GYMNASTICS FOR OUR GIRLS.

IDE by side with the immense strides the intellectual education of women has taken in the last quarter of a century has been a gradual, but somewhat tardy, recognition of the value of systematised physical education for growing girls. Prejudice, however, in spite of the widespread extension of knowledge in regard to the laws of

health, still bars the way to physical exercise being placed on anything like a sure footing. To some, gymnastics for girls means wrenching the arms out of the sockets by means of pulleys and ropes, making the waist unduly thick and the arms alarmingly muscular.

For some systems of gymnastics, and as regards some people, there might be truth in these ideas, but with the application of science to the requirements and capabilities of growing girls, a safe and altogether admirable system has, fortunately, been arrived at. As it is quite novel—the work of a lady who has studied all available systems, and brought energy, practical experience, and scientific principles to bear upon her plans—and, moreover, about to become more widespread through the opening of a training college, in which girls who desire to become professors of physical education may be fitted for their task, our readers may welcome some account of the system.

It is founded upon a thorough knowledge of the requirements of all the various muscles, the respiratory and laryngial included. It is to a great extent a connecting link between dancing and so-called "heavy" gymnastics, and it bears much the same relation to both that the Kindergarten system does to higher education. The picturesque element has at the same time been carefully noted; the exercise-dress is pretty, and graceful positions are as much aimed at as the development of strength. It differs from simple calisthenics in that it is a much more elaborate training of limbs, trunk, and head, as well as hands, fingers, and feet; and it differs from ordinary gymnastics in that no ladders, ropes, horizontal or parallel bars, or jumpinghorses are used. Skipping-ropes, balls, rings, poles, bar-bells, or light clubs, and dumb-bells are about the only accessories required.

The class usually opens with a vocal march or gymnastic song, illustrative of wrestling, shooting, throwing, rowing, &c. Then follow some finger and wrist exercises, hoop-bowling, exercises for the trunk and limbs, "free" or with light dumb-bells; then perhaps a ball exercise, of which there are several series, some being of considerable difficulty; next some Spanish "free" exercises, a gymnastic dance, illustrative of Spanish bathing or other exercises; following this, some skipping-rope exercises, both elementary and advanced, with light bar-bell exercises, American light dumb-bell exercises, and

light club evolutions, leading up to a march as a finale. The usual instruction is to classes, but private lessons are sometimes given to delicate pupils, that the exercise may be adapted to their condition from day to day.

Certain of the dumb-bell and bar-bell movements are commenced at an early period with some pupils, the muscles of the back, shoulders, and chest being so exercised by them that they are very useful in all stages of development. Club exercises are never given until pupils have acquired considerable muscular control, and are able to realise the physiological advantages of good position. Each exercise has a distinct aim. The ball exercises are chiefly useful in providing varied and graceful actions, and unconsciously cultivating accuracy and precision of movement, sense of "time," and the regulation of force necessary for the desired result. They have, besides, a good influence upon the nerves of vision and the training of the eye. Many growing girls become flat-footed from want of a judicious strengthening of the muscles, joints, and ligaments concerned in the functions of support and progression; hence, a special series of exercises to correct this has been invented.

The respiratory and laryngial gymnastics are for the most part adapted from those used in German schools of elocution, and are useful in the relief of asthma, stammering, &c. As a preparation to voice cultivation, whether for public reading or singing, they are invaluable. Bad habits of breathing, and faulty or indolent action of the muscles and apparatus by which articulate sounds are produced, are not only baneful to the proper production of the voice, but to life, and lung gymnastics regularly practised give the needed power of methodic prolonged inspiration and respiration. The first exercises of this class are designed to create the power of advancing and retracting the abdomen during inspiration and expiration, whilst the ribs are as nearly as possible stationary; then follow various abdominal and costal breathing exercises, leading to the expansion of the chest to its fullest limit. Great care has been bestowed upon the arrangements and duration of these exercises; the period of tension is never prolonged at the expense of the period of relaxation, and thus the rhythm of the vital vibrations is preserved.

One special feature of the system is the training of the hand. No apparatus is used, but freedom, force, and elasticity is given to the muscles, joints, ligaments, and tendons of wrist, palm, and fingers, by the practice of simple flexor, extensor, and rotatory movements of the fingers, and by movements of the wrist. When we consider how valuable the strength and flexibility of the hand is to draughtswomen, needle-women, artists, piano and violin players, and others, the importance of this training is seen. Excess in exercise is carefully guarded against; the hardest exercise is taken neither at the beginning nor end, but towards the middle of the practice; each series of movements exercise the left side of the body equally

with the right, and most head and trunk movements are slowly executed. Miss Chreiman, the inventor of the system, has before her two distinct aims: the one to make every lesson thoroughly enjoyable, as the recreative benefit of movement is largely in proportion to its enjoyment; the other to get during every hour's practice the maximum of muscular exertion compatible with the strength and capability of the class, without incurring any possibility of strain or undue fatigue, the ultimate object of the exercise being ever in mind.

Gymnastics are still far from being a part of our female educational system; classes are given in some schools, but then it is too often left to a girl's choice whether she attend or not. What would be said of a teacher who, because a girl was advanced and well-informed for her age, let her follow her own inclinations as to study? The result would be the same as experience has proved to be the case with regard to exercise: nothing would be done. Yet the educational time of mind and body is the same—viz., the *growing* time. Schoolmistresses have to some extent done their duty in providing calisthenic classes for their younger pupils, but in few schools are systematised exercises available for all pupils. Now, however, that Miss

Chreiman's system has been adopted in some of the largest London girls' schools, and that teachers of the system are being despatched to the various large provincial towns, the co-operation of parents is alone necessary to secure the best results. Because girls are weak, it is no reason why they should have no physical training; it is rather the weak who require it most, and the strong who can best do without it. The strong can, perhaps, take liberties with themselves with regard to clothing and diet, but the weak cannot. Modern conditions of life attack tone, stamina, and endurance most, and all of these may be increased by developing, as this new system develops, the health rather than the muscular strength of our girls : health, be it rememembered, being a general and diffused strength over all the organs and functions of the body. A great step has been made by the adoption of a reasoned and scientific plan of physical exercises suitable for girls, but a greater will have been made when the various examining bodies fulfil the hopes of our physical educationists by instituting special examinations and certificates for teachers trained in this branch of work, and by this means put systematic physical training on a level with ordinary mental studies.

LONDON BY NIGHT: WALKS IN A CITY OF SHADOWS.

BY THOMAS ARCHER.



MONG the many thousands of people who come daily into London to swell the turbulent uproar of its great thoroughfares and take part in the ceaseless activity of its commercial life, how few there are who realise the fact that they leave its busiest streets

to silence-that as the midnight darkness falls upon church and mart and hall, the sound of a single footstep may be heard upon the pavement, the rumble of wheels of some belated vehicle booms with preternatural disturbance of tired sleepers who still reside, either as householders or care-takers, within sound of Bow bells. How few recognise this fact, or that, amidst this stillness and in neighbourhoods which are supposed to be deserted, another shifting population takes possession of some of the thoroughfares, where men, women, and children creep along the by-ways - shadows amidst shadows, stealthily moving without apparent destination, and with no evident object except to find some hiding-place in which they may crouch unnoticed till the first cold steely ray of morning reveals them to the constable who comes fresh upon his beat, and begins to give an eye to the doorways of warehouses and offices, or the corners of buildings that lie beside sequestered courts and alleys.

There is always a solemnity in the aspect of London by night. When the last glint of sunshine burns with the vivid glare of a distant fire beyond the edge of the black cloud that is closing like a dark shutter on the sky, which has faded into a dim, neutral tint: when the night wind suddenly begins to stir: when, as we are gazing upward,

"The stars rush out—
At one stride comes the dark,"

the impression of the vastness, the possible solitudes of the great metropolis, the awful hush and pause in that mighty city, teeming with life, unmatched for wealth and power, marvellous for the endless processions of men, its daily strife, its feasting, its wailing, its multitudinous acts and schemes and utterances, is sometimes almost overpowering. Perhaps the thoughtful wayfarer who, like the poet, stands upon the bridge at midnight-say in one of the recesses of London Bridge-is most likely to be influenced by such reflections. The expanse above, so much vaster than the mere long strip of grey sky to be seen above the houses in the main streets; the strange, weird outlines of adjacent buildings and of cranes and shanties on the wharves; the indefinite extension of the irregular black silhouette formed by distant objects on the shores; the sudden twinkling or extinction of lights discerned here and there on the banks or in some window, or from a lantern on board a vessel swaying in the tide; the flash and occasional glitter and white ripple of the dark, rolling river; the dim outline of further bridges, which seem to be