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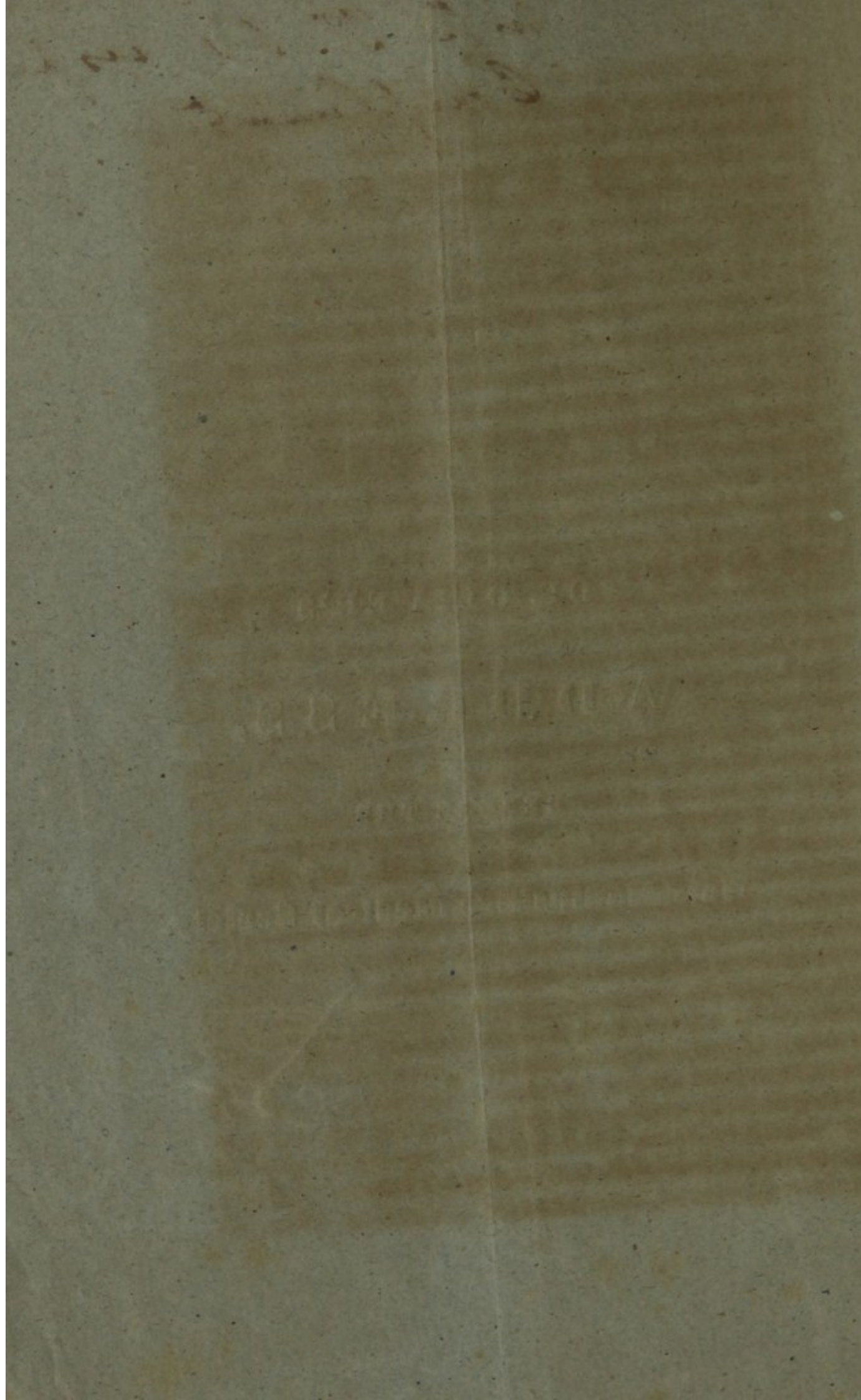
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ADDRESS,

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NEW-HAMPSHIRE

MEDICAL SOCIETY,

AT CONCORD, JUNE 4, 1833.

BY DANIEL OLIVER, M. D.
PRESIDENT OF THE SOCIETY.

Published by request of the Society.

CONCORD:
MARSH, CAPEN & LYON.
1833.



A. D. R. E. S. S.

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ADDRESS.

— In casting about for a subject for the annual discourse before the Medical Society, my choice, after some hesitation, has fallen upon one, which on account of its own intrinsic importance, the extraordinary attention and interest it has excited for some years past, and its intimate relation to our own profession presents peculiar claims to our notice. It is proper for me to observe, however, that I indulge no expectation of being able to present any new views, or to suggest any new arguments, on a subject, which has been so thoroughly sifted, as the evils of intemperance.

But with a view to give a little more variety to the subject, as well as a more extended, and therefore more useful application of the principles of temperance, I have thought it would not be amiss to embrace a wider scope of remark, than has been usually indulged in on similar occasions. I shall not therefore confine myself exclusively to the evils resulting from the use of ardent spirit, but shall briefly discuss some of the principles belonging to the general subject of Temperance.

— It may here be proper to inquire what *temperance* is, for unless we have clear and precise ideas on this point, our arguing and reasonings on the evils of intemperance, however well founded in the main, may be nothing more than vague and eloquent declamation. Unless we know exactly what and where the enemy is, against whom we are fighting, the artillery of our logic and eloquence however well served, instead of being directed with ef-

fect against the strong holds of the foe, will probably either be wasted in the air or spent on a man of straw.— Let us then in the first place ascertain what idea we affix to the terms temperance, and intemperance. Temperance in a moral sense is applied to certain voluntary actions of man, which have for their object the physical welfare of the individual, but which may by excess become prejudicial to him. The same quality when applied to actions of a moral kind, is commonly termed prudence or discretion. What prudence is with regard to our purely moral actions, temperance is with respect to those which concern the physical welfare of man.— Temperance also implies the idea of a medium between two extremes. It relates to actions, which admit of various degrees, and which are capable both of excess and defect. One of its original meanings is *mixture*, that is, such a blending of two extremes, as to neutralize and destroy what is hurtful in each; to compensate the deficiency in the one by the excess in the other, and thus to attain the happy medium or temperature between the two. We temper wine with water, we temper courage with caution, and we temper our appetites by those restraints, which a regard to our physical well being, or our moral duty, suggests to us. Further, the actions to which temperance refers are of such a nature that either excess or defect may be equally hurtful, and a middle path between the two is the only safe course. It is true that temperance is almost always opposed to the excess of these actions, and hardly ever to the defect, because the physical incentives to excess are vastly more powerful than any motives which are found to operate in restraining men within the limits of defect. Lastly, temperance has a moral element. It contains the idea of duty or obligation, because we are bound in gratitude to our Creator, to take care of, and to guard, with the utmost vigilance the precious gift of life which he has conferred upon us. We are bound to avoid all those things which we know or have reason to believe, have a natural tendency to shorten it. We are bound in duty to our ma-

ker and to ourselves to restrain those appetites which are constantly prompting us to hurtful excesses, within the bounds which reason and experience prescribe, as alone consistent with health and our real well being. In short, we are under a moral obligation to consult our own real happiness, and we not only violate the law of our nature but our duty to our Creator, when we suffer ourselves to be hurried beyond the bounds of reason and temperance.

To apply this general idea to the subject before us.—A certain regular supply of food and drink is necessary to the support of our bodies. We are prompted to take this by certain sensations or appetites. When we have taken enough, these sensations cease, and the motive no longer acting we discontinue the action. There is therefore but little danger that we shall err on the side of defect, with respect to food and drink. Our instinctive feelings will in almost all cases carry us *as far* as the line of temperance. On this side every thing is safe under the promptings of nature. But has nature been equally guarded against our erring on the opposite side? Are we equally sure of not taking too much food and drink, as we are of taking enough? Every one is conscious that he has within him feelings, which are constantly prompting him to go beyond the lines which bound the province of temperance. These feelings are our *educated* appetites. Our natural appetites carry us *as far* as the line of temperance, but no farther. But under the training they receive from us, they lose their healthful character, and then cease to be guides of our real wants. We deprave them by stimulants, keep them in a state of forced or unnatural excitement, and they are then no longer satisfied with that measure, or that quality of their appropriate objects, which nature and health require.

This leads me to a general remark which has an important bearing upon this subject, and it is this—that one of the greatest evils incident to a state of *high* civilization, and which counterbalances much of the advantages it confers upon man, is, that it multiplies the means and



the incentives of physical as well as of intellectual excitement, and in this manner tends to shorten life, while it renders its pleasures and its pains more intense. If the length of human life be estimated not merely by the revolutions of the sun, but by the variety and the sum of pleasurable and painful sensations it comprehends, it must be granted that we are gainers on the score of length of life, by this system of excitement, of which the refinements of civilization are made up. We contrive to crowd into a given time as much excitement as we can find means to produce, and the greater the degree of refinement which society attains, the more the art of producing and multiplying excitement is reduced to a system. By this course we in one sense contrive to live longer, that is, we increase and prolong our consciousness of existence by a constant and rapid succession of pleasures and pains.— But we mistake our true interest and happiness by this course. We shorten our physical life or the actual number of our days, by keeping the powers of life and enjoyment constantly on the stretch, and we destroy our capacity, for the gentler and calmer pleasures of life, which constitute by far the greatest part of our worldly happiness, by acquiring a taste for the feverish excitements, which belong to advanced stages of civilization.

If this be true of intellectual and moral excitements, how true is it also of physical pleasures and pains. No means are neglected to stimulate the senses to the highest degree of their capacity of enjoyment, and the effect of habit is at last to bring them into such a condition that unless they are in a state of unnatural excitement, we are uneasy and unhappy. The most mortal poisons are resorted to without hesitation for the purpose of producing these excitements. We stimulate our noses and our palates with tobacco—one of the most deadly narcotic poisons. We stimulate our palates with a variety of acrid heated substances, which tend to wear out the powers of the stomach, while they provoke us to swallow much more food than is necessary for the repair of our bodies, and we stimulate our stomach and

our brains with opium or with spirits. Our children are initiated as soon as possible into the same manner of life. Their senses and nerves are subjected to the same system of training or education, almost as soon as they open their eyes upon the world. They are drugged immediately on their entrance into life with some kind of stimulant, which begins that course of training that is to continue through all their after lives, and which lays the foundation for that love of stimulants and of excitement which so frequently ends in the ruinous vice of intemperance. Infusions made with stimulant aromatic and other herbs are the least injurious of the articles which are forced down the throat of the loathing and struggling victim. Its restlessness frequently resulting from the preposterous trash forced into its stomach is quieted by paregoric and sometimes by spirit, and its tender organs thus prematurely accustomed to these pernicious stimulants, contracts a familiarity with them, which is easily renewed in after life, and the consequence of which is sometimes irretrievable ruin.

As part of the same system of forcing nature, infants at the breast are made to swallow articles of food which would be a task for the digestion of a healthy farmer.— Sometimes they are fed with fat pork and other gross meats, and scarcely are they out of arms, before they are permitted to eat unripe fruit, green corn, cucumbers, &c. in the season of them---they are frequently fed with cake, pies, rich puddings and other abominable compositions, which however grateful to the palates of grown persons are pernicious in the highest degree to the tender organs of young children, destroying their healthy appetite for the simple food designed for them by nature, and producing irritation in their digestive organs, which lays the foundation for bowel diseases which kill them by thousands, or which, if they escape the dangers of childhood, entails upon them a variety of dyspeptic and nervous disorders which are so frequent among young people, especially young females at the present day.— The difference in degree in which the two sexes suffer

from this cause is owing to this, that in men the pernicious effects of diet are counteracted by their more active habits of life, but in women they are aided by other causes which exert a powerful influence upon health, particularly the fashionable mode of female dress, the general use of tea and coffee which are powerful stimulants to the nervous system, and the excitement of the imagination produced by the kind of reading so prevalent at the present day, that of novels and other works of fiction. This kind of reading I would remark, is to the mind what tea, coffee, brandy and tobacco are to the body. It forms part of the same great system of excitements, which is so thoroughly established and interwoven in the very texture of society at the present day, but which has at length fortunately attracted attention in consequence of the enormous evils which have resulted from one of its forms, the use of intoxicating liquors. For we greatly deceive ourselves if we suppose that this is an isolated evil, standing by itself, and wholly disconnected with other prevalent habits of society. It forms part of a system, the various parts of which mutually aid and strengthen one another; and no reformation, in my opinion, will ever be radical and thorough, which does not strike at the root of the system itself, and in particular to the physical training of infants and young children. This last is a point which I hope I shall be excused for dwelling upon for a moment, for it is one of vast importance to the health, the happiness, and the lives of our tender offspring. I am fully persuaded that one reason why so many children are swept off by epidemic and other diseases in our otherwise healthy climate, is the absurd and pernicious mode in which they are fed. Instead of the plain and simple food designed for them by nature, especially bread and milk, their tender organs are stimulated by gross meats, pastry, cake, puddings, sauces, &c., their healthy action perverted and deranged, and a door opened for the entrance of a variety of diseases. High feeding produces two classes of evils in children. One is a disordered state of the stomach and bowels, the other a

tendency to inflammatory diseases of all kinds. The first effects frequently manifest themselves in bowel diseases, such as diarrhœa, dysentery, cholera and worms, enlarged glands, &c. the second in fevers of various kinds, inflammation of the brain or bowels, eruptions on the skin, &c., and a pre-disposition to epidemic diseases of most all kinds which happen to prevail. This last consideration is worthy of particular notice, for I believe it will account in no inconsiderable degree for the mortality among children during the prevalence of various epidemic disorders. Those children whose diet has consisted chiefly of bread and milk or other light but nutritive, and simple food, will as a general fact stand a much better chance of escaping such diseases altogether, or having them lightly, than such as are fed in the usual manner. But a fact of perhaps even greater importance, and intimately connected with our present subject, is that this early habit of excitement of the stomach and of the system, is the stock on which is frequently engrafted in after life the love of intoxicating liquors. The organs early accustomed to excitement, crave it ever after, and in the multiplied opportunities and temptations afforded by society, it must unavoidably happen that individuals thus brought up, unless under the influence of strong moral restraint, or of a full conviction of the danger which threatens them, will learn to gratify this craving, by resorting to that stimulant which surpasses all others in power, as well as in its baneful influence upon health, upon morals and upon life.

Regarding then the vice of intoxication as one of the natural consequences of that love of physical excitement which the habits of civilized life tend so powerfully to foster and promote, as part of that system of excitements, the foundation of which is laid in early infancy, which the habits of after life contribute to mature and complete, it is evident that we must look for a remedy for the evil, not merely in directly discouraging the practice of drinking, but in endeavoring to reform those habits of society, the natural tendency of which, is to create a love for it. To

aim at the first object, and at the same time to neglect this, is merely to lop a branch, and to leave the trunk and root to send out fresh ones. It may be said perhaps that this is an impracticable, and therefore visionary undertaking. This however is not true. All the difficulty consists in bringing about a change in public opinion on the subject, and the work is already half accomplished. It is, above all, necessary, that the work should be begun as early as possible,—that mothers in the management of their children should be impressed with the importance of adhering to the simplicity of nature ; and in particular of avoiding in their diet, all those articles which tend to produce excitement of the stomach and the nervous system. A simple diet of bread and milk, adopted and persisted in during the early years of life, I am persuaded would not only save multitudes of children from fevers, inflammation, convulsions, and a variety of other dangerous and fatal diseases, but would also indirectly save many from the more dreadful evil of intemperance. These remarks might be easily extended, but it is time to proceed to the subject directly before us.

In remarking upon the evils of intemperance, I shall confine myself principally to its effects upon health, tho' I am aware that its moral influence is a consideration of quite as much interest and importance as its physical. But the time will not permit me to enter upon this topic; nor is it necessary, for this part of the subject has been ably and thoroughly discussed, and every body is now well acquainted with the alarming facts which our prison and penitentiary records have brought to light upon this subject. The argument in favor of temperance in its relation to health may be comprised in a few words. The living actions of the human body like those of a machine, may be made to go faster than was intended by nature, but if they actually be so, they cannot continue so long. In both cases the consequence of increasing the speed of these motions is to wear out the machinery by which they are performed, before the close of the period it was intended to last. A clock or watch is design-

ed to go at a certain rate, in order to measure time as it glides away. If without regard to the object and intention for which the watch was constructed, we alter the regulator so as to make it go as fast again, we not only lose the very object aimed at in the construction of the watch, but we unavoidably cause a more speedy wearing out of its mechanism. Just so it is with the human body. The actions of it indeed are not designed to measure time. But a certain rate of action is necessary to some of the most important objects for which life was given us. If we increase this rate of action, we fail of obtaining these objects and at the same time wear out the organs by which it is performed faster than we otherwise should. It will perhaps be asked what are these objects, which we fail of obtaining by accelerating the actions of life, by the use of stimulants? The most important beyond all doubt is a *healthy state of moral feeling*, the basis of all our moral actions. The corporeal seat and instrument of these feelings are undoubtedly the brain of the nervous system; and when we consider how much these feelings are influenced by the state of the nervous system, we shall need little argument to convince us that those agents which have the peculiar power of exciting these organs to preternatural action, must exercise an injurious influence over these feelings. An affection of the brain will sometimes produce a total perversion of moral feeling. No one is ignorant that a person under the influence of intoxication frequently loses all feeling of moral restraint; and this, it is to be remembered is only the extreme degree of that condition, which is produced by more moderate draughts of stimulating liquors which excite a little exhilaration of the feelings. I should therefore contend that a person who is in the constant habit of moderate drinking is never in a state of perfectly healthy moral feeling, however small the deviation may be.

The slightest feeling of exhilaration from a draught of spirits, or wine, weakens the sense of moral restraint; while it is apt to stir up some of those unhallowed feelings

which exist in every human breast, which are the great enemies of social order and happiness, and the sources of most of the vices and errors which disgrace the human character. But whatever we may think of the effect of accelerating the actions of life on the moral feelings, it is incontrovertibly true, that it tends to shorten life. All action in the living machine is necessarily followed by a waste of power and a wear of the organization very analogous to the effect of friction in an artificial machine ; and whatever occasions habitual increased action in the animal system, must inevitably hasten the period of its destruction. This is especially true of those stimulants which act particularly upon the nervous system, such as distilled spirit, opium, and tobacco, because the nervous system is the chief source of living power. Now the means which we possess of increasing the motions of life beyond their natural rate, are found chiefly in our food and drink. Every one knows the effect of taking food or of drinking a little wine, in restoring the system, when exhausted by fatigue and fasting, to vigour and animation. The effect however is not exactly the same in the two cases—and the difference is, that food stimulates the brain less, and is not so speedy in its action, probably because it is not so soon absorbed ; while the stimulant drink from its fluid state is almost immediately imbibed from the stomach into the system, and being carried to the brain as well as to every other part by the blood vessels, acts immediately upon this important organ, which it stimulates to increased action. Taking proper food, unless in excess, never impairs the powers of the mind ; while a single glass of wine or spirits, as most people may have experienced, will frequently produce a slight confusion of head, which impairs for a time the powers of reasoning. This example suggests an important distinction between vital stimulants or those substances which possess the power of increasing the action of animal life. Some of these are *nutritive*, others are not so. The first class, comprehending all the varieties, of food not only stimulate, but also *nourish* the sys-

tem, while the second merely stimulates *without nourishing*; this is the case with spirituous liquors. The first are digested before they are taken into the blood vessels. They undergo a total change in their qualities; and all their injurious or useless parts are separated from them before they are admitted into the circulating vessels, and form part of the living system. But the second or innutritive stimulants are incapable of being digested and becoming parts of the animal system. They are absorbed from the stomach into the circulation in their entire or unaltered state, and carried by the blood vessels to all parts of the body, and among others to the brain, where they produce their effects without having their injurious qualities modified or changed by previous digestion. The nutritive stimulants before they are carried to the brain, are first so changed, that on their arrival at this organ they are already partly assimilated to the nature of its substance. That is, they are converted into blood, by digestion, which alcohol never can be, and the blood vessels which convey them can by a single exertion of their nutritive power deposite them in the brain, so as to repair the losses which the organ has sustained by its own peculiar actions. The stimulating substance, before it is applied to the part to be excited to increased action, is already converted to the nature of that part, and its action is not a foreign, but a friendly one. But the innutritive stimulants are incapable of this assimilation. They are never naturalized, but always remain aliens. Their nature is unchanged by their adoption into the system; and unable to conform to its laws, they are constantly making mischief and sowing dissensions while they remain; and if admitted in too great numbers, they are very apt to revolutionize and destroy it. That the stimulant effect of spirits upon the brain is not a friendly, but a foreign and unnatural one, is proved by the confusion of mind produced by spirituous drink; by the want of power of reasoning clearly, which is one of the immediate effects of these stimulants, by an impaired power of discerning moral distinctions, and a depraved

state of moral feeling which in its extreme degree may lead to the most immoral actions ;—effects which indicate not merely an increased but a *perverted* action of the brain, and which if often repeated, may at length become permanent states of feeling, and degrade the rational being into a madman or a brute. Now such effects as these are never produced by the nutritive stimulant. Those substances which are capable of being changed or assimilated, by the powers of the system, into its own nature, never *pervert* the actions of life from their natural character, though they may increase their degree of force. They never occasion inflammation of the stomach or liver, nor dropsy nor jaundice,* nor do they give rise to disease, or perversion of the rational or moral powers—effects which every one knows so frequently follow from the use of spirituous stimulants. A hearty meal of plain food never impaired a man's moral discernment, nor diminished his power of reasoning correctly. But who has not sometimes felt the effects of a single glass of wine or spirit and water, in throwing his brain into confusion, lessening his power of following a train of simple reasoning, as making a little calculation in arithmetic in his head, and in diminishing the influence of those moral restraints, which are the outworks of the great interests of society, and the safeguard of individual virtue and good conduct. Now if it be true that a single draught of wine or spirit is capable of thus perverting the most important functions of the brain in a person unaccustomed to the stimulus, what must be the effect of the *habit* of drinking these stimulating liquors frequently? Is it to be supposed that they can, from habit, so far change their own nature, as from poisons, to be converted into harmless and healthful agents? This is impossible. The effect of habit is upon *us*, not upon them. *They* undergo no change by *our habit* of using them. The human system does not and cannot assimilate them ; for as I before re-

*One obvious exception to this remark, is furnished by the operation of certain kinds of food, particularly some of the shell fish as the lobster, muscle, clam, &c., on constitutions of a peculiar kind,

marked, they are incapable of being digested. But how then does it happen, that by use they cease to produce the effect which those unaccustomed to their use experience from taking them?—a fact which seems to prove, that some kind of assimilation has been effected between them and the human system? If their mischievous qualities remain unaltered, why do they not always continue to affect the system exactly as they did at first? The answer to this question is, that the human system does not assimilate them to its own nature, but they assimilate the system to theirs. Ardent spirit undergoes no change in its nature by *our* habit of using it. Its qualities remain the same; its relation to the healthy human system unaltered; its pernicious influence over it undiminished. It is the human system itself, which in this case undergoes the change and becomes in some measure assimilated to the nature of the poison, which its own powers were unable to subdue. It gradually accommodates itself to the nature and the properties of an agent whose powers it is unable to control, but this is accomplished at the expense of its own healthy constitution. The animal system digests the nutritive stimulants, i. e. entirely subverts and changes their properties in order to convert them to its own nature; while the innutritive, by long habit, work a similar change upon the animal frame itself, and convert it in some measure to their own nature. Of this, a remarkable proof is furnished by those extraordinary cases in which the human body has become highly combustible in consequence of the habit of drinking spirit. So far has the human body in these cases been changed into the nature of this inflammable substance, that though in its natural state extremely difficult to consume, it has become so inflammable as to take fire from the too near approach of the flame of a lamp to the breath of the person, and to be almost wholly consumed; and in some cases, as has been supposed with some probability, it has been burnt to ashes by a self-kindled fire. The fact then that stimulating drinks from habit no longer affects us as they did

at first, is no proof that they have ceased to be injurious. It is merely a proof that they have already produced an important change in our constitution from its natural state, and which is of itself so far an approach to disease. This change, this assimilation of the constitution to the nature of a deadly poison may go so far, this unholy alliance between good and evil may become so close, that the human system may at length crave with irresistible longings a substance from which at first it revolted with loathing and disgust. But this change in the healthy *appetite* implies a loss of the healthy *power* of the constitution, and, if not in all cases actual disease, at least a predisposition to disease, and a diminished power of resistance to its causes.

The human body, as before remarked, is a machine ; but it is one of a very peculiar kind. Unlike artificial machines, it requires to be kept constantly in action, otherwise it soon loses all power of action, and falls to pieces of itself. On the other hand, if its rate of action exceeds a certain degree, it wears out sooner than it otherwise would, and in this respect it resembles the machines made by the hand of man. But a remarkable peculiarity of an animal machine is, that the causes which are essential to keep it in action, are by the very principles of its construction made to repair the waste caused by the actions which they excite. What are these agents? Air and food. We digest air in our lungs, and we digest food in our stomachs. These are necessary stimulants, from the first moment of existence to the last, to keep up the actions of animal life; and they are made by the powers of the animated machine to repair the waste which is occasioned by the very actions they excite. All action in the living machine is necessarily followed by a wear of the machinery, or a waste of the organization ; and whatever occasions increased action in the animal system, without affording materials for repairing this loss, must inevitably hasten the period of its destruction. This points out the injurious tendency of the innutritive stimulants, which increase the action of the animal economy

without affording any materials for repairing the waste occasioned by them. If man had the power of constructing such a machine, that the steam or the water which set it in motion, should be made at the same time to deposit certain solid particles in every part of the machinery which was wearing by the friction, so as to repair the losses as fast as they were made, such a machine would, in the principle of its action and repair, resemble the human body; for this is a self-repairing machine. On the other hand, the effect of innutritive stimulants on the animal system is, to bring it more nearly to the condition of an artificial machine, in which the moving power merely keeps it in motion, and of course occasions a wearing away of its parts without supplying any thing to repair the loss. A wear and tear of the machinery is caused by its motion; but the self-repairing power is unable to act, for it has nothing to act upon; and the consequence is, that the machine sooner wears out and falls to pieces.

It is therefore very bad economy of life, to make use of innutritive stimulants to increase the action of the animal machine. They cause an absolute waste of the living machinery, without making any compensation by supplying materials for repair. As a general rule, no stimulant should be used which does not furnish nourishment; and of those which do, such as are least stimulating are better for habitual use than those which are more so. It is for this reason that wine, beer or cider, though hurtful as common drinks, are less so than spirit, even when diluted with water—because in wine and other fermented liquors, the spirit they contain is combined with other principles which are of a nutritive kind, and may be digested;—for the same reason wine, &c. are more hurtful than milk or milk and water, because these last are more nutritive and less stimulating. Ardent spirit, which is separated by distillation from the nutritious principles, causes pure unmitigated mischief. Wine and other fermented liquors, if used for common drink, produces evils of the same kind, but carry along with them, to a *certain* extent, the remedy for this evil; while milk and water or water alone, produce only the

nutritive stimulus, which needs no corrective, because it is no greater than the actions of life require.

Nature has kindly bestowed upon us certain powers or capacities of enjoyment to encourage and prompt us to the discharge of our duties, or in doing those things which are necessary to the preservation of our lives and other important purposes of our existence. It will always be found that our enjoyments are naturally connected with some other object important to our own well-being or that of our fellow creatures in some respect or other. We have no capacity of enjoyment for its own sake, but many for the sake of other things ; and if we separate these two things from each other, and cultivate the powers of enjoyment for their own sake, as mankind are but too apt to do, we shall be in danger of degenerating into selfish voluptuaries or sensualists. The power of pleasure is a secondary, not a primary object, of our earthly existence. We are made to perform duties, not to enjoy pleasures in this life. Every pleasure is naturally connected with some duty or action necessary to our physical or moral well being. It is too much the practice of mankind, however, to separate them from each other ; to pursue the enjoyment for its own sake, and to leave the duty to shift for itself.

The taking of food for the necessary repair of our bodily organization is attended with pleasure. The great object intended by nature, however, was not the pleasure of eating, but the nourishment of our bodies. We are apt, however, entirely to disregard the great object of this action, and concern ourselves wholly with the pleasure we can extract from it. On the one hand we search out a variety of substances which can stimulate our palates, without any regard to their being nutritious and healthful or not ; and on the other, we dress up with every kind of provocative to eating those substances which we use as food ; that we may increase the pleasure of eating to the utmost, and be tempted to prolong the gratification long after nature is satiated. The waste of the fluid parts of our bodies requires the use of drink to re-

pair it, and we derive a sensible gratification from quenching our thirst. What use do we make of this fact?—Why, to try if we cannot find something that we shall take pleasure in drinking whether we are thirsty or not; and in this search mankind have been remarkably successful. To such a degree indeed have we succeeded in varying and increasing a pleasure, which was designed by nature merely as an incentive to quench our thirst, that to quench thirst is become one of the last things that people drink for. It is seldom indeed that people in health have any natural thirst, except perhaps after exercise or labor in a hot day. Under all other circumstances we anticipate the sensation, by drinking before it comes on; so as but seldom to enjoy the natural and healthful gratification of drinking because we are thirsty. Who has not observed the extreme satisfaction which children derive from quenching their thirst with pure water and who that has perverted his appetite for drink, by stimulating his palate with bitter beer, sour cider, rum and water, and other brewages of human invention, but would be a gainer even on the score of mere animal gratification, without any reference to health, if he could bring back his vitiated taste to the simple relish of nature. Children drink because they are dry. Grown people drink whether dry or not, because they have discovered a way of making drinking pleasant. Children drink water, because this is the beverage of nature's own brewing, which she has made for the purpose of quenching a natural thirst. Grown people drink any thing *but* water; because this fluid is intended to quench only a natural thirst, and natural thirst is a thing which they seldom feel.

One of the evils, though not the only or the greatest one, of perverting the natural appetite of thirst is that it leaves us without a guide to direct us when we really need drink, and when we do not. There is no danger, it is true, that this want will mislead us into drinking too little; the danger is that we shall be betrayed into drinking too much; i. e. when nature does not require it; and

such no doubt is frequently the case. If a man is fond of some particular drink (and most people I believe have their favorite liquor) he will be tempted to take it when he does not really need it. This consideration points out the wisdom of nature in providing for us a beverage, which has nothing to tempt us to drink it, except when we are really thirsty. At all other times water is either perfectly indifferent, or it is disagreeable to us; but when we labor under thirst, i. e. when nature requires drink, nothing is so delicious to a pure, unadulterated taste. While we adhere to this simple beverage we shall be sure to have an unerring prompter to remind us when we really require drink; and we shall be in no danger of being tempted to drink, when nature requires it not. But the moment we depart from pure water we lose this inestimable guide; and are left, not to the real instincts of nature, but to an artificial taste in deciding on actions intimately connected with health and long life. What is more common than for a man to take a glass of beer, or cider, or wine, or rum and water, not because he is thirsty and really needs drink, but because opportunity makes it convenient, and he thinks it will taste well. And this is true not only of fermented or distilled liquors, which are directly injurious in other modes, but in a less degree of any addition made to pure water to make it more palatable. Let me not be misunderstood. I am far from insinuating that lemonade, soda water, or milk and water, and similar mixtures are hurtful drinks. Far from it. But I say that in using even these mild and healthful beverages we lose one important advantage we should derive from the use of pure water alone. If they are more palatable to us than water (and otherwise we should have no motive to use them) we shall be tempted to take them oftener and in greater quantities than is required by nature, and may thus unconsciously do ourselves an injury. It is rare for a person to drink a glass of water, when he is not thirsty, merely for the pleasure of drinking; and as thirst is the natural guide, if he drinks when not thirsty, he takes more fluid than nature

points out as proper; and so far violates one of her obvious laws. But it may be asked if any injury can result from drinking more than nature absolutely requires. Not perhaps in particular instances, but the *habit* of drinking more may undoubtedly be injurious. The question is evidently of the same kind as whether eating or sleeping more than was intended by nature is injurious. It is sufficient answer to all these questions to say that our Creator knows best. Under the guidance of the instincts which he has implanted in us we are safe. But as soon as we leave these, and place ourselves under the direction of our own educated appetites we are constantly liable to be led into danger. It is certainly hurtful to drink habitually, more than was intended by nature, because it imposes upon the constitution the task of removing the excess; or else it is retained in the system and then may lead to Dropsy, or some other of the consequences of plethora or redundance of fluids in the system. These effects, however, frequently escape observation; because the habit of drinking too much is in most cases connected with the use of stimulating drink; and then the injurious effects are usually ascribed to the spirits alone, and the excess of fluid is entirely overlooked.

It may be thought that this is refining too much on a subject which does not admit of refinement; that it was not intended by our Maker that we should be rigidly confined to precise rules as to the quantity or quality of our food and drink. This may be true. But yet it will not be denied that people *may* eat too much, and *may* drink too much; and that they may eat and drink things of a hurtful kind; and that in all such cases they *may* do themselves an injury. That this *may* be the case is most certain, for it often *is* the case; and scarcely any fact, relating to mankind is more indisputably true or of more frequent occurrence. A large proportion of the acute diseases of mankind are connected with what we term plethora, or an excess of the nutritive fluids of the body. This is the case with most fevers, inflammations, dropsy, apoplexy, and many other diseases. Every one knows

that in these diseases physicians bleed, and starve, and use other means to diminish the quantity of nutritive fluids in the system, which have accumulated beyond the healthy standard by an excess of nutrition. That is, they are obliged to undo by their remedies, what a course of excessive feeding and drinking has been silently doing for a long period of time. The system is calculated to contain only a certain quantity of nutritious fluid. We fill it to the brim in the first place, and then try every means we can think of, to make it hold a little more. So long as we pour in only a certain quantity in a given time, we merely keep it full, because it is furnished with waste tubes to carry off the excess. But the moment we exceed this quantity (be it ever so little) the fluid gradually rises above the level of the brim, and begins to round over its margin. And this is the critical moment when we enjoy the greatest consciousness of health and strength, and yet are on the verge, perhaps of fatal disease; when the incautious addition of a single drop to the cup, or the slightest jarring of the vessel is enough to make the fluid run over its sides, or in other words to produce an explosion of disease. This explains the origin of many acute and chronic diseases. They are the effects of excessive eating and drinking. When the system becomes surcharged beyond a certain point, the excess must escape in some way or other. If the natural outlets are not sufficient for the purpose, nature is obliged to make new ones, which can only be accomplished by the process of disease.

In this view disease, paradoxical as it may seem, is sometimes a salutary process. That is, it is a process instituted by nature to provide for the discharge of an excess of nutritive fluid from the system, when the natural channels are not sufficient for the purpose; to restore the balance between the contained and containing parts of the system. It is a subject of common observation, that a severe fit of sickness is sometimes succeeded by an improved state of health, a fact which becomes intelligible from the preceding considerations. The process

however, is a dangerous one; and the experience of all ages, and the existence of our own profession, as an essential element of society, are proofs that nature is but too apt to fail in the attempt. Another mode in which the use of stimulant food and drink is productive of disease is by fretting and irritating the living tissues, and producing what is termed *irritation* in the system, or the organs, a condition which is intimately concerned in most of the forms of disease.

So far then as life and health are valuable to us, so far should we avoid all those habits of indulgence, whose necessary tendency is to impair or destroy both. And nothing relating to our habits of eating and drinking should be deemed unimportant, so long as we regard an exemption from pain, disease and bodily suffering as a desirable blessing. When sickness and pain shall come upon us, we shall not slight any circumstance, however unimportant it may *now* appear, which could have saved us from our sufferings, or have mitigated their severity. We shall then learn by painful experience to prize the value of temperance, when we are suffering in our person or those of our children and friends, those evils which flow from a neglect of its dictates.