

The various processes of stretching and spitting tobacco juice will obtain. All tax-paying citizens of Toronto have the privilege of witnessing this unparalleled (except to Toronto) spectacle free of charge.

N. B.—Friends of the sleepers must on no account pour strong drink down the throats of the sleepers. Nothing stronger than O'Keefe's lager beer or (Toronto *water*) will be allowed.

Herbert G. Paull.

FOOD AS A BRAIN-POWER.

We know not whether it is possible to discover the causes which produce the great intellects of the world, but we think that, by investigation and allowing that certain physical and mental qualities are hereditary, we can arrive at a reasonable solution. No one will deny that in almost every family there are characteristics peculiar to that particular family, just as there are in nations certain national characteristics. In a family some of its members will very much resemble each other, having the same dispositions, tastes, mental qualities and physical appearance, while others will have opposite dispositions, tastes, &c., though usually retaining some little peculiarity of expression or manner which at once shows them to be members of that family. These differences in members of the same family are to be attributed to physical causes and natural laws, so that we must admit the great importance of properly understanding them. It is the purpose of the writer of this essay to consider the effect of diet upon the human intellect, and further to attempt to explain or account for the great "geniuses" of the world.

We all know the effect a warm climate has, both physically and mentally, upon the human system, inducing enervation, sensuousness, and a laxity of morals:—this at once shows the close connection between mode of life and intellect, we may therefore, state as a general rule that the improvement of the human race, both physically and intellectually, is entirely dependent upon human efforts. An apparent contradiction of this new rule may be found in the fact that some of the greatest intellects of the world have appeared when the public morals and intelligence were in a very low condition; but these intellectual giants are so few in number that their existence is to be attributed to a very happy union of physical and intellectual circumstances, and to the fact (in the majority of cases) that for years before the arrival of each one the world had been building up and preparing theories which only required enunciation in a condensed form by the hand of a master. We are justified in thinking that a great many reputations have been gained merely by the collection of theories of facts, and that the knowledge of many has been aggregated by a single individual, who in doing this has acquired the reputation of a genius: further, the material circumstances surrounding an intellect often influence it so that it gives expression in such a peculiarly striking way as to attract attention and gain a reputation. If we take the example of Shakespeare, nearly every person will immediately settle the question of his genius by stating "wonderful intellect, mind and knowledge of human nature, he has never been equalled." Now, admitting that he possessed a wonderful intellect, we do not feel called upon to admit that he has never been equalled; he had the advantage of such peculiar circumstances in his worldly condition, that, when we consider them, we are perforce obliged to lower our estimate of his success. In his early youth he was thrown into contact with a class of people not in the habit of concealing their human cravings and faults, and further, during his whole life, the condition of all society was such that men took very little trouble to conceal their motives. To understand and describe human nature in a proper manner, we must be observant and live with and in the world; and a state of society but a little removed from barbarism is evidently calculated to afford the best field of observation, as there are but very few circumstances which will influence a mortal to conceal his feelings or motives, whereas in civilized society so many artificial restrictions abound, that it is extremely difficult to obtain a correct insight into human nature. While not wishing to detract from Shakespeare's deserved reputation, we must say that as clever and intellectual observers of human nature existed before him, and have existed since; but he has the merit of being the first in the field and of being an excellent delimitator. Further, dramatic representation being the most speedy and pleasing manner of "holding the mirror up to nature," his reputation has been increased at the cost of others; again, no scenery being used in those days the author's mind was stimulated to present in word-paintings what was invisible to the eyes of the audience: therefore, in considering Shakespeare's merit, we must take into consideration these surrounding circumstances and detract from the reputation of others;—we must also bear in mind his general ignorance on other subjects with exception of a smattering of law, as Lord Campbell proves: any ordinary school-boy of the present age has more general knowledge than Shakespeare had,—who kept his mind and thoughts in one particular groove, in which, however he is equalled by few.

But we have digressed enough—*revenons à nos moutons*. The human intellect is controlled by physical laws. We find as a rule, clever children born of clever parents; of stupid parents, stupid children—though in some cases appear contradictions, which however we can always ascribe to antecedent

causes—as in the case of a stupid child being born whilst the others are intelligent, this is always due to the weakness, crime or negligence of the parent or parents. To continue, the physical and mental treatment of the child, *its diet*, social position, the country in which it is born, all influence the intellect of the child for better or for worse. Through the sin or failings of the parents, the child is born idiotic; through their negligence another child grows up a bad member of society—so that when we see an idiotic or deformed child we are warranted in condemning either the sin or ignorance of its parents.

A great deal of ridicule has been cast upon enthusiastic persons who, upon a *menu* of tripe, fish, &c., have endeavoured to at once produce a great intellect and to supply the waste of brain-power. That the condition of the brain is dependent upon physical causes is indisputable; the question is to place these causes upon a common-sense basis. Let us consider for a moment the influence of diet upon the human frame—the effect of phosphatic food upon the human frame is well exemplified in the Scotch nationality; but we cannot necessarily conclude that a small-boned person should have a diet of oatmeal. In the first place, his boney framework may be suited to his stature and weight. Secondly, it may not be an agreeable diet; it may produce what a punnist calls "Hunt on the skin," or may produce exostosis. Further, where a great variety of food is partaken of, the quantity of phosphates may be sufficient to supply the waste; but where, as in the case of the poor man, there is but little variety or choice of food, it is fully as important that he should buy the food containing the constituents necessary to take the place of the effete substances as it is that he should be able to read and write. With regard to teeth, some families possess beautiful sets, whilst those of the members of other families rapidly decay, and have to be replaced by false ones. This is entirely due to the diet. If the food contains the materials necessary for the formation of teeth, they must naturally be good; if, on the contrary, the food contains none of the necessary elements, the teeth will inevitably decay and become worthless. Of course there are other circumstances which cause a loss of the teeth; but it is absolutely impossible to have good teeth unless proper attention is paid to the diet.

We trust that these few lines tend to show that the *physical* improvement of human beings is dependent upon human efforts. We now come to the question as to the dependency of intellectual improvement upon human efforts, more particularly with regard to its being affected by diet or mode of living.

The most evident and indisputable evidence we have of the effect of diet upon intellect is to be found in the use or abuse of alcohol. That the brain is affected by alcohol is evident, and the influence of alcohol is peculiar only in its immediateness and degree. Other elements affect the brain likewise, but as alcohol is immediately assimilated, its influence is more marked and immediate. We need only refer to over-indulgence in eating, which, as every one knows, induces mental inactivity and torpor. All foods are beneficial or injurious to the extent that they affect the blood which supplies the brain-food to supply the waste and the increased demand of a brain enlarged by mental exercise. Where nations are limited or confined to the use of inferior foods, or to an extremely small variety, the national intelligence will be found of a low order; but where the food partaken of is excellent in quality and great in variety, the national intellect is of a high order; therefore we will always find in extreme temperatures a low order of intellect. If, on the one hand, we look at the Esquimaux, we find that they are obliged to live upon very oily foods in order to supply animal heat; on the other hand, we find the Negro living upon roots, vegetables, and occasionally having a feast of putrid flesh, the reasonable conclusion therefore is that their diet has a very important effect upon their intellect. If we say that it is due to the climate, then we can say that according to the climate, so is the diet, bringing us back to the statement that the diet is the important cause. That the Negro or Esquimaux can not be elevated is not credible, but that it will require time is true; for centuries the diet and climatic influences have lowered the intellectual capacity and have produced cranial forms very different from the intellectual Caucasian type. That knowledge of intellect is to be deduced from cranial types is true. In the "Malay Archipelago," Wallace states "that the Australians have the smallest crania and the Polynesians the largest. . . . And this accords very well with what we know of their mental activity and capacity for civilization." He says, however, "It seems probable, therefore, that if we had a much more extensive series of crania, the averages might furnish tolerably reliable race-characters, although, owing to the large amount of individual variation, they would never be of any use in single examples, or even when moderate numbers only could be compared." Let us compare a few nations in order to see what are the differences in national characteristics and in mode of living, premising that, as other causes have a very important effect upon intellect (religion for example) we will compare those placed under conditions as nearly similar as possible, with the exception, of course, of diet. The Frenchman is gay, free-hearted, polite and intelligent, and lives upon a variety of food admirably cooked. The Spaniard is sullen, passionate and jealous upon a diet of garlic, olive oil and bread. The Englishman is thick-headed, obstinate,