PRECAUTIONS AND SUGGESTIONS

PERTAINING TO THE

ENJOYMENT

OF

HEALTH AND COMFORT

SELECTED FROM VARIOUS AUTHORS.

PUBLISHED BY ROSS WINANS.

BALTIMORE:
JOHN P. DES FORGES.
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Enjoyment of Health and Comfort.

For the illustration of the subject of ventilation, bathing, &c., I make the following extracts from Chambers' Miscellany and other Works.

"With respect to the ventilation of private houses, we offer the following admonitory hints:

Let each bed be as open and airy as possible, that is, have plenty of room for the air to play over and about it.

The bed should be as open and airy during the day as the night, for during the night it absorbs impurities which should have liberty to escape after the persons rise from it.

On rising in the morning, open wide the curtains or doors, throw down the bed clothes,

or, what is better, hang them on screens during the day, and open the window and door, so that the air may blow freely through the house, and carry off all impurities in the atmosphere. Such precautions are especially necessary in the case of newly built houses, where moisture and other injurious exhalations are apt to arise from the walls, the painting and wood work.

A good house-wife will take care to allow nothing to remain within doors, which may cause a bad smell. All by-corners and closets, should be regularly swept out, washed, and ventilated.

It may be asked, how is it to be known when a house is ill-ventilated. If, on coming from the open air, you are sensible of a stifling musty odor in any apartment, at once throw open the door or windows, and see for the future that a continual current be admitted, to prevent such a want of ventilation.

By attention to these simple, but necessarily brief directions, as regards cleanliness and ventilation, much disease and suffering, loss of

time through ill-health, moral deterioration, and other obvious evils might be avoided, and a vast amount of comfort and enjoyment secured.

As Nature does nothing in vain, we may ask what has been her design in causing such an exhalation of vapor and liquid from the body? The design has been the purifying of the system.

A pure and bracing atmosphere, is well known to be more conducive to health, than one which is heavy and relaxing.

When the skin is in a proper condition, and the atmosphere pure, the vital functions, suffering no impediment from external circumstances, proceed with the requisite energy, and the feelings enjoy that degree of buoyancy, which is the best criterion of a good state of health.

When in a perfectly healthy condition, the skin is soft, warm, and covered with a gentle moisture; the circulation of the blood is also in a state of due activity, giving it a fresh and

ruddy color. The degree of redness, as for instance, in the cheeks, is usually in proportion to the exposure to the outer atmosphere; such exposure, when not too severe, causing active circulation of the blood not only throughout the body, but to the most minute vessels on the surface.

It must be obvious, from what has been said, that cleanliness is indispensable in securing not only a healthy condition, but also much comfort both of body and mind. Cleanliness is attained by attention to various circumstances and practices; for the most part people are clean only by halves. Dress, washing, bathing, household arrangements, all require consideration.

Dress.—Purification of the skin may be greatly promoted by the wearing of clean garments. That garment which is placed next the skin, the shirt, be it of linen, cotton, or woolen, ought to be changed less or more frequently, according to circumstances — such as the degree of labor, the nature of the employment,

the warmth of the climate, and so on. The reason for the change is evident. The shirt is the immediate receiver of a large proportion of the matter thrown out by the pores, and much of what it receives it retains. Besides, therefore, becoming unseemly from its appearance, it becomes foul, and the foulness reacting on the skin, irritates and clogs it. Custom is the great regulator in affairs of this kind; but is not always correct. Some change their linen daily, others every two or three days, the great number weekly. What is very inconsistent, those who change their garments the least frequently, are the manual laboring classes, who should change them more frequently than any one else. As it is principally for the benefit of this numerous body that we pen these pages, we must speak as explicitly as possible.

Addressing men (and women too) who labor daily at a mechanical employment, we would offer the following advices:

Do not sleep in the shirt which you wear during the day. Have a night shirt and a day

one. Cotton makes the best, as it is certainly the cheapest, night shirt. A clean day shirt should, if possible, be put on twice a week, and a clean night shirt once a week. Do not be contented with the old fashioned practice of putting on a clean shirt only on Sundays. The washing of a shirt is a very small matter; and it must be a wretchedly paid employment that cannot afford a trifle for this useful and agreeable purpose.

If you labor at an employment in which fumes and exhalations of a deleterious kind are apt to be absorbed by the clothes you wear, make a rule of changing your whole garments every evening when done with work; and let your work-clothes be washed pretty frequently, and well exposed to sun and air. This advice is particularly offered to house-painters, plumbers, and all who work in oils, pigments and metals. By inattention to this practice, the health of house-painters is extremely liable to injury. They may be said so to be gradually killed by the absorption of poison through the

skin, as well as by the lungs. One ordinary symptom of the disease which they contract is known by the name of painters' colic. Indeed, every individual employed at chemical-works, dye-works, gas-works, and the like, should be extremely attentive to the cleanliness of their clothes and persons. After ten hours' exposure in such places, both the skin and garments are to a certain extent saturated with noxious fumes, and though for several years these may produce no other sensible effect than the inconvenience of an offensive odor, yet they are most assuredly undermining the health of the parties exposed. Washing the body thoroughly after the hours of labor, will enable the skin to throw off the greater part of the effluvia it may have absorbed; and shaking and exposing the garments to the air will materially assist in dispelling the offensive odors.

It should be known, too, that dark colored cloth imbibes effluvia much more readily and retains it longer than cloth of a light or white hue.

The best kind of outer garments for workmen of any class are such as will easily wash; indeed all their daily work-clothes should be of materials that can be readily washed and dried.

The neatest and most economical kind of cloth for jackets and trowsers is strong white fustian. A tidy workman, desirous of feeling comfortable and of looking respectable, may very easily have two suits, one to use while another is being washed and dried. How much a good wife may do to insure this health-giving cleanliness, need not be insisted on.

Washing.—The hands, face, neck, and arms should be washed at *least* twice daily, so as to remove every vestige of impurity from the skin. These ablutions should be in the morning on rising and in the evening after labor. If the labor be of a dirty kind, as, for instance, that of painters, plumbers, black-smiths, engineers, &c., the washing should be not only morning and evening, but breakfast and dinner — before, not after — these meals.

At the same time, the hair should be brushed, which by the way, ought to be protected in all dusty employments, by a light linen or paper cap. There cannot be the least doubt, that, by such ablutions alone — nothing else being used than soap and water — the health of workmen would be very essentially promoted.

Sponging.—This is the next step towards personal cleanliness. In cases where bathing by entire immersion of the body cannot be conveniently obtained, it may answer every desirable end to sponge the body all over with water every morning on getting out of bed. In doing so, begin by wetting the head and shoulders, and then proceed to the rest of the body. To save a slop on the floor, the person may stand in a broad shallow tub or pan, or even on a square of oil cloth, which is cheap and can be easily removed. After sponging, rub and dry the body with a rough towel and then immediately dress.

This process is so simple, so inexpensive, and will occupy so little time, that no one need

neglect it on any common pretence. When a sponge cannot be conveniently obtained a wet towel will answer the purpose. The small amount of trouble incurred by this kind of ablution will in general be amply repaid by an increase of health and comfort.

Bathing.—Here we arrive at the great and almost universally recognized engine of personal purification.

According to the Jewish dispensation, certain observances to insure personal cleanliness were the subject of religious injunction; and for a similar reason Mahommedans in eastern countries have been enjoined to perform ablutions at stated times and seasons. In these Oriental countries, and also in Russia, the use of the warm bath is universal among the richer classes, and the public establishments for bathing are in some places on a scale of great splendor. Inattention to cleanliness of apparel seem to render these ablutions indispensable for personal comfort.

The mass of the people having neither the

means to purchase nor the convenience for using private baths, must of course resort to public ones ; and for their accommodation, therefore, every town ought to possess one or more establishments fitted up with all proper conveniences for bathing. In this respect, notwithstanding our wealth, our boasted civilization and mechanical skill, we fall infinitely short of the Greeks and Romans, who had not only their domestic, but their public baths, in which the poorest citizen might lave.

While we wonder at their prevalence among all the eastern and northern nations, may we not lament that they are so little used in our own country? We might, perhaps, find reason to allow that erysipelas, surfeit, rheumatism, colds, and a hundred other evils, particularly all sorts of cutaneous and nervous disorders, might be alleviated, if not prevented, by a proper attention to bathing. I hardly know any act of benevolence more essential to the comfort of the community, than that of establishing by public benefaction, the use of baths

for all classes in each of our cities and manufacturing towns. The lives of many might be saved by them. Throughout the vast empire of Russia, through all Finland, Lapland, Sweden, and Norway, there is no cottage so poor, no hut so destitute, but it possesses its vapor bath, in which all its inhabitants, every Saturday at least, and every day in cases of sickness, experience comfort and salubrity.

Among the ancients, baths were public edifices under the immediate inspection of the government. They were considered as institutions which owed their origin to absolute necessity, as well as to decency and cleanliness.

Ventilation.—The lungs inhale and use up pure air, and expel only that which is vitiated. It is calculated that every human being consumes on an average two and a half hogsheads of pure air per hour. That may be called the allowance required by nature for the due action of the lungs, the purification of the blood, and the preservation of health. Dwellings, workrooms, and other enclosed places, would require

to afford that quantity of fresh air for each inmate; and not only so, but something more to supply the consumption of air by fires and artificial lights. In a room having a number of lights, at least as much as four hogsheads per hour for each individual should be admitted.

By neglecting to afford such supplies by means of channels for ventilating, almost every dwelling house, work-room, school, church, theatre, &c., becomes filled with an impure air, to breathe which is most injurious to health.

This subject for a number of years engaged the consideration of men of science, and numerous reports have been published, showing, by the most conclusive evidence, that the want of ventilation is daily producing diseases most fatal to the general population; the loss of daily power — that is, the loss of at least one-third the industrial capabilities enjoyed by men working under advantageous circumstances: the nervous exhaustion attendant on work in crowds, and the consequent temptation

to resort continually to stimulants, which in their turn increase the exhaustion, are fully proved, and indeed generally admitted.

Accordingly, since the attention of medical men has been sufficiently directed to the subject, the explanation has become complete of many deplorable cases of general ill health and mortality in such places, attributed at first to deficiency or bad quality of food, or to any cause but the true one — want of ventilation. The defective state of information on the subject of ventilation is frequently shown in reports, which assume that apartments containing given cubic feet of space are all that is requisite for life and health, whereas if a spacious drawing room be completely closed against the admission of air, an inhabitant confined to it would be stifled, whilst by active ventilation or change of air, men working in connection with diving machines live in the space of a helmet, which merely confines the head.

In the majority of instances of the defective

ventilation of schools, the pallid countenance and delicate health of the school-boy, commonly laid to the account of over-application to his book, are due simply to the defective construction of the school-room. In the dame schools, and the schools for the laboring classes, the defective ventilation is the most frequent and mischievous.

From this, as well as all other testimony on this subject, it is clear that society is daily suffering to an indescribable extent by *atmospheric impurity*. Great loss of life, occasional or lingering bad health, poverty from inability to labour, mental depression, crime and intemperance, are the well-observed results of this discreditable state of things.

To assuage as far as possible this enormous evil, very extensive improvements would be required in the construction of towns and dwellings generally, and perhaps these may in time be effected, including more plentiful supplies of water.

VENTILATION BY E. E. PERKINS.

"Having endeavored to be explicit on the '*Advantages of Gas in Private Houses*,' we will in this division submit our views on ventilation, holding it, as we do, of *vital importance.*

The object of a good system of ventilation is to quickly remove such air from any room, building, or locality, which militates against health or life; and to keep up a continual volume of pure cool air therein and thereat.

I say, will not you urge the necessity of inhaling pure air in your homes, so that the future man may in his earliest childhood lay the foundation of a robust constitution? for listen to what medical and other qualified men have said on the effects of vitiated atmosphere on children, normally and by descent.

Mr. Carmichael, in his Essay on the nature of Scrofula, charges vitiated domestic air, particularly in sleeping rooms, with being the primary cause.

Dr. Arnott states that an individual, the

offspring of persons successively living in bad air, will have a constitution decidedly inferior to one born of a race living in the pure air, and that the mischief does not end here; but from that first injury, the further descendants further degenerate; that defective ventilation deadens both the mental and bodily energies, leaving its corrupting influence upon the person.

The water given off by perspiration is not pure water, not such as is liberated in the process of distillation or evaporation, but is contaminated with the most offensive animal effluvia. M. Leblanc states that the odor of the air at the top of the ventilator of a crowded theatre or room is of so noxious a character, that it is dangerous to be exposed to it even for a short time. If this air be passed through pure water, the water soon exhibits all the phenomena of putrefactive fermentation.

Every one who has knowledge or wealth at his disposal, is bound to exert some portion of them as much for the benefit of his less fortunate fellow-being as for his own pleasure

or profit; for it is to his own daily safety. Besides which, is there not a *moral law* requiring us to do so? Is there not also a natural law? There are both these laws, and they have this distinguishing proof of their divine origin, they are self-acting; they confer the reward of obedience, and they inflict the penalty of transgression, with a precision and certainty which find no parallel in mere human laws and institutions.

Regarded in its general aspect as a source of life and health, an ample supply of pure air, in conjunction with the immediate removal of secreted and exhaled impurities beyond the possibility of re-inhalation, is a subject of profound interest to all humanity.

If we can believe and understand that, by the influence of the rays of the sun upon its different aspects, the towering pile of granite on Bunker Hill is caused continually to sway to and fro upon its base, with equal readiness may we comprehend that the refined and delicate living animal organism will vary in its

phases of health, with the varying quality of the air upon which it depends for its actual existence.

It was about the middle of the Seventeenth Century that Thomas Sydenham burst the trammels of prejudice in which both the medical and the popular mind of his country and the world had long been bound, in reference to the inocuousness and availability of the operations of nature, and demonstrated the value, in the management of diseases, of the great medicaments which she had furnished from the beginning of creation. When he tore away the bed-curtains, drove his patients from their sweltering beds, threw up their windows, or ordered them on horseback, the community thought him crazy; such kind of treatment was opposed to all their experience, and he had no authority for it from books.

But, holding them in light estimation when they contravened the obvious dictates of reason and nature, he consulted only the latter, and saved many from loathsome death by small-

pox, and from premature graves by consumption.

One century later, the world was shocked by receiving from Calcutta a horrible lesson of the consequences of confining human beings in a close and unventilated atmosphere. Ten hours sufficed to produce intolerable thirst, intense fever, delirium, and death in one hundred and twenty-three, out of one hundred and forty-six persons, and a high putrid fever in those found alive at the end of that time. That 'black hole' has ever since been a by-word and a reproach to humanity, while its lesson has been too little heeded.

Let it never be forgotten for a moment that this agent, to procure which we have neither to dig into the earth, nor transport from foreign climes, nor distill from the alembic, nor refine in the crucible, but which is pressed upon us with a force and in a measure equalled only by the Supreme Benevolence which furnishes and unceasingly renews it — this agent, when left free to act its part, removes the effete poison

from the blood, and imbues it with continual health and freshness; but when stifled and confined, whether intentionally or by accident, turns, like a viper, upon the arm that nourished it, and plants a deadly venom in its veins."

WHAT DR. ARNOTT DID AND SUGGESTED.

In the autumn of 1849, when the cholera was raging in England, the Board of Health recommended, in one of their notifications published in the London Gazette, that in every badly-ventilated dwelling "considerable and *immediate* relief may be given by a plan suggested by *Dr. Arnott* — of taking a brick out of the wall near the ceiling of the room, so as to open a direct communication between the room and the chimney.

I assume," says the Doctor, "that most of your readers understand that the air which we breathe consists of material elements, as much as the water which we drink or the food which we eat.

I assume further, that your readers know

that fresh air for breathing is the MOST IMMEDIATELY URGENT OF ALL THE ESSENTIALS TO LIFE, as proved by the instant death of any one totally deprived of it through drowning or strangulation, and by the slower death of men compelled to breathe over again the same small quantity of air.

Assuming that these points are tolerably understood, I have to show that the spread *of cholera in this country, has been much influenced by the gross oversights referred to.*

ALL *from want of fresh air, and consequently from breathing that which is foul, which can be so readily overcome.* It would seem as if the peculiar morbid agent could as little, by itself, produce the fatal disease, as one of the two elements concerned in a common gas explosion — namely, the coal gas, and the atmospheric air — can alone produce the explosion. The great unanimity among writers and speakers on the subject, in regarding foul atmosphere as the chief vehicle or favorer, if not a chief efficient cause of the pestilence, is

seen in the fact of how familiar to the common ear, have lately become the words and phrases, malaria, filth, crowded dwellings, crowded neighborhoods, close rooms, faulty sewers, drains, and cess-pools, all of which are merely so many names for foul air, and for sources from which it may arise. Singularly, however, little attention has yet been given from authority to the chief source of poisonous air, and to MEANS OF VENTILATION, *by which all kinds of foul air may with certainty be removed.*

A system of draining and cleansing, water supply and flushing, for instance,— to the obtainment of which, chiefly, the Board of Health has hitherto confined its attention, can, however good, influence only that quantity and kind of ærial impurity which arises from retained solid or liquid filth, within or about a house; but, it leaves absolutely untouched the other, and really more important kind, which in *known quantities*, is never absent where men are breathing — namely, the

filth and poison of the human breath. This latter kind evidently plays the most important part."

I extract the following from Tyndall's concluding address to the Students of University College, London.

"Let me utter one practical word in conclusion — take care of your health. There have been men who, by wise attention to this point, might have risen to any eminence — might have made great discoveries, written great poems, commanded armies, or ruled States, but who, by unwise neglect of this point, have come to nothing. Imagine Hercules as oarsman in a rotten boat; what can he do there, but by the very force of his stroke, expedite the ruin of his craft. Take care then of the timbers of your boat, and avoid all practices likely to introduce either wet or dry rot among them. And, this is not to be accomplished by desultory or intermittent efforts of the will, but by the formation of *habits*. The will, no

doubt, has sometimes to put forth its strength, in order to strangle or crush the special temptation. But the formation of right habits is essential to your permanent security. They diminish your chance of falling when assailed, and they augment your chance of recovery when overthrown."