

PLAY AND PHYSICAL TRAINING.

Schiller once said: "Deep meaning often lies in childish play." We have before us two valuable articles: one on "Play as a Means of Development," an editorial in the New York Medical Journal; and the other on "The Physical Training of Young Children," by M. Fernan Lagrange, in the *Revue Scientifique*, in which the author advocates natural play as superior to gymnastics for children under fifteen years of age.

Play, says the Journal, "may be defined as a voluntary exercise prompted by natural inclination and producing pleasure. . . The great variety and apparent aimlessness of motion in play is explained by the requirements of the muscles and faculties, and the necessities of the future. It "is an instinct with the child, and has development for its object. This instinct is an inherent impelling force that causes all the muscles of the body and various faculties of the mind to be exercised in sufficient measure, but never in excess. It gives a large share of education and training, and prepares the young for future work. Nature never leaves what is necessary for continued existence to be supplied by the unaided wisdom of man."

M. Lagrange writes as follows: The fact that intense muscular effort interferes with the development of the growing infant in height is perhaps less well known to hygienists and physicians than to veterinary surgeons and trainers. It has long been observed that young horses which are put to work too early never become as large as their fellow-colts which are allowed to reach their full growth in the pasture. Gymnastic apparatus, with the efforts which they necessitate, would have on the child the same dwarfing influence as harnessing to the waggon or the plow upon the colt. The infant prodigies of the circus sufficiently exemplify this fact. With all the skill they display, they are usually in some way distorted; and persons who have begun hard work on farms or as laborers too early in life are generally stunted. These facts should be strongly impressed upon parents.

In children muscular effort should be generalized, so as to make as great a number of muscles as possible participate in it, or at least to distribute it judiciously among the stronger muscles.

Exercises in which the work is localized, however much they may contribute to the development of the active part in the adult, do not have that effect in children, the volume of whose muscles is never increased by them. They are consequently useless, while they promote fatigue. They are liable to the further objection that they tend to produce deformities in young children subjected to them, whose plastic frames at their tender age yield very readily to any stress which is put upon them, and acquire a permanent set if it is repeated too often.

These objections do not lie against light gymnastics, which are not performed with fixed apparatus. In these, the child bends, stretches, and shifts his arms, legs, head, and body in various directions, at the command of the teacher, in measured rhythm. But even when performed in concert they are not recreations, and this is an extremely important matter with pupils whose brains are working to excess. They become exceedingly monotonous, and the child begins to perform them reluctantly, or learns to partly evade them. He finds in them, not a recreation, but a lesson additional to the others—a new burden. Now, recreation is not only a moral want of the child, but it is an important physical need, in so far as it furnishes a remedy for the nervous weakness and irritability that are induced by constant constraint, and helps to prevent disturbance of the equilibrium of the vital functions.

The prime fault of both these kinds of gymnastic exercise is that they are artificial. They were introduced for the praiseworthy purpose of supplying the want of natural exercise where that could not be obtained; but they have gone beyond this, and the notion has arisen that a child can not take proper exercise without going through an apprenticeship and being subjected to a method. Instinctive exercise would amply suffice for the development of the body if the instinct were listened to every time it speaks, but social and scholar conditions do not permit this. The instinctive desire, repressed too often, becomes weakened, and finally disappears. The body accommodates itself to a sedentary life, and the insufficiency of exercise finally induces muscular indolence and an inert habit. The teacher of gymnastics would not be needed if the pupil had the privilege every day, for a sufficient time, of a large space, and liberty to