

THE RELATIONS OF INSANITY TO MODERN CIVILIZATION.*

For practical purposes insanity may be considered as incident only to civilization. Doubtless, cases of it have occurred in the ruder and uncivilized conditions of the race from injuries of various kinds to the nervous system, and possibly other causes, but for our present purpose these may be ignored. So far as I know we have no accounts which lead us to suppose the disease ever existed to any considerable extent either among the North American Indians or the natives of the Pacific isles.

On the other hand, as communities, states and nations advance in the so-called conditions of civilization, as society becomes more settled and its conditions more permanent and stable, insanity appears. Unfortunately, we have no statistics which show how high a ratio it sustained to the general population during the last few centuries in European countries, but there can be little doubt that at the present time it bears a higher ratio to the whole number of the population, both in Europe and this country, than at any former period of history.† This is indeed a remarkable commentary on, a serious charge to bring against, our modern civilization, and it may be well to examine for a little the relations of the two conditions. Shall we say that civilization and insanity stand in the relation of *cause and effect*? In other words, does the passing from a state of savage life to one of regularity and industry, from a state of ignorance to one of learning and refinement, from the conditions of uncertain and limited supply to one of fairly certain and abundant supply, have so unfavorable an effect upon the nervous system as to develop this

disease and cause its increase? This would appear to be impossible, and we are led to inquire what relation the one sustains to the other.

I think it may be stated in a general way that there are certain conditions incident to, and growing out of, a high state of civilization, which in some degree tend to explain both the development and increase of insanity. The first to which I will allude is a *vicious, imperfect and injudicious education*.

As society advances in the arts and conditions attending a higher state of civilization, property increases rapidly, and, during the last half century, it has been a very common occurrence that families, who have for generations been cradled and reared in poverty, and all their lives have been obliged to struggle for the ordinary necessities of life, have been suddenly lifted into affluence and the surroundings of wealth. Labor, which before had been a necessity and a blessing, is now looked upon as a curse. That family discipline, which before had been a necessity, and had secured a manual occupation, and which now should secure at least an occupation for the brain, is altogether gone; while, in consequence, the child is left—nay, too often encouraged—to assert his own preferences in all things, and the will to strengthen itself in idleness and general demoralization. That education for the brain which, alone, could properly fit it for the changed conditions which environ it, and strengthen it to contend against the illusive and dangerous conditions of wealth, and the disappointment of reverses sure to come, is altogether neglected. Serious results in the way of disease may possibly not come so long as property lasts, but when, as is too often the case, adversity comes, the unfortunate one is left with neither the means nor the ability to cope with the adversities of life. Disappointment, anxiety and consequent worry, producing irregularity of brain action; opposition to a will grown strong in having its own way, acting upon a brain weak from the lack of discipline, very often result in upsetting the mind.

Or, again, the education may be of very *imperfect character*. In this nineteenth century, everybody is in a hurry. The race seems to have suddenly awoke to the realization that life is short, and what is done,

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† "The London Medical Times and Gazette" for November, 1877, contains some statements from the last report of the commissioners of lunacy, to the following effect: Ever since the year 1859 there has been a steady increase of insanity in England and Wales, amounting to more than 1,000 annually. The largest number was in 1869, amounting to 2,177, the smallest in 1875, which was only 1,123. During other years the amount of increase ranged between these two numbers. From 1859 to 1876 the total of insane persons increased from 36,762 to 66,636. It is said the general population of England and Wales increases annually at the rate of one and a half per cent., while insanity and imbecility increase at the rate of three per cent. Probably statistics would show a similar rate of increase in the United States.

must be done quickly, and it cannot take time to become educated. It is a race from childhood to manhood, from the cradle to the spelling-book, from the spelling-book to the arithmetic, and from the arithmetic I had almost, and, perhaps, could truthfully have said, to the fully developed responsibilities of life. Fifty years ago, they did not do things so rapidly. The artisan or mechanic was regularly apprenticed to serve his three or his seven long years, in which thoroughly to master both the principles and details of the calling he had chosen, or which had been chosen for him for life. This was the period of his education, and when this was finished, he was expected to have made such acquisitions as would enable him intelligently to accomplish such tasks as should devolve upon him. The same was true in reference to all the trades and professions. We are all familiar with the changed conditions of to-day. How few in the various trades and employments go through any lengthened apprenticeship or educational process! A few months or a year or two, time enough to master the first steps is taken, and then the ambitious one starts for himself. The man who should have been a learner, aspires to become a master; the man fitted only to labor on a farm under the direction of others becomes himself a proprietor with little more knowledge of the character of the soils he tills, and of their needs of enrichment, than the oxen he drives. In other words, the mechanic, the farmer, artisans of almost all kinds, as well as the professional man, assume charge of, and undertake to manage, the details of callings in life they have never half learned. I need not say such men have not half a chance in the hurry, competition and struggle of this nineteenth century. The anxiety and worry of life are increased a hundred fold, and are sure to tell in time on the nervous system.

Or, once more, the education may be of an *injudicious character*, relative to the age of the person. I am fully persuaded of the evils resulting to the brain from the forcing process prevalent in many of our public schools at the present time, especially at that period of life when all the forces of the system are, or should be largely consumed in physical development. The muscular and alimentary systems are so liable to injury by overwork when they are in the formative period of childhood, that legislation may wisely interfere for their protection; much more so, in my view, is the

delicate nervous system. In childhood, secondary metamorphosis goes on much more rapidly in all the systems than in later years, and this is especially true of the nervous system. If then the brain be over-stimulated by tasks at this period this action will necessarily be much increased, and the brain function will be more likely to become impaired. The evils, however, may not manifest themselves so much in the form of insanity as in a system developed in improper proportions; the muscular and alimentary systems being left in a large degree to themselves, while the brain is unduly stimulated. In later years, it seeks revenge in inability or refusal to work, or in that general condition termed nervousness. The person is inharmoniously developed, and proves of precious little use to himself or to the community of which he may be a member. It seems to me that the true idea of education is the uniform development of all the systems of the body together,—a leading out, building up and strengthening of these several parts for whatever calling or profession may be chosen in life, in such a manner that the individual shall be qualified to adjust himself or herself to the general conditions and requirements of society, without friction to self or others. How far short of this ideal system are those in operation generally we all have abundant opportunity to observe, by the many mental waifs yearly cast upon society.

Another condition arising in connection with the surroundings of civilization, of a somewhat different character from the former, is the *increased facilities of gratifying physical passions and consequent excesses*.

There are thousands of persons who get on well enough while obliged to live in the simplicity and continence of a laborious life, and yet when possessed of the means will suddenly rush into wild excesses, and in a few years their nervous systems become poisoned and wrecked. In this nineteenth century there exists a tendency to herd together to an extent we fail to realize. Cities have been springing up all over England and America, with a rapidity and increasing in a ratio before unknown. "Where the carcass is there will the eagles be gathered together." Cities furnish the temptations to, and the means of, physical excesses. They enrich the city vicinage and serve to allure those who have never learned that the violation of physical law leads to death, or, what is often a thousand times worse than physical death, viz, a

poisoned and diseased life. If the effects ceased with those primarily concerned, the mischief would be less, but, unfortunately for society, they pass on to the next generation unless, as is frequently the case, through a merciful provision of law there does not come another generation. We learn that the intemperate and vicious will be shut out of the kingdom of heaven. They are shut out from the kingdom of health while here on earth, and the retribution of their works follows them with a surety, and often a severity, which can be fully realized only by physicians. As an example in point I may refer to a class of laborers in some parts of England. When living with the bare necessities of life and obliged to practice the habits of frugality and industry, general paralysis of the insane was almost unknown among them. But in consequence of physical excesses, made possible and easy by obtaining, through labor combinations, the means necessary, this disease, whose march is straight on to the grave, has appeared to an extent heretofore unknown among any other class of society.

The same process is silently proceeding, on a less marked scale, in all the great cities and their vicinage, among those poisoned by indulgences of their passions.

Another condition may be comprised in the *practices and daily habits of life*, more especially among the agricultural portion of the population of New England and possibly other sections of the country.

The stimulus which arises from the general increase and diffusion of wealth has acted upon no class of society more strongly than the one now under consideration. As a rule they are ambitious, and this ambition is stimulated by their surroundings and the changed conditions of society incident to the increased facilities for travel by railroads and steamships. Seeing others surrounded by the results of wealth they become profoundly impressed with its importance and desirability, and are willing to forego almost all other considerations, that they may have it and what is incident to its possession. Their children must have no ordinary education. A son must go to college and have a preparation for some form of professional life. Their daughters must attend seminaries and become proficient in music, whether they have any special taste for it or not. They must have a smattering of French, and German, and drawing; they must be dressed in some of the later fashions, and, in short, be able to make an

appearance as good as that of their city cousins or neighbors.

All this necessitates no inconsiderable expense, and, to bring it about, the parents, and indeed, the whole household, bend all their energies. In the summer the family is roused at dawn of day, and in the winter long before. Every hour is consumed in some form of productive labor if possible, and not more than seven or eight hours are permitted for sleep and relaxation. Recreations from games and holidays are considered as so much lost time. And while the system is taxed beyond its strength in labor, it is often nourished only with the plainest of food. Fresh meat is not seen on the table oftener than once a week; salt pork or beef or fish is used with potatoes, and bread made from flour robbed of its best nerve-sustaining constituents, and used while fresh and often while hot. Stale bread is deemed an abomination, while that made from the whole wheat is fit for the poor only.

It will readily be seen how fatal to mental health such habits of life are. The results may not be apparent at once or in years,—indeed, a strong and vigorous constitution may be able to stand the strain to three score years and ten,—but they will be sure to appear in the next generation. Nature punishes the infringement of her laws sooner or later with terrible severity. Those sour grapes which the fathers ate have sharpened the cuspids of their children. They are not so strong as their parents were; they are nervous, self-willed, irritable, delicate, and unable to endure prolonged muscular or mental effort. That vigor, strength and energy of character inherited by the parents has been expended too largely in the grand struggle to get on in the world, instead of being transmitted to their children, so that when the strain and wear and tear of disappointment in life comes on, too often the brain power miserably fails.

We need not, however, wait for the results to appear in the children, as they only too often come in the very meridian of life. The mind having been kept for months and years in one "rut," with little change or relaxation, finally becomes impoverished if not starved. Debarred from all those elevating and nourishing influences which come from intercourse with those in other walks of life, and from reading and a variety of duties and pursuits, by and by the nervous system becomes weakened, so that hundreds of cases appear in our hospitals whose history may be traced to

such causes and conditions, either direct or inherited, as referred to above.

Another cause growing out of the conditions of civilization, and intimately allied to the one just considered, is *too little sleep*.

When a young man, and while a student, the writer well remembers hearing some lectures from a person calling himself a physician, in which he took the ground that fifteen minutes was ample time in which to take a regular meal, and that all time spent in sleep in excess of four, or five hours at most was so much lost time; that if persons slept only five hours instead of eight, they would gain more than six years of time in the course of fifty; therefore, every person who was so much of a sluggard as to sleep eight hours instead of five, was responsible for wasting six years in fifty. That ambitious insect, the ant, was held up by the doctor as an example of industry and lofty enterprise, worthy the imitation of everybody who expects to do much in life—as if he knew how many hours that creature is in the habit of sleeping every year. He might about as well have put his case stronger and argued that it was everybody's duty to sleep only two of the twenty-four hours, because forsooth we could gain more than twelve years in the fifty by so doing. Unfortunately for society, this man was only one of several who have written and taught that persons generally sleep too much. It would have been better for those influenced by these teachings, if their authors had never been born. The truth is that most people, especially the laboring classes in our cities as well as in the country, sleep too little. This is true not only of adults but of children. How often do we see little children out in the streets, or at tasks, long after they should have been in bed! How often are they called in the morning long before they would have waked, and put to some task or other, and the delicate structure of the brain is kept in activity sixteen or seventeen hours of the twenty-four. This habit, being formed in childhood, extends into adult life, and becomes so fixed that it is difficult for the brain to change its custom. In fact the period of wakefulness rather tends to increase, so that it is limited to six or seven instead of eight or nine hours. The man who regularly and soundly sleeps his eight or nine hours, whatever may be his occupation in life, is the man who is capable of large physical or mental efforts. I do not mean that there may not be exceptions to this rule. There have been

those who could do with four or five hours, and work well; there are probably many such to day, but these are rather exceptions. The great mass of people require more for good mental health.

Sleep is to the brain what rest is to the body,—

“Sleep, that knits up the raveled sleeve of care,
The death of each day's life, sore labor's bath,
Balm of hurt minds, great nature's second course,
Chief nourisher in life's feast.”

No words could paint more beautifully and effectively the office of sleep than these of England's greatest poet. All nature teaches the importance of sleep. Every tree and shrub and vine has its period of sleep, and if stimulated into ceaseless activity would soon die. Every portion of the human system is subject to the same great law. The stomach must have its periods of rest; and there are times during every twenty-four hours when the kidneys secrete very little if any urine. It is often said that the heart is an exception to this rule; that its beat never ceases from more than six months before birth until nature's last great debt is paid in death. But in truth it is at entire rest nearly if not quite one-third of the whole time. Its action consists of a *first* and a *second* sound, covering the contraction of right and left auricles and ventricles, and then a rest,—so far as we know, a perfect one. Reckoning this at one-third the time taken in each full action of the heart, and we have more than twenty years of perfect quiet out of the three score and ten. The same is true to even a larger extent in the function of respiration. The muscles concerned in the operation are at entire rest more than one-third of the time. This is an absolute necessity for these organs. Nor is the brain any exception to the law. During every moment of consciousness the brain is in activity. The peculiar process of cerebration, whatever that may consist of, is taking place; thought after thought comes forth, nor can we help it. It is only when the peculiar connection or chain of connection of one brain cell with another is broken and consciousness fades away into the dreamless land of perfect sleep, that the brain is at rest. In this state it recuperates its exhausted energy and power, and stores them up for future need. The period of wakefulness is one of constant wear. Every thought is generated at the expense of brain cells, which can be fully replaced only by periods of properly regulated repose. If,

therefore, these are not secured by sleep, if the brain, through over-stimulation, is not left to recuperate, its energy becomes exhausted; debility, disease, and finally disintegration supervene. Hence the story is almost always the same; for weeks and months before the indications of active insanity appear, the patient has been anxious, worried and wakeful, not sleeping more than four or five hours out of the twenty-four. The poor brain, unable to do its constant work, begins to waver, to show signs of weakness or aberration; hallucinations or delusions hover around like floating shadows in the air, until finally disease comes and

"plants his siege

Against the mind, the which he pricks and wounds
With many legions of strange fantasies,
Which in their throng and press to that last hold
Confound themselves.

Another condition incident to civilization which tends largely to develop and increase insanity, and the last to which I will refer, is *the unequal distribution of the means of living*, especially in large cities and manufacturing communities.

In the great contests of life the weaker go to the wall. That term "the survival of the fittest," in the struggle of life covers a large ground, and numberless are the tales of suffering, want and disease which never come to the light of day, but are none the less terrible as growing out of this struggle. The sanitary surroundings of those portions of our large cities and those of Europe which are occupied by the poorer classes of society are often of the worst character. Impure air, from overcrowding, the effect of which upon the delicate tissue of the nervous system, is deleterious in the highest degree; the lack of all facilities for bathing; the insufficient, irregular, and often unwholesome food-supply, and its improper preparation for use; the habit of drunkenness, from the use of alcohol in its worst forms, and the habit of daily tipping, which keeps the brain in a constant state of excitement; together with the immoral practices which grow out of such surroundings and practices, all tend strongly in one direction. By going through the hospitals for the insane in the vicinity of New York, or those which are the recipients of the mental wrecks which drift out of the lower grades of society in Boston, or, again, those located near the great manufacturing cities of England, we gain new conceptions of the terrible power of the struggle, implied in

the refining processes incident to a passage up to what are termed the higher grades of civilization.

We have seen in the spring season of the year the trees of an orchard white with unnumbered blossoms. Myriads on myriads feed every passing breeze with delicious odors for a day, and then drop to the ground forever. And when the fruit is formed on the tree only a very limited number of the whole ever attain to maturity and perfection, while the ground is strewn with the windfalls and the useless. Why one goes on to maturity and perfection while the other perishes so soon we may not say with certainty, but doubtless the one has some slight degree of advantage in the starting of the voyage; it may be a moment or an hour of time, or a particle of nourishment, but whatever it is the consequence is apparent.

So it is in the grand struggle of human life. Myriads perish at the very start, and as the process of life goes on, one by one, always the weaker by reason of some defect in organization, inherited or acquired, falls out by the way. Christianity has taught us to pick them up and try to nurse them to strength for further battle. She has built hospitals and asylums, and these weaker ones drift into these refuges from the storm. So it has been and so it will be in the future. The stronger in body and mind will rise above and triumph over the hardships and roughnesses of life, becoming stronger by the very effort. To him that hath shall be given, and he shall have abundance of the possessions of life, but that abundance is drawn from him that hath not, and he falls out by the way as the fruit untimely falls from the tree. Many of them are the psychological windfalls of society.

If the views presented above are correct we cannot consider civilization as directly the cause of insanity. Indeed we believe that the educational and disciplinary processes involved in passing to a higher state of civilization tend in the main to strengthen the nervous system and prepare it to resist the encroachments of disease, and to maintain a larger degree of mental health than would be possible without them. And yet there are certain incidental conditions connected with, and growing out of its progress which do largely conspire to act as causes, and which may in a measure serve to explain its development and increase among communities, tending toward, or inheriting an older civilization.