

fication composed of the united experiences of himself and his ancestors acting upon his original organism. Happily the division into sexes as observed where high organization exists, by uniting different experiences, neutralizes the tendency to drift into a wide diversity by which we would soon lose our identity of belonging to a common stock. We may then divide mental deficiencies into general and local, or perhaps more properly, into *idiotic* and *perverted*; the former, depending upon causes which influence the entire mass of the brain, includes idiots, imbecile and stupid persons; and under the latter, all derangements of the mind included in insanity, or illustrated in persons with excessive development in some parts of the mind or deficiency in others. Among those causes separately or combined, which influence the entire mass of the brain, and which produce idiocy, are the following:—

1. Arrest of development; either by quality, cerebral sclerosis, or by want of parts.
2. Deficient or irregular circulation in the organ.
3. Poor quality or vitiated blood, accompanied with debility or disease of the entire system.
4. Chronic compression of the cerebral substance; resulting from (a) early consolidation of the bones of the skull; (b) hypertrophy of the brain; (c) effusion of fluid into the cavities of the ventricles or the arachnoid sac.
5. Defect in the senses or isolation from the world, as instanced in case of Gasper Hauser.

Without entering specifically into a consideration of each of these causes, I will be content with a few practical illustrations, though the principles are capable of a wide application in the study of, and for the instruction of human nature.

Among the many conditions of the blood affecting intelligence, I will mention one for the encouragement of those students, (with whom my sympathies are warm,) who are obliged to work at manual labor during vacation, in order to earn the means of subsistence through the succeeding term at college or school.

They often feel dull and stupid at the commencement, and are frequently discouraged when comparing themselves with others who have not been obliged to labor as they have done. The reason of this is to be found in the fact that

the blood is an exact counterpart of the body. Exercise produces hypertrophy of muscular tissue, and hypertrophy of muscular elements in the blood. In one who has never put forth mental effort there is a poverty of brain element in the blood, and consequently from insufficient nutrition the organ is easily tired out and is incapable of sustained effort. Each succeeding term, however, will tend to restore the balance of brain and muscular elements, so that, eventually, they will graduate, perhaps not with honors, but, with what is better, strong bodies and minds capable of contending with the difficulties of after life.

The actions of the mind are largely influenced by conditions of the sympathetic nerves which regulate the calibre of the vessels. In an irritable state of this system the individual is very subject to excessive emotional excitement, and is incapable of acting with sound judgment, since the activity in the seat of the emotion absorbs all the circulation in the brain, and contraction of other vessels renders other parts of the organ bloodless, a condition unfavorable to an extended consciousness which is necessary for comparison. The emotion upon rising in an audience frequently divests a man of ideas.

Hypertrophy of the brain is observed in those children who were precocious when young, but, as they grew older became stupid, often disappointing parents and teachers who have pushed the development of the brain by over stimulation, until they have defeated themselves by increasing an organ beyond the capacity of the cavity in which it is contained. Size of brain is no indication of power, unless it is associated with other necessary conditions. Education is a subject which requires a careful consideration from a physiological aspect, for practically intelligence is made up of the ordinary chemical and physical forces, working under the influence of construction, and, when we attempt to modify nature, it should be done with a knowledge of and in consonance with her laws. "Blind Tom" illustrates a condition of partial development of the brain, in which the musical talent was in excess, and absorbed all the mental power that was in him, and shows to us the extent to which our ordinary faculties are capable of expanding under favorable circumstances. The worst form of partial