THE ASCENT OF MAN.

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THERE is a secluded hamlet on the Island of Martha's Vinevard called Chilmarth. One out of every twenty-five of its inhabitants is deaf. Many are blind and some are idiots. of the first settlers, twelve generations ago, were deaf people. This community, isolated from the outer, larger, pulsing world, has not only retained its primitive customs and manners, but the physical taint in the original stock has also produced a plenteous harvest of affliction. In one collateral branch deafness has occurred and disappeared and recurred, with curious atayistic perseverance. In another collateral branch blindness has pursued the same wayward and yet persistent course. Blindness and deafness are, therefore, not the offspring of idiocy, but each defect has grown more and more intense in its particular line of descent until what was at first only a defective sense, becomes a deterioration of the entire central shrine of the mind, and an idiot is born.

Chilmarth, with its quaintly tainted stock, kept isolate from the infusion of new blood by preference and by environment, is a sort of garden of affliction. Into its loamy soil the seed of the noxious weed of disease was originally dropped by accident, and not only grows unmolested by the gardener, Time, among the flowers of health, but year by year strangles and presses them out, their place being taken by increasing crops of its own deadly species. Deaf cousin marries blind cousin, or vice versa—very distant cousins, perhaps, but all bearing within their systems the same "fly in the potter's ointment." No fresh, vigorous, alien blood is introduced from the outer world.

In communities where the Roman Catholic Church is preeminent, in a religious sense, the marriage of any nearer than fourth cousins is prohibited by immemorial usage. Thus does that mighty pontifical institution prevent the spread of physical degeneracy. But Chilmarth and its old-fashioned Puritans worship at an entirely different shrine,

At Elwyn, near Media, Penn., some fifteen miles south of Philadelphia, there is an institution known as the Pennsylvania Institute for Feeble Minded Children, which is educating nearly one thousand mentally deficient folk within its walls, besides affording a home to almost as many more "castaways of the mind." At Chilmarth the mental and physical progress is downwards, and will continue so to be until some state sanitary regulation drives forth its male inhabitants to a modern "Rape of the Sabines." At Elwyn the course is upwards. Through its gates is constantly tramping inwards an array of staring, soulless eyes, of flat or conical heads, of watery, open mouths—clumsy, listless, stupid soldiers. After a longer or shorter series of years this same array marches forth again into the world, equal and often superior to its average citizens.

The idiot child at its admission is often much lower than the dog in the scale of being - lower because it utterly lacks the moral sense possessed by that affectionate animal. With this perversion or absence of moral sense is a greater or less deficiency of all the senses. And this child that has no control over the involuntary muscles; that notices no light unless it be one of great intensity and brilliancy; that can stare the sun full in the face without winking; that prefers salt to sugar, the smell of assafortida to the odor of the rose; that enjoys having its teeth pulled out, and is rapturous with the delight of being pricked with pins; that runs its finger roughly along the sharp blade of a razor and marvels, with curious eyes, at the sudden red flow from its severed flesh, - this child is put through the same physico-mental exercise as that by which Sandow's muscles are developed. (Sandow stimulates cell growth in his biceps by the constant use of dumb bells of gradually increasing weight.) Harder and harder blows of each particular sense are sent through the special afferent nerves until the gray matter cells of the child's brain, whose function it is to reconvert the energy of sense into the energy of thought, and that again into the energy of motions, are stimulated first into action and then into growth.

The vocal chords of the congenitally deaf child sag like the overtaxed string of a steel cross bow. But as the child is patiently and perseveringly taught to make the "a, e, i, o and u" sounds, and then the consonant sounds, and then word sounds, the sagged chords tighten up and grow tense and taut. The legs of the bedridden lose altogether in time their power of coördinate movement, but the sufferer, health regained, may even yet take up his bed and walk provided he become again a baby, just lift the knee, and tottle along with fear and trembling, at first, from pillar to post. This is just the sort of slow, painstaking education that after long years lifts the idiot more or less completely

out of the "twilight of the mind."

The brain of the normal man is like the thousand-volt dynamo with endless layers and windings of delicate wire. The brain of the idiot resembles the ten-volt dynamo—coarse coils of wire and fewer of them. The difference between the wise and the

foolish is, therefore, only one of comparative complexity of brain structure. Repeated blows of light sent through the afferent nerves of sight to the centre of sight in the brain stimulate more and more its undeveloped, toneless, idiot cells, cause the blood to surge to them and through them, and finally recreate the sense and thought of sight. Blows of sugar-taste (not salt taste) sent repeatedly through the afferent nerves of taste, produce the same regenerative changes in the taste centre cells. The same process is pursued with the sense of hearing, of touch and of smell. When all these sense centres have been not only stimulated but developed, two other wanderers—mentality and moral sense—come home again and occupy the long vacant house.

This process of mental development requires in many cases an endless series of years for its perfection. In some instances little short of a small eternity would be necessary. The lower the type of idiot the longer the period of years and the greater the amount of devoted long suffering and patience required on the part of the teacher. Progress is slow at first and rapid towards the end. The only impossible factor in the treatment of the most aggravated cases of idiocy is the comparatively limited

tenure of the average human life.

The bodies of many of the Elwyn children upon admission are of sadly low animal type, as appearance goes; and, strange as it may seem, these vile bodies improve pari passu with the mental development (the cell stimulation and regeneration). The hanging chin rises, closing the lips; the soulless eyes sparkle with regained intellection; the drooping, listless walk disappears; the brutish face softens and is humanized; the flat or conical head

shows a gradual and steady metamorphosis of shape.

Henry Drummond, in his fascinating volume on "Tropical Africa," says that one can never know how great a man can become and how much he can acquire until he has seen how little a man can have and of how low a type he can be and still be a man. I have just given two striking instances of how a neglected physical taint can lower man in body and mind, and how enlightened care and development can take the man thus far lowered, lift him up again in mind and body and seat him on a throne beside his hereditarily untainted peers. The fact which I would demonstrate is that the human mind and body are mere dough in the hands of intelligent education and sanitary oversight; that the potentiality of conscious mental endeavor is absolutely infinite; that Casars and Michael Angelos and Napoleons and Edisons have become what they were, first by finding out what they were best fitted to be, and then by constantly, untiringly, resistlessly making themselves such.

I am glad to say that I am a thorough believer in God. I

believe He let the infinity of planetary and starry worlds swing loose from His throne and set them revolving in their fixed orbits, or tied them fast in space, all equipped with inherent physical law competent to develop in time mind, of boundless capacity for expansion and knowledge. It seems to me that the mechanic who makes a clock that can "go" for ten million years and that has the capacity for repair within its own frame, is a far mightier workman than he who must call and repair the clock each week or each year. If it be true that this capacity for repair and for knowledge is the result of the correlation of physical forces—is the perfect flower grown up in long ages out of purely lifeless and material seeds, I fail to see why that should destroy our belief in a great creative First Cause or Intelligence. Rather would I deem such marvel of His works to be far greater tribute to His omnipotence.

I know that the cultivated world at large has an inherent repugnance to what it regards as the debasing confusion of mind with matter. I know that the feelings of pure and good people are outraged by any attempt to give publicity to *stirpiculture*, as regards man himself. But these thoughts, pressed forward by the perhaps over rough and possibly somewhat brutal school of "New Hedonists" — Mr. Grant Allen and others — cannot be overlooked by the rising generation; they demand and will gain

their regard.

The idea that the russet lichen which, ever-living, grows on the eternal rocks, and the "heir of all the ages in the foremost file of time" form, provisionally speaking, the first and last links of an endless chain, abhorrent when originally propounded, is now a

well fixed working hypothesis of the scientific world.

No one doubts that exquisite flowers—roses, chrysanthemums, violets—can be rendered more beautiful and fragrant by seeing that they are born of physically perfect parents and that they thrive on wholesome and strengthening food—the deftly mingled soils through which their dainty rootlets wander in tireless search for life. The breeder of fine cows and horses and dogs, develops the perfect stock by exactly the same watchfulness over parentage, food supply and general environment. What mawkish sentimentality shall draw the line at man, the top and crown of things? If he be dwarfed, weak-minded, miserable, how shall humanity advance?

Here is the case of a primitive people, disease tainted at the start, who go on marrying and intermarrying with disease, making no effort to introduce pure and revivifying blood. What is the inevitable result? The race becomes more and more vitiated. The octopus of affliction stretches its skinny, clammy arms every whither and enfolds an army of disease and idiocy. Does it not

follow that if a perfect woman had been selected as the wife for that originally deaf man, the offspring of such marriage would have been improved; and if the improved son also marry a like high type, will not the improvement continue until the taint is absolutely ejected from the stock? Is it not the duty of the government to lift up its children in body and mind?

If drunkenness be an ineradicable disease of mankind, is it not the merest horse sense that marriage between drunkards be for-

bidden by law?

Eleven years ago Dr. Abraham Bell, the inventor of the Bell telephone, published a series of statistics showing that one-third (and he tells me that the ratio is actually much higher) of the children resulting from the intermarriage of deaf mutes are congenitally deaf; that such marriages are giving rise to a deaf and dumb species of the human race. Since then the national census has collected even more convincing data. Is it not, therefore, plainly shown that a law should be enacted requiring that all deaf mutes in America be instructed by the oral method, which teaches them to talk and so to mingle without disability in general society; that they shall no longer be taught by the manual sign alphabet system, which renders them isolate as a class by themselves, which makes the writing pad their only means of communication with the world at large?

What humanity needs in many directions is prevention. They need to be prevented from reaching that condition where treatment is necessary. Prevention is the sphere and jurisdiction of

government and law.

The illustrations of my theme start up on all sides. The inevitable results of their neglect are filling insane asylums, prisons and institutions for the feeble minded and blind each day. Their use by the intelligent individual who knows his powers and develops them with the resistless power of his will is creating Tennysons and Sandows and Kants and Goethes and Meissoniers

every day.

If it be the body, strong, simple food is taken at regular intervals. The muscle cells are stimulated and their little individual life intensified by constant and intelligent education. By this word I mean a building up and a drawing forth of their powers. If it be the mind to be improved in its grasp and enlarged in its powers, style is acquired by studying the great masters of moving and correct grammar. Forcible and illustrative similes and metaphors are garnered from all the book lore of the past. Readiness and affluency in writing is acquired by forcing one's self to write at all seasons and by lasting through that first period of slugglish thought and dammed-up utterance, which always intervenes, but which so rapidly disappears.

Food, again, is of infinite assistance in rendering the mind a ready and reliable instrument. A steady diet of fish and oysters is well authenticated as a fosterer of brain power and mental clearness. That this diet stimulates the reproductive organs pari passu is a clear proof that man's mental and bodily productiveness are intended to be the twin steeds which successfully pull his chariot of self to the goal of life's race.

Diplomacy and finesse are the sine qua non of permanent success in life. How are they to be acquired? Take the subtle, adroit Hindoo as a guide. When he has something to gain from another man—some assistance to secure, some favor to ask—he studies first the character and then the mood of his acquaintance or vis-a-vis. When he has mastered its intricacies by judicious and sympathetic questioning, he makes himself a part of his acquaintance—shows how his interests may be forwarded by acquiescence in his own wishes, makes the man his friend, helps him when he wants help, renders the benefits to be secured mutual, and takes good care that his point gained shall be the starting post for a long series of mutually beneficial operations. Is not his success utterly dependent upon the wise and constant development of opportunities?

Napoleon beside an idiot — not even such an affinity of extremes can typify the untold potentialities of conscious and mechanical improvement in the mind and body of man.