

CONSERVATION OF THE HUMAN RACE.

J. N. HURTY,

State Health Commissioner of Indiana.

High authority says we are only 50 per cent efficient; that we live out less than one-half the natural duration of life; that we consume twice as much food as is needed to maintain efficient life; that we waste as much as we use, and that one-half of all human beings born either die before reaching maturity or fall into the defective, delinquent or dependent classes. In these facts we find reasons why we waste the major portion of all our resources and call it development. In these facts we find reasons for the existence of robber taxation and predatory business. For, a people who waste themselves will, of course, waste their natural resources. Therefore, the first, the most important, the fundamental, conservation is the conservation of human vitality. A people who cannot be brought to a realization of the fact that they lead only half lives, and who, realizing, will not mend, will show the nations to come what fools the present mortals were.

LENGTH OF LIFE.

Length of life is a resultant of strength. Honor thy father and thy mother that thy days may be long in the land the Lord thy God giveth thee. It is an honor and it is a strength for a nation to have a low sickness and a low death rate, with their consequent lengthened average duration of life. In India the average length of life is twenty-five years; in the United States, forty; in England, forty; in Germany, forty-three, and in Sweden, forty-five. The natural duration is one hundred years. Metchnikoff, after thirty years of study of disease and death, says only a very few die natural deaths; most of mankind commit suicide; that is, most people do not know how, or will not, conserve their vitality, and thus results a greater or less period of disability and inefficiency, with premature death. Nature does no fooling; she has her laws, and they are enforced up to the handle.

VITAL ASSETS.

Comparison of vital and physical assets as measured by earning power shows that the vital are three to five times the physical.

The facts show that there is as great room for improvement in our vital resources as in our lands, water, minerals and forests; and furthermore, this improvement must come first, for through human life only is natural conservation possible. The dead past may bury the dead, but living and strong men, not the weakly and sickly, must do the work of conservation. And the future belongs to that nation which has the highest virility.

ILLNESS.

From our vital statistics, which constitutes the bookkeeping of humanity, we learn that fully 150,000 people in Illinois are sick at all times, 35,000 of whom are consumptives. Not less than half of this is preventable, and three-fourths may be prevented by strong effort. Eighteen experts in various diseases as well as vital statisticians have contributed data on the ratio of preventability of the ninety different causes of death into which mortality may be classified. From this data it is found that fifteen years at least could be at once added to the average lifetime by practically applying the science of preventing disease. More than half of this additional life would come from the prevention of tuberculosis, typhoid fever and five other diseases, the prevention of which could be accomplished by purer air, purer water and purer milk. Let the business men, who are in the saddle and who run our affairs, thoroughly consider this. They surely know that diseases and premature death are drags to business. Fifteen more years of life to each citizen means an enormous increase in the strength and happiness of the people.

Minor Ailments must be thoroughly considered in any steps toward the conservation of vitality. They are far more common and farther reaching than is generally realized. They are chiefly functional disorders, such as of the intestinal canal, heart, nerves, liver, kidneys, etc. These disorders are gateways to the more serious disorders. Those who neglect colds, or what seem to be colds, will prepare the tissues of the respiratory tract for pneumonia and consumption.

Benjamin Franklin, wise and practical, successful as merchant, scientist and statesman, said: "The having of colds is a great drawback. I notice when I have one my efficiency is greatly decreased. Thought, judgment and understanding are clouded. Furthermore, I notice that colds follow excess in eating and drinking and the much breathing of bad air. They are quite unnecessary." The losses due to mistakes in business and in the

general conduct of life on account of minor ailments cannot be estimated except perhaps as time lost. A study of the matter shows that the time lost cannot be less than four days annually to each supposedly well man. Applying this to the wage-earners of Illinois, counting one wage-earner to each five people, making 650,000 in all, and this State has to pocket an annual loss of 2,600,000 days, or 7,150 years. This is certainly a prodigious loss to suffer because of minor ailments, all of which can practically be avoided by proper public and private hygiene.

Neurasthenia, so common in the United States, is one of the most serious and insidious introductions to grave disorders, which may be due to depraved nutrition, to needless worry, or failure to have adequate recreation.

SCHOOL HYGIENE.

In conserving vitality, the child must have physical defects removed as far as possible, then must be brought up amidst healthful surroundings and itself trained in all that conserves health. Indiana has already taken steps in this direction. The sixty-seventh General Assembly ordained that the schoolhouses hereafter built shall be sanitary in all particulars. This means that waste of money and waste of child strength and happiness shall cease in this fair State, so far as this one matter goes. The same assembly has given permission to school authorities to institute medical inspection of school children, that they may be relieved of morbid physical conditions which cause pain, inefficiency, illness and early death. It was a marked forward step to grant this privilege, but it was a mistake in favor of loss of vitality not to make this care of children compulsory. Physical strength is the fundamental requirement for the making of children into educated and moral citizens. There is now a world-wide movement, led by Switzerland and heathen Japan, to save children and make them strong. A Japanese physician traveling in this country said: "We have relatively fewer short graves in our cemeteries." The intelligence of a community could be accurately measured by determining its relative number of short graves. Youth is the time to serve the Lord. We must train the body in youth as well as the mind, or the opportunity to conserve vitality is largely lost. A far better business scheme than securing factories would be for the business men to turn their attention to the conservation of human vitality. The returns would be immense; failure to score in such an effort is impossible.

SYPHILIS AND GONORRHEA.

Hygiene has been permitted to extinguish cholera and yellow fever, and by the grace of private benefaction it will soon banish hookworm disease, which now incapacitates 2,000,000 people. And may God hasten the business men to permit hygiene to banish those twin leprosy, syphilis and gonorrhea, which are important factors in the causation of insanity, crime and pauperism, and which so fearfully wreck the lives of so many innocent women and children, as well as wrecking the lives of the guilty. Syphilis and gonorrhea are responsible for the existence of a large proportion of defectives of various kinds which fill our institutions. Let hygiene drive these plagues away, and Illinois, instead of building more insane hospitals, could donate one or two now existent to educational use of some kind.

SAVING VITALITY.

Strength, endurance and fatigue are the three great elements to be considered in conserving life. The measure of strength is the force a muscle can exert once; the measure of endurance is the number of times it can repeat an exertion. Fatigue is caused by fatigue poisons, which must be removed from the body during rest, principally during sleep.

Anything, therefore, which reduces strength and lessens endurance and prevents removal of fatigue is inimical to vitality conservation.

SCIENCE OF LIVING.

The science of living begins at the mouth. Barring the taking of drugs, as a man eats and digests his foods, so he is. Owing to drug-taking and errors in human feeding, disease is latent in man at all times. Only a few escape sickness and pain and die natural deaths. This is not as nature would have it. Josh Billings, recovering from heart trouble caused by tobacco, said: "Nature made us all right; we make fools of ourselves." Other drugs which are of almost universal use, and which affect heart, nerves or efficient elimination, are coffee, tea, spices, cocaine, morphine, chloral and alcohol. All of these are drugs, and all are poisons, and all more or less disturb the vital functions, reducing vitality and efficiency.

Any departure from unstimulated nutrition works harm. Stimulated nutrition is unnatural, and perforce is opposed to strength.

Immoderate eating—feasting and gluttony—reduce vitality and induce disease with its consequent inefficiency. A very old adage says: "Most men dig their graves with their teeth." The old-time writer of this was working for the conservation of human vitality. Immoderate amounts of nitrogenous foods, exemplified in white of egg and lean meats, cause auto-intoxication. They do this by undergoing putrefaction in the digestive tract, thus making toxins, which in turn, being absorbed into the body, cause the following train of ills, which results in loss of vitality and efficiency. Some of the auto-intoxication ills are: biliousness, coated tongue, foul breath, clammy hands and feet, dry, lusterless hair, putty complexion, dulled hearing, dulled vision, dulled taste, dulled smell, loss of memory, loss of continuous thought and attention, headaches, vertigo, dyspepsia, loss of weight, loss of strength, rheumatism, insomnia, fugitive pains and aches, irregular heart, shortness of breath, brittle nails, dry, harsh skin, cancer, and premature old age of the doddering and slobbering kind.

Until we learn and practically apply this science of living, we cannot attain over 50 or 60 per cent efficiency and must continue to live lives of sickness, pain and disease, and die before the natural duration of life has one-half expired; and if this does not hinder and delay the conservation of natural resources, nothing will.

Over-fatigue is a cause of loss of vitality. The present working day, from a physiological standpoint, is too long. Overwork, better expressed by the term over-fatigue, starts a vicious circle leading to the craving of means for deadening fatigue, thus inducing drug habits and drunkenness.

Experiments in reducing the length of the working day show a great improvement in the physical and mental efficiency of laborers and result in an increased output sufficient to pay the difference. However, the great justification of the shorter day is found in the interests of the race and nation, not the employer. Public safety requires, in order to avoid railway collisions and other accidents, the prevention of long hours; lack of sleep and undue fatigue is quite as great as the waste from serious illness. A typical succession of events is: first, fatigue, then "colds," then tuberculosis, then death. In order to prevent in the beginning this increasing line of destructive agencies, undue fatigue must be prevented.

HEREDITY.

Vitality rests upon inherited qualities. A child born of weak parents, those parents having received their weakness by inheritance, will itself be weak in the same way. Idiots breed idiots. Whatever improvement the child may enjoy must rest upon its inherited foundations. If a child inherits brown eyes, they must stay brown; but inherited weak sight may be improved to a greater or less degree. Two forces, therefore, control vitality—namely, conditions preceding birth and conditions during life. In other words, the foundations of vitality are wholly inherited, and may be cultivated to the degree the inherited foundations will permit.

A perfectly sound physical and mental inheritance is rare, and is the greatest of all assets. The highest development of a nation will begin when the human law conforms to God's law of development and parenthood is denied the defectives. A defective has no right to burden society with other defectives. Prisons and asylums are now sufficiently numerous, and it is evidence of defectiveness of the masses to conduct our affairs so as to necessitate their increase. My State now has five great insane asylums, each representing about one million dollars, and there are enough insane in jails, poorhouses and in homes to fill another one. Our population increased 7.6 per cent in the last decade, and insanity increased 29 per cent.

To go along in the future as in the past, permitting—even fostering—the production of the hereditary insane, of the hereditary criminals, of the hereditary idiot and feeble-minded, and then building great palaces in parks to care for them, will mean we have not the sense necessary for the proper conduct of our affairs.

HYGIENE.

We must look to hygiene, the science of health, to conserve human vitality. The term includes every force necessary to prevent disease, to increase strength and endurance, and to prevent the production of the unfit.

The ponderous and oppressively costly courts have been grinding for centuries, and crime increases. Punishment and fear of punishment restrain evil-doing, but do not eradicate the tendency to evil. This and other defects we must, as far as possible, breed out of the race, and science can find a valid answer for

every objection which obstructionists can raise. Fostering insanity, crime and imbecility is not evidence of understanding and of high ability.¹

The divisions of hygiene are: Federal, State, Municipal, Institutional, School, Domiciliary, and Personal.

Hygiene not only makes for greater physical strength and endurance but it makes for greater moral strength. It is the essence of charity, kindness, patience and truth.

When, through hygiene, defectives are no longer propagated; when we understand that preventable sickness is immoral; when simplicity and frugality of living is achieved, voluntary sickness, voluntary celibacy and voluntary childlessness will become discreditable, and premature deaths will disappear before temperance and sanified homes.
