

SOME HINTS AS TO THE PREVENTION OF IDIOCY.

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IDIOCY means mental undevelopment. Undeveloped mind implies undeveloped brain ; and undeveloped brain implies the undevelopment of every other tissue of the body to the remotest fiber. Idiots are therefore piteously blighted specimens of humanity, physically as well as mentally. As a rule they are not only small-headed and hence small-brained, but are dwarfed in stature, and often their members are disproportionate, misshapen, or deformed. But not all individuals conform to this average status. A few are of large stature, some have bodies defective in fiber rather than in form, some have heads not outwardly different from the heads of normal people, and some even present enormous crania, dwarfing those of the Websters and Cuviers. A partial explanation of this anomaly in the case of the heads is the fact that quality of brain counts for more than mere quantity. The very smallest brain may be a more efficient organ of thought than the very largest one, because its cells may be better developed. A very large brain may be made up mostly of connective tissue, the padding of the cells, and hence be about as useful a thinking apparatus as so much putty.

Again, things are not always what they seem, even in the mere matter of size. Obviously a small head cannot contain other than a small brain. But the converse does not hold. The contents of a large cranium may be mostly water ; in fact, such is sure to be the case with the very largest. Those great bulging crania are hydrocephalic. The brain within is a mere distended sac. Its walls thinned and distorted by pressure, it can by no possibility act efficiently. Relatively speaking, some of these

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hydrocephalic idiots develop a fair degree of intelligence, but as a rule they belong to the lowest grades of idiocy.

Regarding the medium-sized brains of another class of idiots, it need only be said that they are intrinsically defective, their cells having failed to develop, even though their general contour is not affected. Such intrinsic defect is more important than a deviation in size, and more generally operative, the qualitative deviation from the normal being much more radical than the quantitative in the case of all idiots except the comparatively rare examples of extreme micro- or macro-cephaly. Indeed, the average difference in size between normal brains and the brains of idiots is not so pronounced as is commonly supposed. There is a difference in favor of the normal brain, but it is a relatively slight difference. Contrary to the usual supposition, the extremely small heads are less common than the extremely large ones among idiots, though, as already noted, the average is what it should be.

Turning from the skull to the face, we find a tangible illustration of the extent to which the records of the mind are imprinted on the features. As a rule the faces of idiots are vacant and inane; often they are repulsively "animal." Many are "negroid" with thick lips and flattened noses. Others have narrow projecting upper jaws and receding chins. Others again are not uncomely in outline, but even these, unlighted by a rational mind, lack mobility and are scarcely less disagreeable than the rest. Rarely one sees a face that might be called pleasant, yet more rarely a pretty one. Beauty is literally "more than skin deep."

The other bodily deficiencies of idiots as a class—malformations, deformities, spastic paralyses, etc., are patent to anyone who views a group of these unfortunates, but need not be dwelt upon here. Even where there is no outwardly visible defect in contour, the stamp is still in the fiber, and made manifest in every attitude and action.

In mentality idiots vary from almost absolute vacuity up to a range of thought that enables them to be almost but not quite self-supporting. There are no sharply-defined boundary lines in

psychology, and all manner of border-line cases are to be found, grading from fatuous idiocy into normal mentality. The plane of life of the more pronounced types is a very restricted one. Desire is the motive power behind all human action, and as the desires of these unfortunates extend but little beyond the cravings of hunger and thirst, their actions are correspondingly restricted. Many of them do not even feed themselves; the only intelligent action of their lives being to open their mouths as food is held before them. The majority, however, have mind enough to take food when placed before them, feeding themselves voraciously, and only stopping when the supply is exhausted; then lapsing into dormancy until the next meal is supplied. A few even of the lowest grade idiots take a more or less intelligent interest in their immediate surroundings. Now and again one is really inquisitive, prying into everything about the ward, and viewing a visitor with curiosity, in marked contrast to his fellows, most of whom would manifest not the slightest concern if the building were on fire. These inquisitive idiots are the talented members of their community, and are a step in the direction of those so-called *idiots savants*, the geniuses of idiotdom, who from time to time astonish the world with their mathematical feats or their instinctive musical capacity.

One cannot view a company of idiots of this lowest grade without asking himself the question, Of what are they thinking? They sit staring vacantly into space, almost oblivious of their surroundings, but still they are alive and they are conscious. Move one of them suddenly from his seat and he will probably prove by an outburst of temper that he is at least a sentient being. But consciousness implies continuous mental action during waking hours. The train of our thoughts may shift throughout the mazes of our experience, but while we are awake it will not stop. What then are the data supplied the idiot for this incessant thinking? Had he sunk into *dementia* after his mind was mature, he might still recall reminiscences of his past, supplying a vague but sufficient undercurrent for his shadowy thoughts. But the idiot has no past. His is a blighted, not a withered, mentality. Memory does not foster even the few ex-

periences he has had. Whence then his thoughts, since think he must? The answer is not altogether easy. Some idiots give us a clue by, as it were, thinking aloud, repeating some meaningless phrase over and over. One says, "Oh big six," in a monotonous tone perhaps twenty times a minute for hours together. He never speaks except to utter this phrase. The words must long since have ceased to convey any definite meaning to his mind, if indeed they ever had any meaning for him, but he repeats them as persistently as if they were a part of his vital functioning. Apparently the idle sounds serve as a focus for a vague attention, and a series of auditory sensations is the bridge of sentience that spans the gulf between his epoch-marking meals. These sensations are doubtless linked vaguely with other dim percepts, auditory and visual, but the plane of the thoughts thus evolved must be narrow indeed, at best only intangible dreamings.

The very paucity of ideas renders idiocy a condition of negative happiness. The lower grade **idiot** knows nothing and imagines nothing of any world beyond the pale of his own narrow environment. His fatuous happiness is in marked contrast to the feeling of most of the insane, who, remembering the outer world, and nursing a delusive belief in their own sanity, chafe under restraint and live in perpetual discontent. In terminal *dementia*, however, the mind is sometimes almost completely obliterated, and such cases are not objectively distinguishable from idiocy of the lowest grade. Such "dements" and the low grade **idiot** are the two contented mortals of the world. Satisfy their hunger at regular intervals, let them sleep as much as Nature dictates—they ask for nothing more. Day after day, year in and year out, they may go through a routine of living that does not involve deviation by a rood's breadth from the same restricted territory, nor the slightest change in diet or custom, and yet be as contented as the babe that nurses and sleeps and wakes only to nurse and sleep again. Like the infant, they may have moments of temper when some slightly disturbing element enters their narrow environment, but in general their life is placidity itself. Theirs is a living embodi-

ment of existence full to the brim with contentment; a state which sane mortals sometimes sigh for, but which no mortal would care for if he knew its price. Perpetual contentment must be kin to fatuousness.

The one really important question regarding the idiot is, Why is he an idiot? Because his brain has failed to develop, of course; but that only restates the problem in different terms. Why has his brain failed to develop? The strong natural tendency of every ordinary embryo is to develop into a normal adult organism. What forces overcame this tendency in the case of this unfortunate? Nothing like a comprehensive answer can be attempted here, but a few of the prominent causes, and especially some preventable ones will be considered in brief; such being, indeed, the main purpose of this paper.

It is obvious that the causes that blight the mind of an individual must be applied in the early childhood of that individual at latest. As a rule they are applied even earlier, acting through heredity. Of course the entire blame can seldom be laid upon a single cause, and it is often difficult to decide as to which cause was paramount; but after all it is not so important to know what cause has operated *most*, as to ascertain what causes have operated *at all*. Drs. Shuttleworth and Beach, two of the most widely experienced of English observers, have given their joint experience in a highly instructive analysis of 2,380 cases of idiocy that have been cared for in the institutions over which they respectively preside. They find that in about fifteen per cent of their cases what might be styled accidental causes affecting the child after birth have been at least partly responsible for the failure to develop. These causes are injury to the head in infancy, as from a blow or fall; fright or mental shock; sunstroke; and severe febrile illnesses, as from scarlet fever, smallpox, etc. These must in large measure be ranked as unpreventable causes; but the number of such cases is gratifyingly small, and doubtless in many of these the direct exciting cause was only the last item in a series of causes—the determining straw.

In about as many more cases, injuries to the head at birth are believed to enter into the causation of idiocy, the damaging ele-

ment being usually the prolonged pressure of a protracted labor, and not the use of obstetrical instruments. Indeed, it should be understood that in all probability the injury resulting in idiocy might have been prevented in many of these cases had the use of instruments been resorted to early and judiciously. The prejudice against instrumental deliveries existing in some quarters is absurd and mischievous, and may lead to disaster in more ways than one.

In a strikingly large proportion of cases twenty-seven per cent infantile convulsions are recorded as a probable factor in the causation of idiocy. It is well to remember, however, that infantile convulsions not terminating thus are very common, and that the convulsions are themselves the result of yet deeper causes, some of which may have their source in heredity. Nevertheless the fact that twenty-seven per cent of idiots were subjects of infantile convulsions must be more than a coincidence, and should teach us to regard such convulsions as of grave import and worthy of most careful treatment in all cases. The same remarks, slightly modified, apply to epilepsy, which, though itself a symptom rather than a disease is yet a causative factor in eight per cent of cases of idiocy.

Let me reiterate that these and all other causes that may operate upon the individual organism are only part causes. A few days ago, walking in Central Park after a storm I found the ground littered with branches of trees. Here and there even trunks had been snapped in two, or entire trees uprooted. But the trees that had suffered most were chiefly of one kind, the ailantus. Beside these were elms that had weathered the storm with the loss at most of a few twigs. The storm was the direct cause of the destruction of the trees that had fallen. But the same storm had beaten upon other trees unavailingly. It had found the slow-growing elm sturdy and resistant; but the precocious ailantus proved an easy victim. Inherent weakness in the tree was the all-important silent partner of the storm. Just so the human organism. The fever, the blow, the protracted pressure fall in the one case upon a resistant individual that reacts unharmed; in another case upon an inherently weak indi-

vidual, whose energy of development is snapped in twain forever, like the trunk of the weak tree. The lesson is that the weakling must be shielded. The physically unfit may prove the intellectual giant if skillfully nurtured. To foster the weak is not Nature's way, to be sure; but it is the way of civilized humanity.

To attain the best results, however, we must go back of the individual. All observers agree that in the great majority of cases of idiocy, whether or not an exciting cause can be discovered operating upon the individual, a predisposing cause has been traced through heredity. If this predisposing cause is strong enough, it alone suffices; if not so overmastering, an exciting cause must be applied to the individual to turn the scale. Manifestly it must be more difficult to trace hereditary than direct causes. In either case one may confound coincidence with cause, but in the case of heredity it is peculiarly difficult to get at the facts themselves. People almost uniformly feel that some stigma attaches to any hereditary taint. The mother of an idiot child will perhaps admit freely, without appearance of shame, that she carelessly let her child fall, injuring its head; while concealing the fact that one of her parents was insane, as if this were cause for humiliation. Such is the logic of the average individual regarding matters ethical. But even such partial genealogical exploration as is possible, reveals in the case of idiots some highly important data.

Among the facts well established is a striking relationship between phthisis in the ancestors and idiocy in the descendant. In 28 per cent of the cases under consideration, phthisis in one or more ancestors has been ascertained. It must not be supposed, however, that there is any direct and necessary connection between these two conditions. Phthisis is a "protean disease" which so characteristically saps the vitality of its victim as to have long since received the popular name of consumption. Through this devitalization it may prepare the way for many other diseased conditions which the healthy organism would successfully combat. The nervous system, being the highest and hence the least stable tissue of the body, is apt to suffer first and most

(excepting, of course, the tissues directly attacked by the germs of the disease). The offspring of such a devitalized organism may fail to inherit sufficient of what, for want of a better name, we may term inherent or initial energy to insure its normal development. The result is a weak or sub-normal organism, which, according to the degree and kind of initial weakness, and the aid or injury subsequently wrought by its environment, may be nervous or neurasthenic, choreic, epileptic, actually idiotic, or insane. The prevalence of phthisical history in the ancestry of idiots suggests important sociological bearings on the question of the marriage of consumptives.

That the offspring of insane or imbecile parents tend to idiocy is of course not surprising. But as such persons are usually restricted in their opportunities for parentage, such hereditary history is found in only twenty per cent of cases of idiocy. Even such a showing as that, however, strikingly illustrates a kind of survival of the unfit which even civilization does not warrant, and suggests an obvious moral.

But most potently suggestive of all is another array of statistics which tells that in from sixteen to forty per cent of cases of idiocy, according to observations among different classes, intemperance is traced in the immediate ancestors. These observations seldom or never go back of the second generation, and in most instances are confined solely to the parents of the afflicted ones. It is obvious that the most searching inquiry in such a field must fall far short of complete discovery of the facts, and we may safely add a considerable percentage of "probable intemperance" to any percentage of detected intemperance. Could we probe ancestral histories to the bottom we should find that intemperance, even though denied, had in another large increment of cases been a factor in the causation, through heredity, of epilepsy, and infantile convulsions that are so often the immediate precursors of idiocy.

Nor would even these aggregate estimates do full justice to the power of alcohol; for reference has been made only to those cases of actual inebriety in which the system of an ancestor has been undermined by the drug. Only in such palpable instances

would the fact of "intemperance" be demonstrable. But there is another class of cases, probably even more numerous—though here statistics in the nature of the case fail us—in which the effects of alcohol are more direct and equally baleful. It is current belief, both in popular and scientific circles, that the condition of the parent at the moment of procreation is largely influential in determining the exact vital status of the offspring. If this belief is well founded, the offspring of a parent who is not an habitual drunkard but is temporarily intoxicated, is threatened with an awful fate because of the lowered vitality of the parent brought about by the alcohol in his system at the moment. There is even reason to believe in the yet more direct action of alcohol in such a case. It is known that alcohol affects the organism almost directly in proportion to its immaturity. A growing animal will be stunted in physical development if given alcohol, a fact well known to animal breeders, and acted upon in the production of dwarfed specimens. A youth taking alcohol is much more likely to become a drunkard than is an adult, proving that the system of the former is more profoundly affected by the drug than that of the latter. It is but reasonable, therefore, to suppose that the infant organism, at the very moment of its inception, is most of all susceptible to this poison; and as alcohol permeates every tissue of the body there can be no doubt that the incipient organism comes within its influence under the conditions we are assuming. That the result is often "unaccountably idiocy" in the child need not be doubted; nor can we question that in a much larger number of cases the damage done, though falling short of this degree of impairment, is still vast and irreparable.

And if actual intoxication is, as believed, thus baleful, the results of a less degree of indulgence than actual intoxication must be proportionately harmful. It requires no great stretch of imagination to suppose that in a very susceptible organism, where other causes were also in detrimental operation, even a very little alcohol in the system of the parent might turn the balance, and become the one potent determining cause of idiocy in the offspring. In this view, even so common and seemingly

harmless a custom as the taking of a glass of wine at dinner, may be of sociological importance in a way not commonly recognized. I make this application with some hesitancy, trusting, however, that it will be obvious that such comment is not by any means equivalent to the inculcation of uniform teetotalism. My present purpose looks to the possible prevention of idiocy, rather than to the promulgation of temperance.

One other point in connection with the causation of idiocy deserves especial attention. We are told that in almost thirty per cent of cases of idiocy, an abnormal condition of the mother during gestation was supposed to be at least a contributing cause of the defect in the offspring. Whether the child in utero is directly affected by any mental state of the mother, is a moot point with the presumption strongly in the negative, but that it is affected by physical conditions of the mother admits of no questions; and as the physical condition of the mother depends largely upon her mental condition, the moot point is for the present purpose a distinction without a difference. The ancient Greeks set an example that moderns might imitate to advantage when they sedulously shielded their wives during the trying period of gestation from all avoidable 'worriments and surrounded them with all things beautiful and diverting.

I have dwelt thus at length upon the causes of idiocy, with hints as to prevention, because beyond this there remains little that is hopeful to be said. Idiocy implies an inherent defect that can by no possibility be supplied artificially. No process of training will develop the idiotic child into a normal adult. It should be understood, however, that some potentialities of development are within every idiot of whatever type, and that these can undoubtedly be brought out to best advantage in institutions especially intended for that work. It is mistaken kindness on the part of any parent to keep a "feeble-minded" child at home. One may go further and say that the parent is morally bound to send such a child away from home. The interests of the child itself demand this. The systematic training of the school will certainly do the most that is possible toward making it approximate normality. I have seen idiots of

a very low grade whose chief intrinsic defect seemed to be congenital deafness alone, and whose minds might have been developed, I had reason to believe, to the verge of normality had proper training been begun in time. But in their early years deaf-mutism, due to a defect of the ear, was mistaken for a defect of the brain itself, and the mind was not supplied proper pabulum for growth. Unquestionably thousands of idiots are doomed to a life of mere animality by being "fostered" at home instead of being sent to an institution where their latent faculties, even though restricted in compass, could be developed far beyond what might seem possible to an unskilled observer.

But even aside from the welfare of the idiots themselves, the interests of the public at large demand their segregation. The moral effect upon normal children of contact with such defective beings must not be overlooked. Such influence cannot but be bad. To needlessly subject a community to such an influence, as is done in thousands of instances to-day, is an imposition amounting almost to a crime.

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