

5. Sleep eight to ten hours.
6. Baths should be brief and not too frequent, with a dry rub night and morning, and a massage if the skin is dry.
7. Do not worry. Take plenty of time for recreation.
8. Relax and have a good time at your exercise.
9. Keep the bowels regular.

For Constipation.

1. Exercise regularly, using the movements for the trunk, and those in which the thighs are crowded into the abdomen.
2. Eat fruit, bulky foods. Avoid constipating foods, such as milk, cheese, eggs, and fried foods.
3. Drink water freely. Take a glass of cold water at bedtime and upon rising.
4. Have a regular hour for evacuation.

For Rheumatism or Neuralgia.

1. Take light exercise, keeping the body thoroughly covered and warm.
2. Keep the feet warm.
3. Do not cool off suddenly, or take cold baths.
4. Regulate the bowels.

THE PLACE OF GYMNASTICS IN MODERN LIFE.

BY

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THE place of gymnastics in modern life is certainly great. Our forefathers seemed not to need it since their occupations were physically active. But modern machinery and city life do away with much physical action of a great many people, and something must be substituted. Physical, and indeed mental, vigor depends upon muscular motion, and for those whose occupations do not demand it a substitute must be made. This substitute is found in gymnastics. The object of gymnastics is not primarily for show or novelty, but for health. He is wise who early learns to take care of his physical powers in our modern artificial life. Thus from the standpoint of education alone, a practical knowledge of gymnastics is absolutely necessary to the youth who desires to become a leader or even a success in business.

To get the best knowledge of gymnastics as a means of promoting health, it is best to join a gymnasium that employs expert instructors. Many schools and clubs and Christian Associations have thorough courses. The subject has become so prominent that provisions are

being made for this important help to education in every school and college of importance.

From the standpoint of health, the best gymnastics are those that all may perform easily, that do not require great skill. This is best accomplished by calisthenics. This term includes exercises without apparatus, called "free exercises," also exercises with dumbbells, clubs, wands, pulleys, and other light movable hand apparatus used in mass class work. The variety of possible and desirable movements in calisthenics is so great that a person has a wide latitude in selecting those for either private use or formal class work. In any case, if health is the aim, vigorous movements should be chosen as well as those that exercise the large groups of muscles of legs and arms, as well as those that are adjacent to the vital regions of the body, the chest and abdomen. A rational health drill should include the types of movements illustrated on page 359.

A. *Exercises for the lower extremities.*—(1) Leg movements standing: (a) flex thigh. (Fig. 1) high kick; (b) abduct thigh (Fig. 2); (c) extend thigh (Fig. 3). (2) Charges or lunges (Fig. 4); (3) squatting movements (Fig. 5); (4) hopping movements: (springing lightly on one foot or alternate foot with various evolutions usually included under the head of fancy step or gymnastic dancing).

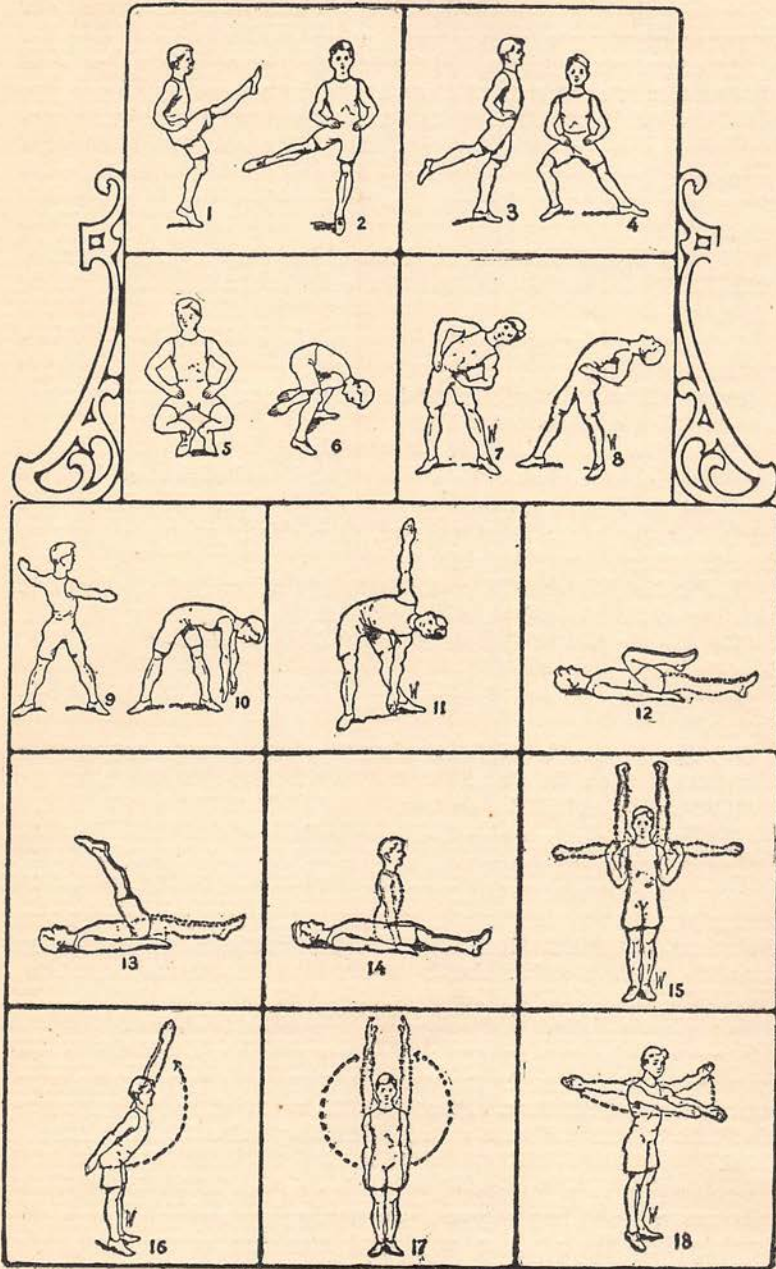
B. *Exercises for the trunk.*—(1) Bend body: (a) forward (Fig. 6); (b) sidewise (Fig. 7); (c) backward (Fig. 8). (2) Rotate body (Fig. 9); (3) rotate and bend body (Figs. 10 and 11); (4) lie on back: (a) flex thighs and legs (Fig. 12); (b) flex thighs (Fig. 13); (c) raise body to sitting position (Fig. 14).

Gymnastics are not limited to producing and maintaining health, but are also used for correcting physical defects, to overcome round shoulders, flat chests, and other common faulty positions. A good carriage of the body is worth a fortune. The time to acquire that is in youth. Little or nothing can be done to correct defects after twenty years of age.

The best types of exercises to help maintain a good carriage are those with the body inclined forward from the hips while performing the following movements with the arms:

(1) *Arm extensions*: (a) side horizontal (Fig. 15); (b) up (Fig. 15). (2) *Arm swings*: (a) forward up (Fig. 16); (b) side up (Fig. 17); (c) forward and backward (Fig. 18). (3) *Arm stretch backward and down*: (a) Reach backward as far as possible with arms at side horizontal; (b) clasp hands back of hips and reach back and down. This position may be held at any time, and indeed should be done often, by those who are inclined to stoop shoulders.

Another purpose of gymnastics is to develop strength by increase of size of muscles. Size of muscles is not the most important object of exercises as many people think, although it is the most widely advertised feature; yet size of muscles usually denotes strength and physical vigor, therefore it must be considered in this connection.



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The best method of developing strength and muscular capacity is by means of "tension calisthenics," or by gradually increasing the weight of pulleys and bells. If the tension method is used, no kind of apparatus is employed. All one has to do is to act as though one had a heavy object to lift, and thus make the muscles rigid while performing slow straining movements. Emphasis must be placed upon performing the movements slowly and in exercising the various groups of muscles separately. The following exercises are best for this purpose:

(1) *For the neck*: Bend the head forward and backward or sidewise, while rigidly contracting the muscles, or twist the head slowly from side to side.

(2) *For shoulder muscles*: Raise arms from thighs to side horizontal.

(3) *For Arm*: Strongly flex the forearm as in "showing your muscle," then extend slowly.

(4) *For forearm*: Clench the fist strongly.

(5) *For chest muscles*: Hold arms flexed, and almost as high as shoulders, then make strong, slow movements backward and forward.

(6) *For the back*: Bend forward, then slowly raise the body as though lifting a heavy weight.

(9) *For the abdomen*: Brace the feet and bend body slowly forward, resisting as though pushing a heavy object.

(10) *For the front thigh muscles*: Bend legs to squatting position, then slowly raise to stand.

(11) *For the back thigh muscles*: Slowly lift heel backward, resisting.

(12) *For the inside thigh muscles*: Slowly abduct (cross) one leg while standing on the other.

(13) *For the calf*: Raise on toes.

(14) *For the shin muscles*: Raise on heels.

Gymnastics are not only used for health, correction, and strength, but for æsthetic and social purposes. The appeal to the sense of beauty was first made through bodily motion, such as dancing and evolutions. It still holds its place by the same means, and also by large classes performing simple or intricate movements in unison, gracefully done with the accompaniment of music and dress. It certainly has a distinct and unique place in æsthetic culture.

The social features in gymnastics are prominent. Nowhere are friendships made so easily and social relations held so naturally as in combined motor interests. It removes the artificial, and brings mankind back to common-sense means of making and cultivating friendships.

Gymnastics, as a feature of recreation, is one of its largest contributors to life. The pleasure of gymnastic plays and games in youth develops into the pleasure of skilful execution of maturity. In addition there is the pleasure of discovering the secrets of bodily con-

trol and of inventing exercises, and these are directly related to discovery and invention in other walks of life.

Gymnastics plays a prominent part in motor education. By means of it skill in bodily motion is highly developed, awkwardness is overcome, useless expenditure of effort lessened, facility of movement increased, all of which are indispensable in modern business requirements as well as highest usefulness in life.

Much of the above is acquired, not so much by calisthenics, as by exercises on gymnastic apparatus, such as flying rings, parallel bars, horizontal bar, and horse, which are found in all modern gymnasiums, and by special gymnastics, such as boxing, fencing, wrestling, and tumbling.

A WORD ON OUTDOOR EXERCISE.

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EACH and every person has a hobby, and rides it regardless of fashion. Some fish, hunt, row; others gather stones, plants, postal stamps, souvenirs; again some are cranks on baseball, football, golf, lawn tennis, and so forth. Others participate in sports which are dangerous to health, and which they sooner or later regret. The hobby of all great men was and is some outdoor exercise or sport. It seems that the much-occupied intellect demands sunlight and fresh air. He can be well satisfied whose hobby leads him out of the city into nature's beautiful garden. The blue sky, blooming plants, green trees; the brooks, creeks, rivers, in which the fishes play, are wonders which everybody should understand. To study the lives of plants and animals not only broadens our knowledge, but it shows us how important our life is, and how important to preserve it. To preserve vitality is no secret, still it is deplorable that every daily newspaper carries pages of advertisements for sick young people. This necessitates serious thinking and warning, as those life-preservers are not of great reliability and often do more harm than good. Everybody knows, or should know, that outdoor exercises increase vitality and health. Why not have a hobby for a clean, strong, vigorous, healthy body?

Growth requires exercise. The child before school age invents games, which express its genius. Its imagination creates the necessary exercise for the intellectual and more for its physical development. In the modern schools the curriculum carries suitable exercises to develop the motor area of the brain, causing a more harmonious education of mind and body. So we keep the executive office of our