

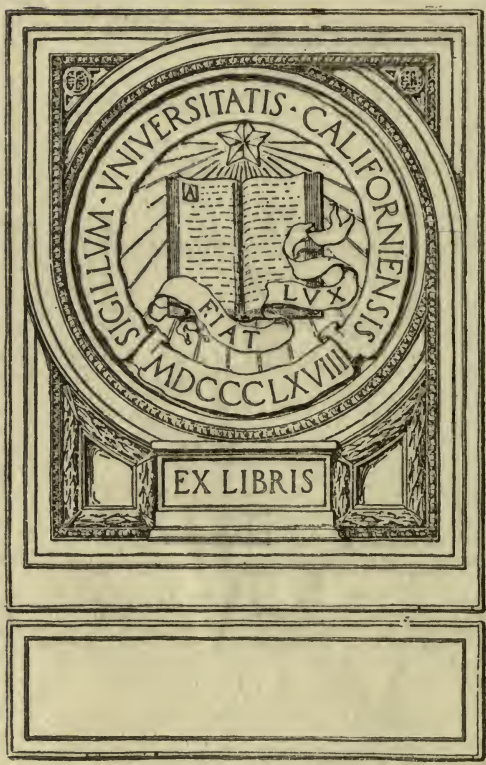
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THE TEACHING
OF ELEMENTARY
SCHOOL GYMNASTICS

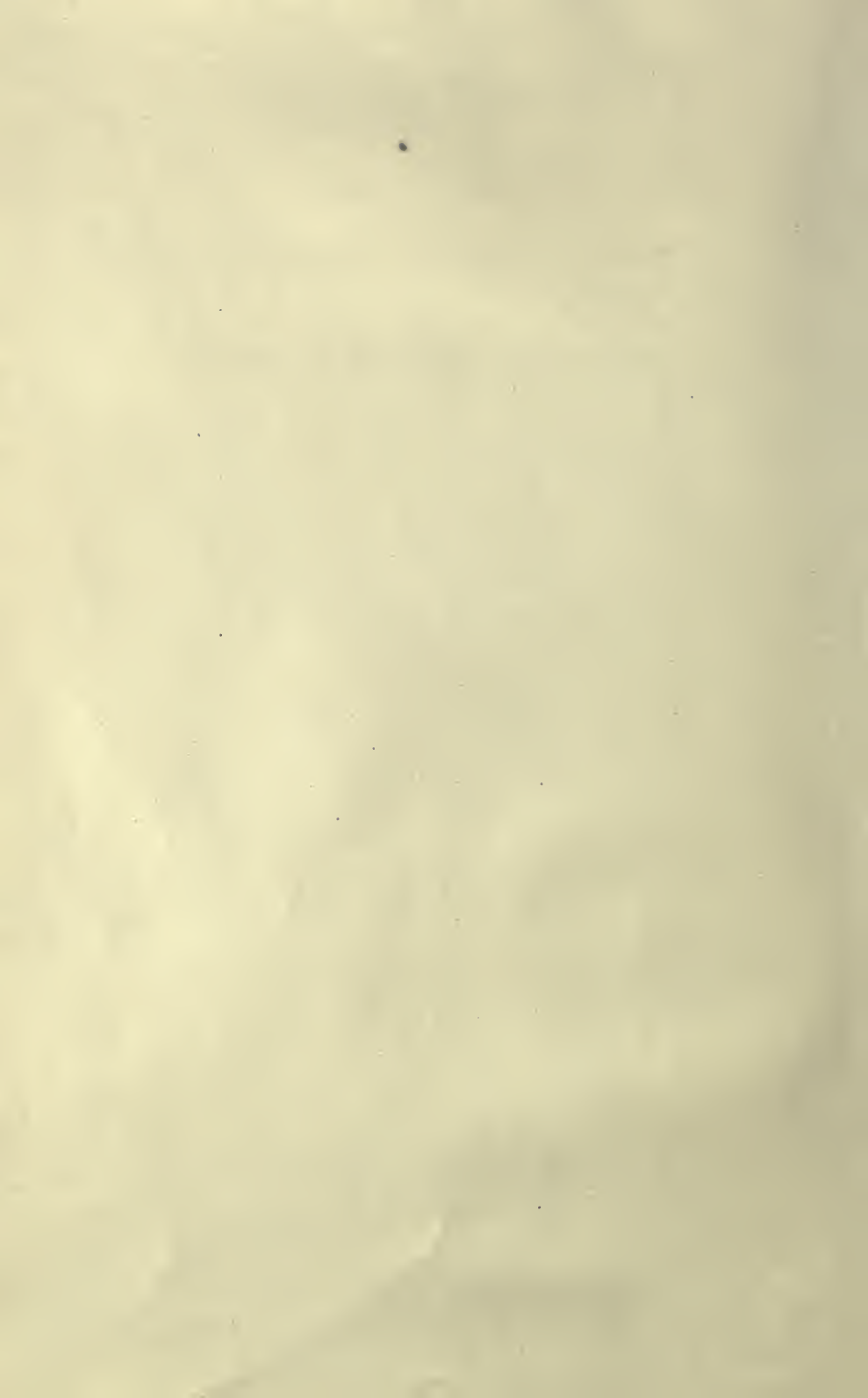
BOWEN



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The Teaching of Elementary School Gymnastics

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PREFACE

The teaching of school gymnastics requires first of all a thorough knowledge of the nature of the child, mental, physical, and moral, as given in the best courses in modern pedagogical psychology; then a knowledge of the general principles of teaching, based upon the facts of child nature; a thorough gymnastic training; and finally a brief but important special training in the technique of teaching this particular subject.

Although the necessity for such a course as this for Normal Schools is not generally recognized as yet, it is really more necessary than in preparing to teach most other school subjects, because the practice of gymnastics lacks an element of preparation for teaching that other class work gives. A member of a class in gymnastics, having his attention constantly directed to his own bodily movements, is less likely to get a clear idea of the methods and purposes of the teacher in charge than in any other class, unless it is in music or manual training. In reading, mathematics, and all other common branches, the pupil spends only a small fraction of the class period in actual work in the subject; the rest of the time is used in watching the work of the others and assisting the teacher in detecting the mistakes in word or thought made by other pupils. Not so in gymnastics. Each pupil executes the commands or does his part of the drill, and if he does this well no more is expected of him.

Another reason for special training in this line is the greater expertness in teaching required of the teacher of gymnastics. The teacher of reading and mathematics observes and criticises the work of one pupil at a time; the teacher of gymnastics must observe, detect mistakes, and make efficient criticism of the whole class at once. It is one thing to be able to perform all of the gymnastic exercises correctly, but an entirely different thing to be able to present the exercises so clearly as to be understood, and then to command, observe, and criticise the work so as to secure rapid advancement, enthusiastic interest, and good order. The present course aims to train teachers to do these things efficiently and intelligently.

It is not the province of such a course as this to repeat the work of the admirable books on psychology and general method of teaching, but rather to supplement such helps by a course of theory and

practice in commanding, demonstrating, and criticising gymnastic exercises, along with a brief study of the general principles of the leading systems and a review of the most important exercises for school use.

It is very important that the teacher of physical training shall be fully aware of the necessity of the work and enthusiastic in it at all times; for that reason a brief statement of the reasons for physical education is given at the outset.

The writer feels satisfied as the result of years of experiment and observation of gymnastic work that of all the exercises devised for improvement of posture the Swedish stand easily at the head, and for that reason they are used here. They form an easy point of attack for the study of methods of teaching, because the exercises are few and perfectly definite. It does not seem best to discard the whole system because we do not agree with its authors as to the angle of the feet or similar slight details. The writer has felt free to change an exercise or a method occasionally when experience or the results of recent scientific investigation indicate the wisdom of the change. The name "Swedish Gymnastics" is used to give credit where it is due, and not to claim for this course an accurate copy of any traditional or ironclad system. The same should be said of the references freely made to the German System. That system should have full credit for many things included here, but no attempt is made to give an authoritative exposition of the system.

Nearly all the State Normal Schools in the country give practical gymnasium work sufficient to prepare their students for professional courses like this one, but few or none of them give professional courses, and as a consequence only an occasional student ever gets the teacher's point of view clearly enough to be a good teacher of school gymnastics. In the interest of the bodily welfare of the children of the public schools, all these Normal Schools, having the equipment and the special teachers, should prepare their students for actual teaching in this branch as well as in other branches of education. This course has been worked out with the hope that it will be a practical guide to those Principals and Special Teachers of Physical Education who realize the need of the professional point of view to make the teaching of physical training in Normal Schools bear more fruit in the public schools. The course should be covered by the average normal student who has had the gymnastic and pedagogic training that naturally precedes in five or six weeks.

W. P. BOWEN.

Ypsilanti, Mich., March 20, 1909.

LESSON ONE

INTRODUCTION

TERMS DEFINED.—*Physical training* means the exercise and training of the motor powers of the body, carried on primarily for the sake of health, discipline, or pleasure. The term implies something systematic and regular, done intelligently according to hygienic principles. *Physical education* has a slightly wider meaning, including all of physical training and also the knowledge of the principles that should guide such training. Physical training gives the hygienic results and the development that is desired at the time; physical education does this and also prepares the individual to carry on his physical training and that of other people.

The term *physical culture* is sometimes used in the sense of physical education, but it has never been used by the best authorities, for it means too much. The culture of the body would include not only exercise, which is the main thing here, but also feeding, clothing, housing, nursing, and all that pertains to bodily welfare. The term has also won disrepute by its being used widely by teachers and promoters of certain superficial types of physical training who have claimed absurd things and have lacked scientific knowledge of the human body.

THE NECESSITY FOR PHYSICAL EDUCATION.—The best way to discover the most favorable conditions for any living organism is to notice under what conditions organisms of the same kind have thrived. In the case of man, we can do no better than to study the conditions and activities under which races of men have advanced and prospered, if we wish to know under what conditions they will continue to thrive. In other words, we must study the life habits of our ancestors in order to find out what conditions are most favorable for us and for our race in the future.

When we make inquiry into the occupations and life habits of our ancestors, we find that they have lived under conditions of civilization but a comparatively short time. There were civilized races living on the banks of the Nile and the Tigris a long time ago, but thirty centuries after that the historians of Greece and Rome wrote of our ancestors, who were still savages, living in caves and huts in the then unbroken forests of Europe and western Asia. Their

food was the fish and the wild game that they could kill with the crudest of weapons; between different races and tribes there was perpetual warfare. How long this and still more primitive forms of life had existed, no one can tell. The time since man first appeared on the globe must be estimated in tens of thousands and perhaps in hundreds of thousands of years.

PRIMITIVE LIFE.—During all these ages our ancestors lived a life of the most strenuous physical exertion. As far back as savage life in the temperate zone can be traced, the men hunted, fished, carried on war, and took part in religious ceremonies; the women made the clothing and the shelter, prepared the food, and made all the utensils needed in their work, besides caring for the children and the domestic animals. These two types of bodily exercise are quite different; that of the men was severe to the highest degree for a time, with periods of complete rest between; a type of exercise we now call *athletic*. That of the women was less severe but more steady and continuous; of the type of *manual labor*. As a result of these occupations both men and women were strong and vigorous; they lived and thrived in spite of unsanitary conditions and exposure to all kinds of weather and hardship. These two types of bodily exercise, carried on so vigorously for so many successive generations, no doubt did much to develop the two types of bodily form and proportions that men and women now inherit.

CIVILIZED LIFE.—If we continue to study the occupations of our ancestors down to a later day, we find that they changed their habits of life a little from time to time, but until very lately they still led lives of great bodily activity. The pioneers of the early colonies along our Atlantic coast, and even those who settled our own state in the early part of the last century, were people of strong physique, many of them not a whit inferior in strength and endurance to the savages who lived here before them. One hundred years ago fully 95% of the population of the United States lived in the country, and the same was true of the middle west fifty years ago. Men cleared the forest with the axe, sowed and planted by hand, cut their grain with sickles, and threshed it with flails. Women did all the household work, including all of the dairy and laundry work, made all the clothing, and not far back they also made the cloth from which the clothing was made. Pioneer life called for muscular work and developed a sturdy race of people.

MODERN LIFE.—Since those days, almost within the memory of persons now living, a change has taken place in the occupations and

habits of our people more sweeping and revolutionary as regards the development of bodily vigor than anything that ever happened before in the history of the race. The great feature of this change is the introduction of machinery to do the work that has always been done by muscle. Man invented the steam engine, the turbine wheel, and the gas engine to serve as means of tapping the reservoirs of energy in nature; and then the human body, that had done the work and borne the burdens of the world since time began, awoke one morning to find its occupation gone. Henceforth intelligence is not only to be supreme, as it has been in a growing measure for centuries, but it is to stand alone,—its former minister, muscular strength, reduced to the insignificant service of turning a switch to stop or start machinery.

MACHINERY.—The extent of this change in the industrial world is entirely beyond comprehension. The amount of power now being derived from steam, gas, and water in the United States, and used to do our work, is measured in millions of horse power. If we were deprived of its services, there are not enough adult male inhabitants on the earth today, if we could put them all at work in this country, to do what machinery is doing for us. By means of dynamos, copper wires, transformers, and motors, power is being transmitted everywhere. Labor saving machinery operated by this power, does a large and constantly increasing share in every field of industry. As a slight suggestion of its range we may mention the cotton gin, the spinning frame, the power loom, and the sewing machine in the making of clothing; the steamboat, the locomotive, the trolley car, the motor bicycle, and the automobile in transportation; the gang saw, the pile driver, the steam shovel, and the traveling crane in building; the magazine rifle, the machine gun, the submarine boat, and the battle ship in war. In the fields not yet fully covered, the introduction of labor saving devices is as rapid as ever; patents on labor saving inventions are being issued in the United States at the rate of 36,000 per year.

SPECIALIZATION.—The introduction of machinery led to the specialization of occupations. In former times work was varied, giving to each individual not only a considerable amount of bodily exercise but at the same time distributing it to all parts of the body. Now all work runs in narrow lines. This is illustrated in factories, where each operator is given some small part to do, and he is expected to do this as rapidly and as accurately as possible day after day. In the transportation systems in the large cities the same thing is seen. One man tends to the stoking machines that supply coal

to a line of furnaces; another oils the engines and sees that they run smoothly; as you enter the station one man sells you a ticket; another tells you what car to take; another watches you put your ticket in the box; another tells you when to get off; another turns the switch to stop and start the car. None of these require much more muscular force than teaching or preaching, and the work is specialized to even a higher degree than in the professions. Even in occupations where muscular work is demanded, the range of exercise is usually so small as to lead to deformity rather than to healthy development.

We still have a few occupations, like farming for men and house work for women, that afford a variety of good bodily exercise, but these occupations are shunned by the more intelligent classes, in spite of the fact that they pay well and are much less strenuous than they used to be. People flock to the occupations calling for shorter hours, less muscular exertion, and better clothing, leaving the work that is more healthful and invigorating to newly arrived foreign immigrants. The professions of law, medicine, engineering, and teaching are crowded, and thousands go into commercial lines as stenographers, clerks, bookkeepers, traveling salesmen, agents, promoters, and managers, where intense competition and slight bodily activity is the rule.

RECREATIONS.—The modern industrial system has not only reduced the amount of muscular work to be done, giving shorter hours for labor and hence more leisure, but it has at the same time greatly increased production, giving all classes of workers more money to spend in pleasure than in former times. In the choice of amusements the American people show the same inclination to avoid muscular exercise that they show in their work. They spend millions of dollars yearly on books, magazines, newspapers, and lectures; millions on festivals, concerts, parties, receptions, and banquets; millions to see exhibitions on the stage and on the ball field; millions for horses, carriages, autos, pleasure boats, and for rides on boats and trains; millions for decoration in dress, in the home, and in public buildings and grounds. Interest in active exercise and games centers in seeing others play them rather than in taking an active part in them.

EFFECTS OF EASE AND LUXURY.—Now the deliberate choice, under the circumstances, of amusements that do nothing for our physical development, is not what is to be expected of a people having the degree of intelligence that we pride ourselves upon possessing. When, a little while ago, the captains of industry consigned

the human body to the scrap heap, along with the flail, the spinning wheel, the street car horse, and other discarded implements of a by-gone age, it should have occurred to us, as students of evolution, that a body developed to its present type by ages of strenuous exertion might not thrive on idleness, and that intelligence, now all in all, might not thrive in this world without a fairly good body. Even if we had not reasoned so far, we have read history, and history tells us of many a nation that has conquered all of its neighbors by strength of arms, and then has been vanquished and exterminated by the softened environment of peaceful life. History tells us, in fact, that every race that has ever become civilized has degenerated and disappeared just as fast as the individuals reveled in luxury and became feeble in body.

But it is not necessary now to foresee what must occur, for it is already happening in plain sight. We have already become a nation of weaklings. To quote from Drummond, "Whereas, once all men were athletes, now we have to pay to see one." By the time that the average man of today is thirty-five years old, baseball and lawn tennis are too violent exercise for him; by the time he is forty-five, croquet and golf are rather severe. Not over one woman in four hundred ever rises to the physical level of lawn tennis of baseball, and few after twenty-five are equal to golf or croquet. Hundreds are so completely deprived of muscular exercise that they never rise above the convalescent stage of health, with an automobile ride as the limit of endurance.

DISEASE.—The weakness and lack of development that inevitably follow a sedentary life cause in turn a weakness of the great vital functions of the body: circulation, respiration, digestion nutrition, and excretion. This weakens all of the tissues of the body, making them less able to resist the attacks of disease germs. This is why grip, pneumonia, consumption, and appendicitis are holding their own in spite of greatly improved sanitary conditions. Apoplexy and heart failure are on the increase because of common lack of development. Nervous diseases, such as chorea, melancholia, hysteria, nervous prostration, and insanity are on the increase, and entirely new nervous diseases have recently made their appearance.

RACE SUICIDE.—There is a marked decrease in the number of children in the families of the more intelligent and well-to-do people of today. The census reports show that American born women have on an average only half as many children as foreign born women now living here. Besides the greater number of American women that never marry, there is a large percentage of families with

no children and a very high percentage with only one or two. The result is that in some sections the pioneer families are dying out. This condition of things has been attributed by some to the greater intelligence and higher ideals of the people, and by others to the narrow selfishness and scramble for wealth and for frivolous pleasures. In the last analysis the true cause is probably to be found in the great decrease in the bodily vigor of the American women. The bearing of normal healthy children requires and probably always will require considerable bodily strength and endurance. It is not surprising that intelligent American women, realizing the extent of their own bodily weakness, hesitate to assume the duties of motherhood, with all the risks that it involves.

POSSIBILITIES.—This is not from any inability to be strong. There are to be seen enough sturdy and vigorous Americans of both sexes to serve as examples of what we might all be. Our athletes, both amateur and professional, compare favorably with those of other countries and with those of former times, showing what the possibilities are. In the busy world we can find many examples of people whose deliberate purpose has been to make themselves equal, by their own habits of life, to the duties of American citizenship.

EDUCATION.—Civilization is justly proud of its achievements in sanitation, through which cholera, yellow fever, smallpox, the bubonic plague,—the diseases that thrive in the midst of filth,—have been banished, and the manner of this achievement might well be imitated in this case. By a campaign of education there was added to the moral code and to the social code the principle that *uncleanness is crime*; and wherever this code prevails the once dreaded plagues are unknown. Now we must by similar campaign of education, add to the moral code that *bodily weakness is crime*, because it leads to the downfall of society as surely as either filth or fraud. And it must be added to the social code too: for as long as a principle of conduct is merely a matter of morals many will shirk, but they all bestir themselves to get in line whenever it becomes a matter of etiquette. Just as soon as good physique becomes the fashion, and anyone with a weak body is ostracized by good society, just as it now ostracizes anyone with dirty clothes, the standard of national physique will begin to rise.

MEANS OF BODILY IMPROVEMENT.—There are at least three ways in which the physique of the American people may be improved. The first of these is the choice of more active and healthful occupations. In place of the rush to the cities and the choice of

occupations that are highly specialized and that involve little or no muscular exertion, there should be more intelligent recognition of the importance of the question as to whether an occupation is conducive to healthful living. Agriculture, one of the most healthful and useful of occupations, has lost its popularity in recent years, but its hardships are rapidly becoming less severe as conveniences in transportation and household work make progress, and there is taking place at present a tendency in the opposite direction. Looking in this direction, the department of agriculture of the United States government is trying to popularize the study and practice of scientific agriculture, with the object of encouraging a larger percentage of our people to live in the country. It is a part of the province of physical education to promote the choice of active and healthy occupations as well as to provide exercise for those who need it.

A second line of activities that is useful in improving the physique of the American people is that of active plays and games and outdoor recreations. Men and women are made or marred as often by their recreations as by their work. As a nation, we have the reputation of not knowing how to get real recreation. Great numbers choose vices as their only source of pleasure, not because they are naturally vicious but because of ignorance of better forms of amusement. We have an abundance of wholesome outdoor games and sports, and the reason more do not practice them is because they do not know how. They may have a spectator's knowledge of many games, but the skill that gives pleasure in the performance is lacking. As everyone knows, it is the skilled performer who enjoys an exercise most and who is most likely to practice it. Many of our best games are not highly pleasurable to the average person until he has acquired considerable skill in them. This skill is more easily gained during the periods of childhood and youth than afterwards, and the course in physical training is seriously lacking if it does not develop it.

Gymnastic exercises constitute the third group of agencies for the betterment of national physique. These exercises have the advantage of being at all times under the immediate and complete control of the teacher, who can vary the kind and quantity of exercise to suit the needs and interests of the pupils.

By *gymnastic exercises* are meant certain definite movements of the body that have been planned by some one to accomplish certain purposes, which may be the cure of disease, the correction of posture, the development of certain muscles, the acquiring of a

certain kind of skill, or simply pleasure. The point is that *gymnastic exercises* are definite exercises that must be done as defined, while *plays* do not necessarily involve the same movements every time.

Here are included the corrective and educational movements of school gymnastics, the various forms of military drill, the heavy apparatus work of the German Turners, and many other exercises managed and controlled in the same way. The exercises are usually taken by the whole class in unison, enabling the teacher to handle large numbers at once and to provide suitable exercise for more people in a small space than can be given in any other way.

THE PROBLEM

The teaching of gymnastic exercises involves the processes and problems common to all teaching, along with some others peculiar to its own field. As in teaching any subject, we must

- (1) give the pupils a clear idea of what they are to do,
- (2) get them to do it,
- (3) observe the quality and quantity of what they do,
- (4) give them such suggestions, criticisms, and other helps as will secure most rapid improvement, and
- (5) move forward as soon as they are prepared for it.

Besides the problems that these processes bring forth in all teaching, we have in teaching gymnastics special problems arising because

- (1) the exercises are not studied and practiced out of class, as in most subjects, making it harder to maintain interest and secure rapid advancement;
- (2) there is no immediate and visible product of the exercise that can be observed and criticised at leisure, as in mathematics, drawing, and other subjects where written work is required, making it necessary in gymnastics to do all observing and criticising on the spot as the work is being done;
- (3) the exercises are performed by the whole class in unison, making it necessary to use formal commands and to observe and criticise the work of all the pupils at once, instead of having a recitation from one pupil at a time, as is usual in other subjects;
- (4) advancement is not conditioned simply on having all the pupils get a clear idea, as in most school subjects, but this must be

followed by the perfecting of muscular coördinations, and in some cases by the development of muscular strength;

(5) the teacher of gymnastics must keep in mind and be guided by several hygienic principles to which little or no attention is paid in teaching other subjects.

SYSTEMS OF GYMNASTICS

During the last twenty years several systems of gymnastics have been on trial in schools and colleges, and of these the Swedish and the German systems have gradually forged to the front. Each of these two systems fills a place, the Swedish being most useful for correction of posture and the German more popular for all around development and training of the body. The Swedish includes a few exercises chosen with great care, while the German system includes an almost unlimited number of exercises; each exercise in Swedish is devised for a particular purpose, while this is not true of the exercises of the German system. In the Swedish gymnastics, apparatus is used sparingly and only so as to give certain physiological effects; in German gymnastics apparatus is used extensively to stimulate interest in exercise. The Swedes claim that their exercises can not be improved upon, and therefore any other exercise must be inferior; the Germans welcome the invention of new exercises, and believe in a wide range of gymnastic training rather than a narrow one.

SWEDISH GYMNASTICS—GENERAL PRINCIPLES

The Swedish system of gymnastics represents the most thorough attempt ever made to discover all of the bodily conditions common to school children and students that can be improved by exercise, and to devise a system of exercises to meet these conditions. The following principles are emphasized:

(1) The main object of gymnastics is to improve the conditions of the vital organs; strength of muscle is to be gained incidentally.

(2) Exercise should not begin or end suddenly, but should increase gradually to a climax and then gradually decrease.

(3) Exercises should be carefully graded, so that the easier exercises will lead up to and prepare for the more difficult ones.

(4) School life causes not only a general lack of vigor, but also gives rise to definite faults of posture and development, calling for definite corrective exercises.

(5) Exercises should be used only when they are known to produce good effects on the body; never because they are pretty or amusing.

(6) Gymnastics should be conducted by command rather than by having the teacher lead in the exercise or by having pupils memorize them.

GERMAN GYMNASTICS—GENERAL PRINCIPLES

The German system of gymnastics represents a national movement to popularize bodily exercises for educational and hygienic purposes and to make them universal. Unlike the Swedish system, the recreative effects of exercise are emphasized rather than the corrective effects; in the place of a few exercises selected with great care, the German system includes an almost endless number. The following principles are emphasized:

(1) Gymnastics should provide balanced development of the muscular system.

(2) To secure vigor of action and best effects, the exercises must be pleasing to the pupils.

(3) Each teacher should be prepared, by an extensive study of anatomy, physiology, and gymnastics, to make and execute his own lesson plans; no rigid form of lesson is advisable.

(4) The teacher must assume the pupils to be normal individuals; corrective and remedial gymnastics are in the province of the physician and the hospital, not of the teacher and the school.

The fact that the Swedish system uses fewer exercises than the German system and follows a more definite plan makes it a more suitable place to begin a study of how to teach gymnastics. For this reason we will study Swedish exercises and Swedish lessons first.

LESSON TWO

THE TEACHING OF CORRECT POSTURE

NORMAL POSTURE.—To understand the significance of posture one must bear in mind that the framework of the body consists of a great many separate bones, so joined as to admit of free movement, and poised upon a small base below. In the trunk we have an exceedingly flexible column of twenty-four vertebræ, separated by elastic discs, resting upon the pelvis; this in turn is poised upon the bones of the lower limbs. The base is so small that any deviation from a vertical position necessitates a deviation of another part in the opposite direction. In normal posture there is no deviation laterally, while in the antero-posterior direction the trunk shows three normal curves: one in the lumbar region that is concave at the back, one in the region of the chest that is convex at the back, and one in the region of the neck that is concave in the same direction.

HOW NORMAL POSTURE IS MAINTAINED.—The weight of the upper part of the body is constantly tending to deepen the normal curves and any others that may be present accidentally, so that normal posture must be maintained in constant opposition to the force of gravitation, and at the expense of a considerable amount of energy.

The first essential of good posture is evidently strong and correctly shaped bones. The disease of children commonly called rickets, in which the bones are weak, often leads to bad postures; certain diseases of the bones in later life have similar effects. Another essential of good posture is the complete set of ligaments which bind the system of bony discs into a movable but inseparable column. A broken ligament makes normal posture impossible as well as a broken bone; yet bones and ligaments avail nothing unless they are held in proper position by the contraction of the muscles. The elasticity of the muscles aids somewhat to hold the body erect, but it is their contraction under control of the nervous system upon which most depends. If this were not so, one fainting or falling asleep would not lose his erect posture.

ORIGIN OF THE NORMAL CURVES.—Every young child learns to stand erect as a voluntary movement, but in the usual way it soon becomes reflex by practice. While the child is creeping, the thighs are bent forward at a sharp angle with the trunk, and the spinal column presents one continuous curve from the head to the pelvis, except that when the head is held up the curve in the region of the neck takes the form that is to be normal. During the weeks and months that precede the erect position, the muscles and ligaments about the hip joints are growing and becoming more firm and strong, so that when the child first tries to straighten up on his feet, those on the front side of the hip do not yield readily, but hold the pelvic

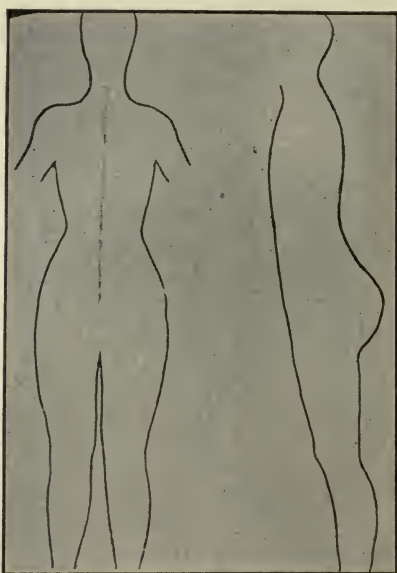


Fig. 1

Outline tracing of normal female figure

basin tilted forward. This necessitates the bending backward of the trunk in the erect position, giving rise to the normal curve in the lumbar region. The convex curve in the region of the chest is the original curve. The posture a child has when he first stands and walks is usually perfectly normal, but the amount of the lumbar curve is sometimes too great when the child has remained in the creeping stage too long, making it impossible for him to sufficiently extend the hip joints.

ROUND SHOULDERS.—This is the most common defect of posture caused by school life. It consists in part in a drooping forward of the head, increasing the curvature in the upper part of the chest. The shoulders are often drawn forward too, contracting the chest and rounding the back. The first part of the defect,—the drooping of the head,—is due to the weight of the head not being supported by the weak muscles, and to the habit of bending over a book or other work; the position of the shoulders is caused by the habit of



Fig. 2

Effect of posture of the spine on depth of chest

holding the arms forward and using them much in this position. This shortens the muscles on the front of the chest and stretches those on the back, pulling the shoulder blades forward.

The chief objection to round shoulders is its effect on the chest. Two groups of muscles, the scaleni and the sterno-mastoid, pass from the head and the vertebræ of the neck to the two upper ribs and the sternum, and normally act as supports for the chest, holding it up and thus giving it a large capacity. When the head droops forward these supports are without their upper point of vantage and allow the ribs to sink. The abnormal deepening of the curve of the

spine in the chest region also acts to depress the ribs. All this flattens the chest in front, lessening the range of the breathing movements and leaving some of the upper parts of the lungs unused. The other organs are crowded and their action hindered. General vitality is lessened and tendency to lung diseases is especially increased.

HOLLOW BACK.—This is an exaggeration of the lumbar curve of the spine. It is sometimes due to the pelvis tipping forward too far, probably the result of learning to stand too late, after the tissues at the front of the hip are too strong to admit of extending these joints. Sometimes the fault is due to weakness of the abdominal muscles; more often to the habits of allowing the hips to sway too far forward and the shoulders too far backward.

Hollow back causes the spinal column to have less supporting power than it should have, and often occasions pain in the small of the back. The pain is usually believed by the subject to be due to weak back muscles, but this is not the case; the weight of parts above is transmitted, not through the whole extent of each vertebra, but by a small margin at its posterior edge, causing excessive pressure and often pain. Hollow back also tends to cause round shoulders, because it puts the shoulders so far back that the head must be drooped forward to keep the balance.

LATERAL CURVATURE.—Lateral deviation of the spine also weakens it, and if the amount of curvature is great, it is apt to cause compression of the spinal nerves where they pass out at the sides of the vertebræ, causing pain, cramp, or paralysis of the parts to which the nerve goes.

Lateral curvature of the spine is often caused by the pelvis not being held at the same height on the two sides. The spine starts upward at right angles to the line joining the hip joints, and if these two joints are not at equal height there must be a curve convex toward the side of the lower hip. This may arise from inequality in the length of the lower limbs, or from the habit of standing on one foot with the opposite hip held up or dropped down or sitting on one foot. A lateral curvature may also result from habits of position due to occupation, as when the head is held to one side in writing the slanting style of penmanship, or when a weight is habitually carried in one hand or under one arm. Waiters in restaurants and women who carry babies often acquire lateral curvature from always carrying the weight on the same side.

GENERAL CAUSES: MUSCULAR WEAKNESS AND FATIGUE.—The prime factor in faulty posture, ever present and unavoidable, is the force of gravitation. It follows that anything that causes the muscles to be deficient in power and efficiency is an important factor in the causation of all kinds of bad postures.

Muscular weakness is evidently a serious evil in this connection. No one who lacks the strength of muscle to hold himself erect, can be expected to maintain good posture habitually. No one can stand

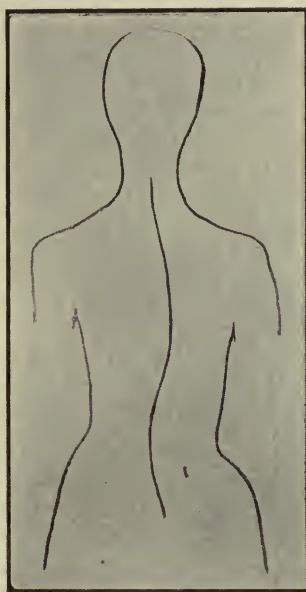


Fig. 3

Tracing of a girl who has an s-shaped lateral curve

erect for an indefinite time. It is a mere matter of time when the strongest will fall from complete fatigue. We all avoid such extreme fatigue by spending nearly one-half of our time in bed, where all the muscles can be relaxed, and by varying our positions while standing, sitting and walking, so as to rest some of the muscles while using others. The natural tendency to avoid the fatigue of holding one fixed position is one cause of the restlessness of children; they seldom acquire bad postures until we have taught them to stand and sit still. Such occupations as writing, sewing, reading, etc., are apt to cause bad postures, partly because the positions

assumed in them are bad, but still more because they bring on fatigue of the muscles that are used in holding good posture. The great problem of preventing bad postures is the problem of avoiding excessive fatigue of the supporting muscles.

GENERAL CAUSES: OCCUPATION.—Next to weakness and fatigue, occupation is the most important cause of bad postures. When muscles are habitually used in a certain position, they tend to grow into the form given to them in that position. For example, when one works most of the time with the head bent forward to look closely at something, the muscles on the back of the neck, as they are gradually renewed in the repair that accompanies and follows work, come to be longer than they formerly were; when the arms are used vigorously in a forward position, as in pushing a lawn mower, the muscles in front of the chest gradually grow shorter, unless they are also used in some other way to counteract the tendency. It is evident that these effects of occupation are much more marked in the young than with older persons, and at the same time the possibility of correction by gymnastic exercises is much greater during the earlier period.

THE THREE STAGES.—In the history of a case of bad posture resulting from occupation or habit there are three stages. In the first or transient stage, the posture is taken because circumstances favor it. For example, the pupil droops forward as he writes, and the clerk leans sidewise against the counter, but each leaves the position as he leaves the place and the occupation. He can stand well, and usually does so. In the second or habitual stage the position so often assumed seems to be natural and the correct one. The bad posture goes with him, and he feels unnatural if he stands erect. He has the muscular strength to straighten up, but he has forgotten how to do it; his muscular sense tells him he is straight when he is not. The effect of the posture is worse than before, simply because he holds it all the time instead of occasionally. In the third or permanent stage the muscles and perhaps the bones have adjusted themselves to the abnormal posture, and he lacks the strength to correct the defect, even when he is taught how.

REMEDIAL MEASURES: GENERAL.—In the first stage it is only necessary to see that no bad posture becomes habitual. This demands watchfulness on the part of the teacher, and caution given in time. To be taught the correct standing position is a great help here. In the habitual stage one must learn over again the correct posture he once learned as a child, and must practice it until it be-

comes habitual again. In the third stage the work of the second must be done, but it has to be preceded by a course of treatment including outside force to aid in the straightening; even then improvement is slow and complete recovery is doubtful.

Since muscular weakness plays such an important part in the causation of bad postures, the general development of the muscles that are used in maintaining normal posture must be of first importance. Swedish gymnastic exercises are intended to accomplish this purpose; other forms of exercise are also useful.

Among exercises that are especially good for all forms of bad posture are those where the weight of the body is suspended by the arms; here the tendency of the weight is to straighten rather than to increase the curvatures. The most valuable single exercise is the fundamental standing position of gymnastics. In teaching this exercise the individual faults of the pupils are pointed out and each is aided in the correction of his own; when one has learned this position he is much less apt to reach the habitual stage of any bad posture he may happen to assume, for he knows the correct position and is able to assume it at any time when he finds himself in a bad posture. Pupils should be tested individually, and given to understand that it is expected of them to know how to assume the correct fundamental position at any time; pupils unable to do so should be given individual help, outside of class hours if necessary. Often it is necessary to push the pupil into the correct position and then have him try to hold it for a short time; in this way he will gradually gain the strength and the coördination.

REMEDIAL MEASURES: SPECIAL.—If the cause of any particular defect is evident, it is of course best to try to have it removed; the posture will not yield promptly to treatment if the cause continues to act. For example, a lateral curvature caused by a short limb should first be treated by adding a lift to the shoe to equalize the length; but in lateral curvatures the causes and the special forms of treatment are so difficult to master that only a specialist should attempt more than general measures. With round shoulders and hollow back the case is simpler, and an intelligent teacher with a fair knowledge of Swedish gymnastics should be able to give effective help in the earlier stages. Here the Swedish system provides special corrective exercises: the Arch Flexions for round shoulders, and the Back and Abdominal exercises for the hollow back.

Often a lateral curvature in the habitual stage can be corrected by using an auxiliary or "Key-note" position. This is sometimes raising one arm upward, or taking a fallout. By trying all kinds of arm and foot positions, one can usually be found which gives the

spine a perfectly straight position. Now have the pupil take this "Key-note" position until it is well learned; then have him try to return to fundamental position while holding the spine in the straight line that the position enables him to get. Repeated practice of this kind is often successful in early stages in accomplishing a complete cure.

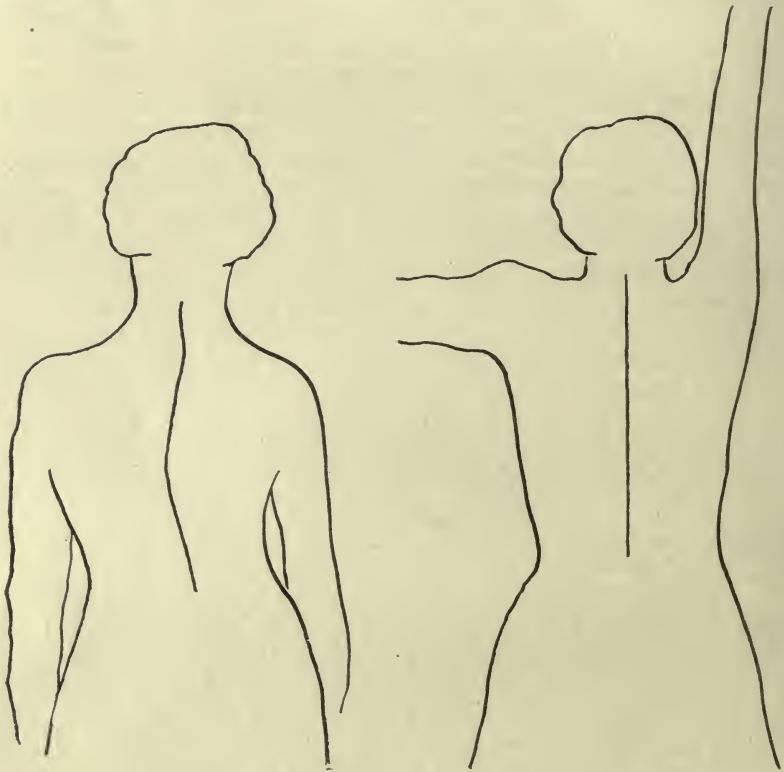


Fig. 4

Correction of a lateral curve by a suitable key-note position

SCHOOL ROOM METHODS.—In her book on "The Posture of School Children," which is the most complete and useful book on the subject yet published, Miss Bancroft recommends the following three tests to apply to pupils:

(1) Standing. Look at the pupils from the side and ask those to step aside or sit down who do not stand in normal posture. This is sometimes called "The window pole test," because a straight pole

held vertically beside the pupil aids a teacher who is not experienced to detect faults in this position.

(2) Have the pupils who have passed the standing test march for four or five minutes and as they do so pick out and eliminate those who do not maintain their good position while marching.

(3) Give the pupils who pass these two tests a few gymnastic exercises, including neck firm, arm raising forward upward, trunk incline forward, and head backward bend. Pupils who pass the triple test are considered normal in posture and are placed in a separate line or division of the class during all gymnastic work.

PRACTICAL WORK FOR THE STUDENT

1. Point out upon a normal subject and name the three normal curves of the spinal column, and point out as many of a class that will be provided as have these curves normal.

2. Is there any definite amount of curvature in these three regions that constitutes the normal curve? Point out cases in the class that have too great a lumbar curve; too slight a lumbar curve; too great a dorsal curve; too slight a cervical curve.

3. Show how Miss Bancroft's "window pole test" would be used to determine normal posture in doubtful cases, and select the members of the class who pass this test.

4. Explain and put in practice Miss Bancroft's marching test with the pupils who have been indicated as passing the standing test. Select all the pupils who pass this second test satisfactorily.

5. Apply to the pupils who are indicated as passing the marching test the gymnastic test, giving them neck firm, trunk forward incline, arm raising forward upward, and head bending backward. Select all who pass this test satisfactorily, and point out the faults of those who do not.

6. Look for cases of lateral curvature, and show the effect of a suitable "Key-note" position.

LESSON THREE

DEMONSTRATION

The first step in learning a new muscular movement is to get a clear idea of it. It is plain that the teacher who is to give this clear idea to the pupils must have a perfectly clear and accurate idea of it himself. There can be no true teaching without this; to go before a class and pretend to teach when one has no clear and vivid concept to present is the most unpardonable sin in all teaching. All attempts in courses like this to develop methods and principles of teaching are lost on people who do not know what they are to teach.

The process of making an exercise in gymnastics clear to a class may be called demonstration, using the word in the sense in which it is used in geometry. To make the most clear and vivid mental picture of anything it is necessary to appeal to the eye; that is, the exercise must be seen by the class. It follows that the teacher must not only have a clear idea of the exercise but he must be able to perform it accurately; everything depends on this. If clothing or some physical disability makes it impossible for the teacher to do this, a pupil who can take the exercise will answer, or even a chart showing pictures of it can be used.

While the exercise is being shown the essential things about it must be stated, to prevent the pupils from emphasizing non-essentials; just as the pupils need, when they explain their problems in mathematics, to point to the work on the blackboard, to direct the attention of their hearers to what they are saying, so the teacher needs to refer directly to the exercise while it is before their eyes. If it has a definite purpose, or a particular fault is common, it is well to mention it, as it may add to the clearness of the idea given to the class. The exercise usually needs to be shown from different points of view, and nothing should be neglected that will make plain what is to be done. The common language of conversation is to be used rather than the condensed form of definition used in books.

At the same time the teacher must avoid telling too much. Clearness demands simplicity. If an exercise has too many points about it to be readily grasped and remembered at one telling, it should be divided into parts if possible; if this is not feasible it is sometimes best to tell of the details in part only and have the pupils

try it, giving the minor details after the most important things have been fixed in mind. It requires some judgment to decide how much to say and how to say it; the tendency of the teacher is in general to talk too much, to fail to plan well enough what to say, and to say it in too indifferent a tone.

PRACTICAL WORK FOR THE STUDENT

1. Test your own ability to take the following gymnastic positions by practicing them before a mirror or under the observation of another student. As the descriptions are read, notice the commands, the purposes, and the common faults.

2. Plan definitely and in detail just how you would present each of these positions to a class of pupils to whom they are new. Apply the principles stated above so as to secure a clear and accurate mental picture in the minds of the pupils.

Recitation of this lesson will involve standing before the class and demonstrating one or more of the following positions, as an illustration of how the student thinks it should be done.

SIMPLE GYMNASTIC POSITIONS

I. FUNDAMENTAL POSITION. (Pos.) Fig. 5.

Command, *In position,—Stand!*

Heels together, or nearly so, toes turned out making an angle of from 30 to 60 degrees; entire body erect, inclined slightly forward from ankles; knees extended, hips drawn back, chest high, head erect, chin in; arms at the sides, wrists and fingers extended but not too stiff, palms resting against the sides of the thighs and held well back.

Return command, *In place,—Rest!* or *Class,—Rest!*

Move right foot one foot length to the rear and assume an easy posture without leaving floor position.

Purpose: To cultivate normal posture and to serve as a starting position for other exercises.

As a posture exercise, fundamental standing position aims to do three things:

- (a) To strengthen muscles used in holding good posture;
- (b) To stretch some tissues and contract others, so as to correct the effects of bad postures;



Fig. 5
Fundamental
standing
position

(c) To train the muscular sense and the proper nerve centers so that correct posture will be taken reflexly.

To criticise fundamental position effectively it must be viewed from two directions: From front or rear and from the side, the latter being more important. Viewed from front or rear there should be bilateral symmetry: weight equally divided between the feet, spinal column straight and vertical, and hips and shoulders at the same height on each side and equally distant from the spine on each side. Viewed from the side, the general line of the body should be straight from head to heel with inclination forward at such an angle as will bring the center of gravity of the body over the balls of the feet; the spinal column should exhibit the three normal curves: cervical, dorsal, and lumbar. The poise is tested by rising on the toes; if one has to sway forward or back before rising, the weight was not over the balls of the feet.

FAULTS: Seen from the side: (See Fig. 6.)

- (a) Weight poised too far back,
- (b) Hips and abdomen too far forward,
- (c) Head too far forward,
- (d) Arms and hands too far forward.

Seen from the front or rear:

- (a) Weight not evenly divided,
- (b) Uneven hips or shoulders,
- (c) Head held to one side.

The combined effect of the first group of faults is to flatten the chest and lessen the range of the breathing movements; at the same time the organs in the body cavity are crowded and their action hindered. The combined effects of the second group is to cause lateral curvature of the spine, which lessens its supporting power and in severe cases causes pressure upon the spinal nerves where they pass out from the spinal canal.

2. FUNDAMENTAL SITTING POSITION. (Sit.) Fig. 7.

Command, *In position on the bench* (or chair or school seat),
—*Sit!*

Pupils promptly seat themselves and at once assume erect position of the trunk as described for fundamental standing position.

At the command, *In place,—Rest!* an easy posture is assumed. Return command. *In position,—Stand!*

Purpose: To furnish a starting position for certain exercises that can be taken from it to a better advantage than from standing position.

Faults: The most common fault in this position is letting the pelvis tip back, taking out all the normal lumbar curve of the spine and giving what is called the "rocking chair" position. Letting head fall forward is also a common fault.

NOTE: the fundamental standing and sitting positions are used in two different ways:



Fig. 6
Faulty standing position



Fig. 7
Fundamental sitting position

(1) As corrective exercises. Here the purpose is to strengthen the muscles needed to hold erect posture and to stretch such ligaments, muscles, and other tissues as hinder the taking of erect posture. For this purpose the position must be taken vigorously and repeated many times with resting positions between. Such exercises are needed in the case of those pupils who have faults of posture so marked and so firmly rooted that they cannot take an erect position easily. Their appropriate place is in the corrective room with individual pupils and in a limited amount of home work for such pupils.

(2) As ideal positions to be practiced with the object of making them habitual. Here the fundamental position is taken with less force but held for a much longer time, which is gradually increased until position can be maintained through the entire class period.

Many teachers have used the first method with all classes, but there is a marked tendency at present to favor the second and to treat special cases needing corrective exercises out of class. Miss

Bancroft says that she is able to get much better results in this way, as shown by tests of 250,000 children in Brooklyn. It is claimed that the fatigue of taking the rigidly erect position, when followed as a routine with classes, tends to poor posture, and that the frequent taking of resting positions which are not criticised by the



Fig. 8
Hands on hips



Fig. 9
Stride sideward with
hands on neck

teacher also gives bad habits of standing and sitting. Instead of commanding position and rest at carefully planned intervals, the work of the teacher, in the new method of training, consists in watching the pupils individually, reminding those who get out of good position, and urging and encouraging them to maintain it.

3. HANDS ON HIPS. (Hf.)

Fig. 8. See also Figs. 15 and 21.
Command, *Hips,—Firm!*

The hands are placed firmly against the waist, just above the hips, palms on the crest of the hip bone, fingers forward; elbows drawn slightly backward; wrists straight or lower than the line of the hand or arm.

Return command, *Arms,—Down!*

Purpose: (a) To aid in holding the trunk firm; (b) to serve as a convenient position for the hands in exercises in which it is not advantageous to leave them hanging freely.

Faults: (a) Elbows too far forward; (b) wrists too high.

4. HANDS ON NECK. (Nf)

Fig. 9 and Fig. 22.

Command, *Neck,—Firm!*

Start as in flinging arms sideward, then flex elbows and bring finger tips together at the back of the neck, with head erect and elbows well back.

Return command, *Arms,—Down!*



Fig. 10.
Arms bend

Purpose: (a) To aid in chest expansion; (b) to cultivate good posture; (c) to increase the difficulty of other exercises.

Faults: (a) Arms brought up toward the front; (b) head moved forward; (c) elbows not held well back.

5. ARMS BEND. (A bd) Figs. 10 and 14.

Command, *Arms,—Bend!*

The forearms are raised sideward, flexing the elbows, which remain close to the sides as possible; the hands are half closed, raised over the shoulders and carried as far to the rear as possible.

Return command, *Arms,—Down!* or *Arms downward,—Stretch!*

In the latter case the elbows are raised slightly and then thrust downward with force.

Purpose: (a) To aid in chest expansion; (b) to serve as a starting point for arm stretchings; (c) to vary the difficulty of other exercises. This exercise aids in chest expansion only when the elbows are held down and the hands far to the rear at the same time.

Faults: (a) Elbows not held down with enough force; (b) hands not held back with enough force; (c) back hollowed.

6. ARMS FORWARD. (Af) Fig. 11.

Command, *Arms forward,—Raise!*

Arms raised slowly forward to horizontal position, parallel, elbows and wrists extended, palms toward each other.

Return command, *Arms,—Sink!*

Also taken quickly at the command, *Arms forward,—Fling!* and also at the command, *Arms forward,—Stretch!* The latter command is given while pupils have the arms bent, as in exercise 5.

Purpose: (a) Cultivation of posture; (b) to vary the difficulty of other exercises.

Faults: (a) Leaning back at the waist; (b) arms too high; (c) shoulders forward.



Fig. 11
Arms forward

7. ARMS SIDeward. (As) Fig. 12.

Command, *Arms sideward,—Raise!*

The arms are raised slowly sideward until they are horizontal, with elbows and wrists extended, palms turned downward, and arms held well back.

Return command, *Arms,—Sink!*

The commands *Fling* and *Stretch* are used in this exercise as in the preceding one, and with the same meaning, the latter command being given when the arms are bent.

Purpose: (a) Cultivation of posture; (b) chest expansion; (c) to vary the difficulty of other exercises. This exercise aids in chest expansion if the arms are held well back, but not otherwise.

Faults: (a) Arms are not at the correct height; (b) arms not held well back; (c) class facing in such a way that collisions of arms occur between pupils.



Fig. 12
Arms sideward



Fig. 13
Arms upward



Fig. 14
*Stride forward

8. ARMS UPWARD. (A u) Fig. 13.

Command, *Arms forward upward,—Raise!*

Beginning as in raising arms forward, the movement is continued up to a vertical position, with arms extended and palms toward each other.

* Do not infer from the fact that most of the pictures show two positions that the positions shown together must always be given together. They are combined here for economy of space, not to indicate a preference of combination.

Return command, *Arms forward downward,—Sink!*

The arms may also be raised sideward upward; in this case the palms are turned upward as the arms pass the horizontal position.

Purpose: (a) Cultivation of posture; (b) chest expansion; (c) to vary the difficulty of other exercises.

Faults: (a) Back hollowed; (b) head forward; (c) elbows not extended; (d) palms forward.

The commands *Fling* and *Stretch* are used here as in the preceding.

9. STRIDE SIDEWARD. (std s) Fig. 9.

Command, *Right (or 1) foot sideward,—Place!*

The foot is lifted, moved two foot lengths toward the side, and placed on the floor, with the line of the foot at the same angle as before, and the weight equally divided between the two feet.

Return command, *Foot,—Replace!*

This position is sometimes taken, in more advanced work, in two counts, moving the left foot on the first count and the right on the second count, each moving one foot length. The command is *Feet sideward,—Place!* Sometimes with children both feet are moved at the same time at the command, *Feet apart,—Jump!*

Purpose: To increase the stability of the standing position.

Faults: (a) Feet not far enough apart; (b) weight not equally divided; (c) one knee bent; (d) feet not at proper angle.

10. STRIDE FORWARD. (std f) Fig. 14.

Command, *Right (or 1) foot forward,—Place!*

The foot is lifted, moved two foot lengths to the front, and placed on the floor with the line of the foot at the same angle as before and the weight equally divided between the two feet.

Return command, *Foot,—Replace!*

The foot may also be placed backward in a similar manner and at a similar command.

Purpose: To vary the standing position and to increase its stability.

Faults: (a) Feet too close together; (b) weight not far enough forward; (c) toes not turned out at proper angle.

11. HEEL RAISING. (H rse) Fig. 15.

Command, *Heels,—Raise!*

Rise high on tiptoes.

Return command, *Heels,—Sink!*

Purpose: (a) To narrow the base of support, so as to give more difficulty in balancing; (b) to serve as a warming up exercise when taken rapidly in series; (c) to test the poise in fundamental standing position.

Faults: (a) Heels turned out; (b) hips thrown forward.



Fig. 15

Heel raising with hands on hips



Fig. 16

Leg raising

12. KNEE BENDING. (K bd) Fig. 17.

Command, *Knees,—Bend!*

The knees are slowly flexed until there is a right angle at the knee; the knees separate as they bend, moving diagonally forward in the direction of the lines of the feet; the heels are lifted a little during the movement, because of the limited movement possible in the ankle joints.

Return command, *Knees,—Stretch!*

Purpose: To cultivate posture and balance.

Faults: (a) Trunk tipped forward; (b) knees held close together.

13. LEG RAISING. (L rse) Fig. 16.

Command, *Right (left) leg sideward,—Raise!*

The foot is lifted and moved two foot lengths to the side, with knee and ankle extended and the trunk erect. The leg is also raised in a similar way forward, backward, and outward, at similar commands.

Purpose: To cultivate posture and balance.

Faults: (a) Trunk not held erect; (b) ankle not extended.

14. KNEE RAISING. (K rse) Fig. 18.

Command, *Right (left) knee upward,—Raise!*

The knee is raised to the level of the hip, hip and knee joints being flexed to a right angle; trunk erect; ankle of free foot extended.

Return command, *Knee downward,—Stretch!*

Purpose: To cultivate posture and balance.

Faults: (a) Trunk not held erect; (b) knee not as high as hip; (c) free foot not extended or too far back.



Fig. 17
Knee bending



Fig. 18
Knee raising



Fig. 19
Head backward

15. HEAD BACKWARD. (H b) Fig. 19.

Command, *Head Backward,—Bend!*

The head is held erect and moved backward as far as possible, and at the same time a deep breath is taken.

Return command, *Head,—Raise!*

Purpose: To correct round shoulders and to raise the chest. "Round shoulders" is a defect of posture that seriously affects the

health, because it flattens the chest and lessens the range of the breathing movements. Habitual flattening of the chest leaves many air cells without fresh air, a condition favorable to the growth of disease germs. (See Fig. 2.)

Faults: (a) Raising the chin too high; (b) bending the lower part of the spine, thus sacrificing the fundamental position. This may be avoided by having the beginners take the exercise at first while sitting in the school seat, where the back of the seat prevents the fault. See Fig. 38. (c) Failure to take a deep breath as the head is moved backward.



Fig. 20
Chest arching

16. CHEST ARCHING. (Ch arch) Fig. 20.

Command, *Chest Arching*,—*One! Two!*

Like the preceding but more extended, the backward bend beginning in the neck and extending down into the region of the chest. A deep breath, as before.

Purpose: Same as the preceding.

Faults: (a) The bend extends too low, so as to hollow the back.

LESSON FOUR

COMMANDS

When gymnastic exercises are taught to pupils individually, it is not necessary to give commands, any more than to pupils who are being sent to the blackboard or to those who are called on to recite. Commands are needed when exercises are to be performed by classes in unison. There is a feeling abroad that commands are something imposed upon pupils in an objectionable way, ordering them about and treating them as menials. As a matter of fact, a command is in these respects just like the other directions given by the teacher in conducting the work of the school. The command is simply a direction of what to do coupled with a signal telling when it is to be done.

Class work in gymnastics should be done in unison for several reasons.

(1) For the sake of appearance. Exercises done out of unison give an appearance of confusion and disorder that not only looks bad to spectators but reacts badly on pupils and teacher. There is a feeling of system and unity produced by work in exact unison that is worth having.

(2) What is probably more important, gymnastics must be taken in unison so that the teacher can observe the work of the class and give the assistance needed. When the exercises are taken in exact unison it is possible for an experienced teacher to see at once who is doing the work correctly, who is wrong, and what is the fault, but the least defect in the unison will always attract the teacher's attention from the movements themselves, thus hiding what should be seen.

The wording and speaking of commands must therefore be such as will secure exact unison in the work of the class.

A typical command consists of two parts:

(1) an explanatory part, which should give all necessary information of what is to be done;

(2) an executive part, or signal for action, which tells when to do it.

The typical form of the explanatory part is the imperative form of sentence, which begins with the verb; as, *Raise arms forward; swing bells sidewise; place right foot backward; march forward; face about.* The wording is as if the command was addressed to one individual; as, *bend head backward (not heads); swing right foot sidewise (not feet); twist trunk to right (not trunks).*

The executive part of the command is formed in either of two ways:

(1) the verb is taken from its place at the beginning of the explanatory part and used as the signal for action; as, *arms forward,—raise! bells sidewise,—swing! right foot backward,—place! forward,—march! etc., or*

(2) the explanatory part is left in its regular form, with the verb leading, and the numbers, *one, two,* etc., are used as the executive. As, *raise arms sidewise,—one! lower them to sides,—two! swing bells forward,—one! swing them downward,—two! face about in two counts,—one! two!*

There are some familiar exceptions to these rules for wording commands; as, *hips,—firm! right shoulder,—arms!* Such exceptions work no inconvenience in case of exercises that everyone knows, and especially in systems where there are but few commands in all; but in school gymnastics, where exercises are many, it is a big advantage, both to teachers and pupils, to have commands worded according to some uniform plan. The guiding principle must in every case be the need of clearness; the command must leave no doubt whatever as to *what* is to be done, *how* it is to be done, and *when* it is to be done.

The speaking of commands is just as important as their wording; the popular feeling against commands has arisen largely because some pompous persons speak them in such a domineering manner. The explanatory part of the command should be spoken plainly, so that all in the class can hear, at about the speed of common conversation, and should close with a falling inflection. The falling inflection is an aid to clearness, because it indicates that the explanatory part of the command is completed; as, *Hips firm and right foot forward! *

Following the explanatory part should come a pause, long enough for the pupils to think over and fully comprehend all that has been said. Few beginning teachers appreciate the importance of this or realize how long it requires. Failure to give a sufficient pause

results in two serious faults in the class work for which of course the pupils are not responsible:

(1) a part of the class is not ready to act when the executive part is given, and consequently the work is not in unison.

(2) slow pupils get in the habit of watching pupils in front of them, imitating their movements, and paying no attention to commands. The length of pause that is necessary varies both with the complexity of the exercise and with the quickness with which it should be done. Slight lack of unison is not conspicuous and hence not troublesome in slow exercises, such as heel raising, leg raising, and some other movements, while in quick movements like foot placing, arm flinging, etc., it is very important that all the pupils start the exercise at the same instant; a long pause is therefore much more necessary in the latter.

The executive word should be spoken in a vigorous and animated tone, not necessarily louder than the preceding part, and should end with a slightly rising inflection. This rising inflection helps the voice to be heard plainly and gives a pleasant and encouraging effect, while the mental effect of the falling inflection in this case is not good. Any teacher who habitually finishes commands with the falling inflection will get the reputation of being cross and arbitrary; in fact, it sounds that way to one who hears it. *Arms sideward, \—Raise! /*

The tone of voice in which commands are spoken is important. It is not easy to explain distinctions here, but it is easy to notice them; one who speaks as if interested, enthusiastic, and confident, will impress the pupils as having those qualities; an indifferent, monotonous, or cross tone affects the class seriously. Teachers are apt to drop to an indifferent tone on the command for returning from an exercise, as they think of the next exercise and begin to plan it before they finish the preceding one; it is as important to return in good form as to take the exercise in good form. An indifferent tone should be used only in the commands for resting and dismissal; it is of course absurd to command, "*Class,—Rest!*" with the same vim and enthusiasm that is used commanding a jump or run.

PRACTICAL WORK FOR THE STUDENT.

1. Practice Speaking, with suitable tone, inflection, and pause, the direct and return commands for the following exercises, using the numbers as the executive part:

(a) Arm raising forward, (b) arm flinging sideward, (c) arm raising forward upward, (d) arm bending, (e) head bending back-

ward, (*f*) trunk bending downward, (*g*) heel raising, (*h*) knee bending, (*i*) fundamental standing position, (*j*) fundamental sitting position.

2. Repeat the same, using the verb as the executive word.

3. In what kind of exercises is it necessary to use the word "right" or "left" in the command? If "right" is used, should "left" be given later? Why? Are there exceptions?

Speak the commands for the following, using first the numbers and then the verbs as executive words:

(*a*) Leg raising sideward, (*b*) foot placing forward, (*c*) trunk bending sideward, (*d*) fallout outward, (*e*) knee raising, (*f*) trunk twisting, (*g*) hands on hips, (*h*) stride sideward, (*i*) trunk incline forward, (*j*) deep breathing.

4. In commands for combined exercises, like "*Hips firm and right knee upward,—Raise!*" what about the pause that is usually made after the word "*Hips?*" Why not make it here? How should it be spoken?

Speak the commands for the following combinations:

(*a*) Hands on neck and stride sideward, (*b*) raise arms forward and knee bending, (*c*) arm bending and leg raising sideward, (*d*) arm flinging forward upward and fallout forward, (*e*) hands on hips and stride forward, (*f*) arm flinging sideward and stride backward, (*g*) arm raising forward and heel raising, (*h*) arm bending and trunk twisting.

NOTE:—In wording these commands we may either use the numbers as executive words and leave the explanation in the imperative form, or move the verb of the second command to the end as an executive, as illustrated in 4 above.

5. Continue the practice in demonstration begun in lesson two, using the following gymnastic positions. These positions are a little more complex, requiring somewhat more care in preparation.

In the recitation, those seated may be asked to make written criticism of the work, covering the following points:

- (*a*) The standing position of the teacher.
- (*b*) Accuracy of demonstration.
- (*c*) Judgment as to number of times position is shown and from what points of view.
- (*d*) Clearness of language.
- (*e*) Economy of time.

17. TRUNK FORWARD. (Tr f) Fig. 21

Taken only from stride position sideward.

Command, *Trunk forward,—Incline!*

The trunk is inclined forward, the movement taking place in the hip joints only, as far as the hips can be flexed; normal curves of spine are maintained, and head, shoulders, and trunk held in the same relative positions as in fundamental position.



Fig. 21

Trunk forward with hands on hips



Fig. 22

Trunk downward with hands on neck

Return command, *Trunk upward,—Stretch*, or *Trunk,—Raise!*

Purpose: To cultivate the correct posture of the spine and develop and train the muscles of the back, which are the ones chiefly involved.

Faults: Hips not completely flexed; normal posture of the spine lost.

Starting the movement from stride sideward enables one to bend farther than from fundamental position.

18. TRUNK DOWNWARD. (Tr d) Fig. 22.

Command, *Trunk downward,—Bend!*

Given while the pupils have trunk forward; may also be given while the pupils are in stride sideward with trunk erect. The trunk is bent further downward by relaxing the muscles in the small of the back. The relative positions of the head, shoulders, and chest are kept as in fundamental position.

Return command, *Trunk upward,—Stretch!* or *Trunk,—Raise!*

Purpose: Same as for trunk forward.

Faults: Failure to maintain the normal position of the head and shoulders.

19. TRUNK SIDWARD. (Tr s) Fig. 23.

Command, *Trunk to right* (or *l*),—*Bend!*

The trunk bends directly to the side, as far as possible, with the relative positions of the head and shoulders unchanged.

Return command, *Trunk upward*,—*Stretch!* or *Trunk*,—*Raise!*

Purpose: (a) To cultivate flexibility of the spine; (b) to strengthen the muscles used in maintaining the normal position of the spine; (c) to stimulate the internal organs by variations of pressure.

Faults: (a) Trunk twisted; (b) head not in normal position; (c) one knee partly flexed; (d) leaning backward.



Fig. 23

Trunk sideward



Fig. 24

Trunk twisting with hands on hips

20. TRUNK TWIST. (Tr tw) Fig. 24.

Command, *Trunk to right* (or *l*),—*Twist!*

Trunk twisting on vertical axis, not twisting the head or hips.

Return command, *Trunk forward*,—*Twist!*

Purpose: Same as for side bend.

Faults: Twisting legs and hips, and twisting head.

21. FALLOUT FORWARD. (fal f) Fig. 25.

Command, *Right* (or *l*) *forward*,—*Fallout!*

The foot is lifted and placed forward three foot lengths, toes turned out at the same angle as in fundamental position, heels on the floor; forward knee bent until it is vertically over the toe; trunk and rear limb in straight line from head to heel; face and shoulders squarely to the front. The body should remain straight and fall forward as the foot is lifted.

Return command, *Foot*,—*Replace!*



Fig. 25

Fallout forward

In returning to position the body remains straight as before, and is brought to the vertical position by a spring made by suddenly extending the ankle and the knee.

22. FALLOUT SIDWARD. (fal s) Fig. 26.

Command, *Right (or l) sideward,—Fallout!*

This fallout is taken like the other except that the foot is moved sideward and the body is inclined sideward in the same direction, while the face and shoulders remain turned to the front.



Fig. 26
Fallout sideward



Fig. 27
Fallout outward

23. FALLOUT OUTWARD. (fal o) Fig. 27.

This fallout is defined like the others except as to the direction; the foot is placed diagonally, midway between forward and sideward. Face and shoulders are turned to the front,—not in the direction of the foot.

Purpose: (a) To cultivate the muscular sense and the ability to coördinate good posture; this is accomplished by the practice it gives in holding the trunk in its correct form while it is out of vertical position; (b) to serve as a starting point for certain exercises; (c) to serve as warming up exercises when taken rapidly in series.

Faults: In criticising fallout positions the teacher should observe them from all directions and should keep in mind all of the points specified in the definitions, as all of these points are apt to be wrong, and all are important. In the outward fallout, which is much the most difficult of the three to take, there is a special tendency to turn the face and shoulders toward the foot, instead of keeping toward the front, thus making it merely a forward fallout with a turn of 45 degrees.



Fig. 28
Leaning position

24. LEANING POSITION. (1n) Fig. 28.

Command, *In leaning position with hands on desk,—One! Two!*

The command is given while the pupils are standing between the desks and the movement is executed in two parts: at the command *One!* the hands are placed on the desks, and at the command *Two!* the feet are placed backward, bringing the body to the position shown in Figure 28, with the weight resting on the arms and the body straight from head to heels.

Return command, *In position,—Stand!* The feet are placed forward and the hands are immediately removed from the desks. The return may be commanded and executed in two parts if the teacher prefers.

Purpose: To exercise the abdominal muscles and to cultivate posture.

Faults: Body not kept straight.

25. HANGING POSITION. (hg) Fig. 29.

Command, *Hands over head,—Grasp! Feet,—Raise!*

With the hands grasping some bar, ladder, or other support overhead, the feet are raised from the floor so that the weight is borne by the arms. The pupils may, in some cases, jump and catch the bar; sometimes they may climb up the wall ladder; and sometimes they stand on a bench and this is removed when the feet are raised; then the feet can hang freely.

Return command, *In position,—Stand!*

Purpose: To aid in chest expansion; (*b*) to serve as a starting point for other exercises, especially abdominal exercises.

26. LEANING HANG POSITION. (ln hg) Fig. 30.

Command, *Backward,—Lean!*

Given while class stand close to a wall ladder or other object of support, with hands grasping bar and elbows completely flexed. When the class is close to the wall ladder and facing it the command may be, *Hands on round at height of eyes,—Place! Feet on lower round,—Place! Arms,—Stretch!*

At the command *Stretch* the arms are extended and the body leans backward as far as the arms will permit; body remains straight as in fundamental position.

Return command, *In position,—Stand!*



Fig. 29
Hanging position



Fig. 30
Leaning hang

Purpose: (a) To exercise back muscles; (b) to cultivate posture.

Faults: Body not held straight.

27. INCLINE BACKWARD. (inc b) Fig. 31 and Fig. 32.

Command, *Backward,—Incline!*

Given while pupils are in stride forward, sitting position with foot support, or in half kneeling or kneeling position. When taken

from sitting, half kneeling, or kneeling position the trunk inclines slowly backward, all the normal curves of the spine remaining unchanged. When taken from the stride position the rear knee is bent and the entire body leans backward, with body straight from head to the forward foot.

Return command, *Trunk,—Raise!*

Purpose: (a) To cultivate normal posture; (b) to develop the abdominal muscles.



Fig. 31
Incline backward



Fig. 32
Incline backward
while sitting

Faults: (a) Head drooped forward; (b) back hollowed; (c) trying to incline too far, causing faulty position and strain. When taken from sitting position, the feet must be supported to prevent falling backward.

LESSON FIVE

OBSERVATION AND CRITICISM

It rarely happens that one is able to perform a wholly new exercise accurately the first time, no matter how clear a demonstration of it has been made. The process by which one learns a new exercise is called coördination. It involves control of the muscles in new combinations and a training of the muscular sense,—the sense by which we get direct knowledge of the position of our joints and of the force with which our muscles are contracting. We try to make the new movement several times, and gradually gain in accuracy by recognizing our faults and correcting them.

By practicing many times we may acquire the ability of taking the exercise correctly without directing our attention to it. The movement is then said to be reflex. The learning of a new and simple movement is seen therefore to include three stages: (*a*) getting a clear mental picture, (*b*) perfecting the coördination, and (*c*) making it reflex.

Success in perfecting the coördination depends largely on how promptly and clearly the pupil recognizes his mistakes as he tries to take the exercise. Since he can see his own positions to only a slight extent, he will learn much faster if some one can tell or show him how far his attempts are successful and to what extent they are faulty. This stage of teaching, therefore, requires of the teacher two things:

1. Observation of the class as the exercise is taken, with the object of discovering where the movement is accurate and where it is inaccurate. This is probably the most difficult of all the duties of the teacher of physical training. Before he can do this successfully he must not only have a very clear concept of what the exercise should be, and such a mastery of the commands that he can give undivided attention to the work of the pupils, but his eye must be trained to observe exercises and detect mistakes quickly.

It is an aid to the teacher here to keep the most common faults in mind; for this purpose the faults that are most common are given in the text along with the definitions of the exercises.

The custom of leading the class in the exercises, which is habitually followed by some teachers of gymnastics, is inevitably fatal

to the best results in this stage of the teaching because it takes the attention of both the teacher and the pupils away from what all should be watching, viz: the work the *pupils* are doing. The mental picture should be made so clear and vivid by a good demonstration that this continuous leading is unnecessary.

Some exercises can best be observed from the front, some from the rear, and some from the side. This makes it necessary for the teacher to move about among the pupils as the work goes on. The common custom of sitting before a class causes teachers to feel that they should always stand or sit in front of a class to give commands, but this is not at all necessary. It is well to have the class face in all four directions during the lesson, since it prevents pupils from forming the habit of imitating those in front of them, and also places all near the teacher a part of the time when new exercises are shown.

2. Criticism of the work of the pupils.

The object here is to give the pupils the benefit of what the teacher has learned in observing their work. The attitude of the teacher in making these criticisms should be one of encouragement and enthusiastic helpfulness. The word "criticism" does not mean fault finding, but the giving of a true estimate of the degree of success the pupils have reached in their attempts to do the work. A class can be kept wide awake and interested by keeping them informed all of the time of the progress they are making. Faults of course must be noticed, but as the work improves the class should be told of it and especially good work commended.

Criticism of faults in an exercise should be specific, stating exactly what is the matter in the clearest possible way. An objective showing of the fault in contrast with the right way of doing it is often the clearest and the quickest way.

The first faults to be criticised are naturally those that are general; they should be mentioned in a general remark to the whole class. Individual mistakes require help for each pupil, which can usually be given by word but sometimes best by direct assistance with the hand. The latter is especially true of posture of the trunk. As a general principle it is well to give more individual criticisms to older pupils and more general criticisms to younger children, since children sometimes misinterpret the personal attention.

Each position should be observed and criticised quickly while the pupils are holding it; then return to fundamental position and repeat, observing and criticising again; this is done enough times to secure accurate performance.

PRACTICAL WORK FOR THE STUDENT.

This lesson and most of those following cannot be prepared by study of the book alone. Students should work together in groups of two or three, so that one can act as teacher and all gain the experience received by trying to teach.

With one or two pupils to take the positions, command the gymnastic positions described in lesson three and observe and criticise the work. Observe especially the following points:

(a) Fundamental position. This is the most important of all exercises taken for posture and every teacher should be particular at all times to demand and secure accurate performance of it. Have in mind where the teacher should stand to observe this position and make it a point to be there and to see if the common faults are present. Train the eye to see at a glance whether the line of the body, as viewed from the side, is straight and inclined forward at the proper angle from the ankles. Watch this position every time it is given in connection with other positions so unflinchingly that your class will learn to expect prompt criticism of carelessness and therefore become habitually accurate in taking it.

(b) Response to commands. Is it prompt? It should be. Is the position taken in exact unison by the class? It should be. If not, is the fault in the manner of command or due to carelessness of pupils? Find out and apply the proper remedy.

(c) Form, or accuracy of movement. Who made mistakes? What are the faults? Teach the erring one how to do better. Was the fundamental position sacrificed in taking the position? This is the most common and serious of faults and must be detected by the teacher at once.

(d) Return to fundamental position after the exercise. Was it prompt and accurate? If not, was the command at fault, or a bad habit of the pupil? Make the command perfect and see.

In place of the usual recitation the class will be divided into squads of 4-6 and the practice of the students in preparation for the class hour will be continued, with opportunity for suggestion and criticism of the methods of preparation they use.

LESSON SIX

OBSERVATION AND CRITICISM—CONTINUED

PRACTICAL WORK FOR THE STUDENT

Continue the work of the preceding lesson by using the gymnastic positions given in lesson four and also the following. In the class hour students will recite by showing how well they can conduct a class of six or eight in the exercises of the lesson, observing and criticising on the points given in the last lesson. Those not teaching nor acting as gymnastic class will write criticisms of what they see on the following points:

- (a) Standing position of the teacher.
- (b) Demonstration. Accurate? Clear?
- (c) Commands. Correctly worded? Interest shown in the tone of command? Inflections? Pause suitable?
- (d) Faults corrected and faults not corrected.
- (e) Manner of criticism. Prompt? Definite? Clear?
- (f) The teacher's ideal. High grade of work required? Too easily satisfied? Too hard to suit?

A FEW GYMNASTIC MOVEMENTS

I. ARM CIRCUMDUCTION. (A cmd).

Command, *Arm circumduction*,—*One! Two!*

At the command, *One!* the arms are raised forward upward as in the exercise 8 on page 26; at the command, *Two!* they sink sideward, downward, turning palms down as the arms pass the horizontal.

Purpose: Chest expansion.

2. ARM PARTING. (A pt).

Command, *Arm parting*,—*One! Two!*

This command is given only when the arms have been raised forward or upward; at the command, *One!* they are quickly separated to the position of arms sideward; at the command, *Two!* they return to the starting position.

3. ARM ROTATION. (A ro)

Command, *Arm rotation*,—*One! Two!*

This command is given when the arms are sideward; at the command, *One!* the palms are quickly turned upward; at the command, *Two!* they return.

4. ARM STRETCHINGS. (A str)

Command, *Arm stretching sideward*,—*One! Two!* At the command, *One!* the arms are bent, as in Figure 10 on page 24; at the command, *Two!* they are quickly extended sideward, finishing as in Figure 12 on page 26. The return movement is made at the command *Arm stretching downward*,—*One! Two!* This is executed in a similar manner, finishing in fundamental position.

Arm stretchings are also taken forward and upward.

When pupils have become accustomed to the movements we may command *Arms sideward*,—*Stretch!* from fundamental position, and the two counts are executed in rhythm.

5. BREATHING. (br)

Command, *Deep breathing*,—*One! Two!*

A deep breath is inhaled at the command, *One!* and exhaled at the command, *Two!*

6. CHANGE OF FEET. (ch F)

Command, *Change of Feet*,—*One! Two!*

This command is given only when one foot has been moved away from its position beside the other, as in stride positions and fallouts. At the command, *One!* the foot that has been moved away is brought back to position and at the command, *Two!* the other one is placed in a similar position. Later we may command, *Feet*,—*Change!* and the pupils execute the two counts in even rhythm, listening to the sound made by the foot to help them keep in unison.

7. CLOSING AND OPENING FEET. (F cl) (F op)

Commands, *Feet*,—*Close! Feet*,—*Open!* or *Feet*,—*Out!*

At the first of these commands the toes are turned in so that the inner margins of the feet touch; at the second command they are turned out to the usual angle.

8. SWING OF FOOT. (sw F)

Command, *Free foot forward,—Swing!*

This command is given only when one leg is raised, and the command may be to swing it forward, sideward, outward, or backward. Swing of the free foot is also used in hopping exercises, the foot being swung as the hop is taken.

9. KNEE STRETCHINGS. (K str)

Command, *R knee sideward,—Stretch!*

This command is given only when the knee is raised as in Figure 18. At the command the limb is quickly extended to the position of Figure 16. The knee can also be stretched forward, backward, or outward to the positions mentioned in exercise 13.

10. PREPARATION FOR JUMPING. (pr jp)

Command, *Preparation for jumping, with counting,—Start!*

The following four movements are taken in even rhythm: (1) raise heels—(2) bend knees—(3) stretch knees—(4) heels sink. The third count is taken as if to jump, but the toes do not leave the floor.

LESSON SEVEN

COMPLEX EXERCISES

We have dealt thus far with the simplest exercises, but many exercises are composed of two or more parts which are taken either in quick succession or all at once, and involve more details. Such exercises require something more than a demonstration to fit the class to take them correctly, and the most effective plan of teaching is to develop such exercises in several stages, leading up to an understanding of them that enables the class to execute them at a single command.

The general plan, to be varied in special cases, is as follows:

1. Demonstrate the complete exercise, if it can be done. This gives pupils a general idea of what they have to learn.
2. Command the separate parts in their proper order, using the usual form of commands and correcting all mistakes.
3. Command these parts in the same order, using the numbers, *One! Two! Three!* etc., as the commands of execution and omitting the explanatory command. This tests the knowledge of the class as to the order of the parts and gives further practice and opportunity for criticism. All mistakes should be seen and corrected here.
4. Give command for entire movement, adding to the explanatory part the words "*With counting,*" the class counting to aid in keeping the same rhythm.
5. Counting should be omitted as soon as pupils can keep the rhythm without it. The amount of time to be spent in any one of these stages of development depends of course on the difficulty of the exercise and the age and advancement of the class, but it rarely is of advantage to omit one stage entirely.

PRACTICAL WORK FOR THE STUDENT.

1. Apply the above plan to the teaching of the following three, which are typical of a large number of the more complex gymnastic exercises:

HALF KNEELING. ($\frac{1}{2}$ kn) Fig. 33.

Command, *On the right (or left) knee,—Kneel!*

Executed in three counts, as follows: (1) Place the right foot backward; (2) Bend knees until right knee rests on the floor; (3) Place the left foot forward to bring the knee to a right angle. (Figure 33 shows count 2.)

Return command, *In position,—Stand!*

The three parts of the exercises are reversed.



Fig. 33
Half kneeling



Fig. 34
Kneeling

KNEELING. (kn) Fig. 34.

Command, *On both knees,—Kneel!*

This is also executed in three counts, the first two being the same as the preceding; the third count of this movement consists in placing the forward knee on the floor beside the other.

Return command, *In position,—Stand!* In three counts, as in the preceding exercise.

JUMPING EXERCISES. (jp u) (jp f) (jp s) (jp turn 90°).

Command, *Jumping upward, with counting,—Start!*

This exercise consists of six counts, as follows:

Raise heels—bend knees—spring upward—alight on toes with knees bent—straighten knees—lower heels. Some teachers prefer three counts, taking 1 and 2 together, 3 and 4 together, and 5 and 6 together.

Common faults in jumping are (1) alighting with knees straight and thus striking the floor too hard, jarring the whole body, and (2) bending trunk forward on alighting. Accurate form is especially important in jumping.

Upward jumping may be done with a turn of 90, 180, 270, or even 360 degrees, the turn being made while in the air, the words, "*with a turn of 90 degrees to right (or left)*" being included in the command.

The jump may be taken forward or sideward instead of directly upward without changing the form of the exercise, changing a single word in the command. Turns can also be made in these jumps. When the jump is forward it can be taken with a running start, inserting into the command the words "*with one (or more) running step, starting with left foot (or right)*." Here the form of the exercise is changed. There are five counts with one step, as follows:

Place foot forward and bend knees ready to spring—jump forward—alight with feet together—straighten knees—lower heels. With each added step one count is added. To get the benefit of the running start there must be no pause after the first count, the jump being taken at once. The turn can also be made with the running jumps, but the turn is most easily made toward the foot from which the jump is taken.

2. Plan how you would teach the following gymnastic tactics. Be ready to state just how you would proceed in teaching each one of them to beginners. Consider in each case the following points:

(a) Is the exercise better taught as a unit, like the simple gymnastic positions and movements, or should it be analyzed and taught in parts like the complex exercises of this lesson?

(b) If the latter, how would you divide it and how teach the parts and the entire movement?

GYMNASTIC TACTICS

I. ALIGNMENT FORWARD. (A1 f) Fig. 35.

Command, *Forward,—Dress!*

This command is given only when the pupils are standing in line, one behind another. The front pupil of the line stands fast in position as a guide for the positions of the others; all the others

measure the distance by raising the arms forward and moving up until just able to touch the one next in front; at the same time the line is straightened. Pupils stand in this position until the return command, *Arms,—Down!*

By placing one pupil in front of the class to represent a guide, the teacher can demonstrate the manner of measuring distance, as it is to be done by the pupils.



Fig. 35
Alignment forward

2. ALIGNMENT SIDEWARD. (Als) Fig. 36.

Command, *Right,—Dress!*

This command is given only when the pupils are standing in one or more lines, side by side. The pupil at the right end of the line is the guide; he stands still when the command is given, with eyes to the front.

All including the guide place left hand on hip; all the others in the line turn head and eyes to the right and move up until right arm touches the left elbow of the one next on the right; at the same time the line is straightened. When there is more than one line the second line is about 30 inches behind the first; those in the second do the same as those in the front line excepting that they do not measure the distance by touching arm to elbow, but each stands directly behind the corresponding one in front; the guide of the rear line measures distance as for alignment forward.

Return command, *Eyes,—Front!*

At the return command all turn eyes to the front and drop the hand to the side, in fundamental position.

By placing a pupil in front of the class to represent a guide, the teacher can demonstrate the manner of measuring distance; by placing two pupils in position for a front line and one for the guide of the rear line, the manner of getting position in the rear line can be demonstrated.

Each pupil should take his place in line as quickly as possible. Pupils may be spaced farther apart by having them extend left arm sideward instead of placing hand on hip. The command is, *Full arm distance,—Right Dress!*

3. FACING TO THE RIGHT. (r fc)

Command, *To the right,—Face!*

The exercise is in two parts: (1) lift the right toe and the left heel and pivot to the right 90 degrees on the right heel by a whirl of the body and the push of the left toe; (2) lift the left foot and place it beside the right, bringing it in from the side with an accent, which is given by a stroke of the ball of the foot on the floor, made by extending the ankle, the knee being kept straight.

4. FACING ABOUT. (ab fc)

Command, *About,—Face!*

This is exactly like the right face except that a turn of 180 degrees is made in the first part.

5. FACING TO THE LEFT. (l fc)

Command, *To the left,—Face!*

Turn to the left, pivoting on the left and pushing with the right toe.



Fig. 36
Alignment sideward

6. NUMBERING. (num)

Command, *Count twos* (or fours),—*Start!*

This command is given only when the pupils are standing in line side by side. At the command, *count twos*, each pupil turns head slightly to the right, except the guide, who keeps eyes to the front; at the command, *Start!* the guide says, "*One,*" then the pupil at his left turns his head quickly to the front and says, "*Two,*" the next similarly says, "*Three,*" and so on until all have numbered. When the class is in two lines, the teacher instructs those in the rear line either to count in unison with the front line or to listen and get the number from the pupil in front as he calls it. The counting should be done in a clear tone, but not necessarily a loud one.

7. MARCHING STEPS. (1 stp f) (2 stp b)

Command, *One* (or two or three) *step forward* (or b),—*March!*

The number of steps commanded are taken as in marching, beginning in all cases with the left foot and bringing in the foot beside the other in similar rhythm to complete the movement. It follows that one step will occupy two counts, two steps three counts, etc. The last count is accented as in facings.

8. SIDE STEPS. (1 s stp r)

Command, *One side step to right* (or left),—*March!*

The movement occupies two counts: the foot is placed to the side as in stride sideward on the first count, and the other foot is brought up beside it on the second. We may command two side steps, but the second step is only a repetition of the first.

9. OPENING AND CLOSING RANKS. (op rk) (cl rk)

Command, *Open ranks*,—*March!*

This command is given only when the class is in two lines, as in diagram (a); the lines separate by taking two steps away from each other, giving position (b). When the pupils are facing the end of the class, the steps are necessarily side steps; when one line is behind the other, the front rank step forward and the rear rank backward.

Return command, *Close ranks*,—*Mach!*

(a)

I 2 I 2 I 2 I 2 I 2 I 2
I 2 I 2 I 2 I 2 I 2 I 2

(b)

I 2 I 2 I 2 I 2 I 2 I 2
I 2 I 2 I 2 I 2 I 2 I 2

10. OPENING AND CLOSING SPACES. (op sp) (cl sp)

Command, *Open spaces,—March!*

This command is given only when ranks are open or there is only one line, and must be preceded by numbering. The numbers one take one step in one direction and the numbers two take one step in the opposite direction. When the pupils face the end of the line steps are necessarily side steps; when they stand side by side in the line the steps are necessarily forward and backward. It is customary to have the numbers one take the step forward or to the right and the numbers two to the left or back. This brings the class to the position shown in the following diagram:

```

  I I I I I I
    2 2 2 2 2 2
  I I I I I I
    2 2 2 2 2 2

```

Return command, *Close spaces,—March!*

When taken directly after opening spaces, this movement is the reverse of the former; but since other exercises are usually taken in the open order, and the class may be facing in another direction when the time comes to close the spaces, it is best to think of returning to the line without regard to the numbers or the way the spaces were opened. For this reason we teach pupils to go by the number and its corresponding direction in opening spaces, but to ignore these and go in such direction as to close up in the reverse movement.

11. OPENING AND CLOSING ORDER. (op ord) (cl ord)

Command, *Open order,—March!*

This exercise is simply a combination of the last two, meaning to open the ranks and then to immediately open the spaces, in even rhythm.

Return command, *Close order,—March!*

NOTE:—Opening and closing order are often troublesome to pupils and sometimes to teachers, usually because they do not fully comprehend how simple the movements really are. The class should be able to open or close order correctly at any time, no matter which way they are facing or how many facings have been taken. The following questions, if clearly thought out, should make the matter easy:

(a) What are the four distinct movements involved in opening and closing order? (See 9 and 10 above.)

(b) In which one of these four movements does the pupil need to think of his number? (He should pay no attention to his number in the other three. This is the key to the situation.)

(c) What should the pupil think of to tell him which way to go in opening and closing ranks? When he has done it once, why not take the same steps whenever he has it to do again?

(d) What should the pupil think of to tell him which way to go in closing spaces? Why not simply remember to reverse the move made in opening spaces?

12. MARCHING. (mch)

Command, *Class forward,—March!* or *Forward, quick time,—March!*

At the explanatory command the weight of the body is poised far forward; at the command,—*march!* pupils start promptly forward, beginning with the left foot, keeping even rhythm and all in unison, with trunk erect (not stiff) and arms hanging easily at the sides. For quick time 120 steps to the minute is the usual rate.

At the command, *Class,—Halt!* one more step is taken and the rear foot is placed beside the other on the next count, with an accent as in facing. Because of the momentum of the body and its inclination forward in marching it is almost impossible to stop instantly, which is the reason for the extra step after the command, "*Halt!*" To make the command, "*Class*" of any value as a warning signal it must be spoken on the step immediately preceding the word, *Halt!* instead of leaving a considerable pause between as we need to do in most commands. When it is desired to march slowly the command is *Forward, slow time,—March!*



Fig. 37
Marking time

13. MARKING TIME. (mt) Fig. 37.

Command, *Mark time,—March!*

This exercise is similar to marching and begins like it with the left foot; the feet are raised directly upward by bending the hip and knee joints, keeping even

rhythm and exact unison without advancing. *Class,—Halt!* is commanded and executed as in marching.

Faults: Rocking sidewise alternately as the foot is lifted.

14. RUNNING. (run)

Command, *Running forward, March!* or *Forward, double time,—March!*

At the command *forward* the weight is thrown on the right foot and the arms are bent at about a right angle, with the hands half closed and the elbows held slightly back; at the command,—*March!* the left foot is swung forward with the knee slightly bent and the weight thrown upon it by a spring from the right foot; then the right foot executes the same movement and it is continued in even rhythm, with the arms swinging easily at the sides of the chest.

At the command, *Class,—Halt!* three steps are taken to give time to check the momentum of the body, and the foot is brought in on the fourth count. If it is desired to change to marching time without stopping the command, *Quick time,—March!* or *Slow time,—March!*

15. HOPPING EXERCISES. (hop)

Command, *Hopping on left (or r.) foot with free foot forward (or s or h),—Start!*

At the explanatory command raise the free foot in the direction given; at the command, *Start!* spring upward from the stationary foot and repeat in even rhythm, alighting each time on the same foot. At the command, *Class,—Halt!* stop the movement and bring the free foot beside the other on the next count. The number of hopping may be varied by hopping two, four, or a larger number of times on one foot and then changing to the other; the free foot may be swung in rhythm to the hopping; appropriate commands must be given.

16. SKIPPING. (skip)

Command, *Skipping forward,—Start!*

Skipping consists in moving rapidly forward by hopping twice on one foot and twice on the other in succession, taking a full step in distance each time. Start with the left foot and stop as in running.

17. MARCHING TO THE REAR. (mch rr)

Command, *To the rear,—March!*

This is usually given while the pupils are marching, but may be given first from standing position to acquire the coördination.

At the command, *March!* which is given just as the right foot strikes the floor, (1) take one step with the left foot, placing it directly in front of the right foot; (2) lift the heels, with both feet on the floor, and turn 180 degrees toward the right on the balls of the feet; (3) step forward with the left foot and continue marching in the opposite direction.

This is the first example of a command that must be spoken at a given time, and so requires special attention and practice by the teacher. The command, "*To the rear*" should be spoken rapidly just as the left foot strikes the floor, the three words all in the time of the one step; the word, "*March*" is then spoken in unison with the stroke of the right foot. Advanced classes may be taught to take the movement at a command with a long pause, but beginners do best as stated above.

To teach the exercise it should be developed in the manner previously used for complex exercises, starting from the standing position.

Marching to right (mch r) and to left (mch l) are commanded in a similar manner. The execution differs in the following points: In marching to the right the foot is placed outward instead of in front of the other on the first count, and the turn is 90 degrees; marching to the left is commanded in the same way but two steps are taken, bringing the right foot forward; then the turn can be made to the left.

LESSON EIGHT

THE USE OF GYMNASTIC TACTICS

Gymnastic tactics are exercises for arranging pupils in order and for moving classes in an orderly manner from place to place. Some of them are complex and most of them must be taken very quickly. It follows that commands require special care here. The exact manner in which each command should be given is stated in the descriptions, which are given in the preceding lesson.

PRACTICAL WORK FOR THE STUDENT

Make the best possible preparation for handling the entire class in the different exercises called tactics. (Page 49.)

In the class hour each student will have opportunity to show ability to conduct the class, with criticism and suggestions on the following points:

(a) Promptness of execution and accuracy of rhythm and unison. The whole class should start and stop each movement exactly together. If they do not do so, is it the fault of the teacher in giving commands or of the pupils?

(b) Accuracy of movement. How secured? How and when are faults to be criticised?

(c) Management, so as to avoid confusion and meet emergencies. What possible sources of trouble? How avoid each?

LESSON NINE

NOTATION OF GYMNASTIC EXERCISES

Teachers need to use written symbols to represent the exercises. It saves time and space to abbreviate the names of the positions. In abbreviating these names the following principles are followed:

1. The common custom of closing each abbreviation with a period is not observed.
2. As far as possible without causing any confusion, the initial letter of an exercise or a direction is the abbreviation for the full name; for example, F for feet, s for sideward, u for upward, etc.
3. Capitals are used for designating the parts of the body, and small letters in other cases. This distinguishes F, feet, from f, forward; B, the back, from b, backward, etc.
4. Where exercises have the same initial, we secure clearness by using enough other letters. Examples, std for stride, str for stretch, ch for change, cmd for circumduction, etc.
5. It is not necessary to write down things that are always to be done, such as fundamental position, return commands, and right and left when the exercise needs to be taken on each side.

PRACTICAL WORK FOR THE STUDENT

Notice how the above principles are employed in the abbreviations for the exercises we have used, and which are summarized below. Gain familiarity with them so as to be able to give the command for any one of them when the abbreviation is written.

SUMMARY OF THE GYMNASTIC POSITIONS

Position of	{	Hands	{	On Hips (Hf)
			{	On Neck (Nf)
		Arms	{	Bend (A bd)
			{	Forward (A f)
			{	Sideward (A s)
			{	Upward (A u)

Position of	Legs	{	Stride Forward (std f)	
			Stride Sideward (std s)	
	Head	{	Heel Raising (H rse)	
			Knee Bending (K bd)	
	Trunk	{	Leg Raising (L rse)	
Knee Raising (K rse)				
Backward (H b)				
Entire Body	{	Chest Arching (Ch arch)		
		Forward (Tr f)		
		Downward (Tr d)		
		Sideward (Tr s)		
	{	Twist (Tr tw)		
		Fundamental Standing Position (pos)		
		Fundamental Sitting Position (sit)		
		Fallout	{	Forward (fal f)
			Sideward (fal s)	
			Outward (fal o)	
		Incline Backward (incl b)		
Leaning Position (ln)				
Hanging Position (hg)				
Leaning Hang (ln hg)				

SUMMARY OF GYMNASTIC MOVEMENTS

ARM	{	Circumduction (A cmd)
		Parting (A pt)
		Rotation (A ro)
		Stretching (A str)
CHANGE OF SWING OF	{	Breathing (br)
		Feet (F ch)
CLOSING } OF	{	Foot (sw F)
		Feet (F cl and op)
JUMPING	{	Stretching of Knee (K str)
		Preparation for jumping (prep jp)
		Half Kneeling ($\frac{1}{2}$ kn)
		Kneeling (kn)
		Upward (jp u)
	{	Forward (jp f)
		Sideward (jp s)

SUMMARY OF GYMNASTIC TACTICS

ALIGNMENT	{	Forward (Al f)
		Sideward (Al s)
FACING	{	To Right (r f c)
		About (ab fc)
	{	To Left (l fc)
		Numbering (num)
		March Steps (1 step f) 2 steps b)
		Side Steps (1 s step)
OPENING AND CLOSING	{	Ranks (op rks) (cl rks)
		Spaces (op sp) (cl sp)
		Order (op ord) (cl ord)
		Marching (mch)
		Running (run)
		Hopping Exercises (hop)
		Skipping (skip)
		Marching to the Rear (mch rr)

COMBINATIONS OF GYMNASTIC MOVEMENTS

Gymnastic movements are often combined, with the object of saving time and of varying the difficulty of the movements or their effect upon the body. An illustration of this has been given under commands. The following are ways in which they are combined:

1. One gymnastic position used as a preliminary position for taking another; as when trunk bending is done from a stride position or when arm circumduction is practiced while trunk is bent. In writing such combinations of exercises it is customary to write the preliminary position first, follow this by a comma, and then write the movement to be taken in that position; the above mentioned exercises would be written: std s, Tr bd f. Tr bd b, A cmd.

The preliminary position should be one that has been previously learned, and is usually taken for the sake of the other position; the latter, being new, is usually practiced several times. A period is used to separate independent exercises, and is not used excepting at the close of an exercise that is entirely independent of the one that follows it.

2. Two or more movements executed at the same time, as when we take neck firm and stride position at once, or arm flinging upward while jumping. Only bendings and twistings of head and trunk are not combined in this way. In writing combinations of this kind the

abbreviations for the movements to be combined are written in succession with no marks of punctuation between them; the exercises mentioned above are written: Nf std s. jp u A fl u.

In speaking the commands for combinations of this kind it is necessary to avoid any pause until the whole explanatory command is given, and then to make a pause much longer than usual before giving the signal for action. The reason is apparent. The commands for the two exercises just written are: *Neck firm and right foot side-ward,—Place! Hands and foot,—Replace! Jump upward and fling arms forward upward,—Start!* In each case the word "and" must be spoken so soon after the preceding as to make the class understand that the first part is not to be taken alone, and the tone and inflection should indicate the same thing. Teachers should practice speaking such commands until they acquire the correct manner of speaking them.

3. Two or more movements taken in succession, usually in even rhythm; as when facings are followed by marching steps, or arm bending by arm stretching. Here the commands are spoken just as when the movements are to be taken together, and the same care has to be taken in speaking them. In writing such exercises, a dash is used to separate the different movements; for example, r fc—I step f. A bd—A str f. H rse—K bd—K str—H sk.

4. Exercises repeated in regular rhythm, after the manner in which the steps are repeated in marching and running. Exercises repeated in this way are said to be done "In series;" they are printed in italics in the book and are underscored if in handwriting, as:

A rse s. A bd. A str u.

The command for series work is the usual explanatory command for the exercise, followed by the phrase, *In series,—Start!* When the exercise gives rise to a sound in even rhythm, as in marching, this sound helps the class to keep in unison; when such a sound is lacking, the class should be commanded to count in unison with the movements, to aid in keeping together, unless musical accompaniment is provided. Command, *In series with counting,—Start!*

The use of punctuation marks to indicate the way exercises are to be taken may be summarized as follows:

Period: Indicates the close of an exercise. Exercises separated by a period are independent of each other; the first is completed and fundamental position is taken before taking the second.

Comma: Separates a preliminary position from the movement to be taken in that position; the exercise before the comma is commanded first, and the second is commanded while the first is being held.

Dash: Movements separated by a dash are commanded together and taken in succession in even rhythm.

PRACTICAL WORK FOR THE STUDENT

1. Try arm parting in series with a class and find out whether pupils are aided most in keeping exact unison by having counting done by the pupils or by the teacher. Which plan should be followed as a rule? What exercises can be done in exact unison without counting?

2. Study the exercises in the lessons given on pages 90 and 91 so as to be able to give the direct and return commands for each. If necessary, consult the list of abbreviations in this lesson or the alphabetical list at the end of the book.

3. Practice conducting a class in the following: (a) *Nf H rse.* (b) *A f. K bd.* (c) *A f std f, A pt F ch.* (d) *A cmd std f.* (e) *std s, A fl s H rse.*

LESSON TEN

THE SWEDISH DAY'S ORDER

The Swedish Day's Order is a standard form of lesson followed by teachers of Swedish gymnastics and designed to guide the teacher in the selection of exercises. It puts into practice the principles of the Swedish system stated in lesson 1 (page 9) and uses the exercises we have been studying. The exercises are divided into eleven groups, each of which is given to accomplish a certain definite purpose. The names of these groups are shown in the following chart:

The Day's Order	Preparatory	I.—Order Movements.
		II.—Leg Movements.
	Body of Lesson	III.—Arch Flexions.
IV.—Heave Movements.		
V.—Balance Movements.		
VI.—Back Exercises.		
VII.—Abdominal Exercises.		
VIII.—Lateral Trunk Movements.		
Quieting	IX.—The Climax; Running, Jumping and Games.	
	X.—Slow Leg Movements.	
	XI.—Breathing Exercises.	

The Day's Order is intended for use in the school room, where the pupils go directly from various school occupations to gymnastics, and go back at once to their other tasks when the gymnastic lesson is finished; this explains some of its peculiar features. The first two groups merely prepare the pupils for the main body of the lesson, and the last two prepare them to resume their mental work to best advantage. The different groups will now be described.

GROUP I: ORDER MOVEMENTS

Pupils going directly to gymnastic practice from other school activities are not apt to be in the best possible mental condition for entering into it promptly. These exercises aim to attract the attention of the pupils from what they have been doing and to turn it

toward muscular control. To be good for this purpose, exercises must be quick, with a definite start and finish, so that the teacher can require accuracy of both form and rhythm; they should be given by command, since exercises in series soon become reflex and so permit the attention to wander; coming at the beginning of the lesson, they should require but little muscular effort. Facings, simple arm and foot positions, and opening order, are good examples of Order Movements. Since attention is especially required in learning new exercises, we may reasonably call any new movement an Order Movement while it is being learned, unless it plainly falls in some other group of the Day's Order.

GROUP II: LEG MOVEMENTS

These exercises are intended to give the general effect known as "warming up," which includes a slight rise in the temperature of the body, moderate increase in the heart action and breathing, and the sending of more blood to the muscles. The heat that causes the warming up arises from the chemical action that takes place in the muscles during exercise. Since we wish a large amount of this chemical change without much fatigue, we choose exercises that employ the largest muscles in the body rather than the smaller ones. Marching, heel raising, running, and other movements where the lower limbs lift the entire body make the best movements for this group.

It is found as a matter of experience that exercises given by separate commands are too slow to serve well for the present purpose, and so leg movements are always given in series when it is possible.

GROUP III: ARCH FLEXIONS

These are backward bendings of the neck and upper portion of the spinal column, taken with the object of correcting round shoulders. This fault of posture, so common among school children and students, always flattens the upper part of the chest and lessens the range of the breathing movements, and so diminishes the capacity of the lungs. The alarming prevalence of fatal lung diseases, like pneumonia and consumption, points to the importance of keeping the chest in good condition. By the practice of arch flexions, the muscles supporting the chest are developed, and also those that hold the spinal column erect; the tissues across the front of the chest and shoulders are stretched at the same time, making it gradually easier for the person to hold the normal posture and to breathe deeply.

GROUP IV: HEAVE MOVEMENTS

Heave movements are movements of the arms that help to expand the chest. The typical heave movements, sometimes called "the true heave movements," are those in which the body is suspended by the arms as in climbing, swinging on rings, etc. Large muscles passing from the chest to the upper arm are used in these movements, exerting an upward pull on the ribs and thus enlarging the chest and making it more pliable. Since these "suspension" ex-



Fig. 38
Head backward
while sitting



Fig. 39
Walking the beam

ercises are too severe for some pupils, and as the necessary apparatus is not always provided, milder arm movements having a similar effect are used. Arm raising, arm stretching, neck firm, etc., are examples.

GROUP V: BALANCE MOVEMENTS

These are for general improvement of posture and cultivation of ability to maintain the balance under difficulties. The exercises are mainly standing positions that give an unstable poise, held for a much longer time than positions taken for other purposes; marching on a narrow beam or wire and taking other exercises on them are also used. (Fig 39.)

GROUP VI: BACK EXERCISES

In order to cultivate control of the posture of the trunk and to develop and train the back muscles to hold the trunk properly, we use positions in which the trunk inclines so as to throw the weight of the upper part of the body on the back muscles. This is accomplished when we incline the trunk forward while supported from below, as in fallout forward or trunk forward, or when we incline it backward while it is supported at both extremities, as in leaning hang.

GROUP VII: ABDOMINAL EXERCISES

The purpose of abdominal exercises is to cultivate the ability to maintain good posture of the trunk, to strengthen the abdominal muscles, and to stimulate the digestive organs. The trunk is held in normal position in all of these exercises, which aids in promoting good postures; every strong contraction of the abdominal muscles presses upon the stomach, liver and other organs in the abdominal cavity, and thus stimulates their activity directly, and also indirectly by the influence of the alternations of pressure on the circulation of blood in them. Occupations of civilized life provide exercise for the abdominal muscles less than for any other important group, and the resulting weakness of these muscles leads to bad posture, displacement of the internal organs, and disease.

GROUP VIII: LATERAL TRUNK EXERCISES

These are movements in which we bend the trunk laterally, twist it, or incline it sideward, for the purpose of increasing the mobility of the spinal column, improving the posture of the trunk, and stimulating the abdominal organs.

GROUP IX: RUNNING AND JUMPING

Here is the climax of the lesson. The work should be the strongest and most difficult of all. Games, when the space permits, are useful; running, jumping, and the more vigorous fancy steps are the exercises most used. Grade pupils often suffer from lack of exercise of this kind, which they thoroughly enjoy but which teachers are apt to neglect because it leads to some disorder and noise. When the time given to gymnastics is short and the work done in the grade room, it is often best to attempt little more than posture work in Swedish gymnastics, and plan to provide the more vigorous exercises at other times in the form of plays and games.

GROUP X: SLOW LEG MOVEMENTS .

When a true climax has been reached and the pupils are considerably warmed up, it is necessary to choose exercises that will serve as a gradual descent from the preceding group, so as to avoid the undesirable effects of stopping too suddenly. The exercises usually chosen are like those of group two, but gradually decreasing in vigor. Marching is the most satisfactory exercise of this group.

GROUP XI: BREATHING EXERCISES

The object here is to continue the quieting effects of the tenth group and at the same time to improve the development and control of the breathing muscles and increase the mobility of the chest. Slow and deep inhaling and exhaling of the breath are used as the exercises. It was formerly customary to take arm movements with the breathing, on the supposition that they aid in chest expansion, but it has been found out that the deepest breathing can be done with the arms hanging easily at the sides.

NOTE:—Teachers differ somewhat as to the naming and arranging of these groups of movements. Groups 3 and 4 are often called “head” and “arm” movements, and group 9 is sometimes named “precipitant exercises.”

PRACTICAL WORK FOR THE STUDENT

Classify all the Swedish exercises we have had thus far into the eleven groups of the Day's Order. Refer to the summary in lesson eight or to the exercises described in the lessons preceding. Have the classified lists ready to read in class, for comparison and discussion. Keep the corrected list.

LESSON ELEVEN

PROGRESSION IN SWEDISH GYMNASTICS

By progression we mean the order or sequence in which exercises are arranged for teaching. In most school subjects this is a very simple matter, usually already arranged in the text-book, and determined by two simple psychological principles: that we should take things up in logical order and proceed from simple to complex. There is usually a single unbroken sequence from the beginning of the subject to its end, and to divide it into lessons we have only to take as far as we wish and then begin where we leave off and go on again, the progression in each day's lesson being simply a part of the logical sequence of the subject.

Progression in gymnastics is a more complex matter, because we have here to consider physiological as well as psychological principles. To correspond to the psychological law of logical sequence we have the law of physiological sequence illustrated by the Day's Order, which must be followed strictly in every lesson if the best effects sought by the Swedish system are to be secured; to correspond to the psychological law "From simple to complex" we have the law "From Mild to more Vigorous" which must be followed if strength is to be increased. To facilitate learning the exercises we must follow the laws of psychological progression as much as possible, but when these conflict with the laws of physiological progression the former must give way. A series of lessons in Swedish gymnastics does not correspond, as one might think, to any single subject of study, but to a whole curriculum of eleven distinct subjects, each with its own purposes and different laws of progression.

We have already considered the laws of progression within the lesson; we must now consider the laws of progression from lesson to lesson. It is evident that we must have here a separate plan of progression to work out for each group, rather than one general plan for the lesson as a whole, and that the laws of progression will differ as the purposes differ.

PROGRESSION IN ORDER MOVEMENTS

Order movements are intended to produce mental rather than physical effects and are all so mild that the degree of vigor need not be taken into account; the proper sequence of these exercises is therefore to be determined by the rules of "logical order" and "simple to complex." The progression arranged in this way often have to be modified to a slight extent because conditions where the exercises are given make it advisable to teach certain exercises before their natural time. To move the class to a vacant room or hall in the building and to arrange the pupils in positions for taking the exercises without colliding with one another, necessarily require some exercises of this kind, and when this must be done the order movements needed must be shifted from their natural order to the first of the list. Fundamental standing and sitting positions, although much more complex than some other exercises of the group, are usually given early in the list because of their importance.

PRACTICAL WORK FOR THE STUDENT

1. Write out a list of 12 different order movements consisting of a combination of a facing and a step, as in r fc—2 stp f. (Command, *Face to right and two steps forward,—March!*) 36 such combinations are possible.

2. Write out a list of 12 combinations of three parts, such as r fc—1 stp f—r fc, or 1 stpf—r fc—1 stp f. (Command for the former, *Face to the right—one step forward—and then face to the right,—Face!*) Nearly 200 such combinations are possible.

3. Take the list of order movements made in the preceding lesson, add to this list the two-part and three-part combinations just made, and arrange the whole list in progressive order, going from the simplest to the most complex.

4. Modify the list thus arranged in order by shifting to the front any exercises that should come first in case of a fifth grade class that goes from the school room to a gymnasium in the same building and where there are floor marks to show standing positions for pupils.

5. Be sure you can conduct a class readily in the practice of any of these exercises.

PROGRESSIVE LIST OF ORDER MOVEMENTS

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- Etc.

LESSON TWELVE

PROGRESSION IN SWEDISH GYMNASTICS—CONTINUED

GROUPS 2 AND 3

Warming up exercises should progress from the milder to the more vigorous for two reasons: experience shows that people unused to exercise become warmed up with milder work than those who are more used to it; by beginning with the milder exercises and increasing the vigor gradually there is less danger of injuring the weaker ones.

In deciding which of two exercises will warm one up most rapidly, we can judge by the distance the body is lifted in each movement, since the amount of exertion and of chemical change is nearly proportional to the height through which the pupil lifts his body. The speed of the exercise and the number of times that it is repeated also are important, but these are managed by the teacher in conducting the work rather than in the selection of the exercises, which alone concerns us now. Exercises about alike in vigor should be arranged by the law of "simple to complex."

PRACTICAL WORK FOR THE STUDENT

1. Make a list of all the different foot positions that are suitable as preliminary positions for heel raising, knee bending, and preparation for the jump. Are they the same for each of the three?
2. Make a list of all the arm positions that are suitable to combine with these foot positions in making preliminary positions for the three leg movements just mentioned.
3. Make a list of all the arm movements that are suitable to take in combination with the three leg movements just mentioned, as in A rse s H rse. How use arm movements with pr jp?
4. Make a combination of change of feet with the above leg movements so as to make a good series exercise for warming up. Select suitable arm and foot positions to go with them.
5. Add the exercises just arranged (under 1, 2, 3, and 4) to the list of leg movements selected in lesson nine, and arrange the

entire list in progressive order according to the principles stated above.

6. Go over this list again and make sure that you can conduct a class readily in any of them that may be assigned.

Arch flexions are backward bendings of the upper part of the spinal column, made without bending the lower part. By a progressive series of arch flexions we aim to teach the pupils first how to perform this movement accurately and then to gradually increase its vigor, so as to strengthen and train the muscles used in holding head and shoulders erect. We should make it as easy as possible for the beginner to perform the movement, then gradually remove the helps and add new difficulties, so as to perfect his power of control. When we introduce chest arching, calling for more strength and skill than any arch flexion the pupil has had, we again aid him by making conditions favorable, gradually removing the aids again as he acquires ability to do the work alone.

The best aid one can give a pupil learning arch flexions is a support at the most prominent point at the back of the chest, to help him avoid bending the lower spine. The very best support for this purpose is that given by the back of a good chair or school seat. (See Fig. 38.) When arch flexions are taken in standing position the foot position helping most is stride forward. Among arm positions, hips firm is a help to the pupil while neck firm adds to his difficulties.

PRACTICAL WORK FOR THE STUDENT

1. Make a list of all the arm positions suitable for combining with arch flexions, and arrange them in progressive order.
2. Make a list of all the foot positions suitable for preliminary positions for arch flexions, and arrange them in progressive order.
3. Which is more difficult, to use an arm position as a preliminary to the arch flexion, or to practice the arm movement several times while holding the arch flexion? Arm positions are used both ways, but foot movements are not.
4. Arrange the entire list of arch flexions, including those with support, in progressive order.
5. Be sure you can conduct a class readily in the practice of any of the arch flexions, including criticism of common faults.

PROGRESSIVE LIST OF LEG MOVEMENTS

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

Etc.

PROGRESSIVE LIST OF ARCH FLEXIONS

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- Etc.

LESSON THIRTEEN

PROGRESSION IN SWEDISH GYMNASTICS—CONTINUED

GROUPS 4, 5, AND 6

The simple arm movements that are used for heave movements in elementary gymnastics are generally placed in the order of the force required to take them correctly. Hips firm as an order movement rather than a heave movement; arms forward is classed as a heave movement, although a very mild one, because it involves training in the position of the shoulder blades; Arms sideward, neck firm, arms bend, and arms upward are the positions most used. Arm stretchings in various directions are arranged on the basis of vigor and complexity. When we begin suspension exercises we give first those in which the body is let down from a position on a bench or some other height; then those where the weight is held; last those where the weight must be lifted by the arms. Climbing exercises on ladders, in which the feet help the arms to support the body, are also used.

PRACTICAL WORK FOR THE STUDENT

1. Make a careful test of the four arm exercises most used as heave movements by taking them yourself accurately and find in this way the progressive order in which you think they should stand.
2. Arrange all the different arm stretchings in progressive order.
3. How many different series of arm stretchings can be made, using two different arm stretchings in each series? Using three? Four?
4. Arrange all the heave movements that have been mentioned above in a progressive list and bring it to class for discussion.
5. Go over these exercises again to make sure you can teach them.

BALANCE MOVEMENTS

Balance movements are arranged in the order of the difficulty of keeping the balance; this difficulty increases, (1) as the base of support is narrowed, as in standing on one foot instead of two, (2)

when an unfamiliar position is assumed, as in standing with knees bent to a right angle, (3) when parts of the body are moved while the balance is being held, and (4) as fatigue increases.

PRACTICAL WORK FOR THE STUDENT

1. Select from the summary in lesson eight all the balance movements and place them in progressive order.

2. Select all the arm movements that are suitable to take in combination with balance movements and arrange them in progressive order,—that is, in the order of their effect to increase difficulty of balancing.

3. Try the following three ways of using an arm exercise with a balance movement and find the progressive order for using them:

- (a) arm movement taken first as preliminary to the balance;
- (b) arm and balance movements taken at same time;
- (c) arm movement taken repeatedly while balance movement is held.

4. Try the effect of bending the knee of the supporting limb in leg raising sideward; of raising the heel of the supporting foot. Do both increase the difficulty of balance? Which most?

5. Devise four exercises on a balance beam suitable for classes, and arrange them in progressive order.

6. Make a complete progressive list of balance movements and bring to class for discussion.

7. Plan how to teach these exercises and conduct the class in them.

BACK EXERCISES

In standing position we have as back exercises: inclining forward, downward bending of the trunk, and the forward and the outward fallouts. These four exercises throw about equal strain on the back muscles, so that the progression from lesson to lesson is wholly advancement from simple to complex,—excepting that in the use of combinations with arm positions, those arm positions in which the arms are held highest add to the strain on the back muscles in proportion to the height at which they are held. The fallout positions

are more complex than the forward bendings, but a simple fallout may be less difficult than a complex bending with the arms held high; the most difficult of all is the combination in which we incline trunk forward from fallout as a starting position.

PRACTICAL WORK FOR THE STUDENT

1. Select the arm movements that are suitable for combination with inclining trunk forward, and place them in progressive order. Will this list be the same for trunk bending downward? For the fallouts? Can you think of any additional arm movements suitable with the latter?
2. Try in these exercises the effect of using the arm exercises as: (a) preliminary, (b) at same time, and (c) repeatedly while holding the inclined position of the trunk. What is the progressive order of the three ways?
3. Arrange a progressive list of the back exercises as before.
4. Plan the teaching and conducting of the class.

PROGRESSIVE LIST OF HEAVE MOVEMENTS

1.
 2.
 3.
 4.
 5.
 6.
 7.
 8.
 9.
 10.
 11.
 12.
 13.
 14.
 15.
 16.
 17.
 18.
 19.
 20.
- Etc.

PROGRESSIVE LIST OF BALANCE MOVEMENTS

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- Etc.

PROGRESSIVE LIST OF BACK EXERCISES

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- Etc.

LESSON FOURTEEN

PROGRESSION IN SWEDISH GYMNASTICS—CONTINUED

GROUPS 7 TO 11

ABDOMINAL EXERCISES

When we wish to take exercise for the back muscles we can incline the trunk forward from the hips; naturally we would expect to take exercise for the abdominal muscles by inclining backward from the hips; the fact that the hip joint will not permit this movement makes it necessary to take abdominal exercise in some other way. We can throw the weight of the head and shoulders on the abdominal muscles by bending backward in the waist region, but this bends the spinal column out of normal position and so is not desirable when posture is to be trained. We can get abdominal exercise in three different ways without sacrificing the posture: (1) by inclining backward from sitting position (see Fig. 32), stride forward (see Fig. 31), kneeling position, or from half kneeling position; (2) by leaning forward and supporting the weight of the body on the hands and feet (see Figs. 28 and 40); or (3) by raising the knees while hanging by the hands as in Fig. 29. It is also possible to take abdominal exercise by raising legs or trunk from a position lying on the back, but this is not a suitable exercise for school gymnastics for several reasons. None of these groups is plainly more easy or more difficult than the others, and the sequence has to be planned by actual experience. Progress is slow, as strength of muscles has to be developed and strain must be avoided. The force increases as the trunk approaches the horizontal position.



Fig. 40

PRACTICAL WORK FOR THE STUDENT

1. Try carefully all the abdominal exercises mentioned above and decide what seems to you the progressive order, as determined by the work required of the abdominal muscles. In doing this be

careful to hold the trunk and head in normal position and not to strain the abdominal muscles.

2. Try leaning position with the hands at three different heights: (*a*) placing hands on some object about the height of a school desk; (*b*) at height of a school seat; (*c*) on the floor. Notice the progressive order and whether any of these is too vigorous for girls.

Make out a progressive list of abdominal exercises and bring to class for discussion.

3. Plan how to teach and conduct the class with each of the above.

LATERAL TRUNK EXERCISES

In lateral trunk exercises we have bending the trunk sideward and sideward fallout and twisting the trunk. In the fallout the muscles on the higher side have to work to support the weight of the head and shoulders.

A peculiarity should be noticed in the use of the stride sideward as a starting point for side bendings. It is the easiest position for beginning to learn side bendings, since it gives a wide base of support; as skill improves, the pupil can progress to side bendings from the fundamental position; but when we introduce arm positions with the arms held high, as in arms upward, we need to go to the wide base again to keep the balance, or the extent of the movement will be restricted. It should be noticed also that the stride forward helps the pupil to avoid twisting the hips when twisting the trunk toward the forward foot, and increases his tendency to do this when he twists away from it.

PRACTICAL WORK FOR THE STUDENT

1. Select the arm and foot positions suitable for combining with lateral trunk exercises and place them in progressive order. What arm position should be omitted as a combination with sideward bending?

2. Arrange a complete progressive list of lateral trunk movements.

3. Plan the teaching and conducting the class in these exercises.

RUNNING AND JUMPING

Beginning classes not accustomed to vigorous work may use marching as a climax at the start, but soon something more vigorous is necessary. The progression of skipping, hopping, running, and jumping exercises is chiefly provided for by the manner of conducting the class, rather than in planning the exercises; various forms of each are arranged to progress from simple to complex.

PRACTICAL WORK FOR THE STUDENT

1. Arrange a progressive list of exercises suitable for this group.
2. Plan the teaching and manner of conducting the class.

SLOW LEG MOVEMENT

Any exercise of Group II may be used here, and the sequence is the same. Marching with gradually decreasing rhythm is the most satisfactory of all slow leg movements.

BREATHING EXERCISES

No progressive list of breathing exercises can be given. The progression is in the manner of taking the exercise rather than in its outward form. Arm movements do not aid, as was formerly supposed.

PROGRESSIVE LIST OF ABDOMINAL EXERCISES

- I.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.
- Etc.

PROGRESSIVE LIST OF LATERAL TRUNK EXERCISES

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- Etc.

PROGRESSIVE LIST OF RUNNING, JUMPING, AND GAMES

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.
- Etc.

LESSON FIFTEEN

ARRANGEMENT OF LESSONS

Lessons are arranged by reference to the preceding progressive lists.

The following set of lesson plans is given for illustration of how to do this, and for practice in teaching.

A SERIES OF SIX LESSONS SUITABLE FOR PRIMARY GRADES, PUPILS HAVING HAD NO PREVIOUS TRAINING

LESSON 1	LESSON 2	LESSON 3
I. Pos. std s.	I. Std f. Hf.	I. Std f, ch F.
II. M t.	II. M t.	II. M t.
III.	III.	III.
IV. A s rse.	IV. A s rse.	IV. A s fl.
V. H rse.	V. Hf, H rse.	V. Hf, H rse.
VI.	VI.	VI. Hf, std s, Tr incl f.
VII.	VII.	VII.
VIII.	VIII. Std s, Tr bd s.	VIII.
IX. Skip.	IX. Run.	IX. Skip.
X. Mch.	X. Mch.	X. Mch.
LESSON 4.	LESSON 5.	LESSON 6.
I. 1 step f.	I. 1 step b.	I. 2 steps f.
II. Mch.	II. Mch.	II. Mch.
III.	III.	III.
IV. A f rse.	IV. A f rse.	IV. A f fl.
V. Std s, H rse.	V. Hf, std s, H rse.	V. A s rse H rse.
VI.	VI. Hf, std s, Tr incl f.	VI.
VII.	VII.	VII.
VIII. Std s, Tr bd s.	VIII.	VIII. A s fl, std s, Tr bd s.
IX. Run.	IX. Skip.	IX. Run.
X. Mch.	X. Mch.	X. Mch.

NOTE: There is so much new work here that a full lesson can not be completed in the time allowed on the school program, and therefore certain groups are omitted. Trunk exercises being less necessary than for older pupils, Groups III and VII are omitted entirely, and VI and VIII used on alternate days. Group XI is also omitted.

A SERIES OF SIX LESSONS SUITABLE FOR BOYS OF GRAMMAR GRADE WHO HAVE HAD SOME TRAINING, WORKING IN THE AISLES BETWEEN THE DESKS AND SEATS

LESSON 1.	LESSON 2.	LESSON 3.
I. Pos. Hf. Std s.	I. Std f. -	I. Std f, ch F.
II. M t.	II. Mch.	II. Mch.
III. Sit, Hf, H bd b.	III. Sit, Hf, H bd b.	III. Sit, Hf, H bd b.
IV. A rse s. A fl s.	IV. A rse f. A fl f.	IV. Nf.
V. Hf, H rse. Hf H rse.	V. A rse s H rse.	V. A rse f H rse.
VI. Hf std s, Tr incl f.	VI.	VI.
VII.	VII. Sit, F sup, Hf, incl b.	VII.
VIII.	VIII.	VIII. Std s, Tr bd s.
IX. Mch.	IX. Mch.	IX. Run.
X. Mch.	X. Mch.	X. Mch.
XI.	XI.	XI.
LESSON 4.	LESSON 5.	LESSON 6.
I. 1 step f. 1 step b.	I. 2 steps f or b.	I. 3 steps f or b.
II. Mch.	II. Mch.	II. Mch.
III. Sit, A f, H bd b.	III. Sit, A f, H bd b.	III. Sit, A f, H bd b.
IV. Nf.	IV. A bd.	IV. A bd.
V. A f fl H rse.	V. Nf, H rse.	V. A bd, H rse.
VI. Hf std s, Tr incl f.	VI.	VI.
VII.	VII. Sit, Hf, F sup, Tr incl b.	VII.
VIII.	VIII.	VIII. A s std s, Tr bd s.
IX. Run.	IX. Run. Jp u.	IX. Run. Jp u.
X. Mch.	X. Mch.	X. Mch.
XI. Br.	XI. Br.	XI. Br.

LESSON 7.

- I. Std s, ch F.
- II. Hf, *H rse.*
- III. Hf std f, H
bd b.
- IV. A rse fu. A fl
fu.
- V. Hf std s, H rse.
- VI. A f std s, Tr
inc f.
- VII. Sit, F sup, Tr
inc b.
- VIII. A f std s, Tr
bd s.
- IX. Jp u fl A fu.
- X. Mch.
- XI. Br.

LESSON 8.

- I. 1 stp s. Al f.
- II. Hf std s, *H rse.*
- III. A s std f, H
bd b.
- IV. A bd, A str s.
- V. Nf std s, H rse.
- VI. A bd std s, Tr
inc f.
- VII. Sit, F sup, Tr
inc b.
- VIII. A bd std s, Tr
bd s.
- IX. Jp u, fl A fu.
- X. Mch.
- XI. Br.

LESSON 9.

- I. R fc.
- II. Hf std f, *H rse.*
- III. A f std f, H
bd b.
- IV. A bd, *A str s.*
- V. A bd std s, H
rse.
- VI. Nf std s, Tr
inc b.
- VII. Sit, F sup, Tr
inc b.
- VIII. Nf std s, Tr
bd s.
- IX. Jp u turn 90°.
- X. Mch.
- XI. Br.

LESSON 10.

- I. R fc.
- II. Nf std s, *H rse.*
- III. A bd std f, H
bd b.
- IV. A bd, *A str s*
std s.
- V. Hf std f, H rse
- VI. Std s, Tr incl f,
Hf, Nf, A bd.
- VII. Ln, H desks.
- VIII. Hf, Tr bd s. A
s, etc.
- IX. Jp u turn 90°.
- X. Mch.
- XI. Br.

LESSON 11.

- I. Ab fc.
- II. A bd std s, *H*
rse.
- III. Hf, H bd b.
- IV. A bd, *A str f.*
- V. Nf std f, H rse.
- VI. Hf std s, Tr
bd b.
- VII. Ln, H desks, A
bd.
- VIII. A f, Tr bd s.
- IX. Jp u turn 180°.
- X. Mch.
- XI. Br.

LESSON 12.

- I. Ab fc.
- II. A bd std f, *H*
rse.
- III. A s, H bd b.
- IV. A bd, *A str f*
std f.
- V. A bd std f, H
rse.
- VI. A f std s, Tr
bd d.
- VII. Ln, H seats, A
bd.
- VIII. Nf, Tr bd s.
- IX. Jp u turn 180°.
- X. Mch.
- XI. Br.

A SERIES OF TWELVE LESSONS SUITABLE FOR HIGH SCHOOL GIRLS WHO HAVE HAD NO PREVIOUS TRAINING, WORKING IN AN OPEN HALL

LESSON 1.	LESSON 2.	LESSON 3.
I. Pos. Hf. Std s.	I. Std f.	I. Std f, ch F.
II. M t.	II. M t.	II. Mch.
III.	III.	III. Hf, std f, H bd b.
IV. A rse s.	IV. A fl s.	IV. A rse f.
V. Hf, H rse.	V. Hf, H rse.	V. A s rse H rse.
VI.	VI. Hf std s, Tr incl f.	VI. Hf std s, Tr incl f.
VIII. Std s, Tr bd s.	VII. Hf std f, Tr incl b.	VII. Hf std f, incl b.
IX. Mch.	VIII. A fl s std s, Tr bd s.	VIII. A fl s std s, Tr bd s.
X. Mch.	IX. Mch.	IX. Mch.
XI. Br.	X. Mch.	X. Mch.
	XI. Br.	XI. Br.

LESSON 4.	LESSON 5.	LESSON 6.
I. 1 stp f. 1 stp b.	I. 2 stps f. 2 stps b.	I. 3 stps.
II. Mch.	II. Mch.	II. Mch.
III. Hf std f, H bd b.	III. A fl s std f, H bd b.	III. A fl s std f, H bd b.
IV. A fl f.	IV. Nf.	IV. Nf.
V. H rse, A fl s, Hf, etc.	V. A fl f, H rse.	V. H rse, A fl f, Hf, etc.
VI. A fl f std s, Tr incl f.	VI. A fl f std s, Tr incl f.	VI. Std s, Tr incl f, A fl s, A fl f.
VII. Hf std f, incl b.	VII. Hf std f, incl b.	VII. A fl f std f, incl b.
VIII. A fl s std s, Tr bd s.	VIII. A fl f std s, Tr bd s.	VIII. Nf std s, Tr bd s.
IX. Mch.	IX. Mch.	IX. Mch.
X. Mch.	X. Mch.	X. Mch.
XI. Br.	XI. Br.	XI. Br.

LESSON 7.

- I. Std s, F ch.
- II. Mch.
- III. A f std f, H bd
b.
- IV. A bd.
- V. H rse, A bd,
Nf.
- VI. Std s, Tr f, A
bd.
- VII. Hf std f, Tr
incl b.
- VIII. Hf, Tr bd s.
- IX. Run.
- X. Mch.
- XI. Br.

LESSON 8.

- I. I stp s. Al f.
- II. Mch.
- III. A bd std f, H
bd b.
- IV. A bd.
- V. Hf, L rse s.
- VI. Std s, Tr incl f,
Nf.
- VII. Hf std f, Tr
incl. b.
- VIII. A s, Tr bd s.
- IX. Run.
- X. Mch.
- XI. Br.

LESSON 9.

- I. R fc.
- II. Mch.
- III. Hf std s, H bd
b.
- IV. A rse fu. A fl
fu.
- V. A s, L rse s.
- VI. Hf std s, Tr
bd b.
- VII. Hf std f, Tr
incl. b.
- VIII. A f, Tr bd s.
- IX. Run.
- X. Mch.
- XI. Br.

LESSON 10.

- I. R fc.
- II. Hf, *H rse*.
- III. A s std s,
Ch arch.
- IV. A bd, A str s.
- V. Nf, L rse s.
- VI. A f std s, Tr
bd d.
- VII. A f std f, Tr
incl b.
- VIII. A bd, Tr bd s.
- IX. *Hop*, ch F on
count 9.
- X. Mch.
- XI. Br.

LESSON 11.

- I. Ab fc.
- II. Hf std s, *H
rse*.
- III. A f std s, ch
arch
- IV. A bd, *A str s*.
- V. A bd, L rse s.
- VI. A bd std s,
Tr bd d.
- VII. A f std f, Tr
incl b.
- VIII. Nf, Tr bd s.
- IX. *Hop*, ch F on
count 5.
- X. Mch.
- XI. Br.

LESSON 12.

- I. Ab fc.
- II. Hf std f, *H
rse*.
- III. A bd std s,
Ch arch.
- IV. A bd, A str s
std s
- V. Hf, L rse f.
- VI. Nf std s, Tr bd
d.
- VII. A f std f, Tr
incl. b.
- VIII. Hf std f, bd s.
- IX. *Hop*, ch F on
count 3.
- X. Mch.
- XI. Br.

A SERIES OF SIX LESSONS SUITABLE FOR HIGH SCHOOL BOYS WHO HAVE HAD GYMNASTIC TRAINING AND WHO WORK IN A GYMNASIUM

LESSON 1.	LESSON 2.	LESSON 3.
I. Pos. Hf. std s.	I. Std f, ch F.	I. 2 or 3 steps.
II. M t. Mch.	step f.	II. Nf std s, <i>H</i>
III. Hf std f, <i>H</i>	II. <i>H rse.</i> Std s,	<i>rse.</i>
bd b.	<i>H rse.</i>	III. A bd std f, H b.
IV. A fl s. A fl f.	III. A f std f, H	IV. A rse u. A fl u.
V. H rse, A f, A s.	bd b.	V. Hf L rse (f, s,
VI. Hf std s, Tr	IV. Nf. A bd.	b).
incl f.	V. H rse, Hf, Nf.	VI. Std s, Tr f, Hf,
VII. Hf std f, incl	VI. A f std s, Tr	Nf.
b.	incl f.	VII. Ln. (hands on
VIII. Std s. Tr bd s.	VII. A f std f, incl	floor).
IX. Mch.	b.	VIII. Nf std s, Tr
X. Mch.	VIII. A f std s, Tr	bd s.
XI. Br.	bd s.	IX. Run. Jp u.
	IX. Run.	X. Mch.
	X. Mch.	XI. Br.
	XI. Br.	
LESSON 4.	LESSON 5.	LESSON 6.
I. Std s, ch F. 1	I. Al f. R fc.	I. Ab fc. L fc.
s stp.	II. Nf std f, <i>H rse.</i>	II. A bd std f, <i>H</i>
II. Hf std f, <i>H rse.</i>	III. A f std s, Ch	<i>rse.</i>
III. Hf std s, H b	arch.	III. A bd std s, Ch
bd.	IV. A bd, <i>A str f</i>	arch.
IV. A bd, <i>A str s</i>	<i>std f.</i>	IV. A bd, <i>A str d</i>
<i>std s.</i>	V. L rse, Hf, Nf,	<i>std f.</i>
V. Nf L rse b.	etc.	V. Nf L rse, F sw.
VI. Hf fal f. A f	VI. A s fal f. Nf	VI. Fal f, Hf, Nf.
fal f.	fal f.	VII. Hg, K rse.
VII. Ln. (hds on fl)	VI. Ln. (hds on fl).	VIII. A f std f, Tr
VIII. Nf, Tr bd s.	VIII. Nf std f, Tr	tw.
IX. Run. Jp u fl A	bd s.	IX. Jp u turn 180°.
fu.	IX. Jp u turn 90°.	X. Mch.
X. Mch.	X. Mch.	XI. Br.
XI. Br.	XI. Br.	

PRACTICAL WORK FOR THE STUDENT

1. Show that the order and leg movements of either of these sets of lessons each form a progressive list, and show where it differs from your own progressive list for these groups.

2. Make out and have ready to read in class or hand in a set of six lessons to follow the 12 in the book arranged for high school girls. Proceed as follows:

(1) Make a blank or skeleton for the entire list of lessons to be made by writing the number of each successive lesson at the top and the numbers to represent the various groups of the days' order down the left margin of each lesson, as in the lessons in the book. Put all this on one side of a single sheet of paper, so that the whole can be seen at a glance.

(2) Beginning with the first group of the day's order, see how far in your own progressive list of order movements the lessons in the book have gone; beginning there, fill out the proper spaces in the blanks with order movements from your progressive list, going through the six lessons with this group before passing on to the leg movements. Be sure of correct abbreviations and punctuation marks.

(3) Follow the same plan in filling in the blank for the other groups of the day's order through the six lessons to be made.

(4) Look over the lessons thus made carefully to see that all punctuation marks indicate what you wish to, and that you have used no movement as a preliminary that has not been previously used alone.

(5) Bring the list of six lessons to class, ready to read and discuss, or hand in.

LESSON SIXTEEN

TEACHING SWEDISH GYMNAS TIC LESSONS

Having studied in detail the formation of the lesson and the plans and purposes to be carried out in the eleven groups, the student is now ready to begin practice in teaching full lessons in Swedish gymnastics. To do this successfully he must have acquired the habit of correct commands, the ability to observe and criticise faults in the performance of the exercises, and must be able to recall at any moment the order in which the groups are used in the Day's Order and purposes and methods peculiar to each. The following general principles of teaching a Swedish lesson will be understood by all who have mastered the foregoing lessons:

1. Order movements should be given only as long as they are needed to get the class in position for work and to gain full attention to commands. Exact unison and accuracy of movement are important. Each lesson should begin with some easy order movements taught in preceding lessons and advance quickly to the most difficult ones the pupils have had. The written lesson plan gives only the new work to be taught, but in conducting the class we should lead up to this by review exercises in a progressive order. Order movements should not occupy much time, but may be introduced anywhere in the lesson when attention has been diverted and the work of the class has thereby lost its high grade.

2. Leg movements should be given in a rather rapid series long enough to produce some increase in heart action and breathing. The teacher can experiment on himself to find some suggestion as to how much this means. Plan how to secure unison in the best and easiest way. (See Ex. 1, in practical work for the student, page 62.)

Some teachers of Swedish gymnastics like to combine groups 1 and 2, using for the purpose rapid marching of the nature of military drill, in which the commands for changing the direction and character of the movement serves to gain and hold attention while the leg movements secure the warming-up effects. Some exercises of this kind will be given later.

3. Arch flexions call for special accuracy and vigor of movement, making it necessary to proceed rather slowly; each arch

flexion to be practiced several times. Judgment must be used as to how often the preliminary position should be changed. When pupils show fatigue, a momentary rest is usually enough. Fundamental position must never be sacrificed.

4. Heave movements, like arch flexions, require accuracy and force. They are apt to be done so carelessly as to lose most of their value. When used in series, plan carefully how to maintain exact unison.

5. Balance movements should really test the balancing ability of the pupils, and to do this must be held many times longer than we hold most positions.

6. Always take inclining and bending forward from stride sideward. These exercises are intended to train pupils to hold the trunk in normal posture while moved from the usual vertical position. Fallouts especially require skill in observation and criticism.

7. Abdominal exercises should be done accurately and not held too long. Be careful to prevent over-straining by not having pupils incline too far back from sitting and kneeling positions and by not placing hands too low in leaning positions.

8. Give lateral trunk exercises promptly but be careful to secure accuracy.

9. We must give enough work here to make a real climax to the lesson. Jumping, if done slowly, as is necessary with beginners, should be followed by running to give enough vigor to the group. Jumps that have been learned well should be given several times in quick succession, and even then the run following is often advisable. Good form in jumping must be secured, especially in alighting.

10. Conduct marching so as to secure a gradual descent from the vigor of the last group. Do not make too sudden a drop here, but begin somewhat milder than the work of group 9 and gradually reduce speed.

LESSON SEVENTEEN

GERMAN GYMNASTICS

GENERAL PRINCIPLES. The German system of gymnastics represents a national movement to popularize bodily exercises for educational and hygienic purposes and to make them universal. Unlike the Swedish system, the recreative effects of exercise are emphasized rather than the corrective effects; in the place of a few exercises selected with great care, the German system includes an almost endless number. The following principles are emphasized:

1. Gymnastics should provide balanced development of the muscular system.
2. To secure vigor of action and best effects, the exercises must be pleasing to the pupils.
3. Each teacher should be prepared, by an extensive study of anatomy, physiology, and gymnastics, to make and execute his own lesson plans; no rigid form of lesson is advisable.
4. The teacher must assume the pupils to be normal individuals; corrective and remedial gymnastics are in the province of the physician and the hospital, not of the teacher and the school.

CLASSES OF EXERCISES. The German system recognizes the following classes of exercises:

1. Free exercises, meaning those taken in standing position without apparatus. These include some that closely resemble the Swedish exercises, and also a great variety of other ones. Tactics, figure marching, and fancy steps are included here.
2. Exercises with light apparatus, such as dumb bells, wands, Indian clubs, hoops, etc.
3. Exercises on heavy apparatus, sometimes called, "heavy gymnastics," including work on parallel bars, horizontal bar, vaulting bar and horse, trapeze, traveling rings, flying rings, ladders, ropes, poles, etc. Here the body must be lifted, at least in part, by the arms.
4. Companion exercises, including athletic contests, games, and combats. The Germans as a race are especially fond of the third class of exercises mentioned, which require and develop great individual strength and skill. They use apparatus as a means of increasing interest in gymnastics, while the Swedes use it only to produce definite effects on the body.

THE GERMAN PLAN OF LESSON

While not believing in the use of a uniform plan of lesson as complex and unvarying as the Swedish, the teachers of German gymnastics are inclined to follow a plan that is about as follows, the lesson occupying about an hour :

1. Marching. For boys this is of a military character, lasting about eight minutes, and ending with a run; for girls it is more often figure marching and fancy steps, lasting fifteen minutes.

2. Exercises with light apparatus, boys twelve minutes, girls fifteen minutes.

3. Exercises on heavy apparatus with at least one change of apparatus, and including some form of jumping; boys thirty minutes, girls twenty minutes.

4. A game, lasting ten minutes.

The Germans make more distinction than the Swedes between exercises for boys and for girls; they agree with the Swedes in giving games only a subordinate place in a gymnastic lesson, instead of devoting whole periods to games as do the English and Americans.

The plan of lesson outlined above can be used in school gymnastics only in exceptional cases, where there is a fully equipped gymnasium and full hour periods for gymnastics. The present course will deal only with light apparatus and fancy steps, since these illustrate best the exercises useful in the schools and the methods of teaching and conducting them.

The following movements with light apparatus are given to illustrate common forms of German gymnastic exercises, and for practice in teaching. Students should prepare to teach these movements. The first thing in such preparation is to read the definitions with the apparatus in hand, executing each movement as it is read, thus fixing a clear idea of how it is done. While the teacher may vary from the manner in which the movement is defined, if he has reason for so doing, he must never leave it indefinite, but must always teach a certain definite thing. On account of the great number of movements used, commands in German gymnastics are less simple and exact than in Swedish.

DUMB BELLS

Dumb bells for the following exercises should be of wood, varying from one-fourth of a pound in weight for the smallest pupils to one pound for the strongest of high school boys. Racks may be obtained for hanging dumb bells on the wall, or they can be conveniently kept in a strong basket, in which they may be moved from place to place as needed.

ELEMENTARY MOVEMENTS WITH DUMB BELLS

Fundamental position is usually taken with the arms at the sides; if pupils are inclined to make too much noise with the bells they may be directed to take rest position with bells on the hips.



Fig. 41

Bells on hips, stride sideward



Fig. 42

Bells on shoulders

I. POSITIONS OF BELLS.

(a) Command, *Bells on hips,—Place!*



Fig. 43

Bells to right horizontal
right sideward layout

The bells are lifted and the knuckles placed against the waist just at the crest of the hip bone, with thumbs to the front. Fig. 41.

Return command, *Bells,—Down!*

(b) Command, *Bells on shoulders,—Place!* Fig. 42.

Arms are raised sideward and bells placed horizontally on the shoulders with thumbs to the rear.

Return command, *Bells,—Down!*

(c) Command, *Bells on chest,—Place!*

Bells are raised by bending arms and placing them high up on chest in the form of the letter V, lower end of bells close together but not touching, elbows close to sides. Fig. 44.

Return command, *Bells,—Down!*

(d) Command, *Raise the Bells to square,—Raise!*

The bells are raised sideward and then the elbows bent to a right angle and the palms turned toward the head. See Fig. 45A.

Return command, *Bells,—Down!*

2. SWINGS OF BELLS.

These are movements of bells with elbows extended.

(a) Command, *Bells sideward,—Swing!* Arms are raised sideward until they are horizontal, palms down. Fig. 12.

Return command, *Bells downward,—Swing!*

Swings are also made in a similar manner forward and forward-upward from fundamental position, forward and upward



Fig. 44
Bells on chest



Fig. 45
Stroke in front of thighs



Fig. 45A
The square

from sideward, sideward and upward from forward, and sideward and forward from overhead. When the bells are swung forward or upward the palms are usually turned toward each other. The command *Swing* is used whenever the straight arm is swung from the shoulder, except in strokes. The swing to right horizontal is shown in Fig 43.

3. STROKES.

Strike bells forward,—One! The bells are swung sideward and then forward in a curve and the thumb ends are struck strongly together with the arms straight and horizontal forward. At the command "*Two,*" the bells are swung back to the starting point. Strokes are also made in a similar way overhead, in front of thighs, (Fig. 45), behind hips, etc. A starting point should be chosen that will permit a good full swing of the bells.

Anvil strokes are strokes in which one bell is held still to represent an anvil while the other strikes it a swinging blow to imitate a hammer. *Anvil stroke on left shoulder*,—*Strike!* or *One!* The left bell is placed on the left shoulder as in Fig. 42 and the right bell strikes a strong blow against the front end of it, as shown in Fig. 46. At the command "*Two,*" the bells return. Anvil strokes are made at either hip or either shoulder, on either knee with a fallout, at arms' length, and in other places.



Fig. 46
Anvil stroke on left shoulder



Fig. 47
Thrust bell sideward

4. THRUSTS.

These are extensions of the arms, starting from some position in which the arm is bent, usually from bells on chest or shoulders. *Right bell sideward*,—*Thrust!* The arm is extended sideward horizontal and as it extends the thumb is placed against the ball of the bell and the wrist is bent so as to bring the bell in line with the arm; the arm is rotated so as to turn the back to the front (Fig. 47). *Bell*,—*Replace!* The command may also be given,—*Thrust right bell sideward*,—*One! Two!*

Thrusts are made also forward, upward, and downward, either with hands singly, in alternation, or both at once. In the forward, upward, and downward thrusts the arm is rotated as above described in the sideward thrust, the backs of the hands being turned toward each other in the three cases.

The twist of the arm is used to prevent the jerk that occurs at the end of the thrust. Thrusts are sometimes given without it, the thrust terminating in the same position of the bells as the corresponding swing.

5. TWISTING OF BELLS. Fig. 48.

Bells are raised forward with the elbows bent and at sides, bells held vertical. On the first count the bells are both turned toward the R so that the thumb end of the L bell strikes the little finger end of the R bell. The R palm is turned up, and the L palm down. Bells are parallel. This exercise is used mostly as a variation from other exercises, and is used in drills.

PRACTICAL WORK FOR THE STUDENT

Prepare to teach the elementary dumb bell exercises just described.

Passing from Swedish to German gymnastics, the following points in teaching must be observed:

1. It is necessary in German gymnastics for the teacher to formulate many explanatory commands, using good language, instead of merely memorizing commands from the text.

2. The exercises are not so absolutely fixed as to manner of execution as in Swedish work. The teacher must teach a definite exercise, but he may use his judgment as to the exact manner in which it is to be done.

3. The exercises are taken in series almost without exception in light apparatus work, and with musical accompaniment when possible.



Fig. 48
Twisting bells

LESSON EIGHTEEN

COMBINATIONS

Since the elementary bell movements are exclusively movements of the arms, the distribution of the exercise to different parts of the body requires combination of these with movements of other parts. The movements most commonly combined with bell movements are as follows:



Fig. 49
Reverse fallout

(a) The stride forward, (Fig. 14; stride sideward, (Fig. 9); and the stride outward, which is diagonally forward-sideward. In these positions the weight of the body is equally divided between the two feet.

(b) The touch, or point, positions sideward, forward, outward, backward, and crosswise, either in front or behind the other foot. Here the weight of the body is all retained over the stationary foot, and the moving foot touches the floor lightly with the toe. See Figs. 50 and 53.

(c) Tapping of foot, forward, sideward, and outward. Here the moving foot taps the floor strongly with the toe and rebounds. The motion takes place in the ankle

mostly. The weight is retained over the stationary foot.

(d) The walk position forward, sideward, and outward. Here the weight of the body is all transferred to the moving foot and the heel of the stationary foot is raised. (See Fig. 80.)

(e) The fallout forward, sideward, and outward. (Figs. 25, 26, and 27.) Here the knee of the moving leg is bent to a right angle.

(f) The layout forward, sideward, and outward. (Fig. 43.) This is like a fallout and gives the same position as the correspond-

ing fallout but differs in the manner of taking it, the opposite foot being moved in the reverse direction; for example, the right forward layout is taken by moving the left foot backward and bending the right knee, the body inclining forward as in the forward fallout; the left sideward layout is taken by moving the right foot sideward and bending the left knee, body inclining to the left. The word "right" or "left" indicates the direction of the incline and not the direction of moving the foot.

(g) The reverse fallout. In this position the back knee is bent, the forward knee is straight, and the trunk erect. (Fig. 49.)

(h) The lunge is like a fallout except that the trunk is held erect instead of being inclined in a line with the extended leg. (See Fig. 67.)

(i) The common leg movements of Swedish gymnastics, including heel raising (Fig. 15), knee bending (Fig. 17), leg raising (Fig. 16), knee raising (Fig. 18), half kneeling (Fig. 33), and kneeling (Fig. 34).

(j) Trunk bending forward (Fig. 21), downward (Fig. 22), sideward (Fig. 23), backward (Fig. 19) and twisting (Fig. 24).

In making combinations of dumb bell movements and other movements, care should be taken to match them well together as to speed, form, and direction. For example, the quick strokes and thrusts go well with step positions, and heel raising, while the bell positions and anvil strokes take more time and hence combine better with stride positions and fallouts, which are not so rapid as step positions. Again, the arm, leg, and body movements combined should be those that go together naturally and appropriately. For example, thrusting right bell forward and step position forward right go well together, while thrusting right bell forward and step position crosswise left do not; anvil stroke at shoulder or hip goes well with a stride position or a fallout but not with kneeling. The movements combined need not go in the same direction, but judgment and care must be used in their selection.

DEFINITIONS. A simple motion or any combination executed in one count is called a *movement*; a series of such movements taken in succession form an *exercise*; several exercises are grouped together to form a *lesson*; when a lesson is memorized by the class and performed without commands it is sometimes called a *drill*.

Sometimes a lesson is intended to make a class familiar with a certain class of movements, such as thrusts, swings, or positions of bells, or combinations of these with steps, strides, or lunges. A class

of movements that is made the subject of a lesson in this way is called a *theme*.

In the notation of exercises in German gymnastics we separate the different movements or counts by dashes and number them by figures in parentheses; punctuation marks are used as needed. For example, (1) swing bells forward and step position forward right—(2) swing bells sideward and step position sideward right—(3) swing bells forward and step position forward right—(4) swing bells downward and replace foot. Another exercise somewhat abbreviated (1) sw bells f H rse—(2) sw bells s K bd—(3) sw bells f K str—(4) sw bells d H sk.

The simplest possible form of exercise is composed of two movements, the second being the reverse of the first, as (1) std s sw bells f—(2) sw bells d F replace. Such exercises are used with beginners and with pupils of the primary grades.

There are three possible types of four-count exercises, as follows:

1. A four-count exercise made of two two-count exercises taken in succession; these two two-count exercises may be exactly alike, as in (1) sw bells s std s r—(2) position—(3) sw bells s std s r—(4) position; the second two-count exercise may be like the first (taken on the opposite side; see Lesson 1) or the two two-count exercises may be entirely different, as in (1) sw bells s std s l—(2) position—(3) strike bells f step position f—(4) position.

2. A four-count exercise may be made by taking two movements for the first two counts and the reverse of these for the third and fourth counts, as in (1) sw bells f H rse—(2) sw bells s K bd—(3) sw bells f K str—(4) sw bells d H sk. (See Lessons 2-4.)

3. A four-count exercise composed of three distinct movements and a return to position on count four, as in (1) sw bells f step position f r—(2) sw bells s step position s r—(3) sw bells u step position b r—(4) position. (See Lesson 5.)

In a few cases where the movements are easily remembered eight movements are combined in an exercise, as in (1) bells on hips—(2) bells on shoulders—(3) bells on head—(4) bells u—(5) on head—(6) on shoulders—(7) on hips—(8) position. (See Lesson 4.)

In choosing movements to combine into exercises it is necessary to choose such as will go well together. The ease with which an exercise can be understood, executed or remembered, depends much on the appropriateness of the movements combined. Compare the following by trying to execute each in series: (1) sw bells f step

pos f r—(2) sw bells s step pos s r—(3) sw bells f step pos f r—(4) sw bells d f repl. (1) sw bells f step pos s r—(2) bells on shoulders reverse fal l—(3) strike bells u step pos b l—(4) position.

Each of these exercises uses about the same parts of the body and none of the elementary parts are difficult, but the second combination is almost impossible from its absurdity and the confusion of mind that it produces.

LESSON I

A LESSON SUITABLE FOR A PRIMARY GRADE

Exercise 1. Strike B forward and std f r—(1) pos—(2)—same as (1) with l ft (3)—pos (4).

Exercise 2. B on sh and std s r (1)—pos (2)—same as (1) with l (3)—pos (4).

Exercise 3. B s (1)—B under arms, elbows high (2)—B s (3)—pos (4).

Exercise 4. B on chest (1)—B s (2)—strike thumb ends of B overhead (3)—pos (4).

Exercise 5. Jump upward landing in std pos and B square (see Fig. 45A) (1)—extend B sideward, palms up (2)—return to pos of (1) (3)—jump to pos (4).

Exercise 6. Walk forward 3 steps starting with l ft and bring ft together on 4 (1-4). Strike B forward, both ends together, 3 times (5-7) B down (8). Walk backward 3 steps, starting l ft, and bring ft together (9-12), strike B as in (5-8) (13-16).

When memorized and used as a drill, take each exercise either 16 or 32 counts. Music, two-step, either working on each count of the measure or on the odd counts, according to the rate at which the exercise is to be taken.

PRACTICAL WORK FOR THE STUDENT

1. Teach the exercises of lesson I to a group of 6-8 students. While the pupils are becoming acquainted with the exercises it is best first to use commands, then series with music, but do not expect them to keep count of the number of times each is done until the movements are well mastered.

2. Teach the elementary movements of lesson 17 (page 96) combining each with a suitable movement of trunk or lower limbs. Use the method given in lesson 6 when advisable. In the most complex cases it is necessary to teach the arm and foot movements separately and then combine them.

LESSON NINETEEN

MORE COMPLEX DUMB BELL LESSONS

LESSON 2

A LESSON WITH DUMB BELLS, SUITABLE FOR GRAMMAR GRADE BOYS
THEME: STRIDES, TURNS, AND STRIKING

Exercise 1. (1) Std f r sw bells s—(2) H rse and strike bells u—(3) return to position of (1)—(4) pos.

Exercise 2. (1) Std f r sw bells s—(2) turn 90 degrees l on balls of feet and strike bells f—(3) return to position of (1)—(4) pos.

Exercise 3. (1) Strike bells f std f r—(2) turn 180 degrees l on balls of feet and strike bells behind hips—(3) return to position of (1)—(4) pos.

Exercise 4. (1) Sw bells s std s r—(2) K bd strike bells f—(3) return to position of (1)—(4) pos.

Exercise 5. (1) Sw bells s std s r—(2) turn 90 degrees l, sway to fal f and strike bells under l knee—(3) return to position of (1)—(4) pos.

Exercise 6. (1) Strike bells u std s r—(2) turn to l 90 degrees and bend f striking bells on floor by l toes—(3) return to position of (1)—(4) pos.

Each exercise should be practiced the same number of times on each side; when used as a drill, take on alternate sides to 32 counts.

LESSON 3

A LESSON WITH DUMB BELLS, SUITABLE FOR GRAMMAR GRADE PUPILS

Arranged on the Plan of the Swedish Day's Order,
by Fannie Cheever Burton

Exercise 1. Bells on hips, bells on chest, bells on shoulders, by command, not in regular order.

Exercise 2. (1) Rse bells f touch stp f r—(2) return to pos—(3) same as (1) with l foot—(4) pos.

Exercise 3. (1) Bells on sh std s r—(2) bd Tr f—(3) thr bells u—(4) bells on sh—(5) thr bells u—(6) bells on sh—(7) Tr rse—(8) pos.

Exercise 4. (1) Rse bells f—(2) sw bells s—(3) sw bells f—(4) pos.

Exercise 5. (1) Rse bells s rse r K—(2) place r bell on r thigh—(3) rse A s leaving r bell—(4, 5) hold this pos—(6) lower A and take bell—(7) sw bells s—(8) pos.

Exercise 6. (1) Rse bells f fal r f—(2) strike floor with bells—(3) return to position of (1)—(4) pos.

Exercise 7. (1) Rse bells s touch stp b r—(2) kneel on r K—(3) incl Tr b—(4) hold this pos—(5) rse Tr—(6) hold this pos—(7) rise—(8) pos.

Exercise 8. (1) Rse bells f—(2) tw Tr r—(3) tw Tr l—(4) pos.

Exercise 9. Hop on r F with l F f strike bells in front of thighs—(2) repeat hop and stroke—(3, 4) same as (1, 2) on other side.

Exercise 2 and 9 should be taken on alternate sides in series; 5, 6, 7, and 8 should be taken on alternate sides, twice on each side.

PRACTICAL WORK FOR THE STUDENT

Prepare to teach one of the two lessons above, as assigned by the teacher. One lesson will be assigned to half the class and the other lesson to the other half, so that in the recitation period each student may be given a class of pupils who have not studied the exercises, making the teaching more real.

LESSON TWENTY

FURTHER PRACTICE IN INTERPRETING AND TEACHING COMPLEX BELL EXERCISES

LESSON 4

A LESSON WITH DUMB BELLS, SUITABLE FOR HIGH SCHOOL GIRLS

Arranged by Fannie Cheever Burton

Exercise 1. (1) Bells on hips—(2) bells on sh—(3) bells on head—(4) bells thrust u—(5) bells on head—(6) on sh—(7) on hips—(8) pos.

Exercise 2. (1) Cross arms over chest with bells held in vertical position just in front of sh and r touch stp crosswise—(2) pos—(3) same as (1) using l foot—(4) pos.

Exercise 3. (1) Rse r bell su and rse l leg s—(2 to 7) hold this pos—(8) pos—(9) same as (1) on other foot—(10 to 15) hold pos—(16) pos.

Exercise 4. (1) Rse bells s fal s r—(2) Tr bd s strike floor with r bell—(3) return to pos of (1)—(4) pos. Repeat to l.

Exercise 5. Bells on sh touch step f r—(2) fal f r thrust bells f—(3) return to pos of (1)—(4) pos. Repeat on l side.

Exercise 6. (1) Bells r hor (Fig. 43) touch stp s r—(2) sw bells to l hor fal s r—(3) return to pos of (1)—(4) pos. Repeat l.

LESSON 5

A LESSON SUITABLE FOR HIGH SCHOOL BOYS

Exercise 1. (1) Bells on sh std s r—(2) thr bells u and lunge s r—(3) swing bells f and lunge s l—(4) pos.

Exercise 2. (1) Bells on chest std f r—(2) thr B u and lunge f r—(3) strike B on floor in front of r ft—(4) pos.

Exercise 3. (1) Bells on shldr s std s r—(2) thr bells u bd Tr d sw bells between knees (Fig. 51)—(3) rse Tr and sw bells u and look at them—(4) pos.

Exercise 4. (1) Bells on sh std s r—(2) thr bells f lunge s r—(3) sw bells s bd Tr r—(4) pos.

Exercise 5. (1) Raise bells s bd r Knee upward—(2) touch r Toe b and strike bells under l knee—(3) bd r Kn upward and strike bells overhead—(4) pos.

Exercise 6. (1) Knees deep bd, pl B on floor close to ft—(2) jump both ft backward, so the body is in pos of fig. 40—(3) turning the body so all weight is on l hand and r bell straight upward—(4) replace B on floor—(5) raise l bell straight upwd—(6) replace B on floor—(7) jump ft back to pos (1)—(8) pos.



Fig. 50
Count 2 of exercise 7
lesson 5



Fig. 51
The chop

Exercise 7. (1) Sw bells s step pos s r—(2) place r bell on l hip, arm behind waist, and cross step pos backward r (Fig. 50)—(3) reverse of (2), coming back to position of (1)—(4) position.

Exercise 8. (1) Bells on shoulders r K rse—(2) thrust bells f and str r K f, foot 6 inches from floor—(3) reverse (2), coming back to position of (1)—(4) position.

When used as a drill, take each exercise on alternate sides for 16 or 32 counts.

PRACTICAL WORK FOR THE STUDENT

Prepare to teach one of the two lessons above, as in the preceding day's lesson.

LESSON TWENTY-ONE

THE ARRANGEMENT OF LESSONS OF DUMB BELL EXERCISES

Good lessons with dumb bells should have the following features:

1. They should give balanced development for all parts of the body.
2. No movement should be used to excess.
3. The lesson should begin with one of the milder exercises, go forward to a climax, and end with one or two milder ones.

PRACTICAL WORK FOR THE STUDENT

1. Prepare an original lesson of dumb bell exercises, the lesson to contain six exercises of four counts each. Make one exercise of the first type described in lesson 18, four of the second type, and one of the third. Carry out the principles stated above as far as you can.

2. Prepare to teach these exercises to a group of 6-8 pupils.

NOTE:—By an *original* lesson it is not meant that every item and idea in it must be new; *movements* may be copied if desired from any source, but their arrangement into *exercises* and these into a *lesson* must be the work of the student, not copied from any source.

LESSON TWENTY-TWO

WANDS

THE WANDS. Wands are usually of wood, from 24 to 30 inches in length and from one-half inch to an inch in diameter; high school boys can use steel wands of the same size. The ends should be rounded. The wooden sticks can be purchased from dealers in gymnasium supplies or from furniture manufacturers, who use them for chair rounds, etc. Wands can be most conveniently kept in a strong box from 8 to 12 inches square and 20 inches high, with a heavy and broad base.



Fig. 52
Starting position



Fig. 53
Wand forward and
touch-step forward



Fig. 54
Wand upward

ELEMENTARY WAND MOVEMENTS

Fundamental position is usually taken with the wand held in both hands and resting against the front of the thighs, backs of the hands to the front (Fig. 52). For marching the wand is usually carried in the manner described in military regulations for carrying arms. A few movements with wands require it to be held with palms forward.

I. SWINGS OF WAND.

(a) *Wand forward,—Swing!* Fig. 53. Arms straight and horizontal. *Wand downward,—Swing!*

(b) *Wand forward upward,—Swing!* Fig. 54. Arms straight and vertical. *Wand downward,—Swing!*

(c) *Wand to right horizontal,—Swing!* Fig. 55. Arms at same height. *Downward,—Swing!* Same to left.

(d) *Wand to right vertical,—Swing!* Right arm straight up, left arm exactly as in (c) Fig. 56. Same to left. (e) *Aim forward right,—Aim!* Fig. 57. Wand along right arm, left arm as in (c) and (d). Same to left.

Swings are also taken to various diagonal positions.

2. POSITIONS OF WAND INVOLVING MOVEMENTS OTHER THAN SWINGS.

(a) *Wand on chest,—Place!* Fig. 58. *Wand,—Down!*

(b) While wand is on chest we may command, *Wand forward,—Thrust!* or *Wand upward,—Thrust!* or *Wand downward,—Thrust!*



Fig. 55

Wand to right horizontal and leg raising



Fig. 56

Wand to right vertical

(c) While wand is overhead we may command, *Wand on shoulders,—Place!* Fig. 59. Then we may command, *Wand upward,—Thrust!* The wand may also be placed on shoulders from almost any other position.

(d) While wand is forward we may command, *Cross right arm over left,—One! Two!* Fig. 60. Elbows are bent to a right angle. The movement may be reversed, and may also be taken from fundamental position or almost any other position.

MOVEMENTS, EXERCISES AND LESSONS WITH WANDS

Wand movements, like those with dumb bells, are exclusively for the arms, calling for combination with movements of other parts of the body in order to properly distribute the work. The leg and

trunk movements used for combination in the case of dumb bells serve in the same way here. The making of exercises and lessons with wands follows the same principles that govern similar work with bells. The following lessons illustrate how such lessons are made, and serve as practice in teaching.



Fig. 57
Aim forward left, in half kneeling position



Fig. 58
Wand to chest

LESSON I

A LESSON WITH WANDS, SUITABLE FOR SIXTH GRADE BOYS

THEME: STRIDES, FALLOUTS, AND WAND SWINGS

Exercise 1. (1) Sw wand f and std s r—(2) sw wand u and sway to fal s r—(3) reverse (2), coming back to position of (1)—(4) position.



Fig. 59
Wand on shoulders and trunk bending to left



Fig. 60
Crossing arms and fallout sideward

Exercise 2. (1) Sw wand f std s r—(2) bd Tr f. sw wand f d between knees with r end of wand to rear and l end to front—(3) reverse (2), coming back to position of (1)—(4) position.

Exercise 3. (1) Sw wand f std s r—(2) turn to r 90 degrees on balls of both feet, sway to fal f r and aim f r—(3) reverse (2), coming back to (1)—(4) position.

Exercise 4. (1) Sw wand u std f r—(2) turn 90 degrees to left on toes and cross r arm over l (Fig. 60)—(3) reverse (2), coming back to position of (1)—(4) position.

Exercise 5. (1) Sw wand u and std f r—(2) sw wand to right horizontal and sway to r fal f—(3) reverse (2), coming back to (1)—(4) position.

Exercise 6. (1) Sw wand u std f r—(2) sw wand d r and then up to l hor turning to l 90 degrees and sway to fal s r—(3) return to pos of (1)—(4) pos.

These exercises should be practiced the same number of times on each side, and when taken as a drill, alternately right and left for 16 or 32 counts. The appearance of the class is made more effective by grouping. With the class in four lines, facing toward one end of the lines, have the exercises taken alternately r and l but instead of all starting to r or l have them start toward the center; then the second four counts will be taken away from the center.

When the above lesson has been learned it may be well for variety, especially if used as a drill, to change the order of the exercises to 1, 4, 2, 5, 3, 6.

PRACTICAL WORK FOR THE STUDENT

1. Teach the elementary movements with wands.
2. Study the lesson given as an illustration of combinations of these elementary movements with other movements of the body, and prepare to teach such of the exercises as are assigned by the teacher. It is well to let half the class have alternate exercises and the other half the balance, permitting each to teach a class of pupils to whom the work is new.
3. Prepare to teach combinations of the elementary movements given at the beginning of the lesson, choosing suitable movements of the trunk and limbs in each case.
4. Prepare to conduct the class using groupings of the exercises, as described at the end of the wand lesson above.

LESSON TWENTY-THREE

PRACTICE IN TEACHING MORE COMPLEX WAND EXERCISES AND IN ARRANGING AND CONDUCTING SUITABLE GROUPINGS OF THE CLASS

LESSON 2

A LESSON WITH WANDS SUITABLE FOR SEVENTH GRADE GIRLS

Exercise 1. (1) Swing wand f and step pos f r—(2) swing wand to r horizontal and touch pos s r—(3) return to pos of (1)—(4) pos.

Exercise 2. (1) Wand on chest and touch pos f r—(2) thrust wand f and fal f r—(3) return to pos of (1)—(4) pos.

Exercise 3. (1) Swing wand f and touch pos b r—(2) aim f r and kneel on r Kn—(3) return to pos of (1)—(4) pos.

Exercise 4. (1) Swing wand f u to position half way between f and u and rse r leg b—(2-7) hold this pos—(8) pos.

Exercise 5. (1) Wand on chest and fal f r—(2) sway to reverse fal and thrust wand f—(3) return to pos of (1)—(4) pos.

Exercise 6. (1) Swing wand f u and touch step s r—(2) fal r and let go of wand with l hand swinging wand down on r side striking floor and place free hand on hip—(3) return to pos of (1)—(4) pos.

Take each exercise on alternate sides, when used as a drill, for 16 or 32 counts and group the class by having them in open order facing the end of the lines and have the ones start to the right and the twos to the left in each exercise.

LESSON 3

A LESSON WITH WANDS, SUITABLE FOR EIGHTH GRADE BOYS

THEME: STRIDES, LUNGES, AND WAND SWINGS

Exercise 1. (1) Sw wand u std b r—(2) aim r f std f r—(3) aim l f std b r—(4) pos.

Exercise 2. (1) Wand on sh std s r—(2) rse r F lunge s r wand moved to l behind l sh r hand back of head l hand at side—(3) shift wand to r to similar position sway to lunge s l—(4) pos.

Exercise 3. (1) Sw wand u std b r—(2) wand r hor std f r—(3) sw wand d and then u to l hor std b r—(4) pos.

Exercise 4. (1) Wand on sh std s r—(2) wand l vertical lunge s r—(3) sw wand d l and u to r vertical lunge s l—(4) pos.

Exercise 5. (1) Sw wand u std b r—(2) lunge f r sw wand d to floor at r toe—(3) wand on chest std b r—(4) pos.

Exercise 6. (1) Wand on sh std s r—(2) lunge s r sw wand diagonally f u turn 90 degrees l—(3) turn front sway to lunge s l sw wand d and u until it aims diagonally u r—(4) pos.

When used as a drill, arrange class in open order (Page 53) and have the ones face one end of the room and the twos the other; then have the exercises taken alternately r and l, all beginning to r.

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach one of the above lessons according to the assignment made by the teacher.
2. Plan groupings of the class that will make the appearance of the exercises more pleasing and thus increase the interest.
3. When you have taught the exercise until the pupils can do it well, have them take it in groups as planned.

It is suggested that the teacher give several students a small class and allow them five minutes to prepare, then call all together and have each show what has been learned and how well it can be conducted.

LESSON TWENTY-FOUR

FURTHER PRACTICE IN INTERPRETING AND TEACHING LESSONS WITH WANDS, AND ALSO IN MAKING MODIFICATIONS IN THE EXERCISES USED

LESSON 4

A LESSON WITH WANDS, ARRANGED FOR HIGH SCHOOL GIRLS

By Fannie Cheever Burton

Exercise 1. (1) Sw wand f u and std s r—(2) bd Tr f d and lay wand on floor, wand pointing from front to rear, r end to rear—(3) reverse (2), coming back to (1) but leaving wand on floor—(4) place hands on wand as if to take it—(5) repeat (3)—(6) stoop and grasp wand—(7) come to position of 1—(8) position.

Exercise 2. (1) Wand on shoulders and rse r K—(2, 3, 4) hold this pos—(5) thrust wand u and stretch r K s—(6, 7, 8) hold this pos—(9) reverse (5), coming back to pos of (1)—(10, 11, 12) hold this pos—(13) return to pos—(14, 15, 16) rest.

Exercise 3. (1) Cross l arm over r and fal s r—(2) cross r arm over l, sway to fal s l, bd Tr s l and strike r end of wand on floor to l of l toe—(3) reverse (2), coming back to pos of (1)—(4) position.

Exercise 4. (1) Sw wand f step pos f r bd l K—(2) wand on chest, extend l knee and rse r K—(3) thrust wand f str r K f, foot six inches above floor—(4) position.

Exercise 5. (1) Sw wand f step pos crosswise r—(2) lift r foot, fal s r, swing wand diagonally u r, half way between hor and vert—(3) sw wand f cross l foot over r in step pos as in (2)—(4) position.

Exercise 6. (1) Sw wand r hor fal s r—(2) sway to fal s l and sw wand s d beside r thigh, l hand as before—(3) return to 1—(4) position.

Exercise 7. (1) Spring lightly f, alighting with K bd (see Fig. 17) and sw wand f—(2) sw wand r hor and extend r leg sideward to step pos (l s lay out) keeping left knee bent (Fig. 43)—(3) sw wand to l to a diagonal pos, l arm s hor, r arm curved overhead, straighten l K, r foot crosswise step pos b—(4) position.

Exercise 8. (1) Sw wand f fal s r—(2) turn 90 degrees to r, kneel on l K, aim f l—(3) reverse (2)—(4) position.

To be taken on alternate sides, 16 or 32 counts. In the first four exercises a good form of grouping would be to have open order with the pupils facing the end, then have the ones face right and the twos face left, or the reverse; in the last four the whole class face front and let the ones start to the right and the twos to the left.

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach the exercises of the above lesson.
2. Try by changing the arm or foot movement to improve the usefulness or the appearance of each exercise in this lesson.
3. Plan groupings of the class that will be effective.

LESSON TWENTY-FIVE

HOOPS

The hoops used in these exercises are of wood, three feet in diameter and one inch in width. They can be obtained of the gymnasium supply companies, or barrel hoops wound with bunting can be used, although not so satisfactory. Hoop exercises are suitable for pupils of the second, third, or fourth grades, or girls of higher grades. The exercises are usually taken with accompaniment of waltz time, one measure for each movement. "The Shepherd Boy," by Wilson, is a favorite piece of music for hoop drills.



Fig. 61
Starting position



Fig. 62
"Divide"

The fundamental position is taken with the hoop resting on the floor in front of the toes and the hands resting on the top of the hoop, close together. Fig. 61.

I. MOVEMENTS OF HOOP HELD IN BOTH HANDS.

(a) *Divide the hoop*,—*One!* Slide the hoop in 1 hand, holding firmly with the r hand, until hands are opposite. Fig. 62. *Two!* Hoop returns.

(b) *The frame,—One!* From divide, raise the hoop by bending arms until the face is in the center of it. Fig. 63. At command *Two* return.

(c) *Hoop horizontal overhead,—One!* Taken from divide or frame; arms fully extended, hoop level. Fig. 64.

(d) *Thrust downward horizontal,—One!* Fig. 65.

(e) *Hoop on right shoulder,—Place!* Fig. 66. Both (d) and (e) are taken from overhead.

(f) *Archer to right,—Aim!* Taken from divide or frame. The position is meant to imitate shooting with bow and arrow. Fig. 67. Notice position of head.



Fig. 63
"Frame"



Fig. 64
Hoop horizontal overhead

2. A FEW MOVEMENTS OF HOOP HELD IN ONE HAND.

(a) *Swing hoop sideward downward to right,—One!* Fig. 68.

(b) *Swing to r horizontal,—Two!* Fig. 69.

(c) *Swing sideward upward,—Three.* Fig. 70.

(d) *Hoop on head,—Four!* Fig. 71.

COMBINATIONS, EXERCISES, AND LESSONS

Hoop movements may be combined with movements of legs or trunk in much the same way as bell and wand movements, but certain combinations are of course more appropriate in each case. The following are for illustration and for practice in teaching.

LESSON I

A LESSON WITH HOOPS, SUITABLE FOR PUPILS OF FOURTH GRADE

Exercise 1. (1) Divide hoop and rse heels—(2) hor overhead and bd K—(3) return to position of (1)—(4) position.

Exercise 2. (1) Std s r and frame—(2) bd Tr f (Fig. 72)--(3) Tr rse—(4) position.

Exercise 3. (1) Divide—(2) archer r and lunge s r (Fig. 67)—(3) return to divide—(4) return to position.

Exercise 4. (1) Hoop hor overhead—(2) fal s r and hoop on r shoulder (Fig. 66)—(3) return to pos of (1)—(4) position.



Fig. 65
Hoop encircles body



Fig. 66
Hoop on right shoulder and right
sidewise fallout

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach the elementary movements with hoops.
2. Study the exercises of lesson I as illustrations of suitable ways to combine, and prepare to teach them.
3. Plan groupings of the class for these exercises.
4. Make suitable combinations of all the elementary movements with other movements of the body, and be ready to teach them.

LESSON TWENTY-SIX

FURTHER PRACTICE IN TEACHING LESSONS OF HOOP EXERCISES

LESSON 2

A LESSON WITH HOOPS, SUITABLE FOR SIXTH GRADE GIRLS

Arranged by Fannie Cheever Burton

Exercise 1. (1) Divide—(2) frame—(3) hor overhead—(4) thrust downward—(Fig. 65)—(5) return to (3)—(6) same as (2)—(7) same as (1)—(8) position.



Fig. 67
"Archer" and lunge sideward right



Fig. 68
Hoop diagonally
downward right



Fig. 69
Hoop to right horizontal

Exercise 2. (1) Frame—(2) thrust f—(3) r fc—(4, 5, 6) repeat the facing three times—(7) frame—(8) position. Repeat.

Exercise 3. (1) Raise arms f, hoop hanging vertically in front of arms—(2) bd Tr s r—(3) return—(4) position. Repeat.

Exercise 4. Sw hoop diagonally s u r and rse l leg s in line with arm (Fig. 71)—(2 to 7) hold this position—(8) position. Repeat on other side.

Exercise 5. (1) Divide hoop and raise it f, turning lower edge toward chest until hoop is hor beneath arms and std f r—(2) turn body 90 degrees to l on toes and turn hoop 180 degrees, so that it lies on top of arms—(3) reverse 2, coming back to position of 1—(4) position.



Fig. 70

Hoop diagonally sideward upward and leg raising



Fig. 71

Hoop on head



Fig. 72

"Frame" and forward inclination of trunk

Exercise 6. (1) Rise r K through hoop, letting hoop hang from knee, and place hands on neck—(2) and (3) hold this position—(4) position.

Exercise 7. (1) Archer r and step pos s r—(2) archer l and step pos crosswise to l with r foot—(3) reverse (2), coming back to (1)—(4) position.

Exercise 8. (1) Kneel on r knee (Fig. 73)—(2) frame—(3) hor overhead—(4) frame—(5) repeat (3)—(6) frame—(7) like (1)—(8) position.

LESSON 3

A LESSON WITH HOOPS, SUITABLE FOR GIRLS OF HIGH SCHOOL GRADE

Arranged by Fannie Cheever Burton

Exercise 1. (1) Hoop diagonally s d r with l hand on hip—(2) hoop hor s r—(3) hoop up to vertical and grasp with l hand also—(4) hoop on head, (Fig. 71)—(5) reverse (4)—(6) hoop hor s l with r hand on hip—(7) hoop diagonally s d l—(8) position.



Fig. 73

Half kneeling with hoop
in position

Exercise 2. (1) Sw hoop diagonally s u r with l hand on hip and fal s r—(2) sw hoop diagonally s d r—(3) return to (1)—(4) position.

Exercise 3. (1) Archer r and step pos s l—(2) sway on toes to step pos s r and bd Tr s l, archer pointing vertically upward—(3) return to pos of (1)—(4) position.

Exercise 4. (1) Divide and rse arms f, turning hoop hor beneath arms, and step pos f r—(2) rse arms u and sw hoop to frame pos b of head with fal f r—(3) return to pos of (1)—(4) pos.

Exercise 5. (1) Sw hoop diagonally s u r and step pos s l—(2) bd r arm, bringing hoop close to shoulder, and fal s l—(3) return to pos of (1)—(4) pos.

Exercise 6. (1) Archer diagonally s u r and fal s r—(2) archer diagonally s d r and sway to fal s l—(3) return to pos of (1)—(4) pos.

Exercise 7. (1) Kneel on r K—(2) frame—(3) archer to r—(4) frame—(5) archer to l—(6) frame—(7) hoop in pos on floor—(8) pos.

Exercise 8. (1) Kneel on r K—(2) frame—(3) archer to r—(4) frame—(5) hoop on floor and hands resting on top with forehead resting on hands—(6, 7) hold this pos—(8) pos.

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach one of the lessons with hoops, as assigned by the teacher.

2. Arrange a lesson of four hoop exercises, choosing from the elementary exercises in lesson 25, and planning suitable foot and body positions to go with them.

LESSON TWENTY-SEVEN

INDIAN CLUBS

THE SELECTION OF CLUBS

Experience has shown that the best weight for Indian clubs for general class use is much lighter than was formerly chosen. This is partly because a class of people who are less vigorous is now using them extensively, and partly because the interest in them now centers in the variety and speed of the movements rather than in the strength required to swing them. For practicing new exercises, which is the main thing in class work, the clubs for the strongest high school



Fig. 74
Clubs in position

pupils should not exceed one and one-half pounds; most men prefer one pound clubs for new exercises and one and one half for familiar exercises. For classes of women and children clubs of one-fourth, one-half, and three-fourths of a pound should be provided. The clubs should not be too short. One chief fault with many patterns of lighter clubs is so short a handle that the natural time of the swing is too quick to be controlled well.

ELEMENTARY CLUB MOVEMENTS

While resting, pupils hold the clubs easily at sides; the clubs should be brought to position and fundamental position of the body assumed at the same time.

Command, *With clubs in position,—Stand!* or *Clubs,—Up!*
Fig. 74.

The ball of the club is grasped in the hand, the clubs are held in a vertical position with the tops of the clubs about as high as the top of the head, hands in front of the shoulders, elbows close to sides.

Faults: Clubs not at proper height or not vertical, body not well poised. See Fig. 74 and Fig. 1.

(a) PLAIN SWING SIDEWISE.

Command, *Right sidewise,—Swing!* Fig. 75.

Raise the club upward and begin to move it sideward, elbow becoming fully extended as arm is diagonally sideward upward at an angle of 45 degrees as shown in Fig. 75. Then, without pausing,



Fig. 75
Plain sideward swing

swing sidewise, downward, and across at full arm's length and back to starting point, as is indicated in the figure. The swing occupies one count; the club remains in the position during the second count; then the exercise is repeated in even rhythm. Care must be taken to swing exactly in the lateral plane. Repeat with the left club.

Faults: Swing made in a diagonal direction; arm not fully extended during swing, especially on starting and just before coming to position.

(b) PLAIN SWING CROSSWISE.

Command, *Right crosswise,—Swing!*

The preceding exercise is reversed, using right and left club singly.

(c) PARALLEL PLAIN SWINGS.

Command, *Plain swings parallel to right*,—*Swing!*

The clubs start from position to the right at the same time, the right club executing the sidewise swing and the left club the cross swing.

Faults: One club swings slightly before the other; body bent to the side.

(d) OPPOSITE SWINGS.

Command, *Both sidewise (or crosswise)*,—*Swing!*

Both start at once on the sidewise swing, clubs crossing in front of knees. Reverse the movement for the crosswise swing.

Faults: Body bent forward with each swing; not poised forward far enough; swings not in lateral plane.

A SERIES OF PLAIN SWINGS

Plain swings, eight counts of each, beginning parallel right,—*Swing!* The series is as follows:

- I. Parallel right.
- II. Both sidewise.
- III. Both crosswise.
- IV. Parallel left.

This series should be practiced, always in the same order, until it is perfectly familiar, as it is the basis for the order of movements in later series.

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach the elementary club exercises just given.

The teaching of Indian club exercises differs from the teaching of bell, wand, and hoop exercises because most of the club exercises are individually more difficult to coördinate and at the same time less vigorous; more teaching and more practice is necessary for the mastery of each movement, making it necessary to utilize the time more fully and carefully; less time is needed for rest. It is also to be noticed that the movements are continuous, instead of being in distinct parts, as bell and wand exercises are; this makes the faults more difficult to observe, requiring complete familiarity with the exercises and as much experience in observation and criticism of club swinging as possible.

After the first few trials to get the general form of the movements, all club swinging should be done in series with accompaniment of waltz time, one measure for each movement. The movements should be taught, if possible, in the order in which they come in the series; as soon as the series is fairly well done, a new movement should be added, and the whole series practiced with the addition; faults should be pointed out at the close of each repetition of the series, with the demonstration of the fault and the correct form in contrast if advisable, and then the series should be practiced again; too much time should not be used for showing individuals, as practice is all important, a large percent of the faults being due to lack of practice and not to wrong ideas. Until the pupils know the order of the movements, the teacher should direct the practice by naming the next in order while the count just preceding the last is being executed; for example, if eight counts of each movement are to be taken, the name of the next should be spoken on the seventh count, so that pupils may have an instant to think of the change.

A few children learn club exercises readily at the age of five or six, but for class exercises they are not usually satisfactory below the sixth grade.

2. Be ready to conduct a large class in the series of plain swings just given.

LESSON TWENTY-EIGHT

COMBINATIONS OF PLAIN SWINGS WITH BODY MOVEMENTS; PLAIN SWINGS AND SHOULDER CIRCLES

COMBINATIONS

Club movements are not so readily combined with all kinds of other movements as are those with bells, wands and hoops, but a few combinations are good and serve to distribute the exercise. The plain swings can be combined with step positions, stride positions, side steps, fallout, and some others. The following will illustrate the use of combinations with the series just given:

I. Parallel right with step position sideward right. Take the step position with the plain swing and return the foot while the club rests on the second count. Continue for the eight counts.

II. Both sidewise and side step. Take the stride position sideward with the plain swing and bring in the other foot on the second count. Take the step first to right and then to left, alternately for the eight counts.

III. Both crosswise and heel raising. Stand on tiptoes during the swing and in fundamental position on the second count. Continue through the eight counts.

IV. Parallel left and step position sideward left. Practice this series till perfectly familiar.

THE CIRCLES BEHIND THE SHOULDERS

These circles are not so easily made alone, but are readily added to the plain swings. They are taken up singly as follows:

(a) SIDEWISE.

Command, *Plain swing with shoulder circle, right sidewise,—Swing!* Fig. 76.

Execute the first count of the plain sidewise swing, then, instead of coming to rest on the second count, carry the hand backward and, without pausing or stopping the momentum of the club, make a small circle behind the shoulder, as shown in Fig. 76. In making

the small circle the hand is at the height of the eye and directly above the tip of the shoulder; the club is held between the thumb and first finger, with the ball of the club in the hand.

Faults: Hand held too low while making small circle; club grasped too tightly; plain swing too small, especially at later part. Practice same exercises with the left hand.

(b) CROSSWISE.

Command, *Plain swing with shoulder circle, right crosswise,—Swing!*



Fig. 76
Shoulder circle



Fig. 77
Parallel

Preceding exercise is exactly reversed. Swing the plain swing crosswise on the first count and then, instead of coming to rest, make a small circle crosswise and down behind the head and shoulder, without pausing or checking the momentum of the club.

Faults: The hand held too high while making small circles; plain swing too small; club grasped too tightly.

Practice same exercise with the left hand.

(c) PARALLEL TO RIGHT.

Command, *Parallel to right with shoulder circles,—Swing!*

The right swings sidewise, the left club crosswise; shoulder circles parallel as in Fig. 77 on the second count.

Faults: Shoulder circles not made at same height; sidewise circle is apt to be too low and the other too high.

(d) FOLLOW.

This is a variation from the parallel, differing from it only in having the club that swings crosswise start and keep a half circle in advance of the other. *Follow to right,—Swing!*

Faults: Club that leads is not far enough in advance; not keeping with the music.

(e) BOTH SIDEWISE.

Command, *Both sidewise with shoulder circles,—Swing!*

Faults: Shoulder circles made with hands too low; plain swings made without fully extending the arms.

(f) ALTERNATE SIDEWISE.

This is a variation of both sidewise, differing from it only in having one club make the plain swing while the other makes the shoulder circle, and vice versa: *Alternate sidewise with shoulder circles,—Swing!* The right club begins with the plain swing, the left with the shoulder circle; the following diagrams show the difference in rhythm between the follow and the alternate swings:

		Count one	Count two
Follow right:	Right hand	plain swing	shoulder circle
	Left hand	plain swing	shoulder circle
Alternate:	Right hand	plain swing	shoulder circle
	Left hand	shoulder circle	plain swing

After a little practice with:

(g) BOTH CROSSWISE with shoulder circles we are ready for:

(h) ALTERNATE CROSSWISE. Here the rule for starting is the same as for alternate sidewise, and as shown in the above chart.

The parallel to left and the follow to left are too nearly like these movements to right to need description. When they are learned we can swing the following series:

SERIES OF SWINGS WITH SHOULDER CIRCLES

- | | |
|------------------------|-------------------------|
| 1. Parallel to right. | 5. Alternate crosswise. |
| 2. Follow to right. | 6. Both crosswise. |
| 3. Both sidewise. | 7. Follow to left. |
| 4. Alternate sidewise. | 8. Parallel to left. |

Each of these movements should be taken for 8 or 16 counts and then a change should be made to the next without any interruption of the rhythm. The change from 1 to 2 has no difficulty. To change from 2 to 3 the left hand must reverse after the shoulder circle of the last count. From 3 to 4 the right hand makes no change, but the left hand makes a second shoulder circle at the beginning of the new movement. To change from 4 to 5, stop the clubs at the end of the last movement of 4, raise them a little above the head, then drop them crosswise on the new movement.

Pupils should notice the relation of this series to the series of plain swings on page 116: 1 corresponds to I, and a variation of it is added as 2; 3 corresponds to II, and a variation of it is added as 4; 6 is like III, and a variation of it is inserted as 5; 8 is like IV, with the corresponding variation as 7. The last four are arranged in the reverse order of the first four. This arrangement makes easy changes from one movement to the next.

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach the combinations of plain swings with leg and body movements.
2. Prepare to teach the circles behind the shoulders, singly.
3. Prepare to teach the combined plain swings and shoulder circles, one at a time.
4. Prepare to conduct the class in the series of swings with shoulder circles.

LESSON TWENTY-NINE

MORE ADVANCED COMBINATIONS: THE MILL-WHEEL

COMBINATIONS

When the above series is mastered, the following combinations may be given:

1. Parallel to right and step position s r with bending of l knee. The step pos is taken with the plain swings and the return, with the shoulder circles, 16 counts.

2. Follow to right and fal s r, taken as follows: std s r and plain swings on count 1—sway to fal s r and shoulder circles on count 2—sway back to std and plain swings on count 3—replace the foot and shoulder circles on count 4. 16 counts.

3. Both sidewise and side step to right for the first two counts, repeat the club movement and step in opposite direction on the next two counts. Continue for 16 counts.

4. Alternate sidewise for 8 counts without other movement, followed by 8 counts of the following: (1) let the clubs drop backward until they rest on the shoulders by loosening the grasp, hands as in position of clubs, and rse r knee (Fig. 18)—(2) hold this position—(3) extend knee forward, foot 6 inches from floor—(4) hold this position—(5) return to position of (1)—(6) hold this position—(7) return to standing position—(8) rest.

5. Alternate crosswise, without combination, for 8 counts, followed by 8 counts as in the preceding but taken on other foot.

6. Both crosswise and side step as in 3, taking the step to left instead of to right.

7. Follow to left and fal s l, taken as in 2.

8. Parallel to left and step pos s l, taken as in 1.

ADVANCED CLUB MOVEMENTS

(a) THE MILL WHEEL.

Command, *Mill wheel to right,—Swing!*

To learn this movement easily a preliminary exercise is necessary; this consists of the parts of the mill wheel made by the hand separately.



Fig. 78
Mill wheel

Preliminary exercise: Hold the left forearm and club horizontal forward, elbow resting against side and elbow bent to a right angle. Starting with the right club in position, as in Fig. 74, make three circles in the forward plane as follows: first, a circle forward with the right wrist lying across the left arm as in Fig. 78, the

palm being down at first and up at the end; second, make a circle just like the first excepting that right wrist crosses under the left arm instead of above it; third, leaving the palm up, when it finishes the second circle, make a circle on the right side of the right arm in the forward plane, hand nearly still. Now begin at the first and repeat in series, practicing the three in order without stopping.

Faults: The circles not made in the forward plane; under circles not complete at their upper half.

Practice same with left hand.

The mill wheel is a "follow" combination of these exercises, arranged as shown in the following diagram; the three circles just described are called the over, under, and side circles respectively.

		Count one		Count two	
		over	under	side	over
Mill Wheel	{	Right hand:		Left hand:	
		under	side	over	under

The mill wheel to right begins, as the diagram indicates, with the under circle with the left hand. As the left club reaches its lowest point in this circle, the right club starts over. The over circles come at the beginning of each count of the music, and so serve as the guide for rhythm. The circles made by each hand come in the order in which they were taken singly.

The mill wheel to left differs from the mill wheel to right only in the stage of the movement at which we begin it; the exercise to right begins with left hand under, and that to left with right hand

under. The reason for this is that the mill wheel is regularly taken after a follow, and the hand that is leading in the follow must lead in the mill wheel.

When the mill wheel is mastered, repeat the series of swings with shoulder circles and insert the mill wheel after the follow. The smoothest change is made by repeating the follow again after the mill wheel.

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach the combinations given at beginning of this lesson.
2. Prepare to teach the mill-wheel. Plan the demonstration and analysis of the movement carefully. Few exercises in gymnastics depend so much on the manner of presentation as to the length of time it takes a class to master them.

LESSON THIRTY

ADVANCED CLUB SWINGING; COFFEE GRIND, REELS, FRONT CIRCLES, LOWER CIRCLES

(b) THE COFFEE GRIND is a follow movement somewhat similar to the mill wheel, but the circles are horizontal. The movement is learned first with the hands singly, swinging the club horizontally above and below the hand in alternation; both clubs swing in the same direction in follow time to make the coffee grind.

(c) THE CIRCLE IN FRONT OF SHOULDER. This circle is made at the same height as the shoulder circle with the club passing in front of arm and shoulder. A new way of holding the club is required here; the ball of the club must be held between the ends of the thumb and two or three fingers, instead of in the notch between thumb and first finger as usual. This circle is made with the plain swing, in the same manner as the shoulder circle. A series can be swung using the front shoulder circle instead of the one used hitherto, with parallels, follows, opposites, and alternates.

(d) THE REEL. This is made by taking the shoulder circle and the circle in front of shoulder in alternation, without any plain swing. The reel may be made sidewise or crosswise, in the same direction as the corresponding plain swings.

Reels can be made parallel, opposite, or alternate; the alternate is the most pleasing of these, and is often introduced into the series of swings with shoulder circles after the alternate sidewise and before the alternate crosswise. The alternate reel may be thought of as a variation of the regular alternate, substituting the small circle in front of shoulder in place of the plain swing.

(e) THE LOWER CIRCLES. Each exercise thus far has been complete in two counts; the lower circles are usually added to the swings with shoulder circles, making four counts in all.

Right club sidewise with lower circles,—Swing! The order of the circles is as follows:

(1) The downward half of the plain swing—(2) lower back circle—(3) lower front circle—(4) upward half of plain swing and

shoulder circle. The greatest difficulty here is the lower back circle, Fig. 79.

The lower back circle is made with the club held between the tips of fingers and thumb, as for the circle in front of shoulder. As the club swings downward it is carried to the rear and behind the back, with the palm of the hand to the rear. Swinging the hand in nearly to the middle of the back, the hand is raised three or four inches by a bend of the elbow to give the club its turn upward, and then brought quickly around the waist line to the front and the lower front circle made. The lower front circle is made with the hand nearly stationary in front of the thigh, with the palm to the front and inward, the club being held between thumb and first finger as in shoulder circles. The lower front circle being completed, swing the club far to the left to make the upward half of the plain swing, and complete the exercise with the shoulder circle.



Fig. 79
Lower back circle

Faults: Lower circle not far enough behind the back; plain swing too small; swings not in lateral plane.

Repeat with left hand.

Right club crosswise with lower circles,—Swing!

This is the exact reverse of the preceding. The order of the different movements is:

(1) The downward half of the crosswise plain swing—(2) lower front circle in reverse direction—(3) lower back circle in the reverse direction—(4) upward half of plain swing and the crosswise shoulder circle.

The only point of difficulty here is, as before, with the lower back circle. With the aid of the momentum gained in the making of the lower front circle, the club rises as it passes to the rear, so that when the hand is behind the hip the club points nearly upward. The palm must be turned to the rear. The club passes inward behind the back and then downward; the second half of the plain swing must be in the side plane, and the shoulder circle at the proper height.

The exercises with lower back circles require somewhat faster music than these previously learned.

SERIES OF SWINGS WITH LOWER CIRCLES

- | | | | |
|-----|-----------------------------|-----|-----------------------------|
| 1. | Parallel to left. | 5. | Lower reel, crosswise. |
| 2. | Follow to left. | 5b. | Alternate crosswise. |
| 2b. | Mill wheel or Coffee grind. | 6. | Both crosswise. |
| 2. | Follow to left. | 7. | Follow to right. |
| 3. | Both sidewise. | 7b. | Mill wheel or Coffee grind. |
| 4. | Alternate sidewise. | 7. | Follow to right. |
| 4b. | Lower reel, sidewise. | 8. | Parallel to right. |

This series is given starting toward the left so that it can be taken immediately after the series with shoulder circles, which was given starting toward the right. The following are the difficult points:

The follow is not made easily with the lower circles and in exact rhythm; the following hand is apt to catch up, so that the last count of the exercise is a parallel. Care must be taken to make all circles full size with the hand that follows, as a shortening of these circles, especially the plain swing, is the cause of one hand's gaining on the other.

The mill wheel in this series is taken with a fallout outward, the hands touching the knee and the clubs swinging each side of the leg.

The alternate swings have the circles related to one another as follows:

	1	2	3	4
Alternate Sidewise—				
Right hand:	down	back	front	up and shoulder
Left hand:	up	shoulder	back	front
Alternate Crosswise—				
Right hand:	down	front	back	up and shoulder
Left hand:	back	shoulder	down	front

This relation of the swings is brought about if we start the left hand in each case on count three and the right hand on count one of the regular opposite swing.

The lower reels consist of lower back and lower front circles in alternation; the lower reel sidewise starts with the right hand back and the left hand front; the crosswise reel starts in the opposite position, so as to start smoothly by stopping the former and reversing the movement.

PRACTICAL WORK OF THE STUDENT

1. Demonstrate and analyze the coffee-grind, showing how it may be taught to best advantage. Show how to pass into it from plain swings and how to pass back to plain swings again.

2. Demonstrate the circle in front of shoulder, showing how to combine it with a series of plain swings. Conduct a class in making a series of swings, replacing the usual shoulder circle with the one in front of the shoulder. Use it singly and then using both hands at once.

3. Demonstrate and analyze the upper reel. Show how to pass into it from plain swings and how to pass back to plain swings again. Conduct the class in several movements in series, using the reel in some of them. In this work both the sidewise and crosswise reels should be used.

4. Demonstrate the lower front and lower back circles sidewise, and show how to combine them with the plain swing and shoulder circles, making a four count movement. Conduct a class in this movement, then repeat with the crosswise movement.

5. Prepare to teach the parallel swings with lower circles to a class that has learned the movements singly. Conduct the class in the right and left parallels and then take up the opposite movements, both sidewise and both crosswise, with lower circles.

6. Prepare to teach the alternate swings with lower circles and to conduct the class in the series of swings with lower circles given above.

7. Demonstrate and teach the lower reels, sidewise and crosswise; show how to pass into these movements from plain swings and back again.

LESSON THIRTY-ONE

THE ARRANGEMENT OF SERIES OF CLUB SWINGS AND THE TEACHING OF SUCH SERIES

Series of club exercises should be so arranged as to permit of easy and graceful change from one movement to the next. A systematic arrangement aids in remembering the series, but if such an arrangement involves a broken movement that is difficult to perform continuously the advantage must be sacrificed for the sake of former principle. Combinations of leg and body movements are often given alternately with the regular kind of swings, in order to balance the work of the different parts of the body and make the club exercises of more use in bodily development. Such groups of exercises are often quite as effective in appearance as the exclusively arm work usually given.

The series of exercises with clubs that have been given are illustrations of suitable series. An indefinite number is possible.

PRACTICAL WORK FOR THE STUDENT

1. Arrange a series of eight swings that can be taken continuously, swings that involve both hands and at least three of them involved combined club and leg or body movements.

2. Prepare to teach this series to a class and to conduct it with a class to whom the movements are familiar. Plan how to give the commands so as to carry on the work continuously and aid the pupils as much as possible. See directions at the end of lesson twenty-seven.

LESSON THIRTY-TWO

FANCY STEPS

ELEMENTARY MOVEMENTS

- (a) (1) Step pos f l (Fig. 53)—(2) walk pos f l (Fig. 80)—
(3 and 4) repeat (1) and (2) with r foot. Continue in series.
(b) Same as (a), using step pos outward.
(c) Same as (a), using step pos sideward.



Fig. 80
Walk position, with hips firm



Fig. 81
Knee flexion

(d) Repeat exercises (a) to (c) with this change: swing the leg in each case as if to take a step position, but do not touch the floor with the foot.

(e) Same as (a), except that in place of a step position the foot is lifted and swung in front of the other knee, the knee of the moving foot being flexed to a right angle and the knee turned outward. Fig. 81.

COMBINATIONS OF FANCY STEPS

(a) Step pos sidewise and crosswise. This may be taken in mazurka time in the following manner:

(1) Step pos s l—(2) step pos crosswise l—(3) walk pos f l—(4, 5, 6) repeat with other foot; it may be taken with two-step time in the following manner:

(1) Step pos s l—(2) step pos crosswise l—(3) repeat (1)—(4) walk pos f l—(5 to 8) repeat with other foot.

Since the two-step time is much more likely to be played, the second way of conducting the steps is much more important than the first.

(b) Step position forward and backward. This may be taken either as a 3 count or a 4 count exercise, as shown in (a).

(c) The change step.

(1) Walk pos f l and immediately bring r foot up close behind l, arch of r foot touching l heel—(2) wk pos f l—(3) repeat with r foot ahead—(4) repeat (2) with r-foot.

In dancing this movement is taken with a slide of the foot along the floor; in military marching the feet are lifted. The former method can be used on a smooth floor, but the latter must be used where the floor or the shoes are rough.

(d) Step position sideward, crosswise, and change step. The step positions occupy counts one and two, the change step is taken on three and four; repeat on the other side.

(e) Step position forward and backward and change step.

(f) Knee flexion, step position forward, and change step.

(g) Repeat (d), (e), and (f), using three running steps forward in place of the change steps. This adds more life and vigor to the movement and makes it more pleasing to children.

PRACTICAL WORK FOR THE STUDENT

I. Prepare to teach the elementary movements given above.

Each movement must first be demonstrated, the teacher counting as she takes the exercise to indicate the counts. Then it should be demonstrated continuously with music, to show the pupils how it goes with the latter. Then command the separate parts, observing and criticising the work of the class; finally command the exercise in series with music. Commands for changes or halting, given when

music is being played, will require good voice and care to make the class hear.

2. Prepare to teach the combinations. Here the teacher must be sure the exercises can be performed correctly, practicing them before a mirror or under the eye of another. Then the plan of teaching must be decided upon, which is usually in the main as follows:

(1) Demonstrate as in the direction just given for elementary movements. The music that will be used should be played here.

(2) Command and criticise as just stated above.

(3) Call for the separate parts by their numbers, as in the general plan for teaching complex exercises, lesson seven. (Page 47.)

(4) Command the whole movement, adding "with counting by the class." Continue observation and criticism, repeating as often as necessary to secure accuracy.

(5) Command the entire exercise in series with music. Continue to observe and stop the class for criticism when suitable practice has been given.

LESSON THIRTY-THREE

COMBINATIONS OF FANCY STEPS

(h) The "Rye" step.

(1) Step pos outward—(2) step pos crosswise—(3) step pos outward—(4) step pos b—(5) the first count of the change step, as described in (c)—(6, 7) repetitions of (5)—(8) rest—(9 to 16) repeat on other side.

(i) The half rocking step.

(1) Step pos crosswise l, throwing all the weight on the l foot and raising r foot backward—(2) spring on r foot and rse l foot f—continue springing on the l and r foot alternately, keeping the feet in the same relative positions. Practice also with r foot forward.

MAZURKA.

The image shows a musical score for a Mazurka, consisting of three systems of piano accompaniment. Each system has a treble staff and a bass staff. The key signature is one sharp (F#) and the time signature is 3/4. The music is written in a style typical of early 20th-century dance music, with a focus on rhythmic patterns and harmonic accompaniment. The first system is 8 measures long, the second is 8 measures, and the third is 8 measures, ending with a double bar line. The bass line is primarily composed of chords and single notes, while the treble line features more melodic and rhythmic activity.

- (j) The rocking step.
 (1) Like count 1 of the preceding—(2) hop on l and sw r foot f—(3) sw r foot across l, throw weight upon it, and sw l foot b—(4) hop on r foot and sw l foot f. Continue in series.
- (k) Mazurka step. (Mazurka time required.)
 (1) Slide r foot two foot-lengths to r with heel raised—(2) spring lightly from both feet and alight on l where r foot finished the slide, with r foot raised s—(3) hop on l and knee flexion with r—(4, 5, 6) repeat in same direction.
 Count (2) is called the "Cut."
- (l) Schottische, simple form.
 (1, 2, 3) run forward l, r, l—(4) hop l and swing r foot f. Repeat beginning r and continue.
- (m) Schottische.
 (1) Slide r foot two foot-lengths to r and transfer weight to it.
 (2) Cut, as in second count of mazurka step.
 (3) Hop r and rse l slightly close behind r, knee turned out.
 (4) Hop r and hold l in same position as in (3).
- (n) Hop Polka.
 (1) Hop l, rse r as in (3) of schottische.
 (2) Slide r two footlengths s, transfer weight to it.
 (3) Cut, replacing r with l.
 (4) Hop r and rse l as in (3) of schottische.
- (o) Pirouette.
 (1) Place r foot one foot-length to r, turning it to r and rear—
 (2) lift l foot, cross it in front of r, close to it and past it to rear, at the same time turning on the balls of the feet in the same direction until a complete revolution has been made. The arch of the l foot will be behind the heel of the r when the turn is complete.

The music best adapted to the pirouette is 4/4 time, taking count (1) of the exercise on count (1) of the music, count (2) of the exercise on counts (2, 3) of the music, and resting on the fourth count of the music. It can be practiced in-series best by taking it twice to right and then twice to left, repeating in this manner.

PRACTICAL WORK FOR THE STUDENT

Prepare to teach the above combinations as in the preceding lesson.

LESSON THIRTY-FOUR

SIMPLE FOLK DANCES

(1) The Shoemakers' Dance.

Formation: A double circle, partners facing each other.

Measure (1). Winding thread. With arms shoulder high and hands as if holding spool and thread, wind over from you quickly three times.

Measure (2). Reverse (1), winding over toward you three times.

Measure (3). Pulling thread tight. Jerk elbows back twice, thus separating hands as in tightening thread.

Measure (4). Clap hands three times.

Measures (5 to 8). Turn facing clockwise, join inside hands and skip around the circle 8 skips, beginning 1.

Measures (8 to 16). Repeat (1 to 8), changing (4) to imitate driving pegs, hammering one first with the other.

SHOEMAKER'S DANCE

The musical score is written in 2/4 time and consists of two systems of music. Each system has a treble clef staff and a bass clef staff. The first system contains measures 1 through 4, and the second system contains measures 5 through 8. The bass clef staff includes measure numbers 1 through 8. The notation includes eighth and sixteenth notes in the treble staff and chords and eighth notes in the bass staff. The piece concludes with a double bar line and the initials 'D.C.' (Da Capo).

NOTE:—The Shoemaker's Dance is a simple dance for children, and should be carried out with dash and spirit. Parts 1-4 make up the first exercise for teaching.

THE KLAPPDANS

A SWEDISH FOLK DANCE, SUITABLE FOR PUPILS OF FOURTH GRADE

Formation: Pupils in double line around the room, turned so as to march clockwise; boys occupy the inside line, girls the outside; the hand and foot toward the partner will be called *inside*, and the other *outside*; partners join hands and place outside hands on hip.

KLAPPDANS.

The musical score for Klappdans is presented in three systems. Each system consists of a grand staff with a treble and bass clef. The key signature is one sharp (F#) and the time signature is 2/4. The first system (measures 1-5) begins with a forte (*f*) dynamic. The second system (measures 6-11) includes a forte (*f*) dynamic starting at measure 9. The third system (measures 12-16) begins with a mezzo-forte (*mf*) dynamic and ends with a double bar line and the instruction "D.C.".

Measures (1-8). The Frolic. (1, 2, 3) Take three running steps, starting with outside foot—(4) hop on outside foot, raising inside foot forward—(5 to 8) repeat, starting with inside foot. Repeat the entire movement through 32 counts finishing facing each other with hands on hips.

Measures (9-16). The Salutation. (9) Boys make a stiff bow to partner, bending in hips only, while girls make a stiff curtsy, crossing r toe behind l and bending knees, trunk erect—(10) clap hands three times in front of chest in the time of two counts—(11) repeat (9), girls making the bow and boys the curtsy—(12) repeat (10)—(13) clap r hand against partner's and hands on hips—(14) clap l hand against partner's and hands on hips—(15) whirl completely around to l on l foot, clapping r hand against partner's as the whirl begins—(16) stamp r, l, and r, in the time of two counts.

Exercise 3. Repeat the frolic.

Exercise 4. Repeat the salutation, changing 10 as follows: (10) rest r elbow in l palm and make three threatening gestures toward partner by shaking the r hand with forefinger uplifted and head inclined toward hand; change 12 in same way, using the opposite hands.

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach the two simple folk dances given above.

The preparation to be made here is like that for the combined steps of the last lesson, but the one who is to teach a dance must decide into what parts or phrases it should be divided for the purpose of teaching, as well as to prepare the method of teaching these parts. The music usually divides naturally into phrases of four, eight, or sixteen measures and the dances are usually composed to accord with this phrasing. This should be studied carefully at the outset.

On coming before the class the dance should be named and the class placed in formation for the first exercise. Then the music should be played and the class asked to listen. The demonstration of the first phrase with music follows, the teacher taking care to stand where all can see. The first phrase of the dance is then taught as stated in the preceding lesson.

Both these dances are simple dances for children and should be taken with dash and spirit.

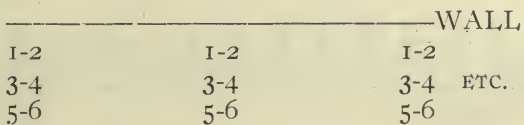
Where there is grouping, teach all the movements to the whole class, then introduce the grouping.

LESSON THIRTY-FIVE

FURTHER PRACTICE IN TEACHING SIMPLE FOLK DANCES

POP GOES THE WEASEL

Form the class in groups of six, the three couples of each group standing close together with first couple next to the wall and partners facing each other.



Exercise 1. Numbers 1 and 2, constituting the 1st couple, skip sidewise 8 counts away from the wall, passing behind the partners of 2nd and 3rd couples, who remain in place, and immediately skip back again to places, 8 counts.

Exercise 2. Numbers 1 and 2 join hands crossed and skip sidewise as before, this time passing between the partners of 2nd and 3rd couples, 8 counts, and back to places, 8 counts.

Exercise 3. Numbers 1, 2, and 3 join hands in a circle and skip sidewise to r 8 counts and then to left; on count 5, corresponding to the word "Pop," Number 3 passes under raised arms of Numbers 1 and 2 to position held by Number 1 at the start, and all not dancing clap hands.

Exercise 4. Numbers 1, 2, and 4 join hands in circle and perform same movements as in 3, leaving Number 4 in position held by Number 2 at start.

Exercise 5. Numbers 1, 2, and 5 execute same, leaving Number 5 at place of Number 3.

Exercise 6. Numbers 1, 2, and 6 execute same, leaving Number 6 at place of Number 4.

Exercises 7-12. Numbers 3 and 4 are now 1st couple, and they begin the next round, repeating Exercises 1-6.

POP GOES THE WEASEL.

The first system of musical notation for 'Pop Goes the Weasel' consists of a grand staff with a treble clef and a bass clef. The key signature is one sharp (F#) and the time signature is 6/8. The melody in the treble clef starts with a quarter note G4, followed by quarter notes A4, B4, and C5. The bass clef accompaniment features a steady eighth-note pattern of chords: G2-B2-D3, A2-C3-E3, B2-D3-F#3, and G2-B2-D3.

The second system continues the melody and accompaniment. The treble clef melody includes a quarter note D5, a quarter note E5, and a quarter note F#5. The bass clef accompaniment continues with the same eighth-note chord pattern.

The third system continues the melody and accompaniment. The treble clef melody includes a quarter note G5, a quarter note A5, and a quarter note B5. The bass clef accompaniment continues with the same eighth-note chord pattern.

The fourth system concludes the piece. The treble clef melody includes a quarter note C6, a quarter note B5, and a quarter note A5. The bass clef accompaniment continues with the same eighth-note chord pattern.

THE IRISH LILT

A GYMNASTIC DANCE, SUITABLE FOR HIGH SCHOOL PUPILS

Pupils standing in regular class formation. Music, "The Irish Washer Woman."

Exercise 1. Hop l and rse r leg f—(2) hop l and sw r leg s—
(3) spring to r foot and rse l leg b—(4) hop r and hold l leg in

IRISH WASHERWOMAN.

The first system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one sharp (F#) and a time signature of 6/8. The lower staff is in bass clef with the same key signature and time signature. A dynamic marking of *p* (piano) is placed above the first measure of the bass staff. The music features a melody in the treble staff and a supporting bass line in the bass staff.

The second system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one sharp (F#) and a time signature of 6/8. The lower staff is in bass clef with the same key signature and time signature. A dynamic marking of *f* (forte) is placed above the first measure of the bass staff. The melody continues in the treble staff, and the bass line provides accompaniment.

The third system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one sharp (F#) and a time signature of 6/8. The lower staff is in bass clef with the same key signature and time signature. The melody in the treble staff includes a repeat sign and a trill-like figure. The bass line continues with accompaniment.

The fourth system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one sharp (F#) and a time signature of 6/8. The lower staff is in bass clef with the same key signature and time signature. The melody in the treble staff is characterized by a series of eighth-note patterns. The bass line provides a steady accompaniment.

The fifth system of musical notation consists of two staves. The upper staff is in treble clef with a key signature of one sharp (F#) and a time signature of 6/8. The lower staff is in bass clef with the same key signature and time signature. The melody in the treble staff continues with eighth-note patterns. The bass line concludes the piece with a final cadence, indicated by a double bar line and repeat dots.

same position—(5 to 12) repeat the preceding r and then l—(13) spring upward and alight in stride pos s—(14) spring again and alight with feet together—(15) hop l and knee flexion r—(16) hop r and rse l leg f.

Movements 13 to 16 make what is called the "Break," and this is the finish for each exercise of the lilt.

Exercise 2. (1) Hop l and tap r toe f—(2) hop l and strike r heel in place of toe—(3) hop l and tap r toe behind l heel—(4) hop l and rse r leg f—(5 to 12) repeat r and then l—(13 to 16) "break."

Exercise 3. (1) Hop l and rse r leg s—(2) hop l and sw r leg f—(3) hop l and quickly flex and extend r knee—(4) repeat 3—(5 to 12) repeat r and then l—(13 to 16) "break."

Exercise 4. (1) Hop l and tap r toe s, toeing in—(2) hop l and strike r heel in place of toe—(3) hop l and tap r toe behind l heel—(4) hop l and rse r leg s—(5 to 12) repeat r and then l—(13 to 16) "break."

Exercise 5. (1) Hop l and tap r toe f—(2) hop l and rse r leg f—(3) spring on r, crossing it over in front of l and rse l leg b—(4) hop l and rse r leg f—(5 to 12) repeat r and then l—(13 to 16) "break."

Exercise 6. (1) Hop l and strike r heel f—(2) change to same pos with l heel f—(3 to 14) change r and l alternately as in the preceding—(15 and 16) stamp l, r, and l in the time of two counts.

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach the two dances given in this lesson, following general directions in preceding lesson.

Pop Goes the Weazel (p. 149) calls for a carefully planned scheme for putting the class in proper position quickly and smoothly. Here the grouping can be given at first. Why?

The Irish Lilt is an excellent dance to illustrate methods of teaching; a class may learn the whole dance in an hour or in a week, depending entirely on how skilfully the teacher develops the exercises and brings out their similarities and differences. Begin slowly, increase speed gradually.

The Irish Lilt is composed on a systematic plan which aids the memory greatly if the plan is grasped by the pupils. Into how many phrases is the first exercise naturally divided? How do the later

movements differ from those of the first phrase? What common movement occurs in each exercise? What can you say to a class of pupils who have just learned the first exercise that will best give them the idea of the second?

Each student will probably be assigned the first exercise and one other; then each one can have a class unacquainted with the exercise he is to teach.

LESSON THIRTY-SIX

FOLK DANCES—CONTINUED

THE SAILOR'S HORNPIPE

Exercise 1. Alternate change steps forward beginning r, with arms folded and held high, body inclined away from advancing foot. 16 counts.

Exercise 2. (1) Spring on to r foot with l toe behind r, r hand thrown out in gesture and l hand on hip—(2) same l—(3-4) change step r—(5-8) repeat (1 to 4), beginning on other side—(9-16) alternate change steps backward, beginning r.

Exercise 3. Rope Pulling. (1) Look up and rise r hand forward upward as if grasping a rope and then pull down—(2) same left. Continue for 8 counts, at the same time advancing quickly on heels by very short steps, time being kept by arm exercise only.

Rowing. (9-16) half rocking step with r foot f, stooping low and reaching f with hands as you rock forward, pulling and bringing up hands close to front of waist as you rock backward, gradually retreating.

Exercise 4. Lookout. (1, 2) Change step sidewise r with slide—(3, 4) repeat l, r hand held up as if to shield eyes, which are turned to side—(5-16) repeat alternately l and r.

Exercise 5. Same as Exercise 2, turning completely around during each change step.

Exercise 6. (1-3) Turn to r and take 3 running steps f—(4) hop l sw r F f—(5-16) repeat alternately l and r, all the time with hands clasped and held low with palms toward floor.

PRACTICAL WORK FOR THE STUDENT

1. Prepare to teach the parts assigned of the dance just given.
2. Arrange a group of steps, original or selected, to make a suitable dance, and prepare to teach it to the class. Select a piece of music and plan the exercises to accord with it.

SAILOR'S HORNPIPE.

The first system of the piece consists of two staves. The upper staff is in treble clef with a key signature of one sharp (F#) and a common time signature (C). It features a continuous eighth-note melody. The lower staff is in bass clef with the same key signature and time signature, providing a harmonic accompaniment of chords.

The second system continues the melody and accompaniment. The upper staff maintains the eighth-note pattern, while the lower staff provides harmonic support with chords.

The third system shows a change in the lower staff, with some notes being held for longer durations, possibly indicating a change in the harmonic texture or a specific accompaniment style.

The fourth system continues the piece, with the upper staff showing a slight variation in the melodic line and the lower staff providing accompaniment.

The fifth and final system concludes the piece. The upper staff ends with a final note and a double bar line. The lower staff provides a final accompaniment chord and ends with a double bar line.

LESSON THIRTY-SEVEN

FIGURE MARCHING

Pupils have to march from their class rooms in single or double file, and this makes them familiar with the formation needed to begin marching. Figure marching consists in having the line go in such a way in an open space as to make figures or patterns. A few of the simplest movements in figure marching are as follows:

DOWN CENTER

3	4	5	6	7	8
2					9
1					10
					11
					12
					13
					14
				16	15

ALTERNATE RIGHT AND LEFT

			13	14	15	16
			12			
			11			
			10			
			9			
			8			
			7			
1	3	5	6	4	2	

FORMING DOUBLE FILE

11	9	7	5	6	8	10
13						12
15		3	4			14
						16
		1	2			

FORMING FOURS

14	10			11	16
13	9			12	15
	5	6	7	8	
	1	2	3	4	

The lines can also pass diagonally across the room, turn at the center or at the middle of a side, and vary the figure in an indefinite number of ways.

The commands used in figure marching are usually informal and not executed as soon as given, because only the leaders make a turn at first, the others making it when they reach the place at which the leaders turned. As a consequence the command is usually an informal direction to the leaders, sometimes made by a signal or gesture rather than by words. After a certain series of turns or figures has been done several times the class can do it from memory, but it is not advised that this be expected of them at first, as the technique of marching should receive the most of the pupils' attention.

PRACTICAL WORK FOR THE STUDENT

Prepare to conduct the class in the series of figures given above. Pupils should be taught and trained in the following points of technique:

(1) The manner of starting promptly with left foot, as described in lesson seven under "Marching."

(2) Posture during marching. (See same reference.)

(3) Learning to march lightly, avoiding scuffling and stamping.

(4) Absolutely straight lines. Children have difficulty with this but college students can do it if they try.

(5) Spacing. Spacing in single file should follow the rules laid down under "Alignment forward," lesson seven. When single file is changed to double file spacing should be twice as far; in fours, four times as far, etc. When pupils alternate right and left as in the second diagram given above they should not close up the spaces to the distance for single file but keep the double distance shown in the figure; the same is true in the changes from twos to fours, as shown in the last diagram. When these spaces are kept properly there is no crowding or waiting when the figure is reversed and the formation returns to single file.

(6) Square corners. Study the directions for "Marching to Rear," lesson seven, and for marching to right and to left, (same paragraph) and practice the right angle turn to right and left. Recall manner of teaching these exercises, as studied in lesson six, and be ready to demonstrate clearly.

(7) Turning in twos and fours requires the pupils going the shorter distance to take short steps and watch the others so as to keep the line straight. Direct pupils carefully as to how close to keep together in the group of two or four.

LESSON THIRTY-EIGHT

PLANNING AND TEACHING ORIGINAL FIGURE MARCHES

PRACTICAL WORK FOR THE STUDENT

Plan an original group of changes, including five or more, starting from single file and finishing in single file. Bring to class with necessary diagrams to illustrate and hand in to teacher. Prepare to teach it to the class.

LESSON THIRTY-NINE

COURSES IN GYMNASTICS,—GENERAL PRINCIPLES

The course of gymnastic work that should be arranged for a certain group of children depends on several factors. Age is an important factor in determining what exercises are suitable, the length of the period, and the manner of conducting the class. The question of how much posture training should be given is to be answered in accordance with the amount of defect of posture present among the children, their ability to coördinate accurately, and the amount of such training they have had. The extent and form of the place for practicing must be taken into consideration in choosing the form of gymnastic exercise, and the equipment that is at hand often limits the practice to certain kinds of work. The following general principles may be stated as a guide to the teacher in planning the course to fit the conditions.

POSTURE.—Posture work is seldom needed among the youngest children, usually not until the fourth or fifth grades. Exceptional cases of bad posture may be helped by a few minutes of attention outside of the gymnastic lesson and often outside of school hours. Such pupils should be helped in a kindly manner to take the erect standing position, and actual help with the hands will be needed in most cases. Test frequently to find how well the position can be taken, and develop a pride in the ability to take correct position at will. When once acquired, see that the pupil does well in this respect in all gymnastic work and at other times, gradually cultivating the habit of the erect posture.

When the grade needs posture work, Swedish exercises should be taught in the regular gymnastic period until the few easiest and best movements are learned. Swedish gymnastic work so easily drops to the level of drudgery that great care must be taken not to try to teach too much nor to follow it too long. A very few weeks is sufficient to teach all the posture exercises needed in a certain grade; when the pupils can take them well, let them know that they have satisfied the requirements and pass to more interesting exercises. During the rest of the year these posture exercises should be taken from day to day at the beginning of the gymnastic period, or what is better, in the brief intervals between other classes, with great care

to inspire pupils with an interest in practicing to improve their habitual poise and not to produce a spirit of antagonism. In no place is the willing coöperation of the pupil more necessary than in the correction of posture.

Pupils who have had Swedish gymnastics before should be taught a few more of the movements following next in progression, in order to maintain interest. The usual tendency on the part of those who teach Swedish gymnastics is to overdo it, with the result that pupils dislike it and come to take no interest in posture. In maintaining interest, however, it is not at all necessary to do poor or inaccurate work,—pupils like to do good work, and when they have done it they like to have their efforts appreciated.

Bad postures are apt to be most common in the seventh and eighth grades. This is the place, then, for doing the most effective teaching of posture, and the place where intelligent interest in good posture is most important. Defects of posture will never be as easily corrected as here if the pupils' coöperation can be secured.

DUMB BELLS.—Dumb bell exercises may be used to advantage anywhere above third grade and in some third grades. The complexity of the exercises must be adapted to the age and ability of the pupils, and the weight of bells carefully chosen in view of bodily strength. Vigorous dumb bell work is especially enjoyed by boys from the seventh to the twelfth grades, but they do not sustain continuous interest for as long a time as some other kinds of work.

WANDS.—Wands may be of so many lengths, sizes and weights, and permit such an endless variety of movements that they are satisfactory under more widely varying conditions than any other form of apparatus. Light sticks like chair rounds are best for the smallest, while high school boys can use steel wands weighing two or three pounds. By choosing suitable exercises wands may be used by any grade of boys or girls.

FANCY STEPS are especially suitable for younger pupils and for girls; the more rapid and difficult steps are highly beneficial for upper grade boys, although only a few of the boys are as skilful in them or enjoy them as well as the girls do.

CLUBS are used in the higher grades and **HOOPS** in the lower grades.

EXHIBITIONS.—These are useful to arouse interest in physical training among citizens, most of whom never had any such work in

their own school days and think it of little importance. It is an interesting fact that many a tax payer who has always objected to gymnastics as a "fad" becomes an enthusiastic advocate of the work after seeing his own children take part in a successful public exhibition of it. The main fault with exhibitions arises from their being so often entirely foreign to the regular work of the pupil. The best kind of an exhibition is one that is planned at the beginning of the term or year, all the work of the period leading up to it and the exhibition showing the best results of all that has been done, in posture, skill, and general physical ability. Such a plan of exhibitions makes them also a stimulus to interest and to good work through the term.

Teachers sometimes plan to give different kinds of gymnastic exercise on alternate days, but whatever is gained in interest because of the variety and novelty is more than lost in the delay in advancement. The best plan is to decide upon a certain series of lessons or the mastery of a certain drill, and to stop and pass to something new and advanced when this is well done, as all teachers do in other subjects.

LENGTH OF THE TIME FOR GYMNASTICS.—For primary pupils the gymnastic period should be short and frequent,—from ten to fifteen minutes two or three times a day being given to physical exercise. For primary pupils most of these periods, preferably two a day, should be devoted to games and plays, and one to gymnastics proper. With pupils of grammar grade the time should be fifteen or twenty minutes, once a day being sufficient for regular gymnastic work; several short periods of two or three minutes should be given to active exercises at times scattered through the day if possible. For high school pupils, from half an hour to an hour a day should be given to bodily exercise, preferably divided between games and some form of gymnastics. This is important because this is the time when the pupils stop to a large extent the free out of door exercises they have practiced before and become weak and lose vitality unless more time is given to bodily exercise in school.

PRACTICAL WORK FOR THE STUDENT

1. Make a general plan for the course of gymnastics for the eight grades of a city school. Include in this plan

(a) the time to be given to gymnastics and its division into five or more periods per week, specifying for each grade.

(b) the kind of exercises to be used, stating whether the same kind of work is to be continued through the year or for what number of weeks. Make the program full for the year. Plan this work as if a gymnasium were available, but

(c) state what changes would be necessary in your plan if the work has to be done in the school room.

LESSON FORTY

COURSES IN GYMNASTICS—DETAILS OF PLANS

PRACTICAL WORK FOR THE STUDENT

Using the general plan made in the last lesson,

1. Make out lessons for the first two weeks, for the grade you expect to teach first.

2. State in a definite way the general kinds of exercise you will plan for the remainder of the year for the same grade. If you prefer using a text-book, specify the book and the exercises you would plan to cover.

3. State suitable time and suitable assignment of parts for a gymnastic exhibition to be given by the pupils of the eight grades of a city school.

4. How would such plans have to be changed to fit a rural school?

APPENDIX

I. LIST OF ABBREVIATIONS IN ALPHABETICAL ORDER

\, arm or arms.	m t, mark time.
ab, about.	Nf, neck firm.
al, alignment.	num, numbering.
B, the back.	op, open.
b, backward.	ord, order.
bd, bend.	o, outward.
br, breathe or breathing.	pos, fundamental standing position
Ch, chest.	pl, place or placing.
ch, change.	pt, parting.
cmd, circumduction.	prep, preparation for.
d, downward.	r, right.
F, foot or feet.	rk, rank.
fal, fallout.	rpl, replace.
f, forward.	rse, raise.
fc, face or facing.	ro, rotation.
fl, fling or flinging.	sit, fundamental sitting position.
H, head, heels, or hips.	s, sideward.
Hf, hips firm.	std, stride.
hor, horizontal.	str, stretch.
hg, hang or hanging.	snk, sink.
inc, incline.	sp, spaces.
jp, jump.	stnd, stand or standing.
K, knees.	stp, step.
L, legs.	sup, support.
l, left.	sw, swing.
ln, lean or leaning.	Tr, trunk.
ln hg, lean hang.	tw, twist.
mch, march or marching.	wk, walk.
mch, rr, march to the rear.	

II. USEFUL BOOKS ON GYMNASTICS

ON SWEDISH GYMNASTICS

- Enebuske: Progressive Gymnastic Days' Orders.
Posse: The Swedish System of Educational Gymnastics.
Kinesiology of Swedish Gymnastics.
Hand Book of School Gymnastics.
Nissen: A, B, C of Swedish Gymnastics.
Skarstrom: Gymnastic Teaching.
Trask: School Gymnastics.

ON FANCY STEPS AND RHYTHM WORK

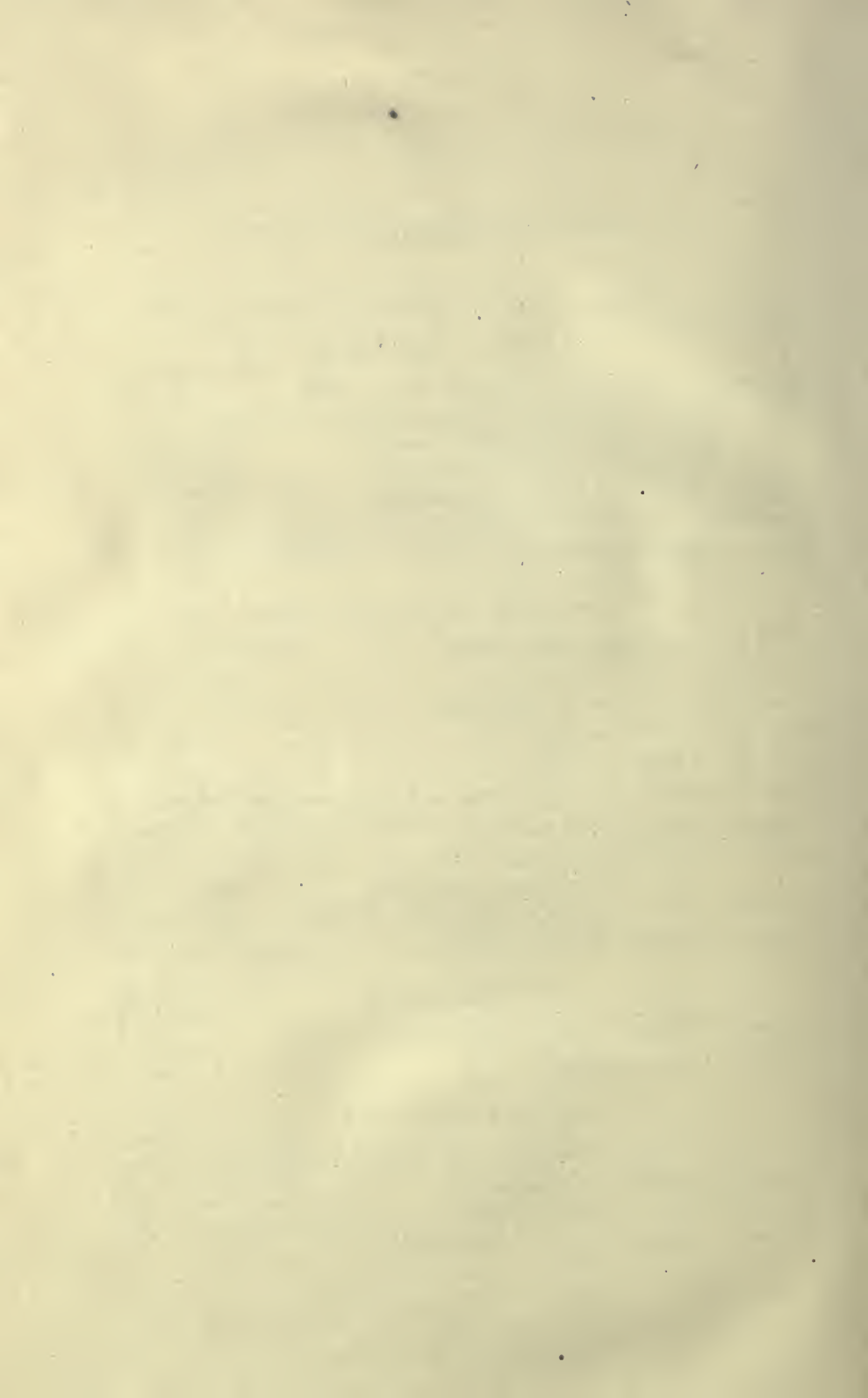
- A. P. F. D.: Danish Folk Dances.
Burchenal: Folk Dances.
Crampton: The Folk Dance Book.
Crawford: Folk Dances.
Caskey: Athletic Pageant.
Chalif School, N. Y. City: Music and Descriptions of Dances.
Gilbert School of Dancing, Boston: Music and Gymnastic Dances.
Hofer: Music for the Child World.
Popular Folk Dances and Games.
Newton: Graded Games and Rhythmic Exercises.
Perrin: Rhythmic Balance Exercises.

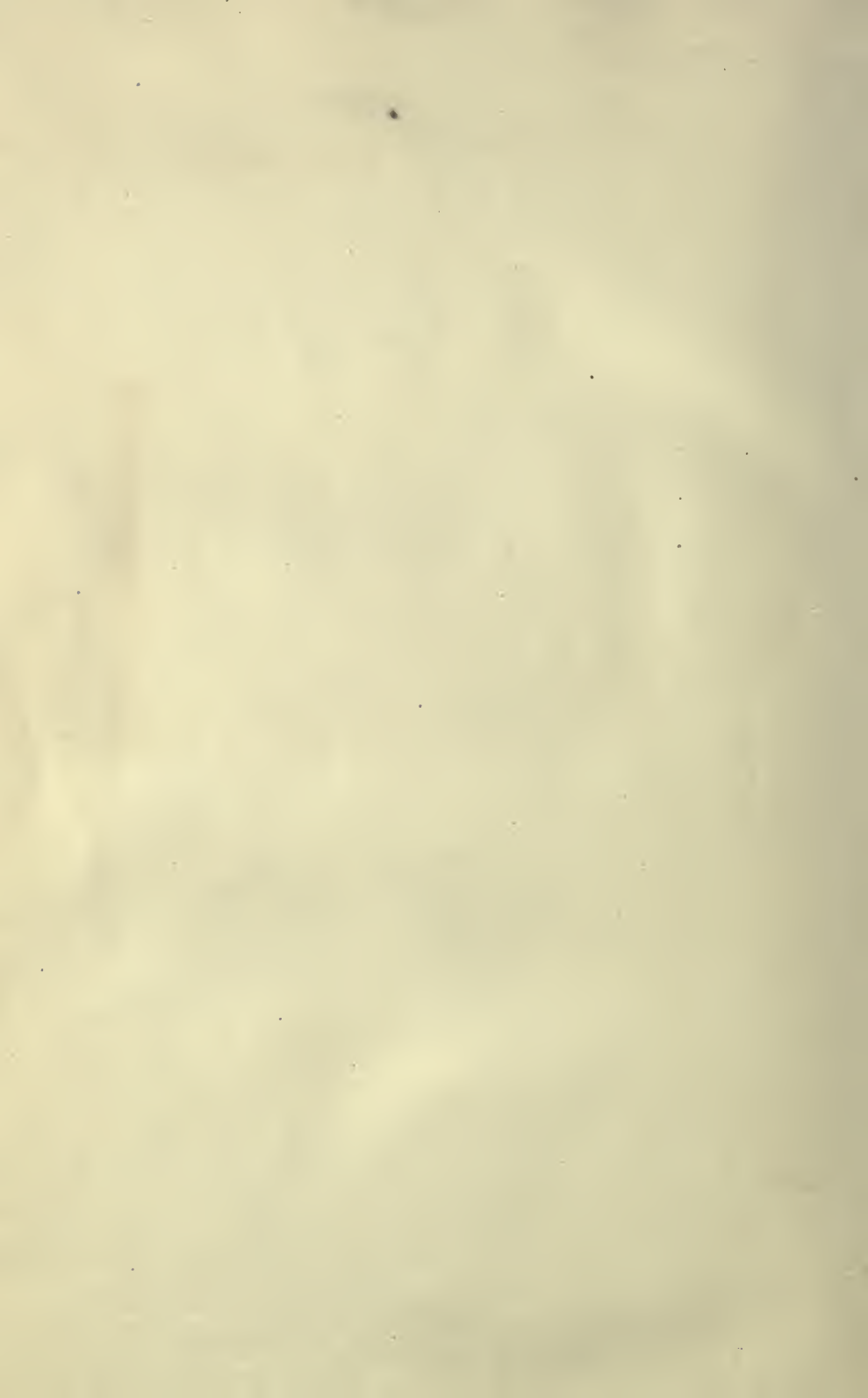
ON INDIAN CLUBS

- Cobbett & Jenkin: Indian Club Exercises.
Schatz: Club Swinging.

GENERAL GYMNASTICS

- Bancroft: School Gymnastics with Light Apparatus.
Michigan Physical Training Course.
Mind and Body: Monthly magazine.
Stecher: German American Gymnastics.





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