

bodily exercise, a host of maladies are developed, such as apoplexies, gastralgies, visceral affections, gravel, gout, hæmorrhoids, &c. In his work, "*Sur la santé des gens de lettres*," Tissot points to the pernicious influence of the stooping position on the organs of respiration, and of circulation in the abdominal viscera. "All literary men," he says, "ought to impose upon themselves the duty of devoting every day an hour or two to exercise."

The beneficial effects of physical exercise may be shortly summed up as follows:

(1) Sound lasting *health*, resulting from the harmonious co-operation and development of all the organs.

(2) *Strength* of all the muscles alike, not of a few, as is the case with artisans and labourers.

(3) *Skill*, which consists in the great flexibility and mobility of the body, ready to carry into instant execution the mandate of the will. A point of great importance in all professions, and particularly the military.

(4) *Endurance*, a consequence of the above.

2. Influence of gymnastics on the moral and intellectual development.

"If one wishes to work upon the understanding of a pupil," says Rousseau, "one must first work upon the forces which the former is to rule. Exercise his body, render it healthy and strong, in order to be able to render it wise and reasonable; let him work, run, shout, be in constant motion; let him first be a man by gaiety, and he will soon be it also by reason."

Cheerfulness and mirth are found only in a healthy body, and under their rule the intellectual faculties attain a quicker and more vigorous growth. With a cheerful spirit we think and judge more acutely and correctly.

The children bring cheerfulness and mirth, as a natural gift, into school, provided they have not already been suppressed by an unnatural education. At school these dispositions ought to be cultivated and encouraged by games and exercises. Long hours of intense and fatiguing study, without exercise intervening, suppress cheerfulness, and with it the pleasure in and disposition to study. The school then becomes a prison; learning becomes forced labour, leading either to torpidity or unnatural efforts. The development of the body is arrested. There is no harmony in the development of the body and the intellect. But add to instruction exhilarating games and exercises, as a systematic recreation after intellectual work, and there will be a different tale to tell.

From another point of view, also, instruction will be far more successful, if gymnastics were a regular branch of instruction. In gymnastics the teachers would possess an excellent means of discipline. During gymnastic exercises the attention of the pupils is kept continually on the stretch; eye and ear are intent upon the master during the common exercises. This attention is, as a rule, transferred from the gymnasium to the school room; the teacher commands tranquillity and order, and his order is instantly obeyed. In such a school disorder, inattention, disobedience, and rudeness have been found to be comparatively rare.

The object of school life ought to be the training up of the young to *intellectual, moral, and physical* maturity. Our schools ought to counteract and extirpate one of the greatest evils of our times, viz., enervation, with its pernicious consequences. Enervation weakens will, courage, self-confidence. Under its influence the mind becomes the slave of the body. Strength and health, produced by exercise, on the contrary produce resolution, energy, courage, and firmness of character.

We read with admiration of the character, courage, and patriotism of the ancient Greeks; but we quite forget

what produced these qualities. It was, to a great degree, gymnastics which produced among them those beautiful traits of patriotism, of self-sacrifice and devotion, of which we read. It was with confidence in the well-trained citizens of his country that Lycurgus answered the reproach of having left Sparta without walls: "The citizens of Sparta must be the walls." To mention only one modern example. The first who took up arms in Germany against Napoleon I., at the rising of the German nation, were the pupils of "Father Jahn," the founder of modern gymnastics in Germany.

Gymnastics awaken the sense for the *beautiful and graceful*. Attitude and movement of the body during exercises lead to it. In the gymnasium man strives after the perfect and beautiful. Every æsthetical representation acts both on body and mind. Among the Greeks the sense for the beautiful was chiefly roused by gymnastics.

Emulation is another fruit of gymnastics. Emulation, in a good sense, is of no little importance for the training of energetic youth. Solon says on this point to Anacharsis: "If we were to banish from human life this love of fame, what dost thou think that we should gain thereby? Who would then have still a desire to perform some brilliant deed?"

Through gymnastics, moreover, *we improve our social life, and widen the circle of worthy occupations*. Popular festivals, of a character far different from horse-races and the like, would soon follow the general introduction of gymnastics into school and social life, and contribute not a little to raise the tone and manners of society.

Dr. Werner, a German author, illustrates the influence of gymnastics on the moral and intellectual development in the following succession of causes and effects:—

Health of the body	Cheerfulness of mind.
Hardening of the body . .	Manliness of mind.
Strength and skill	Presence of mind and courage.
Activity of body	Activity of mind.
Fine development of body .	Beauty of soul.
Acuteness of the senses . .	Strength of the thinking faculty.

3. Influence of gymnastics on professional ability.

Love of work, and skill in work, are the fruits of a good physical and intellectual education. Where there are active and industrious citizens, prosperity exists. This love of work ought to be awakened early at school. The youth of the lower classes, rendered active, industrious, and skilful in the gymnasium connected with the school, would be far different from what they are now. There would be fewer idlers, fewer claiming the support of their fellow-men.

With regard to health, I have said enough on this point. We know that gymnastics are not only a preventive against diseases, but they are effectual also to cure many of them. Why not devote at least equal care and attention to the gymnasium, as to the hospital? It is not better and cheaper also to fill the former than the latter.

Military preparatory exercises in the gymnasium, under able direction, would be useful not only from a pedagogical, but also from a technical and economical point of view. They would serve as a preparatory military training, and they would render the soldier and volunteer more able and apt for his profession.

IV. Promotion of physical education.

The greatest impediment in the way of a general introduction of gymnastics is the prejudice that they are both useless and dangerous. Useless in schools in which games such as cricket, &c., are general, and better than gymnastics; dangerous, on account of the accidents to which gymnasts are exposed.

I have described the effects of gymnastics. There is