

BRAIN FORCING IN MODERN EDUCATION.

I cannot help here adverting to the absurd and unphysiological theories of education which are sometimes taught, and which we as medical men should combat with all our might. The old practice of attending to the acquisitive and mnemonic faculties of brain alone in education is now fortunately giving way. The theory of any education worth the name should be to bring the whole organism to such perfection as it is capable of, and to train the brain power in accordance with its capacity, most carefully avoiding any overstraining of weak points; and an apparently strong point in the brain capacity of a young child may in reality be its weakest point from hyper-activity of one part. I have known a child with an extraordinary memory at eight who at fifteen could scarcely remember anything at all. Then, as the age of puberty approaches, one would imagine, to hear some scholastic *doctrinaires* talk, that it was the right thing to set ourselves by every means to assimilate the mental faculties and acquirements of the two sexes, to fight against nature's laws as hard as possible, and to turn out psychically hermaphrodite specimens of humanity by making our young men and women alike in all respects, to make our girls pundits and doctors, and our young men mere examination-passers. If there is anything which a careful study of the higher laws of physiology in regard to brain development and heredity is fitted to teach us, it is this, that the forcing-house treatment of the intellectual and receptive parts of the brain, if it is carried to such an extent as to stunt the trophic centres and the centres of organic appetite and muscular motion, is an unmixed evil to the individual, and still more so to the race.

Some educationalists go on the theory that there is an unlimited capacity in every individual brain for education to any extent, in any direction you like, and that after you have strained the power of the mental medium to its utmost, there is plenty of energy left for growth, nutrition, and reproduction. Nothing is more certain than that every brain has at starting just a certain potentiality of education in one direction and of power generally, and that it is far better not to exhaust that potentiality, and that if too great calls are made in any one direction, it will withdraw energy from some other portions of the organ. These persons forget that the brain, though it has multifarious functions, yet has a solidarity and interdependence through which no portion of it can be injured or exhausted without in some way interfering with the functions of the other portions. Even the very anatomical and histological composition of the organ might teach us this. The way in which its several elements that minister to mental functions, motion, sensation, regulation of temperature, and nutrition, are mixed up in the cortex, and even in the centres lower down, have as yet defied our anatomical and physiological investigations even to distinguish the one clearly from the other. To say that any one man could have the biceps of a blacksmith, the reasoning powers of a Darwin, the poetic feeling of a Tennyson, the procreative power of a Solomon, and the longevity of a Parr, is simply to state a physiological absurdity. No prudent engineer sets his safety-valve just at the point above which the boiler will burst, and no good architect puts weight on his beam just up to the calculation above which it will break. Nature generally provides infinitely more reserve power than the most cautious engineer or architect. She scatters, for instance, seeds in millions for hundreds to grow, and she is prodigal of material and strength in the heart and arteries beyond what is needed to force the blood-current along; therefore we have no reason to think that any function of the brain should be strained up to its full capacity except on extreme emergencies, or that any of the receptive or sensory brain-tissues should be stored choke-full of impressions for the purpose of being frequently called up again as representations. Especially do those principles apply if we have transmitted weaknesses in any function or part of the organ; and what child is born in a civilized country without inherited brain weaknesses of some sort?—“*Puberty and Adolescence, Medico-Psychologically Considered,*” by T. S. Clouston, F.R.C.P.E., F.R.S.E.