass of tender vessels through which a fluid is to pass, undisturbed, to be equally distributed throughout the body, and which are, therefore, surrounded by a soft medium, capable of yielding to the impetus of their contents. Hence we cannot but conceive how injurious any great pressure must be to so delicate a frame.

Nurses, indeed, appear to feel it a part of their duty to bind infants up with thick rollers, flannels, pilches, and wrappers, all ingeniously tightened and fastened, with so many strings and pins, that you feel amazed at beholding how adroitly they succeed in placing the poor little child in so much misery and confinement.

Looseness is very important in an infant's dress; there should be a free circulation of air between the skin and the clothes, as well as a slight friction upon the surface. All confinement distresses, and when it amounts to tightness, it may, and does frequently, occasion deformity before the evil is suspected. Full room should be allowed for the increase which is continually and rapidly going on. For this reason every part should be fastened with strings, the greatest care should be taken not to draw them too tight. And it is proper, after the strings

have been tied, particularly those under the chin, and round the waist, to ascertain by feeling with the finger that the dress is not drawn too tight. Pins should be used as seldom as possible. The growth of children is so rapid, it is proper to examine, frequently, their clothing, as a few weeks will make a great difference in relation to the size, and the pressure or restraint is often the cause of much crying and fretfulness; it is, therefore, proper that

children's dresses should be made so that they may be easily enlarged, particularly round the waist, throat, arm-holes, and across the chest and back. Bandages round the head, or tight caps, or anything which compresses the brain, should be strictly avoided. Many instances of idiotism, fits, and deformity, are owing to tight bandages; not unfrequently infants are very restless at night, owing to tight night clothes.

The more easily the dress can be put on and off, the better and more comfortable for the child; there should be no other fashion than what is dictated by convenience and comfort. The fashion of long clothing or skirts confines the infant, and prevents the activity of the limbs, so essential to a free circulation of the blood and advancement of its growth. Loose gowns, fastening in front, are therefore preferable to frocks, for two or three months, however less fashionable. All unnecessary tight or stiff clothing should be avoided; every thing which surrounds the body of an infant should be soft, and of yielding nature, so as to prevent any painful pressure upon the muscles or bones, or excoriation or chafing of the skin. Every article of the child's dress should be made and arranged - regardless as to fashion - so as to be adapted to its comfort and health; this will be found to consist in guarding against the variations of external temperature, in preserving a genial warmth for the maintenance of the various functions, and in protecting the body and limbs against external injuries. Pride and fashion must always be laid aside when it interrupts the comfort of health of the child. This, however, unfortunately is not the case with some foolish mothers, who would rather risk the life of their infants

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than deviate from the last style of dress which Madame Humbug has lately received from Paris.

Were it possible for us to visit our fashionable circles, we should behold the embroidered lace, worked ruffles, and stiffly starched linen, scratching and chafing the tender skin of the poor infant, with some important regions of the body entirely unclothed and exposed, and others superabundantly clad, and amidst this empty pride, every consideration of comfort, and the health of the child,

is entirely overlooked. On the contrary, a course nearly opposite is pursued by those filling the humbler walks of life, whose means are not adequate to the ever-varying demands of fashion, and who have the satisfaction of seeing their children in the enjoyment of uninterrupted health and vigor of constitution, by pursuing a course from which their circumstances will not permit them to deviate; and this is usually the cause that health is, in particular, the blessing of the poor, while the rich are more generally the subjects of disease.

One of the most important parts of an infant's clothing is a soft flannel bandage, commonly called the belly-band, which is intended to give support to the abdomen or belly, particularly the naval; and it likewise supports the internal covering of the intestines, and prevents the child from any distension, or, in plain language, a big belly.

In putting on this support, or bandage, you must recollect that there is distinction between support and pressure; the first is very important to health, the second is the cause of many serious diseases, such as rupture, which is owing to neglect or ignorance in putting it on properly, so as to avoid pressure, or, in plainer language, tightness. Besides, the action of the bowels is impeded by this compression, occasioning great pain and costiveness. It should be taken off morning and night, and put on smooth and carefully, and a clean one put on every two or three days, as it is apt to get wet and rumped, and unfit for use till washed and ironed. With some children I have found it necessary to use it for many months, to prevent an enlargement of the abdomen or belly, and delicate

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children are sustained by it in their attempts to sit up.

As regards the quality of clothing best suited to the infant, flannel is perhaps more extensively and advantageously used than any other article of which clothing for children is made. Public sentiment, as much as it is perverted on many subjects connected with the management of infants, appears to be right on this.

The superiority of flannel to other substances used, consists, 1. "In its protecting power against sudden reduction of temperature;"

i.e. its non-conducting power prevents the natural heat escaping from the surface of the body when the surrounding temperature is materially lower; wool being a better non-conductor of caloric than flax or cotton, is consequently better adapted to the purposes of wearing in cold or variable weather. 2. In guarding the body against the cooling effects of evaporation. When the surface of the body is bedewed with perspiration, the flannel prevents too rapid an escape of the warmth from the body; and as it passes off gradually, the moisture is absorbed by the flannel, whence it evaporates from the body imperceptibly. Thus it is perceived, that the temperature of the body can be but little affected during the process of "drying up the sweat," as it is called, which must be otherwise, were linen or muslin employed in its stead, because they conduct off the heat much more rapidly, and absorb the moisture with less facility; hence a cold dampness must of course pervade the surface of the body during the drying process and hence the advantage of flannel next to the skin. 3. In producing over the surface of the body a healthful and "agreeable irritation," by means of which insensible perspiration is advantageously promoted - a function indispensable to the health of the child; its use, in this respect, approaches in effect that of the flesh-brush; by producing this grateful action upon the skin, it equalizes the circulation; the blood is being constantly invited to the surface, which lessens the liability to congestion of the internal organs, by its being thrown upon them in too great abundance.

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From these considerations it is evident that flannel next to the skin, in cold and variable seasons, not only adds to the comfort, but also exerts a salutary influence on the health of the child, so much so, that its adoption cannot but be considered an important, if not an indispensable item in the successful management of the infant.

Flannel is to be preferred for children; it keeps the body in that degree of heat which is most agreeable, as well as most suitable to the functions and actions of health. The perspiration is necessarily increased; the matter perspired is conveyed through the flannel to the atmosphere, and the skin remains dry, warm, and comfortable.

Flannel co-operates with the powers of generating heat in living systems, and thus constantly preserves us in that temperature which is most pleasurable, as well as most natural and beneficial.

Doctor Dewees, Professor of Midwifery, of Philadelphia, says: "There is a very common error upon the subject of flannel, which deserves to be corrected; namely, that it can remain longer dirty, without doing mischief by the filth, than any other substance; but in this there is no truth - flannel, from its very texture, is capable of absorbing a great deal of fluid, which it will retain so long, if permitted, as to allow a fermentative process to go on, and gives rise to the extrication of some deleterious gases; therefore flannel should not be worn even so long, on this very account as linen substances.

"The flannel should always be of the white kind, where the circumstances of the parents will permit it - not that the first cost of the white need be greater than that of the colored, but because it will, for the sake of the eye, require to be more frequently changed, as it will more readily show any dirt that may attach to it; but, for this very reason it should be employed, whenever it be practicable. Another reason may also be assigned: the white can always be procured of a finer quality, which sometimes," - we would say always - "is desirable."

The principal articles of clothing are to be made of

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fine flannel; they generally are called the underclothes; fashion, caprice, or fortune may regulate the rest, provided the garments for the feet and legs to be excepted.

We are confident that if more attention were bestowed on the real necessities and wants of children in this particular, or, in plain language, suitable clothing, and the system preserved from sudden changes, infantile suffering would be greatly diminished, to say nothing of the long list of chronic complaints by which it is to be tortured in after years, and its whole life doomed to wretchedness and misery by fashion, and neglect in preserving a uniform warmth over the whole body and limbs, as a legitimate means of insuring health and comfort to the child. - *Gunn's Home Book of Health.*

AN APPEAL TO MOTHERS

MUCH has been said to mothers on the education of children, and much which ought to be imprinted on the heart, as with the point of a diamond. But there is one part of the lesson, which if noticed at all, has been superficially glanced over, as tangible only in the physician and anatomist: I mean the physical education of children; I mean the mechanism, in all its bearings and uses, and the best helps to keep its ten thousand strings in harmonious tune.

The untiring assiduity with which the mother watches over the tender infant, is a strong indication that nature has peculiarly adapted her for an office, which no one can so effectually fill. Yet thousands have withered in the mother's arms, and generations have gone down to the dust, not by neglect, but through profound ignorance of the simplest, and plainest laws of our nature; *simplest*, because it does not require the ingenuity to trace nature in her untrammelled windings, as it does to devise the artificial helps, which serve only to retard her healthy progress, and pervert all her rational laws. When the watchful mother sees the high flushed cheek, and feels the accelerated pulse, what

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does she do? She immediately sets about devising specifics; and when this and that fails, she applies to her physician, without scarcely thinking of inquiring the cause, which requires not half the skill to trace, as to seek out effectual remedies. Disease does not come by miracle. Look at the vegetable kingdom. Does the shooting tree ever wither in its first putting out, without some blighting frost - some scorching fire - some worm at the root - or some knife of the mischievous truant is applied? No; it blooms on, beneath the genial sun, and distilling dews, till matured into the wide-spreading tree, lodging the fowls of the air, giving shade to the way-worn traveler, and braving tempests of years, and sometimes centuries. So in the animal kingdom. The lamb frolics in the meadows; the birds sing and hop among the branches; and do they feel pain? No; unless tamed and domesticated by man, they are free

as the air they inhale, and their blood is as pure as the water they love. And should you, mothers, love to see your little ones sporting about you, in the sunshine of health; should you love to see their beaming eyes kissing the first dawning of light, with the happy lark; should you delight to see their expanding minds, drinking copious draughts at the perennial fount of knowledge, with untiring zeal? *You may have it so, if you will*; only learn that "nature's wants are few." And do you ask what they are? They are the pure breezes of heaven; the limpid waters that emanate from ten thousand hills; the nectarine milk from the lowing herds; the blushing orchards, and the whitening harvest of grain, to provide bread "to strengthen man's heart." These are the rich bounties of Heaven scattered with a liberal hand, wherever the industry of man has been applied, and they bring no alloy.

But does the mother ask, "How am I to secure all these blessings of health to my children, unless I am a physician?" *Then be a physician.* This is no difficult task. A few simple lessons are to be learned, and the work is done; and these lessons are almost, if not entirely inherent in our natures.

When the infant is put into the mother's hands,

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what does the Master say? "Take this child and bring it up for me. It is the chief of all my work. I have 'fenced it about with bones and sinews.' I have clothed it with flesh. I have placed sentinels at every dangerous post. I have provided food convenient for it, and to you I commit this charge. *See that you mar not my handiwork.*"

Now, what is the mother to do? If she be a judicious one, or one of common observation, she knows that milk is the wholesome nourishment provided for all its wants; she knows that this alone will give proper strength, and facilitate its growth; she knows that the body must be washed in pure water; that it must have quiet sleep, and be kept free from ligatures, so that its breathing may be free, and its growth natural. Now, as I am speaking to the judicious mother let me ask, what more does her infant want in the first months of its existence? Does the regular-moving machinery need any tonics, any decoctions of tea, coffee, or warm toddy, to

accelerate its motions? Does the healthy throbbing of its little heart need any urging forward, or its tender brain want steeping in any of these fumes? Let common sense answer. Let the aborigines of any country answer, who have followed nature in all its bearings. Then, as this is all the needed medicine, can you not be the physician?" - *Health Journal*.

BEACH AND CLOTHING

THOSE who wish to pay a due regard to their health, must attend to their clothing. It should be adapted to the climate, the season of the year, age, etc.

CLIMATE. The principal object of clothing is to preserve a right temperature of the body. Hence persons in very cold climates require much more clothing than those in warm. Custom or habit, however, has a great influence. The natives of this country live throughout the most rigorous winters almost without any clothing, while we apparently experience

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more suffering with a very great quantity of clothing.

AGE. Youth, in consequence of the rapid circulation of the blood, requires less clothing than middle and old age.

SEASON. The dress should be adapted to the season of the year, as every one knows that winter requires much more clothing than summer. But the greatest caution is necessary to make the change very gradually. Woolen garments should be put on early in the fall, and worn late in the spring. This is the more necessary, by reason of the sudden and great changes of our climate: one day the thermometer rises to a hundred, the next it sinks to forty; which racks the constitution, and proves very destructive to health. These vicissitudes must be guarded against by proper clothing, which should never be very thin even in midsummer.

FASHION AND FIGURE. More consequence is now attached to figure and form than to health and convenience. Persons must dress fashionably, no matter how ridiculous or dangerous it may prove. Hence fashion and shape are continually changing, without

regard to health, climate, or comfort. In order to *reduce* the body to a *fine shape*, the stomach and bowels are *squeezed* into as narrow a compass as possible. By this reprehensible practice, indigestion, fainting, coughs, consumption and other complaints are produced.

BANDAGING, ETC. Garters, when drawn too tight, not only prevent the free motion and use of the parts about which they are bound, but likewise obstruct the circulation of the blood, which prevents the equal nourishment and growth of these parts, and occasions various diseases. Tight bandages about the neck, as stocks, cravats, necklaces, etc., are extremely dangerous. They obstruct the blood in its course from the brain, by which means headaches, vertigoes, apoplexies, and other fatal diseases are often occasioned.

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QUANTITY OF CLOTHING. A judicious physician, in speaking upon this subject has the following excellent remarks: "Robust persons are able to endure cold better than the delicate, and, consequently, may clothe lighter; but the precise quantity of apparel which may be necessary for any person cannot be determined by reasoning; it must be entirely a matter of experience; and every person is the best judge for him or herself, what quantity of clothes is necessary to keep him or her sufficiently warm and comfortable.

"While treating on clothing, I would recommend to every person to be careful in observing that their clothes are properly dried previous to being put on. This precaution will be particularly necessary in the winter months, as washer-women are then obliged to dry chiefly by the heat of a fire, and this is apt to be very imperfectly done. Many lives are annually sacrificed by persons putting on damp linen, as well as by sleeping in sheets not properly dried.

"Due care should be taken to change the stockings and other clothing as soon as possible after their becoming wet by any exposure to inclement weather, rain, snow, etc. Many persons are so imprudent as to neglect this very necessary change, and to suffer their clothes, after such an exposure, to dry on them, assisted

probably by going near a fire for some time; but such a practice is always attended with risk, and not unfrequently gives rise either to rheumatism, fever, pleurisy, cough, consumption, or some other disease of a dangerous or even fatal nature."

In the sultry days of summer every precaution should be taken that the body be not suddenly exposed to cold when overheated by exercise, by throwing off a portion of the clothing, as is customary with many.

It is lamentable to see the great departure there is now from the former modes of dress, as well as in other respects. Our ancestors were in the practice of dressing very warm and comfortably - stout cloaks, thick shoes, etc., - and they, in consequence, were healthy. In these days it is the reverse. By the

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present mode of fashion in dress, thousands of females are injured, if not killed.

In concluding this chapter, I will quote the remarks of Buchan on this subject. "Nothing," says he, "can be more ridiculous than for any one to make himself a slave to fine clothes. Such a one, and many such there are, would rather remain as fixed as a statue from morning till night, than discompose a single hair or alter the position of a pin. Were we to recommend any particular pattern for a dress, it would be that which is worn by the people called Quakers. They are always neat, clean, and often elegant, without anything superfluous. What others lay out upon tawdry laces, ruffles, and ribands, they bestow upon superior cleanliness. Finery is only the affectation of dress, and very often covers a great deal of dirt."

The remarks of the celebrated Cobbett on dress occurs to me, and, although not immediately connected with the preservation of health, affords a useful lesson. "Let our dress be as cheap as may be without shabbiness; attend more to the color of your shirt than to the gloss or texture of your coat; be always clean as your situation will, without inconvenience, permit; but never, no, not for one moment, believe that any human being with sense in his skull, will

love or respect you on account of your fine or costly clothes." -
American Practice.

GRAHAM ON CLOTHING

CLOTHING, then, is an evil so far as it prevents a free circulation of pure air over the whole surface of the body, or in any manner relaxes and debilitates the skin, and increases its susceptibility to be unhealthily affected by changes of weather and by the action of morbid agents; it is an evil so far as, by compression or otherwise, it prevents a free and equal circulation and return of the blood; it is an evil so far as it prevents the free action of the chest and lungs, or in any manner or measure restricts respiration; it is an evil so far as

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it interferes in any degree with the digestive organs; it is an evil so far as it prevents the most perfect freedom of voluntary action, and ease and grace of motion and attitude, or prevents the full development of any part of the system, or serves by the substitution of artificial means for natural powers, to relax and to debilitate the muscles, or render the tendons, ligaments, cartilages, and bones, less healthy and powerful or in any measure to abridge the control of the WILL over any organ of voluntary motion; it is an evil so far as it serves to increase the peculiar sensibility of any organ of animal instinct, and to augment the power of that instinct on the intellectual and moral faculties; it is an evil so far as it serves to enfeeble the intellectual faculties, and render the mind sluggish and sensual; and it is an evil so far as it serves to excite an unchaste imagination, and cause the sexes to act towards each other more from the impulse of animal feeling than from the dictates of sound reason.

The application of these general principles to the regulation of clothing is perfectly easy, and cannot lead any intelligent mind into error. It requires - 1st, that whatever climate man may inhabit, he should endeavor to preserve that state of general health and vigor of body which will render the least quantity of clothing necessary

for the preservation of a healthy temperature; 2nd, that the materials used for clothing should, as far as consistent with the proper temperature of the body, be such as serve in the least degree to relax and debilitate the skin, and through it the whole system; 3rd, that the clothing should be so adjusted as in the greatest possible measure consistent with the proper temperature of the body to admit of a free access of air to the whole surface, and of the most perfect freedom of circulation, respiration, and voluntary action, and attitude; and 4th, that the fashion of the clothing should be such as in the least possible degree to excite an impure imagination.

After having so fully laid down the general principles in regard to clothing, it is hardly necessary that I should say that corsets, stays, garters, and every kind of ligature or compression, and all kinds of tight

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dresses, should be avoided, and especially by the young and growing, whose bodies are very easily and almost inevitably diseased, deformed, and distorted, to a greater or less extent, by such unnatural means. The growing body should be free as the air. The flowing robes of the ancients were incomparably more favorable to health and more graceful than modern dresses.

Much has been said by certain writers on hygiene, in favor of wearing flannels next to the skin; and undoubtedly there are particular cases in which the habit being formed, had better be continued, than too suddenly abandoned. Yet it is certain that woolen serves to excite, relax, and debilitate the skin, and through it the whole system, and thereby to increase the very evils which it is worn to prevent, more than cotton, linen, and silk. While, therefore, I leave invalids and individuals to govern themselves on this point according to their particular circumstances and state of health, I lay it down as a general rule, with reference to the permanent interests of the human constitution, that it is better not to wear woolen next to the skin, when cotton, linen, or silk undergarments can be had.

What I have said concerning the regulation of the temperature of the body by means of clothing, is true in regard to the use of fire. In all cases it relaxes and debilitates the system, and diminishes the power of the body to regulate its own temperature; and therefore physiological interests of our bodies require that we should, as far as possible, keep them warm by their own healthy and vigorous calorific function, and only use fires as a necessary evil, and under such regulations as will not expose us to greatly unequal temperatures at the same time, or to powerful heat on one side and severe cold on the other. Our rooms should be so warmed as to be of mild and equal temperature in every part. - *Lectures*.

BREAD is the staff of life, and liquor the stilts - the former sustaining a man and the latter elevating him for a fall.

WORDS FROM HORACE MANN. EXTRACTS FROM HIS LECTURES

"THE ignorance of God's laws must have been unfathomably profound, when delicacy of health, and fragility of frame, and tenuity of form became elements of female beauty; when chalk was chewed, and sirloin eschewed, in order to get the true graveclothes complexion; when the lady in the parlor cast her ruddy cheeks, with her faded calicoes, to the servants in the kitchen; when women were ashamed of freckles on the face, but not of tubercles on the lungs; when mothers were ashamed of a child dirtily clad, but not ashamed of a sickly one; and when they protected their daughters against the life-giving breezes of the north-west, with defence upon defence, and shelter above shelter, until, at last, they gave them the deep shelter of the grave; and when daughters were taught to become emulous of pallor and leanness, to recline upon sofas and ottomans, until, for all useful purposes, they lost their classification among the vertebrate species, and to persecute and expel health and strength from the limbs, by inactivity, and from the brain by novel-reading, until they came, at last, to retain only the semblance of an understanding at either extremity.

Young describes the ghost-women, as follows:-

'The languid lady next appears in state,
Who was not born to carry her own weight,
She rolls, reels, staggers, till some foreign aid
To her own stature lifts the feeble maid.
Then, if ordained to so severe a doom,
She, by just stages, journeys round the room;
But, knowing her own weakness, she despairs
To scale the Alps, - that is, ascend the stairs.
My fan! let others say, who laugh and toil;
Fan! hood! glove! scarf! is her laconic style;
And that is spoke with such a dying fall,
That Betty rather sees than hears the call.
The motion of her lips and meaning eye
Piece out th' idea her faint words deny.
O, listen with attention most profound!

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Her voice is but the shadow of a sound.,
And help! O, help! her spirits are so dead,
One hand scarce lifts the other to her her head.
If, there, a stubborn pin it triumphs o'er,
She pants! she sinks away! and is no more.
Let the robust and the gigantic carve,
Life is not worth so much, she'd rather starve;
But chew she must herself; ah, cruel fate!
That Rosalinda can't by proxy eat.'

"According to the plainest laws of health and hereditary descent, how imbecile and worthless must be the offspring of this phantom-class of women, when compared with

'Such as the Doric mothers bore!'

"Another result of the proper education of woman would be a revolution in dress. Lest I should seem to cross the line of demarcation between the sexes which I have endeavored to draw, I

shall make but few remarks on this subject; and these as far as I am able, will be of didactic character, and, in substance, as applicable to men as to women.

"In the first place, dress is to be treated of as a necessity. Nature has provided other animals with a covering, - feathers, fur, wool, or other vesture. But man is born nude, while provision is made for the greatest profusion and elegance of the materials of clothing. By this arrangement, Nature seems to pay us the compliment of saying, 'Choose your own wardrobe, and fit, diversify and color it as you will,' - a compliment, I am sorry to say, we have as yet given so little proof that we deserve.

"In the next place, the Forms and Materials of Dress should always be made rigidly subservient to the Laws of Health. No garment should ever be allowed to interfere with entire freedom of locomotion, or with the natural action of any bodily organ, or with the perfectly free circulation of the blood. Dress should be used to moderate the extremes of heat or cold, according to the climate of the wearer; and to ward off just the excess, and no more, of those inclemencies and violences of the weather, which the

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the system has not yet been trained to bear. And inasmuch as an inability to dress and undress one's self is always held, in courts of law, to be one of the proofs of idiocy, all dresses should be so made, that the wearer can put them on and off without assistance, at all times, as well as in perils of fire or drowning. In all these respects, dress is one of the Useful Arts.

"And thirdly, dress is one of the Fine Arts. Surely, whatever requires taste and imagination, in addition to knowledge, - whatever admits and courts a display of the harmonies of coloring and the symmetries of form, - belongs to the province of Beauty, and is therefore to be ranked with the Arts of Embellishment. Contrast the elegance of one style, where all the colors blend and harmonize, like those in the petals of a flower, or in the hues of the iris, and where all the motions seem copied from the waving of willow-branches or from ascending flame, with the viciousness of another, where the colors are clapboarded on in stripes of red and

yellow or black and white, and where the motions are all as angular and spasmodic as the most jerking eccentrics of a machine-shop.

"But dress is degraded from a useful art into a harmful one, and from a fine art into a vulgar one, whenever it is allowed to abate one jot or little from the beauty and the utility of Health. The laws of health come from God; the laws of fashion, from the Paris milliners. Is it not most lamentable, that when the command goes forth to the women of the land, 'Choose ye this day which ye will serve,' they have so uniformly responded, 'The Paris milliners?'

"Health, then, is the paramount law of dress; comfort is always coincident with health; and, to the eye of an intelligent observer, nothing can ever be beautiful, everything is always odious, that interferes with either. Why should one wrap the furs of sable or ermine over shoulders and chest, while with the two-fold simplicity of kid or sheep, she covers her feet with but half the thickness of its pelt? When there is no law of nature more certain than that the highest radiance and charm of beauty can emanate only from the highest health, why should the limbs

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ever be tormented by ligature, or the vitals by compression, as if Heaven could be gained only through the penance of cadaverousness and languor? - Why should that exquisite shape which the cunning hand of nature has moulded with wavy outline of form, and graced with undulating flow of motion, beautiful as the swell and lapse of moon-lit waters, be cut up sharply into conic sections, or be be-bishoped or be-bustled as though the very genius of deformity had gone mad? I have read an anecdote of a Moslem priest in an oriental city, who, on seeing a French belle in the streets, fresh from parisian shops, called his daughter to him, and moralizingly said, 'My daughter, when you forget Allah, and Mahomet his prophet, may you look like that woman! In fine, had not woman better retain what similitude she can to that form which the Creator moulded, until milliners and mantua-makers shall authenticate their title to change it, by some less pernicious miracle, than the destruction of beauty and life through the 'evil eye' of Fashion?

"With one further reflection, I leave this fertile but unpleasant topic. Surely the bitterest woman-hater could devise no sharper sarcasm against the sex, than to exhibit an historic gallery of female fashions chronologically arranged, from year to year and from age to age. The fashions of man's dress have been almost incredibly grotesque and absurd; but he, having less natural beauty than woman, could never bear so much caricaturing and spoiling as she. What incomputable wealth has been squandered, and what myriads of lifetimes thrown away, in inventing new modes of deforming the natural form, and in turning its beauty into ugliness! Take the human figure, as God causes a healthy one to grow, and you have a standard which has the venerableness of the ancient and the novelty of the modern, and one, too, which nature pronounces to be 'modish;' but when we once abandon this standard, we wander, without pattern or model, amid the endless caprices of folly. Hence those vagaries of fancy, those distortions like the images of a painful dream, and those dyspeptic imaginations

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which have been embodied in fashionable dress! Is the world a Lunatic Hospital, that sometimes a lady's dress should be twice her height, and anon but half of it; that sometimes it should expand to the orbit of a farthingale, (when surely there was no want of amplitude in 'woman's sphere,') and then be shrunken into swaddling-bands; that sometimes it should be trailed downwards to sweep the earth, and then built-up, turret-like, on the top of the head, - so that, as Addison said of the women in his time, their faces were in the middle of them; and that sometimes the neck should be be-ruffed and be-puffed in the Elizabethan style, and then laid bare, with a vast anatomical mistake as to its nether boundary. This last unseemliness, happens to be the shame of our day. When that Turkish officer Amin Bey, on his late visit to this country, attended some fashionable parties at Washington, he remarked, that on going into our society, he expected to see *as many* of American ladies, but not *as much*. The more private exposures of the Model Artists were broken up as a scandal; but they have

amply revenged themselves by taking many other spirits worse than the first, and going on public exhibition at Carusi's and Papanti's, at all assemblies and ball-rooms.

"I regard this monthly lunacy, too, in the changes of dress, as even more reprehensible in its motives than distasteful in its forms. The ignoble purpose is to make a display of superior wealth, or to arrogate a higher caste, and thus to enforce upon others a sense of inferiority. Now, such motives, or emotions, all benevolent and Christian hearts must repudiate with abhorrence. It is the first impulse of a truly noble man, to temper himself to the condition of the inferiors whom he meets. He seeks to assuage the envy of bad minds, and the mortification of good ones, at the contrasts between his riches and their poverty, his elevation and their lowliness. A benevolent person will never put on airs of learning before the illiterate, nor of knowledge before the ignorant. He does not habit himself in his richest, but his poorest garb, when he is to meet the humble and lowly in their mean

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attire. I would forbear to speak of my keen eye-sight in the presence of the blind, to make known my acute hearing to the deaf, and I would moderate my steps in passing a lame man, so that the painful idea of his own privation need not be forced upon him. There is no littleness more little, nor despicableness more despicable, than the ostentation or covetable qualities before the consciously inferior. However high a man may seem to be raised by any enviable attribute or possession, the meanness of striving to make it an ostentation or a boast, proves that his real nature is antipodal to the accidents of his position. Yet, these contemptible and criminal motives in regard to dress are the very life and power of that hollow Olympus, where dwell the lawgivers of fashion. In these motives originate those changes of dress, which come, as other lunacies were once supposed to come, with a change of the moon. Hence the discarding of a dress, as soon as it is seen to be worn or imitated by those in a supposed inferior condition. Hence, too, the low malice of equipping a servant in the costume of a rival "Lady Patroness;" and the spirit, equally low, that cares for it.

Among the infinite of remorse and mortifications which will throng around the death-bed and the judgment-day, will there be anything that can make the offender feel quite so mean, as the retrospect and exposure of a life spent in the vulgar ostentation of dress, and in striving to make fellow-beings feel inferior for no better reason than because they happened to be clothed from a different set of animals and plants?"

Again Mr. Mann says:

"My regard for woman is too exalted and sincere to insult her by adulation. Duties lie all along the glorious vista into which I would lead her. I call for strength and endurance in all her frame; for fervor and a celestial enthusiasm in all her faculties; for toil and self-sacrifice, and the burning of the idols which the world now worships; because it is up the Mount of Transfiguration that she is appointed to ascend. I summon her to the services of a holy Temple, in whose very

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vestibule she must enrobe herself in the shining garments of Knowledge and Love.

"One cannot discuss any part of this subject without encountering upon the threshold the modern question of 'Woman's Rights.' An epicene school has arisen in our day, whose creed is, that the sexes are equal; that nature has endowed them both with equal faculties and equal capacities for thought and for action; and hence, that all departments of business, all pursuits and all professions, are a common arena where both may enter and wrestle for all the prizes of life. The leader of this sect, in Europe, is Miss Helen Maria Weber, (or, Helen Maria Weber, Esquire), of Brussels, in Belgium, who dresses like a man, in a strait-bodied coat of blue broadcloth, with shiny buttons, buff vest, and biped continuations. According to this theory of equal powers, equal duties and equal adaptations for the performance of duty, the only noteworthy difference between the sexes is that which cunning tailors and mantua-makers have made, and still manage to maintain, in order to increase their custom; and the old saying that 'the tailor makes the man,' so far from being a sarcasm, is but half the truth; for he

makes men and women both, and the sexes are at his mercy; for, by the cut of his shears he can turn a man into a woman, or a woman into a man, according as he makes the nether portion of their garments bifurcate or cylindrical. ⁵¹

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"But, as it seems to me, one great and incontestable fact, - a fact of which the Creator himself is the immediate and ever-repeating author, - a fact which is embodied in our bodies, inspired into our spirits, and organized into our whole organizations, - settles this question at once and forever. God created the race, Male and Female, ON THE PRINCIPLE OF A DIVISION OF LABOR. Each sex is so far from being the other, that each is necessary as the complement of the other. It takes both to complete either. The relation of unlikeness is as remarkable as the relation of likeness between them. They are the subject of contrast, as much as of comparison. From the crown of the head to the sole of the foot, there is not a vital organ in the two, which, by its form, locality or function, would not reveal to the anatomist to which sex it belongs; and the subtler analyst of mind and heart will discover corresponding differences in all aesthetical and spiritual endowments."

DRESS

A NATURAL and symmetrical woman has ever been regarded as the most beautiful object on earth.

Artists and poets have given their most exalted inspirations to the portrayal of her matchless charms. But, strange and morbid fancies, dignified with the title of *fashions*, have been busy in destroying what God made perfect.

The most destructive of these fashions is found in a peculiarity of her dress. I refer to the practice of compressing the middle of the body. This strange.

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fashion has come into vogue only quite recently in the history of the world, and even now prevails in only a few of what are known

as the more civilized peoples, but is producing an amount of disease and suffering, which no finite mind can measure.

When one undertakes to fathom the reasons, or mystery of this fashion, he is lost. Why intelligent beings should, without regard to convenience or comfort, strive to change the shape and proportions of the most beautiful of all the Creator's works, we cannot understand.

By this practice the lungs and heart are forced up toward the throat; the stomach, liver, and other organs, jammed down far into the abdomen; labored respiration and numberless abdominal maladies are the consequence. But the votaries of fashion declare, notwithstanding these shocking deformities and sufferings, that they regard a female form in the hourglass shape as really beautiful. A few years ago this monstrous perversion of taste was well nigh universal. With sincere gratitude, we observe it is now gradually disappearing.

This contraction of the middle of the body, by changing the position of the lungs, heart, liver, stomach, and every other organ within the body, not only seriously interferes with their functional integrity, but almost invariably produces a distortion of the spine. It is impossible to reduce the size of the waist by pressure, to any considerable extent, and not draw the shoulders forward and downward, producing, of course, a change in the form of the spine. I believe, that among the thousands of wasp-waists that have fallen under my observation, I have not seen ten who did not habitually carry the spine and head in an unnatural attitude. Besides this, the influence upon the organs in the lower part of the abdomen, furnishes the medical profession nearly half its business.

The corset is a cruel invention. It ought at once and forever to be abandoned. Even if it be worn loose, (what lady does not wear hers loose?) its stiffness entirely prevents that undulating motion about the middle of the body, which should accompany respiration.

But if it be worn as loosely as it must be to allow entire freedom to the lungs, it would give an unseemly appearance to the dress. In

fact the very structure of a corset renders a close fit indispensable. Every conscientious physician has painful struggles with this fashion.

A fashionable lady has just called upon me with reference to her lungs. I examined her dress. There was the corset, not as close as I have seen, but close enough to make her cure difficult or impossible. I said at once, "I can do nothing for you while you wear such a dress." "Why doctor do you call that tight? Why, that fairly hangs on me." "Yes, madam, I hear that every hour. Have you a husband?" "Yes." "And is he a healthy man?" "Indeed, he is as healthy a man as you would care to see." "Do you think, madam, he could wear such a dress as you have on, and continue his business?" "O, no! but then he is not used to it." "Do you think you know a horse, ox, or any other animal, that could wear such a dress about the vital organs, and continue to labor in comfort?" "Well, doctor that is a funny question. I am sure I can't say, but I suppose no animal could wear such a dress." "You are quite right; neither the strongest man nor the strongest ox could endure such pressure about the vital organs, and not fail. Ladies delicately born and bred, without labor, give way completely, under the cruel pressure." "What shall I do?" "Take off the corset; make the skirt-bands and dress as loose as your husband finds it necessary to wear his dress, and then it will be possible with exercise and other curative agencies to restore you."

Women do not comprehend "*tight*" as applied to their dress; they understand it in connection with other forms of pressure, and as applied to the drunkard, but when in connection with their own dress, they are oblivious.

I shall not argue the proposition, that a reduction of the capacity of the most vital part of the body tends to reduce the vitality, and thus lays the foundation for consumption. Of all maladies, pulmonary consumption

is most clearly the result of low vitality. Whatever breaks down the tone, may, in this climate, lead to consumption. No habit in which woman indulge, tends more directly and irresistibly to cripple the

vital forces, than compressing with a hard, inflexible corset, those organs which eliminate the vital forces.

OPINIONS OF DISTINGUISHED PERSONS ON TIGHT LACING. Lewes says,

"In England, women have pretty generally learned to see the danger, if not always the hideousness, of these wasp-waists, once so highly prized.

Herbst experimented upon some Russian soldiers who laced with a belt. He found they could inspire one hundred and ninety cubic inches without the belt, and but one hundred and thirty when laced.

Dr. Mussey remarks that, "Whatever contrivance is so applied to the chest as to shut out from the lungs a part of the air they are capable of receiving, causes degeneration of the blood, increases the liability to disease, and becomes the ground-work of premature decay and death."

Dr. Griscom declares that it is "a source of consolation to those interested in the progress of civilization to know that '*hour-glass waists*' are fast giving way to true taste, and will shortly, instead of captivating the eye, be looked upon with pity and disgust."

Dr. Rush says, "Many facts might be mentioned to show the influence of tight stays, ligatures, garters, waistbands, and collars, in producing diseases, especially of the lungs, or interfering with their cure."

Another physician of eminence says, "Females dress errs in the tightness with which it is made to fit the body, producing disease of the organs of the chest and abdomen, and preventing free and graceful movements, and that oxygenation of the blood so necessary to health, good looks, and long life.

Dr. Hunt makes the following remark: - "Every body that *thinks*, knows the lungs do not need squeezing, and that it is not sensible for man or woman to wear tight clothing."

Dr. Clarke says, "Since the free expansion of the chest, or in other words, the unimpeded action of the respiratory organs, is essential to health, the employment of tight stays and those forms

of dress which interfere with these natural actions must be injurious, and cannot, therefore, be too strongly censured."

The celebrated Dr. James Johnson says, "The growth of the whole body and the freedom of all its functions, so much depend upon perfect digestion, that every impediment to that digestion, such as compression of the middle of the body, must inevitably derange the whole constitution. Although the evils of tight lacing are as patent as the sun at noon-day, I have not known its commission to be acknowledged by any fair dame. It is considered essential to a fine figure, yet I never could discover any marks of stays in the statues of the Medicean Venus, or the Apollo. And I venture to aver that the Cyprian goddess was not in the habit of drawing her zone as tight as the modern fair ones, else the sculptor would have recorded the cincture in marble. The comfort and motions of the foot are not more abridged and cramped by the Chinese shoe, than are digestion and respiration by the stay." Thus wrote the physician to the father of the present queen of England.

A former professor of the theory and practice of medicine in the university of Vermont says, "Undue confinement of the chest must at all periods of life be prejudicial, hence the practice of tight lacing, we almost always find classed among the causes of phthisis, as well as of numerous other ills." And he adds, "It is surely an erroneous notion that women need the support of stays."

Dr. Ticknor expresses himself on this subject as follows:- "We might, with the same propriety that we now deform our bodies, follow the practices of savage and heathen nations - we might slit our lips, prevent the growth of our feet, pluck out our hair, or flatten our heads; which could all be done with infinitely less detriment to health than results from our own cruel custom of tight lacing."

BARE ARMS AND LEGS. The practice of exposing their arms and legs bare, or nearly so, is very injurious to the lungs. The blood not being able to make its way into the extremities, accumulates in the chest. Let me give you an illustration. One morning, long since, I was asked to visit a young lady residing in this city, who was

suffering from a malady in the chest. After an examination of her lungs, the father said: "Now, sir, if you are not in haste, I wish you could remain a moment, and answer a few questions. We have had five children - three daughters and two sons. Two daughters are dead of consumption; the third and last one, you inform me, has tendency to the same disease, while my sons are perfect illustrations of health and manly vigor. Born of the same parents, fed at the same table, enjoying the same comforts in every way, what is the reason for this difference?"

I replied, "Birth and food are not the only conditions of health. In many particulars, your girls have been greatly wronged.

While the boys have dressed their arms and legs with flannel sleeves and drawers, the girls have almost nothing about their limbs. To illustrate this point, let us examine the dress of your daughter's extremities. You see that, although an invalid, and therefore needing warm dress, she has nothing on her arms but a single thickness of silk, and that in the shape of a flowing sleeve. This gauze undersleeve is not to be spoken of as dress. Her legs have nothing but a single thickness of cotton drawers, surrounded by these indefinite skirts. Now, sir, I venture that you and your sons have on the arms a substantial flannel shirt-sleeve, with a thick woolen coat-sleeve, the *lining* of which is thicker and warmer than the entire dress of your daughter's arm. And you have on the legs warm woolen drawers, and thick, warm pants.

"Your daughter has a pair of kid slippers, with silk stockings, while you and your sons have calfskin boots with woolen socks."

"Oh no!" exclaimed the daughter, pushing out a foot; "I wear these strong boots; mother is very particular about that."

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I said to the father. - "Observe those boots; your daughter and her mother think them prodigious! Now, sir, could you or your sons keep your health and wear prunella gaiters?"

"But what should she wear on her feet?"

"She should dress them as warmly, to say the least, as you dress yours. Feel of her arms! Now feel of her legs! Do you think, with such a circulation as that, the lungs can rid themselves of

congestion? The blood is crowded into the lungs, because it cannot make its way out into these naked, cold limbs; the tubercles are thus swollen and inflamed. Until these limbs are warm, the lungs cannot be relieved of their load.

"While in the case of an invalid, much may be done by friction and exercise, the principal reliance must be upon clothing."

"What shall be done?" at length asked the mother.

"The arms and legs must be covered with knit, closely-fitting, woolen garments. If one thickness will not keep them warm, she must have two. Her arms and legs *must be kept warm*. And as soon as a good circulation is established among them, you will observe a change in her respiration and pulse."

What is true of the young lady of whom I have spoken, is true of nearly all females in this country. Look at the fashionable lady as she promenades Washington street, in December. Her chest is covered with several thicknesses of cloth, including, perhaps, thick pads of hair; then a thick shawl, which with its various doublings, and the folding over in front, often gives from eight to twelve thicknesses of shawl; then over that, a set of immense padded furs; while the legs have a single thickness of cotton covering, and go paddling about in the midst of a skeleton balloon.

I have asked my wife to prepare a chapter on dress, in which I observe a repetition of one or two points already made by myself; but as the subject is one requiring "line upon line, and precept upon precept," I have concluded not to abbreviate her contribution.

Mrs. Lewis has in contemplation a little work on

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the subject of female dress, to be published a few years hence, in which she proposes to treat the physiological aspects of the subject very fully.

The subjoined is from her pen:-

"A *healthy* dress allows the blood to circulate freely through every part of the body, and keeps every part nearly at the same temperature. The *fashionable* style of dress does not secure free circulation; hence cold hands and feet, and a general loss of vitality.

The *present style* of dress compresses the lungs till they are scarcely more than one-half their natural size, and have less than half their natural action. Of course, they cannot absorb sufficient oxygen to keep the body warm. This, with the almost complete nudity of the arms and legs, produces a feeble and irregular circulation. These errors are so common that you may ask the fashionably dressed women of the country, if they have warm feet, and nine out of ten will reply, 'Oh, they are never warm, except when by the fire.' As a result of these cold extremities, the blood is driven to the head and chest, causing frequent headache, and palpitation of the heart.

"A headache is so common among our fashionable women, that it is considered vulgar to be always and entirely free from it. Women, a few generations back, had no such fashion.

"The present style of dress exposes the arms naked, or nearly so, at all seasons of the year.

"A lady imagines when she starts out to walk, with the thermometer down to zero, that her arms are sufficiently protected if she only has on the fashionable flowing sleeves, with fur cuffs upon the wrists. When obliged to raise the hands, you see the naked arm. In this condition, the blood in the arms becomes nearly as cold as the skin, and this current of blood runs back to the chest to chill the vital organs.

"Would our fathers, husbands and brothers be comfortable with their arms thus exposed, in such a temperature? And are delicate women, who live mostly in the house, better able to bear this exposure than strong men?

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"Over these arms should be worn one or two thicknesses of flannel; at least they should be clothed quite as warmly as the body. These extremities, so far from the chest, are more easily chilled than the body, and therefore require at least as much clothing to keep them of the same temperature.

"It is often said that the arms can become accustomed to such exposure as well as the face. But we learn from anatomy, that the

face is supplied with an extra circulation, to protect it against its inevitable exposure.

"Many, who by excessive dress upon the chest, make their lungs very sensitive, do not scruple to remove the dress entirely from the upper half of the chest and the arms on a cold night, go to a ball room, and dance all night, and when morning comes, wonder how they took cold. When, finally they are placed in the grave by consumption, developed by such imprudence, we solemnly talk about God's mysterious providence.

"Not only is the dress of the neck and arms of a fashionable woman entirely wrong, but the legs and feet suffer from the same error.

"As the cold fall weather comes on, every American woman imagines, in order to keep herself comfortable, she must increase the number or thickness of her skirts, while these skirts are worn, in great part, over her hoop. In this way she is completely dragged down by the heavy skirts, which do almost nothing to keep her legs warm.

"The only way to keep the extremities warm, is to wear upon them two or three thicknesses of woolen knit garments, snugly fitting them. These woolen suits should be so supported as not to drag upon the body in the least, and should come down to the ankles under the stockings.

"With thick woolen stockings and good boots made of strong leather or thick cloth, with triple soles, and all lined with cotton flannel, these extremities can be kept warm, and the woman be able to go out freely at all seasons of the year, in any weather without rubbers, which, I may add, should never be worn. Of

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course the cloth uppers cannot be worn in wet weather.

"The thin prunella gaiter, with its paper sole, should not be worn either in the street, or in the house, after the changeable weather of autumn comes on. The usual habit of wearing, in cold weather, slippers in a carpeted parlor even, should never be practiced by those who are feeble, or even by those who are well

and wish to keep so. The floor is the coldest part of the room, and the feet require thick, warm covering.

"A *healthy dress* permits every organ in the body to perform its functions untrammelled. The *fashionable* style does not allow this free action of the vital parts, and hence the present feeble, crippled condition of the women of America. This evil, together with other physiological errors, is doing much to shorten the lives of our women, and compromise the health and *life* of the whole American race.

"To avert these sad results, and to improve the health of our women, it is proposed that the following style of dress be adopted. Such a dress has been worn by the writer nearly twelve years, and she is happy to say, it has saved her from a consumptive's grave, to which she was slowly but surely tending.

"The waist should be several inches larger than the woman's body; a little shorter than the present fashion, and full in front, that the chest may enjoy the freest action. The bands of the skirt should be much larger than the body; the buttons to be placed on the band of the inside skirt, just as they are on a gentleman's pants for suspenders, and the same elastic suspenders worn, crossing behind. Make button-holes in the bands of the other skirts, to correspond with the buttons on the inside skirt, and button on; thus one pair of suspenders will carry three or more skirts. This style of dress is attended by no discomfort to the wearer, and allows full action to every organ of the body. Of course, *corsets* should NEVER be worn. And with the skirt supported as above described, there is no apology for wearing them. The dress I have described may be made so pretty that it will be much admired.

"Whalebones have no business in a woman's dress.

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They spoil all that beauty of outline which Powers and other great artists have found in the natural woman. They interfere not less with that peculiar undulating action of the chest and abdomen which results from the normal action of the thoracic and abdominal viscera. And if the waist be short and loose, as advised above, there will be no need of whalebones to keep it down.

"God knew what he was doing when he made the human body, and made it just right in every way; we cannot alter its shape without destroying its beautiful symmetry, and causing disease and premature death."

DRESS OF CHILDREN. - As bearing upon pulmonary consumption, there are certain errors in the dress of children which must be noticed. I believe I echo the voice of my profession when I declare that the seeds of consumption are planted in thousands, by mistakes in dress during infancy and childhood. To correct these, permit me a few practical suggestions:-

The skirt-bands must be left very loose. If you would give a baby's lungs and heart the best chance for development, the dress about the chest and waist should be so loose that if the child be held up by the shoulders, its entire dress, except as sustained by the shoulders, will fall to the floor. With such a dress, the blood is so much better oxygenated, that, other things being equal, the babe will part with the characteristic, dark red color of its skin much sooner than with close dress.

The bones surrounding the small, feeble lungs, now for the first time beginning to move, are so soft and pliable, that under the slightest pressure, they will yield, and the capacity of the lungs be reduced. I have seen the nurse use the entire strength of her fingers in the first application of the skirt-bands. No thoughtful person, acquainted with the anatomy of the thorax in a new-born babe, can escape the conclusion that the vitality is seriously compromised by this pressure upon the principal organs of that vitality. In many instances I have seen the character of the little

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one's respiration and pulse decidedly affected by enlarging the skirt-bands.

Mothers, if you think it needs all this pressure to give your babes a form, as I have heard some of you say, you forget that the Creator of your child has all wisdom and skill, and that any changes in the baby's form and proportions, must prove only mischievous. And perhaps you may not feel your pride hurt by the suggestion, that His taste is quite equal to yours. That a corset, or

other machine, is needed to give a human being a form, as is so often suggested, is an imputation on the Creator, which no thoughtful and conscientious person can indulge.

DRESS OF CHILDREN'S ARMS. - Prominent among the errors in the dress of children, is the custom of leaving their arms nude.

I speak of the dress for the damp and cold seasons. It should be added that, during the cool summer evenings, too much care cannot be exercised in protecting the baby's arms and shoulders. If the mother desires to exhibit her darling's beautiful skin, let her cut out a bit of the dress near its heart, and when the neighbors come in, let her show the skin thus exposed to the company. This is so near the center of the body that it has no chance to get cold; but in the case of the arms and legs, we have parts far removed from the central organs, and such parts require special protection.

Take the glass part of the thermometer out of the tin frame, and put the the bulb in your baby's mouth. The mercury rises to 98 degrees. Now, on a cool evening, place the same bulb in its little hand (I am supposing it has naked arms); the mercury will sink to 60 degrees or less. Need I say, that all the blood which has to make its way through the diminutive and tortuous vessels of those cold arms, must become nearly as cold as the arms and hands themselves? And need I add that as the cold currents of blood come from both arms back into the vital organs, they play the mischief there?

If you would preserve your child from croup, pneumonia,

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and a score of other grave affections, you should keep the arms warm. Thick, woolen sleeves, which fit at the little dimpled arms down to the hands, at least, constitute the true covering.

A distinguished physician of Paris declared just before his death, - "I believe that during the twenty-six years I have practiced my profession in this city, twenty thousand children have been borne to the cemeteries, a sacrifice to the absurd custom of naked arms."

When in Harvard, many years ago, I heard the eminent Dr. Warren say, "Boston sacrifices hundreds of babes every year by not clothing their arms."

HOW YOUNG LADIES CAN MAKE THEIR ARMS GROW. A young lady asked me what she could do for her very thin arms. She says she is ashamed of them. I felt of them through the thin lace covering, and found them freezing cold. I asked her what she supposed made muscles grow, "Exercise," she replied. "Certainly, but exercise makes them grow only by giving them more blood. Six months of vigorous exercise will do less to give those cold, naked arms circulation, than would a single month, were they warmly clad."

The value of exercise depends upon the temperature of the muscles. A cold gymnasium is unprofitable. Its temperature should be between sixty and seventy, or the limbs should be warmly clothed. I know our servant girls and blacksmiths, by constant and vigorous exercise acquire large, fine arms in spite of their nakedness; and if our young ladies will labor as hard from morning till night as do these useful classes, they may have as fine arms; but, even then, it is doubtful if they would get rid of their congestions in the head, lungs, and stomach, without more dress upon the arms and legs.

DEPENDENCE OF HEALTH UPON CIRCULATION. Perfect health depends upon perfect circulation. Every living thing that has the latter has the former. Put your hand under your dress upon your body. Now place it upon your arm. If you find the body over 90 degrees and your arm under 60 degrees you have lost

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the equilibrium. The head has too much blood, producing headache; or the chest too much, producing cough, rapid breathing, pain in the side, or palpitation of the heart; or the stomach too much, producing indigestion. Any, or all of these difficulties are temporarily relieved by immersion of the hands or feet in hot water, and permanently relieved by such dress and exercise of the extremities as will make the derivation permanent.

DRESS OF MALES. I have little to say upon male dress beside what has been said under the heading - *Best Material for Dress.*" Men make comparatively few mistakes in this department.

A few *fops* compress the chest with the waistcoat, but these foolish fellows are hardly worth considering. A few men wear their pantaloons without suspenders, which is always injurious; the pressure produces absorption of the muscles, tends to push the abdominal contents down into the lower part of the abdominal cavity, and checks the return of the blood through the surface veins.

Many gentleman err in the dress of their feet; but this is discussed under the heading, - "*Our shoes.*"

A great many wear hats, or caps, too close and warm; baldness is the consequence. We never see a man who has lost a hair below where the hat touches his head, not if he has been bald fifty years. If the hair is lost, and the top of the head shining, nothing can be done to restore the hair; but if the hair is falling out, the best restorative means is a frequent bath in cold water, with sharp friction, and the use of a cool, ventilated hat.

Wrapping the neck and upper part of the chest with furs, or a comforter, is a bad habit, often resulting in a cold, which attacks the parts thus unduly heated. And if colds are not caught in this way, the neck must suffer, more or less, by the alternation from heat to cold. I have traced more than one severe cold, which has roused into fatal action a tuberculous lung, to the use of furs. An immense number of them are worn.

Cravats should be slight and loose, not heating the

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neck, not interfering with the action of the muscles, or the circulation of the blood.

In regard to the coat and pants, I will simply say, that they should always be what the present fashion is, - loose, not interfering, in the least, with the arms or legs.

I have written a great deal more on dress than I intended, but the subject is one of such vital importance, and so intimately connected with the health of the lungs, that I could not say less.

Fully conscious of many defects in my discussion of the subject, I take the liberty, in conclusion, to express the hope, that even my poor words may arouse the earnest and serious attention of some portion of my fair countrywomen. - *Weak Lungs, by Dio Lewis.*

LUNG AFFECTIONS

LUNG affections are very much under the control of discipline. A contracted chest, whether hereditary, or produced after birth, is a general precursor and accompaniment of consumption. This difficulty can be greatly, if not entirely, removed. A contracted chest can be expanded. Indeed, we may almost make our own lungs. When the chest is deficient in space, the lungs are compressed and irritated; and they are unable to inspire as much air as is necessary to properly oxydize the blood and prepare it for arterial circulation. When the blood which comes into the heart from the veins, is thrown from the heart into the lungs, it contains a surplus of carbon - the basis of charcoal. Here it comes in contact with the air inhaled by the lungs, takes a portion of oxygen from the atmosphere, and gives off its excess of carbon. Here, then, the blood, by becoming oxygenized and decarbonized, changes its color; and returning to the heart, it is carried to every part of the system to supply its nutrition. It is then returned again through the veins, to the heart and lungs. Before entering the heart, however, it meets with the nourishment of our food, carried through the thoracic duct into the circulation. -

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This being added, the blood again enters the heart.

In this way the whole system is furnished with nutrition. The oxygen taken in through the lungs, together with a portion of electricity, is carried and distributed to all parts of the body, to maintain its substance and vitality. Hence the importance of having not only wholesome and well oxygenized air to breathe, but a good full set of lungs to perform the process of breathing. If the chest is contracted, the lungs have not room to expand and receive a sufficient amount of air; and the vital powers become impaired.

The blood is returned to the arteries imperfectly oxygenized, and electrified, and the whole system suffers. General health becomes impaired, the lungs themselves then often become irritated and inflamed, and death by consumption ensues.

A full chest therefore becomes an important matter. If the chest is too narrow and flat, a discipline must be gone into, in order to expand it. With proper effort, the chest and the compass of the lungs may be greatly enlarged. In this way consumption may be prevented. Even if it has already reached its premonitory symptoms, it may be averted; or even in any stage short of ulceration, it can be cured.

The manner of doing this consists first in standing erect. Persons with weak lungs are inclined to bend over their chest, letting the spine curve between the shoulders, till the lungs become flattened and depressed. Let every such person bring his mind immediately to bear upon the consequences of this state of things, and determine to stand erect; let the front side of his body measure as much from the highest point on his head to his feet, as the back side from the same point. Let him also lie straight in bed; with shoulders elevated by an inclined plane, and head lying on the same line of elevation, with a single pillow. This unvarying erectness of posture will of itself accomplish much in relieving oppressed lungs.

A second step to be taken consists in often inhaling large draughts of air; distending the lungs as much as practicable. By continued practice the lungs will be made to contain more and more air: the air cells

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become expanded. This should be done many times a day until relief can be obtained.

A third step consists in repeatedly - many times a day - throwing the arms and shoulders back. This may be aided by weights in the hands - the dumbbells or something equivalent. The shoulders should be kept back, and not permitted to curve round the lungs. If such be the degree of debility that the shoulders cannot be kept back, or in cases of children who cannot remember to do so, put

on a shoulder brace. But where Nature is able to sustain herself in this process, she will ultimately do better without a brace, than with it. Those who use them are apt to depend on them, without trying to discipline themselves. If people will bear this matter in mind, and can possibly support the effort, let it be done without a brace; do the same in respect to this, as ought to be done in respect to medicines; use them as the last resort, where Nature cannot perform her own work alone.

Where a cough exists, this will demand attention. One of the very best cures for cough, is to stop coughing. Instead of allowing it to have full sway, increasing the irritation of the lungs and bronchial tubes, let it be suppressed as far as practicable. This will diminish the irritation of the lining membrane of the bronchial tubes and the substances of the lungs. The less the coughing allowed, the less the inclination to cough. Where this effort cannot succeed, then some resort must be had to palliatives in the form of remedial agents. When this shall be done, let the mildest palliatives be used which are able to give relief, and as few opiates as possible. If a homeopathic medicine will operate, so much the better. In all cases where a cough is the result of consumptive lungs induced by dyspepsia - and such cases are not few - the best cough-drops in all the world are made by dropping the habits in which the cause originated.

Another important matter, is living and sleeping in apartments well ventilated. This is important as a means of health, or the relief from any form or kind of disease. Every apartment of a house, and every

school-room-room and public hall, should have a ventilator at the top of the wall. This allows the air in the room to keep itself pure. A portion of the oxygen being taken up by the lungs, and carbon being given off by them, the air becomes devitalized and unfit for being received again into the lungs. This impure air being lighter than healthy air, rises to the top of the room, and will pass off if it can find vent, leaving room for pure air to come in. In this way the lungs are receiving new and healthy air by every inspiration.

For the same reason, no one should sleep without free access to a change of air. The offensive smell of sleeping rooms in the morning is owing to the repeated breathing of the same air, till its vitality has become destroyed, and the impure exhalations from the body pent up in a close room, where the air cannot renovate itself. It is all folly for people to talk of being so feeble that they cannot bear a window open, especially in summer, in the night. Every one can bear air enough to sustain healthy breathing; and all notions to the contrary are foolish and wicked. In small rooms, a window, or door, or both, should be opened in winter, as well as in summer. If we breathe the same air twice, it cannot the second time furnish sufficient oxygen for the blood. If people would give heed to these facts, they would prevent and even cure a large proportion of consumptive cases which appear among us. The strength and endurance of the whole system depend, in a very great degree, on the amount of healthy air that is breathed.

Tight lacing - compressing the lungs with ropes, and boards, and steel - is now nearly abandoned; but still dresses are made too tight in the waist, and too much filled with whalebone. The chest should have free room to expand itself, and allow the lungs to fill with air. The breathing should meet no resistance from dress.

There is great damage done at the present day to the health of females by hanging under-dresses upon the bowels. The unnatural weight dislocates the bowels and all the other viscera of the abdomen. It drags them downward from their proper location and

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connection with the stomach, diaphragm and lungs. This leaves a space between these organs which gives a sensation of faintness and sinking at the pit of the stomach, which is often called a "goneness." This leads often to a bending over of the chest and flattening of the lungs. Other organs also suffer. The liver is pushed downward and rendered torpid. The bile, which is the appropriate stimulus for the bowels, becomes deficient; the bowels become sluggish and costive; and the blood is left impure because the bile is not properly taken up, as is shown in the countenance.

If ladies would have health and a pure, clear skin, they must allow their lungs to receive the air freely, their liver a chance to cleanse the blood, and their bowels an opportunity to clear themselves. Unless they will do this, they cannot long maintain a clear skin and a healthful feeling. Costive bowels alone are ruinous to a healthy body and a cheerful mind. This state of bowels is produced, not only by a sluggish liver, but by the whole viscera being pressed downward upon the lower intestine, and preventing its proper action by mechanical pressure. All other kinds of costiveness can be greatly overcome by discipline in mind and diet; but that which is caused by mechanical pressure cannot be cured till the pressure shall be removed.

The use of physic in such a case would be as unphilosophical as taking an emetic to get rid of tight boots. The bowels and other organs which are fallen down upon the lower bowel, must be pressed upward. Every weight must be removed from them, the dresses suspended from the shoulders, and the bowels repeatedly pressed upward. If their drooping cannot be overcome in this way, a supporter should be worn till their native strength has accumulated. But where costiveness depends alone on the sluggish action of the bowels themselves, it can be overcome by mental discipline. The mind should be brought to bear every morning on their action. They should be brought under the magnetism of thought. Let the mind electrify the bowels till they will move. A regular, systematic

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discipline in this way has overcome many a case of obstinate costive habit. A mental determination, persevered in, will sometimes effect that which never can be done with medicine. Indeed, medicines should never be taken for costiveness, if it be possible to do without them. Alternatives only increase the difficulty in the long run, as a general rule.

Another complaint prevalent at the present day among ladies, is depression of the uterus. This may be caused by a weakness in the ligaments which suspend it, or by falling and pressure, as already described, of the bowels. Where it is produced by the latter cause,

the remedy is obvious. Raise the bowels up to their place, and keep them there. When this cannot be done without mechanical support, an abdominal supporter should be used, till Nature shall again be able to support herself; for, without this kind of relief in the case, there can be no cure of this uterine derangement. Here let every young female see how liable she is to incur immense suffering by the weight of heavy skirts hung upon the bowels and resolve never to run the risk of ruining herself for life in this reckless way. The Bloomer costume is certainly to be commended for one of its characteristics, - all the skirtings are hung upon the body of the dress. This lets the shoulders carry the weight of the whole dress, and the bowels and other organs are left free from pressure.

Where the depression of the uterus is owing to debility of the ligaments sustaining it, some means must be resorted to for the restoration of tone. This may generally be done by giving tone to the muscular system in general; for these difficulties are generally found in those of feeble physical forces. Hence, restoring the general tone of the muscular system will give tone generally to this part. That part of the system which can be exercised with the greatest advantage in these cases, is the arms and chest. Instances have often occurred where females laboring under this form of complaint were so feeble that they were almost, and sometimes quite, unable to walk. Many such have been cured by a process of exercise

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which only called into exertion the muscles of the arm and chest. By sitting and lifting weights, tossing balls, and such other measures of discipline as were proportioned to their strength, many have been restored to perfect health and soundness.

Millions of females are suffering for want of some vigorous employment of their physical energies. They do not go out enough and exercise in the open air, expand their lungs, and exercise their limbs. The English ladies generally, could almost take one of our puny, pale-faced American ladies in their hand, and carry them through town in their fingers. But walking is not sufficient exercise;

it only uses the muscles of the lower limbs. The most important part of the system to be exercised, in any one of sedentary habit, is the arms and chest. An editor once said, "The best board for dyspeptic ladies, is a washboard." This remark contains sound philosophy. They need, not only for dyspepsia, but for the complaints just described, as well as others, some vigorous exercise for the muscles of the arms, chest, and abdomen. Raising the tone here, will by sympathy raise the tone in other parts. - *Philosophy of Health.*

HOW TO MANAGE DELICATE YOUNG GIRLS

I HAVE a daughter of fourteen. She seems robust and healthy, except that she is subject to attacks of quinsy. Can I do anything to relieve her of this tendency?" "My two daughters are thirteen and sixteen years of age. One is dyspeptic, and the other is subject to nervous headache. How ought they to live?" "What habits shall I cultivate in my little girl of twelve years, who is delicate, nervous, and precocious?" It is no wonder that we are often pressed to answer questions of this sort, for on the parents of such children rest heavy responsibilities. In the first place, in nearly every case of this kind, the father and mother, through lack of health, and ignorance have transmitted to the child feebleness of constitution, and impurity of blood; and have ripened her tendencies to

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disease by bringing her up in unnatural habits; and so are, directly, the creators of her morbid conditions. In the second place, the girl must almost inevitably die early or drag out a suffering, miserable existence, unless she has her relations to life re-arranged. The reason why girls die from twelve to twenty years of age, is because *they are not allowed a chance to live.* They are *entitled* to a chance. To live is just what they are put here for. Ample provision for their continued life is made in their organizations and in their relations to external nature. But their parents do not know how to let them

live. They are anxious for their welfare - to have them grow up just as they ought. And so they subject them to the artificial regulations of society, which is almost the surest way to defeat their object. If a young girl is delicate in health, her father and mother are ready to resort to any expedient which promises to "patch her up." They are willing to give her medicine of any sort or kind - to follow the directions of any medical quack - *anything except* to comply with those conditions which are absolutely essential to be regarded, in order to allow what constitutional power she has, opportunity to express itself healthfully. For instance, I have heard mothers say, "My daughters cause me great trouble and anxiety by their propensity to run and race out of doors, and to engage in rude play. I endeavor to restrain and teach them as well as I can, but fear they will never be lady-like and refined. . . ." If I were to give to parents the three rules most necessary to be observed in the physical training of feeble girls, I should say:

1. Give them out-of-door life.
2. Encourage them to out-of-door life.
3. Urge on them life out of doors.

Not but that there are other things of vast importance, but that it is difficult to induce parents to appreciate *this*. Why, the young were made to live where the sunshine and pure air can visit them freely. All their nature clamors for such life. No sooner is the infant able to walk than it begins to manifest its desire to get outside the house, and it never consents to live in the house till its *instincts are subdued*. It goes

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naturally from the maternal lap to the "lap of Mother Earth," and as certainly gathers strength and vigor from contact with the latter as from the former.

And at no period of life is habitual exercise out of doors more beneficial than from eleven or twelve, to fifteen or sixteen years of age. Those are the years in which the body makes essential changes and rapid growth, and *its* proper care should be of the first interest to the parent. Intellectual culture need not and should not, be

neglected; but I venture to say that he who, during those years, makes mental training his *object*, forgetting the body, acts quite as unwisely as he who goes to great pains and expense to procure beautiful and excellent furniture for a house, which, for aught he knows, is leaky and dilapidated, and tottering on its foundation.

It is not so difficult for persons to understand the necessity that *boys* should have exercise out of doors. But the distinction in the needs of the sexes in this respect, rests entirely in the false notion of the people, and not in the nature of things. Let fathers and mothers see to it that their daughters have some hours in the open air daily. . . . But they need be by no means confined to play in their out-door life. There are many kinds of *work* which they may do to great advantage. They can split wood, or saw wood, plant or hoe, or husk corn, dig potatoes, rake hay, pick up stones, make garden, milk cows, harness or drive horses, etc. Aside from the physical benefits to be derived, the real solidity of character, the self reliance and the general intelligence girls would attain from learning and pursuing these occupations, *as work* cannot well be over-valued. This would be a very important addition to their course of education. And there need be no doubt as to the propriety of taking so much time from their studies. For any girl of fourteen whose constitution is not strong and health firm, who *studies books* over three hours a day, loses more than she gains, and will be less a woman at twenty-five than if she had taken a different course. I am well satisfied that if parents are under the necessity of sending their daughters away from home to school, they will promote their

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highest interests by keeping them under their own immediate supervision, caring especially for their proper physical development, till they are well grown. Thus the value to them of five years at school, from sixteen to twenty-one, is incomparably greater, than it is from twelve to seventeen.

Next to out-of-doors life, legitimately comes the subject of *dress*, for one cannot exercise to great advantage in the style of dress usually worn by girls. I think parents should give their attention to

this subject in proportion to the value which they set upon their daughters. If I had a daughter whose life, and health, and happiness, and character, and future welfare I prized as highly as if she were a son, I would provide for her as economical expenditure of her nervous energy as if she were a son. For walking, or playing, or working out of doors, she should have plain, substantial clothing - strong boots, stout pants, short, light skirts, perfect freedom about the chest and arms, and a light straw hat. And she should have a supply of warm overcoats and mittens, and water-proof boots, so that no weather could keep her in-doors.

If I was desirous that she should make a pretty, respectable woman, but considered her of less consequence than my boys, I would see that she went out with them, but would take a little more care to have her dress conform to the established standards. She could afford to do things at some disadvantage, and if one hand was needed to take care of her dress, why, I would only ask her to do half as much as her brother.

If I expected her never to be of any account to anybody, but chose to do what I conveniently could to make her effeminate and sickly, I would clothe her just as most mothers do clothe their girls. She should never step out of doors without a large sun-bonnet tied close under her chin, her bodice should be hooked snugly about her chest, the dress should come so low at the shoulders that she could not raise her arms above her head, her skirts should be long and wide, and particularly warm about the back and hips, she should have nothing about the ankles but thin cotton hose, and only thin-soled shoes on her feet. She

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might have India-rubber sandals to put on in a wet day; or if that would not do, she might stay in the house.

More attention should be paid to clothing the *feet* of girls, even in the house. A pair of cloth or leather shoes, with light soles, and one pair of cotton stockings, do not afford sufficient warmth, when thick dresses and outside wrappers are needed about the body. The neck and arms should always be covered, except if it be when the temperature of the atmosphere is so elevated that no clothing is

needed for the purpose of warmth. Flowing sleeves are decidedly objectionable, unless warm under-sleeves are worn. Every young girl should have all her clothing suspended from her shoulders, and should wear no garments so tight as to give any feeling of pressure when the lungs are expanded to their fullest extent. I wish I could induce mothers to believe this. But I cannot. I can only tell the truth (and every honest physician, or other person who knows anything about the human system, will corroborate this statement), and leave them to assume the responsibility of acting.

An immense amount of unnecessary work is expended on the wardrobe of misses. I have no objection to ornamentation anywhere, if it does not cost too much. But ruffles, and scallops, and edgings, and embroidery, on their night-dresses, and drawers, and skirts, and sleeves, and collars, and handkerchiefs, cost vastly too much, when the mothers or daughters who do them cannot get time for reading or for out-of-door exercise. And besides, girls of feeble vitality do actually wear upon their constitutional strength, by always when they sit, doing sewing or knitting work.

Regularity, particularly in the hours of eating, of going to bed, and rising, is of great importance in the habits of the class of persons whose management, we are considering. A delicate child should take her meals at the same time each day, and never eat any thing between meals. Whatever she eats, whether it be fruits, or nuts, or anything else, should be eaten at her meals. Whatever may be said of the necessity of flesh-meats as a diet for working or thinking men,

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they are never appropriate to be eaten by young girls; and are most unfit for those who have the greatest desire and longing for them. Diet of these persons should consist of fruits, grains, and vegetables, in their least complicated forms of preparation. The less condiments used the better. Tea or coffee should never be allowed. The supper, if taken at all, should be very light, and eaten at least two hours before bed-time.

Sleep is the great upbuilder and restorer of the nervous system, and growing girls should have plenty of it. From April to October

they should go to bed before the candles are lighted, and during the winter should not be out of bed after seven and a half o'clock. Neither should they be dragged out in the morning at four or five o'clock. If they go to bed regularly and early, they will be pretty sure to get up in good season, in summer. And in winter, if they are inclined to sleep, in bed is the best place for them, till the gray dawn begins to break. Their beds and pillows should be of hair, sea-grass, husks, hay, straw, or something of the sort, and even cotton for beds is much less objectionable than feathers. Their sleeping-rooms should be thoroughly ventilated every day, and in all moderate weather the window may be left open a little at the top during the night. No garment which has been worn through the day should be worn at night, and those worn day or night should be hung up and aired before being again put on.

Cleanliness of the skin is essential to good health in every person, but need not by any means be secured by taking a "cold bath on rising every morning." Young girls, unless quite robust, as a rule, would do better to wash off quickly in water, and in a room of moderate temperature, about three hours after breakfast; and that not oftener than every other day, if it seems to tax the strength. The washing should be performed, however, at least twice a week, and should always be followed by brisk exercise.

Delicate young girls should never take any *medicine*, no matter what doctor advises it. They do not need it. It can do them no good. It can only help to make them, permanently, more feeble than before.

Parents, if your daughters seem sickly and frail, and you are at a loss what to do with them - if they have symptoms which you do not understand, and you are anxious and perplexed, you may send for your family physician, if you choose. He may give you some information, or make suggestions which will be of service to you. But if he begins to talk about something "to take" though it be no more than a dose of "herb tea" be assured he will prove no true helper. Turn from him to Nature. Seek to place your child in harmony with her, and wait patiently; and you will learn that she

can find ways to remove difficulties which discourage you. - *Laws of Life, for April, 1860.*

THAT LITTLE DRAB GAITER

I CANNOT keep out of my mind the thin gaiter on that little tiny foot, this windy March day. The little girl sat beside me in church, and I could have taken her in my arms, and pressed her to my heart with many a fond kiss, - we know what a treasure a little girl is, - the twining arms, and the sweet caresses. So quietly she sat, that little one of three years; hushed was her merry prattle, and serious her pretty face, for it was the house of God. My heart was full of pity for the child, and indignation that a woman could be so foolish as to risk the life of her child, by changing the thick, every-day shoe for a light prunella gaiter, with a sole as thin as paper, and take a long walk to church. All the child's other clothing was suitable, from the satin hood, the delaine dress, to the lambs-wool stockings. Her mother sat beside her wrapped in cloak and furs.

I heard a gentleman say, not many days since, that nine women in ten would run the risk of burying their children in order to have them dressed fashionably to go to church or Sabbath-school. The mother's heart within me would not admit that; but is it not too true that mothers are really cruel to dress their children in the way they do? Will the women of this generation, with all the light and knowledge that

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physiological science gives them, and the good sense with which God has endowed them, thus put the little feet of their own offspring in the cold grave? Or, if the child have sufficient constitution to live through, will the mother so act as to make her offspring a puny, sickly being all the days of its life? Is there not a fearful load of guilt resting upon such mothers, - is it not her duty to be as wise and as judicious in the physical training of the little ones of her household, as of their moral training? Do not thus expose your child, and say "The Lord hath taken her away," for it is blasphemy.

What a blessed thing it would be if mothers would have independence enough to discard every foolish fashion, and dress their children comfortably; then might the coming generation improve upon the present, and American women not be a reproach and byword for European nations, who are continually saying we are the sickliest women on the face of the earth. Does a thin cloth shoe look as well or as suitable for the winter season, as a nice calf-skin or morocco? It seems to me that it is in as much out of place as a lace bonnet or lawn dress.

Another little girl I saw, of perhaps five years, quite decently clad, with bare arms, and three or four inches from stockings to pantalettes. Do not wonder at the mortality of children, - let us rather wonder that so many live to mature years. Do not wonder that the young girls and women of our country are pale and delicate not able to do a quarter of the work that their mothers and grandmothers accomplished at their age; but let us rather wonder that is is no worse.

With every mother, with every one who has charge of young children, lies the work of reform. Some are awake and alive to their duty, ready for the love they bear their children, and for the good of those that may live after them, to try and rear their children to be strong and healthy, - to bear the epithet old-fashioned; and, perhaps, remarks of ridicule, and to be laughed at by some silly people. If any part of the body should be well protected from cold and wet, it is the feet, and little girls need their feet as well

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covered as little boys, and what woman would think of putting such drab gaiters on her little boy? - *Rural New Yorker*.

TAKE CARE OF THE FEET

"Of all parts of the body," says Dr. Robertson, "there is not one which ought to be so carefully attended to as the feet." Every person knows from experience that colds, and many other diseases which proceed from colds, are attributable to cold feet. The feet are

at such a distance from "the wheel at the cistern" of the system, that the circulation of the blood may be very easily checked there. Yet, for all this, and although every person of common sense should be aware of the truth of what we have stated, there is no part of the human body so much trifled with as the feet. The young and would-be genteel-footed cramp their toes and feet into thin-soled, bone-pinching boots and shoes, in order to display neat feet, in the fashionable sense of the term. There is one great evil, against which every one should be on their guard, and it is one which is not often guarded against - we mean the changing of warm for cold shoes or boots. A change is often made from thick to thin-soled shoes, without reflecting upon the consequences which might ensue. In cold weather, boots and shoes of good thick leather, both in soles and uppers, should be worn by all. Water-tights are not good if they are air-tights also; India rubber overshoes should never be worn except in wet splashy weather, and then not very long at once. It is hurtful to wear any covering that is air-tight over them, and for this reason India rubber should be worn as seldom as possible. No part of the body should be allowed to have a covering that entirely obstructs the passage of carbonic-acid gas from the pores of the skin outward, and the moderate passage of air inward to the skin. Life can be destroyed in a very short time by entirely closing up the pores of the skin. Good warm stockings and thick-soled boots and shoes are conservators of health, and consequently of human happiness.

BEDROOMS IN SPRING

IF two persons are to occupy a bedroom at night, let them step upon weighing scales as they retire, and then again in the morning, and they will find their actual weight is at least a pound less in the morning. Frequently there will be a loss of two or more pounds, and the average loss throughout the year will be more than one pound. That is, during the night there is a loss of a pound of matter, which has gone off from their bodies, partly from their lungs, and partly through the pores of the skin. The escaped

material is carbonic acid and decayed animal matter, or poisonous exhalations. This is diffused through the air, in part absorbed by the bed-clothes. If a single ounce of wool or cotton be burned in the room, it will so completely saturate the air with smoke that one can hardly breathe, though there can only be an ounce of foreign matter in the air. If an ounce of cotton be burned in every half-hour during the night, the air will be kept continually saturated with smoke, unless there can be an open door or window for it to escape.

Now the sixteen ounces of smoke thus formed is far less poisonous than the sixteen ounces of exhalation from the lungs and bodies of the two persons who have lost a pound in weight during the night hours of sleeping, for while the dry smoke is mainly taken into the lungs, the damp odors from the body are absorbed both into the lungs and into the pores of the whole body. Need more be said to show the importance of having bedrooms well ventilated, and of thoroughly airing the sheets, coverlids and mattresses, in the morning, before packing them up in the forms of a neatly made bed? - *Agriculturist*.

VENTILATION OF BEDROOMS. - Two persons occupying a bedroom will weigh at least a pound less in the morning than at night. This owing to the escape of matter that has passed off in the meantime through the skin and lungs. The exhalation is carbonic-acid gas, which is poisonous. This is diffused

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in the air or absorbed by the bed-clothes. The fact suggests the necessity for ventilating sleeping-rooms, and airing bed-clothes in the morning before making the bed. - *Ex*.

VALUABLE EXTRACTS GATHERED FROM THE LAWS OF LIFE

LET me be frank with you. Take women as you find them, as girls, sisters, marriageable daughters, wives or mothers. Begin the investigation at their girlhood and end it at their coffins, and tell me in what direction they, or men form any thing like just ideas in regard to the Laws of Health and Life as pertaining to their

intellectual, physical, moral or spiritual development? Outside of the circle of Health Reformers, there is not a man who acts as if he ever thought his daughter is amenable to physical law in the same sense, or to any thing like the same degree that his son is. All his bearing and conduct go to show that he feels that it is of no consequence whether she is trained under the authority of the Laws of Health and Life or not.

"Why, sir, as I write, can be seen from my window a group of children, boys and girls in equal numbers, playing out of doors in this wintry weather. The boys have upon their feet, heavy, thick-soled boots. They are dressed in pantaloons made of woolen cloth, lined, and coming to their ankles. The upper part of their bodies are covered with thick cotton shirting, vesting over that, and over these a woolen coat, with long sleeves, lined, and heavy woolen mittens upon their hands. Some of them have over all these an overcoat. The girls in this group are dressed as follows: Upon the upper part of their bodies is a cotton chemise, with short sleeves; over this is a calico dress with long sleeves, unlined, and thin mittens upon their hands. Over their hips they have a calico skirt, a petticoat, and a pair of drawers, the legs of which come just below the knee. On the feet are thin shoes and woolen stockings, the upper parts of which come

within two inches of the lower part of the pantalettes, leaving the legs unclad between the knees and the bulge of the calves of the legs. Almost every one of these girls is at school from six to eight hours during the day, studying in a hot room, is of a nervous temperament, and of course, predisposed to large development of brain, and feeble nutritive energy, resulting in deficiency of muscles. Of ten girls that I can now count of the group at play, I have no hesitation in saying that at least three-fourths of them will *not grow to womanhood*. They *must* inevitably succumb to the infringement of the laws upon which their very existence depends, and growing out of their careless habits, or want of proper training on the part of their parents. This falseness begun in childhood in the training of girls, is almost universally carried on to adult age, so

that so far as respects the Laws of Health and Life, the women in this country dress as defiantly and as disregarding of them as they dress their daughters when children, or as they themselves when children were dressed by their parents."

"IMPROPER DRESS. - Sick headache may also be produced by improper dress. It is notorious that women suffer more from it than men. A great variety of causes I admit conduces to this result, but among them there can be no question, but that the style of dress which woman wears has more or less of significance. The fashion of her dress is such as to produce ligation around the body just at the point of separation between the nutritive and respiratory structures. Now, at this point, Nature demands that there be the freest circulation, and all ligatures, no matter how they are brought to bear, that disturb, in slight degree only, the circulation at this point, are calculated to produce just such nervous conditions as culminate in this disease. I can take a strong man and girt him about the waist, not where men are usually girt, but higher (just about the short ribs,) directly over the upper portions of the liver, spleen, and stomach, and the back just above the upper portions of the kidneys, and subject him to that process for sixteen hours, and unless he is

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constitutionally predisposed to show reactions as against any outrage to which his body has been subjected, I can induce sick headache, - that is, I will induce nausea or sickness at the stomach with such congestion of brain, and such fullness, or pain, over the eyes, as, without violation of language, to be denominated sick headache."

"HANDS. - A lady placed her hand in mine. It was small, soft, white, and delicate, and wore numerous rings set with costly jewels. I compared it with my own, which was large, brown, and ringless. As I looked at the two I thought to myself that out of a hundred persons who should see them together, ninety-nine would think that hers was far the prettier. And yet I would not exchange my hand for hers, for in either case, the hand was the representative of the whole body, and its conditions, and relations to life. Her hand

looked pretty, but it was cold and clammy, and sought mine for the genial warmth which circulated to my finger tips. I thought of the question or proposition of our Saviour. 'Is not the life more than meat, and the body than raiment?'

"The lady's care was for meat; mine was for life. Her care was for raiment; mine was for the body. Her care was for appearance; mine for reality. She would put on fine externals. She would have a fine complexion; hence she would not let the sunlight touch her face. - She would have her head fashionably dressed; hence she must have her long, heavy hair, combed and knotted behind. She would have a fashionable bust; hence she would have her dress girted so tightly as to press her ribs in upon her lungs. She would have her dress 'fit beautifully' about her shoulders; hence she would prevent all freedom of motion there. - She would represent in her dress, long, graceful, flowing lines; hence she wore her dress trailing upon the ground. She would wear costly shining silks; hence she would place herself in such conditions as to preserve such fabrics. She would have a small, genteel foot; hence she would wear tightly fitting shoes. She would have a beautiful

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hand; hence she would keep it from all but the most delicate uses. And it is her privilege to have all these; but with them she must take their belongings - a body deranged in all its functions, and unfitted for the uses of a healthy, well developed mind - a body full of vile impurities - a whited sepulcher, fair without, but within filled with all uncleanness.

"I like a fair appearance, but *will have* health; hence I will comply with the conditions on which health depends. I will have vigorous circulation, good eyesight, good hearing, acute smell, a nice sense of taste, keen appetite, refreshing sleep, clearness of brain."

"THE FEET. - The feet hold important *physiological* and *pathological* relations. A wiser maxim for the preservation of health was never given than that which enjoins upon persons the necessity of keeping the head cool and the feet warm. The latter is quite as important as the former. Indeed the circulation of the brain cannot be healthful, and perfectly carried on, unless the feet are kept

warm. It may be truly said that if the feet are kept entirely healthy, no organ in the body can be unhealthy. For so intimate is the sympathy between all parts of the body that no organ can be deranged without disturbing the circulation in the feet. If there is indigestion after a hearty dinner the feet suffer; if the liver is disturbed the feet suffer; if there is pressure upon the lungs, or if the bowels are inactive, or if the kidneys do not perform their office properly, the feet are sure to feel the reactionary influence unhealthfully. So if one will be sure to keep his feet in an entire state of health, he may be certain that he cannot be sick in any department of his system.

"But the feet of almost every grown person in this country suffer from abuse put directly upon them. Health Reformers generally, give no such care to the feet as they deserve. They should be kept *clean*. They perspire more readily and freely than most other portions of the body, and the excreted matter ought to be removed by frequent washing. The stockings

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should be often changed. Everybody knows how much warmer clean stockings are than those which have been worn for some days. Where the feet perspire considerably, persons should have two pairs of stockings in wearing all the time, changing at midday, and allowing those which have been worn in the morning to become dry. All persons on removing their stockings at night, if they are to be resumed by the next morning, should hang them up where they may become perfectly dry, and the perspired matters lodged in them, may be, partially at least, removed by the air circulating through them. Cotton is the best material for stockings, worn next the feet, except it be in very warm weather, when linen may be more comfortable. In cool or cold weather, thick warm woolen stockings should be worn, but there should be between them and the skin, thin cotton ones. People of sedentary habits particularly, do not take half pains enough to dress the feet warmly. The practice of sitting, either in sewing, knitting, writing, reading or studying, with the feet cold, is a fruitful cause of ill health. The more efficient means of producing cold feet could scarcely be

contrived than that of wearing shoes made after the common fashion, and especially those worn by women. Not one woman in a hundred, wears shoes large enough for her feet, and not one person in a thousand wears shoes the shape of which is at all fitted to a naturally shaped foot. Nobody in this country has ever attempted to make shoes to fit human feet. Shoemakers can not be induced to make shoes which will allow the foot to take its natural form and position. The use of the shoe is simply to protect the foot against unpleasant or injurious contact with the ground or other substances, and to retain its heat, preventing its passing off too rapidly. It is not at all to give shape to the foot. The shape of the foot in the shoe should be precisely what it would be if no shoe were worn. That is the shape in which God made it, and it is infinitely more desirable, so far as beauty or use is concerned, than the form into which it is crowded by "civilized" shoes. The time will come when some man or woman will invent a shoe which will be fitted to the shape of the

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foot, and it will be very much better looking than the shoes which are now worn. Till then Health Reformers should insist, in giving their orders for boots or shoes, upon having them made so wide in the sole, as well as in the upper leather, as to give the foot ample room. Have a sole so wide that the entire foot will rest upon it, even if you have to carry back half a dozen pairs before you can get one to suit - and most shoemakers will have to try at least half a dozen times before they can believe that you mean what you say. A *tight shoe cannot be warm*. Women are greatly at fault in this direction. Even in our Institution we find it exceedingly difficult to induce our feeble ladies to dress their feet at all properly. In the cool, chilly autumn days they will persist in wearing thin cotton stockings, and thin cloth shoes, so tight as to materially interfere with capillary circulation - so falsely educated in regard to physical life are women everywhere.

"Garters do not come precisely under the head of clothing for the feet, but they are frequently so much concerned in the poor circulation of the feet, that they should be introduced here. By

their pressure upon the blood vessels, particularly the veins as they pass up the leg, they intercept the free and natural flow of the blood, and so are in a very large degree productive of coldness of the feet. The return of blood from the feet to the heart has to be performed in opposition to the law of gravitation, which makes all substances tend downward. Blood flows down hill as naturally as water; hence there is a special contrivance to carry it from the feet back into the trunk of the body. There are valves in nearly all of the veins of the body, but an unusual number in the veins of the legs, which open upward, or toward the heart, allowing the blood to pass freely in that direction, but shutting, if it sets backward, and thus preventing its return. But these valves are exceedingly delicate, and can be broken down. Many a woman has worn her garters so tight as to retard the movement of the blood upward through the veins of the legs, to that degree that it has set back and overcome the resistance of the valves, thus destroying them, and causing that troublesome and painful

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difficulty, varicose veins. But where the extreme effect is not produced, almost universally the circulation is retarded so far as to disturb materially the healthful condition of the feet.

"Let the student, the professional man, the seamstress, the teacher, see that their feet are kept in healthful conditions, and above all let the mother see to it that the feet of her children are kept warm, and they will have very greatly added securities for the preservation of their general health."

"Look at the upper part of her dress. No woman has it so fitted as to allow her to raise her arms straight from the shoulder above her head. That part of it which we country people call the waist, is oftener than otherwise cut so that it is impossible for her to breathe as nature intends she should. I would like to offer a dollar apiece for each woman in the State of New York, of whom a committee of physicians should affirm that she breathed physiologically, provided I could have one cent paid to me for each woman in the State of whom it should be decided by said committee that she breathed unphysiologically. There is not one woman in five

thousand, in the State of New York, who breathes naturally. The lungs play unhealthfully at every respiration. The diaphragm and intercostal muscles have double labor, in fact do pretty much all the labor of breathing, while the abdominal muscles, which are particularly intended to aid efficiently in this most vital process, are nearly useless.

"If a man stands upon his feet, with his clothing about him, so that he can breathe freely, you will generally find the most essential movement at the bulge of the abdomen. There is where you see the clearest indication of full respiration, but if a woman is clad in her usual mode, and you watch her respiration, you shall generally find it restricted to the upper part of the chest. The reason why, in order to fill her lungs she is to show motion at this particular point, is because of the girted condition of her clothing just at the line of separation between the lungs and the stomach.

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"Here, then are two very important considerations connected with dress. One is, that a woman's dress should be fitted so that she can have the free use of her arms, the other, that she should have the free use of her respiratory organs."

I assure you, my friend, the reason why children die by scores in every little hamlet and village every year, is not because God has so organized them that they cannot live, not because parents have not enough natural affection to take care of them; but because parents are ignorant and stupidly heedless as to the care they need. If the calves, or the pigs, or the lambs, or even the cats, in a section of country, were to have so great mortality prevail among them as has prevailed among the children in thousands of neighborhoods in our country during the past five years, there would immediately be a scientific investigation as to the cause of such frequent deaths in the case of these animals. The men would gather together in public meetings to discuss and to devise means for the alleviation of such a state of affairs; and as interesting discussions would be held by the women in private circles. There would not be simple regret that the creatures were dying; there would be active measures taken to arrest the devastation. Not so when children die. There is

discussion enough, and excitement and interest without stint. There is speculation as to the comparative merits of the different physicians employed, and opinions expressed that if such a child had been attended by such a physician, or had not had such a doctor, the result would have been different. But there is no intelligent inquiry into the *causes* why sickness prevails. Parents rise up in fear every morning, and lie down in dread every night, and *yet* go on from day to day, treating their children in such a manner that it is almost a miracle if they escape being sick.

"My friend, perhaps you have a little daughter. If she is dressed in the style in which little girls are usually clad, you cannot find if you will travel through the length and breadth of the United States, an honest and intelligent physician, physiologist, or other person,

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who understands the structure and function of the human organism, who will not tell you that the manner of your child's dress is such as is directly and very powerfully calculated to produce disease. Look at her now, in this fall weather, with her lower limbs from the hips downward covered only with, at most, one or two thicknesses of cotton! The hoops outside of these hold all the other clothing out from the body, so that there is a complete reservoir for cold air underneath. Perhaps she is kept in the house most of the time; but she cannot go from one room to another, she cannot even play about the floor of the sitting-room, without passing through currents of cold air, and having the circulation of the blood in her feet and legs disturbed. How would you get along, let me ask you, with your legs no better covered than hers? You would be in a perfect shiver all the time. Then think how much more feeble is her circulation, how much more delicate are all her structures, than yours, and answer to yourself whether, in the sight of Heaven you are justifiable of permitting her to go one more day dressed in such a style.

"I appeal to you, rather than the mother, because men are supposed to be less under the control of fashion than women, and because certainly men can appreciate the value and comfort of being warmly clad better than women can do who dress after the

common fashion. And now, having had your attention directed to this matter, if you should allow any consideration to prevent you from immediately seeing that your daughter is comfortably and healthfully clad, and under such neglect she should die by disease before another spring has come, may you not expect to hear the voice of conscience saying to you, down to the latest day of your life, '*You were the murderer of your child!*'

"For the coldest weather, there should be worn next to the body a garment, comprising drawers, waist, and sleeves reaching to the wrist, of cotton flannel. Over this a similar garment of woolen flannel, and over this, a waist with sleeves, to which are buttoned firmly the trowsers. At least a child needs as *much*

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clothing as this, in the severest weather in our latitude. The stockings and shoes should correspond in warmth. Then the little girl should have a good pair of leather boots, sufficiently large to admit of an extra pair of stockings being worn, without interfering in the least with the circulation of the blood in the feet, a pair of good thick cloth trowsers, to be put on outside, a thick warm coat (or cloak) and a pair of warm mittens. Then, every day from November to June, she should spend at least two or three hours in the open air. If you will see to it that your little daughter is treated in this way, and lives on simple food, eating nothing between meals - not even fruit, nuts, or a bit of candy - and that her suppers, if she takes any at all, are very light, and will have her regular in her habits, you will have furnished to her a security for life and health immeasurably greater than that which she has now."

BOOTS FOR WOMEN. The Princess Royal of England had as a part of her out-fit twelve pairs of Boots. Some of these intended for rough walking were provided with *treble* soles.

"English women dress their feet much more healthfully than American women. One great cause of ill-health and in fact of premature death of the women in the United States, is the imperfect and improper way in which women clothe their lower limbs. One has but to go into our schools to see how early, parents begin to *murder* their daughters. Little girls with light skirts

descending two-thirds of the way from the knees to the feet, while the legs are cased in thin stockings and the feet in thin *boot-ees*, thus contriving the most efficient way to disturb and derange the circulation, and produce congestion of the lungs. In the Autumn, the Winter, and the Spring, all persons who have to *be out of doors* should wear *boots*, made with long legs and thick soles. I trust our fashionable women will consent to take care of their healths, now they know that the Princess Royal looks after hers and *wears boots*."

DISEASE AND ITS CAUSES. Chapter 5 [EGW]

BY ELLEN G. WHITE.

In this age of degeneracy, children are born with enfeebled constitutions. Parents are amazed at the great mortality among infants and youth, and say, "It did not use to be so." Children were then more healthy and vigorous, with far less care than is now bestowed upon them. Yet with all the care they now receive, they grow feeble, wither and die. As the result of wrong habits in parents, disease and imbecility have been transmitted to their offspring.

After their birth, they are made very much worse by careless inattention to the laws of their being. Proper management would greatly improve their physical health. But parents seldom pursue a right course toward their infant children, considering the miserable inheritance already received from them. Their wrong course toward their children results in lessening their hold of life, and prepares them for premature death. These parents had no lack of love for their children, but this love was misapplied. One great error with the mother in the treatment of her infant is, she deprives it very much of fresh air, that which it ought to have to make it strong. It is a practice of many mothers to cover their infant's heads while sleeping, and this, too, in a warm room, which is seldom ventilated as it should be. This alone is sufficient to greatly enfeeble the action of the heart and lungs, thereby affecting the whole system. While care may be needful to protect the infant from a draught of air, or from any sudden and too great change, especial

care should be taken to have the child breathe a pure invigorating atmosphere. No disagreeable odor should remain in the nursery, or about the child. Such things are more dangerous to the feeble infant than to grown persons.

Mothers have been in the practice of dressing their infants in reference to fashion instead of health. The

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infant wardrobe is generally prepared to look prettily, more for show than for convenience and comfort. Much time is spent in embroidering, and in unnecessary fancy work, to make the garments of the little stranger beautiful. The mother often performs this work at the expense of her own health, and that of her offspring. When she should be enjoying pleasant exercise, she is often bent over work which severely taxes eyes and nerves. And it is often difficult to arouse the mother to her solemn obligations to cherish her own strength, for her own good, as well as that of the child.

Show and fashion are the demon altar upon which many American women sacrifice their children. The mother places upon the little morsel of humanity the fashionable dresses which she had spent weeks in making, which are wholly unfit for its use, if health is to be regarded of any account. The garments are made extravagantly long, and in order to keep them upon the infant, its body is girted with tight bands, or waists, which hinder the free action of the heart and lungs. Infants are also compelled to bear a needless weight because of the length of their garments, and thus clothed, they do not have free use of their muscles and limbs.

Mothers have thought it necessary to compress the bodies of their infant children to keep them in shape, as though fearful that without tight bandages, they would fall in pieces, or become deformed. Do the animal creation become deformed because nature is left to do her own work? Do the little lambs become deformed because they are not fitted about with bands to give them shape? They are delicately and beautifully formed. Human infants are the most perfect, and yet the most helpless, of all the Creator's handiwork, and, therefore, their mothers should be instructed in

regard to physical laws, so as to be capable of rearing them with physical, mental, and moral health. Mothers, nature has given your infants forms which need no girts or bands to perfect them. God has supplied them with bones and muscles sufficient for their support, and to guard nature's fine machinery

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within, before committing it to your care.

The dress of the infant should be so arranged that its body will not be the least compressed after taking a full meal. Dressing infants in a fashionable manner, to be introduced into company for for visitors to admire, is very injurious to them. Their clothing is ingeniously arranged to make the child miserably uncomfortable, and it is frequently made still more uneasy by passing from one to the other, being fondled by all. But there is an evil greater than those already named. The infant is exposed to a vitiated air, caused by many breaths, some of which are very offensive and injurious to the strong lungs of older people. The infant lungs suffer, and become diseased by inhaling the atmosphere of a room poisoned by the tobacco-user's tainted breath. Many infants are poisoned beyond remedy by sleeping in beds with their tobacco-using fathers. By inhaling the poisonous tobacco effluvia, which is thrown from the lungs and pores of the skin, the system of the infant is filled with the poison. While it acts upon some as a slow poison, and affects the brain, heart, liver and lungs, and they waste away and fade gradually, upon others, it has a more direct influence, causing spasms, fits, paralysis, Palsy, and sudden death. The bereaved parents mourn the loss of their loved ones, and wonder at the mysterious providence of God which has so cruelly afflicted them, when Providence designed not the death of these infants. They died martyrs to the filthy lust of tobacco. Their parents ignorantly but none the less surely, kill their infant children by the disgusting poison. Every exhalation of the lungs of the tobacco slave, poisons the air about him. Infants should be kept free from every thing which would have an influence to excite the nervous system, and should, whether waking or sleeping, day and night

breath a pure, cleanly, healthy atmosphere, free from every taint of poison.

Another great cause of mortality among infants and youth, is the custom of leaving their arms and shoulders naked. This fashion cannot be too severely censured. It has cost the life of thousands. The air,

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bathing the arms and limbs, and circulating about the armpits, chills these sensitive portions of the body, so near the vitals, and hinders the healthy circulation of the blood, and induces disease, especially of the lungs and brain. Those who regard the health of their children of more value than the foolish flattery of visitors, or the admiration of strangers, will ever clothe the shoulders and arms of their tender infants. The mother's attention has been frequently called to the purple arms and hands of her child, and she has been cautioned in regard to this health and life-destroying practice; and the answer has often been, "I always dress my children in this manner. They get used to it. I cannot endure to see the arms of infants covered. It looks old-fashioned." These mothers dress their delicate infants as they would not venture to dress themselves. They know that if their own arms were exposed without a covering, they would shiver with chilliness. Can infants of a tender age endure this process of hardening without receiving injury? Some children may have at birth so strong constitutions that they can endure such abuse without its costing them life; yet thousands are sacrificed, and tens of thousands have the foundation laid for a short, invalid life, by the custom of bandaging and surfeiting the body with much clothing, while the arms - which are at such distance from the seat of life, and for that cause need even more clothing than the chest and lungs - are left naked. Can mothers expect to have quiet and healthy infants, who thus treat them?

When the limbs and arms are chilled, the blood is driven from these parts to the lungs and head. The circulation is impeded, and nature's fine machinery does not move harmoniously. The system of the infant is deranged, and it cries and mourns because of the

abuse it is compelled to suffer. The mother feeds it, thinking it must be hungry, when food only increases its suffering. Tight bands and an overloaded stomach do not agree. It has no room to breathe. It may scream, struggle and pant for breath, and yet the mother not mistrust the cause. She could relieve the sufferer at once, at least of tight bandages, if she understood

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the nature of the case. She at length becomes alarmed, and thinks her child really ill, and summons a doctor, who looks gravely upon the infant a few moments and then deals out poisonous medicines, or something called a soothing cordial, which the mother, faithful to directions, pours down the throat of the abused infant. If it was not diseased in reality before, it is after this process. It suffers now from drug-disease, the most stubborn and incurable of all diseases. If it recovers, it must bear about more or less in its system the effects of that poisonous drug, and it is liable to spasms, heart disease, dropsy on the brain, or consumption. Some infants are not strong enough to bear even a trifle of drug poisons and as nature rallies to meet the intruder, the vital forces of the tender infant are too severely taxed, and death ends the scene.

It is no strange sight in this age of the world, to view the mother lingering around the cradle of her suffering, dying infant, her heart torn with anguish, as she listens to its feeble wail, and witnesses its expiring struggles. It seems mysterious to her, that God should thus afflict her innocent child. She does not think that her wrong course has brought about the sad result. She just as surely destroyed her infant's hold on life as though she had given it poison. Disease never comes without a cause. The way is first prepared, and disease invited by disregarding the laws of health. God does not take pleasure in the sufferings and death of little children. He commits them to parents, for them to educate physically, mentally and morally, and train them for usefulness here, and for Heaven at last.

If the mother remains in ignorance in regard to the physical wants of her child, and, as the result, her child sickens, she need not expect that God will work a miracle to counteract her agency in making it sick. Thousands of infants have died who might have

lived. They are martyrs to their parent's ignorance of the relation which food, dress and the air they breathe, sustain to health and life. Mothers in past ages, should have been physicians to their own children.

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The time she devoted to the extra beautifying of her infant's wardrobe, she should have spent in a nobler purpose - in educating her mind with regard to her own physical wants, and that of her offspring. She should have been storing her mind with useful knowledge, in regard to the best course she could pursue in rearing her children healthfully, with the view that generations would be injured or benefited, by her course of action.

Mothers who have troublesome, fretful infants, should study into the cause of their uneasiness. By so doing, they will often see that something is wrong in their management. It is often the case, that the mother becomes alarmed by the symptoms of illness manifested by her child, and hurriedly summons a physician, when the infant's sufferings would have been relieved by taking off its tight clothing, and putting upon it garments properly loose and short, that it may use its feet and limbs. Mothers should study from cause to effect. If the child has taken cold, it is generally owing to the wrong management of the mother. If she covers its head, as well as its body while sleeping, in a short time it will be in a perspiration, caused by labored breathing, because of the lack of pure, vital air. When she takes it from beneath the covering, it is almost sure to take cold. The arms being naked, exposes the infant to constant cold, and congestion of lungs or brain. These exposures prepare the way for the infant to become sickly and dwarfed.

Parents are accountable in a great degree, for the physical health of their children. Those children who survive the abuses of their infancy, are not out of danger in their childhood. Their parents still pursue a wrong course toward them. Their limbs, as well as their arms, are left almost naked. Those who value fashion above health, place hoops upon their children. Hoops are not convenient, modest or healthful. They prevent the clothing from falling close about the

body. Mothers then dress the upper part of their limbs with muslin pantalettes, which reach about to the knee, while the lower part of their limbs are covered with

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only one thickness of flannel or cotton, while their feet are dressed with thin-soled gaiter boots. Their garments being kept from the body by hoops, it is impossible for them to receive sufficient warmth from their clothing, and their limbs are continually bathed in cold air. The extremities are chilled, and the heart has thrown upon it double labor, to force the blood into these chilled extremities, and when the blood has performed its circuit through the body, and returned to the heart, it is not the same vigorous warm current which left it. It has been chilled in its passage through the limbs. The heart, weakened by too great labor, and poor circulation of poor blood, is then compelled to still greater exertion, to throw the blood to the extremities which are never as healthfully warm as other parts of the body. The heart fails in its efforts, and the limbs become habitually cold; and the blood, which is chilled away from the extremities, is thrown back upon the lungs and brain, and inflammation and congestion of the lungs or the brain is the result.

God holds mothers accountable for the diseases their children are compelled to suffer. Mothers bow at the shrine of fashion, and sacrifice the health and lives of their children. Many mothers are ignorant of the result of their course in thus clothing their children. But should they not inform themselves, where so much is at stake? Is ignorance a sufficient excuse for you who possess reasoning powers? You can inform yourselves if you will, and dress your children healthfully.

Parents may give up the expectation of their children's having health while they dress them in cloaks and furs, and load down those portions of the body with clothing where there is no call for such an amount, and then leave the extremities, that should have special protection, almost naked. The portions of the body, close by the life springs, need less covering than the limbs which are remote from the vital organs. If the limbs and feet could have the extra

coverings usually put upon the shoulders, lungs and heart, and healthy circulation be induced to the

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extremities, the vital organs would act their part healthfully, with only their share of clothing.

I appeal to you mothers, do you not feel alarmed, and heart-sick, in seeing your children pale and dwarfed, suffering with catarrh, influenza, croup, scrofula swellings appearing upon the face and neck, inflammation and congestion of lungs and brain? Have you studied from cause to effect? Have you provided for them a simple nutritious diet, free from grease and spices? Have you not been dictated by fashion, in clothing your children? Leaving their arms and limbs insufficiently protected has been the cause of a vast amount of disease and premature deaths. There is no reason why the feet and limbs of your girls, should not be in every way as warmly clad as those of your boys. Boys, accustomed to exercise out of doors, become inured to cold and exposure, and are actually less liable to colds when thinly clad, than the girls, because the open air seems to be their natural element. Delicate girls, accustom themselves to live in-doors, and in a heated atmosphere, and yet they go from the heated room out of doors with their limbs and feet seldom better protected from the cold than while remaining in the close warm room. The air soon chills their limbs and feet, and prepares the way for disease.

Your girls should wear the waists of their dresses perfectly loose, and they should have a style of dress convenient, comfortable and modest. In cold weather they should wear warm flannel or cotton drawers, which can be placed inside the stockings. Over these should be warm lined pants, which may be full, gathered into a band, and neatly button around the ankle, or taper at the bottom and meet the shoe. Their dress should reach below the knee. With this style of dress, one light skirt, or at most two, is all that is necessary, and these should be buttoned to a waist. The shoes should be thick-soled, and perfectly comfortable. With this style of dress your girls will be no more in danger in the open air than your boys. And their health would be much better, were they to live

more out of doors, even in winter, than to be confined to the close air of a room heated by a stove.

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It is a sin in the sight of Heaven for parents to dress their children as they do. The only excuse that they can make is, it is fashion. They cannot plead modesty to thus expose the limbs of their children with only one covering drawn tight over them. They cannot plead that it is healthful, or really attractive. Because others will continue to follow this health and life-destroying practice, it is no excuse for those who style themselves reformers. Because everybody around you follow the fashion which is injurious to health, it will not make your sin a whit the less, or be any guarantee for the health and life of your children.

SPIRITS, COFFEE, AND TEA

ALCOHOLIC LIQUORS of all kinds, whether strong beer, cider, wine or brandy, should never be taken except as drugs; because, besides the danger of a drunkard's grave, they are all stimulants; they impart no nourishment to the system, but force its action to an unnatural degree. The idea that these liquors promote digestion is all a delusion. They give to the stomach an unnatural and forced action, which while in health, it does not need; and the longer it is subjected to this driving process, the more will it depend on stimulants. When the stomach is excited in this way, the brain also is excited; and whoever uses alcoholic drinks as a beverage, is so far a drunkard; for no dividing-line can be drawn - no transition boundary can be made - between him who drinks moderately, and him who drinks excessively. It is all wrong, and only wrong. It is all intoxicating, and only intoxicating. He who drinks a little is a little drunk; he who drinks largely is largely drunk. To be temperate in the use of good things in their place, is to use them with proper moderation. To be temperate in the use of bad things, or things out of place, is to let them alone. The way to be temperate in religion, is to have a zeal according to knowledge. The way to be temperate

in fanaticism, is to let it alone. Temperance in eating bread is moderation; temperance

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in regard to stimulants and narcotics is total abstinence.

COFFEE is objectionable for a similar reason; it is a stimulant - a kind of narcotic stimulant, bearing some resemblance to opium; and so powerful is its action, that it is considered and used as a most certain antidote to poisoning from opium. And it can readily be seen, that unless it was an article of much power itself, it could never overpower such a poison. Coffee should never be placed on any other list than that of medicines; it should never be drunk as a luxury or beverage. Mothers should never be so tender and affectionate for their drink. That mother is insane who will value the immediate gratification of her child more than its future enjoyment of health and soundness. Her child will desire no such indulgence, if it had never been accustomed to it. If the habit has been formed, let it be at once abolished. There are few things over which my very soul has groaned so deeply, as seeing mothers so ignorantly or carelessly undermining the constitutions of those whom they love, and for whose welfare, moral and physical, they are greatly responsible. Yet, if they are determined to gratify their tender ones at all hazards of their constitutions, they are, of course, at liberty to do so; or if any are disposed to treat themselves in the same way, there is no evil law against it; but they break another law, which must be met, - a law of nature written by Jehovah on every nerve of the human body.

TEA is another objectionable article, because of its stimulating properties. This is a direct, diffusible, and active stimulant. Its effects are very similar to those of alcoholic drinks, except that of drunkenness. Like alcohol, it gives, for a time, increased vivacity of spirits. Like alcohol, it increases, beyond its healthy and natural action, the whole animal and mental machinery; after which there comes a reaction - a corresponding languor and debility. The wash-woman becomes exhausted, and must have her bowl of tea to recruit her energies, instead of giving nature a chance to recover herself. She depends upon art rather than

nature, and each time lowers the standard of her own permanent strength. She accomplishes more in a short time, while her strength is artificial instead of natural; but is gradually, though perhaps imperceptibly, wearing herself out before her time. The nurse keeps herself awake nights by this artificial process; and each time, by imperceptible steps, lessens her natural strength. She thinks, with the wash-woman, that tea does her good - strengthens her, because, like the rum-drinker, she feels better under its immediately stimulating effects.

The time was when ministers, instead of being largely inspired with the Holy Ghost, wrote and delivered their sermons under the inspiration of ardent spirits; but now, seeing that to be morally and physically wrong, they not unfrequently labor under that artificial inspiration, which is quite as effectual, contained in tea. By this process, they gradually impair their own natural energy of body and mind; for, when we drive up and overtax the forces of nature by stimulus, they ultimately fall in the rear of their original process of action. The green teas are much more powerful stimulants than the black. The Chinese do not use the green teas. Not long since, meeting a young Chinese, the inquiry was made why they did not drink their green teas. Putting his hands up to his head, he said, "They burn all the hair off." They were too stimulating to the brain and nerves. - *Philosophy of Health*.

A BAD PRACTICE. - Many persons who use kerosene lamps are in the habit, when going to bed, or when leaving a room for a short time, of turning the wick down low in order to save a trifle of the consumption of oil. The consequence is that the air of the room soon becomes vitiated by the unconsumed oil vapors by the gas produced by combustion, and also by the minute particles of smoke and soot which are thrown off. Air thus poisoned is deadly in its effects, and the wonder is that more persons are not

immediately and fatally injured by breathing it. Irritation and inflammation of the throat and lungs, headache, dizziness and nausea are among its effects. - *World's Crisis*.

NO MEDICINE

THE following is a sketch of the conversation said to have passed between Thomas Jefferson and D. P. Thompson, when about establishing the University of Virginia:

"Do you design a Medical Department in the University?"

"I think not. Anatomy to be sure, is a science; but I have no confidence in *Materia Medica*, which I have long since banished from my family, choosing rather to rely on nursing and nature for a cure. My attention was first called to this subject when I was Minister to France. During my residence in Paris, my daughter was seized with typhus fever, and I sent for a physician, who was called the most eminent and successful one in the city. He came, examined the patient, gave some directions about nursing, and departed, giving no medicine and leaving none to be given. The same course was taken the next day, and the next, when growing uneasy I said to him:

"Doctor, you don't appear to be doing anything for my daughter. What is the reason?"

"The reason is I wish her to get well. I had supposed you knew what my system of practice was, or you would not have sent for me."

"No; what is it?"

"To have the most careful nursing, leave the disease to wear itself out, and let nature do the rest, but give no medicine."

"Well, sir, though still uneasy, I acquiesced in the course, and the result was, my daughter recovered with a constitution uninjured by mineral medicine." Since then - a period of nearly thirty years - I have been my own doctor, and scrupulously following the

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system of this French physician, have practiced not only in my own family, but among the colored people on my plantation, taking them all through the worst of fevers, and never losing a single patient." - *Health Journal*.

RULES FOR HEALTH

1. SLEEPING rooms should be well ventilated.
2. No person should sleep on feathers.
3. Clothing worn in the *day*, should not be worn at night.
4. When taken off, it should be thoroughly aired.
5. Otherwise effete matters remain in it.
6. Sleep is the best restorer of the Nervous system.
7. One hour of sleep before midnight is worth two after it.
8. Never eat anything between meals.
9. Two meals a day is better than three.
10. The drink which nature provides is cold water.
11. The use of salt may fairly be questioned.
12. It has no nutriment in it, and greatly provokes costiveness.
13. Persons of constipated bowels will find its disuse advantageous.
14. Daily exercise in the open air is an absolute pre-requisite to Health.
15. Without Health of body, vigor of mind is not to be expected.
16. With feeble body and mind, large spirituality cannot be enjoyed,
17. And without this, one cannot be a growing Christian.
18. So that Christianity enjoins obedience to Physical law,
19. And insists on its sacredness as truly as on that of THE DECALOGUE;
20. But Ministers seldom preach on *the worth of the Body*.
21. They preach of the worth of the soul.
22. Not thinking that in a sick body, *the soul* is in prison.

23. And it is more likely to grow depraved than good,
24. And to become indifferent to spiritual considerations,
25. And willing to exchange them for bodily indulgences,
26. So that their preaching and labor is almost useless,
27. And needs to be recast, directing itself as,
28. Well to Physical habits as to Principles.

FOOD FOR MAN

WHAT is a proper diet for man?

One which contains, in a state of purity, the right elements of nutrition, in the right quantity, and the right proportions.

What substances best answer this description?

The farinacea - as wheat, corn, rice, oats, rye, barley, etc.; fruit - as apples, pears, peaches, plums, grapes, berries, etc.; and vegetables - as beans, peas, potatoes, turnips, tomatoes, squashes, etc.

Why this food to be preferred to the flesh of animals?

Because it contains the elements or nutrition in greater quantity, on the average, in better proportions, and in greater purity; and because it is best adapted to the anatomical structure, physiological condition, and natural tastes of man.

What ultimate elements are required in human food?

Oxygen, hydrogen, carbon, nitrogen, chlorine, calcium, sodium, potassium, magnesium, sulphur, phosphorus, iron.

From whence are these derived?

From vegetables.

What are the proximate elements?

Protein, in the form of gluten, fibrin, casein, albumen or gelatin, starch, sugar, or oily matter, salt, and the phosphates, sulphates, etc.

Are these proximate elements also found in vegetables?

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They are; the vegetable kingdom is a great laboratory, to supply food to the animal kingdom.

What objections are there to our eating these vegetable substances at second hand, in the flesh of animals?

Flesh does not contain sufficient of the carbonaceous or heat-forming principle; it is always impure, from the presence of excrementitious matter; it is often diseased.

What is the best diet?

A proper admixture of farinaceous food, such as unbolted wheat bread, corn bread, cracked wheat hominy, oat meal, etc.; ripe fruits - melons, etc., in their season, and vegetables, with a moderate

quantity of the milk and eggs of healthy animals, and a sparing use of sugar, butter, salt, and vinegar. - *Catechism of Health*.

PURE AIR

THROW open the window, and fasten it there,
Fling the curtain aside, and the blind,
And give a free ent'rance to heaven's pure air,
'Tis the life and the health of mankind.

Are you fond of coughs, colds, dyspepsia and rheums,
Of headaches, and fevers, and chills;
Of bitters, hot-drops, and medicine fumes,
And bleeding, and blisters, and pills?

Then be sure when you sleep that all air is shut out;
Place, too, a warm brick at your feet;
Put a bandage of flannel your neck quite about,
And cover your head with a sheet.

But would you avoid all forms of disease?
Then haste to the fresh open air,
Where your cheek may kindly be fanned by the breeze,
'Twill make you well, happy, and fair.

Then open the window, and fasten it there,
Fling the curtain aside, and the blind,
And give free admission to heaven's pure air,
'Tis life, light, and joy to mankind.

HOW TO LIVE [NUMBER SIX]

OBLIGATIONS TO LAW

PHYSICAL OBLIGATIONS

HE who would enjoy perfect health, is obliged to obey organic law; and from this absolute obligation he cannot free himself; for if he transgress physical law, he must endure the infliction of a physical penalty. While the violator of human law may escape the

punishment due to his crimes, by keeping them out of sight, or by fleeing from the reach of justice, he who is guilty of transgressing the laws of his own animal economy, cannot escape with impunity - his sin is sure to find him out. Though he may pass on for a while without arrest, yet, sooner or later, he will find himself overtaken, tried before Nature's court, and condemned.

If we stand in the range of the tornado as it sweeps along its course, can we resist its power? When the engine has accumulated a fierce velocity, can we cast ourselves before it with impunity? Can we stand beneath the weight of the pile-driver as it is loosed from its fastenings, and escape the fatal power of the law of gravitation? Can we cast ourselves from the towering precipice, and not be dashed in pieces? Yes, we may do all this, when nature has so changed that we can violate a single law of our physical being and not suffer damage. Yes, we may, when the God of nature shall repeal the laws which he has set to physical life; or when material things shall cease to be governed by Deity, and be let loose upon the mere contingencies of chance.

The man who, by gradual steps, deviates from the pathway of physical law, may seem to pass on uninjured

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for a length of time, yet, by and by, he will be sure to feel the rod of punishment. He who disregards dietetic law, may not at first discover any injury, or, should he experience suffering, he may not discover the relation of the cause and the effect, yet the consequences of his unlawful course will, sooner or later, follow, and he cannot escape. The man who habitually steeps himself in alcoholic liquor, or the more deadly essence of tobacco, may possibly live to threescore years and ten, and seem to be tolerably well; yet he has made himself liable to fall suddenly dead, in consequence of the unseen fires that have for years been consuming his internal organs. The man who disobeys law in any other way, may not now see that his system is injured; yet when some outward cause of disease shall approach him, he is overcome by it, simply because his previous habits have weakened the power of resistance in his constitution.

The standard of general health is probably lower in the United States than in any other civilized portion of the world. The average age is probably less than half what it ought to be. And the standard of health and longevity is constantly degenerating. The physical habits of Americans, are more in conflict with natural law, than those of any other civilized nation. The greater part of those who are uncivilized - savage and heathen - are living in less rebellion against their own physical being, than are Americans. Very few die a natural death. The vast majority die of gradual suicide. If the tomb-stones of our grave-yards could bear witness, what would be their testimony? Upon a tomb-stone in New Jersey, there is written under the name of a young lady - "Died of thin shoes;" a declaration which might be truthfully written upon many others. Could they generally speak out as plainly, we should find here, "Died of stimulants," "Died of narcotics," - and there, "Died of an abused stomach," - and almost everywhere, "Died of gradual suicide."

The author of our being has given to the human constitution, a natural period of existence. But when we commit violence on our own vitality, we shorten

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its duration. We bring on premature old age, or create, by gradual steps, fatal disease. To die of disease is not, as a general rule, the way to die. We should die as the much-venerated John Quincy Adams died - at his post, in the service of God and humanity, - not of disease, but of age - not because the vital powers had been violated, but because vitality had worn itself out. The men of this generation, die by the violence of their own hands. Their lamp of life goes out, not because the oil is exhausted, but because it has become so adulterated by the admixture of foreign and incongruous elements, that it can no longer burn.

If the term of threescore years and ten, ought to be considered the proper average of healthy human life, we have greatly fallen from the standard. At all events, our average of American life is evidently not one-half what it ought to be. It is said - though we have no very definite data on this point - to be a fraction less than

twenty-seven years. And it is evidently growing shorter. The dietetic habits of Americans in some respects, are growing worse and worse. Notwithstanding all temperance light and labors, there is at present an increase of liquor-drinking throughout the land; and tobacco-using is a vice which is becoming more and more deep-rooted and devastating, especially among the young men, and even the boys, of this generation. And unless there shall come a revolution in our American habits, which are forming the basis of physical and moral character, our race will soon come to a physical and moral ruin.

MORAL OBLIGATIONS

Next to our obligations to God, are our obligations to ourselves. If we are in duty bound to treat our Creator right, we are also, next to him, in duty bound to treat ourselves right. This becomes a matter of moral obligation toward him who made us, "whose we are, and whom we ought to serve."

The second table of the moral law, comprehended

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in this, "Thou shalt love thy neighbor as thyself," implies the pre-existence of the law of self-love; and the law of self-love involves the obligation of self-protection. What right have we to abuse, or even to neglect ourselves? To do that which will injure our constitution or health, is sinful in the sight of Heaven. To transgress physical law is transgressing God's law; for he is as truly the Author of physical law, as he is the Author of the moral law. Whoever, therefore, violates the laws of life and health, sins against God as truly as though he break the ten commandments. Every man is under obligation to obey those laws and whoever dares violate them, will find "the way of transgressors is hard."

The moral sense of community is exceedingly obtuse on this subject. With the great majority, appetite is the only law which governs; and in spite of all that can be said, it will probably, in a great degree, continue to be so; and those who choose to have it so, must bear the consequences. But some may possibly be induced to examine their obligations and responsibilities in the case. Where is

the consistency of being governed by principle instead of appetite, in regard to the demands of the moral law, and yet let appetite rule instead of principle, in regard to physical law? for, as before stated, when we violate physical law, we do truly violate moral obligation. Whoever will let appetite govern in one thing, is in a fair way to let it govern in all things. Whoever, through appetite, will allow himself to eat too much or too often, is very likely to give license to all other appetites and passions in proportion to their strength and activity.

When men will let moral principle govern their eating and drinking, they will greatly advance their physical and moral welfare. Every effort made for the physical salvation of community, should be based on moral principles. If the advocates of temperance had always stood on this platform, they would have accomplished vastly more than they now have done. They have made the cause too much a matter of individual and public expediency. Instead of laboring sufficiently to show that every drop of liquor, taken

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as a luxury, is so much direct and tangible sin against God, their efforts have been to show, more particularly, that, inasmuch as by the general and extensive use made of it, vast damage was done, we were bound, as a matter of expediency, or of moral obligation based upon general expediency, to entirely abandon its use; that although the evils growing out of its use were very great, and therefore, for the sake of example, we were bound to abandon it, yet it was not so much an evil *per se*; that if there were no danger of an increased appetite, or of injury by example, a little might not be wrong.

When the advocates of reform will plant their feet firmly upon the principle, that drinking a drop of that burning poison, is a violation of physical law which God has instituted in our physical being, and therefore a violation of moral obligation to him - laying the axe first at the root of the tree - they will stand where Heaven will give them moral power to move the world. They will then have the lever of Archimedes, with its fulcrum, and the place to stand which he desired, by which to lift the earth from its base. When

men will stand on this foundation, in advocating temperance, they will be likely to maintain consistency in their own habits. They will not bring upon themselves the too just charge of hypocrisy in pleading temperance over a plug of tobacco; of drawing their eloquence from the sensual inspiration of the smoking weed; of pleading abstinence from the weaker bane, and indulging lust for the stronger poison. No man can preach the Gospel or plead its moral reforms with eloquence, while sinning against God with this idol in his mouth. If he would utter his words with moral force, they must proceed from a PURE BREATH, AND FROM CLEAN LIPS.

PERSONAL OBLIGATIONS

When conversing with men on the consequences of want of intelligence and practical interest in the laws of physical life, and the importance of waking up to our responsibility in the matter, they will often apologize

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for their neglect and disregard for the subject during the past, and their indifference and apathy toward any future improvement, by a wholesale, unmeaning condemnation of the conduct of the world on this subject. They say, "We" - meaning all the world - "we know a great deal better than we do - if we were more enlightened, we would not regard it." This subterfuge, miserable as it is, sums up their excuse for a further neglect of the subject. Because the mass of the people are destroying the true basis of their highest earthly interest, they feel feel justified in letting themselves and children suffer on, under the penalties of ignorance and neglect of organic law.

If the majority of men were steeping themselves in alcoholic liquors, would this afford a valid reason why my feet should tread the same beaten path? The main question is not, what will the world do in this matter? but, what is our duty and our interest, as single individuals - what will we ourselves do in this case? Will we act in accordance with our highest temporal good, and receive the reward, which is as sure as the promise of salvation to the

righteous, or will we recklessly pass on and be punished? These are questions for every man and woman and child to settle according to the law of self-love and self-protection, written upon the tablet of every human soul. If we are suffering the ills of violated law, we suffer for ourselves, - a suffering world cannot relieve a single pain; and if we die, we die for ourselves, and the death of others cannot save us. Will we also, as individuals, attend on the duty of taking care of those whom Heaven has committed to our charge? Or will we say, because the rest of the world take no interest in the welfare of their children, we will also let our own go on in the way of suffering and ruin?

Obedience to the laws of health, should be made a matter of individual and personal duty. It is every individual's duty to study the laws of his being and to conform to them. Ignorance or inattention on this subject is sin; and the injurious consequences of such a course, make it a case of gradual suicide. The idea that we may do what we please with ourselves, is not

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not only bad policy, and bad economy, but to do so is positively wrong; it is sin against the Author of our being. And when persons knowingly or wantonly expose themselves to disease and death, by violating the laws of life and health, instead of calling the result a visitation of Providence, it should be called an act of suicide.

If a man chew or smoke tobacco till the electric forces of his nervous system are undermined, or the vital properties of his blood are corrupted, or the secreting energies of his liver and kidneys are destroyed, and he consequently be laid upon a premature dying couch, would his sickness and death be properly considered visitations of Providence? To send a note to church in such a case, as it is the custom to do, if the nature of the case were understood, would be insulting to Heaven. And there are thousands of similar notes offered at church, where the disease that has become the burden of prayer, is no more a matter of Providence than is the State-prison for highway robbery, or the hangman's rope for murder.

If a man has gormandized on meats for a series of years, till his blood and flesh are filled with cancerous or scrofulous humor, shall this infliction of penalty be called a Providence? As well might we call delirium tremens a dispensation of Heaven for the sanctification of the soul. If men will sin against themselves, they must meet the punishment made due by the laws of their own organization. If they will rebel against nature, they must abide the righteous decisions of nature's court; and from these decisions there is no appeal. The Almighty himself, without a miracle cannot save a man from burning his flesh when it comes in contact with living fire. If he would trust in Providence to save him from suffering, he must himself keep within the limits of divine law, written on the human constitution.

If the path of duty pass through a region of danger, we may trust in Providence; but when we recklessly throw ourselves under the car of Juggernaut, we must be crushed. An American gentleman was suffering severely from ill health. He had consulted the

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most skillful of American physicians, some of whom told him his sufferings were occasioned by tobacco, and he became himself satisfied that this opinion was correct; but, unwilling to relinquish this enslaving habit, he went to Paris, France, to take the advice of Dr. Broussais, to see if he could not institute some method of recovery which would allow him to continue his habit. Oh, what folly! Why did he not get up a petition, - for a long list of signers could have been obtained, - and send it to the court of Heaven, praying that law, touching this indulgence, might be repealed? Such a step was the only one which could possibly have afforded the slightest hope; for, while law remains as it is, the transgressor must suffer.

The laboring man who eats quick and works immediately after, is not only pursuing a course of bad economy, but is doing wrong to himself and to his Creator. He is diminishing his power and durability for doing good. When a man of intellectual habits neglects to live in accordance with the laws of mind and body, he

pursues not only a bad policy, but secures for himself the punishment due to his criminal conduct. The man who lives unnaturally instead of naturally, who allows his system to come under the influence of stimulating drinks, or narcotic and poisonous drugs, does a material and important wrong to himself, and must expect to give account for his criminal conduct on the day of final judgment.

The strange abandonment of principle which characterizes this generation in their treatment of themselves, is almost enough to dishearten the most sanguine hopes of reform. Instead of seeking after a true knowledge of themselves, - the laws which sustain and govern their own animal existence, - and what course of living they ought to adopt to secure for themselves a sound state of health and long life, they foolishly and wickedly inquire, "What shall I eat and wherewithal shall I enjoy the present hour?"

If we tell the devotee to the alcoholic draught, or the more poisonous and filthy narcotic, tobacco, that his daily potations, or the essences of the deadly weed, are secretly gnawing the tender cords that bind his soul

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and body together, he heeds us not. He will probably acknowledge the facts in the case, and, at the same time, with most perfect indifference to consequences, and insensibility to personal obligations, will answer that he chooses rather to enjoy life while he does live, than to prolong life by curtailing present gratification.

But what is duty - what is right - in the case? Have we a right to prefer present gratification to permanent good? Have we any right to open an artery, and let the blood gradually run away, because we are delighted with the crimson stream? We have just as much right to do this, as we have to use rum, tobacco, tea, coffee, or any other hurtful agent, for mere gratification, against the highest earthly interests of our own life. If we would reach a high attainment in morals or in piety, we must live for it. So, too, if we would have firm and enduring health, we must live for it.

SOCIAL OBLIGATIONS

In addition to our own personal obligations to physical law, we are under high accountability in consequence of our relations to society. We are under obligations to law for the sake of posterity. Parents, and those who may expect to be parents, are called upon to take care of their health and constitution for the sake of generations to come. If parents are of weakly or diseased constitution, the children must suffer, to more or less extent, the consequences. By the unlawful course of parents in regard to themselves, the children suffer disease and premature death.

Parents are also under obligation to teach and oblige their children to conform to physical law for their own sakes. The mother who suffers her children to eat irregularly, or to violate the laws of their systems in any other way, commits a crime against her offspring, against humanity, and against Heaven, for which God will hold her responsible. She commits a crime against the dearest objects of her affections, the evil consequences of which, time may never be able wholly to remove, and eternity alone reveal to her understanding.

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How strange and unaccountable, that mothers should love their children as tenderly as to indulge them in what they have occasion to know may injure their constitutions, and impair their happiness for life! May many children be delivered from such mothers, and from such cruel kindness!

The managers and teachers of schools and literary institutions are under obligations to secure such facilities for exercise and regulations in regard to the observance of dietetic law, as are adapted to preserve the health, and promote the literary progress, and secure to the world the usefulness of their pupils. And students owe it to the world that they so walk in obedience to law, as to render their existence and advantages a blessing to society.

Professional men cannot disregard the laws of their own health, without infringing upon their obligations to community whom they serve. If their services are required, they are bound to make the most of their ability to meet the demand. The labors of any professional man, engaged in the active business of his calling,

whether he be a clergyman, a physician or a lawyer, make a severe draft upon the nervous system, which will require all the strength that it can possibly command.

Working men have a responsibility in this matter. Those who employ laborers are in duty bound, not only for their own interests, but for the interests of those who serve them, so to regulate the hours of each day's labor, as to give their men a chance to live, enjoy the blessings of life, and sustain those who may fall into their charge. Those who are employed to labor, are under obligation to live in such a manner as to make themselves of service to their employers and meet the demands of society at large.

All who desire the welfare and improvement of society, are under obligation to exert an influence over others on this subject, by example and precept. No man can live entirely isolated from his fellow-beings; his influence by word or deed, is constantly telling pro or con the well-being of the world. Let him see to it that it be such, touching this matter, as shall

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make mankind the better and happier for his having lived in it. Let him be at least a drop in the bucket of that great wheel which moves the vast machinery of human improvement in its onward course. - *Philosophy of Health*.

PHYSICAL DEGENERACY

WE copy the following from the Maine Farmer.

When editors, physicians and ministers, begin to see the physical degeneracy of our world, and to speak out as they ought on the subject, the people will awake. Too many, we say it in sorrow, do not undertake the business of thinking for themselves. They trust it to their minister, their doctor, or their editor. Hence, the importance that these should be right. But woe to them, if the people get right first.

We would call attention to the following communication upon physical degeneracy. It is a subject of the first importance to the community. There can be no doubt, that the rising generation are

not so robust - and not so healthy, as those that have preceded them. The cause, to our mind, is obvious. We have departed from the simple habits, and laid aside too much the athletic exercises of our ancestors. And in proportion as we have so departed, are we visited with debilities and disorders, which weaken and derange the system. Simple diet, and plenty of exercise in the open air, is what nature requires. Deprive her of this, and she deprives you of the energy, elasticity and activity of frame and of mind, for the mind is more or less influenced by the health of the body. We highly appreciate the efforts which some physiologists are making to bring back society to those simple and frugal habits, which can alone insure that vigor and capability to endure hardships, which as a people we ought to possess. The evil is not confined to one sex - both alike, are guilty of the errors which are bringing about the degeneracy of which we speak, and perhaps the ladies carry things to greater extremes than the gentlemen. At any rate, they are more addicted to tea and coffee intemperance.

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What is to become of the world? exclaimed a worthy woman to us not long since. There is not a young girl of my acquaintance, continued she, that is learning to spin or weave, and a great many of them think it a disgrace to be seen at the wash-tub. For my part, I think, said she, the rising generation will be more idle and effeminate than the present, and if they are, the Lord have mercy upon them. We could not help smiling at the good woman's earnest exclamations - but there is too much truth in her remarks.

MR. HOLMES: In the 19th number of the current volume, there is an original article, entitled "Physical Degeneracy" in which the writer lays down the fact incontestably that there is a manifest degeneracy, in regard to the physical powers of the people of the present age. No man can open his eyes and look about him and examine the bills of mortality, without acknowledging this fact.

The writer asks a number of questions, and calls loudly on you to answer them. I have not seen your answer. As a medical man, I think it was your duty to have answered them. But as you have neglected to do it, I have thought it my duty to say something by

way of answer. I do not propose, or expect to give all the causes, and perhaps not a hundredth part of them. It is a subject that concerns all classes of the community and should engage the attention of the whole people, for it is a melancholy fact, that the bills of mortality, show that too many have died that belonged to the middle-aged.

Is not one cause, a neglect of that coarse, plain, but substantial diet and clothing, and the industrious habits used and practiced before the American Revolution?

The present system of high living, which is now becoming fashionable, is not such as is dictated by nature, nor is it such as you would prescribe for your horse or for your hog. Why do you not provoke their appetites by all the niceties of cookery, with mixtures of sweet, and salt, and sour, and pepper, and spice etc., etc. You dare not risk your horse under such treatment. Yet you do risk yourselves, and are anxious

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to risk yourselves and families under such a regimen. You encourage cooks to vie with each other, in making mixtures of food to please the palate and lure to destruction.

The tyrant fashion prompts to the practice of these follies. There is not moral courage enough to stand against the pressure of public opinion in this respect, although it is bringing misery upon us. One does it, another must, and such has been the blind deference paid to the dictates of this spirit, and so guilty is every one in regard to it, that the stage, the press and the pulpit have refrained from attacking it as they ought. But very few have dared to lift up their voices against it, and they have been hissed at, and stigmatized by the names of Grahamites, cold-waterites, etc., etc.

We are not the first nation, Mr. Editor, that has gone the same path to destruction.

The sins, says the prophet, of the cities of the plain were fullness of bread and idleness. Effeminacy and luxury destroyed Rome, when all the arms of the surrounding nations could not do it in their primitive days, and when they did not number a quarter so

many as when they bowed to the yoke after the days of the Emperors.

Alexander the Great, while practicing the plain and simple rules of temperance, was invincible to all the toils of war, but was finally conquered by giving way to his own appetite.

A vitiated public opinion, backed by intemperance and gluttony, must be stronger and more invincible than Goliath with all his armor. In vain may the gospel be preached - in vain may we remonstrate with a man besotted by gluttony and other species of intemperance. The man is gone, irretrievably gone, there is, there can be no hope, unless we first make a rational man, as it regards diet and regimen - and sound in the principles of temperance in all things.

Are not our temperance societies and papers very much to blame for not occupying the whole ground. - Some give themselves up to appetites. They say that they have but one life to live, and I am determined to

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enjoy that. What sort of enjoyment can a glutton or a drunkard have? What sort of enjoyment does an idle spendthrift have? If they will not be reclaimed - if they will hurry on to death, let them die, for the world loses nothing by their death, but when a rational, sane, and good man, drops off prematurely, the world sustains a loss indeed.

There might be many other causes mentioned which aid in producing the degeneracy of which we complain. But we have named the principal and chief cause. It is time to pause and look around for the remedy. Look back to our forefathers and practice the simple habit which they did.

Study well written books on dietetics - make the preservation of your health a religious study. Learn to conquer your passions as you go through this world. All good people have made it a duty so to do. I would recommend a total shift of habits from those practiced at the present day, as the only remedy. It is a subject of the first earthly importance, for if health be lost, what of a worldly nature can be enjoyed, and even the mind will suffer, when burdened with

an enfeebled body. Woman! thou arbiter of Fashion, I call upon you to assist in this reform. Do you wish to be widows? But widows, a greater or less number of you must be, unless there shall be a change of habits of life. This will appear abundantly evident, if you examine the cause and see how many middle aged men have died, who have left families either destitute, or without a guide and protector. And this mortality, I contend, is brought about by foolish and unpardonable indulgence in the fashions of the day. - *Health Journal*.

PORES OF THE SKIN. - Besides the mouths of these little oil glands, many anatomists have considered the skin - and the cuticle of course - as pierced with little openings called pores, almost innumerable. Some have reckoned them at 1,000,000 to every square inch. - Others, deny all this. But one thing is

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very certain, which is, that what we call sweat, or the accumulated perspiration of the body, when it becomes abundant, is constantly escaping through the skin and its cuticle, in the form of a thick mist or fog, as we may see by holding a bright mirror close to it, which will immediately become tarnished. Or, if we sit where the sun shines across us, upon a wall, we can see the shadow of the mist which ascends from us rising like a sheet of thin smoke upon the wall.

SUNSHINE

SECLUSION from sunshine is one of the misfortunes of our civilized life. The same causes which makes potato vines white and sickly, when grown in dark cellars, operates to produce the pale, sickly girls that are reared in our parlors. Expose either to the direct rays of the sun, and they begin to show color, health, and strength.

One of the ablest lawyers in our country, - a victim of long and hard brain-labor, came to me a year ago, suffering with partial paralysis. The right leg and hip were reduced in size, with constant pain in the loins. He was obliged, in coming up stairs, to raise the left foot first, on every stair, dragging the right one after it. Pale,

feeble, miserable, he told me he had been failing several years, and closed with, "My work is done. At sixty, I find myself worn out."

I directed him to lie down under a large window, and allow the sun to fall upon every part of his body; at first, ten minutes a day, increasing the time until he could expose himself to the direct rays of the sun a full hour. His habits were not essentially altered in any other particular. In six months, he came running up stairs like a vigorous man of forty, and declared, with sparkling eyes, "I have twenty years more of work in me."

I have assisted many dyspeptic, neuralgic, rheumatic, and hypochondriacal people into health, by the SUN-CURE. I have so many facts illustrating the wonderful power of the sun's direct rays in curing certain

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classes of invalids, that I have seriously thought of publishing a work, to be denominated the "SUN-CURE."

I take the liberty of introducing another case, which greatly impressed my mind at the time.

Many years ago, a clergyman who had for years been a victim of dyspepsia, and who had prayed for death, as the only door of escape, came, through the advice of a mutual friend, to consult me. I advised the disuse of all medicines, the generous use of cracked wheat, good beef, and much exposure to the sunshine. To secure the last-mentioned influence, I directed him to enclose twenty feet square in his garden with a close fence, and plant the ground within with something, the cultivation of which would occupy his mind. Then, when the weather was warm, shutting himself in, he was to busy himself, *quite nude*, with the cultivation of his vegetables, from ten to sixty minutes a day, always indulging in a thorough bath and friction before leaving. *He was radically cured.*

I was practicing my profession in Buffalo, New York, during '49 and '51, those memorial cholera seasons. I saw at least five cases of cholera on the shady side of the street and houses, to one on the sunny side. One eminent physician in New Orleans reports from his own practice, eight cases of *yellow fever* on the shady side of the street, to one on the sunny side.

Who has not read Florence Nightingale's observations in Crimea, showing the difference between the shady and the sunny sides of the hospitals? In St. Petersburg the shady side of the hospitals was so notoriously unfavorable to the sick soldier that the Czar decreed them into disuse.

The shade-trees about our dwellings have done much to make our wives and daughters pale, feeble, and neuralgic. Trees ought never to stand near enough to a dwelling to cast their shade upon it; and if the blinds were removed, and nothing but a curtain within, with which to lessen, on the hottest days, the intensity of the heat, it would add greatly to the tone of our nerves and to our general vigor. The piazzas which project over the lower story, always make that less healthy than the upper story, especially for sleeping

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purposes. I am sure I have cured a great many cases of rheumatism by advising patients to leave bed-rooms shaded by trees or piazzas, and sleep in a room and bed which were constantly dried and purified by the direct rays of the sun. - *Dio Lewis*.

THE BEST BED

Of the seven pounds which a man eats and drinks in a day, it is thought that not less than two pounds leave his body through the skin. And of these two pounds a considerable percentage escapes during the night, while he is in bed. The larger part of this is water, but in addition there is much effete and poisonous matter. This being in great part gaseous in form, permeates every part of the bed. Thus, *all parts of the bed, mattress, blankets, as well as sheets*, soon become foul and need purification.

The mattress needs this renovation quite as much as the sheets. To allow the sheets to be used without washing or changing, three or six months, would be regarded as bad house-keeping; but I insist, if a thin sheet can absorb enough of the poisonous excretions of the body to make it unfit for use in a few days, a thick mattress, which can absorb and retain a thousand times as much of

these poisonous excretions, needs to be purified as often, certainly, as once in three months.

A sheet can be washed. A mattress cannot be renovated in this way. Indeed, there is no other way of cleansing a mattress but by steaming it, or picking it to pieces, and thus, in fragments, exposing it to the direct rays of the sun. As these processes are scarcely practicable with any of the ordinary mattresses, I am decidedly of the opinion, that the good old-fashioned straw bed, which can, every three months, be changed for fresh straw, and the tick washed, is the sweetest and healthiest of beds.

If, in the winter season, the porousness of the straw bed makes it a little uncomfortable, spread over it a comforter, or two woolen blankets, which should be

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washed as often as every two weeks. With this arrangement, if you wash all the bed covering as often as once in two or three weeks, you will have a pleasant, healthy bed.

Now if you leave the bed to air, with open windows, during the day, and not make it up for the night before evening, you will have added greatly to the sweetness of your rest, and, in consequence, to the tone of your health.

I heartily wish this good change could be everywhere introduced. Only those who have thus attended to this important matter, can judge of its influence on the general health and spirits.

- *Dio Lewis.*

DAMP BEDS

SLEEP is essential. However moderate the work, the best constitution will soon break down under a loss of sleep. It is especially necessary for preachers. If they are engaged in their work, as they should be, their labors are exciting and wearing, more than those of most other men, and after the exhausting services of a meeting, they need quiet and refreshing rest at night. This is far more essential than food or drink. Friends who invite them home show no want of hospitality in the supplies which they

furnish to tempt the appetite. But in the provision which they make for their obtaining needful rest, there is often a culpable negligence which is sometimes attended with the most serious results. The late Wm. Dawson, an eminent and useful Methodist minister in England, was killed by a damp bed. Prince Albert was said to have shown the first symptom of his fatal illness as the consequence of a damp bed at Madingly Hall. We have had some painful experiences in this matter. At one time, after preaching three sermons on the Sabbath, to a crowded house, we were invited home by a brother to stay all night. We were very kindly received. After an interesting season of prayer, we were sent to sleep in a room - the third one away from any fire - in a bed that was

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seldom occupied, and which had accumulated all the damp and cold that a winter's frost could give it. The night was the coldest of the season. In vain did we try to sleep. We were so thoroughly chilled that rest was impossible. In the morning we arose languid and depressed, feeling as if we had suffered a long fit of sickness. The good people had none but the kindest intentions, but if God had not blessed us with a strong constitution, and watched over us for good, our labors might have suddenly closed.

We have heard some of our old preachers say that they did not suffer in the early days of their ministry when they slept in the chambers of log cabins, through the roofs of which they could see the stars, as much as they often do now when put to sleep in some cold room of the large house of some wealthy brother. In those days the big fire below warmed the chambers; but the spare chamber of the large house is generally removed far from the influence of fire.

Will not our sisters think of these things? Make it a matter of conscience, never to put an ambassador of Christ, weary with toils, nor indeed any one else, to sleep in a bed that is cold, damp and uncomfortable. There is never any necessity for it. If you cannot take a fire to the bed to dry it thoroughly, you can always, with a little trouble, take the bed to the fire. This is a great deal better

than to kill one off prematurely, or to give him the rheumatism, or some other painful disease for life.

FASHIONABLE WOMEN

FASHION kills more women than toil or sorrow. Obedience to fashion is a great transgression of the laws of woman's nature, a greater injury to her physical and mental constitution, than the hardships of poverty and neglect. The slave woman at her task will live and grow old, and see two or three of her mistresses fade and pass away. The washerwoman, with scarce a ray of hope to cheer her toils, will live to see her fashionable sisters all die around her. The

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kitchen-maid is healthy and strong when her lady has to be nursed like a sick baby.

It is a sad truth that fashion-pampered women are almost worthless for all the great ends of human life. They have but little force of character, they have still less power of moral will, and quite as little physical energy. They live for no great purpose in life; they accomplish no worthy ends. They are all doll-forms, in the hands of milliners and servants to be dressed and fed to order. They dress nobody, they feed nobody, they instruct nobody, they bless nobody, they save nobody. They write no books, they set no rich examples of virtue and womanly life. If they rear children, servants and nurses do all, save to conceive and give them birth. And when reared what are they? What do they ever amount to, but weaker scions of the old stock? Who ever heard of fashionable woman's child exhibiting any virtue or power of mind for which he became eminent? Read the biographies of our great and good men and women. Not one of them had a fashionable mother. They nearly all sprung from strong minded women, who had about as little to do with fashion, as with the changing clouds. - *Sel.*

SLEEP. - Invalids generally do not sleep enough. The importance of sound, quiet, and sufficient sleep cannot be too highly estimated, as may be inferred from the physiological fact,

that it is during sleep that the structures are repaired. The materials of nutrition are digested and elaborated during the day; but assimilation - the formation of tissue - only takes place during sleep, when the external senses are in repose. Literary persons require more sleep, other circumstances being equal, than those who pursue manual-labor occupations. If the brain is not duly replenished, early decay, dementation, or insanity will result. The rule for invalids is, to retire early, and remain so long in bed as they can sleep quietly. If their dietetic and other habits are correct, this plan

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will soon determine the amount of sleep which they require. Gross, indigestible, and stimulating food, heavy or late suppers, etc., necessitate a longer time in bed, for the reason that the sleep is less sound. And for the same reason, nervine and stimulating beverages as tea and coffee, prevent sound and refreshing sleep and thus wear out the brain and nervous system prematurely. Those who are inclined to be restless, vapory, or dreaming, during the night, should not take supper. - *Dr. Trall.*

CARE OF THE EYES

CRAWFORD, the celebrated sculptor, had an inveterate habit of reading in a reclining position. One eye had to be taken out in consequence of a cancerous tumor forming behind it, and his life has paid the forfeit, after years of suffering and the expenditure of a large amount of money. Prescott, the historian, in consequence of a disorder of a nerve, by which the eyes were rendered useless for all writing purposes, could not use a pen, as he was unable to see when it failed to make a mark for want of ink; nor could he distinguish the lines or edges of his paper. Yet with these disadvantages he wrote all his histories, using the agate styles on carbonated paper, being guided as to the lines or edges by brass wires drawn through a wooden frame. But with all these hindrances he has made himself one of the most readable of modern historians, and earned a fortune besides.

To avoid these and other similar calamities, we urge upon the young, especially, never to use the eye by any artificial light, where nicety of sight is required, nor the use of them in any straining position, or while riding in rail cars or carriages. We urge upon parents, in view of the many incurable eye diseases, to caution their children against reading by twilight; that is, before sunrise, or after sunset. It would be better not to allow them to read or sew by any artificial light, but if that is unavoidable, let it be imperative that they cease by nine o'clock at night in

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summer, and, by ten, at the furthest, in winter. It is a most inexcusable folly, and will, sooner or later, bring its punishment, to read or sew by gas or lamp, or candle light, and then sleep after daylight, as a habit. To all persons, of all ages, it is a most injurious practice. - *Hall's Journal of Health.*

DRINK LESS WITH YOUR MEALS

ONE great error, we drink too much at our meals. Before we have sufficiently masticated and insalivated our food, to enable us to swallow it, we force it down by taking water or warm drinks. This not only dilutes the saliva, but weakens the action of the gastric juice after the food gets into the stomach. Most persons take a swallow of fluid with almost every mouthful of food. Look along the side of the dinner-table in any of our hotels, and you will be surprised at the quantities which are drunk during the meal: and, if your mind be not too much taken up with observing the errors of others, you may discover the same evil in yourself, and thus be led to correct it. This habit, sooner or later, ends in producing dyspepsia and constipation, than which there are no affections more destructive of comfort and health. When we are thirsty at our meals, or at other times, we should drink to allay such thirst only. All solid food should be thoroughly ground and mixed with saliva in the mouth, unaided and undiluted by water or other drinks. Rely upon it, this apparent necessity for drinking, is a mere habit, which we can correct at will; and all who prize health at its true value, will

not consider its preservation or purchase too high at the cost of attention to so simple a matter.

In this age of tobacco-smoking and chewing, the salivary glands seem to be turned to a new office - that of cleansing this filthy narcotic from the teeth and gums. Were they endowed with language, verily might they exclaim -

"To what vile uses have we come at last."

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Who can wonder at the hollow and wan cheeks of mankind, when such a continuous drain is established upon them - a kind of perpetual catarrh or lachrymosis of the mouth. Take warning by what we say. If you would have good digestion, proper action of the system, and full, ruddy cheeks, eat slow, masticate your food better, drink less at your meals, and you who smoke, if smoke you will, avoid spitting as much as possible. The latter have a two-fold reason for observing our last injunction; they will save, at the same time, their own health and the feelings of their friends. -*Sel.*

WESLEY AND HIS PREACHERS

HE prescribed the minutest rules of life for them, even such as concerned their physical habits. He found that some became "nervous" more probably by too much work than by too little, though he thought otherwise. He gave them advice on the subject. "Touch no drink, tobacco, or snuff. Eat very light, if any, supper. Breakfast on nettle or orangepeel tea. Lie down before ten; rise before five. Every day use as much exercise as you can bear; or murder yourselves by inches." "These rules," he adds, "are as necessary for the people as the preachers." . . . He interrogated them closely in his printed Minutes about their habits, "Do you," he asked, "deny yourselves every useless pleasure of sense, imagination, honor? Are you temperate in all things? - to take one for instance, in food? Do you use only that kind, and that degree which is best both for soul and body? Do you see the necessity of this? Do you eat no flesh suppers? no late suppers? these naturally tend to destroy bodily health. Do you eat only three meals a

day? . . . Do you take no more food than is necessary at each meal? You may know, if you do, by a load at your stomach, by drowsiness or heaviness, and in a while by weak or bad nerves. Do you use only that kind and that degree of drink which is best both for body and soul?

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Do you drink water? Why not? Did you ever? Why did you leave it off, if not for health? When will you begin again? To-day?" --*Dr. Stephen's History of Methodism.*

MATCHED BY A WOMAN

IN the somewhat famous case of Mrs. Bogden's will, which was tried some years ago, Mr. Webster appeared as counselor for the appellant. Mrs. Greenough, wife of the Rev. Wm. Greenough, late of West Newton, a tall strait, queenly-looking woman, with a keen black eye - a woman of great self-possession and decision of character - was called as a witness on the opposite side. Webster at a glance had the sagacity to foresee that her testimony, if it contained anything of importance, would have great weight with the jury. He therefore resolved, if possible to break her up; and when she answered the first question put to her, -

"I believe?" Webster roared out, "we don't want to hear what you believe we want to hear what you know?"

Mrs. Greenough replied, "That is just what I was about to say, sir," and went on with her testimony.

And, notwithstanding his repeated efforts to disconcert her, she pursued the even tenor of her way, until Webster, becoming quite fearful of results, arose apparently in great agitation, and drawing out his large snuff-box, thrust his thumb and finger to the very bottom, and carrying the deep pinch to both nostrils, drew it up with gusto.

Webster - "Mrs. Greenough, was Mrs. Bogden a neat woman?"

Mrs. Greenough - "I cannot give you very full information as to that sir; she had one very dirty trick."

Webster - "What's that, ma'am?"

Mrs. Greenough - "She took snuff."

The roar of the court was such that he neither rose nor spoke again till after Mrs. Greenough had vacated her chair for another witness.

WORDS FROM HORACE MANN. EXTRACTS FROM HIS LECTURES

"PHYSICALLY, man is born in weakness. He is not the emblem of weakness, but the thing itself. Yet through the organs of his body, he holds relations to all material things. He is adapted to them and they to him; his eye to the light, his feet to locomotion, his muscles to resistance, gravitation, and force. If a man moves in harmony with the physical universe around him, it prospers and blesses all his works, lends him its resistless strength, endues him with its unerring skill, enriches him with its boundless wealth, and fills his body with strength, celerity, and joy. But woe to the people or the man, who through ignorance or defiance, contends against the visible mechanism or the invisible chemistry of Nature's laws. Whoever will not learn and obey these laws, her lightnings blast, her waters drown, her fires consume, her pestilences extinguish; and she could crush the whole human race beneath her wheels, nor feel shock or vibration from the contact.

"Intellectually, man is born in blank ignorance. To the infant, all knowledges are a nonentity. A few sensations make up all his consciousness. Yet through his capabilities, he holds direct relation with all the truths and all the wisdom which God has materialized (if I may so speak), and incorporated into the frame of nature. The material universe is not matter alone. It is filled with scientific treasures, inconceivable, boundless, endless. Knowledge furnishes the keys by which the apartments of the temple containing these treasures can be unlocked. Hence, whoever will obtain the key of any of these apartments; that is, whoever will acquire a knowledge of the system to which he belongs, can command such riches as Imperial or Oriental despot never dreamed of. Some of these treasures have already been discovered, and they are now enjoyed in the products of those useful and elegant arts which distinguish

civilized men from barbarians. But beyond the boundaries of our present knowledge, treasures of yet undiscovered wealth,

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gorgeous and incomputable, lie crowded and heaped together, compared with which the Gazas and Indies of the past are but the gauds and toys of childhood. There they lie, all perfect, beautiful as truth herself, and only waiting for the coming of the great discoverer, - the Bacon, the Columbus, or the Franklin of the future age, - to reveal them, and make new benefactions to mankind. Yet this same intellect, by obeying the fiery impulses of appetite and passion may become the engine that sweeps itself and others to ruin."

"Now, it is the comprehensive duty of a College, so far as it can be done by human agency, to equip the youth whom it receives, with terrestrial and with celestial armor to meet the tremendous exigencies of their being. Above all, it is its duty to prepare them to equip themselves.

"Listen to me, I pray you, while I endeavor to unfold these three classes of duties, in their order.

"All ethical and religious histories, all intellectual philosophies, mourn over the degeneracy of the human heart, and the errors of the human mind. But were all the wrongs and calamities which pertain to the human race, to be classified according to their more immediate relation to the Body, the Intellect, or the Soul, I believe by far the greater proportion of them would be found to proceed immediately from the bodily appetites and propensities. This body of ours in which the soul dwells, - without which, as human beings, we can do nothing and are nothing, - seems not less lost to its first estate of blessedness than either the mind or the heart. Of the three great channels through which depravity sends out its copious streams to corrupt the character of individuals and to blast the happiness of the race, the largest current has its head-springs in the bodily appetites and passions. We weep and bleed at the terrible idea of "Adam's Fall." As to the body, would to God, there had been but one "Fall." But from Adam through all the generations to ourselves, what has it been but a series of cascades, plunge after

plunge, and deep below depth! Would it not be the direst of indignities and blasphemies to suggest that God could ever have created

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a race, so physically enervated, dwarfed and gangrenous, as ours now is? - not developed but stunted, not beautiful but deformed, not healthy but instead of health, that appalling catalogue of disease, whose definitions crowd the shelves of the physician's library, and exhaust the copiousness of three languages for their nomenclature. These choleras, these plagues, these pale consumptions, these burning fevers, this taint and corruption of blood, which, after flowing under-ground for two or three generations, burst up from their subterranean passages to torment the lineage of guilty progenitors; - were all these, do you say, implanted and indigenous in the first generations of men, by God's providence; or have they not all been since generated by man's abuse? Congenital blindness, deaf-mutism, hydrocephalus, insanity, idiocy, did these come normally, through law, or by reason of the most flagrant violations of law? With one-fourth of the human race dying before they attain the age of one year, what sacrilege to suppose that God said of such a race, "Let us make man in our own image," and then added, "so God created man in his own image; in the image of God created he him; male and female created he them." Intemperance, gout, scrofula, and the through and through rottenness of the licentious man, - did God enact laws which, by their faithful observance, would bear such fruits, in clusters as the vine bears grapes? No! It is impiety to suppose it. Trace back the pedigree of any bodily pain, disease, or privation of sense, and its ancestors, however remote, will be found in some violation of God's physical laws, or in a culminating series of violations, too wickedly great for individual enterprise. Through the temptation of a bodily appetite, man first fell; and all theological schools, and Bible societies, and divine ministrations and ordinances, will never re-instate him in his pristine purity until the laws of physical health shall triumph, by bringing the bodily

appetites and passions within the domain of conscience and religion.

"So universal and long-continued have been the violations of the Physical Laws, and so omnipresent is

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human suffering as the consequence, that the very tradition of a perfect state of health has died out from among men. We are wonted to the presence of debility of pain. Religious men teach us to accept weakness and suffering as the appointed lot of humanity. Hence the conditions of health and longevity are not merely disregarded, but ignored, and men of the profoundest learning on other subjects are here ignorant of elements. University professors know how to take care of the solar system, but do not know how to take care of their own systems. I admire the rules of prosody by which Greek and Latin verse flow into harmonious numbers; but I prefer the tuneful pulse which never makes an elision, to any music of classical scanning. I once knew a professor of rhetoric in an American college, who choked himself to death at a dinner party, with an undivided piece of mutton. He knew to a semitone the rhetorical proportions in which breath should be sent out of the lungs; but was ignorant of the physiological quantities in which food should be taken into the stomach. Clergymen are forever exhorting us to keep our spirits clean and pure, and then, in their outer man, they exemplify their teachings by all the defilements of tobacco. They are Boanerges for the advancement of their own sect, but disdain companionship with that sect of the Nazarites who drank no wine. Statesmen and learned doctors debate and discuss the minor questions of political economy; but forget that a blight on public health is more pecuniarily disastrous than mildewed crops, and that the most adverse balances of trade are less impoverishing than the expenditures for sickness, the non-productiveness of bodily imbecility, and the costs of vice and crime.

"I hold it to be morally impossible for God to have created, in the beginning, such men and women as we find in human race, in their physical condition, now to be. Examine the book of Genesis,

which contains the earliest annals of the human family. As is commonly supposed, it comprises the first twenty-three hundred and sixty-nine years of human history. With child-like simplicity this book describes the infancy of

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mankind. Unlike modern histories, it detail the minutest circumstance of social and individual life. Indeed, it is rather a series of biographies than a history. The false delicacy of modern times did not forbid the mention of whatever was done or suffered. And yet, over all the expanse of time - for more than one-third part of the duration of the human race - not a single instance is recorded of a child born blind, or deaf, or dumb, or idiotic, or malformed in any way! During the whole period, not a single case of a natural death in infancy, or childhood is to be found. Not one man or woman died of disease. The simple record is, 'and he died,' or, he died 'in good old age and full of years,' or, he was old and full of days.' No epidemic, nor even endemic disease prevailed, showing that they died the natural death of healthy men, and not the unnatural death of distempered ones. Through all this time (except in the single case of Jacob, in his old age, and then only for a day or two before his death) it does not appear that any man was ill, or that any old lady or young lady ever fainted. Bodily pain from disease is nowhere mentioned. No cholera infantum, scarlatina, measles, small pox - not even a toothache! So extraordinary a thing was it for a son to die before his father, that an instance of it is deemed worthy of special notice; and this first case of the reversal of nature's law was two thousand years after the creation of Adam. See how this reversal of nature's law has, for us, become the law; for how rare is it now for all the children of a family to survive the parents. Rachel died at the birth of Benjamin; but this is the only case of puerperal death, mentioned in the first twenty-four hundred years of the sacred history; and even this happened during the fatigues of a patriarchal journey, when passengers were not wafted along in the saloons of rail-car or steamboat. Had Adam, think you, tuberculous lungs? Was Eve flat-chested, or did she cultivate the serpentine line of grace in a curved

spine? Did Nimrod get up in the morning with a furred tongue, or was he tormented with the dyspepsia? Had Esau the gout or hepatitis? Imagine

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how the tough old Patriarchs would have looked, at being asked to subscribe for a Lying-in-Hospital, or an Asylum for Lunatics, or an Eye and Ear Infirmary, or a School of Idiots or Deaf-mutes. What would their eagle-vision and swift-footedness have said to the project of a Blind Asylum, or an Orthopedic establishment? Did they suffer any of these revenges of nature against false civilization? No! Man came from the hand of God so perfect in his bodily organs, so defiant of heat and cold, of drought and humidity, so surcharged with vital force, that it took more than two-thousand years of the combined abominations of appetite and ignorance; it took successive ages of outrageous excess and debauchery, to drain off his electric energies and make him even accessible to disease; and then it took ages more to breed all these vile distempers which now nestle, like vermin, in every organ and fiber of our bodies!

"During all this time, however, the fatal causes were at work, which wore away and finally exhausted the glorious and abounding vigor of the pristine race. At least as early as the third generation from Adam, polygamy began. Intermarriages were all along the order of the day."

"After the exodus, excesses rapidly developed into diseases. First came cutaneous distempers, - leprosy, boils, elephantiasis and so forth, - the common effort of nature to throw visceral impurities to the surface. As early as king Asa, that royal malady, the gout, had been invented. Then came consumptions, and the burning ague, and disorders of the visceral organs, and pestilences; or, as the Bible expresses it, "great plagues of long continuance, and sore sicknesses of long continuance;" until in the time of Christ, we see how diseases of all kinds had become the common lot of mankind, by the crowds that flocked to him to be healed. And so frightfully, so disgracefully numerous, have diseases now become, that if we were to write down their names, in the smallest legible hand, on the

smallest bits of paper, there would not be room enough on the human body to paste the labels.

"I have neither time nor desire to describe to you

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the pestilent streams, the "Dead Seas" of physical abomination, through our blood which has flowed down to us, - foul as Acheron for the purity of the soul, oblivious as Lethe for the vigor of the mind. Yet the cause and the occasion would refuse to pardon me should I not enforce our obligations to re-elevate the race to bodily soundness, by showing some passages of its loathsome descent. I take one example from Greece, and one from Rome, - the two foremost nations of European antiquity. Some passages in St. Paul's Epistles to the Corinthians will be better understood when it is known that *Venus* was the tutelary goddess of their city. She had a magnificent temple on the northern slope of the Arco-Corinthus. This mountain was covered with other temples, dedicated to inferior deities, and with the splendid mansions of the opulent. But the fame of Venus rose high above those of all other divinities, and it was enjoined by the Corinthian law that one thousand beautiful females should officiate as courtesans or prostitutes before the altar of this goddess of Love. When calamity impended over city or nation, or when individuals would propitiate the goddess in behalf of private enterprises, they vowed a certain number of courtesans for her service, and such vows were always fulfilled. Opulent men from private nations flocked to a city whose merchandise was licentiousness. Hence ample revenues flowed into the public treasury; and hence, that class of men who know no higher law than the law of Mammon and Venus, applauded and sustained her civil polity. Corinth, as may well be supposed, became the most gay, dissipated and corrupt, and so, eventually, the most effeminate and feeble portion of Greece. Would you know something of Athenian manners and morals, look at Athenian literature, especially that of the stage.

"For centuries, it was no better in Rome. Matrons deemed respectable, might be seen moving along the public streets, in a state of complete nudity, to witness festivals in honor of the gods,

where such spectacles were exhibited as made simple nudity respectable and decent. In the splendid baths, reared by the prodigality

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of successive emperors, promiscuous bathing could be purchased at the price of a farthing. In crowded theatres, the cry of the audience, "*Nudentur mimae*," was instantly obeyed. All of religion that was left, only served to exemplify the amours and licentiousness of the gods.

"I cannot repeat, what came later was indescribably worse, sucked vast nations into its engulfing vortex, and has sent down its loathsome influences to corrupt the blood and enervate the brain of succeeding generations.

"Every diseased man who bequeaths his maladies to his offspring; every drunkard who rears children from his inflamed and corrupted blood; every licentious man who transmits his weakness and his wickedness as an inheritance of suffering, is another repetition of the Fall of Man.

"From such causes, by adamantine laws, and through unalterable predestinations, has come our present diluted and depleted humanity; effete, diseased and corrupted of blood; abnormal, wasted, and short-lived; with its manliness so evaporated and its native fires so quenched, that our present world compared with what it should be and what it might be, is but a Lazar-house of disease, and an Asylum for the Feeble-minded. The imbecile races of Italy and Spain, the half-grown millions of India and Mexico, like river-mouths, are only the foul drainage of ancestral continents, all gushing with fountains of debilitating and corrupting vices.

"Then reflect, that, as the number of ancestors doubles at each ascending remove, - two parents, four grand-parents, eight great grand-parents, and so onward, - there are, even at only the tenth degree, more than a thousand conduits of whose united streams each child is the receptacle; and how swollen with the feculence of all transmissible malignities, both of body and mind, must be his blood and brain.

"Why then should we wonder that all our animal propensities are represented in our ethics; that Mammon has been the Lycurgus of much of our civil polity, and that a denial of the great law of Human Brotherhood

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so often finds refuge and resting-places in our popular theology!

"It has been somewhat generally conjectured that the early generations had some method of computing time very different from ours, and hence that the patriarchs from Adam to Noah, (with one or two exceptions,) did not, according to the literal record, live to the age of between nine hundred and a thousand years, - afterwards gradually tapering down to between one and two hundred years, at the time of the Egyptian vassalage. ⁶¹ But it is a strong, if not a conclusive argument in favor of a literal version, that, if the race had not been created with ten times more vital force than it now possesses, its known violations of all the laws of Health and Life would, long ere this, have extinguished it altogether. So rapidly had it run down, that, at the time of David, - about half-way from Adam to the present day, - he spoke of the average human life, as only three-score years and ten. Now, ask the Bills of Mortality, and they will tell you that in Europe and in the United States, it is but thirty years; and in great cities, but twenty years.

"Awful and unspeakable violations of God's laws have done this dreadful work. It is the violation of the laws of Health and Life, I emphatically repeat, which has cut down the years of man to this contemptible brevity and harrows those years with pain; which surrounds the cradle with diseases that spring, like wolves, upon the infant at his birth, and which, instead of the olden days when no child was dead-born, brings such multitudes into the world, who, though they may not be dead-born as to breathing, are so as to intellect and heart. A joy that had wings and laughter, once inhabited every joint and vital organ of man's frame. Pain has conquered this festive domain, and turns human breath into sighs.

"No other part of the organic world with which we

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are acquainted, has suffered this dire change. Under intelligent culture, the vegetable world is constantly outgrowing itself, in size, beauty and richness. All animal natures thrive, strengthen and surpass the progenitors of their stock, when subjected to the law of their being. Man alone, of all the earth, pales and dwarfs and sickens; begets children, the party-colored tissue of whose existence is the woof of one disease woven into the warp of another; transmits insanity and gout and consumption and scrofula; procreates blindness and deaf-muteness and those human *fungi*, the brainless idiots; spawns polished imbecility through our cities, which they, by their wealth, send to college, to be converted into pillars of Church and State. And why? Solely because man will break Heaven's laws. Because, for the sake of money, or for pride, disease will marry disease, and blood wed kindred blood. Because, when God commanded Adam *to work*, that is, to take some form of exercise, *in the garden*, that is, in the open air, men will not exercise, and will live in dwellings which add artificial poisons to natural ones, and then breathe the virulent compound. Popes and hierarchs send to Jordan to obtain 'holy water' for the baptism of their children, that they may give their spirits a figurative cleansing, but will not keep them physically clean with the pure water at their door; and the royal sinner imports a few cubic yards of the 'holy earth' from Jerusalem, in which that body of his may be buried, wherein sin has rioted and wantoned through all his life; - as though the thought the Omniscient could be cajoled into forgetfulness of the difference between 'holy water or 'holy earth,' and the pure in heart, and the obedient in life.

But, besides defying all the laws of God in regard to pure air, cleanliness, diet, exercise, and the selection of healthful occupations and healthful sites for residences, - besides these sins of omission, how numberless are the sins of commission which we commit, - sins which are expelling all manly power and womanly endurance from the race. To say nothing of the stimulants taken in our common morning and evening beverages, (which are no more necessary or useful to

enable healthy men or women to perform their labor than a morning dram is for the lark or the eagle, for the buffalo or the leviathan,) - to say nothing of these, the people of this nation annually madden their brains with two hundred millions of gallons of intoxicating liquors; and not only stupefy and defile themselves, but transmit irritable nerves and contaminated blood to their children by the consumption of more than thirty million dollars' worth of tobacco. Of this immense sum, squandered for this foul and abominable weed, it is estimated by Dr. Cole, - an able writer on Physiology, - that the members of the Church of Jesus Christ take five million dollars' worth of their share. It is an indisputable fact that, taking the whole United States together, much more money is expended for the single article of cigars than for all the Common Schools in the Union. Cigars against schools; cigars against the great cause of Popular Education; and Appetite triumphs over Intellect and Morals! And where these natural poisons of alcohol and tobacco are used most freely, the Church and the School-house are seen most rarely. I say nothing of opium and other narcotics. And, after quenching still more the expiring embers of vitality that yet glimmer in the race, and corrupting its corruption to a more malignant type, we call ourselves civilized and, - may Heaven pardon the audacity, - Christian. Are those the practices of civilization which honeycomb the bones and leave the muscles sodden, while they irritate the nerves and evaporate electricity from the brain? Is that Christianity which obeys the ceremonial law rather than the eternal; which asks the blessing of Heaven upon its food, and then gorges itself like a wolf; which offers the morning prayer, but all the day long passes unheeding by the hungry, the naked, the sick and by the prisoner's door. The time will come when men will speak of Christian and un-Christian health, as they do now of Christian and un-Christian character.

"For all these ancestral sins, posterity suffers through all its organism, and in every endowment. We suffer for the offences of our progenitors; our descendants

will suffer for ours. The self-justifying ancestor may asseverate that his surfeits of viands and wines and his indulgence in narcotics do him no harm, but, three generations afterwards, delirium and gout will shriek out their denial in his great-grand-children.

"Now let the man who would fear God, and work righteousness, survey this subject in its comprehensiveness and its solemnity. As was before said, the larger portion of the crimes against morality and religion, - crimes which savor of the second death, - germinate in what we call the bodily propensities. Intemperance and concupiscence, beget the vilest forms of selfishness, beget rebellion against God and the crime of not loving man. Look at the catalogue of offences which the moralist defines in his ethics, or the lawgiver denounces in his penal code, - at once so tropical in their luxuriance and so Tartarian in their fruits; - the murders, the incendiarisms and the nameless and numberless inhumanities of intemperance; the harems of the Mussulman and the polygamies of the Mormon, the illegitimate births, the infanticides and the crimes to forestall infanticide; the organized haunts in our great cities where iniquity is transacted by night, as business is transacted in the market-places by day; - and then reflect that these are but random specimens of those offences that come from the lusts of the flesh and the lusts of the eye. Yet these are the crimes that block up the pathway of education, and turn the sweetest persuasions of the Gospel and its most appalling alarms into empty sounds in the ears of men. In view of all this, it is no extravagance to say that our youth need physiological knowledge, as a preventive both against the debilities of ill-health, and the ferocities of animal passion, as much as they need literary and scientific knowledge against the calamities of ignorance and superstition or religious training for the love and service of God.

However well-intentioned men may become under the influence of literary and religious institutions, yet when the bodily organization is weak, the power of virtuous effort is proportionably enfeebled. In a languid

frame, benevolence and piety themselves degenerate into revery or barren contemplation. Sickly men dare not take the field, and wage battle with their satanic foes. If money-changers invade the temple, they cannot scourge them out. If wicked men build distilleries or kidnap Africans, they can only write a moral tract or sing a pious song, and let distiller and kidnapper go on. Next after Heaven, the brave heart of Martin Luther had its reinforcements from his strong frame. All along the life-way of a pure-minded but feeble-bodied man, on the right-hand and on the left, his path is lined by memory's gravestones, which mark the spots where benevolent enterprises perished and were buried, through lack of physical vigor to embody them in deeds.

"Tis then, a painful sense comes on,
Of something wholly lost and gone;

Of something from our being's chain
Broke off, not to be linked again.'

"If it be a solemn duty to keep the spirit pure, as a sanctuary for the Most High; if heart and soul and mind are to be devoted to the service of God and of our fellow-men; then who can overstate our responsibility to keep the body, - through which alone and by which alone, the highest achievements of practical heroism can be won upon earth, - in the robustest working and militant condition. Oh, if piety, like the army, kept a sick-list, what a populous hospital it would show! Well did the Apostle say 'Let not sin, therefore, reign in your mortal body, that ye should obey the lusts thereof.' Well did he urge his followers onward by telling them that 'every man that striveth for the mastery [in the race] is temperate in all things.' Well did he exhort all who called themselves by the name of Christ to present their 'bodies a living sacrifice, holy and acceptable unto God.' And well did he set forth, what was perhaps the greatest of all his achievements: 'I keep under my body, and bring it into subjection, lest by any means when

I have preached to others, I myself should be a castaway.

"Now think for a moment what mankind would gain were they relieved from early decrepitude, and from the weakness and bondage of earlier bodily ailments. What elasticity would be given to muscle, what vision to mind, what pinions to genius. What can the consumptive man do in felling a forest, by the side of the hardy pioneer, - the one exhausting his strength on a sapling; the other, mowing the trees into windrows. The tall man stretches up his hand and plucks the fruit, without an effort, which the child would perish before he could reach. It is just so with the tall mind compared with the short one. No combatants are so unequally matched, as when one is shackled with error, while the other rejoices in the self-demonstrability of truth; yet when virtue contends with vice for the extirpation of social abuses, or for the advancement of great reforms, how often do the strong bodied reprobates vanquish the weak-bodied saints. In all the higher departments of invention and discovery, in the soarings of genius, and in the exultant aspirations of sentiment, all well-organized and healthy persons rise, as by natural bouyancy, to the sublimities of an upper sphere, whither imbecility or mediocrity of strength, with all their strivings, can never soar.

"Half of what passes among men for talent is nothing but strong health. I do not here so much refer to the sound man's power of mastering truth by intuition, which the sickly arrive at only by long painstaking, as to his ability of persistence in holding on to any work, after weaker hands are forced to let go; his power of continuing the chase for a noble prize, after weaker limbs faint, or of stretching the vision on and on, after common eyes swim and darken.

"Besides, about the same amount of time must always be lost in coming to the age of maturity, whether the available period of subsequent life be cut down to twenty years, or extended to a hundred.

"I often used to wonder why the moderns, with all our accumulations of power derived from the sciences;

with such an expansion of the useful arts, by which, through the medium of machinery, we train the forces of nature to do the far greater portion of our work, and with a consciousness every way so much richer than belonged to antiquity; - I have often wondered, I say, why the moderns, with these incalculable advantages, are comparatively so little in advance of the ancients. Not only in the sayings of the wise men of old, but in the excavations of Pompeii and Herculaneum, in the decipherings of Champollion, and in Layard's exhumed wonders of Nineveh, there are such proofs of wisdom, of genius and of skill, - such intuitions into the very heart of things, - as give a transient plausibility to the old hyperbole, that there is nothing new under the sun. With the experience and discoveries of all past times treasured in our books; with our alliance and co-partnership with the powers of nature; with the beacons of ancient error to warn, and the illuminations of ancient wisdom to direct, our advance beyond all our ancestors ought to be immeasurably greater than it now is. The only solution of that painful problem is this: that all our immense advantages have but a little more than indemnified us for the appalling degeneracy of our physical strength and our mental intuitions. The improved external world of nature and art have been almost cancelled by the deteriorated internal world of vigor and insight.

"I must dwell upon this topic no longer now, unexhausted though it be. Yet when I ponder upon the wealth of human happiness that lies folded within it, I am almost tempted to call upon the student to leave his learning, and the philosopher his science, and the clergyman his theologies, and first teach men how to obey the laws of God in their physical frames; - how to glorify Him in their bodies as an accompaniment, if not a pre-requisite to glorifying Him in their spirits.

"Oh, how beautiful is the ever-changing and ever-renewing beauty of Health! - the marmorean repose of infantile sleep; the singing gladness of childhood; the exultant and sometimes wayward impulses of youth, intoxicated and bewildered by varieties of joy; the firm, right-onward march of manhood unbarbed

by an arrow of pain, and uncrippled age at last, venerable in its serene and lofty front; - how beautiful are they all! Less beautiful is the clear-springing fountain with its flower-adorned brink; less noble the mighty river cleaving its mountain-barred passage to the deep, and less reflective of all the glories of Heaven, its outspreading and calmer current as it lapses and dies into the sea!

Again Mr. Mann says:

"An earnest student is prone to ruin his health. Hope cheats him with the belief that, if he can study now without cessation, he can do so always. Because he does not see the end of his strength, he foolishly concludes it has no end. A spendthrift of health, is one of the most reprehensible of spendthrifts. I am certain I could have performed twice the labor, both better and with greater ease to myself, had I known as much of the Laws of Health and Life, at twenty-one, as I do now. In college, I was taught all about the motions of the planets, as carefully as though they would have been in danger of getting off the track if I had not known how to trace their orbits; but about my own organization, and the conditions indispensable to the healthful functions of my own body, I was left in profound ignorance. Nothing could be more preposterous. I ought to have begun at home, and taken the stars when it should come their turn. The consequence was, I broke down at the beginning of my second college year, and have never had a well day since. Whatever labor I have been since able to do, I have done it all on credit, instead of capital, - a most ruinous way, either in regard to health or money. For the last twenty-five years, so far as it regards health, I have been put, from day to day, on my good behavior; and during the whole of this period, as an Hibernian would say, if I had lived as other folks do for a month, I should have died in a fortnight.

"Health has a great deal to do with what the world calls talent. Take a lawyer's life through, and high health is at least equal to fifty per cent more brain. Endurance, cheerfulness, wit, eloquence, attain a force

and splendor, with health, which they can never approach without it. It often happens that the credit awarded to the intellect belongs to the digestion. Though I do not believe that genius and eupepsy are convertible terms, yet the former can never rise to its loftiest heights unaided by the latter.

Again, a wise man with a great enterprise before him, first looks around for suitable instruments wherewith to execute it; and he thinks it all-important to command these instruments, before he begins his labor. Health is an indispensable instrument for the best qualities, and the highest finish of all work. Think of the immense advantage you would have in a suit in court, if, after a week's or a fortnight's laborious investigation of facts, you could come in for the closing argument, on the last day, fresh and elastic, with only so much more of momentum and fervor for the velocity and the glow you had acquired, while your wilted opponent had little more vitality than a bag of sand. How long will our teachers and trainers of youth suffer boxers and racers to be wiser in their generation than themselves?

"Have you ever studied Human Physiology? If not, get such a work as Jarvis,' or Cutter's, or Cole's, or Carpenter's, and 'read, learn, and inwardly digest' it, and then obey it religiously. I say *religiously*; for Health comes within the domain of conscience and religion. The materials being given, a man is as responsible for his health as for his character. He determines that the former shall be not less than the latter. Extraordinaries excepted, a man should be ashamed of being in ill health as he should be of getting drunk.

"But I cannot dwell longer on this topic. Get health, if you have it not; keep it, if you have it."

And again he says:-

"But amid the exuberance of this country, our dangers spring from abundance rather than from scarcity. Young men, especially young men in our cities, walk in the midst of allurements for the appetite. Hence, health is imperiled; and so indispensable

an element is health in all forms of human welfare, that whoever invigorates his health has already obtained one of the great

guaranties of mental superiority, of usefulness, and of virtue. Health, strength, and longevity, depend upon immutable laws. There is no chance about them. There is no arbitrary interference of higher powers with them. Primarily our parents, and secondarily ourselves, are responsible for them. The providence of God is no more responsible, because the virulence of disease rises above the power of all therapeutics, or because one-quarter part of the human race die before completing the age of one year - die before completing one-seventieth part of the term of existence allotted to them by the Psalmist - I say the providence of God is no more responsible for these things, than it is for picking pockets or stealing horses.

"Were a young man to write down a list of his duties, Health should be among the first items in the catalogue. This is no exaggeration of its value; for health is indispensable to almost every form of human enjoyment; it is the grand auxiliary of usefulness and should a man love the Lord his God, with all his heart and soul and mind and strength, he would have ten times more heart and soul and mind and strength, to love Him with, in the vigor of health, than under the palsy of disease. Not only the amount, but the quality of the labor which a man can perform, depends upon his health. The work savors of the workman. If the poet sickens, his verse sickens; if black, venous blood flows to an author's brain, it beclouds his pages; and the devotions of a consumptive man, scent of his disease as Lord Byron's obscenities smell of gin. Not only 'lying lips,' but a dyspeptic stomach, is an abomination to the Lord. At least in this life so dependent is mind upon material organization, - the functions and manifestations of the soul upon the condition of the body it inhabits, - that the materialist hardly states *practical results* too strongly, when he affirms that thought and passion, wit, imagination and love, are only emanations from exquisitely organized

matter, such as perfume is the effluence of flowers, or music the ethereal product of AEolian harp.

"In regard to the indulgence of appetite, and the management of the vital organs, society is still in a state of barbarism; and the young man who is true to his highest interests, must create a civilization for himself. The brutish part of our nature governs the spiritual. Were we to see a rich banker exchanging eagles for coppers by tale, or a rich merchant bartering silk for serge by the pound, we should deem them worthy of any epithet in the vocabulary of folly. Yet the same men buy pains whose prime cost is greater than the amplest fund of natural enjoyments. Their purveyor and market-man bring them home headaches, and indigestion, and neuralgia by hamper-fulls. Their butler, bottles up stone, and gout, and the liver-complaint, falsely labelling them sherry, or madeira, or port, and the stultified masters have not wit enough to see through the cheat. The mass of society look with envy upon the epicure who, day by day, for four hours of luxurious eating suffers twenty hours of sharp aching; who pays a full price for a hot supper, and is so pleased with his bargain, that he throws in a sleepless and tempestuous night, as a gratuity. English factory children have received the commiseration of the world, because they were scourged to work eighteen hours out of the twenty-four; but there is many a theoretic republican who is a harsher Pharaoh to his stomach than this; - who allows it no more resting-time than he does his watch; who gives it no Sunday, no holiday, no *vacation* in any sense. Our pious ancestors enacted a law that suicides should be buried where four roads meet, and that a cart-load of stones should be thrown upon the body. Yet, when gentlemen or ladies commit suicide, not by cord or steel, but by turtle-soup or lobster-salad, they may be buried in consecrated ground, and under the auspices of the church, and the public are not ashamed to read an epitaph upon their tomb-stones false enough to make the marble blush. Were the barbarous old law now in force, that punished the body of the suicide for the offence which his soul had committed, we

should find many a cemetery at the cross-roads. Is it not humiliating and amazing, that men, invited by the exalted

pleasures of the intellect, and the sacred affections of the heart, to come to a banquet worthy of the gods, should stop by the way-side to feed on garbage, or to drink of the Circean cup that transforms them to swine!

"If a young man, incited by selfish principles alone, inquires how he shall make his appetite yield him the largest amount of gratification, the answer is, *by Temperance*. The true epicurean art consists in the adaptation of our organs, not only to the highest, but to the longest enjoyment. Vastly less depends upon the table to which we sit down, than upon the appetite which we carry to it. The palled epicure, who spends five dollars for his dinner, extracts less pleasure from his meal than many a hardy laborer who dines for a shilling. The desideratum is, not greater luxuries, but livelier *papillae*; and if the devotee of appetite would propitiate his divinity aright, he would not send to the Yellowstone for buffaloes' tongues, nor to France for *pate de fois gras*, but would climb a mountain, or swing an ax. With health, there is no end to the quantity or the variety from which the palate can extract its pleasures. Without health, no delicacy that nature or art produces can provoke a zest. Hence, when a man destroys his health, he destroys, so far as he is concerned, whatever of sweetness, of flavor and of savor, the teeming earth can produce. To him who has poisoned his appetite by excesses, the luscious pulp of grape or peach, the nectareous juices of orange or pine-apple, are but a loathing and a nausea. He has turned gardens and groves of delicious fruit into gardens and groves of ipecac and aloes. The same vicious indulgences that blasted his health, blasted all orchards and cane-fields also. Verily, the man who is physiologically "wicked" does not live out half his days; nor is this the worst of his punishment, for he is more than half dead while he appears to live.

"Let the young man, then, remember, that, for every offense which he commits against the laws of

health, nature will bring him into judgment. However graciously God may deal with the heart, all our experience proves that he never pardons stomach, muscles, lungs or brain. These must

expiate their offenses *un*-vicariously. Nay, there are numerous and obvious cases of violated physical laws, where Nature with all her diligence and severity, seems unable to scourge the offender enough during his life-time, and so she goes on plying her scourge upon his children and his children's children after him, even to the third and fourth generation. The punishment is entailed on posterity; nor human law, nor human device can break the entailment. And in these hereditary inflictions, nature abhors alike the primogeniture laws of England, and the Salic laws of France. All the sons and all the daughters are made inheritors; not in aliquot parts; but, by a kind of malignant multiplication in their distemper, each inherits the whole.

"I ask the young man, then, who is just forming his habits of life, or just beginning to indulge those habitual trains of thought out of which habits grow, to look around him, and mark the examples whose fortune he would covet, or whose fate he would abhor. Even as we walk the streets, we meet with exhibitions of each extreme. Here, behold a patriarch, whose stock of vigor three-score years and ten seem hardly to have impaired. His erect form, his firm step, his elastic limbs, and undimmed senses, are so many certificates of good conduct; or, rather, so many jewels and orders of nobility with which nature has honored him for his fidelity to her laws. His fair complexion shows that his blood has never been corrupted; his pure breath, that he has never yielded his digestive apparatus for a vintner's cess-pool; his exact language and keen apprehension, that his brain has never been drugged or stupefied by the poisons of distiller or tobacconist. Enjoying his appetites to the highest, he has preserved the power of enjoying them. Despite the moral of the school-boy's story, he has eaten his cake and still kept it. As he drains the cup of life, there are no lees at the bottom. His organs will reach the goal of existence together. Painlessly as a

candle burns down in its socket, so will he expire; and a little imagination would convert him into another Enoch, translated from earth to a better world without the sting of death.

"But look at an opposite extreme, where an opposite history is recorded. What wreck so shocking to behold as the wreck of a dissolute man; - the vigor of life exhausted, and yet the first steps in an honorable career not taken; in himself a lazarus of disease; dead, but, by a heathenish custom of society, not yet buried! Rogues have had the initial letter of their title burnt into the palms of their hands; even for murder, Cain was only branded on the forehead; but over the whole person of the debauchee or the inebriate, the signatures of infamy are written. How nature brands him with stigma and opprobrium! How she hangs labels all over him, to testify her disgust at his existence, and to admonish others to beware of his example! How she loosens all his joints, sends tremors along his muscles, and bends forward his frame, as if to bring him upon all fours with kindred brutes, or to degrade him to the reptile's crawling! How she disfigures his countenance, as if intent upon obliterating all traces of her own image, so that she may swear she never made him! How she pours rheum over his eyes, sends foul spirits to inhabit his breath, and shrieks, as with a trumpet, from every pore of his body, 'BEHOLD A BEAST!' Such a man may be seen in the streets of our cities every day; if rich enough he may be found in the saloons, and at the tables of the 'Upper Ten;' but surely, to every man of purity and honor, to every man whose wisdom as well as whose heart is unblemished, the wretch who comes cropped and bleeding from the pillory, and redolent with its appropriate perfumes, would be a guest or a companion far less offensive and disgusting.

"Now let the young man, rejoicing in his manly proportions, and in his comeliness, look on *this* picture and on *that*, and then say, after the likeness of which model he intends his own erect stature and sublime countenance shall be configured.

"Society is infinitely too tolerant of the *roue*, - the

wretch whose life-long pleasure it has been to debase himself and to debauch others; whose heart has been spotted with infamy so much, that it is no longer spotted, but hell-black all over; and who, at least, *deserves* to be treated as travelers say the wild horses of the

prairies treat a vicious fellow, - the noblest of the herd forming a compact circle round him, heads outward, and kicking him to death.

"But why should not a young man indulge an ambition to lay up a stock of health, as well as to lay up stocks of any other kind? Health is earned, - as literally so, as any commodity in the market. Health can be accumulated, invested, made to yield its interest, and its compound interest, and thus be doubled and redoubled. The capital of health, indeed, may all be forfeited by one physical misdemeanor, as a rich man may sink all his property in one bad speculation; but it is as capable of being increased as any other kind of capital; and it can be safely insured, on payment of the reasonable premium of temperance and forethought. This, too, is a species of wealth which is not only capable of a life-long enjoyment by its possessor, but it may be transmitted to children by a will and testament that no human judicature can set aside.

"Why, too, should not a young man be ambitious to amass a capital of health upon which he can draw, in cases of emergency, without danger of bankruptcy or even protest? Suppose, in the course of life, some brilliant achievement should be offered for his winning, - some literary or scientific labor, or some victory over the leagued forces of vice, or error, or ignorance, - which might demand for its triumph a double amount of exertion, for months, or for years; - then when he feels that he can do a day's work every day, and another day's work every night, and still live as long and enjoy as much as his fellows, will he not experience a delight in the consciousness of his power, a thousand times more vivid and more pure than a capitalist can ever feel over his funds, or a miser over his hoards? And is not this a legitimate satisfaction; nay, a lofty and honorable ambition, to which a true man may properly aspire?"

THE OLD AGE OF A TEMPERATE MAN

LEWIS CARNARO, a Venetian nobleman, memorable for having lived to an extreme old age, he being 105 years old at the time of his death, wrote a treatise on "the advantages of a

temperate life." He was induced, it appears, to compose this at the request, and for the instruction of some ingenious young men, for whom he had a regard; who, seeing him, then eighty-one years old, in a fine state of health, were extremely desirous to be made acquainted with the means by which he had been enabled to preserve the vigor of his mind and body to so advanced an age. He describes to them, accordingly, his whole manner of living, and the regimen he invariably pursued. He states, that when he was young he was very intemperate - that his intemperance had brought upon him many and grievous disorders; that from his thirty-fifth to his fortieth year, he spent his days and nights in the utmost anxiety and pain - and that, in short his life had become a burden to him. His physicians, after many fruitless attempts to restore him to health, told him, that there was but one medicine remaining, which had not yet been tried; but which, if he could but prevail upon himself to use with perseverance, would free him from all his complaints - and that was, a regular and temperate plan of life. Upon this, he immediately prepared himself for his new regimen, and confined himself to a very moderate portion of plain and wholesome food. This diet was at first very disagreeable to him, and he longed to return again to his former mode of living. Occasionally, indeed, without the knowledge of his physicians, he did indulge himself in a greater freedom of diet; but, as he informs us, much to his own uneasiness and detriment. Compelled by necessity, and exerting resolutely all the powers of his mind, he became, at length, confirmed in a settled and uninterrupted course of the strictest temperance; by virtue of which, as he states, all his disorders had left him in less than a year, and he enjoyed, subsequently, perfect and uninterrupted health. Some sensualists, it appears, had objected to his mode

of living - insisting that it was useless to mortify one's appetites as he did, for the sake of becoming old, since all that remained of life after the age of sixty-five, could not properly be called *vita, viva, sed vita mortua* - not a living, but a dead life. "Now," he says, "to show these gentlemen how much they are mistaken, I will briefly run

over the satisfactions and pleasures which I now enjoy in this eighty-third year of my age. In the first place, I am always well, and so active withal, that I can with ease mount a horse upon a flat, and walk to the top of very high mountains. In the next place, I am always cheerful, pleasant, perfectly contented, and free from all perturbation, and every unpleasant thought. Joy and peace have so firmly fixed their residence in my bosom, as never to depart from it. I have none of that satiety of life so often to be met with in persons of my age, for I am enabled to spend every hour of my time with the greatest delight and pleasure. I frequently converse with men of talent and learning, and spend much of my time in reading and writing. I have another way of diverting myself - by going every spring and autumn to enjoy, for some days an eminence which I possess in the most beautiful part of the Euganian hills, adorned with fountains and gardens; and above all, a convenient and handsome lodge, in which place I also, now and then, make one in some hunting party, suitable to my taste and age. At the same seasons of every year, I revisit some of the neighboring cities, and enjoy the company of such of my friends as live there, and through them the conversation of men of other parts, who reside in those places - such as architects, painters, sculptors, musicians, and husbandmen. I visit their new works; I revisit their former ones, and always learn something which gives me satisfaction. I see the palaces, gardens, antiquities; and with these the squares and other public places, the churches, the fortifications - leaving nothing unobserved from which I may reap either entertainment or instruction. But what delights me most is, in my journeys backward and forward, to contemplate the situation and other beauties of the places I pass through - some in the

plain, others on hills, adjoining to rivers or fountains - with numerous beautiful houses and gardens. Nor are my recreations rendered less agreeable and entertaining by my not seeing well, or not hearing readily everything that is said to me - or by any other of my senses not being perfect; for they are all, thank God, in the highest perfection, particularly my palate, which now relishes better

the simple fare I meet with wherever I happen to be, than it did formerly the most delicate dishes, when I led an irregular life. I sleep, too, everywhere soundly and quietly - and all my dreams are pleasant and delightful.

"These are the delights and comforts of my old age, from which I presume, that the life I spend is not a dead, morose, and melancholy one; but a living, active, and pleasant existence, which I would not change with the most robust of those youths who indulge and riot in all the luxury of the senses; because I know them to be exposed to a thousand diseases, a thousand unavoidable sources of unhappiness, and a thousand kinds of death. I, on the contrary, am free from all such apprehensions - from the apprehension of disease, *because I have nothing for disease to feed upon* - from the apprehensions of death, *because I have lived a life of reason*. Besides I am persuaded, death is not yet near me. I know that barring accidents, *no violent disease can touch me. I must be dissolved by a gentle and gradual decay, when the radical moisture is consumed, like oil in a lamp, which affords no longer life to the dying taper.*"

SLEEP

THERE is no fact more clearly established in the physiology of man, than this, that the brain expands its energies and itself during the hours of wakefulness, and that these are recuperated during sleep; if the recuperation does not equal the expenditure, the brain withers; this is insanity. Thus it is, that in early English history, persons who were condemned to death by being prevented from sleeping, always died raving

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maniacs; thus it is, also, that those who are starved to death become insane; the brain is not nourished, and they cannot sleep. The practical inferences are these:

First, those who think most, who do most brainwork, require most sleep.

Second, that time saved from necessary sleep is infallibly destructive to mind, body, and estate.

Third, give yourselves, your children, your servants - give all that are under you - the fullest amount of sleep they will take, by compelling them to go to bed at some regular hour, and to rise in the morning the moment they awake; and within a fortnight, nature, with almost the regularity of the rising sun, will unloose the bonds of sleep the moment enough repose has been secured for the wants of the system. This is the only safe and sufficient rule - and as to the question how much sleep one requires, each must be a rule to himself - great Nature will never fail to write it out to the observer under the regulations just given. - *Dr. Spicer.*

VALUABLE EXTRACTS. GATHERED FROM THE LAWS OF LIFE

ABOUT DIET AND OTHER THINGS. - The writer of the following letter wished an answer, and as she did not give her name, I can only reply through the Laws, which is perhaps as well.

"I have long felt the necessity of light to enable me to do my duty in my family as a mother, and have now commenced reading the 'Laws of Life.' It seems to me if I could be convinced of what is the best food and drink for my children, I would furnish it to them. **THUS** far I have tried to please their tastes, perhaps more than any thing else. If I should keep them on two meals a day, and those consisting of Graham bread and pudding, they would think mother was really cruel. However I think I could get along with that, but what should I do with my friends when they come to visit me? Our relatives, with multitudes of

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others, visit us, expecting something good to eat, of course, and I, of course, have had a little pride in getting them something rather extra. If I were very poor I could say that I could not get the means to treat company as I wish, and I should be excused; but if I should say I have changed my manner of living for the sake of health, I should be asked no doubt, 'Where did you get your directions?' and if I should reply, 'From the Laws of Life,' they would probably say to me - 'I am astonished that you should take that Journal! Don't you know that the editors are infidels? etc.

" You are aware, no doubt, that people will say what they choose, but still I do not care so much about that, as I do to know and do what is right. I had about made up my mind that it was as well to eat temperately of all the good things of earth, as any way, but have not been really satisfied with the idea after all. I looked in the paper to see if I could find any recipes for Graham bread, pudding, crackers, etc., but could not find any. Would it be asking too much of you to print some of these recipes in your paper? If we are to have but two meals a day, what hours are we to take those meals at?"

"This mother already sees the result of the practice of endeavoring to please the tastes of her children. The more a child or grown person does this, the more fickle will the appetite become, and nothing but the richest foods, and a great variety at that, will satisfy. Is it not really more cruel to children, to cherish so false and morbid an appetite in them, and be constantly indulging them, than to keep them to simple food, thus cultivating in them a relish for the plainest and most wholesome dishes? Mothers must be their own judges of their conduct toward their children, and not allow the children to judge for them.

"In regard to the entertainment of friends, I think it quite right that they should have such dishes placed before them as will enable them to get along comfortably and pleasantly. Still I should not care to have friends visit me with the sole object of getting something

good to eat. Though articles are placed upon the table which are not considered proper to eat ordinarily, the children will not be likely to be troubled by them, if the parents set them a good example, and keep to their accustomed diet. This I think may be done without any offense whatever to visitors, particularly when they are told that it is for 'conscience' sake. If they ask how the conscience comes to be quickened on those points, there need be no hesitation in replying that it is by reading the Laws of Life, for I should hope that no person, who has read this Journal three months in succession, could fail to understand that we are not

infidels, but are Christians, - not only theoretically, but that, at least, we earnestly aim to be such in our daily lives and conversation, and in the advocacy of the Health Reform."

FOOD. - The combinations of cookery are exceedingly unhealthy, and provoke disease to a great degree. The kitchen and the drug-shop, the cook and the doctor, are co-workers. One furnishes capital, the other trades upon it. If you would have long life in the land, you must simplify your tastes. No stomach can stand the drafts made on it by modern cookery, and this the doctors know right well. Add to this that the nerves of taste act healthily on simply-prepared food, and so make all the special senses *acute*, while complicated and rich food prevents their action, and so deadens them. It is a fact worthy attention, that very few young men - to say nothing of older men - have *un*-perverted taste. They cannot discern the natural qualities of substances unless under strong appeals to the organs exercised. The power to discriminate delicately is gone. And what is true of the sense of *taste* is equally true of the other four senses. Highly seasoned food, hot drinks, the use of snuff, smoking, drinking spirituous liquor, use of flesh-meats, constant and uninterrupted use of condiments - salt, pepper, spices, etc. - all help to break down the discriminative power of smell, sight, hearing, and touch. Man, who has his *reason* to aid him as an animal, and therefore is bound within the compass of his animal

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nature to *excel* animals lower than himself, is greatly their inferior. In a large degree this is owing to *perversion*, and lies within the compass of his sensual indulgences. I speak to you positively, because I am conversant with both sides of the question practically. In my own person I have *felt* the effects; in the persons of others I have observed the effects. Take the senses under cultivation and arrange dietetic relations with them. On the one side treat them with the following daily bill of fare, and watch the result:

"BREAKFAST. - Ham and eggs or beef-steak, pork-steak, mutton-chop or chicken, potatoes, pickles, pepper, mustard,

vinegar, salt, and catsup, hot rolls, raised bread, buckwheat cakes (hot) butter, and molasses, tea or coffee, chocolate, milk, and sugar.

"DINNER. - - Boiled victuals, consisting of pork, beef, potatoes, parsnips, carrots, beets, and turnips.

"Roast-beef or boiled mutton, pot-pie, chicken-pie, or cold boiled ham, with vegetables salt as the ocean, and saturated with *old* butter. Dessert: mince-pie, whose crust is lard, and salt, with a little flour stirred in and baked - and called pastry.

"SUPPER. - Tea and toast, hot biscuit, butter-cake, cheese, cold and sliced meat, mustard, salt, pepper, vinegar, sugar, and milk.

"INCIDENTALS - under medical advisement. - Salts or senna, castor-oil or pills, blue and black; calomel, jalap, opium, Dovers' powder, morphine, arsenic, quinine, podophyllin, lobelia, strychnine, colchicum, dog's liver, rattlesnake's poison, whiskey, brandy, gin, gums, resins, pitches, turpentine, essences, essential oils, blisters, burning, or scarifications to the skin.

"Admirable arrangement! Does it not appear so to you? A horse thus treated would have his sight, hearing, smelling, tasting, and feeling rendered perfect; do you not think he would? That you have the catarrh at eighteen, and cannot tell by smell a rose from a toad-stool; that at thirty-five you wear spectacles, at forty a wig, at forty-five have not a tooth in your head, unless a dentist has put it there: that at

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fifty your legs are like drum-sticks, and your hands are tremulous with palsy - is not owing to the food you have eaten, and the drinks you have drunken, in *your opinion*, is it?

"*Your* doctors say for you, 'that *food* and medicine are related; that the latter is the jackal to the lion. How can one eat relishable food without the after-clap of unrelishable medicine?' 'The ailments you suffer' say these wise men, 'are not caused by your *gluttony*, your wine-bibbing, and beer-swilling, and your drug-taking, but by God,

" 'Who moves in a mysterious way,
His wonders to perform.'

"Such is medical divinity - it is the theology of the still and the stall, and paves the way to the abode of devils till the track is like a turnpike. Now take the other bill of fare.

"Let me run a contrast; Peaches against pork, apples against beef, plums against mutton, strawberries against tallow, cream against lard, unleavened bread against leavened bread, course flour against fine, water against teas and coffee, potatoes, peas, beans, against pound-cake and preserves, keen taste, good appetite, against pepper, salt, allspice, cinnamon, cloves, cayenne, and many other things which only the *Genius* of all evil, habited gastronomically, knows and impels to be mixed with your food. Is not the contrast great?

"Oh, heavens! that the fable of Circe should be made good at our tables; that then and there she should work her horrible transformations till you, who ought to be gentlemen, are all nigh swine. If you would but discard the doctors who are dummies, and the dummies who are doctors, and take an upward open-countenanced look at Nature, one glance of her eye would insure your lives more safely than any bevy of doctors you could gather.

"WORK. - If you will live and not die, toil. Are you ashamed of labor? Then I am ashamed of you, and so is God ashamed of you. Next to a sinner who

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is accursed, the Almighty abhors a drone. His benignities, like special favors, like sunlight through a cloudy sky, gather about the head of the worker. Do not be afraid of work. It is honorable, it is refreshing, it is ennobling, enlivening, redemptive. If you are a thinker, work; if heirship to great possessions is yours, work. No matter what pursuit you follow, work; work daily, habitually, persistently, in the open air. Dig dirt. It is a better alternative than any living man carries in his saddle-bag, it regulates the stomach, rouses up the liver, equalizes the circulation, strengthens the muscles, invigorates the mind, calms the passions, purifies the soul, and adjures and exorcises the fiends who haunt men, better than all the medicines invented. It is life, soul, heart, mind, might, and strength to a man, especially if followed by recreation. I do not

mean by it playing the fiddle, that is *fun*; nor selling cloth and measuring tape from behind a counter for ladies, that is *employment*; nor studying law, that is *instruction*; nor studying to be a doctor, that might be *folly*; but I do mean by it that which makes the sweat flow, which makes the muscle like iron, which compels one to fight against the sun till he is tanned nut-brown like a gypsy.

"The human being does not live who is not bound by his constitutional laws, obedience to which wraps up his very life, to *work the soil* he treads till the smell of the earth comes up into his nostrils, more grateful by far than frankincense and myrrh. God is great, and tombstones are his witnesses. God is just, and model men, beautiful women, rosy-cheeked children, are his testimonies.

"But working the earth, digging in the ground, is not only necessary to bodily vigor and robust health, it is equally needful to *brain* - if body and brain may be contra-distinguished. Brain-sweat is the most exhausting sweat; tires out nature quicker, kills sooner than any sudoriferous flow. What steady marchings there are from the ranks of *thinkers to the grave!* The sound of the bell - tomb! tomb! tomb! is heard at midnight, noon, and at dawn of the day. Not because they *think*, for the brain is made for thought; but because

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they do naught else but think, except in a *wrong way*. If they knew enough to offset thought by thoughtlessness, care by carelessness, the responsibilities of a man by the ease of the child; if life were industry diversified to them by play instead of hard monotony and dull routine, the benefits would be incalculable.

"DO NOT TAKE DRUGS. - If you are sick, get well by proper means. Be content to get well *naturally*. If you must die, do so rationally. I should prefer to die rationally than to die *scientifically*. Death may come, would come, to us all in a manner greatly to be preferred over his present method of approach, if we would let him. We force him to his *terrible* aspects. We transform him from an angel into a horrible devil. The horrors of the death-bed may be in the physician's pocket. He drops them into your drink, covers them up in stewed apples, disguises them in liquor, coats them over with sugar. As far as possible he cheats your eye, your ear, your smell,

your taste. But all this is a *sham*. He gives you the *horrors*. Let alone his poisons if you wish to get well; deal not in his drugs, if you wish to die with a bright eye, a clear mind, a heart at ease and a spirit triumphant."

DISEASE AND ITS CAUSES. Chapter 6 [EGW]

BY ELLEN G WHITE.

MY sisters, there is need of a dress reform amongst us. There are many errors in the present style of female dress. It is injurious to health, and, therefore, sin for females to wear tight corsets, or whalebones, or to compress the waist. These have a depressing influence upon the heart, liver, and lungs. The health of the entire system depends upon the healthy action of the respiratory organs. Thousands of females have ruined their constitutions, and brought upon themselves various diseases, in their efforts to make a healthy and natural form unhealthy and unnatural. They

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are dissatisfied with nature's arrangements, and in their earnest efforts to correct nature and bring her to their ideas of gentility, they break down her work and leave her a mere wreck.

Many females drag down the bowels and hips by hanging heavy skirts upon them. These were not formed to sustain weights. In the first place, heavy quilted skirts should never be worn. They are unnecessary, and a great evil. The female dress should be suspended from the shoulders. It would be pleasing to God if there was greater uniformity in dress among believers. The style of dress formerly adopted by the Friends, is the least objectionable. Many of them have backslidden, and although they may preserve uniformity of color, yet they have indulged in pride and extravagance, and their dress has been of the most expensive material. Still their selection of plain colors, and the modest and neat arrangement of their clothing, is worthy of imitation by Christians.

The children of Israel, after they were brought out of Egypt, were commanded to have a simple ribbon of blue in the border of their garments, to distinguish them from the nations around them,

and to signify that they were God's peculiar people. The people of God are not now required to have a special mark placed upon their garments. But in the New Testament we are often referred to ancient Israel as examples. If God gave such definite directions to his ancient people in regard to their dress, will not the dress of his people in this age come under his notice? Should there not be in their dress a distinction from that of the world? Should not the people of God, who are his peculiar treasure, seek even in their dress to glorify God? And should they not be examples in point of dress, and by their simple style rebuke the pride, vanity and extravagance of worldly, pleasure-loving professors? God requires this of his people. Pride is rebuked in his word.

But there is a class who are continually harping upon pride, and dress, who are careless of their own apparel, and who think it a virtue to be dirty, and dress without order and taste; and their clothing often looks

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as though it flew and lit upon their persons. Their garments are filthy, and yet such ones will ever be talking against pride. They class decency and neatness with pride. Had they been among that number who gathered around the mount to hear the law spoken from Sinai, they would have been chased from the congregation of Israel, because they had not obeyed the command of God - "And let them wash their clothes," - preparatory to listening to his law given in awful grandeur.

The ten commandments spoken by Jehovah from Sinai cannot live in the hearts of persons of disorderly, filthy habits. If ancient Israel could not so much as listen to the proclamation of that holy law, unless they had obeyed the injunction of Jehovah, and had cleansed their clothing how can that sacred law be written upon the hearts of persons who are not cleanly in person, in clothing, or in their houses? It is impossible. Their profession may be as high as Heaven, yet it is not worth a straw. Their influence disgusts unbelievers. Better if they had ever remained outside the ranks of God's loyal people. The house of God is dishonored by such professors. All who meet upon the Sabbath to worship God should,

if possible, have a neat, well-fitting, comely suit to wear in the house of worship. It is a dishonor to the Sabbath, and to God and his house, for those who profess that the Sabbath is the holy of the Lord, and honorable, to wear the same clothing upon the Sabbath that they have worn through the week while laboring upon their farms, when they can obtain other. If there are worthy persons who, with their whole heart would honor the Lord of the Sabbath, and the worship of God, and who cannot obtain a change of clothing, let those who are able, donate to such a Sabbath suit, that they may appear in the house of God with cleanly, fitting apparel. A greater uniformity in dress would be pleasing to God. Those who expend means on costly apparel and extra fixings, can by a little self-denial exemplify pure religion, by simplicity of clothing, and then use the means they have usually expended needlessly

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in aiding some poor brother or sister, whom God loves, to obtain neat and modest apparel.

Some receive the idea that in order to carry out that separation from the world which the word of God requires, they must be neglectful of their apparel. There is a class of sisters who think that they are carrying out the principle of non-conformity to the world by wearing an ordinary sun-bonnet, and the same dress worn by them through the week, upon the Sabbath, to appear in the assembly of the saints to engage in the worship of God. And some men who profess to be Christians view the matter of dress in the same light. They assemble with God's people upon the Sabbath, with their clothing dusty, and soiled, and even with gaping rents in them, and placed upon their persons in a slovenly manner. This class, if they had an engagement to meet a friend honored by the world, and they wished to be especially favored by him, would exert themselves to appear in his presence with the best apparel that could be obtained; for this friend would feel insulted were they to come into his presence with hair uncombed, and garments uncleanly, and in disorder. Yet these persons think that it is no matter in what dress they appear, or what is the condition of their persons, when they meet upon the Sabbath to worship the great

God. They assemble in his house, which is as the audience-chamber of the Most High, where heavenly angels are in attendance, with but little respect, or reverence, as their persons and clothing indicate. Their whole appearance typifies the character of such men and women.

The favorite theme of this class is pride of dress. Decency, taste, and order, they regard as pride. And according to the dress of these mistaken souls will be their conversation, their acts, and their deal. They are careless, and often low in their conversation at their homes, among their brethren, and before the world. The dress, and its arrangement upon the person, is generally found to be the index of the man or the woman. Those who are careless and untidy in dress are seldom elevated in their conversation, and

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possess but little refinement of feelings. They sometimes consider oddity and coarseness, humility.

The followers of Christ are represented by him as the salt of the earth, and the light of the world. Without the saving influence of Christians, the world would perish in its own corruption. Look upon the class of professed Christians described, who are careless of their dress and persons, and loose in their business transactions, as their dress represents, coarse, uncourteous and rough in their manners, low in their conversation; and at the same time they regard these miserable traits as marks of true humility and Christian life. Think you if our Saviour was upon earth, he would point to them as being the salt of the earth, and the light of the world? No never! Christians are elevated in their conversation, and although they believe it to be a sin to condescend to foolish flattery, they are courteous, kind, and benevolent. Their words are those of sincerity and truth. They are faithful in their deal with brethren, and with the world. In their dress they avoid superfluity and display; but their clothing will be neat, not gaudy, modest, and arranged upon the person with order and taste. Especial care will be taken to dress in a manner that will show a sacred regard for the holy Sabbath, and the worship of God. The line of demarkation between such a class and the world will be too plain to be mistaken.

The influence of believers would be ten-fold greater if men and women who embrace the truth, who have been formerly careless and slack in their habits, would be so elevated, and sanctified through the truth, as to observe habits of neatness, order, and good taste in their dress. Our God is a God of order, and he is not in any degree pleased with distraction, with filthiness, or with sin.

Christians should not take pains to make themselves gazing-stocks by dressing differently from the world. But if, in accordance with their faith and duty in respect to their dressing modestly and healthfully, they find themselves out of fashion, they should not change their dress in order to be like the world. But they should manifest a noble independence, and moral, courage

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to be right, if all the world differ from them. If the world introduce a modest, convenient, and healthful mode of dress, which is in accordance with the Bible, it will not change our relation to God, or to the world to adopt such a style of dress. Christians should follow Christ, and conform their dress to God's word. They should shun extremes. They should humbly pursue a straightforward course, irrespective of appeals or of censure, and should cling to the right, because of its own merits.

Women should clothe their limbs with regard to health and comfort. They need to have their limbs and feet clad as warmly as men. The length of the fashionable female dress is objectionable for several reasons.

1. It is extravagant and unnecessary to have the dress of that length that it will sweep the sidewalks and streets.

2. A dress thus long gathers dew from the grass, and mud from the streets, which makes it uncleanly.

3. In its bedrabbled condition it comes in contact with the sensitive ankles, which are not sufficiently protected, quickly chilling them, and is one of the greatest causes of catarrh, and of scrofula swellings, and endangers health and life.

4. The unnecessary length is an additional weight upon the hips and bowels.

5. It hinders the walking, and is also often in other people's way.

There is still another style of dress which will be adopted by a class of so-called dress reformers. They will imitate the opposite sex, as nearly as possible. They will wear the cap, pants, vests, coat, and boots, the last of which is the most sensible part of the costume. Those who adopt and advocate this style of dress, are carrying the so-called dress reform to very objectionable lengths. Confusion will be the result. Some who adopt this costume may be correct in their views in general upon the health question, and they could be instrumental in accomplishing vastly more good if they did not carry the matter of dress to such extremes.

In this style of dress God's order has been reversed,

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and his special directions disregarded. Deut.22:5. "The woman shall not wear that which pertaineth unto a man, neither shall a man put on a woman's garment for all that do so are abomination unto the Lord thy God." This style of dress, God would not have his people adopt. It is not modest apparel, and is not at all fitting for modest, humble females who profess to be Christ's followers. God's prohibitions are lightly regarded by all who would advocate the doing away of the distinction of dress between males and females. The extreme positions taken by some dress reformers upon this subject cripple their influence.

God designed there should be a plain distinction between male and female dress, and has considered the matter of sufficient importance to give explicit directions in regard to it; for the same dress worn by both sexes would cause confusion, and great increase of crime. St. Paul would utter a rebuke, were he alive, and should behold females professing godliness with this style of dress. "In like manner also, that women adorn themselves in modest apparel, with shamefacedness and sobriety; not with broided hair, or gold, or pearls, or costly array; but (which becometh women professing godliness) with good works." The mass of professed Christians utterly disregard the teachings of the Apostles, and wear gold, pearls and costly array.

God's loyal people are the light of the world, and the salt of the earth. And they should ever remember that their influence is of

value. Were they to exchange the extreme long, for the extreme short dress, they would, to a great extent, destroy their influence. Unbelievers, whom it is their duty to benefit, and seek to bring to the Lamb of God, would be disgusted. Many improvements can be made in the dress of females in reference to health, without making so great a change as to disgust the beholder.

The female form should not be compressed in the least with corsets and whale bones. The dress should be perfectly easy that the lungs and heart may have healthy action. The dress should reach somewhat below the top of the boot; but should be short enough

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to clear the filth of the sidewalk and street, without being raised by the hand. A still shorter dress than this would be proper, convenient, and healthful for females, when doing their housework and especially, for those women who are obliged to perform more or less out-of-door labor. With this style of dress, one light skirt, or, at most two, are all that is necessary, and these should be buttoned on to the waist, or suspended with straps. The hips were not formed to bear heavy weights. The heavy skirts worn by females, their weight dragging down upon the hips, have been the cause of various diseases, which are not easily cured, because the sufferers seem to be ignorant of the cause which has produced them, and they continue to violate the laws of their being by girding the waists and wearing heavy skirts, until they are made life-long invalids. Many will immediately exclaim, "Why such a style of dress would be old-fashioned!" What if it is? I wish we could be old-fashioned in many respects. If we could have the old-fashioned strength that characterized the old-fashioned women of past generations it would be very desirable. I do not speak unadvisedly when I say that the way in which women clothe themselves, together with the indulgence of appetite, is the greatest causes of their present feeble diseased condition. There is but one woman in a thousand who clothes her limbs as she should. Whatever may be the length of the dress, females should clothe their limbs as thoroughly as the males. This may be done by wearing lined pants gathered into a band and

fastened about the ankle, or made full and tapering at the bottom; and these should come down long enough to meet the shoe. The limbs and ankles thus clothed are protected against a current of air. If the limbs and feet are kept comfortable with warm clothing, the circulation will be equalized, and the blood will remain healthy and pure, because it is not chilled or hindered in its natural passage through the system.

¹ If a person in fever is to be packed, his conditions are much more readily and safely controlled by wetting *two sheets* in water at 90 degrees, wringing them but slightly, packing him in them, or even by putting him into a fresh pack when the first one becomes heated, than by putting him into a cold sheet.

² ANIMAL AND VEGETABLE FOOD. That animal food renders man strong and courageous, is fully disproved by the inhabitants of northern Europe and Asia, the Laplanders, Samoides, Ostiaces, Tungooses, Burats, Kamtschatdales, as well as by the Esquimaux in the northern, and the natives of Terra del Fuego in the southern extremity of America; which are the smallest, weakest, and least brave people of the globe, although they live almost entirely on flesh, and that often raw. Vegetable diet is as little connected with weakness and cowardice as that of animal matters is with physical force and courage. That men can be perfectly nourished, and their bodily and mental capabilities be fully developed in any climate by a diet purely vegetable, admits of abundant proof from experience. In the periods of their greatest simplicity, manliness and bravery, the Greeks and Romans appear to have lived almost entirely on plain vegetable preparations: indifferent bread fruits, and other produce of the earth, are the chief nourishment of the modern Italians, and of the mass of the population in most countries of Europe: of those more immediately known to ourselves the Irish and Scotch may be mentioned; who are certainly not rendered weaker than their English fellow-subjects by their freer use of vegetable aliment. The Negroes, whose great bodily powers are well known, feed chiefly on vegetable substances; and the same is the case with the South Sea Islanders, whose agility and strength were so great, that the stoutest and most expert English sailors had no chance with them in wrestling and boxing. - *Lawrence on the Natural History of Man*.

³ A Thesis, read at the commencement of the New York Hydropathic School, April 14, 1855, by the author, a graduate of the institution.

⁴ "According to Menzies and Goodwill, five times the quantity of air remains in the lungs after ordinary expiration than is ordinarily expired or inspired at any one time."

⁵ In this country, I am ashamed to say, we have had some instances of women, - of notoriety, if not of eminence, - who have donned the outward semblance of the masculine gender. As Juno 'walks a queen,' so, it is said, we have one woman who *walks a farmer*, clad in male attire, with horsewhip in hand.

"As means of preventive police, not all the laws that legislatures could enact, nor all the courts they could establish, nor all the executive officers they could appoint, would be half so efficacious to prevent society at large from becoming a Sodom at large, as the all-pervading though silent influence of a universal and unmistakable distinction in the costume of man and women. Where this distinction is observed, the very garments are a guard set over the wearer, going where she goes, stopping where she stops, and abiding with her as a perpetual and restraining monitor. But where this distinction is discarded, the mere fact of casting it aside, is evidence of guilty intent. Hence, any woman, however unnecessary she may deem the badge of dress to be for her own safety, is traitorous to the virtue of both sexes, when she practices or palliates or tolerates any departure from so protective a custom, - from a custom founded upon so strong and universal an instinct that none but tribes sunk in the very lowest barbarism have ever discarded it. These views are so prompt an outgrowth of the natural sentiments, and so strongly fortified by reason in all stages of its development, that whoever violates them is worthy not only of legal penalties, but of the ridicule and scorn of the community.

⁶ With their accustomed disregard of women, the Hebrew historians, with but an exception of two, never mention how old *they* were at the time of their death.