censure of the principals and teachers by the parents complaining that their children had been unnecessarily retarded in their grades.

We must be more active and alert in this direction, and not until we, as a body, take a more decided stand, can we hope to successfully stem the rapidly advancing tide of both organic and functional nervous diseases.

If it be true that the physiologic nerve cell is limited in its capacity, and that its normal activity results in the expenditure of a certain amount of force which, when discharged, presents changes corresponding to fatigue, and that a certain amount of rest is not only capable but necessary to restore or regenerate its normal function, in the absence of which, changes corresponding to its inanition occur; then, clearly, the duty of the physician is to use all possible means to secure the needed *rest* for all morbid conditions of the nervous system in which nervous irritability and instability are the chief clinical criteria, and those which form so great a part or the subjective phenomena of the purely functional neuroses and psychoses.

DEGENERACY; ITS CAUSES AND PREVENTION.

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Practically all recent books and essays upon the subjects quote statistics to prove a startling increase of insanity, of criminals and of pauperism. They either state or intimate that the race will soon be overwhelmed by the number of persons of this character, unless something is done to prevent them from procreating their miserable kind.

Before we accept this gloomy conclusion, we should study the matter and see if the statistics may not be faulty. We may also, with profit, study the conditions that are in the way to prevent those who are normal in their development from continuing so indefinitely through succeeding generations, as well as to recognize and study what influences are at work to counteract degenerating tendencies.

There is ground for hope that some of the apparent increase shown by statistics is not real, but due to the greater care in the census enumeration of later years. Moreover, insanity and other mental defects are now treated as a disease and misfortune, and more frequently come to light while formerly they were too often considered a blemish and disgrace and hidden from view. We may draw some consolation, too, from the fact that latter day segregation of many of this class will prevent their reproduction and favorably impress the figures of the future. Nevertheless, we recognize that whatever arguments there may be against the correctness of the statistics of the question, we yet know that the dependent individual is most numerous and a great and ever increasing burden to the state.

Economic conditions, new to our generation, have arisen with the vast application of steam and electricity and have played a part in the enormous growth of cities. The furious passion for money pervading all classes, and the sway its possession gives in business, in politics, in society, in religion, in courts of law, in legislative bodies, is leading us into danger. Great wealth has led to a desire to still further enhance its power, and giant combinations have been

formed, enormous enterprises undertaken, all of which gives a demand for men at wages and destroys the individuality of small concerns, while the fall in the price of produce has made farming unprofitable. These conditions make rural people turn a more willing ear to the promise of shorter hours and regular stipend, and they swell the stream setting toward the cities. The farmer forgets his freedom and his independence and recalls it too late, when he finds himself a mere cog in a great machine in the city, and no hope of relief when his employment is gone. He is then in poverty and hope dies within him. He is tempted or driven to do evil and may never be able to reform. He has not his native trees for company and inspiration. There are no flowers to cheer; no calm for reflection; no quiet for study. Children born and reared under such circumstances start the race of life with a serious handicap.

No argument is needed to prove the power of heredity. It is seen every day in the development of the trotting horse, whose breeding is regulated with such nicety that the height, weight, color, speed and even the cash value of a colt can be told, almost to a certainty, before it is born. The state undoubtedly should make use of this knowledge to perpetuate and up-build the race, as an offset to the increasing tendency that density of population, through vice and disease, makes toward degeneracy.

In our own country we suffer from the additional burden of imported dependents. Indeed, it has been said that foreigners furnish one-eighth of our population, one-third of our paupers, one-third of our criminals and one-third of our insane. It is true, I believe, that we have a law of Congress to prevent the importation of dependent persons. So long, however, as the conditions of life are easier in our own country, the degenerates of Europe and Asia will find their way to our shores.

A strict medical supervision of all marriages is strongly advocated by some writers, as a safeguard against the increase of this class of persons. It is unquestionably wrong for degenerates of a pronounced type, and those who are dependent, to propagate their kind, and there can be little doubt that the state has a right to step in and restrain the weak or the willful of these classes, through the application of medical knowledge, to the case of every applicant for a marriage license; but whether or not this will cure the evil is a question that should be carefully studied. It is not the purpose of the writer to dampen the ardor of those who would regulate the evil by law, on the contrary to urge it and freely avow belief that steps should at once be taken, beginning at the marriage license windows of our country, to prevent the union of those who, by the almost unerring law of heredity, will reproduce a brood which will be a charge upon the state or a burden to society. Proper laws, intelligently enforced, will directly restrain a great many. It is our belief, however, that their chief use will be to form a focusing point, from which knowledge shall radiate. We believe further that it is only through the proper education of the masses that those unfit to reproduce their kind will be restrained. And we believe, moreover, even though it be true that the race is degenerating from one generation to another, where the conditions of life are unfavorable, it is equally true that there is a constant regeneration going on where the conditions of life are favorable. Laws alone can not cope with the question. Rules and

statutory enactments are of but little value, unless backed by a healthy public opinion. But there are agencies constantly at work to counteract the degenerate tendencies that should be considered before we despair of the race.

While it is necessary to look evils squarely in the face, it seems wrong to enumerate them too often; to discant too loudly upon the ills that beset us, or to see only the dark side of the picture. Human nature is prone to brood over the sorrows and trials of life. The uncanny things are too apt to be kept prominent and we are too likely to forget the cheery, bright and sunny side of affairs. The world contains more sunshine than shadow, more joy than sorrow, more smiles than tears, more righteousness than sin, more good than evil, more charity than theft. Adam's sin is repeated still, but there is an ever-progressive spirit of the Nazarene pervading every day life.

It is well to prevent the degenerates and dependents from procreating, but it is infinitely more important to correct whatever there be in our civilization that drifts toward degeneracy. Human beings crowded together so close that the home loses its individuality, its sanctity and its seclusion; or that vitiates the air that is breathed; that makes artificial feeding of old or young necessary; that pollutes the drinking water or in any way hampers physical growth. Whatever there is that blunts the moral sense, that whets the appetite for alcohol, that excites the passions or gives opportunity for licentiousness must be wrong. All these evils are fostered by too close living in tenements, whether located on the boulevard or in the slums, and just as sure as a cloudy sky portends the coming of the storm, such conditions lead on directly to drunkenness, crime, idiocy and insanity. Whatever is being done, or whatever may be done to make country life profitable and possible is an aid to segregation and must therefore be a step in the right direction. The trend of population toward large cities is not a good omen for the race and calls loudly for legislation that will turn the current back again. The great and rapid growth of our cities, that receives so much admiration and is quoted as such signs of prosperity and greatness, will ultimately result in a plague upon humanity if some wisdom does not appear and set the tide the other way. Can it be that the crowding will go on till the curfew will be necessary to segregate the young in their homes, that the evil of street association, as a school of vice and crime, will be lessened? It is well to pause and inquire where is the profit, in the end, of clustering of industries in large cities, if sweater's dens must be the accompaniment. It may be well to consider whether or not those having knowledge of medical sanitation and sociology should not have a larger place in our legislative assemblies. It seems that their valuable knowledge should be used in deciding our laws of immigration and other legislation relating to the welfare of the race, while it would lessen the too common tendency to decide such grave questions upon the sordid demands of barter and exchange.

We have with us now and always have had splendid and powerful agencies, operating with vigor, as a stay to crime and a help to humanity. Chief among these is the church through all her divisions and denominations, for whatever the differences as to church government may be, their teachings are as one on the question of morality and right living.

I wish, however, to speak more particularly of an agency that is paramount to all others in its influence toward the regeneration of the race; an agency that has already done a vast amount of good and that promises, if properly backed and intelligently followed, to solve the problem; an agency that strikes almost at the root of the evil; an agency almost divine indeed—for it is none other than the new woman. I do not refer to the new woman of newspaper creation—not the woman who hopes by copying the follies of man or his wearing apparel, to emancipate herself. Not the woman who would wage a war of strife and contention with men. She is not new—she is as old as civilization itself.

The real new woman understands that there is within her an inherent and natural power to command the actions of man and sway him for good or for evil. She realizes her power; and that hers is the enormous responsibility to shape and control the destiny and perpetuity of the race. She realizes that it is her high and divine privilege to be the mother of mankind. She realizes that it is among her first duties to equip herself, mentally and physically, to graciously bear the joys and responsibilities of maternity. She realizes that there is no loftier mission on earth than to fashion the character and train aright the intellect of the growing child. She realizes that the budding boy is the coming man. She realizes that it is a crime for man to grow so grasping as to enslave his fellow creatures of either sex. She realizes that the good things of this earth are God's bounty and intended for all his children alike. She realizes that the mad race for wealth, with its rapid concentration "makes countless thousands mourn." She realizes that the frenzy for gold is every day enhanced by the demands of some of those of her own sex, as they struggle to reach the summit of fashion and social power. She realizes that the mother is largely responsible for the traits of the child, other than those of heredity; and that it requires no more time to learn and love the ways of purity, than to learn the ways of vice and iniquity. She realizes too that proper training is the best preventive of perversions of every kind. She has established and is all over the country conducting branches of the greatest institution in American history—I refer to the kindergarten.

The kindergarten has reversed the old order of things, when the daughters of the poor and uneducated, and perhaps the vicious, were made the companions, the guardians and instructors of children in the homes of the rich. Now young ladies of good position in the world graduate from universities to take positions in the kindergarten, qualified to mold, fashion and discipline the minds of children of the humblest, beginning with the child at the very dawn of its intellectual development. Devotees of this new cause deem it a privilege to work all day in the creche, caring for children of mothers who must toil for daily bread.

The new woman believes it is a perfectly normal desire to want to wash and dress, to entertain and caress a helpless babe, even though it be of lowly birth, and if the babe should be her own, she counts the moments she is forced to be separated from it. She feels pity toward her married sister who dwarfs her maternal instincts, or denies herself the boon of motherhood, or who shuns the society of the children she has unwillingly borne. The new woman sees in life upon a farm better discipline for the mind than

can be found in the greatest counting room. She sees that the same farm can do more for the physical development of men and women than any manual training school in the land. She sees that the music of the birds inspires deeper thoughts of God and Nature than all the grand organs in the universe; that the sighing of the wind through the trees and the patter of the rain on the roof inspire the loftiest emotions.

The new woman is she who founds homes and settlements among the poor, and successfully conducts them. She consoles the needy in their trouble and feeds them when they are hungry. She encourages the idle to work and helps them to secure it and if necessary she instructs them how to perform it. She founds and conducts useful societies, classes, schools and clubs of every sort among the poor. Her spirit and her genius build fresh-air sanitariums, floating hospitals, and in the summer time sends from the alleys and slums the debilitated weaklings to the green fields, the sylvan groves and the babbling brooks, to drink in the inspiring delights and breathe the pure air of the countryside. I will not attempt to enumerate all the institutions she is working through, for they are well nigh countless and daily multiplying.

When the new woman's hand is sought in marriage, she is likely to have inquiry made as to the young man's health and his morals, rather than inquiry as to his bank account. What his wealth in the great distinguishing characteristic that elevates him above the animal world—his manhood, his judgment, his intelligence? It is through the new woman that society will eventually come to apply the same rule and exact the same standard of morality for men that it does for women and eventually elevate him to her plane.

The new woman has learned the terrible cost in pain and suffering to her sex and her offspring that so frequently comes from a union with dissolute men. She has learned, through the advance of medical science, that the harvest reaped from a sowing of "wild oats" in her husband's youth is too often one of disease and death to herself and a pitiful inheritance to her child.

Higher education through schools, great universities and libraries is not enough. Kindergartens should be founded in sufficient numbers to reach all the young. The new woman will multiply the kindergartens and reach the degenerate or wayward before habits of thought or action are formed and do for the infant mind all that training and example can do.

Through the present work of the new woman and its future development must come the public knowledge and the public sentiment that will lead to the necessary reform to let daylight through the slums; to raze the unsanitary tenement to the ground; to pull down the towering buildings that harbor miasm in their shadow; that will make it possible for human beings even in cities to live on the surface and not be forced either into the air or under the ground.

Through this direction of forces, cottages will be built for all so that man can return to his primal condition. Even the very poor will not be denied free access to God's sunshine, pure air, green grass, the shade of trees or the beauty and fragrance of the flowers.

A vast number of holy influences are constantly at work that realize the necessity of proper care and training of children while they are young. Let us hope it will go on till our philanthropists and our

State legislatures will see the economy of laboring more for institutions for the young; for if they be trained aright, it surely means economy in hospitals, asylums and prisons.

36 Washington Street.

THE PSYCHO-NEURAL FACTOR IN SURGERY.

Read at the Meeting of the Mississippi Valley Medical Association at St. Paul, Minn., 1896.

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As a thorough knowledge of general and special pathology is essential to the soundest surgical judgment as to the propriety and necessity of an operative procedure, so is a knowledge of the nervous system of the patient and the relation of his nervous system to the local disease found essential to proper diagnosis and prognosis. The time is coming and now is when the surgeon should have wide neurologic and psychiatric knowledge in order to avoid fatal mistakes and to most successfully practice his art. The manner in which the necessity of a grave operation is announced may to certain psychologically unstable constitutions pre-determine a fatal issue, or it may give to a doubtful issue a possibly favorable result. There are some constitutions so neuropathic and psychopathically predisposed that the shock of such an announcement would precipitate a crisis of mental alienation, and it were better that the proposed operation should be abandoned than insisted upon under such circumstances, or that the patient should be gradually approached and prepared by cautious speech and suitable precursory, reconstructive and tranquilizing neurologic treatment. Some patients before being operated on should be made almost entirely over in the tone of their nervous systems and some should be let alone, tranquilized and made comfortable and allowed to die in happy euthanasia. What, for instance, is the use of exsecting a far-advanced cancerous uterus after the cachexia has long persisted and the nerve centers have become irreparably neuropathic and the neurasthenia has become profoundly irreparable from the prolonged pain and insomnia. The rational process would be to stop the pain and insomnia, correct as much as possible the neurasthenia that exhausts and makes the patient's last days comfortable by neurologic and antiseptic treatment and the best surgical suggestion without the knife. In fatal surgical results the reputation of operative surgery suffers often because overlooked neuropathic conditions were at fault.

In my judgment the previously applied skill of a neurologic clinician would postpone many operations indefinitely which are now fatally performed, and properly prepare other cases for the surgeon's knife and a successful surgical issue, which are now doomed when the operation is decided upon, because conditions of endurance of the operation are not in the nerve centers of the patient.

The cause and effect of psychic shock in different patients are not always considered as they should be by either physician or surgeon. The possible evil effects of words and acts at the bedside or before an operation that tend to paralyze or even produce a paresis of hope are not always duly considered. The