

not every schoolboy, at least every educated man is supposed to comprehend the general tenor thereof and its main thesis or conclusion, that acquired characters—characters acquired by the individual—are not and cannot be transmitted to the offspring. To use Weismann's own expression, "We maintain that somatogenic characters" (characters originating in the cells and tissues of the body) are not transmitted, or rather, that those who assert that they can be transmitted must furnish the requisite proof. The somatogenic characters not only include the effects of mutilation, but the changes which follow from increased or diminished performance of function and those which are directly due to nutrition and any of the external influences which act upon the body. Among the blastogenic characters" (characters originating in connection with the germ cells), "we include not only all the changes produced by natural selection operating upon variations in the germ, but all other characters which result from this latter cause" (1). In natural selection is to be found the key of the phenomena of inheritance.

Now, up to a certain point, we as medical men are prepared to accept this teaching. We know from experience that acquired mutilations are not transmitted, we acknowledge that no clear and satisfactory examples of the transmission of mutilations have been brought forward. We can realize that the loss of an arm, for example, has no direct influence upon the germ cells of the individual, and that so these germ cells if fertilized will develop into the complete individual. But there is another class of phenomena specially interesting our profession which appears to give a direct lie to Weismann's thesis. And it is, I think, this failure of the ruling theory to explain satisfactorily the phenomena in question which has been the main factor in making us as a profession not enthusiastic of late years to debate the subject.

For, accepting the theory, we must be prepared to deny wholesale the transmission of acquired defects of every order and give ourselves over to a most serious form of fatalism. If an individual is from the first feeble-minded, that is not his parents' fault; it is due either to an unfortunate commingling of the ids, or ancestral plasms, composing the promiscuous ovum and spermatozoon from which he is derived or to characters which have come down to him from previous generations. If he, being diseased, begets feeble-minded children, he is in nowise to blame—acquired characters are not transmitted. Either those feeble-minded children are an accident—a spontaneous variation—or more probably they represent the summation of characters inherited from long generations. If a man or a woman becomes an alcoholic, it is not his or her fault, it is the result of inherited tendencies; and if the children of the same are of weak constitution or idiotic, again the parents are blameless.