## THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

Vol. XIII. TORONTO, MAY 1ST, 1881. No. 9.

## Original Communications.

## GYMNASTICS OF THE BRAIN.

BY J. A. GRANT, M.D., M.R.C.P., ETC., LOND., OTTAWA.

Read before the Canada Medical Association in Ottawa, September, 1880.

GENTLEMEN,—In presenting this subject for the consideration of the Association, I feel satisfied that no more important topic could occupy the attention of medical science, than that which closely concerns the welfare of society, and promotes in the most comprehensive sense, the "mens sana in corpore sano." Mental hygiene and physical hygiene are inseparably connected, and a few observations at present may not be out of place in regard to the essential balance of mind and body, and the application of a few ordinary principles to the present system of education. The physical well being of the pupils in our schools should be as carefully guarded as the acquirement of knowledge. Year after year our educational system is becoming more complicated, and even the so-called common school course is quite academic in character, and more than an ordinary test of strength to the young brains, in their plastic state, budding forth to the supposed stage of practical usefulness. While acknowledging the rapid increase in the required subjects of study, branch after branch being yearly added, we must not overlook the very tree of life and the processes requiring such close attention to obviate the inroads of disease which soon sap vitality and ruin the prospects of the brightest specimens of intellect in the incipient stage of development. The mental and physical well being of the pupils should advance equally, otherwise growth in either case, will become, in a measure, one-sided. While approaching the subject I am fully aware that it is dangerous ground, still, as a matter of public duty, it may not be out

of place to advert briefly to a few points respecting which it is important all classes of the community should alike have full information. point to which I first wish to direct attention is "the brain of youth." The problem, and one of the most difficult and trying of the age in which we live, is, how to build the best brains out of the materials placed at our disposal. Education or educated evolution certainly has considerable to do with the development of mental power. building of a brain is a social problem of more than ordinary interest to every family circle. Mothers particularly have to do with it, and teachers are desirous of drawing out innate power in its various forms, just as varied and peculiar as the phases of the human countenance. The brain the chief part of the nervous system, must be built up in keeping with the development of the whole body, the one depending greatly on the other in order to arrive at the greatest degree of power and perfection, either as to organization of structure or performance of function. Maudsley, in his Gulstonian lectures for 1870, says: -" The time has come when the immediate business which lies before anyone who would advance our knowledge of mind unquestionably is a clear and searching scrutiny of the bodily conditions, of its manifestations in health and disease; he must recognize how entirely the integrity of the mental functions depends on the bodily organization, in fact, must acknowledge the unity of mind and body." The brain, the seat of the mind, possesses a mechanism peculiar in itself, and a power diversified in character, presenting various phases and peculiarities, throughout the highest order of intellectual development in the genus homo. In the crude and almost rudimentary state of cerebral pulp, soft, pliant and undecided in cerebral type, as to inherent mental power or capacity, more than ordinary care must be observed in suddenly straining the structure nature has put in the cranial cavity. The drawing out process embraced in the true education must be conducted with care, caution, and more than ordinary guidance and observation. It is here that mental hygiene operates, embracing as it does all that relates to development, exercise and the maintenance of mental activity—in fact, education in the most comprehensive sense. The brain may be considered a central telegraphic office, constantly distributing