

THE PHYSICAL TRAINING OF GIRLS.

BY THE EDITOR OF "PHYSICAL CULTURE."



EXERCISE 1.

AMONG all the advances we have made during the present century, none are more striking than those effected in the physical education of women. I can remember the days, not so long ago, when we heard a great deal of the finishing school, and as Thackeray reminds us, its prim head mistresses used to recommend "the assiduous use of the back-board for a further period after leaving school." That was about all the physical exercise our grandmothers had; they were apt to regard all exercise for girls as hoydenish and unmaidenly.

One is not surprised to hear that after such a lackadaisical education the heroines of the novels of those days commonly died of an interesting consumption, and passed their lives in exciting male sympathy by going into a dead faint whenever anything somewhat out of the common occurred. Indeed, there is considerable truth in Jerome's observation that the maiden of that time met her lover only to tell him that she could never, never see him again, and wept steadily throughout the whole interview.

Fortunately, those days have gone, and we bring into our lives a little more common-sense than we did then, but still there is a great deal not done which can be done and which must be done. In our large towns especially, one notices in passing along the streets the want of physical education among girls. There is not only a lack of elasticity in the step and a want of colour in the face, but there is often, indeed, one might say usually, actual distortion. Hardly any are erect, and you rarely see a case in which the two shoulders are on the same level. This is what meets the casual eye, but there is a deeper mischief hidden in the form of weak lungs, feeble circulation, and want of energy. Add to this the fact that many of these girls have to struggle for bare livelihood under the most adverse conditions, and the tale of misery is complete. Now, if you compare these town maidens with those of the country, you will find that, so far as actual physique and health go, the country girl has a vast superiority, simply because of the opportunities in the country for fresh air and exercise. Another thing which

you will notice in the town is that the majority of the girls whom you meet look tired and pale because their bodies have never been built up by an education worked out with the same earnestness and calculation as that with which we have to build up the brain.

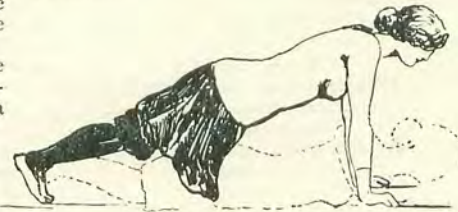
Now, you who read this will find no difficulty whatever in educating your bodies. The only barrier in the way will be your own laziness. There is now no conven-

tional barrier; that which was impossible a few years ago is quite correct to-day. It is within the power of every one of you to be healthy and strong, and if not to be actually beautiful, at least to have a clear, pure complexion, a bright eye, healthy colour, and a good figure.

It being generally admitted nowadays that exercise is advisable, the next step is to consider what particular kind of exercise should be adopted. Some years ago the only system of exercise practised by girls was what was called calisthenics, which consisted chiefly of a series of movements with light rods, calculated to strike the spectacular eye as pretty when performed in concert. But although these exercises were pretty when adroitly gone through, they possessed no real physiological value.

Now that exercise is taken more seriously and is recognised as being absolutely essential to health of body and mind, several means have been tried to secure a system of exercising which will cover the whole ground necessary, and yet which will be simple and capable of being followed without elaborate appliances.

The most efficacious of these is dumb-bell exercise, and this is so because dumb-bell exercise more than any other can be made systematic, that is to say, we know exactly the parts affected, we know the value of each exercise, and we can work with it logically to a conclusion.



EXERCISE 5.

Under the Sandow system every group of muscles in the body is exercised in turn, so that when one group is fatigued another is brought to work, and so on until every muscle in the body has had its share. The result of systematic exercise, of course, is that instead of feeling exhausted, one feels exhilarated after exercise. There is no undue strain on any part, and an equal development is secured. Again, it is easier to vary dumb-bell exercise than any other, and in the case of any deformity, such as round shoulders, sunken chest, drooping shoulders, spinal curvature, etc., one can easily remedy the defect with a little patience. More especially, if possible, is this true with regard to actual weakness, such as lung weakness, spinal weakness, etc.

The perfect development and health secured by exercise deepens the chest, strengthens the heart, braces the mental powers, and generally invigorates the whole body. In cases where there is either paucity or exuberance of flesh, the defect can easily be removed by dumb-bell exercise. In the case of too prominent collar bones, or of general scragginess, well thought out exercises will speedily fill up the gaps and restore the rounded outlines intended by Nature, or, in the case of stoutness, an easy reduction can be promised almost week by week by half an hour's exercise each day. Add to this increased grace of movement and elegance of carriage, and you will see that these exercises come as a boon to every girl.

The difficulty with regard to dumb-bell exercise is that one is apt to use too heavy bells, from the fact that bells which at first

seem quite heavy enough soon grow useless, and one is insidiously led to increase the weight.

Now the disadvantage of dumb-bell exercise is that when one gets beyond a certain weight, the strain on the deltoids, that is, the shoulder muscle, is perpetual and exaggerated, and this is apt sometimes to result in a strain upon the heart. To obviate this, Mr. Sandow has introduced a grip dumb-bell, which is of a very light weight and will last a lifetime. As the pupil grows stronger, all that one needs to do is to increase the strength of the springs.

The spring-grip dumb-bell is a dumb-bell made in two halves, separated about half an inch from one another and kept apart by springs. When exercising, the bells are gripped and the two halves compressed together. Another advantage of this dumb-bell is that it compels the use of will-power, without which exercise is almost useless. The weak feature in calisthenics was that in the contraction of the various muscles pupils did not put forth will-power. Now, this exercise of will-power in the contraction of the muscles is a very difficult thing to learn, and quite as difficult to maintain when it has been learned, but by using the spring dumb-bell no back-sliding is possible, the constant necessity to grip tightly requiring the expenditure of a certain amount of energy, which amount can be easily regulated from weak to strong by arranging the springs. Special bells are being made for ladies, very light and beautifully finished. It is difficult with the old solid type of bell to prevent swing and jerk getting into the work, and so long as the movements are gone through with either swing or jerk, no physiological benefit can accrue.

Now that we have already discussed the kind of exercise which we have selected and the apparatus, we can go on to the movements themselves. It is impossible to discuss them all here, but a few may be taken to show the idea. And, in the first place, I would enjoin upon you all that the exercises given here should all be gone through at one time, no matter how few movements can be done of any one of them. It is a mistake, for



EXERCISE 3.



EXERCISE 4.



EXERCISE 2.

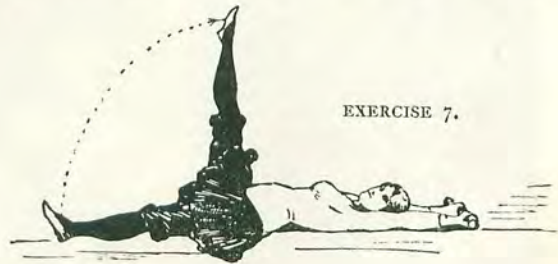
example, to do half of them in the morning and the other half in the evening. The exercise should not be carried to such a point as to induce fatigue, although, of course, at first a little stiffness is bound to result. The point is that they ought to be performed regularly, morning after morning, without fail. After exercise, when the body is still heated,

about thirty-six inches to the front with the left foot, left knee bent, right leg perfectly straight, and at the same time drive vigorously forward with right bell stretching the shoulder as far forward as possible. The heel of the right foot must never leave the ground. Smartly recover to the ready position, bringing the left heel close to the right. In lunging

strengthens both the stomach muscles and the back muscles and gives mobility to the chest, greatly deepening it. It is a little difficult to perform at first, but practice will soon make perfect. Do not be alarmed, although you feel as though some of the stomach muscles were bound to give way under the strain. There is not the slightest



EXERCISE 6.



EXERCISE 7.

a cold sponge should be taken. Of course, if very robust, a cold bath itself may be indulged in, or, if constitutionally weak, a tepid sponge or a mere chest sponge is all that should be permitted.

In Exercise 1 it is chiefly the biceps and triceps which are brought into play. The position is as follows:—

Grip the bells tightly, arms perfectly straight and slightly in front of body. Hands in front of thighs, knuckles downward. Stand perfectly upright with chest thrown forward.

Movements.—Keep elbows fixed, the upper arms close to body, raise right hand slowly to shoulder and lower to original position, at the same time raising the left hand. The right hand should always be descending when the left is ascending and *vice versa*.

In the next figure, Exercise 2, the position is: arms stretched downwards and a few inches from sides.

Movements.—Bring left arm slightly to front and as far to the right as possible without moving shoulder, the upper arm to be pressed close to chest; at the same time the right arm is to be pressed behind as far to the left as possible. The arms should be slightly flexed and the shoulders kept immovable. Make a momentary pause in this position and then reverse the movement, that is, the right arm to be in front and the left arm behind the body. Care should be taken to prevent any swing.

The next figure, Exercise 3, is one of the marching movements, the very finest possible for giving a good carriage.

Position.—Clasp hands behind the head, elbows pressed well back, chest thrown forward, head erect. Rise on tip-toe.

Movement.—March briskly forward on tip-toe, knees straight, elbows pressed well back. Start with one hundred movements and increase to three hundred.

Exercise 4 is a lunging exercise.

Position.—Stand with right toe pointing to the right, left to the front. The right arm to be bent at elbow, forearm horizontal, elbows close to the side and eyes front.

Movement.—Lunge

with the bell the arm should be straightened just before the left foot reaches the ground, that is to say, the movement of the arm should slightly anticipate the movement of the foot.

The exercise should then be reversed as shown in the figure.

Exercise 5 is one of the movements performed without bells. It strengthens the shoulder muscles and the great muscles at the side of the chest.

Position.—Lie flat on face, palms of hand on floor close to shoulders, body rigid.

Movement.—First method: Press the body upwards as far as possible, lie straight on the elbows, keeping the body rigid throughout.



EXERCISE 8.

After a pause slowly lower to first position. Second method: Practise lowering the body until within an inch of the floor, not permitting any part of the face or body to touch the floor.

Exercise 6 is chiefly for the stomach muscles, which, when undeveloped, are the feeblest muscles in the human body and a constant source of weakness.

Position.—Lie on back with arms as shown, legs and body perfectly straight.

Movements.—Raise right knee to right angles with the body, knee flexed, foot kept down as much as possible and toes pointed. Straighten to original position and raise left knee. The second part of this exercise, which we will call 7, is more severe, and should only be performed when the first part becomes easy.

Exercise 7.

Position.—Same as Exercise 6.

Movement.—Raise right knee to right angles with the body, and knees straight, toe pointed, lower to original position, and raise left leg.

Exercise 8 is an excellent deep-breathing exercise; indeed, there can hardly be a finer exercise for the trunk in general, as it

danger of strain in these exercises, even though you were able to do four times the number you could do.

Position.—Same as in Exercise 6, but with thumbs interlocked.

Movements.—Raise arms and body slowly, upwards and forwards, till the fingers pass beyond the feet, the head pressed well down between the arms, exhaling to the utmost. Carry body slowly back to original position, inhaling deeply through the nostrils. Pay particular attention to this exercise.

Exercise 9 is chiefly for the muscles of the thigh and calf.

Ready position.—Rise on toes, stretching the body up as far as possible, arms by side.

Movements.—Sink slowly downwards, knees apart, and body upright; heels must not touch the ground. When the last limit has been reached, return to the original position. This exercise must be performed entirely on the toes, the heels not being permitted to touch the floor.

Exercise 10 is an exercise bringing into play chiefly the muscles of the side, and is a very important exercise indeed. The position is arms at side, body perfectly upright.

Movements.—Bend body to the left side as far as possible, at the same time bring the right hand well up under the right armpit, stretching the left hand down to past the left knee. The exercise should then be reversed.

The above exercises will give you an idea of what systematic dumb-bell practice really means, and how easy it is with a little patience to obtain a good all-round development of the body.



EXERCISE 9.



EXERCISE 10.