HEREDITY AS A SOCIAL BURDEN.

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HEREDITY AS A SOCIAL BURDEN.

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It may appear a waste of time to place before you proofs of the existence of heredity as a large factor in the production of those nervous diseases on which I wish to speak briefly to-day. My reason for doing so is two-fold. The existence of heredity as such a factor has been occasionally denied by men of such position that their opinion must carry weight, even though they are opposed by the majority of the thinking men who have given this matter their attention. The existence of heredity appears thoroughly established by statistics which have been most carefully compiled and verified. Moreover, the great number of these defectives, and the vast, ever-increasing expense of their maintenance, as well as their harmful influence on society at large, can only be realized in this way.

The three forms of disease which are most liable to make their victims dependent on society by rendering self-support impossible, or their society dangerous, are epilepsy, insanity and imbecility. In dealing with heredity in connection with these three forms of nervous disturbance, it is not reasonable to expect each condition to exactly reproduce its kind. The law of heredity is that each characteristic in the parents tends to reproduce itself in the offspring. Characteristics derived from one parent may be overcome by the influence of the other, and may even reappear a generation farther on, or be permanently obliterated. The three above named conditions are
all simply evidence of degenerative changes of the nervous centers, dependent for their form on the portion of the brain attacked, and the age at which they develop. Brain trouble occurring early in life occasions imbecility; later, insanity; while epilepsy may complicate either condition or, rarely, occur independently. Almost any lesion or trophic change in the brain may occasion one or more of these manifestations of disturbed nervous action.

Let us look first at epilepsy as an inherited neurosis. The statistics being more accurate than in the other two diseases, for the reason that its symptoms are unmistakable, and thus friends can neither deceive themselves or others in regard to its existence. Even in uncomplicated epilepsy, if the spasms are at all frequent, the sufferer’s power of self support is lessened, if not entirely destroyed, and he becomes a burden on friends or the general public. Echeverria, after ten years’ careful research in tracing the offspring of epileptics, has published the most valuable statistics on this subject that I have yet found. Excluding all cases which could not be fully verified, he found that 62 male and 74 female epileptics begot 553 children whose life histories were as follows: 22 were still born; 195 died in infancy from spasms; 78 lived as epileptics; 18 lived as idiots; 39 lived as paralytics; 45 lived as hysterical; 6 had chorea; 11 were insane; 7 had strabismus; 27 died young from other causes than nervous disease; 105 were healthy. Excluding the last three divisions we have 414 out of 553 who either died in utero or were affected with nervous disease. Could a more convincing story be told? He concludes that the marriage of epileptic women to non-epileptic men is more liable to result in neurotic offspring than when the conditions are reversed. He quotes one case when two epileptics married and out of five offspring two died of infantile convulsions, one from hydrocephalus, one lived an epileptic, and one was said to be bright. Of his 136 original cases 87 had parents with either insanity or epilepsy, while in forty-six cases epilepsy had existed through three generations. One woman had epilepsy from puberty to her marriage, which demonstrates that marriage may benefit epileptics, but of four children born afterward, two were epileptic and one paralytic. Dr. Knight of Lakeville, Conn., in an address before the American Conferences of Charities and Correction, quotes a case where an epileptic mother bore fifteen children. Eight died in infancy, two were fairly teachable imbeciles, two were epileptics and three had sufficient intelligence to secure husbands and thus risk the multiplication of their kind. Dr. Landon C. Gray tells of an epileptic woman who bore nine children, seven of which died of infantile convulsions.

I studied the records of 500 epileptics at the Elwyn (Pennsylvania) school for the feeble minded during my residence there as a medical officer. Of these 149 were very incomplete. In the remaining 351 I found neurotic disease in 108 families on the father’s side; in 106 on the mother’s side; in 22 instances on both sides, or 236 families in all. In 19 other families some neurosis existed in brothers or sisters, but was not acknowledged farther back. From my personal knowledge of some of the families, I am sure that strict truth and the power to see “themselves as others see them” would swell these figures considerably. Insanity, imbecility and epilepsy with 56, 58 and 71 cases respectively, figure most prominently in this array of epileptic inheritance, chorea, paralysis, etc forming the remainder.

The heredity of insanity is not so evident, nor is it so certainly transmitted to offspring, especially in neurosis of the same form, as is epilepsy. The reason for this may be looked for in the fact that many cases of insanity are the direct result of excesses, or other causes occurring in adult life. The transmitted effect manifests itself more frequently in childhood or infancy, and epilepsy or imbecility results. Or possibly we may find that incurable perversion of the moral nature, aptly termed “moral imbecility,” which
furnishes so much contention as to whether it should be regarded and punished as depravity or treated as a congenital absence of the faculty of moral control. A smaller number reach mature years before coming into their inheritance of misfortune and are classed as insane, and occasionally reproduce the parent malady with singular exactness. Savage, the eminent English authority, states the matter very concisely as follows: "Heredity produces some insanity, but is more likely to produce either mental defect or special and unusual forms of muscular, sensory mental or moral disorder." Nearly every systematic observer admits heredity as an etiologic factor in insanity, and while the most conservative statistics place the average from 20 to 25 per cent. of the cases observed, others place it higher and Kesteven says: "The most influential of causative conditions is heredity, and it is the most commonly suppressed by the friends." The truth of the last statement at least is indisputable. I wish to particularly emphasize the influence of heredity in imbecility and idiocy for the following reasons. They are the legitimate offspring of nearly every form of neurotic taint. Their extent and baneful influences are not realized by anyone who has not given the subject very careful study. The census reports for 1890 and the natural increase would bring their number to between 90,000 and 100,000. This is far below the real number. So slow are parents to publish their children to strangers as feeble minded, that the late Dr. Kerlin of Elwyn, Pa., investigated the matter. Out of 295 applications for admission to his school in 1880, 178, or 60 per cent., could not be found on the census enumerators list. How far this may apply throughout the country we can only surmise, but mothers are much the same everywhere, and are not willing to publish their children's defects.

There are two conditions in parents which figure largely in the production of feeble mindedness in children, tendency to neurotic disease and inebriety. These conditions are associated with the greatest fre-

quency. Dr. Beach of England states that drunkenness is found in the ancestry of 38 to 40 per cent. of the parents of idiots (using the term idiot in its broadest sense). The Fourth Conference for the Care of Idiots in Germany agreed that inebriety was the principal cause of idiocy. In this country the Association of Medical Officers engaged in the care of the feeble minded agreed unanimously that a large per cent. of imbecility is due to the transmitted effects of alcohol and counseled, as did the German conference, more stringent legal restriction of its sale. It is well to bear in mind, in regard to these conclusions, that we can not draw too close a line between the habitual inebriate and the neurotic, for one class merges into the other and makes the distinction between cause and effect a difficult study. A cloud of witnesses testify to the transmission of neurotic taint in one or more of its many forms, to produce the multitude of imbecile and idiot children whose large aggregate number and marked increase is shown by every census. The largest and most complete studies on this subject have been made by Dr. Barr in this country and Drs. Beach and Shuttleworth in England. The work of these gentlemen is too well known to make any doubt of the great care exercised in the preparation of their tables, or the accuracy of their results, possible.

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<th>Barr</th>
<th>Beach</th>
<th>Shuttleworth</th>
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<td>Total cases</td>
<td>1,044</td>
<td>1,080</td>
<td>1,200</td>
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<td>Per cent.</td>
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<td>Insanity and imbecility</td>
<td>38.02</td>
<td>22.71</td>
<td>20.08</td>
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<td>Other neuroses</td>
<td>21.55</td>
<td>36.85</td>
<td>Incomplete</td>
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<td>Total</td>
<td>59.57</td>
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If we accept the aggregate totals of Barr and Beach which are nearly alike we have nearly 60 per cent. of the families with more than one victim of nervous disease. These figures fairly illustrate the results of other observers. We can not go much into detailed cases, but I would like to quote Dr. Ireland in illustrating the persistence of this tendency to produce offspring
of low grade in some cases. He cites an instance where four illegitimate feeble minded children were born to one defective woman from four different fathers. In another instance, under my own care, was a little idiot boy with the well-formed but lax and useless muscles in certain regions, which usually accompany the cerebral condition known as microgyria. His mother, a robust, high grade imbecile with no apparent physical defect, came to see him. She had married again and bore in her arms another idiot child very similar to his half-brother. A local physician assured me that they were certainly the children of different men, the second husband not having come to that region until after the birth of the first child.

Such is the evidence that tendency to nervous degeneration or instability descends from generation to generation, broken or interrupted perhaps by infusion of stronger elements, reappearing a generation farther on. What is their number and to what extent do they affect the welfare and progress of the public? Of epileptics, Dr. Knight, who has given their care much study, estimated that in 1892 there were, in this country, 19,000. They almost invariably drift into imbecility, dementia or other form of insanity, and are cared for, if cared for at all, under these heads. Some children recover, but adults very rarely. They are ever liable to injury, which prevents their following many forms of employment. They are free to marry if they can find a mate, and there are very few who set out earnestly on that quest and are not very particular, who do not succeed; and they leave as a legacy to the public more epileptics. When subject to attacks of epileptic mania no class of the insane are more dangerously violent.

The number of the insane in the country will hardly number less than one hundred thousand. Probably there are more. It would be difficult to ascertain the total cost of their support. We will look at the approximate cost in the two largest States which in 1890 contained about one sixth of the population of the country, which will furnish some guidance to the possible expense in the whole country. In Pennsylvania, in 1894, there were 8,616 insane in institutions of all kinds, of which number 6,342 were in the six State hospitals and the private hospitals at West Philadelphia and Frankford. These 6,342 insane represented an expenditure of nearly one and one-half million dollars. The care of less than one-eighth of the State's feeble minded added $150,000 to this large total. New York spent in 1893 for the care of her insane in public hospitals and for a small proportion of her imbeciles, over two and a half millions of dollars. Carry out this ratio throughout the country and the amount would be startling. The bulk of the insane are in asylums, for public safety demands this. Where are the feeble minded, who are found in European countries to outnumber the insane, and probably would here if properly enumerated? Not one-tenth are cared for in institutions. The remainder are in almshouses where their proper care is, in many cases, doubtful. Many are in homes where they monopolize their mothers' time and care, and elsewhere, where they are teased by children, abused by the vicious and live a strange life among their own people, with whom they have little in common. From the highest grades of imbeciles are recruited the ranks of petty criminals, prostitutes and tramps, who marry early and often, and who reproduce with the frequency of animals. Officers in reformatory institutions are becoming impressed with the idea that the majority of the younger criminals are permanently lacking in the higher mental traits, without which the development of moral character is difficult if not impossible. The growth of the burden on the industrious of supporting the helpless and the worthless may be better realized when we find that the New York State Board of Charities and Correction expended nearly eight and one-half millions of dollars in 1880 and nearly sixteen and one-half millions in 1890, although the popula-
tion in that decade increased less than 20 per cent. Do you realize that the taxpayer may support, during a life of ordinary duration, members of three generations of these defectives? The remarkable increase in numbers in a family line of defectives and incapables may be best illustrated by quoting two instances. One, founded on the report of Miss Schuyler, President of the New York Charity Aid Society, of "Margaret the Mother of Criminals," and progenitor of a family of paupers, beggars, prostitutes and criminals, which finally became a race of 700. Their family vigor was largely preserved by intermarriage with fresh, vigorous families of ruffians, and some of the women bore at least twenty children, among which were numbered insane, epileptic and imbecile. I would quote briefly from Dr. Barr's exhaustive article on the influence of heredity on idiocy, the record of the family known as the "Tribe of Ishmael," where the descendants of one unclean, neurotic man traced through many years, "multiplied by consanguineous marriages into 250 families, numbering some 5,000 individuals, whose continuous criminal record has poured over the Northwest a flood of imbecility and crime." Nor do these instances stand alone. It is the salvation of society that at a certain stage of nervous retrogression nature appears to check further increase by making the most defective sterile and short lived.

The cost of human life through the insane each year is very large. Professor White, late of Cornell, places the number of homicides in the country last year at over 10,000. How many of these are due to insanity I will not pretend to say, but almost daily we read of suicides preceded too often by the death by violence of one, two, or even five or six people under circumstances which appear hardly consistent with normal mental balance. So frequent have such affairs become that only when some one of more than ordinary standing becomes the victim do they excite more than temporary local interest or arouse us to the danger which may be very near us.

The remedy for this state of affairs is a subject which demands earnest thought and radical measures for relief. The evil is so wide spread, so thoroughly grafted in the every day life of society that to think of its immediate or entire suppression would be folly. It is time to attack the evil in some quarter. We can not expect relief from purely medical means. No more hopeless disease exists among the more common maladies than epilepsy in the adult. The relatively small number of "recoveries" in hospitals for the insane would be diminished if we subtracted the number who are committed to recover from alcohol, and other such cases who go out only to find their way back to some hospital later. Officers of institutions for imbeciles no longer look for restorations to normal brain power in large numbers, and even in such cases as leave the institutions there is a fear that their places may shortly be claimed by their children. He knows that the chief value of his work lies in the knowledge that the high grade imbecile is safer and the low grade and idiot more comfortable than he could be made at home. That he has relieved other children of association which would work harm and no good. He has relieved the family of an expense which deprived the other members of their due and the mother of a burden often too great for her. More than this, by enabling one person to care for perhaps five of these children, five families have been able to turn their entire efforts to ordinary social duties unhindered by such a burden as an imbecile child. Moreover, defective imbecile children should become the wards of the State until the danger of child-bearing is past. It is not so important with males. I need not explain why girls with strong animal passions and low mental or moral powers need such care.

It seems strange that our marriage laws should be so lax. The marriage of the unfit goes on unhindered. The epileptic may marry his kind and reproduce more of his kind. The drunkard, from a body thoroughly
diseased, may cause any number of defective children to become public wards to be supported by the more self-respecting and industrious. There is no legal preventive against the man whose father and grandfather have been insane, and who has been, at some time, insane himself, from marrying a woman similarly afflicted and charging the bill to the public. The lunacy law of Pennsylvania expressly provides that a patient while still insane may go home for stated periods to resume all his family relations. It is time for a radical change in this condition of things. The excellent example of New York should be followed in other States and more accommodation provided for mentally and morally incapable women and girls. More stringent marriage laws should be enacted and enforced. The need of some such law was most strongly impressed upon my mind during my frequent observations of the mothers of feeble-minded children, so many of whom, though not feeble-minded were surely close to the line. So many had a different name from their child's, from remarriage. Possibly the fathers were the same, but this was not so evident. In one winter, out of five children who died consecutively, four of the mothers had contracted a second marriage. One woman who was said to be the mother of six microcephalic imbeciles, and had two of them in our care, once visited us and announced her intention of contracting another marriage. It is a well-established fact that a mother who has had a microcephalic child is liable to have any successive children similarly marked.

So long as this evil continues it is difficult to see how we can stop the constant increase of this class. Such marriages should be legally prohibited. While women, in every way fitted to fill the post of wife and mother, hesitate before the responsibilities such a position entails, these women should not be allowed to assume such duties as they can never properly fill, at so great a public cost, for the mere gratification of animal instinct or a prospect of support. Such a law would not be unjust. The right of society to control all powers which militate against the general good ought not to be denied, and such a law judiciously applied would work no material hardship and interfere with no one's just rights. The marriage of an epileptic is a crime. It is almost absolutely sure to result in the birth of human beings foreordained to a lifetime of suffering.

On whom does the responsibility of righting these wrongs fall more heavily than upon ourselves. No one understands so well as we how surely the fruit follows the seed in these matters, and no one's word would have the same weight in molding public opinion to force proper legislation to this end. The marriage of the unfit should subject the perpetrator to punishment as surely as would any other offense against the public peace and morals. The whole body of the intelligent public would agree with us in this matter. The clergy would endorse such a move, perhaps excepting a few who are entirely unworthy of the vocation they have assumed, who disregard the divine warning that the consequence of the father's sins shall surely descend to the children and cheerfully assist, for a marriage fee, in perpetuating the evil.

These two measures, of providing safe and comfortable homes for the weak and preventing in some measure marriage among those who can only perpetuate and increase human suffering, poverty and crime, fall far short of fully solving the question, but they have the advantage of being practicable, and furnish, so far as I can see, the only radical method of presently reducing this class to its minimum number, for it truly attacks the evil at the root. We can not abolish human weakness and sin, but we can deprive it of the seal of the State and the Christian church.