

No. 467

AN
INAUGURAL DISSERTATION
ON

Hygiene

SUBMITTED TO THE

President, Board of Trustees, and Medical Faculty

OF THE

UNIVERSITY OF NASHVILLE,

FOR THE DEGREE OF

DOCTOR OF MEDICINE.

BY

L. A. Upshaw.

OF

Alabama.

185889

MEDICAL JOURNAL OFFICE,
NASHVILLE.

To Dr. A. H. Buchanan

As a mark of due respect for his high attainments in the science of medicine for his many excellent qualities of both head and heart, This feeble effort on the Preservation of health is affectionately inscribed by his sincere and most humble servant

S. A. Upshaw.

Hygiene.

Impressed, as I am, I have endeavored to give my feeble views on this subject.

The physical organization of man, as well as his mental endowments, is naturally superior to the rest of animated creatures.

This is evinced not only by his anatomical structure, but by his history where he has not been impaired, by his departures from the laws of nature. But while the lower orders of animal life spot in the happiness of health and primitive vigor around him civilized man alone is the victim of constitutional infirmities, and countless diseases, the dreadful penalties of his voluntary departures from the laws of his system, thus making his free will, and his superior

mental endowments the instruments of his own ruin. I design pointing out in a brief manner, the principle — natural means of developing the human system and preserving its health, as far as I am capable, and shall endeavor to enforce the importance, of reliance, upon them mainly — instead of the almost exclusive reliance upon medication, which is so perniciously fashionable, it is folly to neglect the means on which the Creator has made constitutional vigor to depend, till the vital flame is almost extinguished, and then attempt to restore it by medication alone, the attempt to resuscitate a dying plant by a drop of water, or to kindle a heap of wet wood with a paper flame would be as rational. As man's intellectual or

moral character is determined in a great degree by his education and associations through life, so his bodily vigor is influenced by his habits from earliest childhood, to old age. An infants diversities of form structure and predispositions to disease occurring in the family which may be due, in some degree, to natural causes and to that extent may be unavoidable, but the most of these differences are owing to the habits rather than of the individual, themselves or to those from whom they inherit their peculiarities. For the sins of the Father, visits the offspring to the fourth generation in the form of physical infirmities, — more certainly perhaps than in any other way. Then what are the natural conditions on which a proper,

4

development and health of the body depend. The first thing, I shall notice, and that which is more frequently neglected, than any other is exercise. (If the question were asked, what is the most important rule of health, it might be answered as Demosthenes said of oratory, Action! Action!) It might as reasonably be expected that vegetation could spring forth, and grow, and flourish, without light, heat, and moisture, as that the animal frame, could be fully developed and preserved in health, without vigorous action. It is an indispensable means, it is indicated by the human frame its long leavers, and numerous muscles attached to them, the arms, the legs, the hands, and the feet, the numerous joints, and their mobility; all —

5
obviously indicate that it is formed
for vigorous, complicated, and repeated,
action. Exercise is an instinctive want
in the animal economy, it may be in
the simplest motions of the infant, in
the romping of childhood, and youth,
and in restlessness, under restraint,
of more mature age. Where nature
points out the rule of action, it can
not be disregarded with impunity,
even inanimate things are preserved
by motion. The waters are purified
by agitations, waves, and tides. The at-
mosphere, by its ever varying currents.
Vegetation, is continually waved by the
scering winds, and is strengthened by
their influences. But motion, is more
especially a function of animal being
on the exercise of which, the perfection
of their growth, and their preservation

most directly depend.

This is secured to brutes, in a state of nature, by the repeated exertion which the instinct, and necessities lead them to make in procuring food. The habits of man are more artificial, and therefore must be regulated, by his reasons, but man continually violates this great law of his physical frame, and there it is in a low state of degeneracy. Brutes, approach man, in physical degeneracy, and susceptibility to disease, in proportion to the degree of their domestication, and the contraction of their natural range of activity. The salutary effects of exercise appears conspicuous, by a close observation of the various classes of men, in reference to their habits, and vocations, and their consequent bodily peculiarities. Nations

7

and classes noted for bodily activity either in the chase, in war, or in the arts of civilized life, have better ~~better~~ developed frames, and are less liable to constitutional incidental diseases, than those who are more indolent. The strolling Indians of North America possess more muscular, and vigorous forms, and are more exempt from constitutional infirmities, than their white brethren, although both races, are surrounded by the same natural circumstances. The laborer may be distinguished any where by his sanguine complexion, large muscular broad shoulders, full breast, and stoutness of form. The marks are more striking in females, who labor — because the muscular exertion, in them and of the inactivity of the others of their sex, are more distant, and consequently the contrast is greater. It is not

difficult to judge of the various employments of man by the comparatively larger development of the muscles, and other organs particularly exercised in their vocations. For instance the right arm of the Blacksmith is comparatively larger than the left, which is owing to using the hammer in his right hand. The lower extremities of the Indians are — more muscular than the upper, because they are more used, in their mode of life than the latter, while the shoulders and upper extremities, of the civilized are larger for the same reason. The negroes of our southern climate, are more muscular, and more durable, than the whites which may be ascribed to their constant hard labor. The medical statistics prove contrary, to the opinion of some, that there is less mortality, and particularly from

9

constitutional diseases among the active classes, than among the inactive. This would be a reasonable conclusion, without fact to support it, for no position seems more reasonable, than that just in proportion to the rigor of the system, and capability of bearing exertion, will be its power of resisting morbid impressions of every kind. On the other hand the inactive are characterized by a thin delicate skin, small limbs, thin soft muscular narrow chest, and inability to support long continued muscular action, in other words all their organs, and powers, are deficient, and consequently all experience shows them to be doomed subjects, of disease and premature death. The aptitude of this class to corpulence in advanced life, forms no exception to but is a confirmation, of the general truth for this condition itself is a disease, —

10,
and is always connected with feebleness
of the vital power. It may be necessary
just here to qualify this exhibition, of the
dependence of development on exercise,
by observing that its full effects cannot
be seen in a single individual, but must
be traced through many generations.
For these effects, are transmitted from
the parents, to children. An individual,
of vigorous parents, may have a tolerable
constitution, although he is bred, in
indolence: and one from feeble parents,
may have a feeble frame although he
be raised to activity, but the one is ene-
rved, and the other is invigorated, by
respected habits; The qualities transmitted
from both parents, are dependent on
their habits, and therefore the general
proposition is true, and must be evident.

But although most persons are convinced, by reflection of the necessity of exercise, yet they are prone to forget it in practical life. A concise view therefore of some of the most prominent, ways in which it is contributed to health may serve to impress its importance, on the mind.

First, It quickens, and exalts the nervous system, that source and generator of motion, which ramifies minutely every part of the body, and by which all the tissues, and organs, perform their functions, Second, It quickens the actions of the heart, and arteries, and accelerates the circulation of the blood, that great fountain of life, by which all the solids are formed, and by which they are constantly renewed, and —

preserved. Thirdly, It increases respiration, by which a greater quantity of the vital principle of the air, is consumed and combined with the blood, and thus vivifying, that life sustaining fluid. Fourthly It increases animal heat, an agent powerfully efficient, in all the functions of the system.

Fifthly It increases the action of the skin particularly, and thus prevents any noxious matter, from combining with the blood. And lastly, it assists digestion, and in short, it exalts and perfects the actions of all the organs of the body, to the proper performance of the functions which constitute health. Now if these views be correct, it becomes necessary to apply — them as they are of the greatest importance, And there is no time in life, of which

exercise is so essential, as that of child-
 hood, this is the time at which the har-
 vest, should be reaped. Nursery, is the
 workshop in which human beings are
 shaped, and fashioned. The foundation
 of many infirmities, are laid in nursery.
 All extremes should be avoided, and
 children should have free access, and
 motion of their limbs, they should be
 reasonably exposed to the air, and to all
 natural influences that surround them.
 Nature gave the limbs, for motion,
 the air, for respiration, but in how
 many instances are they restrained
 by misguarded parental tenderness,
 or parental vanity, which is less par-
 donable. No error is more common, than
 that of cramping the children, by
 inconvenient modes of dressing, or

by having them carried in the arms of
 the nurse, continually, and thus pre-
 venting them from exercising their
 own limbs. I can see nothing in it but
 natural consequences of error, according
 to the laws of nature. No fact seems
 better established than that of rai-
 sing children, tenderly, are delicate
 and feeble, and unhealthy, and subject
 to premature decay, while those raised
 hardily, are robust, and healthy, and
 have better prospects for a longer
 life. And in addition to this, it may
 be observed that children nursed
~~in care~~, always become more healthy
 when led by natural impulses, they
 break the fetters of dothing care, and
 indulge their natural disposition
 to romp, and roam at large. Although
 exercise is most important during the

years of life before puberty, while the body is forming, yet it is essential to health during all subsequent years.

This may be exemplified by observing all classes of society whose vocations whether mechanical, or literary, do not afford a sufficient amount of muscular exertion. These as a general rule may be observed to be pale and sometimes dyspeptic and incapable of bearing much fatigue, all of which indicate that the vital powers, are deficient, the body a mere mushroom, instead of solid growth. Hence as already intimated, the average term of life, in this class is far below that of the active.

Indigestion, liver complaint, and consumption, are their peculiar scourges.

Even the man who has employed the most of his life, in some active vocation

in the possession of good health, after quitting business, finds himself on the list of valetudinarians, seeking restoration at some fashionable mineral watering place, perhaps with consumption. with all its fatality, indigestion with its train, or with thousand other diseases too tedious to mention, a good portion of which may be ascribed to his indolence or want of exercise.

The fashionable modes of dressing among the females, which by compressing the chest, not only prevents the development and action of the muscles, of that delicate and interesting part of the female, but impedes the growth and action of the lungs. Hence those whose lungs are not allowed free and full access are always pale, feeble, and nervous. So however much our gallantry

and false taste may admire, our better — judgement must condemn, and deplore.

Considering the two parts comparatively for instance the Chinese women, in compressing their feet, and the fashion of compressing the chest, the former being infinitely less absurd of the two, one being the instruments of locomotion, and the other of life itself.

Pure air is another indispensable condition to health. And the importance of it appears more evident when it is considered that an adult, consumes about 9 gallons of air in a minute, and that which is once respired, is totally unfit to sustain life afterwards.

The common sources of impurities in the atmosphere, are animal, and vegetable, decompositions, the most dreadful diseases have almost desolated some of the cities on account of the animal and vegetable

decomposition and of the malarial poisons surrounding them. When the fishes shall forsake the limpid stream, to inhabit the muddy pools, and stagnated ponds, then let man forsake or corrupt the pure element, which nature made and tempered for his use. So great is the dread of the atmosphere ~~as~~ nature gave it, that the physician finds the greatest difficulty in forcing the patient, and attendants to allow the doors, and windows of the sick room to be opened, although their very salvation may depend on it. Consumptive patients especially, have an unaccountable dread, of exposure to the open air. I do not have not a doubt in my own mind, but thousands have shorten their lives by close confinement to their rooms, where few have by exposure. The next thing which I shall mention is Aliment.

The body formed and perpetually renewed from the various articles of nutriment, their nature quantity and the perfection of their digestion, must necessarily influence health. Simplicity in quality, moderation in quantity are the general rules on the subject. The quantity and quality of food, should bear a direct proportion to the amount of exercise. Food is the steam of life, (and he that eats, and drinks much, and does not keep up his machinery, his paddles, and his wheels, at work, must finally burst his boiler). Few persons in civilized life have proper digestion either from diet improperly prepared or in quantity out of proportion to their activity or exercise. The last is the most frequent cause of dyspepsia. The complaint of head-ache, and other indisposition on sunday

20
is owing to the indulgent of the appetite,
to the usual extent or perhaps greater,
in the richer kinds of food, without
the usual amount of exercise.

And what is thus practiced by all occasi-
onally, is practiced by some continually,
hence the literary, and the sedentary, are
almost sure to suffer from indigestion
and must continue to suffer from it, until
they learn to accommodate their appetites to
their habits.

Dyspepsia is another disease in the treat-
ment of which, too much reliance
is placed on medicine. Nine cases out
of ten are caused by gulping down imp-
roper quantities and preparations of
food, I know of nothing that ought to
provoke the physician so much, than
after having explained to his

dyspeptic patient, the cause of his disorder, and the only remedy for it, to find him taking some patent Pill, or bitters that perhaps, ^{he} may ^{he} know nothing about, or gulping down like the Hyæna, every every thing in the way of food, that may suit his fancy. Therefore the only rational way of attempting to cure this disease is by removing the cause that produce it. He who imagines that an effect can cease, while the cause of it, continues must be a poor philosopher.

A great many persons look upon medicine as a perfect fountain of absolution, in which they can bathe and be absolved from all the disease which their violations to the laws of health, can produce. No one should imagine he can violate laws of health at any time with ---

impugnity. So he that violates the laws of health must find, that at some critical time diseases, each violation will claim its penalty, and each one like the creditors of a breaking debtor, will rush in to have its claim satisfied, when he is least prepared to meet it.