



THE



SUCCESS
LIBRARY



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THIRTY VOLUMES

VOLUME TEN

AVOCATION AS ESSENTIAL TO SUCCESS AS VOCATION. MEANS OF RECREATION AND DIVERSION FOR RESTING, DEVELOPING, AND ROUNDING OUT THE SUCCESSFUL MAN OR WOMAN. INTELLIGENTLY DIRECTED RELIEF FROM STRENUOUS CONCENTRATION AS A MEANS OF REFRESHING AND STRENGTHENING POWERS FOR SUCCESS. HOW TO CULTIVATE THE SUNNY SIDE OF NATURE, THE HOPEFUL VIEW AND THE OPTIMISTIC AIM SO AS TO REMOVE THE OBSTACLES IN THE WAY OF SUCCESS. LITERAL POWER OF FAITH TO "REMOVE MOUNTAINS" OF DIFFICULTY



"Pleasure may perfect us as truly as Prayer"
WILLIAM EMORY CHANNING

" . . . Art tired?
There is a rest remaining. Hast thou sinned?
There is a Sacrifice. Lift up thy head.
The lovely world and the over-world alike,
Ring with a song eterne, a happy rede,
'THY FATHER LOVES THEE.'"
JEAN INGELOW: Songs with Preludes. Dominion

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INTRODUCTION

VOLUME IV

EXTRAORDINARY elements are lacking in the lives of the majority of people. Their existence is summed up in a little work, a little play, a little love, and an occasional glance at the stars. To the few only is it given to fare forth to battle; to go on voyages of discovery; to produce great inventions; to write great books; to endure the martyrdom of a Father Damien; or to "voyage over strange seas of thought alone."

The majority stay at home, and are happy because they have no history. Their important concerns are those of the "particular hearth and home" where they learn life's lessons, not by the comet's rush but by the rose's birth.

Yet these concerns of heart and home, of work and play, are, after all, of more significance in the world's economy than is the discovery of a polar center, where human life can never be; because they are a part of man's daily existence; of the individual man, upon whose welfare depends the welfare of society. His health and strength, the right performance of his work and play, the right conduct of his house, have a deep and important influence upon the community at large.

Society is too often thought of as an abstraction or a vague embodiment of a great mass of people; and not what it really is—a collection of units. Upon each individual member of society rests the responsibility of helping to secure the general welfare. He may believe that what he does or is, is not of great importance to the community. His neglected garden seems a small affair, yet a town of neglected gardens would be a dreary place. His ill-breeding may seem to concern no one but himself, yet it has far reaching results. Every human being has a duty toward society. The first application of this duty is in the care of the individual for his own health. He may give hundreds of dollars to hospitals, and yet sin against society by neglecting his physical well-being.

Mrs. Jellyby may devote all of her time to improving the condition of the natives in Borioboolagha, while her neglected household is lowering the standards of the community in which she lives. A writer may be engaged upon what he considers a great work, yet by his contempt of social usages he is doing more harm to society than he can ever repair with his genius.

Life is largely made up of minor duties, but upon their right performance the happiness of a nation may depend. It may depend, too, upon the ability of people to play as well as work. Americans, as a nation, do

not play enough; do not understand the value of outdoor exercise, and of athletic games. They are inclined to leave athletics to professional athletes, or to relegate them to the period of college life; whereas, sports and games should enter to a greater or less degree, into the lives of all active men and women.

Volume Four of THE SUCCESS LIBRARY treats of that kind of success which is attained through vigorous health and out-of-door life; through a knowledge of domestic economy and of social usages; in short of all the practical concerns of everyday life. The first division is devoted to the subject of physical culture. Those who cannot have access to a public gymnasium are instructed how to establish a gymnasium at home. A system of physical exercise is presented. Special articles follow on Indian clubs, the trapeze, parallel bars, rings, the ladder, running, training, etc. The entire ground is fully and exhaustively covered.

Closely connected with the subject of physical culture is that of indoor and outdoor amusements. Under the head of pastimes, sports, and amusements, is described in detail every kind of game,—bowling, chess, checkers, archery, golf, tobogganing, polo, etc. Not only are games described, but such pastimes as camping out are treated of, with explicit directions for the entire enterprise, from choosing the ground, to selecting the outfit.

Success in the making and management of a home is an ideal often sought after, but because of ignorance and inexperience, not always realized. Like the division on social usages, the division on domestic economy is written for the inexperienced. It does not take a great deal for granted in setting forth information, but as the children say, begins at the beginning.

The young housekeeper will find here practical instruction on every subject connected with the science of housekeeping, from buying meats to the making of bread; from carving to spring-cleaning; from the training of servants to the decorating of the home. Such information is often needed in this country, where the majority of American girls spend their girlhood in schools and colleges, and often marry without the slightest knowledge of domestic economy.

A successful housekeeper must have experience, but experience must be founded on certain first principles which underlie all domestic science. These first principles are set forth clearly and minutely in the division on household economy.

The department of social usages is written for the novice, not for the woman of society. An inexperienced person can here find enlightenment on every possible usage and custom of the social world; can learn what to do, and what not to do; can learn the proper form of invitations; the correct way of setting a table; the *convenances* of weddings, funerals, theater parties, garden parties, of every form of social assemblage. The information is gathered from the most reliable and the most recent sources; does not include social fads, but emphasizes those usages of refinement and good taste which can never vary greatly because they are founded on certain unchanging principles of social well-being.

This department of the "Library" should be of especial benefit to those who live away from large cities; or to those whose early training debarred them from a knowledge of the usages of society. No one who has mastered the instruction here presented need fear to venture through the labyrinth of social forms.

The subject of dress, one of perpetual and vital interest to all women, is also exhaustively treated in this volume. Success in dressing, like success in housekeeping, depends upon the mastery of certain first principles. These are set forth in full. Not only are colors, textures, and fashions, discussed, but the suitability of clothes, the time and place for their appearance, their cost—all of these divisions of the main subject receive particular attention.

The topic of individuality in dress is also fully discussed. Women may know how to dress in the fashion yet may be ignorant of the colors and materials best suited to their individual types. In this volume, much space is devoted to personality in dress—the expression of the mind and soul through the apparel. Women are told what jewels match their eyes; what furs and laces their complexions; what colors should be worn with brown hair, what colors with gray, or blonde hair; stout women are told which styles to avoid, and which to cultivate. Thus women are shown how to dress artistically. Men's dress is also considered. They are told when and where certain styles of clothing should be worn. The subject of children's dress is fully considered, in its æsthetic and in its practical aspects. Throughout, time, place and occasion are considered in their relations to dress. The article is suggestive and inspiring, rather than didactic.

The entire volume is of the most practical everyday character, written for American men and women, and with constant regard to the conditions peculiar to American life and society.

PHYSICAL CULTURE

(1895)

HEALTH

THE doctrines and dogmas concerning physical health have passed through more changes and phases in the course of history than has any system of theology. Next to the saving of his soul, the saving of his body has seemed to man his most important interest. His conception of how this could be done, has been in all ages a measure of his civilization.

In the earliest times, man's bodily ills seemed to him the work of evil spirits or demons. A sick person was looked upon as "possessed." There are many instances of this belief, in both the Old and the New Testaments. The morality of daily living was, in the law of Moses, closely bound up with ceremonials, the direct effect of which was upon the physical well-being. The Jewish religion was one of bodily as well as of spiritual health. The superstitions concerning demoniac possession of the sick still linger among uncivilized or partially developed peoples. The negroes retain these superstitions in regard to the various "miserics" with which they are afflicted, preferring in many cases the use of charms to legitimate remedies.


Throughout the medieval period, even the most highly civilized of the European nations were not free from the belief that bodily ailments were due to witchcraft, or to some other evil spiritual influence. During that period, also, the strong, natural desire of men to rid themselves of a disease quickly and suddenly, led to the belief in miracles, in supernatural cures by prayers, or through the influence of relics. That the niece of Pascal was cured of a disease of the eye by a miracle, was the universal belief of her contemporaries. And the phenomena which are yearly witnessed at Lourdes attest the strength of that instinct which seeks health directly from a supernatural source.

It would seem that from the earliest times men have sought physical wholesomeness in two ways: either through medicines and physicians, or through reliance on unseen powers. Of this latter method the most modern developments are the Christian and Mental Sciences, which attempt to found physical health upon mental or spiritual well-being.

The Greeks were, perhaps, the first nation to conceive of the beauty of physical health, and to use for its preservation such methods as daily baths, massage and athletic sports. Their dream of the perfectly sound and beautiful body was expressed again and again in marble. In the Venus of Melos they fixed the type of feminine health and beauty; that of masculine health and beauty in innumerable statues of gods and athletes. The Greeks, with their love of outdoor life, of bathing, of exercise, became the most naturally healthy of all nations, establishing a standard of beauty directly dependent upon health, which in after times was never lost sight of completely, even when the asceticism of the Middle Ages made the body something to be despised, and regarded sickness as a means of spiritual purification.

During this period, and to the beginning of the nineteenth century, the science of medicine was in its infancy; and was for many hundred years entangled with such false sciences as that of astrology. A man might attribute his recovery from illness to medicine or to a fortunate conjunction of the planets. Only within the last hundred years has medicine become a strict science, founded upon an accurate and minute knowledge of man's physical organism. The period of experiment is not yet over, nor will it ever be, but the work of inquiry and research is now conducted on scientific principles.

The most radical difference between this age and preceding ages is the positive attitude of the modern world toward physical well-being. Formerly men wished only to avoid illness; now the universal desire is to extract from health the beauty and comeliness, the strength and joy which are embodied in the ancient Greek statues. Health has become a kind of moral obligation, the natural and desirable state of men. Everything favors this new glorification of physical harmony. The laws of health have never been so well understood nor so strictly obeyed as at the present time.



A great variety of outdoor games, such as golf and tennis, is but one good result of this modern appreciation of the beauty of health. Its most beneficent result, perhaps, is seen in the lives of women. Formerly it was considered the right of a woman of position to be fragile and ailing. Her refinement, her place in the social scale, were measured to a degree by her ability to faint easily. Her beauty lay in her wasp waist and her pallor. But the Venus of Melos type is again in the ascendant; and since the recognition of beauty as primarily dependent upon health has become universal, this type will keep its supremacy.

The preservation of health has a direct bearing upon every phase of social and domestic life; is perhaps as essential to moral and mental harmony as is right thinking and right living. Much of the depressing theology of earlier times had its origin, no doubt, in dyspepsia. In "Oldtown Folks" Mrs. Stowe tells of a farmer whose exclusive diet of pie and pork brought upon him the gloomiest views of predestination. The cheerfulness of a man's outlook upon the universe, or of that little corner of the universe most familiar to him, depends largely upon his health. He cannot do his work in the world if he is crippled by disease. He cannot preserve warm human feeling if his thoughts are continually upon himself. Disease shuts him in from the world. Health puts him in harmony with that abundant life which, pulsating through the universe, produces power and joy. To be strong and to be happy are the two central obligations of human existence, and in fulfilling these a man becomes good of necessity.

It is significant that Christ ever refused to separate the moral and physical well-being of man. When he healed men he forgave them their sins, making both soul and body whole. This unity of the being of man has been overlooked, chiefly as a result of the medieval abhorrence of the body. The followers of Christ forgot through many centuries the value which their Lord himself placed upon the bodies of men.

The exigencies of the modern world demand of its citizens more abundant health than was ever before requisite to meet the struggles of existence. The crowding together of many persons in great cities, the feverish demands of business life, the constant rush and hurry, make physical health necessary to success. To many "it is not an inheritance, but a greatness to be achieved." But, however hampered with the burden of ancestral ills, it is within the power of men and women to cultivate good health, as they would cultivate their minds or their moral faculties.

Early training has much to do with physical well-being; but defects in such training need not permanently hamper the acquirement of good health. Early hours, plain food, daily baths, and daily exercise, constitute a simple prescription for many ills. In addition, a cheerful spirit, a fixed determination to live gayly upon the top of the universe, and a disposition to find good in everybody and in everything, will complete the cure. Only the healthy man can understand how best "to love, work, play, and look up at the stars." Only the healthy man can know the full meaning and value of success.

Nature, the kindest of physicians, has made good health dependent not upon expensive drugs, but upon the right use of her provisions for man's welfare,—food and sleep, fresh air and sunshine.

SLEEP

IN HIS organism man resembles a watch. He must be replenished with power at stated intervals, or brain and nerves refuse to do their work. This reinforcement depends largely upon a sufficient amount of sleep. When a man is asleep, nature can do more for him than in a waking state. He is completely in her hands there and she makes the most of her opportunity by building up his worn-out tissues, by strengthening his nerves, and by putting the entire machinery of his body into correct running order.

The value of sleep receives a good illustration in the part which it has in the first year of a child's life. Newly born infants are practically asleep during the whole of the day; and during the first year, the majority of the twenty-four hours are spent in sleep. Nature is storing up health and strength in the little body, having her own way with it until the brain becomes strong and the sinews sure. Children, who as a rule are natural in their instincts, demand and obtain their full measure of sleep.

It is when manhood is approaching, when social, and business, or educational, interests fill the life, that the temptation comes to disregard the homely nurse, Nature, and to reconstruct a code of physical well-being. Young men and women at college often boast that they can live and work on five hours of sleep; or they go into society, and turn night into day, believing that it can do them no harm. The bad effects of such courses may not show at once, but nature is a severe creditor. The effects of too little sleep show later in brain and nervous diseases, and even in apoplexy and paralysis. The least harmful effect is irritability; and irritability turns a man into a kind of moral mosquito. He is not dangerous, but he is annoying.

The Greeks had a religious veneration for sleep, conceiving it to be a drowsy god, Morpheus, crowned with poppies, into whose arms a man could creep and forget his troubles. "Sleep which knits up the raveled sleeve of care," wrote Shakespeare; and one of his sonnets is a complaint that the image of the Beloved has wronged him of his sleep. Many people and many nations have imagined death a long, beneficent sleep, from which the soul would awake refreshed.

The number of hours which should be spent in sleep varies with different temperaments. Highly nervous organizations require from eight to ten hours. A phlegmatic person may need but five or six hours. It is said of Napoleon and of Frederick the Great that they required but five hours of sleep. A good rule is to sleep until one wakes naturally. To go to bed early is desirable, because it is in accord with nature, who, if she had her way, would put all her

children to bed with the chickens. As soon as the sun goes down, the majority of animals creep to their rest. Sunset for man, on the contrary, is a signal to begin a secondary day of pleasure or relaxation. This day should close before midnight, if the full benefit of sleep is to be enjoyed.

Sleep may be robbed of its beneficial effect by wrong conditions. Fresh air and a great deal of it is essential in a bedroom, or the entire system will eventually be poisoned. The night air is no more harmful than the day air, and man should fill his lungs full of it while asleep. The bed-clothing should be warm, but not heavy, thus allowing the limbs full freedom. Authorities differ as to sleeping on the left or right side, but the general opinion now is that, as a rule, people should sleep on the right side, the body straight, the arms down. It is harmful to sleep with the arms above the head, as it puts a strain upon the muscles of the back and chest and interferes with deep breathing. It is desirable to breathe through the nose while asleep, and not through the mouth. These good habits can be formed by taking thought each night on retiring.

To insure unbroken rest, rich food should not be eaten immediately before going to bed. On the other hand, simple food such as hot milk or crackers, taken just before retiring, has been found of benefit in cases of insomnia.

So many persons suffer from insomnia, that a few remedies may be mentioned: warm baths are conducive to sleep, if taken just before bedtime; night-walks in the fresh air are also efficacious; or a brisk rubbing of the body on retiring. But however persistent the insomnia, an earnest warning is addressed to all sufferers not to take quieting drugs or powders. Their effect is only temporary, and when it has passed off the person is more than ever at the mercy of his sleeplessness. Insomnia indicates that some one of nature's laws has been violated; therefore only natural remedies are legitimate in repairing the evil. Let the sufferer keep a quiet mind, and persist in using natural means of producing sleep until nature comes to his relief. And on the slumber which she provides, there is no interest except the interest of good health.

THE BATH

NEXT to sleep, the frequent cleansing of the body is most important to physical well-being. If people had a better understanding of their bodily systems, they would have a keener appreciation of the value of bathing.

The skin is a porous tissue which, day and night, is in a state of activity, taking in certain materials and throwing out others. The

rejected material consists largely of carbonic acid, and of matter useless to the system and most poisonous when allowed to remain upon the body. The exhalations of the skin produce the offensive odor which sometimes fills occupied, unventilated rooms. The skin also takes in oxygen from the atmosphere, through the pores, which average twenty-eight thousand to the square inch, or seven million for the whole surface of the body.

It will be readily seen, therefore, that unless the entire surface of the body is cleansed, the pores will become clogged with impure matter, which, accumulating more and more, will finally exclude the oxygen necessary for the preservation of health. The sluggishness of the pores reacts upon the circulation of the blood, producing colds, and a variety of more serious disturbances, such as rheumatism, inflammation, cramps and fevers. Persons who do not bathe frequently are also more likely to contract infectious diseases, scarlet fever, measles or smallpox. The daily bathing of the entire body is requisite for perfect health.

This bath should take place in the morning, immediately upon rising, when the vital powers are strongest. The temperature of the water should be only a little less than that of the body. Cold baths should not be taken except by persons in the most vigorous health; and these should be merely plunge baths. Immediately after bathing, the body should be briskly rubbed with a coarse towel, until a glow is felt over the entire surface. Rubbing is almost as essential as bathing, because of the brisk circulation of the blood which it produces. If a reaction does not follow cold baths, they should be discontinued.

Warm baths should be taken only at night, just before retiring, as cold is likely to result from exposure to the air, after the pores have been opened, and the system is relaxed. After bathing in warm water, an application of cold water is invigorating and strengthening. Turkish baths should not be taken by persons of delicate constitution.

Bathing has an esthetic as well as a hygienic influence. In one of Mrs. Whitney's novels, the question "Why was Venus born of the foam of the sea?" receives the answer "Because one must be clean before one can be beautiful." This is literally true. The foundation of beauty is health, and the foundation of health is a wholesome, clear skin, from which all impurities are daily washed away. There is also a certain moral value in bathing, which finds its expression in the old adage, "Cleanliness is next to godliness." The pure body is indicative of a pure spirit.

DIET

THERE is a saying, "Tell me what a man eats and I will tell you what he is." Diet is one of the most important considerations in the preservation of health, and cannot be the subject of too careful attention, on the part of individuals and of those who have the physical well-being of a household under their care.

Americans are justly accused of over-eating. The abundance and variety of the food produced in the United States is partly responsible for this bad habit, for the temptations to an epicurean diet are many. The disposition of the nation to "do everything too much" is another cause of over-eating. In consequence, a nation of dyspeptics has been evolved, whose habits of eating are the amazement of Europeans.

The stomach is to the body what the boiler is to the engine, the proper working of every part of the mechanism being dependent upon it. The mechanism cannot work at all, if it is out of order; or it works disjointedly and to no purpose. It follows, therefore, that men must not abuse their stomachs if they would enjoy health.

First of all, they should not eat too much. The primary use of food is to nourish the body and not to tickle the palate. When hunger is satisfied and eating becomes a mere indulgence, its highest power is frustrated.

To satisfy hunger, the plainest foods only are necessary. Rich foods are only producers of dyspepsia and other physical ills. This is so because fine, rich and concentrated foods resist the action of the gastric juice, and so lie upon the stomach instead of digesting properly; while upon plain foods, plain meats, vegetables, bread, etc., the gastric juice takes instant and healthy action, so that the body has the immediate benefit of its fuel. There is neither waste nor delay.

Americans, as a rule, eat too much greasy meat, and by far too much pie and pastry and other carbonaceous food. They make the mistake also of eating the heaviest foods in summer, as well as in winter, consuming pork chops with brown gravy on the Fourth of July as if it were midwinter, and in other foolish ways tempting Providence. To crown their misdeeds, they drink iced water through a heavy dinner, chilling the poor stomach, which has already a task inadequate to its natural powers. The ice-water habit is one of the most vicious of American habits, and is the cause of innumerable ills.

On the other hand, sufficient water is not drunk between meals. Many physicians believe that to keep the system in healthy condition, we should drink at least two quarts of water a day. The wisdom of water drinking is obvious. Impurities of the body are carried off

and the inside of the body is cleansed. If Americans would substitute milk or water for strong tea and coffee, their reputation as a highly nervous people would decrease

Too many people have but one conception of the meaning of intemperance. They apply it always to the use of spirituous liquors, whereas intemperance may be manifested in drinking tea or coffee, or in eating candy. American women are intemperate in candy eating, and both men and women in coffee drinking. Coffee is sometimes drunk three times a day, and in the majority of households twice. In consequence, Americans are the prey of a host of nervous diseases, and have become a byword among the nations because of their nervous characteristics. The climate of this country and the constant rush and hurry are stimulating enough, without exciting the already overtaxed nerves with excessive coffee and tea drinking.

This nervousness leads in its turn to fast eating. Dickens's description of an American boarding-house dinner, in "Martin Chuzzlewit," is still typical of the rush of the people at mealtime:—

"All the knives and forks were working away at a rate that was quite alarming; very few words were spoken; and everybody seemed to eat his utmost in self-defense, as if a famine were expected to set in before breakfast time to-morrow morning, and it had become high time to assert the first law of nature. The poultry disappeared as rapidly as if every bird had had the use of its wings and had flown in desperation down a human throat. The oysters, stewed and pickled, leaped from their capacious reservoirs, and slid by scores into the mouths of the assembly. The sharpest pickles vanished, whole cucumbers at once, like sugar plums, and no man winked his eye. Great heaps of indigestible matter melted away as ice before the sun. It was a solemn and an awful thing to see. Dyspeptic individuals bolted their food in wedges; feeding not themselves, but broods of nightmares, who were continually standing at livery within them. Spare men, with lank and rigid cheeks, came out unsatisfied from the destruction of heavy dishes, and glared with watchful eyes upon the pastry."

The whole economy of living is disturbed by the habit of fast eating. It is the direct cause of indigestion, and indigestion is the direct cause of bad temper, gloomy views of life, and of all the other sins implied by profound selfishness. The dyspeptic nature of Thomas Carlyle embittered the existence of his wife, and destroyed, to a degree, his usefulness as a teacher of society. But it is needless to dwell upon the evil effects which follow an abuse of the digestive organs. These effects are everywhere visible. The remedies are simple and can be followed by everyone.

In the first place, plain foods should be eaten; and these should be well cooked, the meats broiled or roasted, not fried, and the vegetables carefully prepared, without too much seasoning or butter. For

breakfast, fruits and cereals should be eaten, and eggs in preference to meat. If meat be eaten, it should be a simple lamb chop, well broiled, or a preparation of hashed meat and potatoes. An abundance of vegetables, good thick soup, and well-baked bread should, as far as possible, take the place of meats.

Pie and cake will be eaten with care and moderation by those who are wise. Simple puddings, and, at times, a little pure candy, should satisfy the craving of the system for sweets. This craving is often abnormally developed in persons whose ancestors were intemperate in the eating of pastry, and should be brought to normal proportions by careful diet.

The hours for meals should be so arranged that the members of a household will not be forced to eat hastily. The social dignity and importance of mealtime should be recognized, thus transforming the function from a mere animal necessity to an opportunity for social intercourse and enjoyment. Europeans take much more time for their meals than Americans, and they recognize the social importance of eating. This nation can never boast of being wholly civilized until it follows the European example. Life holds many other joys besides making money, and a man may well forego a part of his gains for the pleasure that he may find with his family and friends. Eating between meals is another source of woe.

The golden rule, the summing up of the whole subject is "eat to live" in the strongest and happiest way, in the way most beneficial to oneself and to society at large.

CLOTHING

IT IS unfortunate that hygienic clothing is not always the most beautiful. A compromise may be made, however, between health and beauty which will sacrifice neither. In a climate like that of the United States, where a dozen varieties of weather may enliven the dullest day, the secret of hygienic dressing is to have a sufficient variety of clothing, and to change it to meet atmospheric conditions. It is a mistake to wear heavy clothes from November to May merely because it is the winter season. Such uniform dressing is productive of colds. The underwear should be, perhaps, of the same thickness, but the outer wraps should be varied according to the temperature. A seal-skin jacket or a heavy fur-lined coat is well adapted to a freezing temperature, but should not be worn on the milder days of winter.

The feet should always be well protected, thick-soled shoes being best for the health in all seasons. The uppers can be of light or heavy leather, according to the time of the year. Great care should be taken that the vital parts of the body, the chest and the abdomen, are

sufficiently and evenly covered. Evening dress, exposing the chest and shoulders, should only be worn in houses where the temperature is kept at summer heat. A certain amount of risk is always attendant upon the change from ordinary street garb to evening dress.

Clothing should be warm and light in winter; light but not exposing in summer. At all times it should give free play to the limbs, being so far identified with the body that it is not an encumbrance.

EXERCISE

THE American people, as a whole, have realized only of late years the value of systematic exercise. Formerly, little or no attention was paid to the cultivation of the body, except by professional athletes. Now gymnasium systems have been introduced into the majority of public and private schools and institutions. Military drill and gymnastic exercises, out-of-door games like golf, tennis, polo, football, basket-ball, etc., all bear witness to the awakening interest in athletics. But to many persons, especially those shut up in cities, these forms of exercise are not possible. There are other forms, however, which can be practiced, and should be practiced under all circumstances.

The daily walk of from one to two miles should always be taken if health is to be preserved. In walking, keep the head erect, the mouth closed, the chest raised, the weight of the body poised upon the ball of the foot. Learn to breathe deep while walking, so that the full benefit of the fresh air may be obtained. Keep the thoughts upon outward objects, whether in city or country, so that the mind may be refreshed. A country walk affords a thousand interests and pleasures not to be found in the city; but the city walk is rich in human interest. In addition to the daily walk, some simple gymnastic exercises can be practiced just before retiring, or after the morning bath. Even the slightest of these exercises will aid in strengthening the muscles, and assist the circulation of the blood.

THE EDUCATIONAL VALUE OF PHYSICAL TRAINING

By *W. J. HILLS*

Secretary of the Gymnasium of Columbia University.

TRAINING is a more comprehensive term than exercise, in that exercise is possible without training, while training is impossible without exercise. Yet in all exercise there is educational value, which is as varied in degree as the movements themselves differ in character. The exercises of pushing dumb-bells and pulling chest weights, for example, would hardly be considered educational in their nature, since the mind operates little upon the event. Their effect is, in the main, a physical one: increase of muscular power, change of blood currents by drawing upon the flow to the brain to flush the extremities, increased strength of the heart muscle, and a better supply of pure blood to the nerve centers. On the other hand, ball in all forms, particularly lacrosse, which is a high type of this sport, has a considerable educational value. The training of the eye, the judgment of speed and of distance, the equal coördination of the body by the use of the right and the left hand in the delivery of the ball, are some of the many results of practice in this game.

The handling of the body in gymnastic feats on such apparatus as the bars, the horse, and the buck, introduces in a large degree the element of training and requires great persistence and patience to keep the knees and the hips straight, to hold the foot with the toes turned outward instead of inward, to correct, in short, any slight irregularity of movement.

As the nerve lines in the fingers of the piano player, by constant practice, come to act from the ganglia, or nerve centers, without direction from the brain, so the complete coördination of the body is brought about only after such hard and persistent education or training in these matters of detail. This education assumes a practical aspect to the world at large when viewed in the light of its training value for business life. That such training is a useful preparation for

life's activities is a new idea, but it is undoubtedly well-taken. Sooner or later every man finds that persistence, patience and hard work are necessary to his business success, and that he must just as surely acquire a patient, hard-working habit in order to succeed in life.

Convinced of the amount of labor demanded to overcome every little irregularity of movement, the gymnast has learned one of life's greatest lessons. The examples are numerous where timid, retiring, backward young men, lacking all courage and confidence in self, have been entirely changed by participation in athletics. After a period of training, such a lad becomes master of himself; he enters into competition with his fellows; and soon gains confidence in his ability to become master of others. If he shall continue to train in life, that is, to live normally in all respects, he will be a better man, not only physically but also morally, since he will have acquired from his training many such benefits as retention of self-confidence, which will give him an advantage in the struggle of life.

The question of gymnastics *versus* athletics has been the subject of no little discussion for some years past. It may be said on the one hand that gymnastics can be more easily prescribed to meet peculiar needs and conditions; are at all times easily brought under regulation and control; and may be so modified as to prove an un-mixed good. Sports and games, on the other hand, are necessarily arbitrary in nature and are less susceptible to the needs of their participants. The effects of athletics are so diverse that it may be well, at this point, to consider them somewhat at length.

Sports may be classified under three heads: 1, Individual antagonistic; 2, team contests; 3, racing. The first group includes games in which two or more men participate, each depending upon his own individual effort, and that of short duration. The group may be subdivided according to the character of the sport, as follows: *a*, Golf, tennis, handball, rackets, all of them light-action movements attacking alternately a ball; *b*, fencing, boxing, wrestling,—sports of direct personal contact; *c*, shot-put, hammer-throwing, high and broad jumping, discus-throwing, pole vaulting, heavy gymnastics, etc.,—all requiring extreme effort of short duration.

In the second group, team contests, a given number of men contend against an equal number, each with a distinct part to perform. The subdivisions of this group are two: *a*, Cricket and baseball, where one team rests and the other performs the bulk of the work, while the plays require skill rather than strain, and the duration of effort is short; *b*, basket-ball, lacrosse, the various polos, hockey and football, where both teams play at the same time for a given period.

The third and last group, racing, comprises *a*, rowing, running,

swimming, bicycling, etc., where the single individual is competing against one or more, doing the same act continuously for a given distance or length of time; *b*, contests in which all the players on each side are performing the same thing at the same time, such as tug-of-war and crew rowing.

From this established basis, let us proceed, in a like sane and methodical manner, to analysis and conclusion. We shall select hand-ball as the best type of division *a* of the first group. The game is not one-handed like the game of tennis, and it brings all parts of the body into play. It cultivates quickness of action, mental acumen to the highest degree, judgment of distance, direction, angle, instant application of force, and decision as to where the ball shall be returned out of reach of the opponent. It should be classed as a valuable game for boys, giving perfect coördination without an undue amount of danger from overstrain, since it is always within the power of the player to limit his action.

As a type of subdivision *b* of this same first group—contests in which two men oppose each other—we would select the sport of boxing. Under proper regulation, it may be considered one of the best general exercises in physical training for schools. The entire muscular system is under tension at all times. The brain is kept very sharply awake studying the opponent, anticipating his movements, and endeavoring to find an opening for attack or repulsion. The activity, excitement, and continuous tension make a demand upon heart and lungs which easily becomes very severe. But it is at times within the power of the individual to fall back upon the defensive and thus relieve the pressure if it becomes too great.

Some have objected to boxing on the ground that it makes the boxer pugnacious and quarrelsome, but the fact of the case is quite the contrary. Whatever else he may learn, the boxer will find that to lose his head is to lose everything, and this lesson has accordingly a most beneficial effect on the hot-headed boy. Further, he has in his hands a ready weapon, if made effective with training, for self-preservation and protection in time of need. To sum up, boxing develops quickness of eye, thought and action, self-possession, confidence and courage, and a high degree of coördination, or balance; it is a delightful exercise, full of interest and skill, requiring the use of both hands freely, develops the heart, expands the lungs, improves the carriage, opens the pores of the skin, and, in short, is most valuable. Boxing is, therefore, superior in some ways to fencing.

We dismiss the next two subdivisions—*c* of group 1 and *a* of group 2—as passably suitable for high school boys. Cricket and baseball especially have a high educational value.

In the class of sports comprising lacrosse, the various polos, hockey, basket-ball, football, etc., more than in other games, is there a necessity of harmony and coöperation among the players; the boy must lose his identity and become a part of one great whole. He must obey implicitly the orders of his captain, and at the same time be alert to carry out his part of the game successfully and vigorously. He needs to be ready to change on the instant from attack to defense; he must keep the field of operation constantly in mind, take advantage of every opening, fill every gap, and put his whole heart and soul into the game. He must be aggressive, fearless and energetic in attacking his adversary and ready to sacrifice himself at the altar of duty by springing into such a position as to receive the attack and thereby protect his comrades. Such sports bring out the stamina of the lad. The greater the element of danger in a game, the more forcibly does it operate to develop these characteristics, so that we would place football highest in the category of the sports. The strain upon the heart is relieved and lessened by the intervals and breaks in the game caused by the various rulings and regulations in its government.

We now arrive at the third and last group, which includes racing in general. In all such events the strain is continuous from the beginning of the race to the end, and the plucky lad, full of courage and spirit, will not stop until the goal is reached, no matter how great is nature's outcry. One of the most unfortunate conditions of these contests is that the boy does not prepare for the worst before he must tax himself to the limit. There is added danger from the fact that every one of the team is controlled by the strongest of them all. In the examination of young men entering college, we find cases where the action of the heart is uncertain, irritable, irregular, with faint lesions due to early-followed and excessive athletics, and usually to those of the group last mentioned. The injuries from this class of sports are covert, more permanent and more serious, and the compensation at least questionable; while the injuries received in football are external, readily diagnosed, and usually of a temporary character.

We may, then, recommend the games of groups 1 and 2, with the exception of wrestling, since they create a healthy rivalry, are valuable factors in education, and tend to improve the health with the minimum danger of serious injury. On the other hand, all games that require a continuous and especially severe strain upon the heart, such as running, swimming, rowing, skating, cycling, tug-of-war, etc., these — but only in contests — may well be eliminated from the activities of our growing boys.

PHYSICAL TRAINING

1. GENERAL, OR FREE, MOVEMENTS

A GOOD posture during exercise is of prime importance. In the fundamental position, which should be maintained so far as the directions permit, the heels are put together; the body and the head are erect without being stiff; the hips are drawn slightly backward; the chest is well raised; the arms hang loosely at the sides; the weight of the body is thrown forward on the balls of the feet.

EXERCISES FOR THE ARMS AND THE SHOULDERS

1. The arms are raised forward and parallel to each other to a vertical position, and are then lowered again. The exercise must be taken rapidly and with vigor. At the start, the palms, or inner surface of the hands, are turned to the rear.

2. The previous exercise is varied by allowing the momentum to raise the body on tiptoes.

3. With the palms turned toward the thighs at the start, the arms are raised sidewise until the backs of the hands meet above the head, and are lowered again.

4. The arms are raised forward shoulder high, the palms turned toward each other. From this position the arms are swung outward, closed in front, and lowered again.

5. The position at the start is with the arms raised sidewise, shoulder high, the palms turned upward. The movement consists in forcibly turning the palms over and back.

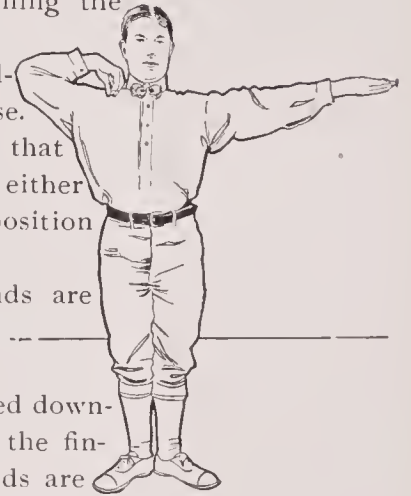
6. The forearms are flexed so as to bring the fingers on the shoulders; the upper arms are horizontal; the elbows pointed sidewise. From the bent position, the arms are vigorously extended sidewise, so that they become straight and horizontal. The exercise may be taken with either arm alone; or alternately, so that one arm passes to the bent position while the other is being extended (Fig. 1); or simultaneously.

7. From the starting position of the previous exercise, the hands are thrust in a straight line upward from the shoulders, simultaneously, alternately, or with either hand alone.

8. The arms are raised sidewise, shoulder high, the palms turned downward, the fingers, the wrist, and the elbows, extended. The tips of the fingers then describe a small circle, causing the arms to rotate; the hands are raised forward and over, which will expand the chest instead of compressing it. (Fig. 1) Repeat with the palms turned upward.

9. The fingers are forcibly spread apart and afterward tightly clinched inward against the palm. The exercise is refreshing when the hands are tired from writing or sewing.

The important effect of the arm movements is the raising of the chest walls, which enlarges the capacity within the chest, and thereby increases the space for air supply. Besides promoting activity of respiration, they are useful in cases of relaxed carriage, and of defects in the formation of the chest. The raising and the lowering of the arms also brings into action one of the most important muscles of respiration, namely, the diaphragm,



lying between the chest and the abdomen. Through the massage, so to speak, by this muscle, the organs of the abdominal cavity are mechanically stimulated into activity.

EXERCISES FOR THE NECK

10. The head is bent forward until the chin lightly touches the chest. After remaining a moment in this position, the head is raised and bent backward. Without the least movement of the shoulders, the head is then bent sidewise, left and right, and again raised upright.

11. The head is first bent forward and then rotated sidewise to the left, then backward, then sidewise to the right, and again forward; the face remains turned toward the front or upward throughout. A common fault is to move the upper part of the body, especially the shoulders, as the head is rotated.

By strengthening the muscles of the throat and the neck, these movements tend to improve the carriage of the head and the chest. A further benefit is gained by raising the chest and thereby increasing the depth of inspiration.

EXERCISES FOR THE TRUNK

For the following exercises, the hands rest on the hips, the fingers to the front, the thumb to the rear, and the elbows pointed sidewise.

12. The trunk is bent alternately forward and backward as far as possible, with straight knees; the head should be kept erect by directing the eyes to the opposite wall. (Fig. 2.)

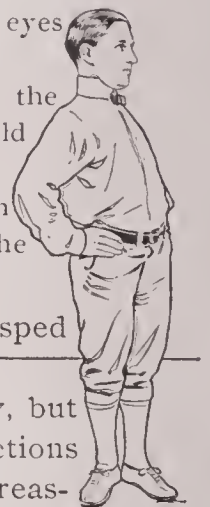
13. The trunk is bent alternately to the left and to the right; the head follows the movement of the trunk, but should not turn aside in either direction.

14. The head and the upper body are turned while in the upright position alternately left and right, while the feet remain planted firmly on the floor. (Fig. 3.)

The movements may be repeated with the hands clasped at the back of the head. A slight pain, resulting from congestion, may be caused when bending the trunk forcibly, but (Fig. 2.) this is relieved by the opposite flexion. Trunk flexions exercise the rib muscles, widening the chest and thereby increasing its capacity; they help to flatten the shoulder blades, and to straighten the spine in cases of curvature. Under the latter condition, the bending must be to one side only. The movements have also a churning and exciting effect upon all the organs of the abdominal cavity and are useful in cases of hemorrhoids and of constipation. (Fig. 3.)

EXERCISE FOR THE LEGS

The tendency to lean forward must be guarded against, as the strain is thereby greatly lessened. Those who find difficulty in maintaining an erect position of the body may, in the beginning, rest the hand on some support. Otherwise the hands should rest on the hips.

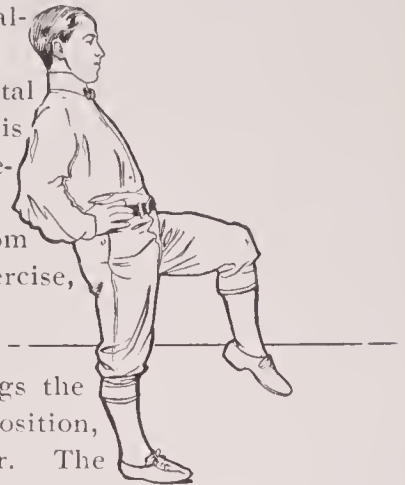


15. Either leg is raised forward to a horizontal position and lowered again. Either leg is then raised sidewise and also backward as high as possible, always without bending the knee.

16. Either knee is bent and raised so that the thigh is in a horizontal position; the lower leg hangs perpendicularly down, and the instep is stretched so that the toes point downward. (Fig. 4.) The entire movement, including the change of feet, is performed quickly and easily.

17. Either leg is raised forward horizontally, and, while elevated from the floor, the knee is quietly, but vigorously, bent as in the previous exercise, and extended again.

18. Both knees are bent slowly until the body sinks to a sitting position, and at the same time the heels are gradually raised, which brings the weight of the body on the toes. (Fig. 5.) After a moment in this position, the knees are slowly straightened and the heels lowered to the floor. The erect position of the upper body should be maintained from the beginning to the end of the movement.



(Fig. 4.)

Exercises with the legs are particularly quieting, and are useful to equalize the circulation after long mental activity. The brain has less control over the blood supply than the other organs of the body, for its weaker arteries possess less power to discharge the blood after its life-giving elements have been received. A very wise and economical way, however, has been provided to relieve the congestion, for the blood leaves the brain readily enough when there is a demand created for it in another part of the body. When the circulation is equalized in this manner, the effect is noticeable in easier respiration, and sleep follows naturally. Where balance enters into the leg movements, high coördination, rather than force, is required to maintain the equilibrium of the body, and continuous practice helps to correct a poor posture. From their proximity to the abdomen, the legs may be exercised in cases of stagnation with benefit to the organs.

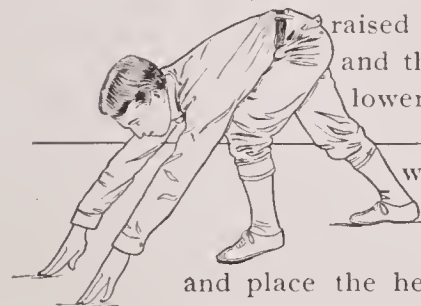


(Fig. 5.)

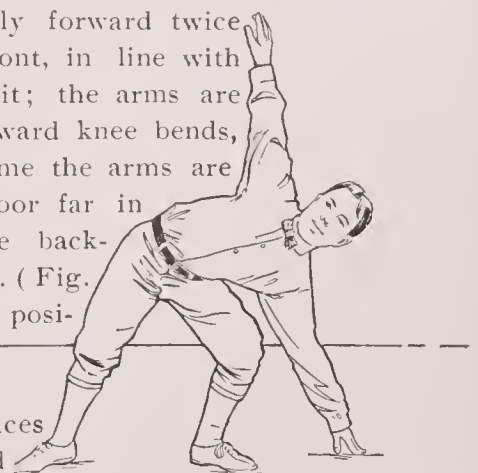
19. For the starting position, either foot is placed directly forward twice its length; the weight is equally divided; the body faces front, in line with the forward foot, while the other foot forms an angle with it; the arms are raised vertically. In this position, the forward knee bends, and the body stoops; and at the same time the arms are lowered until the fingers touch the floor far in advance of the bent knee; the backward heel should not leave the floor. (Fig. 6.) After resuming the upright position, lower the arms to the side and place the heels together.

EXERCISES COMBINING THE ARMS, THE TRUNK, AND THE LEGS

20. Either foot is placed sidewise; the body faces the front; the weight is evenly divided; the arms are extended sidewise, shoulder high, the palms turned downward. (Fig. 7.)



(Fig. 6.)



(Fig. 7.)

movement consists in bending the knee and stooping sidewise for one hand to touch the floor; both arms remain extended and parallel.

21. The first composite exercise is repeated in detail, except that the foot is placed obliquely forward instead of directly forward.

22. For the starting position, either foot is placed directly forward; the arms are extended sidewise, shoulder high, the palms turned upward; the weight of the body rests on the backward, or supporting, leg. The trunk then bends backward and at the same time the arms are raised and the hands clap above the head. When the trunk is straightened, the arms are lowered again, shoulder high. A common fault is to bend the elbows or the knees, as the body is bent backward.

GRASSHOPPER JUMPS

A number of positions with the arms may be taken which will change the tension of the muscles and afford an opportunity to repeat the exercises with greater variety. The hands may be placed on the hips or clasped at the back of the head; or the arms extended sidewise, shoulder high, the palms turned downward; or, raised vertically with the palms turned inward, the arms may be lowered sidewise, shoulder high, and raised again according as the legs are spread apart or brought together.

23. An upward leap is made and the legs are quickly spread apart sidewise so that the feet alight at about eighteen inches distance, in a straddling position; the fore part of the feet should touch the floor at the end of the jump; the knees are slightly bent so as to break the force of the descent.

24. After a vigorous leap upward, the legs quickly spread apart crosswise, so that the descent ends in a stride position, one foot before the body and the other behind it. On the second jump, the backward foot lands in the forward position.

RUNNING ON PLACE

25. The so-called mock-running is hopping from one foot to the other without a forward movement from place. The body should not, by this time, have lost its erect position, with the chest prominent; the hands are placed on the hips. There are three ways of running, all of them of great value as heart developers and chest expanders. The first is an easy dog trot; in the second mode of running, the lower leg is swung backward and raised so high that the heel touches the flank; the run of ascent, corresponding to hill-climbing, requires that the knee be raised high enough forward to bring the thigh up to a horizontal level.

Active jumping and running develop elasticity in the body and invigorate the muscles of the legs in such a manner as to give a springing step in walking. The vigorous shaking of the internal organs which accompanies the exercise produces effects similar to those of horseback riding. The motion powerfully urges the blood into the lungs where its waste products are readily eliminated by the rapid exhalation. The action of the liver is also hastened, and the channels of excretion are kept free and open.

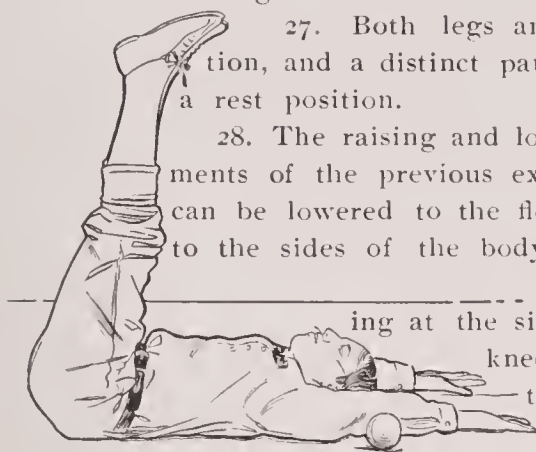
EXERCISES FOR THE ABDOMEN

In the starting position, the body lies flat on the back, the arms resting by the side and the palms turned downward.

26. Either leg is raised and lowered slowly, with straight knee.

27. Both legs are raised slowly, at least to the vertical position, and a distinct pause is made before they are again lowered to a rest position.

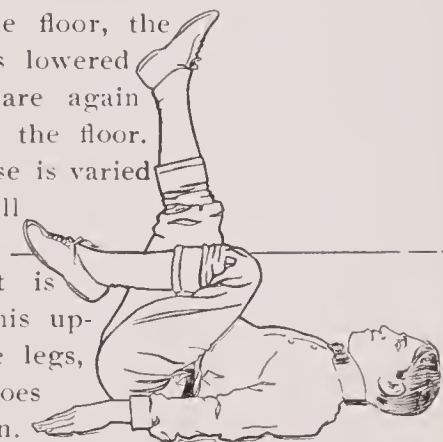
28. The raising and lowering of the arm accompanies the leg movements of the previous exercise. After several days practice, the hands can be lowered to the floor at back of the head before being returned to the sides of the body. (Fig. 8.)



(Fig. 8.)

29. Both legs are raised, the arms remaining at the sides; while elevated from the floor, the knees are bent and the thighs lowered toward the body; the legs are again straightened and lowered to the floor.

30. The previous exercise is varied by bending and straightening the knees alternately in treadmill fashion. (Fig. 9.)



(Fig. 9.)

31. The trunk is raised to a sitting posture, the chest is well arched and the arms hang loosely at the side. From this upright position, the trunk is lowered slowly, without lifting the legs, and is then raised again. If necessary, for the first trials, the toes may be thrust under a piece of furniture to weight them down.

32. The trunk is lowered from a sitting position half-way to the floor and then raised again.

33. Exercises 31 and 32 are repeated with the hands clasped at the back of the head.

In the starting position, the body is stretched flat on the stomach, the hands clasped on the seat.

34. Either leg is raised slowly, with straight knee, and is then lowered again.



(Fig. 10.)

35. The trunk is raised from the waist without lifting the legs and is then lowered to the floor. (Fig. 10.)

36. After being extended on the floor above the head, the palms turned downward, the arms are raised with the trunk, and then lowered to a horizontal position; the tendency to duck the head and tip up the legs will be overcome by practice.

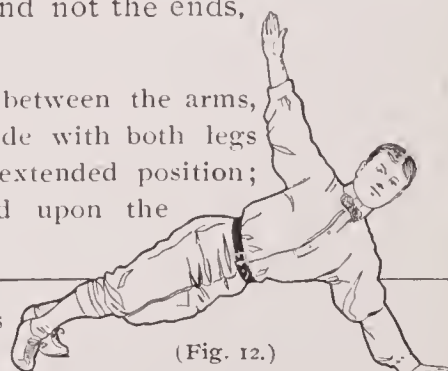
For the following exercises the body is supported by resting the toes and the palms upon the floor; head, trunk, and legs, should be in the same straight line; the arms are at full length; the under side, and not the ends, of the toes rest on the floor.

37. Either leg steps forward, so that the bent knee comes between the arms, and is then extended again. (Fig. 11.) A forward jump is made with both legs and then a return jump to the extended position; the hands remain firmly planted upon the floor.



(Fig. 11.)

38. Either hand is lifted from the floor and the arm is raised sidewise as high as possible; as it swings upward, the arm should turn

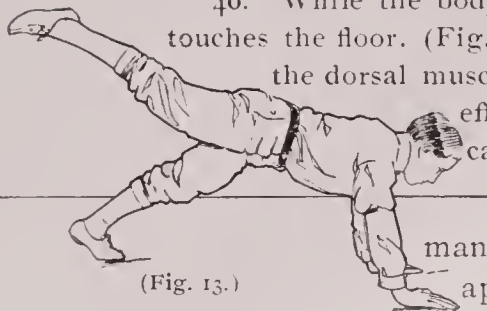


(Fig. 12.)

the body over so that it rests sidewise on the supporting arm and the feet. (Fig. 12.) After a moment the arm is lowered to its first position.

39. Either leg is raised sidewise without turning the body over (Fig. 13), and is then lowered again.

40. While the body remains in a straight line, the arms are bent until the nose touches the floor. (Fig. 14.) This exercise, known as dipping, invigorates principally the dorsal muscles, although the whole muscular system shares in its beneficial effects. It is consequently helpful in cases of relaxed or faulty carriage and of lateral curvature of the spine.



(Fig. 13.)

The most welcomed result of abdominal exercise to many is a decrease in fat at the waist. Curious as it may appear, the waist is made actually smaller and a natural muscular corset is formed, as effective and certainly much less injurious than any artificial support. The alternate pressure and release brought to bear upon the internal organs by



(Fig. 14.)

these movements first of all excite the secretion of the juices of the stomach so as directly to aid digestion. The peristaltic action of the intestines also is benefited by such muscular action. Constipation is, in fact, chiefly a lack of muscular tone, so that any activity in the region of the abdomen is helpful in cases of this sort.

BREATHING EXERCISES

41. The arms are slowly raised forward or sidewise to a vertical position as the breath is inhaled, and are then lowered again during exhalation.

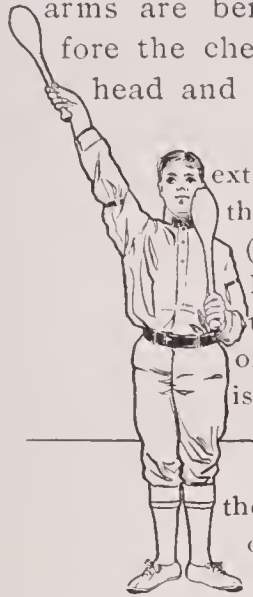
At the end of a series of exercises, or after any exertion, a pause may well be made for deep and quiet breathing. As the flow of blood through the heart has been quickened by such activity, a full exhalation is needed to remove the waste products given off in the contraction of the larger muscles. A greater air space then remains for a supply of oxygen, with which the rapidly-flowing blood becomes heavily charged. The time-honored advice to retain the breath during exertion, or to beat the chest when it is fully inflated, or to swell the abdomen during breathing exercises is no longer given. Such a course retards the blood currents, increases the pressure on the channel walls, and checks the flow of the blood upon the venous side of the system, with injurious effect.

2. THE INDIAN CLUB

A PAIR of light clubs, varying from one to two pounds in weight, in accord with the size and the strength of the individual, will be found more desirable at the start. The chief requisites of good club-swinging, namely, accuracy of movement, roundness, and ease, cannot be gained by exhaustive exercise with heavy clubs. The English variety, known as the Liverpool gymnasium club, and variously called by their different manufacturers the bulb, or the scepter, club, is perhaps the most popular where it is known. The weight in this style is placed low, so that the handles are long and slender.

The clubs should be grasped firmly, close to the ball; the thumb may be extended along the shank as a means of keeping better control of

the motion. In the starting and the ending positions of all movements, the arms are bent so as to hold the clubs upright, about six inches before the chest; the body should maintain a correct posture with the head and the shoulders turned squarely to the front.



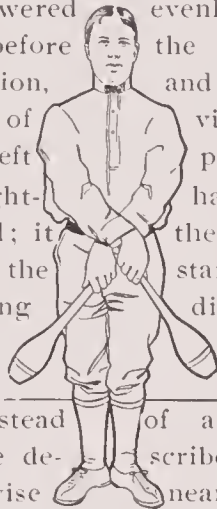
(Fig. 15.)

1. The outward arm circle.—The right, or the left, arm is extended at the side, obliquely upward. (Fig. 15.) The club is then dropped at arm's length sidewise, swung first past the knees (Fig. 16), and then upward to the oblique position, where it is lowered to the start. A common fault is to let the momentum of the club twist the body aside. The circle is described on count one and the club is lowered to the front on count two; the arm is extended again in the interval before count one is given a second time.



(Fig. 16.)

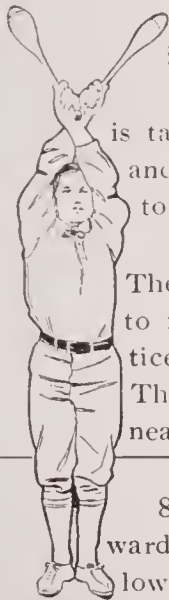
2. After the separate movement with the clubs is familiar, the exercise is performed with both clubs. The arms are extended obliquely upward, forming with the trunk a letter Y; next, the clubs are lowered evenly, so that they will pass each other directly before the body (Fig. 17); they then continue the circle to the oblique position, and finally are brought to the front. Considered from another point of view, the clubs always pass in a plane parallel to the right and left plane of the body.



3. Inward arm circle.—The right-hand club is swung from the oblique position to the left, above the head; it then describes a complete circle, parallel to the plane of the body, to the starting position. The left-hand club is then swung in a corresponding direction.

4. Both clubs describe inward circles, crossing each other directly before the upper body. (Fig. 18.)

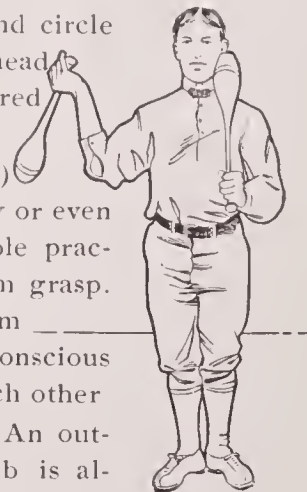
5. Outward hand circle.—Instead of a sweep before the body with straight arms, the hand circles are described behind the back with the elbows bent. Either club is raised sidewise near the head and slightly back. The club is then dropped sidewise (Fig. 19) and a twist of the wrist given to carry it around in a circle behind the back (Fig. 20); the hand is returned to the starting position on count two.



(Fig. 18.)

6. Inward hand circle.—The first position for the outward hand circle is taken, after which the club is started inward behind the head and twirled around in a circle until upright, and is then lowered to the front.

7. Each hand circle is performed with both clubs. (Fig. 21.) The beginner cannot expect to execute these movements gracefully or even to round the circles fully, in every direction, without considerable practice. He may at least try to swing smoothly and with a firm grasp. The secret of avoiding collision with the clubs is to cross them near the hands, since the clubs are smaller at that point. Be conscious then, of bringing the hands together as the clubs pass each other

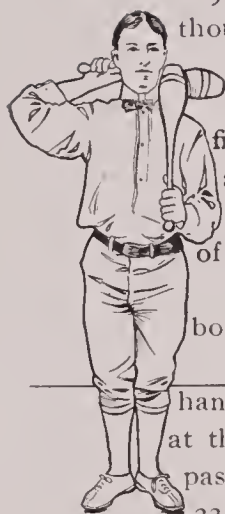


(Fig. 19.)

8. Either club is extended at arm's length, obliquely upward. An outward arm circle is described to the upright position and the club is allowed to pass directly to an outward hand circle, that is, behind the head.

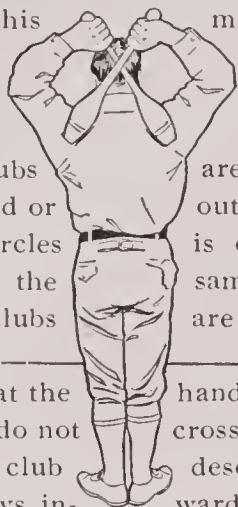
(Fig. 18.) Since the direction of the circles is the same, the momentum gathered from circling before the body will easily carry the club around behind the shoulder.

9. The previous exercise, when performed with both clubs, is a very graceful, though difficult, movement. Outward arm and hand circles are combined as each has already been arranged for two clubs.



(Fig. 20.)

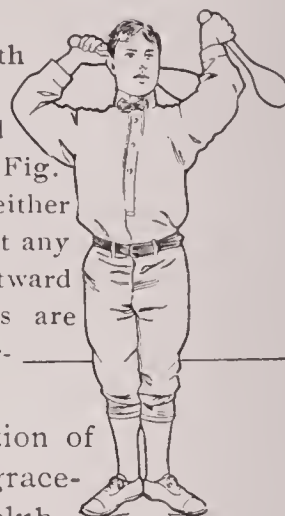
10. In a similar manner, the inward arm and hand circles are joined, at first, for one club. After this movement is mastered, both clubs are used. The oblique position is always the point where the clubs pass from the variety of arm circles to the same variety of hand circles.



11. Double circles.—Both clubs are raised at the same side of the body and then circle either inward or outward.

12. Either variety of arm circles is combined with hand circles in continuation of the same direction; at the end of the arm circles, the clubs are separated and pass on opposite sides of the head to the back.

(Fig. 22.) A little thought shows that the hand circles are neither outward nor inward, for the clubs do not cross each other at any point. Quite the opposite; one club describes an outward hand circle, while the other follows inward. The clubs are therefore parallel, which alone need concern the performer.



(Fig. 22.)

These four elementary circles comprise the foundation of all club-swinging and readily combine in innumerable graceful movements that may be developed by an expert club-swinger. While they are too complicated to be described in this place, some of them may suggest themselves and be made to form an interesting addition to the above exercises.

3. THE WOODEN DUMB-BELL

THE modern dumb-bell consists of two spheres connected by a handle. This description seems simple enough, but correct forms are seldom seen in the shops. The wooden bell of average size is about ten inches in length, the handle being three and three-quarters inches long and nearly an inch through, and the bells, or balls, about three inches in diameter. There are various weights, however, running from four ounces to two pounds, and thus suitable for persons of any age and physical condition.

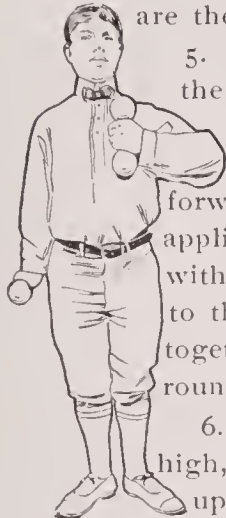
At the start, the bells are grasped firmly in each hand and rest close to the sides, at arm's length, the palms turned inward; the body must remain in a correct standing position. The exercises should be performed with steady, continuous movements, and yet be executed with vigor and elasticity.

1. The arms are raised forward and parallel to each other to a vertical position, and are then lowered again.

2. The previous movement is repeated with the palms turned to the rear at the start.

3. With the palms turned toward the thighs at the start, the arms are raised sidewise until the thumb ends of the bells click above the head. The arms are then lowered so that the finger ends of the bells click at back of the body. The last movement is especially effective in forcing the shoulders back.

4. The arms are raised above the head, the palms turned inward. From this vertical position, the bells are lowered at arm's length, sidewise, shoulder high, and are then raised again before dropping to the side.

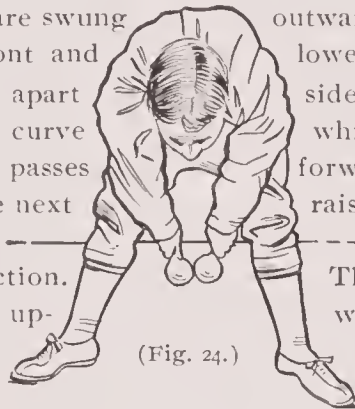


5. The bells are placed on the chest, the palms turned inward, and the elbows raised from the body so that the forearms are horizontal. By stretching the arms vigorously and quickly from the chest, with either an alternate or a simultaneous movement, the bells are thrust forward, sidewise, upward or downward, in a straight line. The last clause applies particularly to the side thrust, which otherwise might be made with a circular swing outward. The thrust downward should be made to the rear of the body. (Fig. 23.) By endeavoring to bring the elbows together at the back, the movement becomes very useful in case of rounded shoulders and narrow chests.

6. The position at the start is with the arms raised sidewise shoulder high, the palms turned downward. In this position, the hands are bent upward at the wrist, then extended in the original position and bent downward. The exercise has a similar effect to that of finger-spreading under free-hand movements.

7. The arms are lifted forward to the horizontal position, the palms turned inward. The extended arms are swung outward, raising the body on the toes, and are then closed in front and lowered.

8. The legs are moved apart sidewise in a straddling position, while the arms sweep in a curve to shoulder height, and then pass forward and downward between the legs. (Fig. 24.) The bells are next raised forward and swung to the right side, shoulder high (Fig. 25); the head and the body turn naturally in the same direction. The bells are swung between the legs a second time, and then upward to the left side, shoulder high.



(Fig. 24.)

9. With the arms raised upward at the start, the heels joined, the trunk begins to bend forward, and at the same time the arms are lowered in front until the bells strike the floor; the knees remain straight. After rising again to the upright position, the arms are dropped to the sides.

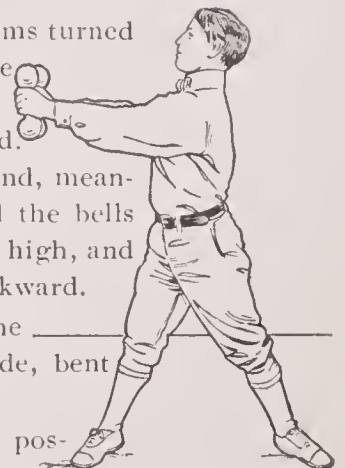
10. The arms fully extended are lifted sidewise shoulder high, the palms turned downward. The movement consists in bending to either side while the arms remain parallel; the body should face the front.

11. Exercises 19 and 20, under free-hand movements, are repeated.

12. While standing with the feet apart, the trunk bends forward and, meantime, the arms are lowered from a vertical position above the head and the bells are swung between the legs. The arms are then raised in front, shoulder high, and swung backward in a horizontal line combined with trunk bending backward.

13. In the starting position of the previous exercise, that is, with the legs straddling and the arms upright, the trunk is turned to either side, bent backward, and then straightened again.

14. The position of the exercise is with the knees bent to a sitting posture, the heels raised. While balanced on the toes, the bells are thrust in different directions as above, with an additional movement of thrusting both bells to the same side.



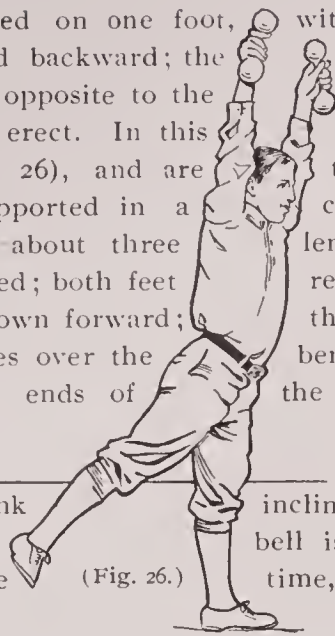
(Fig. 25.)

15. While balanced on either foot, with the supporting knee bent, the arms are raised forward to a vertical position and are then lowered again.

16. The body is poised on one foot, with the other foot raised from the floor and the leg extended backward; the trunk is slightly inclined forward and turned in a direction opposite to the supporting leg; the shoulders are well arched and the head erect. In this position, the arms are raised forward until vertical (Fig. 26), and are then lowered again.

17. The body is supported in a charge position; for this, either foot is placed forward about three lengths; the front knee is bent and the backward knee extended; both feet rest on the floor at an angle; the weight of the body is thrown forward; the trunk is erect, the chest well arched. The trunk inclines over the bent knee and the hands reach far forward until the thumb ends of the bells touch the floor, and then straightens forward again.

18. The previous exercise is taken in a side charge position. The trunk inclines sidewise over the bent knee and the thumb end of the bell is touched to the floor as far out as possible. At the same time, the other arm is raised in line with the first.

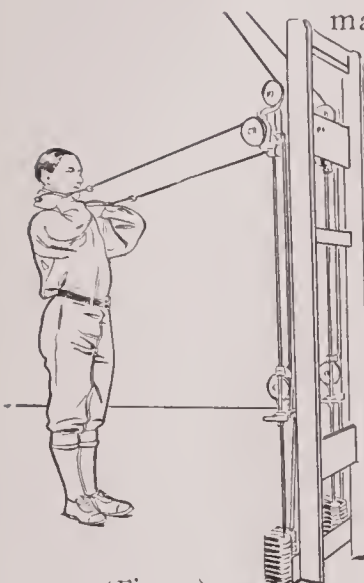


4. THE CHEST WEIGHTS

THE more modern form of pulley weights has been described by a manufacturer as a "rope that passes under a pulley on the weight-holder, or carrier, and over another pulley to the handle or other attachment. By means of this arrangement, the weight travels only one-half as fast as the handles; the tension on the rope is constant, and the rope does not slack to be brought up with a jerk." There are also numerous weightless machines made by the manufacturers of such goods, which fill fairly well the place of the more expensive chest pulleys.

For the following exercises, the body faces the machine.

At the start, the handles are grasped firmly in both hands, the palms turned downward and the elbows straight. Several steps are taken backward until the weights are raised from the floor, when the arms are extended forward horizontally; the feet should be about eighteen inches apart.



(Fig. 27.)

1. The handles are pulled downward past the hips and are then returned to the horizontal position.

2. The movement is repeated with the hands grasping the under side of the handles.

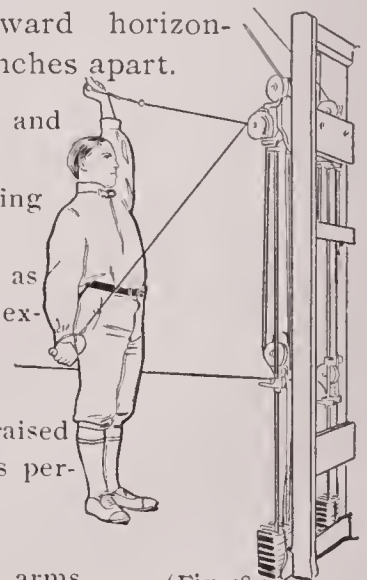
3. The forearms are flexed on the upperarms so as to bring the handles on the shoulders, and are then extended again. (Fig. 27.)

4. Combine exercises 2 and 3.

5. With the palms still turned upward, the arms are raised until vertical and are then lowered to the front, the elbows perfectly straight.

6. Combine 2 and 5.

7. With the backs of the hands turned upward, the arms are swung in opposite directions from the horizontal position until one arm is



(Fig. 28.)

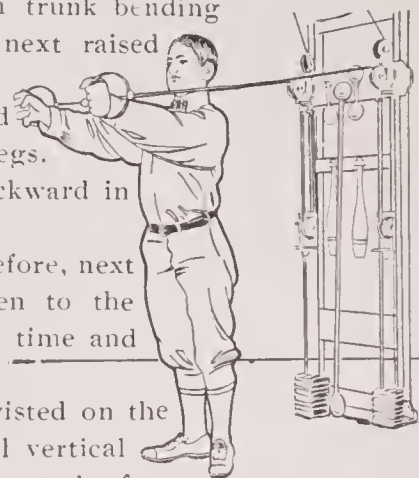
vertical above the head, and the other arm is vertical at the side. (Fig. 28.) The position of the arms is then interchanged and finally becomes horizontal.

8. The feet are moved sidewise in a straddling position. With trunk bending forward, the handles are then pulled downward between the legs, next raised until vertical and then lowered to the horizontal.

9. While standing with the feet apart, the trunk bends forward and, meantime, the handles are pulled downward between the legs. The arms are then raised in front, shoulder high, and swung backward in a horizontal line combined with the trunk bending backward.

10. The handles are pulled downward between the legs as before, next raised forward and pulled to the right side, shoulder high, and then to the front. The handles are pulled downward between the legs a second time and then upward to the left side, shoulder high.

11. While remaining in the straddling position, the trunk is twisted on the hips to the right and at the same time the arms are raised until vertical and are then lowered to the horizontal position as the body turns to the front. The movement is repeated to the left side.



(Fig. 29.)

For the following exercises, the back is turned to the pulleys. Several steps are taken forward so as to draw the weights off the floor when the arms are brought to the side of the thighs; the palms face the front.

12. The handles are pulled forward at arm's length until horizontal (Fig. 29) and are then lowered again as far as possible at back of the body. The motion of the arms should not be allowed to sway the body from an upright position.

13. The arms are bent so as to bring the handles on the shoulders; the elbows point sidewise, the palms turned to the front. (Fig. 30.) The handles are pushed forward in a straight line, so that the arms extend horizontally, and are then pulled to the shoulders again.

14. The arms are extended forward, shoulder high, the palms turned downward. From this position, the handles are pulled upward, with straight elbows, until vertical, and then down again.

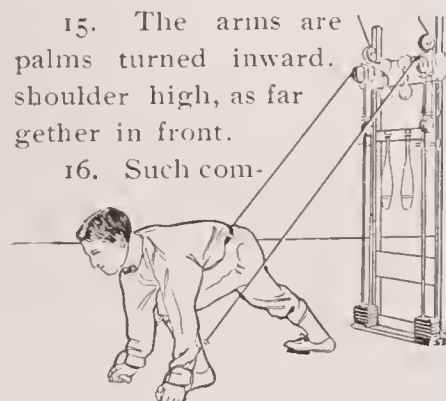
15. The arms are extended forward, shoulder high, the palms turned inward. The handles are next pulled sidewise, shoulder high, as far back as possible, and are then closed together in front.

16. Such combination movements may be made as exercise 13 with 14; or 13, 14 and 15; or 12 and 13, with deep knee bending to a sitting position during 12.

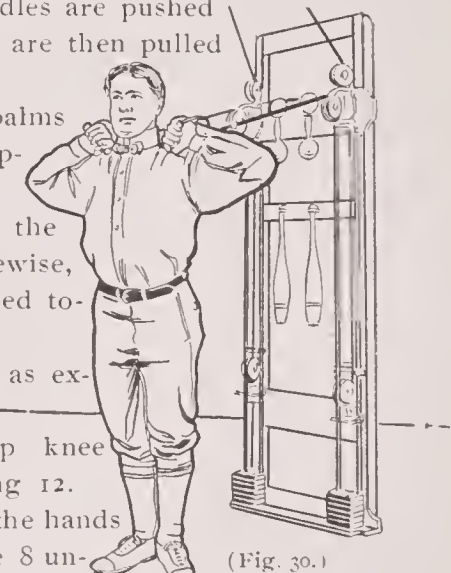
17. The arms are rotated with the hands grasping the handles as in exercise 8 under free-hand movements.

18. In the stride position of exercise 19, under free movements, the forward knee is bent; the trunk inclines forward; and at the same time the arms are swung downward past the hips. (Fig. 31.) After resuming the upright position, lower the arms to the side and place the heels together.

For the following exercises, a handle is grasped in the right hand and the usual position, a few steps from the weights, is taken, but with the right side toward the machine and the right arm extended sidewise, shoulder high.



(Fig. 31.)

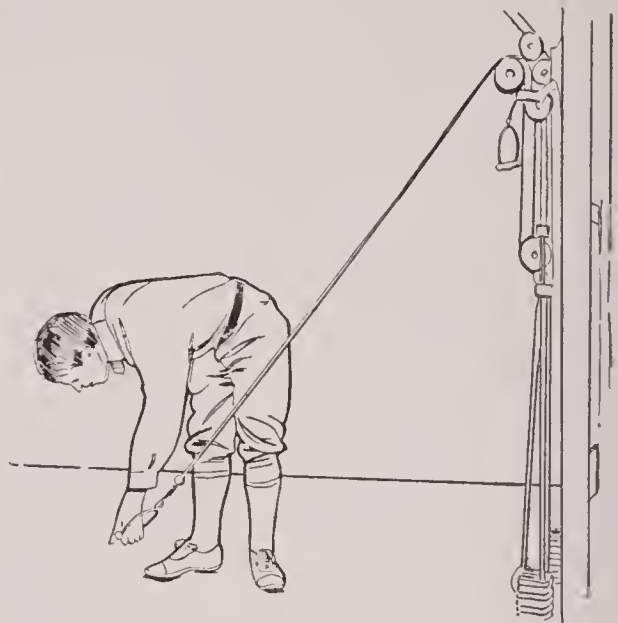


(Fig. 30.)

19. The handle is pulled downward past the hips in front of the body and is then returned to the horizontal position; the body should not turn in the least to one side. (Fig. 32.)



(Fig. 32.)



(Fig. 33.)

20. The previous movement is repeated at back of the body, with especial care not to turn the body aside.

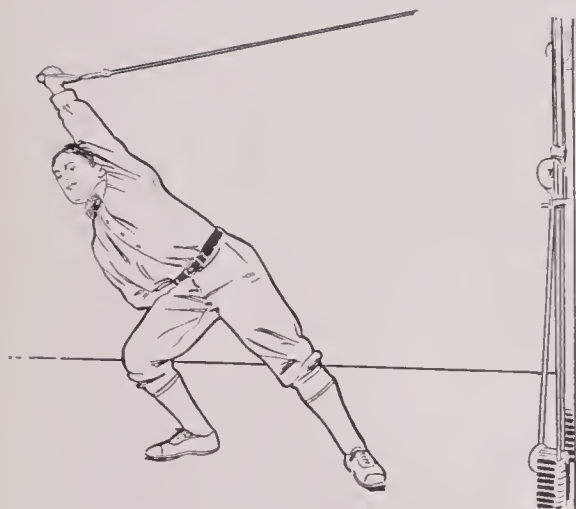
21. With the handle turned over so that the palm faces upward, the forearm is flexed on the upperarm and is then extended again.

22. Combine 19 and 21 or 20 and 21.

23. With the palm still turned upward, the arm is raised until vertical and is then lowered to the horizontal position.

24. Combine 21 and 23.

25. The trunk is inclined forward over the left foot, with straight knees, and at the same time the handle is pulled downward at arm's length to the left toe, after which the body resumes the upright position. (Fig. 33.)



(Fig. 34.)

26. The legs are moved apart in a straddling position, and with a simultaneous movement the trunk is inclined sidewise to the left, the left knee is bent, and the right arm is raised with the palm turned upward until the right leg and the right arm are in the same straight line. (Fig. 34.) After resuming the upright position, the series of exercises is repeated with the left side turned to the weights.

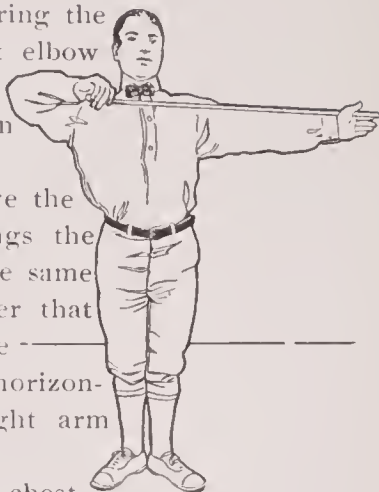
5. THE WAND

WANDS vary from three to four feet in length and are made of wood or of iron tipped with rubber. When made of iron, they average about five pounds in weight. The wooden wands are preferable for children, and a cane, or a broomstick, may be used for the purpose.

The wand is held close to the body with the arms extended downward; the backs of the hands are uppermost; the grasp is somewhat more than shoulder-width apart; it is only in stepping over the rod that the hands need to be nearer together.

1. The wand is swung upward to a horizontal position above the head and is then lowered again.

2. The wand is swung upward to the left, close to the body, until level with the shoulders (Fig. 35), is then lowered and raised to the right side. During the movement to the left side, the left arm is extended, and the right elbow is bent above the level of the wand. The grasp of the left hand should be loosed so that the wand may rest lightly in the crotch of the thumb.



(Fig. 35.)

3. At the start, the wand is raised horizontally above the head. The left arm, which remains stretched, then brings the wand downward to the left side of the body, and at the same time the right arm bends over the head in such a manner that the upperarm becomes vertical and the forearm rests upon the crown. (Fig. 36.) From this position, the wand is raised horizontally and is then lowered to the right side with the right arm stretched while the left arm is bent.

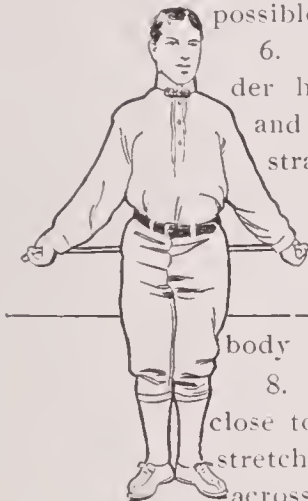


(Fig. 36.)

4. At the start, the wand rests horizontally against the chest, with the wrists bent forward. The wand is then thrust forward in a straight line and withdrawn to the chest. During the same movement, either leg is raised with straight knee, and then lowered again.

5. Exercise 2 is modified by raising the legs alternately sidewise as high as possible.

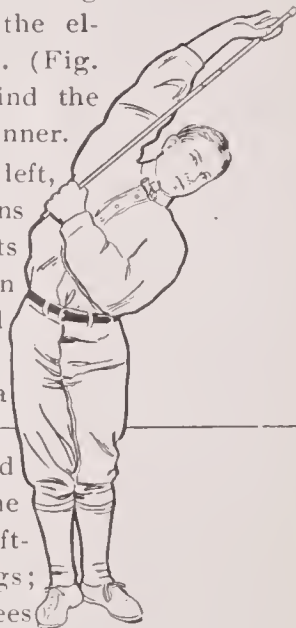
6. The wand is held at arm's length before the body, shoulder high. The movement consists in swinging the wand upward and at the same time raising either leg backward with the knee straight.



(Fig. 37.)

7. From the same starting position, the wand is swung above the head and, without in the least bending the elbows, is then swung downward, back of the body. (Fig. 37.) Raising the wand over from its position behind the body to a position in front of it is done in a similar manner.

8. The wand is swung upward to the right, or to the left, close to the body, until vertical; the right (left) arm remains stretched, while the left (right) is bent and finally rests across the chest. Simultaneously, the trunk is inclined on the opposite side and is straightened again when the wand is lowered to the horizontal position. (Fig. 38.)



(Fig. 38.)

9. At the start, the feet are moved apart in a straddling position, while the wand is raised at arm's length horizontally above the head. The wand is then swung downward and at the same time is twisted in such a manner as to cause the left-hand end of the rod to pass between the legs; the trunk is also inclined forward and the knees yield slightly to the force of the swing. (Fig. 39.)

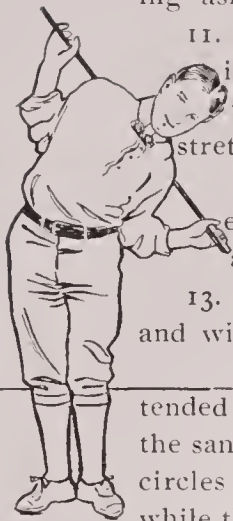


(Fig. 39.)

After resuming the upright position, the right-hand end is swung between the legs in a similar manner.

10. While the wand is held in back of the body across the shoulder blades, the heels together, the trunk is bent from the hips sidewise to the left, then upward, forward and upward, then sidewise to the right, upward, backward and

upward; the back remains straight and the head in line, not drooping nor turning aside. (Fig. 40.)



(Fig. 40.)

11. At the start, the wand rests lightly on the chest. From this position it is raised until the arms are extended and either knee is lifted at the same time as high as possible; the lower leg is perpendicular and the instep stretched so that the toe points downward.

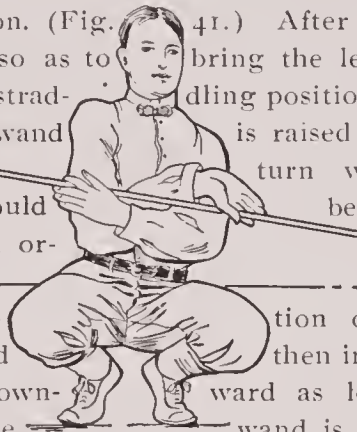
12. The wand is raised from a position on the chest and is then lowered, while the knees are bent to a sitting posture and are straightened again.

13. The previous exercise is modified by thrusting the wand forward from the chest and withdrawing it as the knees are straightened.

14. At the start, the wand is held close to the body, with the arms extended downward, the hands shoulder width apart. The rod is raised slightly and at the same time the forearms are bent. Immediately, the right hand moves upward and circles in such a manner as to bring the right end of the wand over to the left side, while the left hand is carried underneath to the right. As the twist is made, the knees are also bent to a sitting position. (Fig. 41.) After resuming an upright position, the exercise is repeated so as to bring the left arm uppermost.

15. With the feet placed in a straddling position, the trunk is twisted on the hips to either side, while the wand is raised at arm's length above the head; the head should turn with the trunk, but no farther. The twisting sidewise should be far enough to exert a strong pressure upon the internal organs, which will stimulate the circulation in them and aid digestion.

16. From the starting position of the previous exercise, the trunk twists to either side and then inclines forward at the same time that the wand is swung downward as low as possible. (Fig. 42.) After straightening upward, the wand is lowered to the front and the heels closed.

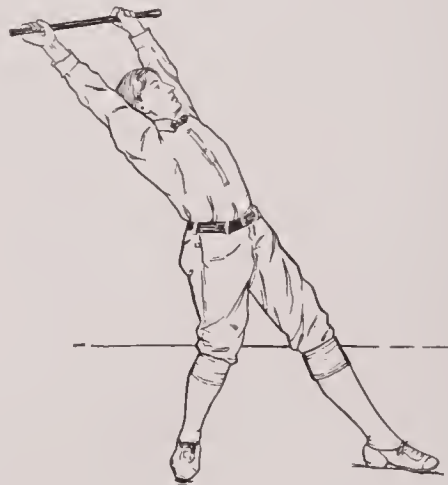


(Fig. 41.)

17. Exercise 17, under The Dumb-bell, is repeated for the wand, except that the wand is swung downward from a position above the head and not reached forward from a rest position.



(Fig. 42.)



(Fig. 43.)

18. The wand is raised at arm's length above the head; either foot charges sidewise, the trunk inclines sidewise over the bent knee, and the end of the wand is struck on the floor.

19. After the body resumes the upright position, either foot is placed backward and is then bent in a charge position; the trunk inclines backward to the opposite side without the wand being lowered, and then straightens again. (Fig. 43.)

20. The wand is held near the body with the arms extended downward. With a swinging motion in raising the knee, either foot steps over the wand between the hands (Fig. 44), if possible without touching it; then either step back again with the same foot or let one foot follow the other, in stepping over forward and also in stepping back to the original position. Bending the trunk or the head forward should, as far as possible, be avoided. If difficulty be found at first in performing the exercise, the lower leg may bend inward as it goes over the wand. The exercise falls among the many movements which have been given for slow digestion (Fig. 44.) and constipation.

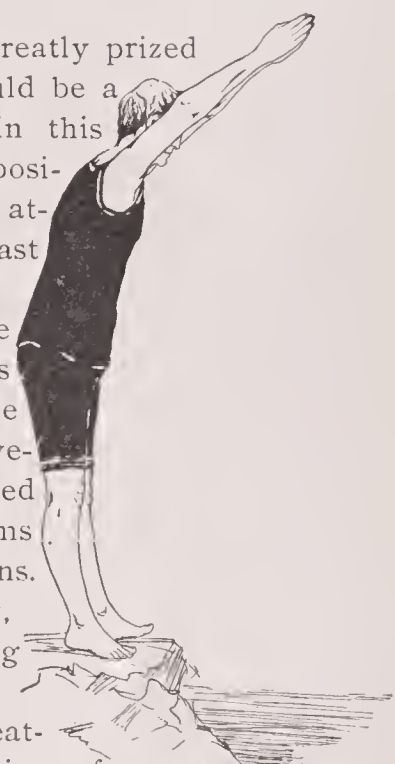
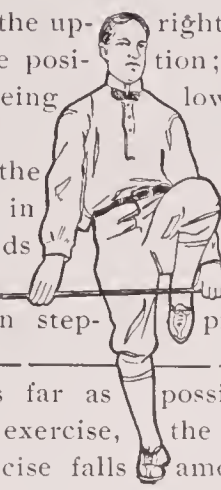
6. SWIMMING

SWIMMING is another accomplishment that the Ancients greatly prized and the so-called Moderns have thus far neglected. It should be a matter of regret to parents to see their children untaught in this art, for early in life the plastic body yields most readily to positions and movements that the older person finds difficult to attain. Of its usefulness in saving life, there cannot be the least question.

As a part of physical training, swimming takes a high place as a healthful exercise. It is one of the few single exercises that bring into play all the muscles of the body and at the same time uses them symmetrically. Its free and graceful movements give healthful action to the muscles; if properly followed it tends greatly toward the muscular development of the arms and the chest and promotes the action of the respiratory organs. Contact with water is in itself refreshing and invigorating, while the triumph over one of the elements dilates the being with a sense of power.

Persons should never enter the water immediately after eating, nor when heated and exhausted by exercise. The best time of day for swimming is either before breakfast, between six and eight, or, later in the forenoon, between eleven and twelve.

An inflated belt, fastened about the upper body, has been found most useful in teaching the pupil how to swim. The first lesson, which should be taken in shallow water, consists in lying on the surface, flat on the stomach, with the limbs spread apart and motionless. Float about easily in this manner until confidence in the belt is assured. As there is little but fulcrum in water, the first sensation while in this position is



alarming. Kicking with the legs only aggravates this feeling and affords but a fancied advantage. After becoming accustomed to the position with the face downward, the pupil should lie on the back with the limbs stretched outward from the body.

As an introduction to a second day in the water, the lungs are well filled and the head held under the surface while ten is counted. On raising the head out of the water wink the eyes vigorously without touching them with the hands. This will help to overcome a feeling of dread or distaste for the water. The rest of the period may be devoted to practicing the arm stroke. This should be tried first before going into the water. An erect position is taken; the elbows pressed close to the body; and the hands are brought beneath the chin with the palms together. The fingers then take the lead while extending the arms forward straight from the chest. When the arms are stretched the palms are turned outward and the arms are swept sidewise, shoulder high, to a line with the body. The movement is followed by bending the elbows and drawing the arms inward to the first position beneath the chin. The elbows should never be raised above the hands in the stroke. When attempting the movement in water with the aid of the inflated belt, advance into the water up to the armpits and, turning toward the shore, straighten the body out near the surface; force the legs as far from the bottom as possible; keep the head upright and the chest well filled. Then do not strike out wildly with the hands, but carry them forward until the arms are fully extended beneath the surface of the water before turning the palms outward. The forward extension of the arms, since it does not aid in advancing the body, is a negative movement, and consequently should be made slowly and quietly; speed and force should be exerted only in striking outward.

The leg stroke is less easily acquired than the arm movement. While grasping with both hands some solid object, as a tree, a rock, or the edge of some structure, lie stretched out on the surface of the water, the legs straight, the heels together, and the toes pointed outward. Draw the feet in toward the body with the heels remaining together; then thrust the legs apart smoothly; and, when fully extended, close them together like the blades of a pair of scissors. Afterward, practice the stroke with the hands free and stretched motionless on the surface of the water.



When both strokes have been brought within control, the next difficulty lies in combining the two in harmonious action. Proceed to lie on the surface of the water, supported by the belt, with the arms stretched forward and the backs of the hands together, while the legs are spread apart. For the first movement, the arms must sweep outward to a right angle with the body and the legs be brought together. From this point, the hands are

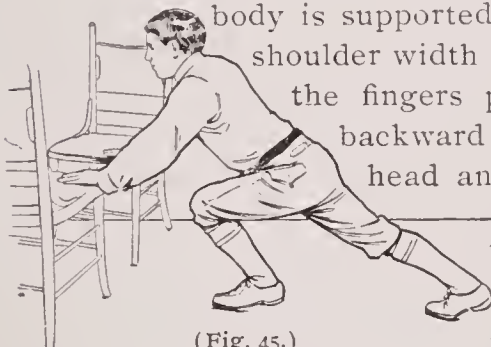
brought under the chin by dropping the elbows, and at the same time the feet are drawn in toward the body. The limbs are now in a position to propel the body forward. This third movement consists in extending the arms with the palms together and also thrusting the legs apart. The three movements should be distinctly separate for the first trials and performed slowly and resolutely. After some practice it will be easy to combine them in well-rounded, harmonious strokes.

The student can feel that much of his task has been accomplished when he has mastered the strokes with the aid of the belt. He should then try the movements in the same shallow water without such support. A leaning position is taken while the feet rest on the bottom and, with the lungs inflated and the breath held, a few strokes are made with the arms. Several attempts will show how buoyant the body is in water and, by that time, the pupil should be able to keep afloat and increase the number of strokes with the arms and the legs together. Perhaps the greatest progress can be made by striking off from a rock or step lying a foot beneath the surface in about four feet of water. For the starting position, the body should incline forward and rest partly under the surface while the knees are bent. Many have been able at this stage to strike out with the limbs, the first time a lunge forward from the steps is taken. The entire process may seem slow and laborious, but it is a needful preparation for correct, advanced swimming such as back, side and racing strokes, floating, diving, etc. A final word of warning should be given, not to venture at any time beyond the bounds of safety, nor attempt foolhardy feats which more accomplished swimmers would not try.



7. EXERCISES WITH CHAIRS

IN THE front leaning position, which is taken for the first exercise, the body is supported between two chairs, placed front to front, shoulder width apart, by resting the hands on the seats, the fingers pointed forward; the legs are extended far backward and in the same straight line with the head and the trunk; the back arched; the arms at full length; the head erect.



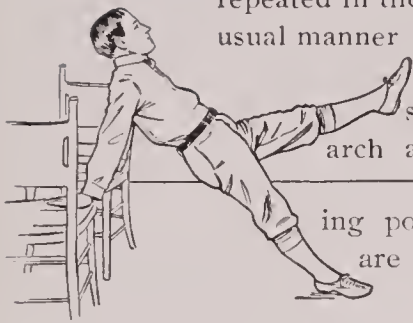
(Fig. 45.)



(Fig. 46.)

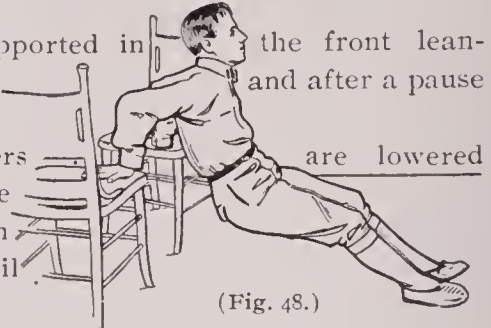
1. Either leg steps forward between the chairs and is then extended again. (Fig. 45.)
2. Both legs jump forward with the heels together and then backward in one movement until extended.
3. Either leg is raised from the floor, as high as possible, and is then lowered, with the knees and the elbows straight.
4. On lifting either leg from the floor, the knee is bent forward between the chairs and is then extended again. (Fig. 46.)

5. The exercises of raising either leg and of bending either knee upward are repeated in the back leaning position. The trunk is supported at arm's length in the usual manner at the edge of the chairs, but the body is extended forward instead of backward, which will bring the chest upward. (Fig. 47.) The feet should be far enough in advance of the chairs to cause the back to arch and not sink down.



(Fig. 47.)

6. While the body is supported in the front leaning position, the arms are bent slightly, and after a pause are straightened again.



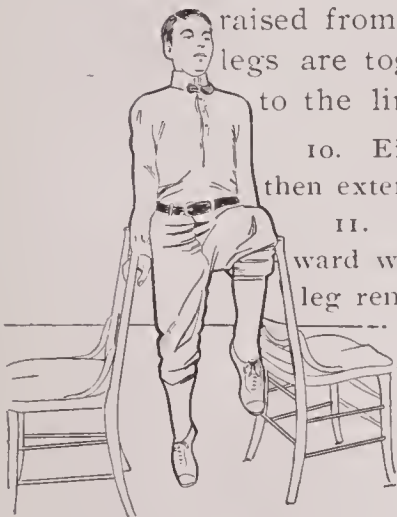
(Fig. 48.)

7. By deeper bending, the shoulders are lowered to a rest position on the edge of the chairs — which should accordingly be less than shoulder width apart — and are then raised until the arms are fully extended.

8. In the position with the chairs shoulder width apart, the body dips as low as the arms allow, which are then straightened again.

9. While supported in the backward leaning position, the arms and the hips are bent until the body assumes a half sitting posture between the chairs, and are then extended as at first. (Fig. 48.)

For the following exercises, the chairs are back to back. The body is raised from the floor with the hands grasping the tops of the chairs; the legs are together; and the toes pointed downward so as to give rigidity to the limbs and prevent them from swinging during the movements.



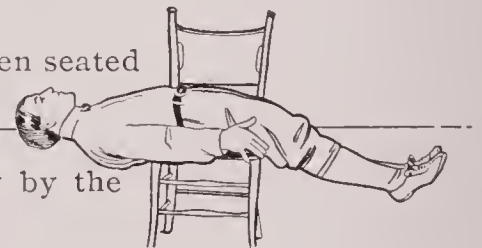
(Fig. 49.)

10. Either knee is bent upward until the thigh is at least horizontal and is then extended. The exercise is then repeated with both legs. (Fig. 49.)

11. By bending the knee, the left, or the right, lower leg is raised backward with a swinging movement and is then lowered; the thigh of the bent leg remains vertical and close to the extended limb.

12. By bending both legs at the knees, the lower legs are raised together and are then extended in the same manner as in the previous exercise.

The following exercises are taken seated on a chair sidewise so that the back is not in the way of a backward movement. The arms rest loosely by the sides.



(Fig. 50.)

13. The trunk is lowered backward slowly to a horizontal position and is then raised in the same length of time until upright. (Fig. 50.)

14. The previous exercise is repeated with the hands clasped on the back of the head.

8. THE HORIZONTAL BAR

POSITION: HEIGHT OF SHOULDERS

[The remainder of the exercises in physical training have been arranged for such apparatus as is found in the numerous municipal playgrounds of Europe, which are being introduced to some extent in American cities. Many manufacturers advertise such outfits for private lawns and grounds at low cost, and several families might very profitably unite in providing their children with this means of recreation. The horizontal bar may be bought separately, as there are several varieties with rubber ends now offered that are adjustable to doorways and passages, while the rest of the apparatus may be put up by a skillful carpenter, with the directions for space and angle here given.]

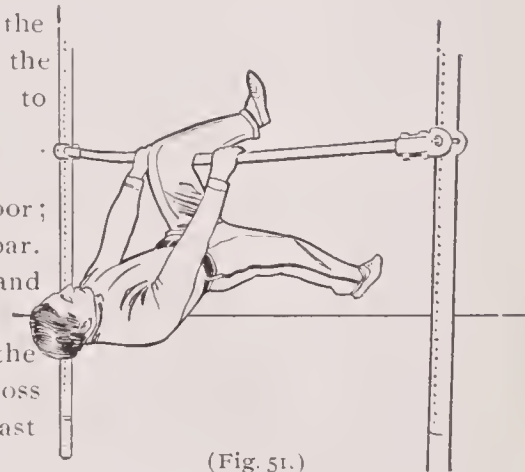
1. THE hands grasp the bar, shoulder width apart, the fingers uppermost and pointed to the front; the feet are placed on the ground as far as possible in advance of the bar, so that the body hangs beneath it; the heels together, the toes pointed outward, the legs and the trunk straight, the arms extended, the head in line with the body, the eyes directed upward. While suspended in this backward leaning position, the body is raised and lowered as in the simplest lever by bending and extending the arms.

2. The previous exercise is repeated in the forward leaning position. The feet are placed as far as possible to the rear of the bar; the line of the body is maintained; the arms are extended.

3. While sustained in the forward leaning position, the knees are bent to a sitting posture and, instantaneously, the feet are raised from the ground and swung forward with sufficient impetus to carry the body to a backward leaning position and then back again to the position at the start.

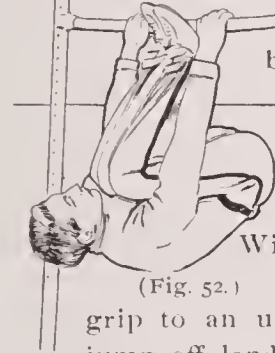
4. The hands grasp the under side of the bar a few inches apart; the arms are bent so as to raise the feet from the floor; the elbows are close to the side; the chin rests above the bar. The body is then swung forward and backward, with the legs and trunk in line and the toes pointed downward.

5. With the fingers grasping the bar by the upper hold, the elbows are passed over the bar so that the upperarms rest across it. The body is then swung forward and backward as in the last exercise.



(Fig. 51.)

6. While the hands grasp the bar, the knees are bent to a sitting position underneath as far as the arms allow. The right leg is raised until the sole of the foot presses the bar and is then slipped over until resting on it under the knee; at the same time the left leg is extended horizontally and in line with the body (Fig. 51). While hanging in this position, the body is swung backward and forward.



(Fig. 52.)

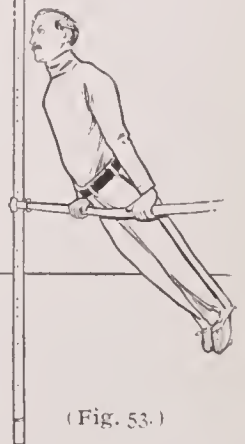
7. The left leg is passed over the bar after the right, and the body, which hangs by both knees and the arms, is swung forward and backward. At the end of the movement, release the hold of the knees and turn over backward slowly until the feet touch the floor.

8. First pass the left leg over the bar outside the hands. Without pause, bend the arms, press firmly upon the hands and swing up to a sitting position on the bar. Now change the grip to an underhold; swing the right leg over the bar, at the same time jump off, landing upon the balls of the feet with the knees yielding.

9. While the hands grasp the bar, the knees are bent to a sitting position; both legs are then raised and passed under the bar. (Fig. 52.) Without pause, turn over backward and extend the legs and the trunk in a forward leaning position, the back hollowed, the chest thrown outward. The knees are then bent and the legs brought between the hands and lowered to the first position.

For the following exercises, the position of the bar is waist high. The hands grasp by the upper hold, except in exercise 15.

10. By means of an upward spring, rise to a rest position with the arms straight and the upper part of the body above the bar. (Fig. 53.) After a pause, jump off and alight on the balls of the feet, the knees yielding to the force of the descent.

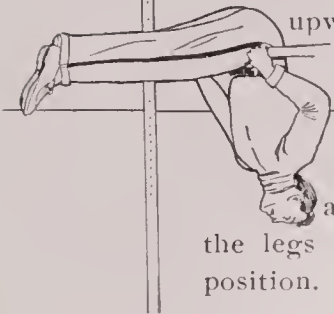


(Fig. 53.)

11. During a vigorous upward jump, either knee is bent and raised between the body and the bar, and is then extended again so that both feet land together. In repeating the exercise, both knees are bent and then extended while off the ground.

12. During an upward jump, either leg is raised sidewise as high as possible, and lowered again before the descent. In the same manner, both legs are parted sidewise in a straddling position while in the air.

13. While the body is sustained against the bar in a rest position, the arms are bent until the fore and the upper arms form a right angle, and are then stretched upward.



14. From a rest position at one end of the bar, travel sidewise to the opposite end by shifting the hands along alternately: the arms remain straight.

15. At the start the feet are placed somewhat in advance of the bar and the hands grasp by the under hold. On bending the arms, shoot the legs and the body forward and over the bar, completing a circle to the first position. (Fig. 54.)

(Fig. 54.) The position of the bar is above the reach, for the exercises below:—

16. While the body is suspended at full length, the exercises of bending either knee or both knees upward are repeated.

17. By bending the knees one at a time or both together, the lower legs are raised backward and are then lowered again, while the thighs remain vertical throughout the exercises.

18. Either leg is raised forward horizontally without swaying the body and is then lowered again beside the other. The movement is made also with both legs.

19. During a vigorous upright spring, release the grip of both hands and change to the under hold. On a second jump upward, reverse the grasp from an under hold to an upper hold.

20. By a strong pull with the hands, the body is raised until the elbows may pass over the bar so that the upper arms rest across it. After a pause, the body is lowered until again extended.

21. By bending the arms, the body is drawn up until the chin rises above the bar, and then descends to the full hanging position.

22. The previous exercise is varied by bending both knees upward and extending them while the body is being raised and lowered.

23. From a hanging position at one end of the bar, travel sidewise to the opposite end by shifting the hands along alternately.

24. The hands grasp one end of the bar on opposite sides, so that the body is turned toward the other end and a line passing through the shoulders would be at right angles to the bar. Travel forward to the other end of the bar and back again by advancing hand over hand.

25. During an upward spring, the arms are stretched apart sidewise by slipping the hands along on the bar as far as possible, and are brought together again before the descent.

9. THE PAIR OF RINGS

THE flying rings are usually 5 to 7 inches in inside diameter and are suspended about 18 inches apart. Webbing straps are stronger and safer than leather for suspending the rings and are better than rope for the

purpose in many ways. The straps should be double, so that the rings may hang in the loop. The following exercises should be performed with the rings raised at first shoulder high and afterward at a greater height:

1. In the position of exercises 1 and 2, under The Horizontal Bar, the movements of raising and lowering the body by bending the arms are repeated.

2. While grasping the rings, one in each hand, incline the body backward and then revolve first to the right, then front, then to the left and back, the feet remaining firmly placed on the floor, the head, the trunk and the limbs in line. The body thus describes the surface of a cone, the apex of which is found in the feet.

3. The body is raised from the floor so that the chin is above the rings. While the weight is sustained by the right hand, the left arm is extended holding the ring at arm's length. After a pause, the ring is withdrawn by bending the arm, and the left ring is then extended from the body.

4. The feet are raised forward from the ground and passed between the rings, and then slowly descend to the rear so as to complete a circle. If difficulty be found at first in starting the circle, the knees may be bent and brought close to the body, as soon as the feet are lifted from the ground.

5. The feet are swung upward as in the previous exercise, and when they reach the rings, the toes are put into them; the knees are then bent and the body continues the action of the circle; the arms are extended; the back is lowered and hollowed; and the grasp is bent in such manner that the body is turned face downward. (Fig. 55.) After a pause in this hanging position, the trunk is raised and the feet are again lowered to the ground.

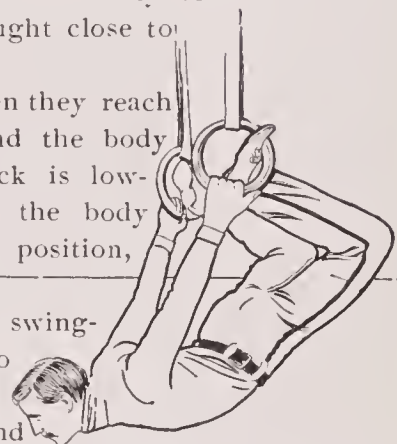
6. While grasping the rings with the arms bent, start the body swinging by running forward and backward; the feet should continue to touch the ground at the points within their reach.

7. The previous exercise is modified by turning about at the end of each swing so as always to face in the direction in which the body moves.

8. At the end of a forward swing, the feet are raised from the ground; the toes are inserted in the rings; and the back is arched as in exercise 5. In this position, the body may swing forward and backward as long as desired.

9. At the end of a backward swing, the legs are raised and swung between the rings in a backward circle to a standing position, when the grasp is released.

10. The arms are thrust through the rings and the elbows are bent so that the hands may clasp in front. While resting upon the upperarms, forward and backward swings are taken in the manner described above.



(Fig. 55.)

10. THE DOUBLE INCLINED POLES

THE many forms of climbing not only strengthen every part of the body, but fortify the courage and have a practical value in increasing the means of escape from danger. By a correct employment of the various parts of the body in assisting each other, climbing may be performed with ease and elegance. While none of the many exercises that follow are dangerous, the beginner should stop at once when such signs of fatigue appear as an insecure grasp, a struggle of the lower limbs, or a halting of part of the body in any movement. This will give him an opportunity to descend in safety to the ground while his strength lasts.

The regulation size of climbing poles and ropes is one and one-half inches in diameter, and fifteen feet is a desirable height for practice

purposes. The double, or pair of, poles are placed eighteen inches apart, which is also the width of the inclined ladders. The rounds of the ladders are twelve inches apart. All inclined apparatus is at an angle of 45 degrees.

The general position for the following exercises is behind or under the poles, while the body, except in number 6, faces the front. All exercises in which the right hand follows the left are repeated so as to advance the right hand first.

1. The left hand grasps the left pole as high as the reach, and the right hand grasps the right pole at the same height. The feet are made to clasp the left pole by raising the left leg before the pole, placing the outside edge of the foot against the right inner side of the pole, the knee to the left; then lifting the right foot in back and placing the outer edge against the outside of the pole; the ankles are therefore crossed and the pole passes between the edges of the feet. The legs are then straightened and the body is raised, causing the arms to bend at the height of the chest. Both hands advance as high as the reach; the legs are drawn upward, while the arms remain straight; the trunk is raised as before, bending the arms to a rest position. The descent is made in the reverse manner.

2. The ascent is made with the hands clasping both poles. At the start, the feet are passed from the outside over the poles, the lower legs resting against the front surface. The descent may be made by sliding downward without grasping the pole with the hands.

3. The ascent is made on one pole, the return on the other. At the start, the hands grasp the pole with the left hand above, but touching the right. The left hand advances to the reach, the right following; the legs are then drawn upward without bending the arms; the body is extended until the arms are in a position to advance farther. In descending, the right hand slips down opposite the chest, the left following; the body is then lowered to straighten the arms.

4. The body travels upward without the use of the legs; the hands clasp both poles. At the start, the hands draw the body upward as high as possible; the left hand then advances to the reach, the right following; the arms are next bent, raising the body to a rest position of the hands.

5. From a similar starting position, the ascent is made by advancing both hands at the same time. The advance is only slight and never exceeds a few inches.

6. Exercises 4 and 5 are repeated with the back turned toward the poles. The hands grasp the poles above the head, the fingers in the rear, the thumbs in front; the legs clasp the pole from the outside. The left hand slips upward (or both hands for exercise 5) and grasps the pole aided by the elevation of the left side of the body; the right hand follows in the same manner.

The following exercises are taken in front of the poles but facing toward them.

7. The body is inclined forward until the hands grasp the poles at half reach; the insteps are placed against the inside of the poles, the knees on the outside, so that the lower part of the legs rest crosswise. The climb is made by advancing the hands together as described above.

8. The hands grasp the pole at the height of the hips, the feet together and from twelve to eighteen inches away from the bars, the body and the head erect, and the arms extended. The body is thrown forward between the bars by allowing the arms to bend, and is then returned to the upright position; the knees remain

straight, the stomach drawn in, the chest arched outward. The movement is excellent for expanding the chest.

9. The dipping movement of the last exercise alternates with forward bending from the hips, the arms and the knees remaining straight. The movement consists in swinging the hips backward and downward.

10. The dipping exercise alternates with deep knee bending.

11. From a stand position between the poles, the body revolves over backward, aided by the hands, which grasp the bars tightly at shoulder height and pull the body over. When the feet reach the bars, the insteps are placed against them; the trunk then continues the action of the circle, and at the same time the grasp of the hands is bent in such a manner that the body hangs downward between the bars by the toes and the fingers. After a pause, the legs are swung downward to a stand position.

12. The hands grasp the poles at the reach and lift the body from the floor. Elevated in this position, the body is swung backward and forward with the legs and the upper body in line, the knees straight and the toes pointing downward.

II. THE INCLINED LADDER

THE following exercises are taken on the upper side of the ladder:—

1. While the feet rest on the ground, the hands grasp the round at the reach; the feet are raised to the lowest round, the toes pointed forward; the body is inclined in line with the ladder; the head is erect. The right hand and the right foot are lifted at the same time to the next higher round; the knee is straightened; and the left side of the body then advances in the same manner. Either walk or run up and down the ladder in this way.

2. With the back turned toward the ladder, the hands grasp the beams or side rails below the height of the shoulders; the feet are raised to the first round; and the body then extended in line with the ladder. Otherwise the ascent and return are made in the manner described above.

3. The ascent is made as in exercise 1. On reaching the top, the legs are swung over the sides of the ladder, the knees bent, the fore legs hanging loosely; the hands grasp the side rails on the under edge. The descent is then made by sliding downward at a speed which is regulated by the pressure of the hands.

4. The hands rest on the hips; the right foot is placed on the first round, the left following; the feet are advanced on the round so that the rest is nearly at the heel; the body is inclined forward; the head is in the same straight line. The left foot is raised to the next round; the leg is then straightened and at the same time the right foot follows.

5. The hands grasp as high as the reach, while the inside of the feet rest lightly on the side rails, the legs are straight, the toes pointed downward. By the strength of the arm, the body is drawn upward to the top, the left hand leading, and is then slipped back again with the feet in the same position.

6. After advancing half-way up the ladder, climb between the rounds to the under side. The hands then grasp the round above the head at arm's reach; the toes are inserted behind a lower round; the trunk is thrown forward so as to arch the back outward. After a pause in this hanging position; any means may be used to return to the ground.

7. The feet are thrust through the ladder and a seat is taken on a round with the body facing the apparatus; the toes are inserted behind a lower round; the arms are extended above the head, the hands clasped. Thus secured, the trunk is bent backward

from the hips and is then raised again to the upright position. The feet are placed on the lower round, the back facing the ladder, the hands grasp a round above the head at arm's reach. While sustained by the hands alone, either leg is raised and lowered with straight knees, and afterward both legs, without change in position.

The position of the body is changed for the following exercises to the under side of the ladder.

8. Exercise 1 of this series is repeated in detail.

9. The hands grasp the sides of the ladder at full reach. The arms are then bent, thus raising the feet from the ground; the legs remain straight and together, the toes pointed downward; the head is held back. The right hand reaches upward at full length, the arm is then bent and on the instant, without change in the relative position of the legs and the trunk, the left arm is raised to the reach beyond the right. In descending, the leading hand is slipped down to the round below the one grasped by the supporting hand.

10. While the body is suspended with the hands grasping the side rails, both arms shoot upward at the same time as far as possible; the advance can seldom exceed a few inches at a time.

11. Exercises 10 and 11 are repeated, with the arms bent at right angles when shifting.

12. With the back turned toward the ladder, the hands grasp the round within reach; the body is then raised from the floor, causing the arms to bend at right angles. In traveling upward, a jump is made with both hands to the round above, while in the descent the hands are slipped downward to a lower round.

12. THE VERTICAL POLE OR ROPE (FIG. 56)

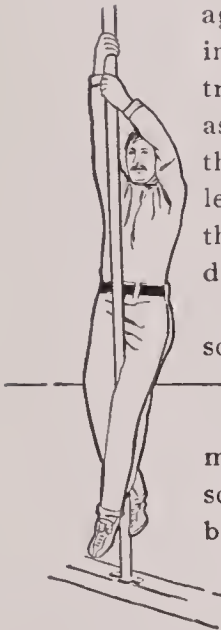
1. THE hands grasp the pole or the rope at full reach; the right foot is placed against the left side of the pole, the lower leg in the rear; the left foot is passed in front and placed on the right side; the legs are then straightened, raising the trunk and at the same time bending the arms. The right hand advances as high as the reach; the legs are drawn upward without bending the arms; the feet then firmly clutch the pole and the trunk is straightened upward so that the left arm is bent; this hand is next raised to the reach and beyond the right and the legs are drawn upward as before. In descending, the leading hand is slipped down to the breast and the movements of the body are reversed.

2. In repeating the exercise to allow the left hand to lead upward, the descent may be made by the legs alone while the arms are extended horizontally at the side; the rope cannot be used in this manner.

3. Ascend hand over hand without the use of the lower limbs, the legs remaining straight and in line with the pole, the toes pointed downward. In descending, the feet clutch the pole while the body may slide or be lowered to the bottom.

4. The upward climb is made as before, but in descending, the body is lowered hand over hand while the legs are free from the pole, straight, and together.

5. The body is raised from the ground and the legs are extended forward horizontally, with the pole passing between them; the feet are together and the toes pointed forward; the trunk upright; the head thrown slightly backward. The hands follow each other in climbing upward, after which the descent is made with the feet clasping the pole.



(Fig. 56.)

PASTIMES, SPORTS, GAMES AND
AMUSEMENTS

SPORTS AND GAMES—INDOOR

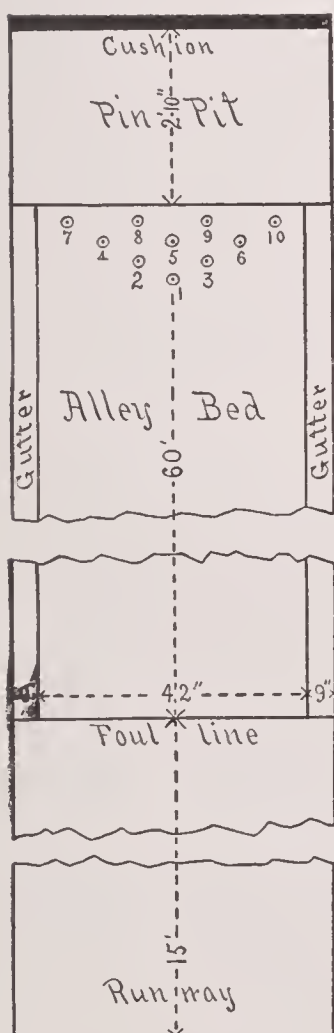
BOWLING

BOWLING, which is one of the oldest athletic sports known to the civilized world, was introduced into America about two hundred years ago. Since that time, the game has undergone many changes, and has passed through several periods both of popularity and of unpopularity, but as it is now played, it is one of the most familiar and enjoyable of our indoor winter sports. It combines in one the benefits of several of the other forms of athletics, and, besides being especially valuable as a means of training the hand and the eye to work together, it is one of the

best exercises for the arms, back, and legs.

There are very few towns or cities, especially east of the Mississippi River, which are not provided with one or more Bowling Alleys, though many of these alleys and their fittings are not of regulation size and make. The material of which a regulation alley is usually made is selected maple, or pine and maple, in long strips, three inches wide and one inch thick. These are placed on edge, side by side, and are bolted or nailed together and secured directly to the foundation material. The floor or *bed* of the alley proper must not be less than sixty-three feet three inches in length, though whenever possible its length should be at least seventy-two feet. The width should be forty-two inches.

At the pin end of the alley, ten circles, two and one-fourth inches in diameter, are plainly marked, either with paint or in some other way. These circles are arranged in the form of a triangle with its base parallel to the end of the alley, and they are twelve inches apart from center to center. The center of the circle at the vertex of the triangle, on which pin No. 1, called the *head pin*,



is placed, is three feet three inches from the end of the alley. Each of the pins is placed over one of these circles, and the numbers and positions of the pins used vary in the different games, as will be explained hereafter. At a point sixty feet from the center of pin No. 1 a line, called the *foul line*, is drawn across the alley, at right angles to its sides. On each side of the alley, from the foul line to the pin end, is a rectangular gutter about nine inches wide and two or more inches deep. This is to receive the ball in case it leaves the alley. At the pin end of the alley is a *pit* five feet in width, at least two and one-half feet in length, and at least ten inches in depth, the bottom of which is covered with a thick mat of canvas, leather, or other strong material.

At the side of this pit farthest from the alley is a large, dark-colored mat or cushion that extends the entire width of the pit and is usually five or more feet in height. Back of the foul line is a space, called the *run*, the width of which must not be less than that of the alley, and the length not less than fifteen feet. This is the space over which the bowler runs before casting the ball, and it may be either a continuation of the alley itself, or part of the floor of the building, but it must be level and on the same plane as the alley.

Extending along the alley, near the gutter, from the pit to a point a short distance beyond the foul line, is the *runway*, which is a gutter, usually elevated above the plane of the alley, in which the balls are returned from the pit to the bowlers.

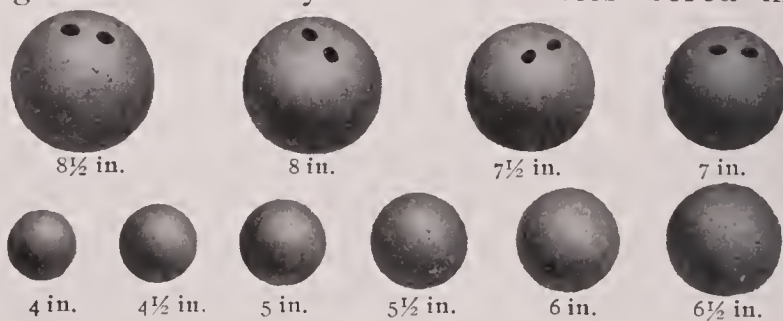
Regulation *League* pins, (Fig. II) are fully described in Rule IV of the American Bowling Congress, appended to this article.

The balls (Fig. III) are made of hard wood, such as *lignum-vitæ*, are perfectly round, and vary in weight from one to fifteen pounds, and in size from that of an ordinary baseball to twenty-seven inches in circumference. The largest balls usually have two holes bored in them, which are about one inch in diameter and three or more inches in depth, and are about one and one-half inches apart. These are for convenience in handling, the thumb being inserted into one of the holes, and the middle finger into the other.

There are many different opinions as to the best way in which to bowl, but, except for a few general rules, the bowler should adopt



(Fig. II)

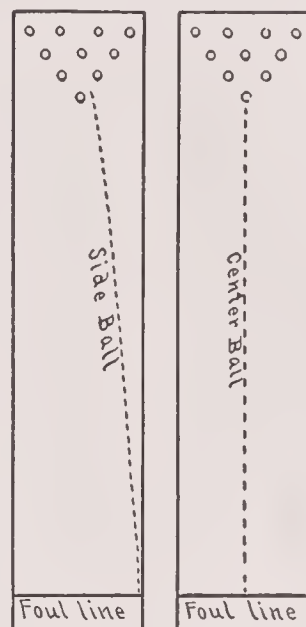


(Fig. III)

that position and style which is most natural for him or her. In nearly all Bowling games the object is to knock down as many pins as possible with each ball, and there are several different ways of doing this. You should begin, of course, with the smaller balls, and after acquiring control of them you can progress gradually to the larger ones. With most beginners, there is a tendency not to follow this rule, because it is natural to suppose that a large ball will knock down more pins than a smaller one; but the first requisite is to learn to deliver the ball correctly and in the desired direction, and this faculty can be acquired most easily and quickly with a comparatively small ball.

The Bowling game that is most common, and that should be the first to be learned by the beginner, is the *Tenpin game*, in which, as the name indicates, a pin is placed on each of the ten spots on the alley. The balls that are now used in this game are all *finger balls*, that is, balls provided with the holes that have been described for the insertion of the thumb and finger.

Take one of these balls from the runway with the hand with which it is to be bowled, by inserting the thumb and second finger in the finger holes, and walk to your position on the run behind the foul line. You must now decide whether you desire to start the ball in the center of the alley or at one side of it (Fig. IV, 1 and 2), and take your position accordingly. This is entirely a matter of judgment; it can best be decided by trying each way, and selecting the one by which you accomplish the best results.



(Fig. IV. 1 and 2)

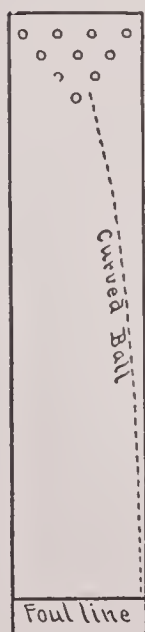
Stand five steps back of the foul line, with the body bent slightly forward and the left foot to the front, and with the ball held either against the chest, or at about the height of the knee, its weight resting on the left hand. Draw an imaginary line with the eye from your position to the head pin, and when you deliver the ball try to cause it to follow this line. You should endeavor to strike the head pin on one side, rather than in the center, as more pins will be knocked down in the former case than in the latter.

Having thus decided what direction you desire the ball to take, swing it so as to make sure that your finger and thumb have a firm grip in the finger holes. Now, starting with the right foot, take four quick steps, and, with the left foot in front, deliver the ball. The delivery is made by a full sweep of the arm close to the side; do not bend the arm or back, but bring the ball close to the alley by bend-

ing the knees and keeping the feet wide apart. The foregoing directions can be made to apply to a left-handed bowler by interchanging the words right and left where applied to the hands or feet.

After bowling the first ball, do not bowl the second until all the pins that are down have been removed from the alley and the gutters. These pins are called *deadwood*, and players are prohibited by the rules from counting pins made by a ball bowled when there is *deadwood* on the alley or in the gutters. You must be careful not to step on or over the foul line, and must cause the ball to take the alley very near the point at which you release it from your hands, and thus avoid bounding, or "lofting" it. Failure to observe either of these rules will prevent your receiving credit for the pins knocked down by that roll.

Do not try to bowl too swiftly at first; your first efforts should be directed toward acquiring a graceful and easy delivery and accurate control of the ball. Increased speed will gradually be acquired; but when once you have become proficient in the swing and the delivery, you will find that slow balls, properly placed, will make a good score.



Many of the best bowlers prefer to bowl a *curved ball*, that is, one that is started at one side of the alley and is made to curve gradually in the desired direction, so as to strike the pins at a greater angle than would be possible with a *straight ball* (Fig. IV, 3). This curve is produced by giving the wrist a quick turn in the direction in which it is desired to have the ball curve, at the same time that you release it from the hand.

Whenever possible, rubber-soled shoes should be worn for Bowling; if you wear shoes that have leather soles, the bottoms should be chalked frequently to prevent slipping. A chalk box, and a wet sponge for moistening the fingers, will be found usually near the alley.

The majority of people when beginning to bowl have as great difficulty in learning to score as they do in mastering the game itself. You will find, however, that scoring is a very simple matter, when once you have obtained a clear understanding of its principles. The game of Tenpins is divided into ten equal parts, called *frames*, which correspond to the innings in base ball. The players bowl their frames alternately, each being allowed two successive balls to a frame. (See Rule IX, following.) The scoring is complicated by the fact that there are three results that may be accomplished by bowling one or both of the balls allowed for each frame, and that each of these results requires an entirely different method of scoring.

(Fig. IV. 3)

First, a player may knock down all of the ten pins with the first ball, in which case he is said to make a *strike*; second, he may make a *spare* by getting with the second ball all of the pins that remain after he has bowled the first; and, third, he may make a *break* by getting nine pins, or less, with the two balls. The card or blackboard on which the score is kept is divided, by non-erasable straight lines, into a number of spaces, as indicated in Figure V.

The large spaces at the left are for the names of the players; the squares in the ten numbered columns are for the scores of each of the ten frames; the squares in the last four columns are for recording the number of strikes, spares, and breaks, and the total scores of the different players. The squares in the bottom row are used for the total scores of all the players in team games. On most boards the last four columns are omitted. When a

SCORE BOOK OR BOARD

PLAYERS	FRAMES										Strikes	Spare	Breaks	Game	
	1	2	3	4	5	6	7	8	9	10					
TOTALS															

(Fig. V)

player makes a break in any frame, he scores in the appropriate square the number of pins knocked down by the two balls. When he makes a spare, he indicates it by putting in the right-hand upper corner of the frame a diagonal line, thus (\diagdown). He cannot score the number for that frame, however, until he has bowled the first ball in the next frame, which he must do in his regular order. The score for the frame in which the spare was made is then the number of pins knocked down by the first ball in that frame (ten) plus the number made by the first ball of the next frame.

When a player makes a strike, he indicates it by putting a cross (X) in the right-hand upper corner of the frame. He must then wait, as in the case of the spare, until he has bowled his next frame, when he can find his score for the strike frame by adding to the number of pins made in it (ten) the number made by the next two balls. You will thus see that if he makes strikes in two adjoining frames, the score for the first frame will be (ten) plus (ten) plus the number of pins made with the first ball of the next, or third, frame. Should a player make a strike, or a spare in the tenth frame, he must complete the play by rolling extra balls before leaving the alley. If he has made a strike he will roll two extra balls; if a spare, only one. The score for the tenth frame can thus be determined in the same way as in the other frames. The final score of each player for the game is found by adding together the various scores made by him in the ten frames.

Following are some of the terms commonly used in bowling:—

Break—When in any frame a player fails to knock down the ten pins with the two balls allowed.

Bridge or Railroad—When the two end pins in the back row are left standing after the first ball in any frame has been bowled.

Chalk Box—A box placed near the alley and containing chalk for the shoes of the bowlers.

Deadwood—Pins that have been bowled down and remain either on the alley or in the gutters.

Double header—Two consecutive strikes.

Foul Line or Foot Mark—A straight line drawn across the alley, at right angles to its sides, at a point sixty feet from the center of the head pin.

Frame—One of the ten equal parts into which the game is divided, corresponding to the innings of a base ball game.

Gutter—The two troughs, one on each side of the alley, into which the balls roll if they leave the alley at the sides.

Lofted Ball—One that bounds on the alley.

Pin Pit—Space at the end of the alley, into which the pins fall when bowled off the alley and which also receives the balls as they drop from the end of the alley or from the cushion at the rear.

Pin Boy—Boy who sets up the pins and returns the balls to the players.

Poodle—A name applied to a play in which the ball rolls into the gutter without striking a pin.

Railroad. See *Bridge*.

Runway—A raised trough near the alley, in which the balls are returned from the pit to the foul line.

Run—Space back of the foul line over which the player runs before delivering the ball.

Spare—A play in which the pins are bowled down with two balls.

Strike—A play in which all of the pins are bowled down by the first ball in the frame.

Triangle—The outline at the end of the alley on which the pins are arranged.

Turkey—Three successive strikes.

REVISED PLAYING RULES OF THE AMERICAN BOWLING CONGRESS

RULE I—THE NAME

These rules shall be known as the rules of the American Game of Tenpins.

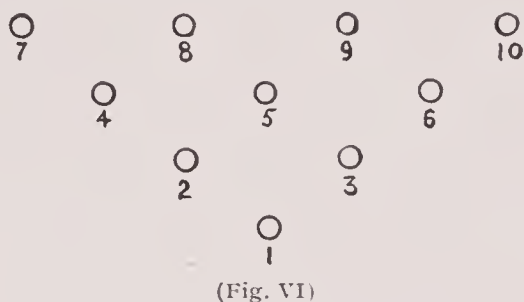
RULE II—THE GAME

The game to be played shall be the American ten-frame game, and shall be played on a regulation alley with regulation pins and balls.

RULE III—THE ALLEY

SECTION 1. A regulation alley shall be not less than forty-one, nor more than forty-two inches in width, shall be sixty feet in length from the center of the spot on which the head pin is placed, to the foul line, and shall have a run back of the foul line at least fifteen feet in length.

The spots on the alley shall be twelve inches apart from center to center, and the center of the four spots on the back row must be three inches from the edge of the pit. The spots must be two and one-quarter inches in diameter, and made so distinctly that they can be plainly seen by the person setting up the pins, each spot to be properly numbered (as in Figure VI.)



SEC. 2. The gutters on each side of the alley shall extend from the foul line to the pit. They shall be two inches deep and eight and three-quarters, or not more than nine inches, wide, and shall incline downward from a point about opposite the head pin to the pit, so that the gutter, where it enters the pit, shall be three and one-half inches in depth below the surface of the alley.

SEC. 3. The pit shall be ten inches deep below the surface of the alley to the cushion or mat, and shall not be less than two and one-half feet long from the alley to the swinging cushion at the rear. The cushion shall be constructed, as far as possible, so as to prevent the rebounding of pins from it to the alley. No cushion shall be attached to the partitions between, or at the sides of the alley, or gutters, at any point opposite the pins; but the partitions may be covered with one layer of leather (no other substance may be used), not to exceed half an inch in thickness. The outside of the coverings on said partitions must be twelve inches from the center of the nearest corner pin spot. The rear swinging cushions must have dark-colored covers.

RULE IV—THE PINS

SECTION 1. A regulation pin shall be fifteen inches in height, two and one-quarter inches in diameter at the bottom, twelve and one-quarter inches in circumference (two and one-quarter inches from the bottom), fifteen inches in circumference at the body, or thickest part (four and one-half inches from the bottom), eleven and five-eighths inches in circumference (at a height of seven and one-quarter inches from the bottom) five and one-quarter inches in circumference at the neck (ten inches from the bottom), and eight inches in circumference at the thickest part of the head (thirteen and one-half inches from the bottom); it shall taper gradually from the bottom to the largest part of the body, shall be of uniform weight, and shall be stamped "A. B. C. Regulation Pin." The manufacturer's name and address may also be stamped thereon.

RULE V—THE BALL

SECTION 1. The ball shall not exceed twenty-seven inches in circumference in any direction, but smaller balls may be used.

SEC. 2. Alley balls used in match games, when properly marked, shall be considered the private property of the owners or custodians, and no others shall be allowed to use them without their consent.

RULE VI—FOUL LINE AND FOUL BALL

SECTION 1. In all games there shall be a line, not more than an inch in width, drawn or painted on the surface of the alleys and gutters, the center point of which shall be sixty feet from the center of the head or front pin spot, measuring to the outside of the line, which, if possible, shall be continued upward at right angles at both ends. This shall be known as the *foul line*.

SEC. 2. A player in delivering a ball must not step on or over this line, nor allow any part of his body or clothing to touch on or beyond the line until after the ball has reached the pins. Any ball so delivered shall be deemed foul, and must be so announced at once by the umpire. The player forfeits all pins made by such foul ball, and such pins, if any, shall be respotted before the next ball is rolled. Should any ball delivered leave the alley before reaching the pins, or any ball rebound from the back cushion, the pins, if any, made on such ball shall not count, but must be respotted. All such balls shall count as balls rolled. Pins knocked down by a pin or pins rebounding from side or back cushion shall count as pins down.

RULE VII—DEAD BALLS

If any player roll on the wrong alley, or roll out of turn, or is interfered with by a spectator or other bowler; or if any of the pins he is playing at be knocked down or disturbed in any way before his ball reaches them; or if his ball, after being fairly bowled, should come in contact with any obstacle on the alley before reaching the pins; or if the player bowl before all the pins are in their places; the umpire shall immediately declare such ball "dead," and shall allow the player to roll again after replacing the pins as they were before such ball was rolled.

RULE VIII—DEADWOOD

Pins knocked down, but remaining on the alley or in the gutters, are termed "deadwood," and must be removed from the alley before the next ball is rolled. Should a pin fall when the "deadwood" is being removed, it must be respotted and pin or pins rebounding from any other alley must be respotted.

RULE IX—THE COUNT

SECTION 1. Two balls shall be allowed for each frame, except when a strike is made, as designated below, or when a spare is made in the last frame, which must be completed before leaving the alley, and on the same alley as made.

STRIKES

SEC. 2. A *strike* is credited when the player bowls down the ten pins with the first ball delivered in any frame. It is designated by a cross (X) in the upper right-hand corner of his frame, and the player is credited with whatever pins he may make on his next two balls, in addition to the ten already credited by the strike.

SPARES

SEC. 3. A *spare* is credited whenever a player clears the alley with the first and second ball. It is designated by a small line (\) in the upper right-hand corner of the frame in which it is made, and the total score in that frame is left open till the player shall have rolled one ball in his next turn, when the number of pins knocked down by such ball are immediately added to the ten credited by the spare. In the last frame, the player finishes before leaving the alley, as hereinbefore provided.

BREAKS

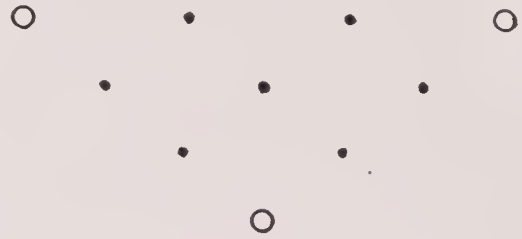
SEC. 4. A *break* is charged to a player at all times when neither a strike nor a spare is made. Then the player is allowed only the total number of pins down.

In addition to the game of Tenpins, which has been described, there are numerous other Bowling games, which differ from it only in a few minor points. A glance at the following rules will enable you to understand how several of the most common of the other games are played, and wherein they differ from the ordinary game of Tenpins.

COCKED HAT

IN THE game of Cocked Hat, the head pin and the two corner pins (Nos. 7 and 10) are left standing, as indicated in the diagram.

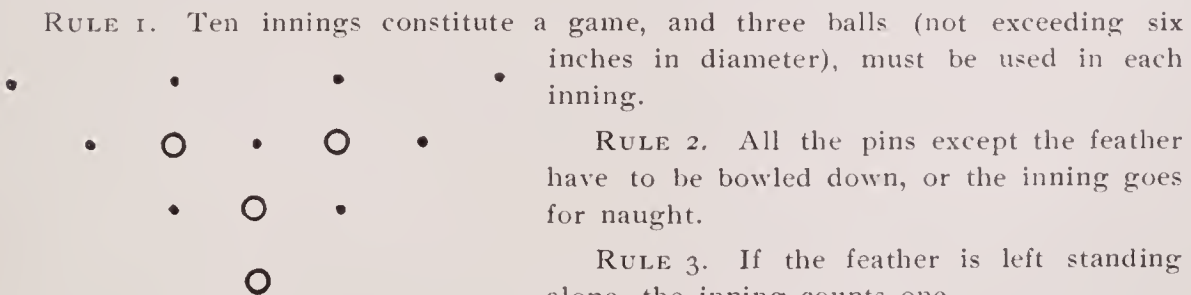
Balls not exceeding five and one-half inches in diameter must be bowled, and they must be rolled down the alley, not cast or thrown. The rules of the game of American Tenpins generally govern this game, except in St. Louis and the Northeast, where there are local rules. In scoring, each pin counts one, so that when a strike or a spare is made the count before the extra balls are rolled is three. "Poodles," or balls rolled down the gutter, are fair balls, and any pin or pins knocked down by them are counted. The maximum score that can be made in this game is ninety.



The pins used in Cocked Hat games must be seventeen inches in height, five and one-fourth inches in diameter and two and one-fourth inches across the bottom. They must be as nearly uniform in weight as possible.

COCKED HAT AND FEATHER

THE pins are set up as shown in the diagram, the center pin being the *feather*.



RULE 1. Ten innings constitute a game, and three balls (not exceeding six inches in diameter), must be used in each inning.

RULE 2. All the pins except the feather have to be bowled down, or the inning goes for naught.

RULE 3. If the feather is left standing alone, the inning counts one.

RULE 4. There are no penalties. The deadwood must be removed. Any pins knocked down through the deadwood remaining on the alley cannot be placed to the credit of the bowler.

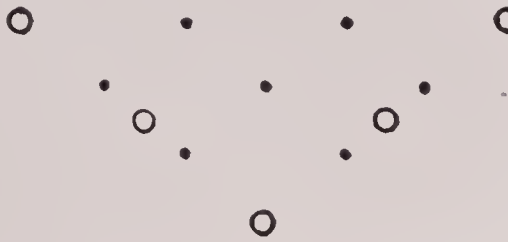
RULE 5. The maximum score is ten.

QUINTET

ARRANGEMENT OF PINS

RULE 1. There shall be five pins placed upon regulation spots and arranged as in the diagram.

The head pin (No. 1) is placed on the same spot as the head pin in the game of Tenpins; pin No. 4 on the same spot as No. 7 in Tenpins and pin No. 5 on the same spot as No. 10 in Tenpins. The pins numbered 2 and 3 are placed on spots exactly half-way between, and in line with the head pin and the pins numbered 4 and 5 respectively.



THE PIN

RULE 2. A regulation Quintet pin shall be twelve and three-sixteenths inches in circumference at the body or thickest part (three and three-fourths inches from the bottom), four inches in circumference at the neck (eight and three-eighths inches from the bottom), and six and three-sixteenths inches in circumference at the thickest part of the head (ten and five-eighths inches from the bottom), and shall taper gradually from the bottom part of the body to a diameter of two inches at base of pin. The pins shall be twelve inches in height and of uniform weight.

THE BALL

RULE 3. The ball shall not exceed five inches in diameter, but smaller balls may be used.

GENERAL RULES

RULE 4. The rules of the game of Tenpins shall govern the game of Quintet in all points not mentioned herein.

NINE UP AND NINE DOWN

THE pins are set up the same as for the game of Tenpins.

RULE 1. Three balls (not exceeding six inches in diameter) are bowled in each inning.

RULE 2. The player must knock down a single pin, which counts one; then, with the two remaining balls he endeavors to leave one pin standing, which counts one. Failing to do either, the inning goes for nothing.

RULE 3. No penalties are attached. Deadwood must be removed. Any pins knocked down through the deadwood remaining on the alley cannot be placed to the credit of the player.

RULE 4. Ten innings constitute a game.

RULE 5. The maximum score is twenty.

HEAD PIN AND FOUR BACK

THE pins are set up as shown in the diagram.

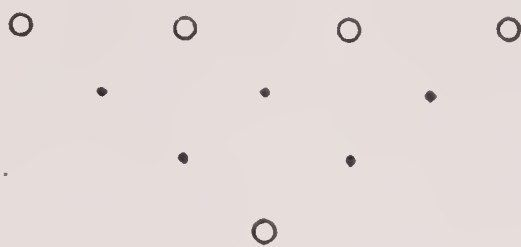
RULE 1. Three balls (not exceeding six inches in diameter) are allowed in each inning.

RULE 2. If the four back pins are bowled down and the head pin is left standing, the score is two. If all the pins are bowled down the score is one.

RULE 3. There are no penalties. The deadwood must be removed. Any pins knocked down through the deadwood remaining on the alleys cannot be placed to the credit of the player.

RULE 4. Ten innings constitute a game.

RULE 5. The maximum score is twenty.



FOUR BACK

THE pins are set up as shown in the diagram.

RULE 1. Three balls (not exceeding six inches in diameter) are allotted to each inning.



RULE 2. Each pin counts as spotted, and only one pin can be made at a single roll. If only one pin is made in a frame it is termed a break, and the player loses that frame and scores nothing.

RULE 3. There are no penalties. The deadwood must be removed. Any pins knocked down through the deadwood remaining on the alley cannot be placed to the credit of the player.

AMERICAN NINEPINS

THE pins are set up as shown in the diagram.

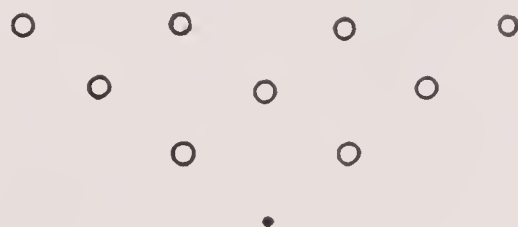
RULE 1. Ten innings constitute a game.

RULE 2. Three balls (not exceeding six inches in diameter) are bowled.

RULE 3. One pin of the frame must be left standing, or the inning goes for nothing.

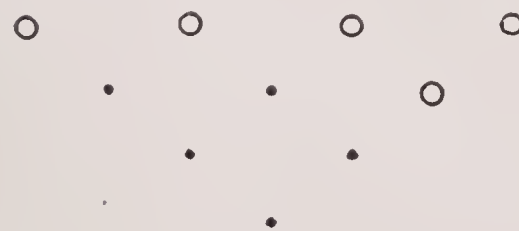
RULE 4. There are no penalties. The deadwood must be removed. Any pins knocked down through the deadwood remaining on the alley cannot be placed to the credit of the player.

RULE 5. The maximum score is ten.



FIVE BACK

THE pins are set up as shown in the diagram.



RULE 1. Three balls (not exceeding six inches in diameter) are bowled in each inning.

RULE 2. Should a left-handed bowler be bowling, the second quarter pin can be set up on the left quarter spot.

RULE 3. Strikes and spares count five each.

RULE 4. No penalties are attached. Deadwood must be removed. Any pins knocked down through deadwood remaining on the alley cannot be placed to the credit of the player.

RULE 5. Ten innings constitute a game.

RULE 6. The maximum score is one hundred and fifty.

THE NEWPORT GAME

THE pins are set up as in the game of Tenpins.

RULE 1. Three balls (not exceeding six inches in diameter) are allowed in each inning.

RULE 2. Ten frames constitute a game. The object of the game is to bowl an exact number of pins from one to ten, but not necessarily in routine order. The player who, in ten innings, scores the least number of winning innings is the loser. For instance, A bowls down 2, 5, 7, 8, and 10; B bowls down 1, 6, 8, and 9. Here B loses, as A has one more inning to his credit than B.

NOTE.—As the larger numbers of pins are easy to obtain, the superior skill lies in picking out the small numbers. For this reason the "pony" ball is used, and the small numbers are the points of attack from the start. When the player has bowled down a certain number of pins corresponding with any score he has made, and his remaining ball or balls will be of no avail, an x is placed under his name, indicating that the inning goes for naught.

RULE 3. Only one score is allowed for each inning. Players alternate in the use of alleys.

RULE 4. Balls bounding from the cushions go for naught.

TENPIN HEAD-PIN GAME

THE pins are set up as in the game of Tenpins.

RULE 1. Each player is permitted to roll twelve balls.

RULE 2. The pins are respotted after each ball is rolled.

RULE 3. In order to make a count, the head or front pin must be hit first, and then each pin down is counted.

A player is generally permitted to roll six balls consecutively on each alley, when two alleys are in use. On three alleys, four balls are rolled on each alley; and if four alleys are used, three balls are rolled on each. The maximum score is one hundred and twenty—twelve tens, which, in Tenpins, would be equal to the maximum score of three hundred. With the above exceptions, the game is governed by the rules of the American Bowling Congress.

DUCK-PIN GAME

THE pins are spotted as in the game of Tenpins.

RULE 1. A regulation Duck Pin shall be nine inches in height, one and one-half inches in diameter at the top, three and one-half inches in diameter at the body of the pin, and one and three-eighths inches in diameter at the base; it shall taper gradually from the bottom to the largest part of the body, and the pins shall be as nearly uniform in weight as possible.

RULE 2. No ball exceeding four and one-half inches in diameter shall be used.

RULE 3. Each player shall roll three balls to each frame, and shall roll two frames at a time.

RULE 4. A line shall be drawn ten feet beyond the regular foul line, and any ball delivered beyond the first-named line shall be declared foul.

With the above exceptions, the game is governed by the rules of the American Bowling Congress.

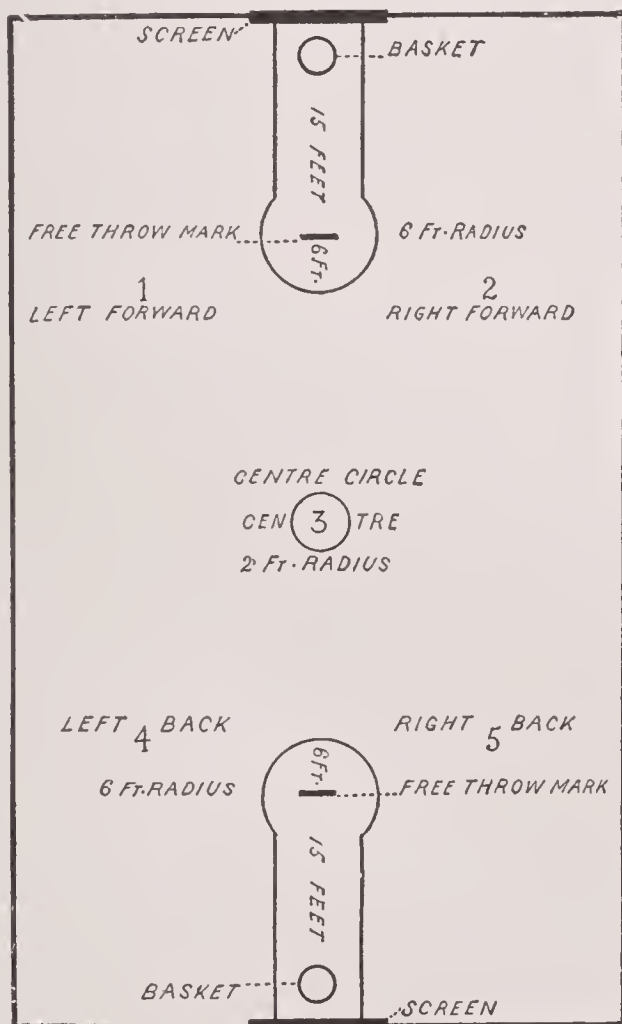
BASKET-BALL

WITHOUT losing any of its popularity as a game for men, Basketball has become the most popular of the heavy athletic sports for women. Although invented less than ten years ago, its growth in public favor has been remarkable, and at the present time it is played by schools, colleges, athletic associations and clubs, in all parts of this country.

The game was originally invented as a sort of indoor substitute for football, and as now played, it combines many of the principal elements of that game. It cultivates physical strength and endurance in a way that makes it

peculiarly adapted to women; and, besides being taught in nearly all training schools, is played by hundreds of Basketball teams that are formed by women in the various cities and towns. In some cases, women play by the same rules that are applied to men's games, but some modifications of these rules have been found desirable in order to do away with certain elements that are objectionable in a game for women.

Basket-ball may be played on any level space that is free from obstructions; such space should be fifty by seventy-five feet in extent. These dimensions are not arbitrary, but the field of play must contain not less than three thousand five hundred square feet.

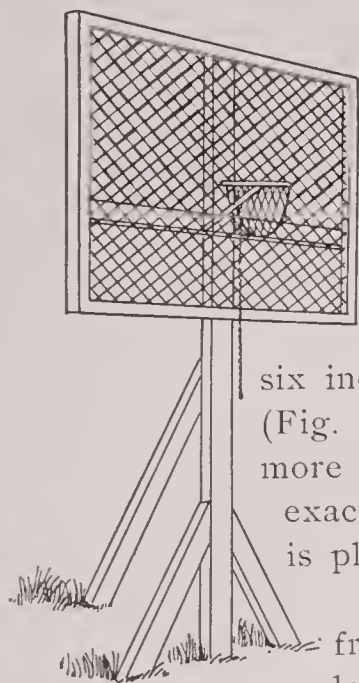


(Fig. 12)

It is laid out as indicated in the accompanying diagram. (Fig. 12.)



The boundary lines should be plainly marked, and the side boundaries should be at least three feet from the wall or other limit of the field. The game is usually played indoors, and two walls are often taken as the end limits of the field of play. If this be not done, a perpendicular screen made of boards, wire netting, or other suitable material, is erected in the middle of each end line. (Fig. 12½.)



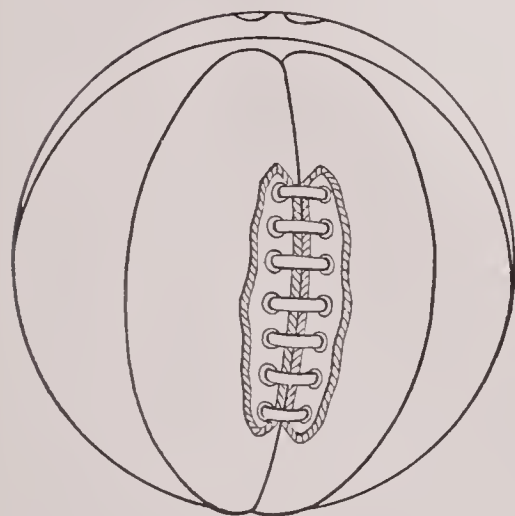
(Fig. 12½)

The two goals, which are basket-shaped nets eighteen inches in diameter at the top, are placed at a height of ten feet above the middle of the end lines, with their rims six inches from the walls or screens from which they are supported. (Fig. 13.) The screen may be of any width, but must not extend more than one foot from the upper rim of the basket. In the exact center of the field of play, a circle with a radius of two feet is plainly marked.

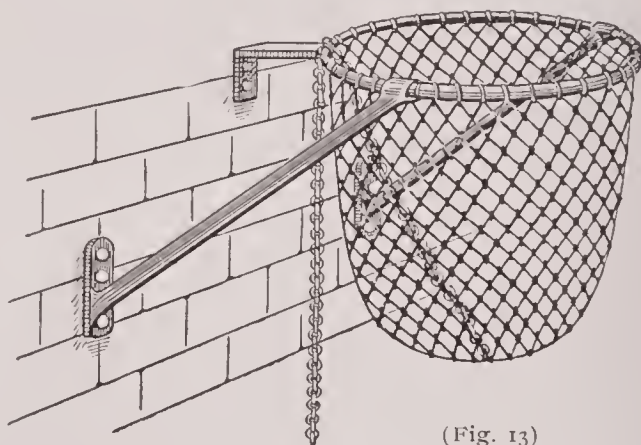
At a point fifteen feet from the spot directly below each goal, and in the imaginary center line of the field,

a mark is made, which is called the "free-throw mark." Around this mark a circle with a radius of six feet is described, and from this circle a lane six feet in width, leading to the wall or screen, is plainly marked on the field.

The ball that is used (Fig. 14) is similar to a football, except that it is round; it is about thirty inches in circumference, and usually weighs about eighteen ounces.



(Fig. 14)



(Fig. 13)

The object of each team is to get the ball into the goal of the opposing team, and to prevent the ball from being lodged in its own goal. The game is divided into two halves of twenty minutes each, with an interval of ten minutes between them for rest. In the regular game for men, five players constitute a team, and they are respectively designated, according to the part taken by them in the game, *center*, *right forward*, *left forward*, *right back*, and *left back*. Their positions on the field are shown in the accompanying diagram. (Fig. 15.)

Each player of the side that has not the ball in its possession opposes the one of the other team who is playing the same relative position, so that center is opposed to center, forward to forward, and back to back.

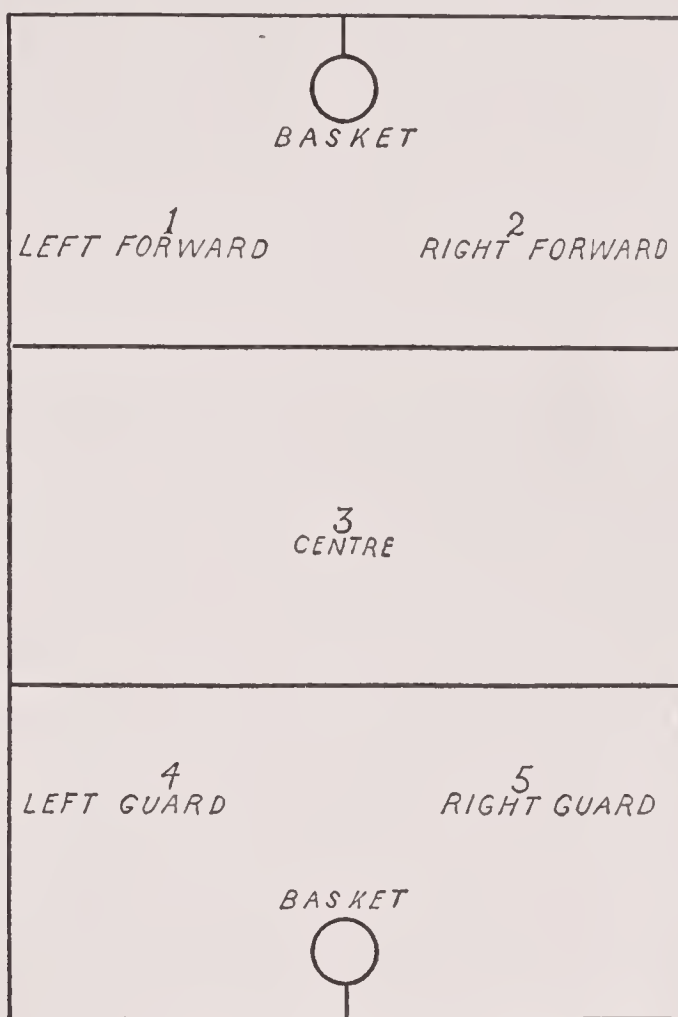
Before beginning the game, a referee, two umpires, a timekeeper, and a scorer are selected. The referee is the judge of the ball, and decides to which side it belongs, and when it is in play. The two umpires are the judges of the players and of fouls. They make their decisions independently of each other.

In beginning the game, the referee takes the ball to the center of the field, and tosses it into the air in a plane at right angles to the side boundaries, so that it will fall near the center mark. The two centers stand within the center circle, each on the side of the referee that is nearest to his own goal, and when the ball is tossed both jump for it. This is done at the beginning of each half and whenever a goal has been made. The ball is in play after it has been touched by either of the centers, and the members of each team then unite in attempting to lodge it in their opponents' goal.

If the ball goes out of bounds, it belongs to the player who first touches it, and he throws it into the field at the point where it went out. The players of the opposing team may stand on the boundary line and try to stop the throw, but they may not go out of bounds to do so. After time has been called, the referee puts the ball in play by tossing it into the air so that it will fall near the spot where it was when time was called.

No player is allowed to hold, kick, or carry, the ball, or to hold, tackle, or push, an opponent; violation of this rule constitutes a foul of class A.

If a player trips an opponent, or is unnecessarily rough, he may be excluded from the game on the second offense; this constitutes a foul of class B. When a foul has been made, the game is stopped, and a player of the other side has a free throw at the goal of the offending



(Fig. 15)

side. This throw is made from the *free-throw mark*, and no player may interfere with the thrower, or may be within the six-foot circle surrounding the free-throw mark, or the lane leading from it to the screen or wall. If the goal is made, the ball is taken to the center of the field and is put in play by the referee in the same way as at the beginning of the game; if the goal is missed, the ball is in play and the game goes on as before.

A goal made during the ordinary play counts two points; if made from a free throw, the goal counts one point. The game is won by the team scoring the greater number of points during the two halves. If the scores of the two teams are equal at the end of the time allotted for play, the game goes on until one side scores two more points.

In Basket-ball, as in football, much more depends upon the extent to which the members of a team work together than upon the individual excellence of the player. The ideal team is one in which the members play in such thorough harmony with one another that each seems to know intuitively just what the others will do under given conditions, and the part of the field in which each will be found at all times during the game.

Following are the rules for Basket-ball adopted by the Amateur Athletic Union and the Young Men's Christian Association Athletic League of North America:—

RULE I—THE COURT

SECTION 1. Basket-ball may be played on any ground free from obstructions, said ground not to exceed three thousand five hundred square feet of actual playing space.

SEC. 2. There must be a well-defined line marked around the floor or field. The side boundaries shall be at least three feet from the wall or fence. The end boundaries shall be directly below the surface against which the goal is placed. This line shall form the boundary of the field of play.

RULE II—THE BALL

SECTION 1. The ball shall be round, and shall be made of a rubber bladder covered with a leather case. It shall not be less than thirty nor more than thirty-two inches in circumference, and the limit of variableness shall not be more than one-fourth of an inch in three diameters. It shall not weigh less than eighteen, nor more than twenty ounces.

SEC. 2. The ball shall be provided by the home team. It shall be tightly inflated and so laced that the ball cannot be held by the lacing, and shall be otherwise in good condition.

SEC. 3. The ball made by A. G. Spalding & Bros. shall be the official ball.

SEC. 4. The official ball must be used in all match games.

RULE III—THE GOALS

SECTION 1. The goals shall be hammock nets of cord, suspended from metal rings eighteen inches in diameter (inside). The rings shall be placed ten feet above

the ground in the center of the short side of the actual playing field. The inside rim shall extend six inches from the surface of a flat perpendicular screen, or other rigid surface, measuring at least six feet horizontally and four feet vertically. If a screen is used, it must not extend more than one foot below the upper edge of the goal.

SEC. 2. The goal shall be rigidly supported from below. There must be no projections beyond the sides nor above the upper edge of the goal.

SEC. 3. The goal made by A. G. Spalding & Bros. shall be the official goal.

RULE IV—THE PLAYERS

SECTION 1. Teams for match games shall consist of five men.

SEC. 2. In match games all players must have been *bona fide* members of the Association, Branch, Department or Organization which they represent, for at least thirty days.

SEC. 3. In match games no member of one team shall play or act as substitute on any other team in that league.

SEC. 4. Physical Directors, or their salaried assistants, shall not play in match games.

RULE V—THE OFFICIALS

SECTION 1. The officials shall be a Referee, two Umpires, a Scorer and a Timekeeper.

SEC. 2. In each league game the local governing committee shall pay the actual expenses of the officials.

RULE VI—THE CAPTAINS

SECTION 1. Captains shall be indicated by each side previous to the beginning of a match; they must be players in the match.

SEC. 2. The captains shall be the representatives of their respective teams.

SEC. 3. The captains shall toss for choice of goals, and shall be entitled to call the attention of the officials to any violation of the rules which they think has been made.

SEC. 4. Before the beginning of a match, each captain shall furnish the scorer with a list of his team with their positions.

RULE VII—DUTIES OF THE REFEREE

SECTION 1. The referee in all cases must be a thoroughly competent and impartial person, and shall not be a member of either of the competing organizations.

SEC. 2. In all but championship games, the home team shall choose the referee, but shall notify visiting teams of such selection not later than four days before the date fixed for the game. Any team neglecting to send such notifications within the limit specified, shall forfeit to visiting clubs the right to appoint the referee.

SEC. 3. In all championship games the referee shall be selected by the Championship Committee.

SEC. 4. Before the game begins, the referee shall see that the regulations respecting the ball, goal, and grounds are adhered to. By mutual agreement of the captains, the referee may allow alterations in the rules regarding grounds and time, but not in goal, ball or team. The referee shall ascertain before the beginning of the game the time for beginning, or any other arrangements that have been made by the captains.

SEC. 5. The referee shall be judge of the ball. He shall decide when the ball is in play, to whom it belongs, and when a goal has been made.

SEC. 6. The referee shall approve of the timekeeper and scorers before the game begins.

SEC. 7. Whenever the ball is put in play by tossing it up, the referee shall stand so that he shall throw the ball in a plane at right angles to the side lines.

SEC. 8. The referee shall call time, when necessary, by blowing a whistle.

SEC. 9. No player but the captain shall address any official. The referee shall call a foul for violation of this rule.

SEC. 10. The referee is the superior officer of the game and shall decide all questions not definitely falling to the umpire, but shall have no power to alter a decision of the umpires when it is in regard to matters under their jurisdiction.

SEC. 11. Any team refusing to play within three minutes after receiving instructions to do so from the referee shall forfeit the game.

SEC. 12. The referee's term of office shall extend only from the time the game begins until it is concluded, and his decision awarding the game must be given then. His jurisdiction shall then end, and he shall no longer have any power to act as referee.

SEC. 13. The referee shall have power to give the game to the visiting team in accordance with Rule XI, Sec. 36.

SEC. 14. The referee shall disqualify men according to Rule XI, Secs. 21 and 39.

SEC. 15. The referee shall notify the secretary of the committee under whose jurisdiction the game has been played, whenever a player has been disqualified, giving the player's name, date, place, name of team and nature of the offense. The referee shall call fouls when the following rules are violated: Rule VII, Sec. 9; Rule XI, Secs. 35 and 38.

RULE VIII—DUTIES OF THE UMPIRE

SECTION 1. The umpires, in all cases, must be thoroughly competent and impartial persons, and shall not be members of either of the competing organizations.

SEC. 2. In all but championship games the visiting team shall choose the umpires, but shall notify the home team of such selection not later than four days before the date fixed for the game. A team neglecting to send such notification within the limit specified shall forfeit to the home club its right to appoint the umpires.

SEC. 3. In all championship games the umpires shall be selected by the Championship Committee.

SEC. 4. The umpires shall be judges of the men and shall call all fouls, except as provided in Rule VII, Sec. 9; Rule XI, Secs. 35 and 38.

SEC. 5. The umpires shall make their decisions independently of each other, and a foul called by one shall not be questioned by the other.

SEC. 6. Whenever a foul is called, the umpire calling it shall call time by blowing a whistle, and shall indicate the offender. He shall notify the scorer of the player fouling and the nature of the foul.

RULE IX—DUTIES OF THE SCORER

SECTION 1. The scorer shall be appointed by the captain of the home team.

SEC. 2. He shall notify the referee when a player should be disqualified, according to Rule XI, Sec. 21.

SEC. 3. Official games shall be scored according to the details in the official score blanks.

RULE X—DUTIES OF THE TIMEKEEPER

SECTION 1. A timekeeper shall be appointed by the captain of the home team.

SEC. 2. He shall note when the game starts, and shall blow his whistle at the expiration of twenty minutes actual playing time in each half.

SEC. 3. Time consumed by stoppage during the game shall be deducted only on order of the referee.

RULE XI—THE GAME

SECTION 1. A goal made from the field shall count two points; a goal made from a foul shall count one point; a goal thrown shall count for the side into whose goal the ball is thrown, even though it was done by mistake. The ball must enter and remain in the basket until after the referee's decision in order to constitute a goal.

SEC. 2. The referee shall put the ball in play by tossing it up in a plane at right angles to the side lines, so that it will drop near the center of the field, which shall be indicated by a conspicuous mark. This is to be done at the opening of the game, at the beginning of the second half and after each goal.

SEC. 3. After the referee puts the ball in play in the center, it must first be touched by one of the center men, who shall have been previously indicated to the referee. The umpire shall call a foul for violation of this rule. Both men may jump for the ball, the better man, of course, gaining the advantage. When two fouls are called at once on opposite sides, they should be thrown in succession. The ball should then be put in play in the center.

SEC. 4. After time has been called, the referee shall put the ball in play by tossing it up in such a manner that it will drop near the spot where it was when time was called, unless it was held out of bounds. In this case play shall be resumed at the whistle of the referee, as if time had not been called. (Rule VII, Sec. 7.)

SEC. 5. The two opponents nearest this spot when time was called shall be the first to touch the ball after play is resumed. They shall be indicated by the referee.

SEC. 6. When the ball is held by two or more players for any length of time the referee shall blow his whistle, stop the play, and throw the ball up from where it was held. (Rule VII, Sec. 7; also Rule XI, Sec. 5.)

SEC. 7. Whenever the ball is put in play, the players who are to touch the ball first must not stand farther than two feet from the spot where the ball is to fall.

SEC. 8. A game must be decided by the winning of the most points in forty minutes playing time.

SEC. 9. In case of a tie, the game shall continue (without exchange of goals) until either side has made two additional points; the team which first scores two points wins. The goals may be made from either field or foul line.

SEC. 10. If the goal is touched by an opponent when the ball is on the edge of it, one point shall be scored for the other side.

SEC. 11. For seniors the game shall consist of two halves of twenty minutes each, with a rest of ten minutes between the halves. For juniors the halves shall be fifteen minutes in length, with a rest of ten minutes between the halves. This is the time of actual play. These times may be changed by mutual agreement of the captains.

SEC. 12. The teams shall change goals at the end of the first half.

SEC. 13. When a foul has been made, the opposite side shall have a free throw for the goal at a distance of fifteen feet from a point on the floor directly beneath the center of the goal, measured toward the opposite goal. The player having a free throw shall not cross the fifteen-foot line until the ball has entered or missed the goal. If this rule be violated, a goal, if made, shall not be scored, and, if missed, the ball shall be dead and must be put in play at the center. The ball cannot be thrown to any person, but must be thrown at the basket. An attempt satisfactory to the referee must be made to cage it.

SEC. 14. No player shall stand nearer than six feet to the thrower, nor in a lane six feet in width from the thrower to the goal, nor interfere with the ball until after it reaches the goal. He shall not be interfered with in any way whatsoever, by either player or spectators. If this rule is violated by one of his own side and a goal is made, it shall not count, and whether missed or made, the ball shall be thrown up at the center. If the goal is not made, and no rules have been violated, the ball shall be in play. The players must stay back of the line until the ball has entered or missed the goal.

SEC. 15. The ball may be thrown or batted in any direction with one or both hands.

SEC. 16. The ball shall not be kicked or struck with the fists. The umpire shall call a foul for violation of this rule.

SEC. 17. A player shall not carry the ball while in bounds. He must play it from the spot on which he catches it. Allowance is to be made for one who catches it while running, provided he throws it at once, or stops as soon as possible. This shall not be interpreted as interfering with a man's turning around without making progress. The umpire shall call a foul for violation of this rule.

SEC. 18. A man may touch the ball with both hands but once; it makes no difference at what point this occurs. He may catch it with both hands, then dribble it with one hand, but cannot touch it with both hands until some one else has played it. Or he may get the ball with one hand, and dribble it some distance, and then take it with both hands and throw it. In dribbling with one hand there is nothing to prevent the hands being used alternately. The ball must be played by another player; touching him is not sufficient. The principle is that he can take it with both hands but once in a single play. This does not interfere with his throwing for goal twice or more in succession, even if no other player touches it between times. The player who dribbles the ball cannot throw for goal until the ball has been played by another player. The umpire shall call a foul for violation of this rule.

SEC. 19. The ball shall be held by the hands only. The using of any other part of the body to hold or assist in holding the ball constitutes a foul. The umpire shall call a foul for violation of this rule.

SEC. 20. There shall be no tackling, holding, or pushing of an opponent. The arms shall not be used in any way to interfere with the progress of a player who has not the ball. Grasping the clothing or person of a player with the hands, or putting one or both arms about a player, shall be called holding. The umpire shall call a foul for violation of this rule.

SEC. 21. There shall be no shouldering, tripping, striking, kicking, hacking or intentional or unnecessary roughness of any kind. Violation of this rule constitutes a foul, and the referee may, for the first offense, and shall, for the second offense,

disqualify the offender for the game and for such further period as the committee in charge of that league shall determine; provided, that disqualification for striking, hacking or kicking shall be for one year, except by alteration of penalty in any special case by the proper Registration Committee of the Amateur Athletic Union, or the Governing Committee of the Athletic League of the Young Men's Christian Association. A foul is a violation of the rule, whether committed unintentionally, ignorantly, or otherwise. The fact that a foul is made is the only guide for the officials in calling the same. The umpire shall call a foul for violation of this rule. The referee shall disqualify for violation of this rule.

SEC. 22. A substitute shall be allowed for a player who has been disqualified, and the foul made by him shall be counted.

SEC. 23. Whenever, on account of sickness or accident to a player, it becomes necessary for the referee to call "time," play must be resumed in five minutes. If the injured player is unable to resume play by that time, a substitute shall take his place, or else the game must start at once without him. If a substitute take his place he cannot play again during that game.

SEC. 24. The ball is out of bounds only when it has completely crossed the line.

SEC. 25. When the ball goes out of bounds and rolls or bounces in again, play shall continue, even though a player may have touched it when out of bounds; except that if the whistle of the referee is blown, the ball shall then be put in play as though it had not returned to the field of play.

When the ball goes out of bounds and remains there, it shall be returned by the player first touching it. There shall be no interference with his returning it, that is, no portion of the person of an opponent shall be outside the field of play. The ball may not be touched by an opponent until it has crossed the line. If either of these rules is violated, the ball is to be returned to the player who had it and again put in play at the original place; however, if his opponent knock the ball out of his hands, then Rule XI, Sec. 38, may be applied to this action of the opponent.

He may throw the ball in any direction into the field of play from any spot (outside bounds) in a line at right angles to the boundary line at the point where the ball crossed it. The ball must be thrown, not rolled, into the field of play. When either of these rules is violated, the ball shall go to the opponents at the same spot. The ball must be thrown into the field of play; that is, it must be thrown to some player before the player who passed it in can again play it.

He is allowed five seconds to hold the ball, and if he holds it longer it goes to his opponent. In case of doubt in the mind of the referee as to which player first touched the ball, he shall toss it into the field of play at the spot where the ball went out.

SEC. 26. When the ball is batted, rolled, or passed from the field of play in order to claim exemption from interference, it shall be given to the opponents at the point where it left the field of play. When it is passed to a player out of bounds, the ball shall be given to the other side. Carrying the ball from the field of play constitutes a foul (Sec. 17). When the center men are jumping for the ball, and one of them bats it out of bounds, it is in play and shall go to the other side.

SEC. 27. When a player makes a throw for goal while any part of his person is out of bounds, the ball shall be put in play in the center of the field of play. If a goal is made, it shall not be scored.

SEC. 28. If a player throws for the goal and the whistle of the referee, umpire, or timekeeper sounds while the ball is in the air, and the throw results in a goal, it shall count, except as provided in Section 30 of this rule.

SEC. 29. When the umpire's whistle sounds simultaneously with either the referee's or timekeeper's, the umpire's shall take precedence.

SEC. 30. A goal scored before the whistle can be blown for a foul made by the team scoring, shall not count; but if a player, while throwing for the goal, is fouled by an opponent and succeeds in scoring, both shall be counted.

SEC. 31. If only one team puts in an appearance on the appointed day, the team complying with the terms agreed upon shall be declared the winner of the game by default.

SEC. 32. When it happens, however, that neither team is ready to begin playing at the hour appointed for the game, the team which completes its members first cannot claim a default from its opponent. The latter shall be entitled to fifteen minutes additional time, and if then unable to present a full team, shall, if required by their opponent, be obliged to play shorthanded or forfeit the game.

SEC. 33. A team defaulting or forfeiting a game shall be declared the loser by a score of 2 to 0.

SEC. 34. There shall be no protests against the decision of the officials except in regard to interpretation of rules. (Rule XII, Sec. 4.)

SEC. 35. Any remarks on the part of a player during the progress of the game, derogatory in any way to the officials, shall be called a foul by the referee.

SEC. 36. The home team shall be held responsible for the behavior of the spectators. Failure to keep them from interfering with the progress of the game or from discourteous conduct shall, after a warning, make the home team liable to forfeit the game. (Rule VII, Sec. 13.)

SEC. 37. In case of doubt on any point, in the mind of the referee or umpire, arising from the presence of the spectators, the visiting team shall have the benefit of the doubt.

SEC. 38. Any persistent intentional delay of the game shall be counted as a foul against the team so delaying. The referee shall call this foul.

SEC. 39. The referee shall promptly disqualify any player using profane or abusive language.

RULE XII—FOULS

SECTION 1. All fouls shall be called by the umpire, except as provided in Rule VII, Sec. 9, and Rule XI, Secs. 35 and 38.

SEC. 2. Fouls are classified according to their penalties, as follows:—

General. 1. Players addressing officials (Rule VII, Sec. 9). 2. Touching ball in center (Rule XI, Sec. 3). 3. Kicking or striking ball (Rule XI, Sec. 16). 4. Carrying ball (Rule XI, Secs. 17 and 26). 5. Holding ball (Rule XI, Sec. 19). 6. Tackling, holding, pushing opponents (Rule XI, Sec. 20). 7. Delaying game (Rule XI, Sec. 38).

Specific fouls for which players may be disqualified. 1. Striking. 2. Kicking. 3. Shouldering. 4. Unnecessary rough play. 5. Tripping. 6. Hacking. (Rule XI, Secs. 21 and 39).

SEC. 3. Officials are expected to be as strict as possible, both with players and spectators. In all cases not covered in these rules, officials are to use their own judgment in accordance with the general spirit of the rules.

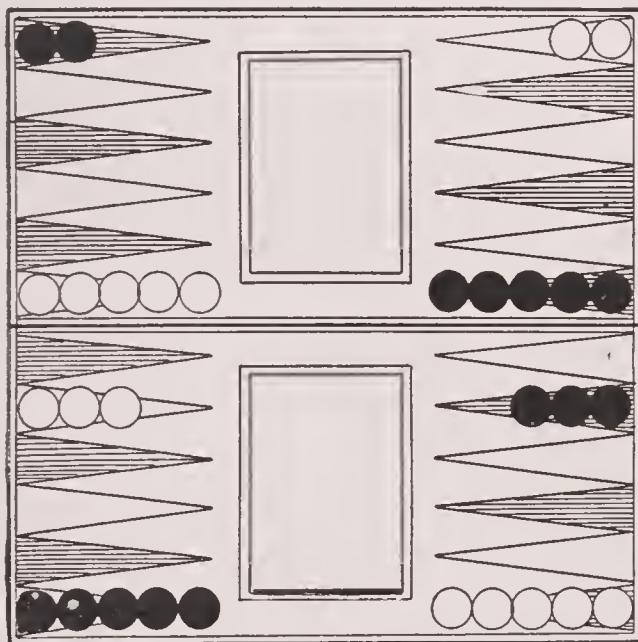
SEC. 4. All questions pertaining to the interpretation of the rules may be referred to the Basket-Ball Committee of the Amateur Athletic Union, P. O. Box 611, New York City, or the Y. M. C. A. Athletic League, 3 W. 29th Street, New York City. Protest must be presented in writing within forty-eight hours.

BACKGAMMON

THOUGH it belongs to the category of old-fashioned games, Backgammon is still a familiar and attractive form of amusement.

Chance is unquestionably its controlling factor, but, at the same time, the player may exercise considerable judgment and foresight.

The game is played on the two flat, inner surfaces of a shallow box, usually a folding checkerboard. The top half is hinged at one side to the bottom half in such a way that the former may be folded back so as to make the top and bottom of the box one continuous plane surface. The playing-space is marked with twelve points, which are colored alternately white and black (or red), as shown in the accompanying diagram. (Fig. 1). There are two players, each of whom has fifteen pieces, or men, like those used in checkers, half of the set being white, while the others are black or red.



(Fig. 1)

The twenty-four points are named as follows (see diagram): The one to the extreme left in White's home, or inner table, is called White's *ace* point; the next, White's *deuce* point, and the others in order White's *trois*, *quatre*, *cinque*, and *six* points. The first or *ace* point in White's outer table is called his *bar* point, and the others in order the *deuce*, *trois*, *quatre*, *cinque*, and *six* points of White's outer table.

The positions of the players in the foregoing description have been assumed to be as indicated in the diagram by the words

White and Black; but since the two playing sides of the board are similar, and consequently interchangeable, there is no restriction as to the way in which they are to be disposed with reference to the players. Then, too, the names of each player's table may be interchanged, so that the one at the right will be called the inner table and the one at the left, the outer table. The order of arrangement indicated in the diagram, however, is the one usually followed.

In addition to the board and men, two dice are required, and there is usually a dice box for each player. Dice are cubes, usually of ivory or bone, the sides of which are marked with pips or spots numbering from one to six. These are arranged so that the sum of the number of pips on opposite sides of the die is seven. Dice boxes are small cup-shaped receptacles, which are usually made of leather or pasteboard. In "throwing" dice they are placed in the box, its top is covered by the fingers of the player, and after being shaken or "rattled," they are emptied upon the table.

After the pieces have been arranged on the Backgammon table, in the order that will be described, each of the players endeavors to bring his man around into his home, or inner table by throwing such numbers with the dice as will permit him to do so, and he also tries to move so as to prevent his antagonist from accomplishing the same result. The player who first carries his men home, and then clears them off the board, wins the game.

The men of each player are arranged on the table in the following order: (see diagram) two on the opponent's ace point; five on the player's six point; five on the six point of the opponent's outer table, and three on the player's cinque point. To begin the game, each player throws one die, and the one throwing the highest number has first play. He may either take these two numbers as his first throw, or may throw again. After throwing, the player should call the numbers thrown, in the order of their size. Thus, if he throws five two, he calls cinque deuce, and plays his men accordingly. Each player's men are moved from his opponent's inner table to his outer table, then to the player's outer table, and last to his home table. From this it will be seen that the opposing men are played in opposite directions.

The first player, after having thrown the dice, moves any one of his men to an open point as many points distant as there are pips, either on one die or on both. If he chooses to move the first man the value of one of the dice, he may move another in a similar manner the value of the other die. Thus, White might play cinque deuce, by moving one man from the six point of Black's outer table to the bar point of his own outer table, or by moving one man

from that point to the deuce point of his outer table, and another man from the same point to the cinque point of his outer table. White could play others of his men in a similar manner. When doubles are thrown, the thrower is entitled to move twice the number of points indicated by the pips on the dice. Thus, if he throws double-ace, he may move four points, double-deuce, eight points, and so on. Double-ace is considered the best possible throw.

While White is playing, Black puts the dice into the box and shakes them, and as soon as White's play is completed, throws, calls his throw, and plays it in a manner similar to that described for White. The players have one play at a time, and they alternate throughout the game.

The only limitations to the play are that neither player may play beyond his own home table, or to a point occupied by two or more of his opponent's men. Any part of a throw which cannot be played is lost, but the whole throw must be played if possible. Moving a piece so as to leave it on a point unoccupied by any other piece is called "leaving a blot," and if the adversary moves one of his pieces to that point, he is said to "hit a blot." The first piece is thus captured, or taken, and must be removed from the table and placed on the *bar*, or division between the two halves of the table. It cannot be put in play again until the player to whom it belongs throws the number of a point which is vacant, or is left a "blot," on the opponent's inner table. The man is then "entered" by being placed on that point. Thus, if an ace is thrown, the man is placed on the ace point; if a deuce, on the deuce point, and so on.

A player is not permitted to move any other man while he has a man on the bar. If the opponent has his inner table *made up*, that is, has two or more men on each point, it is obvious that the player who is *up* cannot *enter*, and as it is useless for him to throw, his opponent continues throwing and playing until he leaves a point on his inner table vacant. A player may hit two blots at one play if he throws numbers that enable him to do so, but he is not compelled to hit a blot if the throw can be played without doing so.

The game proceeds as described until one of the players has moved all of his men to his home table. He then *bears* the men, or takes them off the board. To do this, he removes a man from the board whenever he throws a number corresponding to the number of the point on which that man is situated. Or, if he prefers, he may remove one man and play another, or may play both. Thus, if his home table is made up and he throws quatre deuce, he has the following options: to bear one man from his quatre point, and one from his deuce point; to bear one from his deuce point, and play a quatre

from his cinque or six point; to bear one from his quatre point, and play a deuce from his trois, quatre, cinque or six point; or to play two men which are so situated that they may be moved respectively four and two points.

In a similar manner, doublets entitle a player to bear or play four men. If a player cannot play either part of his throw, he must bear it, and if he throws a number which is higher than any point on which he has a man, he must bear a man from the highest occupied point. When a player has begun bearing his men, if one of them should be hit on a blot, he must enter it on his opponent's inner table. He cannot bear any more men until the one taken up has again entered his own home table. In a manner similar to the foregoing, the adversary bears his men as soon as he has moved them all to his home table. The game is won by the player who first bears all of his men.

The game is counted a *single*, or *hit*, if the adversary has borne one or more men; a *double*, or *gammon*, if he has not borne a man; and a *triple* or *quadruple* game (as agreed upon), or Backgammon, if, when the winner bears his last man, the adversary has a man up or one on the winner's inner table. After a player has borne one man, should another be taken up, he can only lose a hit, even if the adversary wins the game before he has entered the man. When a player has carried home all of his men except two, he may often avoid losing a gammon by throwing doublets of fours or fives. In a series of games, the winner of a hit has the first throw in the succeeding game. But if a gammon or Backgammon is won, the order of play is decided, as in the first game, by each of the players throwing a single die.

TECHNICAL TERMS OF BACKGAMMON

Points. The twenty-four spaces on the board, colored alternately white and black or red, on which the men are originally placed.

Throwing Spaces. The two blank spaces on the table between the rows of points. The dice are thrown on these spaces.

Men. The thirty discs with which the game is played. They are similar to the pieces used in checkers. One player has fifteen white pieces, while the other has the same number which are black or red.

Making a Point. When two men are played so that both occupy a point which was previously blank, the play is called *making a point*.

Doublets. When a player throws so as to turn up similar numbers on the two dice, he is said to throw *doublets*.

Leaving a Blot. When in the course of the game, a man is moved to an unoccupied point, the play is called *leaving a blot*.

Hit a Blot. If a player moves one of his men to a point occupied by a single opposing man, he is said to *hit a blot*. The man so *hit* is taken from the board and placed on the "bar," or ridge, separating the two halves of the board.

Entering. The operation by which a man on the "bar," said to be "up," is put in play. The man is placed on a point of the opponent's inner table corresponding to the number thrown by the player.

Made up. When a player has two or more men on each point of his inner table, that table is said to be *made up*.

Bearing. When a player has moved all of his men to his home table, he must remove them from the board by *bearing*. A man is removed from the point corresponding to the number thrown by the player.

Single, or Hit. A game counts as a *single*, or *hit*, if when it is won, the adversary has borne one or more men.

Double, or Gammon. The game counts as a *double*, or *gammon*, if the adversary has not borne a man.

Triple or Quadruple, or Backgammon. These terms indicate the value given to a game won when the adversary has a man up, or one on the winner's inner table. The players should agree at the beginning of the game whether a backgammon is to have triple or quadruple value.

LAWS OF THE GAME OF BACKGAMMON

1. If a player places his men wrongly, the adversary, before throwing, may require that the board be properly furnished.
2. If a player has not all of his men on the board when he throws, he cannot place the ones omitted.
3. The dice must be thrown in one of the tables. If a die jumps from one table to the other, or off the board, or upon the bar or frame, the throw is not allowed and the player throws again.
4. Similarly, if one die rests upon the other, or tilts against it, or against a man, or the bar or frame, the throw is not counted, and the player must throw again.
5. If a die is touched while rolling or spinning on the board, the player not at fault may name the number that shall be played for that die.
6. The same may be done if a die, even when at rest, is touched before the caster has called his throw, and the throw is disputed.
7. If the caster, having mistaken his throw, plays it, and the adversary has also thrown, it is not in the power of either to alter the play, unless they mutually agree to do so.
8. The caster must play the numbers called, if the dice are subsequently touched.
9. If the caster touches one of his own men, he must play it unless he has given notice of his intention to adjust it. If one of the opponent's men, or a man that cannot be played, is touched, there is no penalty.
10. A man is not supposed to be played until it has quitted the point on which it was placed.

11. The whole of a throw must be played if possible. In bearing, if a man is played, and another is then borne from the highest occupied point, the highest number thrown is deemed to be borne.

12. If a man is up, and others are borne before that man is entered, the men borne must be entered again in the same manner as though they were up.

13. If a wrong number of points is played, the adversary may require that the right number be played, but he must do so before his next throw.

HINTS TO BEGINNERS

WHEN obliged to leave a blot you should, as a rule, leave it where it is least likely to be hit. Under some circumstances it is best to leave a blot where it is likely to be hit, but this does not often occur. The following table gives the odds against being hit, dependent upon the number of points to be moved by the adversary:—

It is about	9 to	4	against	being	hit	by	a	1	point	move.
“	“	2	“	1	“	“	“	2	“	“
“	“	3	“	2	“	“	“	3	“	“
“	“	7	“	5	“	“	“	4	“	“
“	“	7	“	5	“	“	“	5	“	“
“	“	19	“	17	“	“	“	6	“	“
“	“	5	“	1	“	“	“	7	“	“
“	“	5	“	1	“	“	“	8	“	“
“	“	6	“	1	“	“	“	9	“	“
“	“	11	“	1	“	“	“	10	“	“
“	“	17	“	1	“	“	“	11	“	“
“	“	35	“	1	“	“	“	12	“	“

This table assumes that there is only one point in range, but if there are others, the odds against being hit will, of course, be greater. On the other hand, if intervening points are held by men belonging to the player who leaves the blot, the odds are less than those given in the table.

Points should be made where there is the best chance of obstructing or hitting an opponent.

BEST PLAYS

FOLLOWING are the best plays for every possible throw at the beginning of the game:—

Aces (best throw). Move two men to your bar point, and two to your six point.

Sixes (second best throw). Two men to adversary's bar point, and two to your own bar point.

Six cinque; six quatre; or six trois. A man from adversary's ace point as far as he can go.

Six deuce. A man from adversary's outer table to cinque point in your home table.

Six ace. Move to your bar point.

Cinques. Two men from adversary's outer table to trois point in your inner table.

Cinque quatre. A man from adversary's ace point to quatre point in his outer table.

Cinque trois. Move to trois point in your home table.

Cinque deuce. Move two men from the five point in adversary's outer table.

Cinque ace. Play the cinque from the five men in adversary's outer table, and the ace from his ace point. If playing for a gammon, play the ace from the six to the cinque point in your home table.

Quatres. Move two men from the ace to the cinque point in opponent's inner table, and two from the five men in his outer table. If trying for a gammon, instead of the first part of the foregoing play, move two men from the opponent's outer table to your cinque point.

Quatre trois. Move two men from the five in adversary's outer table.

Quatre deuce. Move to quatre point in your own table.

Quatre ace. Play the quatre from the five men in adversary's outer table, and the ace from his ace point.

Trois. Move two men to the cinque point in your home table, and two to quatre point of adversary's inner table. If trying for a gammon, move last two to trois point of your inner table.

Trois deuce. Move two men from the five in adversary's outer table.

Trois ace. Move to the cinque point in your inner table.

Deuces. Play two on the quatre point in your inner table, and two on the trois point in opponent's inner table. If trying for a gammon, play the last two from the five men in opponent's outer table.

Deuce ace. Play the deuce from the five men in adversary's outer table, and the ace from his ace point. For a gammon, play the ace from the six to the cinque point in your inner table.

CHESS

"For Life is a kind of Chess, in which we have often points to gain, and competitors or adversaries to contend with, and in which there is a vast variety of good and ill events that are, in some degree, the effect of prudence, or the want of it."

—BENJAMIN FRANKLIN.

CHESS ranks above all other games, both in antiquity and in intellectual value. It is a fit pastime for sages, since its laws and its technique make it the most profound, precise and complicated of all games; yet it is both beneficial and interesting to the average intellect. It is often regarded as too difficult and too scien-

tific for any but the strongest and most highly cultivated minds, but this is a mistake, since any person of ordinary intelligence can learn to play Chess after a reasonable amount of instruction.



equal among the games of skill or chance.

Chess has been called "the game of infinite variety," and therein lies the secret of its unending fascination. While in its simpler forms it is undoubtedly a game of amusement, yet its profounder study becomes to some extent a form of mathematical reasoning and develops many useful intellectual qualities. As a form of mental amusement, as a resource in hours of leisure, as a consoler and a means of forgetfulness, it has no

THE ARRANGEMENT

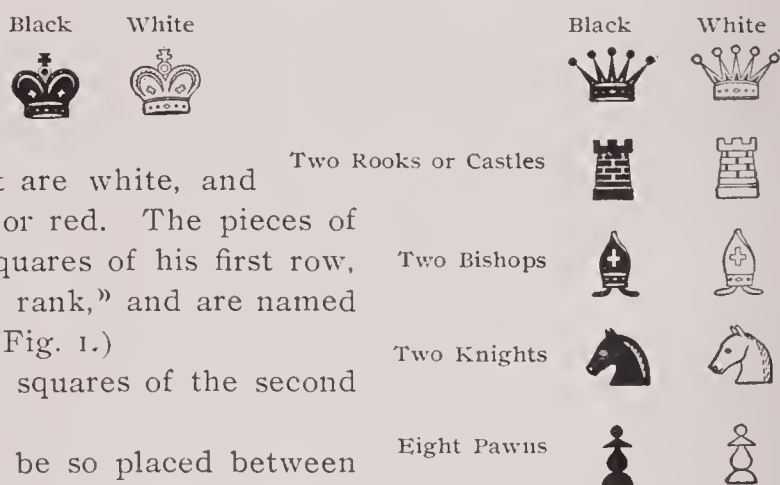
THE game of Chess is played by two persons upon a checkered board which is divided into sixty-four squares, colored alternately white and black or red. Each player is provided with a set of "men," consisting of eight pieces—a king, queen, two bishops, two knights and two rooks or castles,—and eight pawns. Those of one set are white, and those of the other, black or red. The pieces of each player occupy the squares of his first row, which is called the "royal rank," and are named and figured as follows: (Fig. 1.)

The pawns occupy the squares of the second row.

The chessboard must be so placed between the players that there will be a white square in each player's right-hand corner. The rows of squares which run vertically on the board are called "files," those which run from left to right are known as "ranks," while those which run obliquely are called "diagonals."

It is customary to draw lots to determine which player shall use the white men, and the first move is always made with a piece of that color. If a series of games is to be played, the players exchange pieces (and thus colors) at the beginning of each game. The men must be arranged on the board in the order shown in the accompanying diagram.

Observe that the queens are always placed upon squares of their own color. The rooks occupy the corner squares, the knights are placed next



(Fig. 1)

the rooks, and the bishops next the knights, while the king and queen stand on the center squares. The pawns of each set are alike, and any one may be placed in front of any piece.

The object of each player is to move so as to force his opponent's king into a position from which he cannot escape. (See *checkmate*.) The game



(Fig. 2)

is opened by the player with the white men moving one of his men from the square on which it stands to some other square. The manner in which the various pieces may be moved, and the limitations and rules governing the moves, are stated below. Only the possible moves of each piece if unrestricted, can be pointed out, since the presence of other men on the board materially limits the moving power of the different pieces.

THE MOVES

The King. The king's moves are restricted more than those of

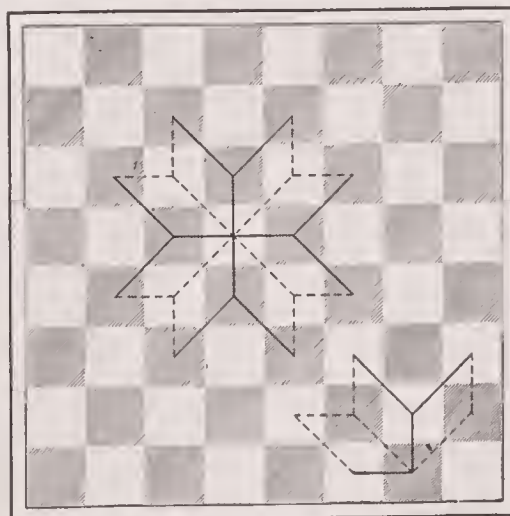
any other piece on the board. He may move only one square at a time, but he is not limited as to direction. Under certain conditions he is permitted to move two squares, which is called "castling," and will be explained under that head.

The Queen. The Queen is the most powerful piece in Chess. She may be moved any number of squares, in any direction, either straight or diagonally.

The Rook, or Castle, is next in value to the queen. He may move any number of squares on the files or on the ranks, backward, forward or sidewise.

The Bishop ranks next to the rook, and may move *diagonally* any number of squares.

The Knight is of nearly the same value as the bishop. Near the end of the game, however, two bishops will be found of greater value than two knights. Two knights alone cannot effect checkmate, whereas two bishops can. The knight's move is made up of two steps—one straight forward and one diagonal, either of which may be taken first. The accompanying diagram explains clearly this peculiar move. (Fig. 3.)



(Fig. 3)

KNIGHT'S MOVE

HERE it is shown that if a knight starts from a white square he must rest on a black one, and *vice versa*. The knight is the only piece that can "jump over" other pieces.

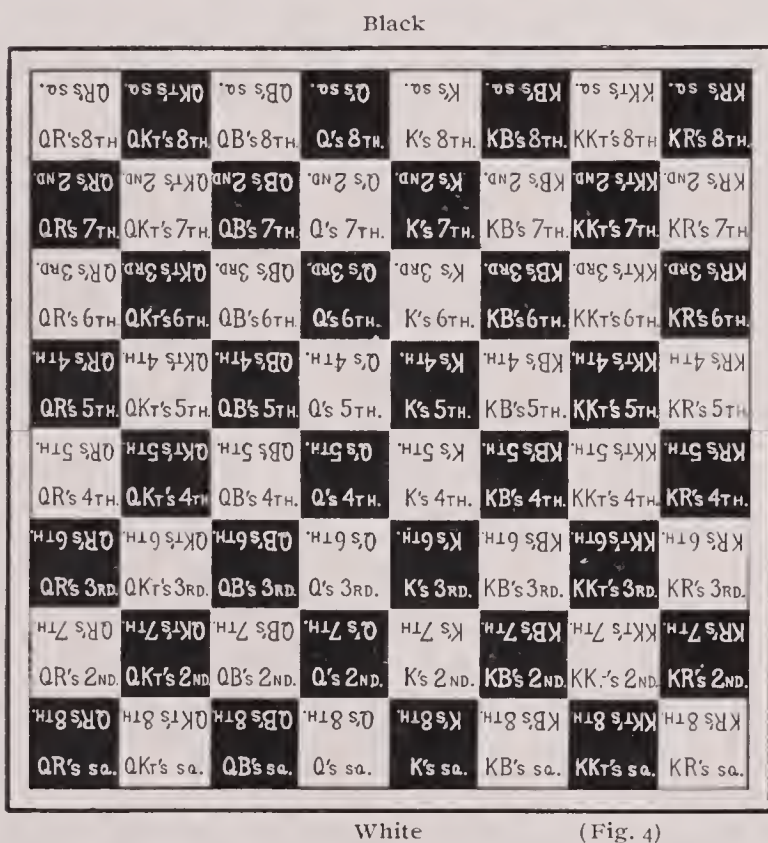
A Pawn may be moved *one square forward* at a time, except on the first move, when he may be moved either one square or two. When "capturing" a piece, a pawn must move *diagonally* and rest on the square of the piece captured, which is first removed. The pawn is the only man that does not capture in the direction of the move.

The pieces can be played backward or forward, to the right or to the left, but the pawns may only go forward. Should a pawn advance to the royal line of the adversary he may be promoted to the rank of any of the pieces except the king.

CHESS NOTATION

THE system of notation used in published games and problems is shown in Figure 4. It will be seen that the moves are reckoned from both ends of the board.

The squares are named after the pieces placed upon the board, as shown in Diagram 2. Thus, the square upon which the king stands at the



beginning of a game is called the king's square; the square in front of the king is called the king's second square; and so on to the king's eighth square.

The pieces to the right of the white king are called, respectively, the king's bishop, king's knight and king's rook; those to the left of the white queen are called, respectively, the queen's bishop, queen's knight and queen's rook. The men of the black set do not hold the same relative positions as those of the white. The pieces

to the left of the black king are the king's pieces; those to the right of the black queen are the queen's pieces.

The pawns take their names from the pieces in front of which they stand. Thus, the king's pawn is the pawn placed directly in front of the

king at the beginning of the game; the king's bisbop's pawn is the pawn placed directly in front of the king's bishop, and so on.

ABBREVIATIONS

THE abbreviations used in Chess publications to designate the pieces and pawns are as follows:—

K.....	King	QR.....	Queen's Rook
Q.....	Queen	P.....	Pawn
B.....	Bishop	KP.....	King's Pawn
Kt.....	Knight	QP.....	Queen's Pawn
R.....	Rook	KBP.....	King's Bishop's Pawn
KB.....	King's Bishop	KKtP.....	King's Knight's Pawn
KKt.....	King's Knight	KRP.....	King's Rook's Pawn
KR.....	King's Rook	QBP.....	Queen's Bishop's Pawn
QB.....	Queen's Bishop	QKtP.....	Queen's Knight's Pawn
QKt.....	Queen's Knight	QRP.....	Queen's Rook's Pawn

TECHNICAL TERMS IN CHESS

The Move. The player opening the game is said to have "the move."

Taking, or Capturing, is effected by removing the adverse piece from the board, and placing the attacking piece on the square previously occupied by the captured piece.

Check and Checkmate. It is a principle of Chess that the king cannot be captured. When he is directly attacked by any piece or pawn he is said to be "in check," and the player so attacking must give warning by calling "check." The attacked king must then (a) move "out of check"; (b) take the checking piece or pawn; or (c) interpose a man. Should he be unable to do any of these things he is said to be "checkmated," and the game is lost to the player whose king is checkmated.

Discovered Check occurs when a player moves a piece or pawn from before the opponent's king and thereby opens or "discovers" check.

Double Check occurs when a king is attacked by two men at the same time.

Perpetual Check occurs when a king has no escape from one check without rendering himself liable to another. This differs from a checkmate in that the king may still move, though subject to repeated checks from the adversary. When this is the case, the player whose king is in *perpetual check* has the privilege of demanding that checkmate shall be given in a certain number of moves, in default of which the game may be declared a *draw*.

Stalemate occurs when a king, although not in check, is so placed that he cannot be moved without going into check, and when no other piece or pawn can be moved. The game is then "drawn."

Smothered Mate occurs when a king is so hemmed in by his own men that he cannot escape the attack of an opposing knight. This loses the game to the player of the smothered king.

En Prise. A piece attacked by another piece is said to be *en prise*.

Drawn Game. A drawn game may arise from several causes: (1) from *perpetual check*; (2) from *stalemate*; (3) from neither player having sufficient force to check his opponent's king; or (4) from unskilful use of a sufficiently strong force. If the attacking party cannot effect checkmate in *fifty moves* after the first check is called, the game is drawn.

Castling is accomplished by moving the king and one of the rooks at the same time. This is the only double move in the game. To *castle*, a player must bring either rook to the side of the king, and the king must pass to the other side of the rook. In other words, the king is moved from his own square two squares to the right or left, while at the same time the rook toward which the king moves is brought to the square over which the king has just passed. A king cannot castle if he or the rook has been moved, or if another piece is between them, or when the king is in check.

En Passant (in passing). When, on the first move of a pawn, A, it is advanced two squares, if one of the adversary's pawns, B, is in such a position as to have taken A if it had been moved only one square, B may take A "*en passant*." Thus, in Figure 5, if one pawn is at B when the other is moved from A to A', B may move to B' and take A in passing.

To Interpose. If a king is placed in check, and it is possible to move another man between the attacking piece and the attacked king, the player defending is said to *interpose*. The term may also be used when covering an opponent's attack on any piece.

Doubled Pawn. When two pawns are on the same file the front one is called a *doubled pawn*.

Isolated Pawn. When a pawn stands alone, unprotected by other pawn or piece, it is termed an *isolated pawn*.

Passed Pawn. When a pawn is so far advanced that none of the adversary's men can oppose it, it is said to be a *passed pawn*.

Queening a Pawn. A pawn advanced to the eighth square of a file may then become a queen, or any other piece except a king.

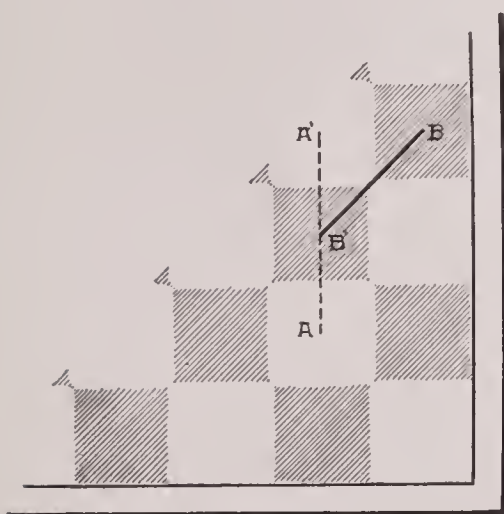
Winning the Exchange. When a player captures a superior piece in exchange for an inferior one, he is said to *win the exchange*.

Minor Pieces. The knights and bishops are called *minor pieces*.

Forced Move occurs when a player can make but one move.

Gambit. This word is from an Italian wrestling phrase, and means to *trip up*. In Chess it is an opening in which a pawn or piece is placed in a position to be captured, with the object of obtaining an advantageous attack. A gambit is "accepted" or "declined" at the discretion of the opponent. The pawn sacrificed is called the *gambit-pawn*.

J'adoube. Two French words meaning "I adjust," used by a player when he touches a piece or pawn without the intention of playing it.



(Fig. 5)

LAWS OF CHESS

THE following laws were in force in most of the prominent tournaments held throughout Europe, and have been adopted in all of the principal Chess clubs in this country:—

I—THE CHESSBOARD

THE board must be so placed during play that each player has a white square in his right-hand corner. If, during the progress of a game, either player discovers that the board has been improperly placed, he may insist on its being adjusted.

II—THE CHESSMEN

If, at any time in the course of the game, it is found that the men were not properly placed, or that one or more of them were omitted at the beginning, the game in question must be annulled. If, at any time, it is discovered that a man has been dropped off the board, and moves have been made during its absence, such moves shall be retracted, and the man shall be restored. If the players cannot agree as to the square on which it should be replaced, the game must be annulled.

III—RIGHT OF MOVE AND CHOICE OF COLOR

The right of making the first move, and (if either player require it) of choosing the color, which shall be retained throughout the sitting, must be decided by lot. In any series of games between the same players at one sitting, they shall have the first move alternately in all the games, whether won or drawn. In case of an annulled game, the player who had the first move in that game shall move first in the next.

IV—BEGINNING OUT OF TURN

If a player make the first move in a game when it is not his turn to do so, the game must be annulled, if the error has been noticed before both players have completed the fourth move. After four moves on each side have been made, the game must be played out as it stands.

V—MAKING TWO MOVES IN SUCCESSION

If, in the course of a game, a player move a man when it is not his turn to play, he must retract said move; and after his adversary has moved, must play the man wrongly moved, if it can be played legally.

VI—TOUCH AND MOVE

A player must never touch any of the men except when it is his turn to play, or except when he touches a man for the purpose of adjusting it; in the latter case he must, before touching it, say "I adjust," or words to that effect. A player who touches with his hand (except accidentally) one of his own men when it is his turn to play, must move it, if it can be legally moved, unless before touching it, he say, "I adjust," as above; and a player who touches one of his adversary's men under the same conditions, must take it, if he can legally do so. If, in either case, the move cannot be legally made, the offender must move his king; but in the event of the king having no legal move there shall be no penalty. If a player hold a man in

his hand, undecided on which square to play it, his adversary may require him to replace it until he has decided on its destination; that man, however, must be moved. If a player, when it is his turn to play, touch with his hand (except accidentally or in castling) more than one of his own men, he must play any one of them legally movable that his adversary selects. If, under the same circumstances, he touch two or more of the adversary's men, he must capture whichever of them his antagonist chooses, provided it can be legally taken. If it happen that none of the men so touched can be moved or captured, the offender must move his king; but if the king cannot be legally moved, there shall be no penalty.

VII—FALSE MOVES AND ILLEGAL MOVES

If a player make a false move, that is, either by playing a man of his own to a square to which it cannot be legally moved, or by capturing an adverse man by a move which cannot be legally made, he must, at the choice of his opponent, and according to the case, either move his own man legally, capture the man legally or move any other men legally movable. If, in the course of a game, an illegality be discovered (not involving a king being in check), and the move on which it was committed has been replied to, and not more than four moves on each side have been made subsequently, all these last moves, including that on which the illegality was committed must be retracted. If more than four moves on each side have been made, the game must be played out as it stands.

VIII—CHECK

A player must audibly say "Check!" when he makes a move which puts the hostile king in check. The mere announcement of check shall have no signification if check be not actually given. If check be given, but not announced, and the adversary make a move which obviates the check, the move must stand. If check be given and announced, and the adversary neglects to obviate it, he shall not have the option of capturing the checking piece or pawn, or of covering, but must move his king out of check; but if the king have no legal move, there shall be no penalty. If, in the course of a game, it be discovered that a king has been left in check for one or more moves on either side, all the moves subsequent to that on which the check was given must be retracted. Should these not be remembered, the game must be annulled.

IX—ENFORCING PENALTIES

A player is not bound to enforce a penalty. A penalty can be enforced by a player only before he has touched a man in reply. Should he touch a man in reply in consequence of a false or illegal move of his opponent, or a false cry of check, he shall not be compelled to move that man, and his right to enforce the penalty shall remain. When the king is moved as a penalty, it cannot castle on that move.

X—CASTLING

In castling, the player shall move king and rook simultaneously, or shall touch the king first. If he touch the rook first, he must not quit it before having touched the king, or his opponent may claim the move of the rook as a complete move. When the odds of either rook or both rooks are given, the player giving the odds shall be allowed to move his king as in castling, and as though the rooks were on the board.

XI—COUNTING FIFTY MOVES

A player may call upon his opponent to draw the game, or to mate him within fifty moves on each side, whenever his opponent persists in repeating a particular check, or series of checks, or the same line of play, or whenever he has a king alone on the board, or

king and queen,	}	against an equal or superior force;
king and rook,		
king and bishop,		
king and knight,		

king and two bishops,	}	against king and queen; and in all analogous cases;
king and two knights,		
king, bishop and knight,		

and whenever one player considers that his opponent can force the game, or that neither side can win it, he has the right of submitting the case to the umpire or bystanders, who shall decide whether it is one for the fifty move counting; should he not be mated within the fifty moves, he may claim that the game shall proceed. For example: A has a king and queen against B's king and rook. B claims to count fifty moves. At the forty-ninth move, A, by a blunder, loses his queen. B can claim that the game proceed, and A, in his turn, may claim the fifty move counting.

XII—PAWN-TAKING IN PASSING

Should a player be left with no other move than to take a pawn in passing, he shall be bound to play that move.

XIII—QUEENING A PAWN

When a pawn has reached the eighth square, the player has the option of selecting a piece, except a king, whether such piece has been previously lost or not, the name and powers of which the pawn shall then assume, or of deciding that it shall remain a pawn.

XIV—ABANDONING THE GAME

If a player abandon the game, discontinue his moves, voluntarily resign, wilfully upset the board, or refuse to abide by these laws, or to submit to the decision of the umpire, he must be considered to have lost the game.

XV—THE UMPIRE AND BYSTANDERS

The umpire shall have authority to decide any question whatever that may arise in the course of a game, but must never interfere except when appealed to. He must always apply the laws as herein expressed, and neither assume the power of modifying them, nor of deviating from them in particular cases, according to his own judgment. When a question is submitted to the umpire, or to bystanders, by both players, their decision shall be final and binding upon both players. The term "bystander" shall comprise any impartial player of eminence who can be appealed to, whether absent or present.

HINTS TO BEGINNERS

ACCUSTOM yourself to play with either color. Always play strictly according to the laws of the game.

Be willing to accept odds of a superior player.

Watch your adversary's move, and discover as far as possible his reason for making it.

Decide what move you wish to make before touching the piece to be moved.

Do not advance pieces too rapidly — they are apt to be forced back by opponent's pawns and time would thus be lost.

Do not begin an attack too early in the game, but when once begun do not be diverted from your object unless absolutely necessary for the safety of your men.

Do not give check uselessly.

Protect your pawns; toward the end of a game a pawn is often as valuable as a piece.

When possible, make your rooks support each other. A rook is most effective toward the end of the game, when the board is comparatively clear.

Learn as many openings as possible. To restrict your game to one opening would be poor playing.

Avoid placing your queen before your king in such a way that the opposing party may attack the former piece, and thus the latter, by bringing forward a rook or a bishop. A queen is often lost in this manner.

Following are some of the openings which should be learned:—

Philidor's Defense

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. Kt to KB ₃	2. P to Q ₃

The Giuoco Piano

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. Kt to KB ₃	2. Kt to QB ₃
3. B to QB ₄	3. B to QB ₄

The Counter Gambit in the King's Knight's Opening

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. Kt to KB ₃	2. P to KB ₃

Petroff's Defense

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. Kt to KB ₃	2. Kt to KB ₃
3. Kt takes KP (not necessarily)	

The Two Knights' Defense

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. Kt to KB ₃	2. Kt to QB ₃
3. B to QB ₄	3. Kt to KB ₃

The Scotch Gambit

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. Kt to KB ₃	2. Kt to QB ₃
3. P to Q ₄	

The Knight's Game of Ruy Lopez

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. Kt to KB ₃	2. Kt to QB ₃
3. B to QKt ₅	

Queen's Bishop's Pawn's Opening

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. P to QB ₃	2. KKt to B ₃
3. P to Q ₄	3. Kt takes P
4. QP takes P	

The Evans Gambit

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. Kt to KB ₃	2. Kt to QB ₃
3. B to QB ₄	3. B to QB ₄
4. P to QKt ₄	4. B takes QKtP

The Allgaier Gambit

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. P to KB ₄	2. P takes P
3. Kt to KB ₃	3. P to KKt ₄
4. P to KR ₄	4. P to KKt ₅ (best)
5. Kt to Kt ₅	

The King's Gambit Proper, or King's Knight's Gambit

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. P to KB ₄	2. P takes P
3. Kt to KB ₃	3. P to KKt ₄ (best)

The Muzio Gambit

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. P to KB ₄	2. P takes P
3. Kt to KB ₃	3. P to KKt ₄
4. B to QB ₄	4. P to KKt ₅
5. Castles	

The King's Rook's Pawn's Gambit

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. P to KB ₄	2. P takes P
3. P to KR ₄	3. B to K ₂

The King's Bishop's Gambit

WHITE	BLACK
1. P to K ₄	1. P to K ₄
2. P to KB ₄	2. P takes Pawn
3. B to QB ₄	3. P to Q ₄

The Sicilian Game

- WHITE
1. P to K₄
2. P to Q₄

- BLACK
1. P to QB₄

The Game of the Two Bishops

- WHITE
1. P to K₄
2. B to QB₄

- BLACK
1. P to K₄
2. B to QB₄

The King's Bishop's Opening

- WHITE
1. P to K₄
2. B to QB₄
3. Kt to QB₃

- BLACK
1. P to K₄
2. Kt to KB₃ (best)

The Fianchetto

- WHITE
1. P to K₄
2. P to Q₄
3. B to Q₃
4. P to QB₄

- BLACK
1. P to Q₃
2. B to QKt₂
3. P to K₃

or

1. P to K₄
2. P to KKt₃
3. Kt to QB₃

1. P to Q₃
2. P to K₃
3. B to QKt₂

DRAUGHTS OR CHECKERS

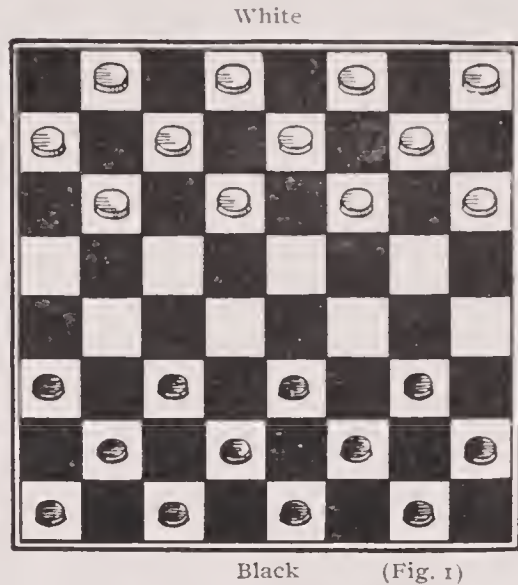
MANY of the attractive and commendable features of chess may be found in the simpler and less scientific game of Draughts or Checkers. Without entering into a discussion of the relative merits of these games, it will suffice to say that one who desires that his pleasures shall come easily, will usually prefer the simpler of the two.



THE BOARD AND MEN

The game of Checkers is played on the same kind of board that is used in chess, which is divided into sixty-four equal squares, colored alternately black and white. Red is often used in place of black and is opposed to white. But, unlike chess, the pieces are placed on squares of the same color, either all black, or all white, and are moved only to squares of that color. There are twenty-four pieces, or "men," twelve of which are white, while the others are black. They are all of the same size and are disk-shaped, each having a flat top and bottom, circular in form.

The game is played by two persons, who sit at opposite sides of the board, and each has twelve pieces of the same color, which are arranged as shown in Figure 1. The pieces may all be placed either on the dark-colored squares or on the white, but the board must be arranged so that there shall not be a piece on the right-hand corner square of either player, or, in other words, so that each shall have a *double corner* to the right. This will be better understood by reference to Figure 1, in which one player is supposed to sit at the side of the board marked White, while the other sits at that marked Black. The more common practice in this country is to arrange the men on the white squares, and, with a view to clearness in describing the game, this arrangement will be followed throughout. The squares are numbered as shown in Figure 2.

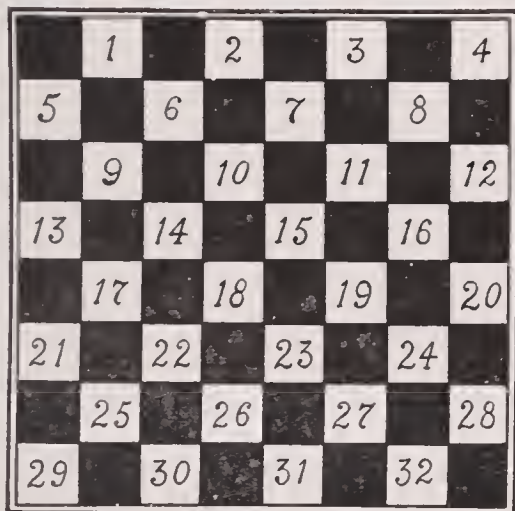


(Fig. 1)

THE MOVES

IN BEGINNING the first game, it is decided by lot which of the players is to have the black men, and in the other games of a series they take the white and the black men alternately. The player having the black men always has the first move. The moves are made diagonally, one square at a time, and there may be only one man on a square, thus the

man on square 23 may move to either 18 or 19; the one on 24 may move to either 19 or 20. The men must move forward, that is, toward the side of the board opposite their first position, until after they have reached one of the squares in the adversary's first or *king* row. They are then *crowned* by having a second man placed above the first, and become *kings*, after which they may move either forward or backward as desired.



(Fig. 2)

the one having the first move may "jump" to the vacant square, thereby "taking" the other man, which is then removed from the board. In the same way two or more men may be "taken" in one move, if there are alternate vacant squares between them. Thus, in Figure 2, if there be white men on squares 22, 15, and 8, squares 18, 11, and 4 be vacant, and there be a black

man at 25, whose move it is, the latter may jump first to 18, then to 11, then to 4, at one move, and thus capture the three white men. Since a king may move either forward or backward, he can take men in either direction, but, like the other men, he can move only one square at a time, unless he jumps an opponent. He may be taken by one of the opposing men in the same manner as an uncrowned piece.

A piece which is in a position such that it may be taken by one of the opposing pieces at the next move is said to be *en prise*. The players move alternately, the object of each being to take all his opponent's pieces, or to *block* the latter so that they cannot move. The player who has all of his pieces taken or blocked loses the game, and if neither can obtain an advantage that will enable him to win, the game is *drawn*.

When one player appears to have an advantage of the other, in either force or position, he may be required to win in forty of his own moves, and if he fails to do so the game is drawn.

If a player moves in such a way as not to take one of his opponent's men when in a position to do so, the latter has the option (a) of allowing the move to stand; (b) of requiring that the man moved be replaced, and that the man *en prise* be taken; or (c) of *huffing*, which means that the move is allowed to stand, and the man which could have captured is taken from the board as a penalty for not capturing.

In addition to huffing, the player makes his move, but the huff must be made before the move or the former is lost. If the adversary of the player who failed to capture allows the move to stand without huffing, and the latter moves again without taking the man *en prise*, the former has the same option as before. If a player can take one man by either of two moves, or one man by one move and more than one by another, he may elect which move he will make. But whichever move he decides upon, he must take every man that is *en prise* for that move. Should he neglect to do this he may be either huffed, or compelled to take the pieces omitted.

It is better, as a rule, to keep the men in wedge form near the center of the board, and to move toward the center rather than toward the sides. A man situated in one of the side columns is handicapped by having only one possible move, while a man in one of the three center columns may move diagonally to the right or to the left.

It is advisable to get a king as early in the game as possible, and to keep him well protected, or *guarded*, since he is much more valuable than an ordinary man. A player should not make too many unnecessary exchanges, that is, moves which enable him to capture one of his opponent's men but at the same time put one of his own men *en prise*. If a player has the advantage in number of men, he should make as many exchanges as possible, since his relative advantage is thus increased, but if he has fewer men, or if he would sacrifice position by an exchange, he should try to avoid making it.

To *have the move* means to be in such a position as to be able to secure the last move. This is generally an advantage, but it is sometimes the

reverse. At the beginning of the game the second player has the move, but it is of no advantage to him at that time. To ascertain which player has the move at any time, add together all the pieces on the alternate columns, beginning at either side. If their sum is odd, the next player has the move, while if even the second player has it. An exchange causes the move to be transferred to the other player, hence the one who has it should avoid exchanging, unless he does so twice in succession so that he is enabled to keep the move.

THE LOSING GAME

IN THE Losing Game, or "Give-Away," as it is sometimes called, the object of each player is to force his adversary to take as many pieces as possible, and the player who first gets rid of all his pieces wins the game. This style of play is not considered scientific, but it requires a considerable amount of foresight and good judgment. It is desirable to force your antagonist to acquire kings, and with this object in view your men should be well separated, and your back squares should be left open. The rules relating to huffing and the other points of play are applicable to this game.

GLOSSARY OF TECHNICAL TERMS USED IN CHECKERS

Pieces. The twenty-four discs with which the game is played. They are shaped alike, but twelve are colored white and twelve black.

Squares. The sixty-four square spaces into which the checkerboard is divided. They are colored alternately white and black.

Move. To *move*, or *make a move*, is to push a piece diagonally from one square to an adjoining square of the same color.

King Row. The row of squares nearest each player is called his *king row*.

King. When a piece, or man, belonging to either player is moved or jumped to the opponent's kingrow he becomes a *king*.

Crown. When a piece becomes a king it is *crowned* by the opponent, who places on it another piece of the same color.

Jumping. When two opposing pieces are on adjacent squares, and piece B of the player having the second move is situated on a square to which piece A of the first player could move, if it were unoccupied, while the square behind B in the line of the two pieces is vacant, A may "jump" B and rest on the vacant square.

Taking, or Capturing. When a piece is jumped, it is said to be *taken*, or *captured*, and is removed from the board.

Unguarded. A piece having a vacant square behind it is said to be *unguarded*.

En Prise. A piece which is in such a position that it may be captured at the next move is said to be *en prise*.

Exchange. When in two successive moves each player captures one of his opponent's men, an *exchange* is said to have taken place.

Cornered. When a piece is in such position that, though able to move, it cannot do so without being captured at the next play, it is *cornered*.

Double Corner. This is a term used to designate the two playing-squares in the right-hand corner of each player.

Breeches. When a king is moved into a vacant square between two opposing pieces, each of which is unguarded, so that whichever one is moved the other must be sacrificed, the king is said to be "in breeches."

Huffing. This is one of three options given a player if his opponent neglects to capture when able. If the player elects to huff, the last move of the opponent stands good, and the man that could have captured is removed from the board as a penalty for not taking.

Standing the Huff. A player who does not take a piece, although he sees that it is *en prise*, is said to "stand the huff."

Draw. If neither player is able to win, the game is declared a *draw*.

Odds of the Draw. If, at the beginning of a game, one player agrees to forfeit it to his opponent in case of a draw, he is said to give the latter the *odds of the draw*.

The Move. To "have the move" means to occupy such a position as to be able to secure the last move.

J'adoube. This is a French term meaning "I adjust," which is used by a player when he touches a piece to give notice that he does not intend to play it.

LAWS OF THE GAME OF DRAUGHTS OR CHECKERS

1. The choice of men for the first game is determined by lot, and in a series of games the players take the white and the black men alternately.

2. In each game the player having the black men has the first move, whether the previous game was won or drawn.

3. If a player whose turn it is to play touches a piece, he must move it, unless he has previously given notice of his intention to adjust it. If he touches a piece that cannot be moved, there is no penalty.

4. If a piece is moved over an angle of the square on which it is stationed, the move must be completed in that direction.

5. A move or a capture is completed as soon as the player's hand is withdrawn from the piece moved to another square.

6. When a man becomes a king his move is finished—that is, if there is a piece *en prise* of the newly-made king, he cannot capture it by a continuation of the move which carried him into the king row, but must wait until after the adversary has made his next move.

7. If a player makes a false move, or one that is not allowed by the foregoing rules, the adversary may require the pieces so moved to make a proper move in whichever direction he pleases. If there is no legal move for the piece, there is no penalty except the option of allowing the false move to stand.

8. If a player captures one of his own pieces, the adversary may have it removed at his option.

9. If more than one piece be captured at one move, and the player removes his hand from the capturing piece before all of the pieces *en prise* have been taken, the move is completed, and the player is liable to the provisions of Law 11.

10. When a player moves a man to king, the adversary must crown that man.

11. If a player, when moving, neglects to capture a man or men *en prise*, the adversary has the option (a) of allowing the move to stand; (b) of requiring that the piece moved be replaced and that the capture be made; or (c) of huffing the piece that could have been captured.

12. If a player entitled to huff touches that one of his adversary's pieces which failed to capture, he must huff. He is required to huff before moving, and if he fails to do so he cannot huff afterward; but if the adversary neglects to capture, the player again has the option of Law 11.

13. A player who has the advantage in force may be required to win in forty of his own moves (that is, forty by each player), computed from the move in which notice is given. If he fails to win in forty moves the game is drawn.

14. In a similar manner, a player who has two kings, while his opponent has only one, may be required to win in twenty moves.

15. When the *odds of the draw* is given, the player giving them must not occasion unnecessary delay by uselessly repeating the same maneuvers. When the average of the players' forces and positions becomes nearly equal, the player who has given the odds of the draw may be required to win the game in twenty of his own moves, or lose it through its being declared drawn.

16. Each player may be required to move within a specified time, which must be agreed on before play commences. A player who does not move within that time loses the game.

HINTS TO BEGINNERS

MOVE toward the center of the board whenever possible, and try to avoid moving a man to a side square.

Push toward your opponent's king row as soon as opportunity offers, and keep your own king row protected.

Think well before each move, and always have in mind the probable future moves of both yourself and your antagonist.

Give your whole attention to the game, and be careful to do nothing to distract your adversary's attention.

Never indulge in disputes over points in the game, and never be a disagreeable loser.

Whenever possible, play with those who are more expert than yourself, and thus be a learner, rather than a teacher.

EXERCISES

FOLLOWING are the moves for a few games, which will assist the beginner in learning some of the simpler methods of play. The long columns of figures, necessary to show each of the different moves, may appear formidable to a young player, but after a little practice with a board and men, no difficulty will be found in following

the details of the game. Black, of course, has the first move, and the moves of each color are numbered in their order. The abbreviations used are *t*, which indicates that a man is taken, and *k*, that a man becomes a king.

GAME I

BLACK		WHITE	
1.	11 to 15	1.	22 to 18
2.	15 " 22 (t)	2.	25 " 18 (t)
3.	8 " 11	3.	29 " 25
4.	4 " 8	4.	25 " 22
5.	12 " 16	5.	24 " 20
6.	10 " 15	6.	27 " 24
7.	16 " 19	7.	23 " 16 (t)
8.	15 " 19	8.	24 " 15 (t)
9.	9 " 14	9.	18 " 9 (t)
10.	11 " 25 (t 2)	10.	32 " 27
11.	5 " 14 (t)	11.	27 " 23
12.	6 " 10	12.	16 " 12
13.	8 " 11	13.	28 " 24
14.	25 " 29 (k)	14.	30 " 25
15.	29 " 22 (t)	15.	26 " 17 (t)
16.	11 " 15	16.	20 " 16
17.	15 " 18	17.	24 " 20
18.	18 " 27	18.	31 " 24 (t)
19.	14 " 18	19.	16 " 11
20.	7 " 16 (t)	20.	20 " 11 (t)
21.	18 " 23	21.	11 " 8
22.	23 " 27	22.	8 " 4 (k)
23.	27 " 31 (k)	23.	4 " 8
24.	31 " 27	24.	24 " 20
25.	27 " 23	25.	8 " 11
26.	23 " 18	26.	11 " 8
27.	18 " 15		etc.

Black wins, for though there are now a king and four men of each color, the black pieces are in much the more advantageous position.

GAME II

BLACK		WHITE	
1.	11 to 15	1.	22 to 18
2.	15 " 22 (t)	2.	25 " 18 (t)
3.	8 " 11	3.	29 " 25
4.	4 " 8	4.	25 " 22
5.	12 " 16	5.	24 " 20
6.	10 " 15	6.	21 " 17
7.	7 " 10	7.	27 " 24
8.	8 " 12	8.	17 " 13
9.	9 " 14	9.	18 " 9 (t)
10.	5 " 14	10.	24 " 19
11.	15 " 24 (t)	11.	28 " 19 (t)
12.	14 " 17	12.	32 " 27

13.	10	"	14	13.	27	"	24
14.	3	"	7	14.	30	"	25
15.	6	"	9	15.	13	"	6 (t)
16.	1	"	10 (t)	16.	22	"	13 (t)
17.	14	"	18	17.	23	"	14 (t)
18.	16	"	30 (t 2 & k)	18.	25	"	21
19.	10	"	17	19.	21	"	14 (t)
20.	30	"	25	20.	14	"	9
21.	11	"	15	21.	9	"	6
22.	2	"	9 (t)	22.	13	"	6 (t)
23.	15	"	18	23.	6	"	2 (k)
24.	7	"	11	24.	2	"	6
25.	10	"	14	25.	6	"	9
26.	25	"	21	26.	31	"	26
27.	14	"	17				

There are now a king and three men of each color, and the game results in a draw.

GAME III

BLACK	WHITE
1. 22 to 18	1. 12 to 16
2. 24 " 20	2. 8 " 13
3. 25 " 22 (t)	3. 9 " 13
4. 29 " 25	4. 5 " 9
5. 18 " 14	5. 9 " 18 (t)
6. 22 " 8 (t)	6. 4 " 11 (t)
7. 25 " 22	7. 10 " 15
8. 23 " 18	8. 16 " 19
9. 18 " 14	9. 6 " 10
10. 27 " 24	10. 10 " 17 (t)
11. 21 " 14 (t)	11. 3 " 8
12. 30 " 25	12. 1 " 6
13. 25 " 21	13. 15 " 18
14. 22 " 15 (t)	14. 11 " 18 (t)
15. 24 " 15 (t)	15. 18 " 22
16. 26 " 17 (t)	16. 13 " 22 (t)
17. 15 " 10	17. 6 " 15 (t)
18. 31 " 26	18. 22 " 31 (t & k)
19. 32 " 27	19. 31 " 24
20. 28 " 3 (t k & 2, & k)	

The only three men White now has left are badly situated, and as Black has a king to the good he wins the game easily.

GAME IV

BLACK	WHITE
1. 11 to 15	1. 23 to 19
2. 9 " 13	2. 22 " 18
3. 15 " 22 (t)	3. 25 " 18 (t)
4. 10 " 14	4. 18 " 9 (t)
5. 5 " 14 (t)	5. 27 " 23
6. 8 " 11	6. 26 " 22

7.	6	"	10	7.	22	"	18
8.	1	"	5	8.	18	"	9 (1)
9.	5	"	14 (t)	9.	29	"	25
10.	11	"	15	10.	30	"	26
11.	4	"	8	11.	25	"	22
12.	8	"	11	12.	32	"	27
13.	2	"	6	13.	22	"	17
14.	13	"	22 (t)	14.	26	"	17 (t)
15.	3	"	8	15.	17	"	13
16.	15	"	18	16.	24	"	20
17.	11	"	15	17.	13	"	9
18.	6	"	13 (t)	18.	20	"	16
19.	15	"	24 (t)	19.	27	"	20 (t)
20.	12	"	26 (t 2)	20.	31	"	6 (t 3)

There are now the same number of men of each color, but Black wins because the pieces of that color are better situated than the others.

The foregoing games are subject to numerous variations, and simply serve to illustrate specific styles of play. Either by practicing alone or by playing with an opponent, the beginner may first follow one of these methods and then vary it in the different ways that will suggest themselves. By this means a clear insight into the principles of the game may soon be obtained, and several styles of play may be learned.

DOMINOES



THE game of Dominoes is so old and so familiar to most of us, and appears so easy to play, that doubtless many of us consider it a trivial and old-fogyish form of amusement. But there is much more in the game than appears on the surface. It does not depend entirely upon chance, as beginners and those unacquainted with it often think, but offers opportunities for careful calculation and skillful play.

To be convinced of this, one has only to watch a game in which an ordinary player is opposed to a more skillful one. The difference in the two methods of play will at once be apparent, and the better score will often be found credited, not to the player who "has the better luck," but to the one who plays the better game.

An ordinary set of Dominoes consists of twenty-eight pieces, which are usually about three-eighths of an inch in thickness, one inch in width, and two inches in length. They are either made entirely of some black

material, or have black backs and white faces. The face is divided cross-wise into two equal parts by a groove, or a raised line, which is colored black on a white face and *vice versa*.

The faces are distinguished from each other by various numbers and combinations of circular dots or depressions, of the same color as the dividing line. These dots, or pips, range in number from one to twelve, and by distributing them in different ways in the two face spaces, twenty-eight different combinations are formed. Each piece is named from the number and arrangement of the pips on the face. The Domino which has six pips in each space, for example, is called the *double-six*, and in a similar manner the twenty-eight pieces are designated as follows:—

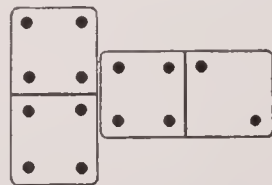
Double-six	Double-five	Four-trey	Trey-blank
Six-five	Five-four	Four-deuce	Double-deuce
Six-four	Five-trey	Four-ace	Deuce-ace
Six-trey	Five-deuce	Four-blank	Deuce-blank
Six-deuce	Five-ace	Double-trey	Double-ace
Six-ace	Five-blank	Trey-deuce	Ace-blank
Six-blank	Double-four	Trey-ace	Double-blank

BLOCK GAME

THE simplest and most characteristic game of Dominoes is what is called the Block Game, from which most of the other games were developed. The pieces are all placed face downward on a table or other surface, and thoroughly mixed or "shuffled." Each of the players, of whom there may be two, three or four, then selects seven of the pieces, which compose his "hand." The faces of these must not be seen by the other players until they are played. The one who has the highest double has the "pose," or first play, and places the double on the table, face upward. The play then proceeds in regular order to the left of the leader, and the "lead" for the succeeding "hands" rotates in a similar manner.

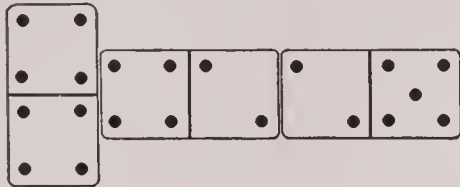
At the beginning of the game, the player who obtains the lead by reason of holding the highest double is required to play that piece, but the leads from the succeeding hands may be made with any piece held by the leader. If there is any doubt or dispute among the players as to whose turn it is to lead or to play, this may be determined by each drawing a piece, the highest piece drawn winning the lead or play.

Each player plays one piece at a time, and one end of that piece must match the free end of one of the pieces already down. For example, let us suppose that the highest double held by either player at the beginning of a two-hand game is the double-four. The player holding that piece plays it, and the other player must then play one of the following pieces: six-four, five-four, four-trey, four-deuce, four-ace or four-blank. Whichever one he plays, as for example, the four-deuce, must be placed at one side of the double-four, as shown in the accompanying figure.



(Fig. 1)

The first player must now play either one of the pieces already named or some piece having two pips at one end, such as the five-deuce. This must be placed against that one of the first two pieces which it matches. In this instance it would be placed against the four-deuce. (Fig. 2.)

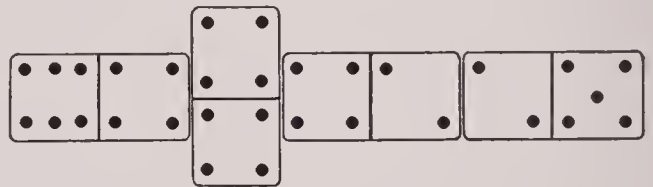


(Fig. 2)

The other player must now play a piece having either four or five pips at one end. If, for example, he plays the four-six, he must place it as shown in Figure 3.

It will be seen from the foregoing that in playing a single piece to a double, the matching end of the former is placed against the side of the latter, while in playing one single piece on another, their matching ends are placed together.

If no player holds a double at the beginning of the game, the one having the highest-numbered piece leads. The one that gets rid of all his pieces first cries "Domino!" and his score for that hand is determined by counting the spots on the pieces held by the other player or players.



(Fig. 3)

In all games of Dominoes, one person usually keeps the scores of all the players. If at any time no one can play, the game is said to be "blocked." Each player then places his remaining pieces on the table, face upward, and the one whose left-over hand aggregates the least number of pips is given a score equal to the sum of the pips on the pieces still held by his opponents. Unless otherwise agreed, the score for the game is one hundred, though at the present time it is often set at fifty.

DRAW GAME

THE Draw Game, which is often played by two or three persons, is really only a variation of the block game. The difference between the two is that in the former, whenever a player is unable to play he draws one piece at a time from the pack, until he finds a piece that will match. (The pack, or pool, consists of the pieces that remain after the players have all drawn their hands.) It would not be a violation of the rules for the player to continue to draw from the pack after he has obtained the piece wanted, but this is usually prohibited by agreement at the beginning of the game.

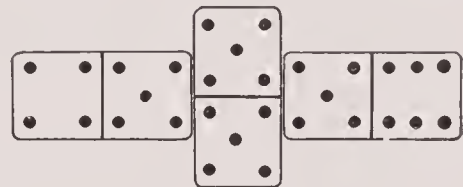
MUGGINS OR FIVES

THIS is perhaps the most popular of the games played with Dominoes. Instead of seven pieces, five are drawn by each player, and the leads and plays are regulated as in the draw game. The distinctive characteristics of the game of Muggins, or Fives, is indicated by the latter name,—the score is reckoned in multiples of five. Thus, if the six-four or the double-

five be led, the player scores ten; if he leads the four-ace, the trey-deuce, or the five-blank he scores five.

Throughout the remainder of the game, if, when a player's turn comes, he can play a piece such that the sum of the pips on its free end and those on the free end of the other end-domino of the set is a multiple of five, that number is added to his score. If any player cannot play in his turn, he draws from the pool until he gets a piece that will match; but unlike the draw game, the rules require him to stop drawing and play that piece when he gets it.

Let us suppose that at the beginning of a game the double-five is the highest double out, and so is led. The leader scores ten. If now the six-five be played, for example, no score is made, because the aggregate number of spots on the free ends is sixteen, which is not a multiple of five.

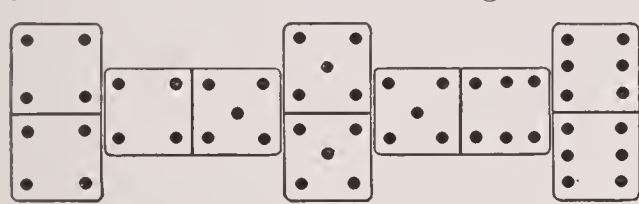


(Fig. 4)

If, however, the five-four now be played, ten is scored, since the sum of the pips on the free ends (six and four) is ten, a multiple of five. (Fig. 4.)

Let us suppose the double-four is played next. There would be no score, since the count made by this play is six plus eight, or fourteen. If now the double-six be played, the count will be twelve plus eight, which makes the score twenty. (Fig. 5.)

The player who first disposes of all the pieces in his hand cries "Muggins!" and, as in the "block game," he adds to his score the sum of the



(Fig. 5)

pips in his opponents' hands; in case of a block, the same rules obtain as in the block game. But, as stated before, all scores in Muggins are counted in multiples of five, and the one who first plays

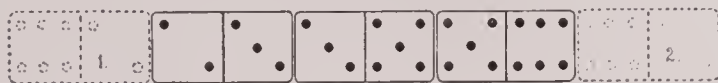
out his hand scores the sum of the multiples of five, which are the nearest the aggregate number of pips in the respective hands of his opponents.

Thus, if the pips held by one of the other players aggregate twelve, while another holds thirteen, the scores would be twenty-five, ten from the first hand and fifteen from the second. A deuce-blank, ace-blank, double-ace, or double-blank held alone counts nothing, while either a trey-ace, double-deuce, or deuce-ace counts five.

The score of the game of Muggins is two hundred if two play, or one hundred and fifty if there are three or more players. The score is usually kept as follows: Five is scored by means of an oblique straight line, thus \searrow ; ten, by an X; fifteen, $X\searrow$; twenty, XX ; and so on. In this way the score of each player is kept in a single straight line, and the operation of adding the separate numbers is avoided. When ten X's have been given a player, it indicates that he is credited with one hundred points. A line is then drawn through that part of the score, which simplifies the keeping of the rest of it. Thus, a score of one hundred and twenty-five would be put down in this way, $\text{XXXXXXXXXXXXX}\searrow$.

BERGEN

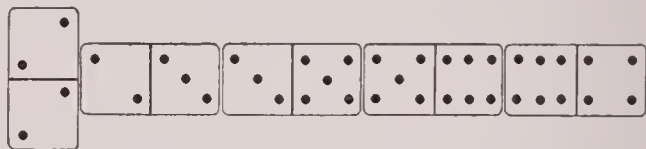
THE Bergen game may be played by two, three or four players. Each draws six pieces. The lowest double leads at the beginning of the game, and this play entitles the leader to be credited with a "double-header." After the first lead, the players lead in turn from left to right. If a player has no double when his turn comes to lead, he plays the lowest



(Fig. 6)

piece in his hand. The object of each player is to play a piece that will make both extremities of the line the same, and thus score a "double-header," or to make a "triple-header" either by playing a double on a double-header or by playing a piece such that its free end has the same value as a double at the other extremity. Thus, if the trey-deuce, five-trey and six-five have been played in turn, and the next player has the six-deuce, he may play it at either end of the line (as at 1 or at 2, fig. 6) and thus make a double header either of deuces or of sixes. (Fig. 6.)

If, now, the next player has a double which matches the free ends, he can play it at either end, and thus make a triple-header. On the other hand, if after the trey-deuce, five-trey, and six-five have been played, as above, a double-deuce is played, the next player may make a triple-header by playing a six-four. (Fig. 7.)



(Fig. 7)

If when a player's turn comes he is unable to play, he draws one piece from the pool. If he is then able to play, he does so; if not, the next player plays, or if unable to do so, draws. The player who first disposes of all his pieces wins the hand. If the game be "blocked," the hand is won by the player holding the least number of pips, unless he holds a double and the others have none, in which case the lowest of those without a double wins; if each has a double, the one holding the lowest double wins; if one player holds two or more doubles, and another holds less doubles than he, the latter wins, regardless of the relative values of the doubles.

The score for the play is fifteen when two play, and ten when there are more than two players. A triple-header counts three; a double-header two; and a won hand one. But when a player is within three points of finishing the game, a triple header counts him only two; and if he is within two points, either a triple-header or a double-header counts him only one. After the lead a careful player usually retains doubles in his hand as long as possible, so that he may be prepared to make a triple header.

There are numerous other games which may be played with Dominoes, but the foregoing are the ones which are best known, and they are sufficient for the ordinary player.

ROLLER POLO

THE game of Roller Polo, like ice hockey, was developed from lawn hockey, and in the objects sought by the players in these games there is great similarity. In the methods of play, however, there is a vast difference. In Roller Polo, there is no rule forbidding off-side play, and a much heavier and stouter stick is used than in lawn hockey. Then, too, in the former game, the stick is almost always held in one hand. Roller Polo, is a much more open game, and the tries for goal may be made from any direction and from unlimited distances.

A team is composed of five players, who are designated as follows: One *goal-tend*, one *half-back*, one *center*, and two *rushers*. The game is played with a rubber-covered ball, which is about the size and weight of the cricket ball used in lawn hockey. A Roller Polo rink should be rectangular in shape, and may be of any size agreed upon by the captains of the opposing teams. It should be surrounded by boards extending from the surface to a height of at least two feet; but unless this boarding extends to a height of four feet or more, it should be surmounted by a railing, so as to prevent injury to the player by falling over the low boards. The goal line is at each end of the rink and must be not less than ten feet from the boundary of the playing space. The two goals are erected in the middle of these two lines. The two posts of each goal should be three feet in height and four and one-half feet apart, and a net of some kind is usually stretched between them, to catch the ball when a goal is made. From the center point between the goal posts, a semicircle, with a radius of three-feet, is plainly marked on the rink, and no player except the goal-tend is allowed within this circle.

In beginning the game, the ball is neither faced nor bullied, but is placed in the center of the rink, and at the signal to commence play, one player of each side, usually one of the rushers, charges toward the ball and tries to gain possession of it. The center and the other rusher then join the first rusher in an attempt to carry the ball to a position near their opponents' goal, suitable for a try-at-goal. These three men generally rush the ball down the rink in a triangular formation, either equidistant from each other, or with the two side men only a short distance behind the middle man. The rushers should be fast skaters, as well as accurate goal shots, and should be especially



good at receiving, passing, and dribbling, the ball. The duties of the center are very similar to those of the rushers, and he should possess about the same qualifications, though he is often not so fast a skater as the rushers. The position of half-back is a very difficult one, for not only is he expected to stop all long passes for goal, but he is the first defense man met by the opponents' rushers in their attack on the goal. The goal-tend should be a cool, active player, and should be especially adept at stopping short tries for goal, which often come with great speed and from a variety of directions. He never leaves his station between the goal posts except in cases of great emergency. The game is usually divided into three fifteen-minute innings of actual play, with an interval for rest between each two. A goal is made when the ball passes between the goal posts below the line of their tops. Each goal counts one point, and the side scoring the greater number of goals in the three innings wins the game. If the ball goes out of bounds, it is replaced opposite the point where it went out, and not less than four feet from the boundary. Two balls are usually furnished the referee; if one of them is cut or ripped, or passes the boundary and is out of play for thirty seconds or more, the other is put in play by the referee.

A foul is declared: (*a*) If any player stop or strike the ball when any part of his person is touching the surface of the rink; (*b*) if he stop, catch, or bat, the ball with his hands or arms, or if any player, except the goal-tend, kick the ball with his feet or skate; (*c*) if he enter the semicircle in which the goal is included; (*d*) if he hold another player at any time; (*e*) if he run about or strike the ball while one or both of his skates are off; (*f*) if he stop before or near the goal to readjust his skates; (*g*) if he insert his stick between the arm and the stick of another player. The penalty for fouls is the deduction of one point from the score of the offending side for every third foul. When a third foul has been penalized in this manner, the game is continued from the point where the last foul was called. If a foul that prevents a goal from being made is made by the goal-tend, one point is given to his opponents.

Following are the rules for Roller Polo, as adopted by the National Polo Association:—

1. Each team shall consist of five players, to be designated as follows: One *goal-tend*, one *half-back*, one *center*, two *rushers*.
2. The ball shall be the regulation rubber-covered polo ball, which shall be furnished by the manager of the home club, and shall become the property of the winning club.
3. The sticks shall not exceed four feet in length, one and one-eighth inches in diameter and fifteen ounces in weight. The crook of the stick may be covered with leather, but no metallic substance shall be allowed near that end of the stick. A

cord or strap shall be attached to the handle to prevent the stick from slipping from the hand, but it shall not extend more than ten inches beyond the end.

4. (a) All games shall be played on circular-runnered skates, in good order, without any extra appliances; the rollers shall be of standard size, with a smooth brass face. No skate shall be more than two inches shorter than the ordinary boot or shoe of the player, and said boot or shoe shall have no foreign substance attached to it. The spindle must not project more than one-quarter of an inch from the skate.

(b) The skates must be securely fastened to the feet, and no player may call time to readjust his skate.

(c) For each championship game, the home club shall furnish two balls to the referee for use. If the ball in play is batted out of the playing surface, and is not returned within thirty seconds, the other ball shall be put in play by the referee. As often as one of the two is lost, another must be substituted, so that the referee shall at all times, after the game begins, have two balls ready for use.

(d) The last ball in play shall become the property of the winning club. Each ball used in championship games shall be examined by the secretary of this association, inclosed in a paper box and sealed with his seal; which seal shall not be broken except by the referee, in the presence of the two contesting teams, after play has been called.

(e) Should the ball become out of shape, cut or ripped, so as to expose the yarn, or in any way be so injured, in the opinion of the referee, as to unfit it for use, the referee, on being appealed to by either captain, shall at once put the alternate ball into use and call for a new one.

(f) In case a skate is broken, and a player is thereby obliged to leave the surface, his place must be taken by a substitute in uniform, but the player retiring cannot resume his position until a goal has been made, or until the time limit has expired.

5. The goal shall be three feet in height and four and one-half feet in width. The surface of the rink must be pumiced and swept before each game.

6. In playing a game, the front of the cage or goal must be not less than ten feet from the end, and equidistant from the sides of the playing surface of the rink.

7. No player, except the goal-tend, shall be allowed within a semicircle plainly indicated in front of the goal, the radius of which must be three feet from the center of the goal line. It is understood that if the goal-tend leaves his position, whoever for the time being takes his place, is the goal-tend.

8. (a) To start the game, the ball shall be placed at the middle of a straight line drawn through the center of each goal, and at the whistle of the referee, shall the charged upon by a player from each team.

(b) A goal is won by the passage of the ball into the cage or net from the front, where it must remain until removed by the referee.

9. The teams shall exchange goals whenever a goal is scored.

10. (a) Three innings of fifteen minutes each of actual playing time shall constitute a game, except as provided for hereinafter, and the club winning the most goals in that time shall be the winner of the game.

(b) In computing the time, all waits between goals and during the progress of the game on calls of time shall be deducted from the actual time, and only the playing time of the goal shall be reckoned.

(c) The final goal shall be the one which ends at the expiration of the third fifteen minutes of actual playing time, unless the clubs are tied, in which case the deciding goal shall be played.

(*d*) In case a game is interrupted by unavoidable accident or other unforeseen cause, and cannot be continued, the game shall be awarded to the club leading at the time of the interruption, providing two periods have been played.

11. There shall be a corps of official referees, timekeepers and scorers appointed by the secretary, said timekeepers and scorers to be appointed on recommendation of the local managers. Time must be kept by a stop watch or a stop clock. The expenses of the officials shall be paid by the manager of the rink in which the game is played. If either official fails to appear at any game, a substitute shall be appointed by the captain of the visiting club.

12. Any timekeeper may be removed upon the protest of three clubs.

13. Timekeepers and scorers shall receive instructions from the secretary, and will render themselves liable to removal by neglecting to comply with the same.

14. No person but the players and referee shall be permitted on the surface during a match, unless assistance is to be rendered in case of accident, or unless upon mutual invitation of the captains and referee.

15. (*a*) The referee shall have charge of the clubs and the surface from the time the game is called until it is finished or postponed. He shall start and call the game, shall settle all disputed points, and shall announce each goal, giving its time, and all fouls and their nature.

(*b*) The referee is master of the surface from the beginning of the game to its close, and is entitled to the respect of the spectators. Any person offering any insult or indignity to him shall be ejected from the premises.

(*c*) He must invariably be addressed by the players as Mr. Referee. He must compel the players to observe the provisions of the playing rules.

(*d*) The referee must keep the contesting teams playing constantly from the beginning of the game to its termination, allowing for such delays as are rendered unavoidable by accident.

(*e*) The referee must call play promptly at the hour designated by the home club, and on the blast of the whistle the contest shall begin. When the whistle is blown for time, play immediately ceases; and no goal, even though it is made, can be counted until the signal has been given to renew play.

16. The skates of each club shall be examined by the referee and the manager immediately before and after the players go on the surface. Any player found with illegal skates, rolls or spindles, shall be fined not less than \$5 nor more than \$10, and his club shall be fined \$100, which must be paid within twenty-four hours, on penalty of loss of franchise; the money shall go to the opposing club. No player shall be allowed to leave the surface without permission of the referee, who shall examine his skates on his return.

17. There shall be an official scorer connected with each club who shall prepare a summary of each contest, which shall contain the names of players, date of game, the number and order of rushes, goals won by each team and a record of fouls, giving the names of players making the same, and the time occupied in playing for each goal. A copy of this summary shall be furnished the officiating referee before he leaves the rink, and he shall at once mail the same to the secretary.

18. If, after the completion of a game and the decision of the referee, either club has cause for dissatisfaction with the rulings of the referee, they may have the matter decided by the association, by submitting within twenty-four hours a formal complaint to the secretary, signed by the captain or manager of the team, stating their reasons for the complaint; but no club that does not abide by the decision of the referee and play the game out under his direction, shall have the right to enter a complaint. Any club refusing a game shall be liable to expulsion.

19. If the ball go out of bounds, the referee shall blow his whistle to call time and place the ball at the point opposite where it went out, at least four feet from the rail. In renewing play, the players who do so must stand in position to knock the ball lengthwise of the surface, with their backs toward the sides.

20. Time shall be called by the referee whenever a foul occurs. Upon the renewal of the game, the ball must be placed where the foul occurred.

21. If time is called while a goal is being played for, the play shall not cease until the referee's whistle is blown.

22. A goal shall be taken from either side for every third foul committed by it during the progress of a game. After taking cognizance of a third foul and announcing the result, the referee shall continue the game from where it left off at the call of foul.

23. It shall be deemed a foul: (*a*) If a player stop or strike the ball when any part of his person is touching the surface; (*b*) if any player stop, catch, or bat, the ball with his hands or arms; (*c*) if any player, save the goal-tend or one taking his place, kick the ball with his foot or skate; (*d*) if the player intentionally violate Rule 7; (*e*) if any player hold any other player on the surface or against the rail; (*f*) if any player run about or strike the ball while one of his skates is off; (*g*) if any player stop before or in the immediate vicinity of the goal cage to readjust his skates; (*h*) if any player put his stick between the arm and body of another player.

24. (*a*) If a referee decides that a foul is made by the goal-tend or by any player taking his place for the time being, which prevents a goal from being made, he shall give a goal to the other team.

(*b*) If the goal-tend removes, or attempts to remove, the ball after it goes into the goal, he shall be fined \$5 and the goal shall be allowed to the opposing side.

25. Any act by a player that is manifestly intended as an unwarrantable interference with another player, may be declared a foul by the referee from his own observation or upon complaint by the captain of the offended side.

26. If, on account of the absence or injury of any player, a substitute is necessary, and no regular member of the team is present, any person may be selected, with the approval of the captain of the opposing team, given in the presence of the referee.

27. If a dispute shall arise on the surface, it shall be settled by the referee and the two captains. The players shall immediately resume their positions on the floor and take no part in the discussion unless called upon by the referee. Any player violating this rule shall be fined by the referee, not exceeding \$5 for each and every offense.

28. If any club refuse to play a scheduled game, or to abide by the decision of the referee, it shall forfeit the game and be liable to expulsion; and the members leaving the floor shall be liable to expulsion and subject to an individual fine of \$25.

29. If from any cause during the game play shall be suspended, each player shall fall back to his position and remain standing quietly in an upright position, and shall refrain from touching or knocking the ball. Any player violating this rule shall be fined \$1.

30. At the beginning of play, the visiting club shall take the goal nearest the entrance to the surface.

31. Any club not answering to the call of the referee on the surface at the advertised time of beginning the game, shall be fined \$10, said sum to go to the home team.

32. No player shall wear any extra appliances larger than the ordinary size, such as masks, shin-pads, chest-protectors, etc., to impede the progress of the ball. Any player violating this rule shall be ordered from the floor by the referee to make such changes as the referee may desire. The player shall also be liable to a fine of not more than \$3 nor less than \$1. Any player holding another, or in any way using his hands to obstruct his progress, shall be fined not more than \$5 for the first, nor more than \$10 for the second, offense.

33. (a) Any player throwing his stick at the ball or across the surface shall be fined \$5, and for a second offense during the same game, \$10.

(b) Any player deliberately tripping or striking another shall be fined \$10, and for a second offense during the same game, \$20, and he shall also be ordered from the surface for the remainder of the game.

(c) Any players engaging in a broil or altercation upon the surface shall be immediately ordered from the surface and fined \$20 each, and they may be suspended or expelled in addition to their fines, according to the gravity of their offense.

(d) Any player using profane or obscene language on the floor, or acting in an ungentlemanly manner sufficient to attract the attention of the spectators, shall be fined \$10, and he may be suspended or expelled in addition to his fine.

(e) Any act by any player that is manifestly intended to delay or obstruct the game, or is contrary to the spirit of fair and honorable play, shall subject the player to a fine, suspension or expulsion, according to its gravity, by the referee or the Board of Directors.

34. If, at any time or place, any player shall use abusive or insulting language, or offer violence to any referee, the latter may prefer charges against the player; and if the charge be proven true, the Board of Directors shall fine the player from \$10 to \$25, or expel him, according to the gravity of the offense.

35. (a) When any player is fined by a referee, or by the directors of the association, such fine shall be collected by said referee before leaving the hall, after notifying the offending player and his captain or manager; and in case of his inability to collect such fine, the referee for the ensuing game shall collect the same before the beginning of the contest, and in default thereof shall award the game to the visiting club.

(b) No referee shall remit a fine once imposed, under penalty of himself incurring the same.

(c) Any fined player shall be considered eligible to play if his fine has been mailed to the secretary within twenty-four hours after receiving the notice of the same from the secretary or the referee, the burden of proof being upon the manager, and the postmarks being evidence of the receipt and dispatch of letters.

36. Any club playing a player who has unpaid fines shall, on knowledge of the same coming to the secretary, be declared by him to have forfeited every such game to the opposing club.

37. A player may appeal through his manager to the Board of Directors regarding any fine over \$5 imposed by a referee; but the referee shall be upheld unless four managers vote against his decision, the interested manager refraining from voting, and the vote being one of record.

38. In case of any disturbance, unnecessary noise, or interference with the game or the referee by any person, the referee shall have the right to suspend the game until quiet is restored, or, if necessary, he may order the offending party or parties expelled from the rink. In case his orders are not obeyed, he may stop the play and award the game to the visiting club.

WATER POLO

WATER POLO, though differing in many respects from the other forms of polo, retains a sufficient number of their characteristics to entitle it to be classed with them. The game is played either in a swimming pool or in open water, though the latter is preferable, since it gives no opportunity for the players to rest by touching the sides or bottom. Good swimming is required of all the players, and constant practice is necessary to enable them to play well. The game increases the staying power of a swimmer, and is a beneficial and interesting form of aquatic sport.

THE GAME

AN ORDINARY Association football is used, which is about twenty-eight inches in circumference, covered with rubber, and inflated with air.

A team consists of seven players, of whom three are *forwards*, one is *half-back*, two are *full-backs* and one is *goal-tend*.

The playing space must be between eighteen and thirty yards in length, and not more than twenty yards in width. The goals, which are placed in the middle of the end lines, consist each of two goal posts ten feet apart, and when the water is more than five feet in depth, a crossbar must be placed three feet above the surface; when the water is less than five feet in depth the crossbar must be placed eight feet from the bottom. In swimming pools the goal posts are usually secured to the bottom, but in open water they are secured to floats which are anchored in place. A net is usually placed back of the goal posts to catch the ball when it passes between them, and this assists the referee in deciding when a goal has been made.

In beginning the game, the two teams take their places in line with their respective goals, and when all is ready the referee cries "Go!" and tosses the ball into the water at the center of the playing space. The players swim rapidly toward the ball, with the exception of the goal-tend, who remains near his goal. The center forward, who is usually the fastest swimmer of his team, goes directly toward the ball, and if he reaches it before his opponents, he passes it back to one of his own side. The ball is then passed, hit, or dribbled toward the opponents' goal in the attempt to send it between the goal posts. A goal is scored if the entire ball passes under the crossbar and beyond the goal posts.

The game is divided into two halves of seven minutes each, with an interval of three minutes for rest between the halves. At the beginning of the second half, and whenever a goal is scored, play is resumed in the



same manner in which it was started at the beginning of the match. The teams exchange goals at the beginning of the second period of play.

Fouls are awarded for the following violations of the rules: (*a*) Standing on or touching the bottom during any part of the game, unless for the purpose of resting; (*b*) touching the ball with both hands; (*c*) jumping from the bottom, except at the start; (*d*) holding to any artificial support during any portion of the game; (*e*) ducking an opponent when he is not in possession of the ball; (*f*) retaining possession of the ball when ducked; (*g*) holding, pulling back or pushing an opponent, or turning on the back and kicking him off.

The penalty for a foul is a free throw for the opposing side from the place where the foul occurred, but a goal cannot be scored from a free throw until after the ball has touched at least one other player. When a free throw is awarded to a side, the throw is taken by that one of its players who is nearest the spot where the foul occurred. The other players must remain in the respective positions held by them when the foul was declared, until the ball has left the hand of the thrower.

The goal-tend is exempted from the rule relating to standing, jumping from the bottom, and using both hands, but he may not throw the ball more than half the distance to his opponents' goal, under penalty of a foul.

If a player sends the ball across one of the side boundary lines, a free throw is given to his opponents from the point where it crossed the line. If a player sends the ball across his own goal line, a free corner-throw is given to his opponents, but if the attacking side sends the ball over, a free throw is given to the defending goal-tend.

The fastest swimmers and those who are most adept at passing the ball, are chosen as forwards; the captain of the team usually plays at half-back, which is the most difficult position; the full-backs should be steady, cool players, with much endurance; the goal-tend need not be a fast swimmer, but should be very quick and should have a thorough knowledge of the points of the game.

Following are the International Rules for Water Polo, as adopted by the Amateur Swimming Association:—

RULES

1. *Ball*—The ball shall be round and fully inflated. It shall measure not less than twenty-six and one-half inches, nor more than twenty-eight and one-half inches, in circumference. It shall be waterproof, with no strapped seams outside, and no grease or other objectionable substance on the surface. The ball shall be furnished by the home team.

2. *Goals*—The width of the goals shall be ten feet; the crossbar shall be three feet above the surface when the water is five feet or more in depth, and eight feet from the bottom when the water is less than five feet in depth. The goal-posts shall be furnished by the home team.

(NOTE—Whenever practicable, nets should be attached to the goal-posts.)

3. *Caps and Flags*—One team shall wear dark blue caps and the other team white caps. Each goal-scorer shall be provided with a red flag, and the referee with a dark blue flag, a white flag and a bell.

4. *Field of Play*—The distance between the goals shall not be more than thirty yards, nor less than nineteen yards; the width shall not be more than twenty yards, and shall be the same throughout the field of play. The goal-posts shall be fixed at least one foot from the end of the bath or any obstruction.

5. *Depth*—The water shall not be less than three feet in depth.

6. *Time*—The duration of the match shall be fourteen minutes, divided into two halves. Three minutes shall be allowed at half-time for change of goals. When a goal has been scored, the time from the scoring of the goal to the beginning of play, or time occupied by disputes or fouls, shall not be reckoned as part of the time of play.

7. *Officials*—The officials shall consist of a referee, a timekeeper and two goal-scorers.

8. *Referee*—The referee's duties shall be to start the game, stop all unfair play, decide all cases of dispute, declare fouls, goals, half-time and time, and see that these rules are properly carried out. He may proclaim a foul without its being claimed by any of the competitors, and shall decide upon and declare all goals, whether signified by the goal-scorers or not. The referee's decision is final.

9. *Goal-scorers*—The goal-scorers shall stand at the side near each goal, and when they consider that the ball has passed through the goal, at their respective ends only, they shall signify the same to the referee by means of a red flag. They shall not change ends, and shall keep the score of goals of each team at their respective ends.

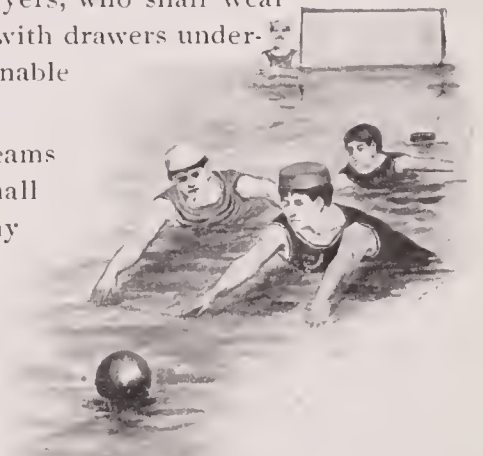
10. *Teams*—Each side shall consist of not more than seven players, who shall wear blue caps and white caps, respectively, and drawers, or costumes with drawers underneath the costumes. In baths, no grease, oil or other objectionable substance shall be rubbed on the body.

11. *Captains*—The captains shall be playing members of the teams they represent; they shall agree upon all preliminaries, and shall toss for choice of goals. If they are unable to agree on any point, the referee shall decide for them.

12. *Starting*—The players shall enter the water and place themselves in line with their respective goals. The referee shall stand in line with the center of the course, and, having ascertained that the captains are ready, shall give the word "Go!" and immediately throw the ball into the water at the center. A goal shall not be scored after starting or restarting until the ball has been handled by an opposing player or by a player on the same side, who shall be within half-distance of the goal attacked. The ball must be handled by more than one player before a goal can be scored.

13. *Scoring*—A goal shall be scored by the entire ball passing beyond the goal-posts and under the crossbar.

14. *Fouls*—It shall be a Foul: (a) to touch the ball with both hands at the same time; (b) to hold to the rail or side during any part of the game; (c) to stand on or touch the bottom during any part of the game, unless for the purpose of resting; (d) to duck an opponent, unless he is holding the ball, or to re-



tain possession of the ball when ducked; (*e*) to jump from the bottom or push from the side (except at starting or restarting) in order to play the ball or duck an opponent; (*f*) to hold, pull back or push off from an opponent; (*g*) to turn on the back and kick at an opponent; (*h*) to assist a player at the start or restart.

(NOTE—Dribbling or striking the ball is not holding, but lifting, carrying, pressing under water, or placing the hand under or over the ball when actually touching, is holding. Dribbling the ball up and through the posts is permissible.)

15. *Penalties*—The penalty for each foul shall be a free throw to the opposing side from the place where the foul occurred. A goal cannot be scored from a free throw unless the ball has been handled by at least one other player.

16. *Wilful Fouls*—If, in the opinion of the referee, a player wilfully commits an ordinary foul, he shall be cautioned for the first offense, and for the second offense the referee shall have the power to order him out of the water until a goal has been scored. It shall be a wilful foul for a player to start before the word "Go," deliberately to waste time, or to take up a position within a yard of his opponents' goal.

17. *Declaring Fouls*—The referee shall declare a foul by blowing his whistle and exhibiting the color of the side to which the free throw is awarded. The player nearest the point at which the foul occurred shall take the throw. The other players shall remain in their respective positions from the time of the blowing of the whistle until the ball has left the hand of the player taking the throw.

18. *Goal-keeper*—The goal-keeper may stand to defend his goal. He must not throw the ball beyond half-distance; the penalty for so doing shall be a free throw to the opposing side from half-distance at either side of the field of play. The goal-keeper is exempt from clauses (*a*), (*c*) and (*e*) in Rule 14, but he may be treated as any other player when in possession of the ball.

19. *Goal Line and Corner-throws*—A player throwing the ball over his own goal line shall concede a free corner-throw to his opponents, but if the attacking side throw the ball over, a free throw shall be given to their opponents' goal-keeper.

(NOTE—In the event of the ball having become dead by being thrown over the goal line, it must not be considered in play until it has left the goal-keeper's hands.)

20. *Out of Play*—Should a player send the ball out of the field of play at either side, it shall be thrown in any direction from the point at which it went out, by one of the opposing side, and shall be considered a free throw.

21. *Declaring Goals, Time, etc.*—The referee shall declare fouls, half-time and time, by whistle; goals, by bell.

22. *Leaving the Water*—A player leaving the water, or sitting or standing on the steps, or sitting on the side of the bath in which the match is being played, except at half-time or by permission of the referee, shall not reënter the game until a goal has been scored, or until half-time. Should a player leave the water, he can only reënter at his own goal line.

ICE HOCKEY

WITH the increase in the number of artificial ice rinks, especially in the larger cities, has come a corresponding increase in the popularity of some of the winter sports that were formerly confined to the extreme northern states, until at the present time ice skating and the games of which it forms a part are well known even in the south. Ice Hockey is, without doubt, the most popular of these games. It should not be confused with ice polo, or with lawn hockey, from which it was developed. Ice polo differs in several important particulars from Ice Hockey, and is very similar to roller polo, from which it is said to have been taken. Lawn hockey, roller polo and ice polo are described in separate articles.

Since it is only in a few of the northern states that the winters are severe enough to furnish ice suitable for Ice Hockey for any considerable length of time, the games are generally played in artificial ice rinks, so that the description to be given here will apply especially to that style of game. As played out of doors, it differs from the indoor game only in a few minor points, which are entirely dependent upon the difference in the location of the playing spaces, or rinks.



THE GAME

A HOCKEY rink is rectangular in shape, and should not be less than 112 feet in length and 58 feet in width. It is bounded on the two longer sides by upright planking, which extends from the surface to a height of two or more feet. A goal is placed in the middle of each end, or goal line, which should not be less than five feet from the end of the ice. Each goal is composed of upright posts firmly fixed in the ice six feet apart, and projecting four feet above the surface. The exact center of the rink is marked in some manner, usually by a small nick or a spot on the ice.

Each player is provided with a hockey stick (Fig. I) which is usually made of second-growth ash, and has a handle that may be of any desired length or diameter. The handle is curved at the lower end so as to form a blade, which must not be more than thirteen inches in length and three inches in width. The lower edge of the blade is flat, so that when placed upon the ice it will touch throughout its length.

Instead of a ball being used, the game is played with a *puck* (Fig. II) which is a solid disk of vulcanized rubber, three inches in diameter and

one inch in thickness. The surface of the puck is smoothly finished, so that the little object slides along the ice with great ease and rapidity.

An Ice Hockey team is composed of seven players, including four *forwards* or *rushers*, who form the attack, a *point*, a *cover-point*, and a *goal-keeper* or *goal-tend*. The three latter give their attention entirely to defensive play, though the cover-point is sometimes called on to assist the forwards.

A good Ice Hockey player must be perfectly at home on skates, and must be able not only to skate rapidly, but to stop, turn and dodge in every conceivable way. He should wear regulation ice-hockey skates, the blades of which are straight on the bottom, and are thus best adapted to making quick stops and turns.



(Fig. II)

The object of the players of each team is to drive the puck between their opponents' goal posts, below the imaginary line between their tops, and to prevent its passage between their own goal posts. The game is divided into two halves, usually of thirty minutes each, with an interval of ten minutes between them for rest. The team scoring the most goals in the two halves wins the game. If the score be a tie at the close of the second half, ten minutes more is allowed for play, and if the score still be a tie at the end of the ten minutes, the game must stand as a tie until decided in another match.

The officials of the game are a referee, two umpires and a timekeeper, who are selected by the captains of the contesting teams. The referee follows the play and settles all disputed points regarding the rules. One of the umpires remains behind either goal throughout the game, and they settle all questions regarding the goals.

The following are the approximate positions in which the different players of each team stand at the beginning of the game, though these are varied according to the judgment of the different captains: The two forwards, who are best at driving the puck, stand near the center of the rink. The other two forwards, who should be the swiftest skaters of the four, stand a short distance back of the center forwards, and a few feet nearer the side lines, one being on either side. The cover-point takes his place near the middle of the rink, and about one-third the distance to his goal behind the forwards. The point stands behind the cover-point and about midway between the latter's position and the goal. The goal-keeper stands between the goal posts.

In beginning the game, the puck is *faced* at the center of the rink between two of the opposing center forwards, that is, it is placed on the center mark and the two men stand facing the puck from opposite sides, each with the blade of his stick touching the side of the puck that is nearest his own goal. When the referee calls "Play!" each strives to gain possession of the puck and to pass it to one of the other forwards of his team. As soon as one of the four gets it, he rushes it toward his opponents' goal, and the other three forwards keep just abreast of him, but spread out across the rink in an irregular line. One forward drives the puck only a short distance when he passes it across to one of the other

forwards, who, in turn, retains possession of it for a few seconds and then passes it to another of the four.

By thus passing the puck from one forward to another, the danger of an opponent gaining possession of it is lessened. After having passed the opposing forwards, the cover-point is the first defense man encountered by the forward who has possession of the puck. He passes it across to one of the other forwards, and in this way, by a succession of quick passes, they endeavor to get it past the cover-point. If they succeed in doing this, they next encounter the point, whom they endeavor to pass in a similar manner. Having succeeded in eluding these two defense men, the advancing forwards next attack the goal, which is defended principally by the goal-keeper. The opposing forwards, cover-point, and point follow the puck as it is rushed down the field, and they are thus present to assist in defending the goal when attacked.

The most exciting part of the game is usually seen when the puck is near one of the goals. Shots and stops follow each other in quick succession, until a goal is either scored or the puck is rushed away from the goal toward the other end of the rink. In the latter event, the defenders become the attacking party, and they endeavor by tactics similar to those first employed, to drive the puck through their opponents' goal.

If the puck goes off the ice behind the goal line, it is brought out by the referee to a point five yards from where it first crossed that line, and is faced in the same manner as at the beginning of the game. If it goes off the ice at the side, it is brought in and faced in a similar manner three yards from the side.

There are two distinct ways of driving the puck from one part of the rink to another, one being called *lifting* and the other, *dribbling*. In the former, the player gives a peculiar twist to his wrist at the moment that he strikes the puck a powerful blow with his stick, so that the little object is lifted clear of the ice and travels sometimes thirty yards or more over the heads of the players. The "lift stroke" is used by a player in driving the ball from the vicinity of his own goal toward that of his opponents. It is also valuable in shooting for goal, since it is much more difficult for the goal-keeper to stop a puck that is traveling swiftly through the air than one that is sliding along the ice.

Dribbling consists in advancing the puck by a succession of short, alternate right and left strokes, which tend to confuse an opponent. This method is employed by a player in running with the puck, which he often does rather than lose possession of it by a long lift.

The sides of the rink are made use of, especially when a player is making a run, by driving the puck against them so that it will carom back toward the middle of the rink at a sharp angle. This assists the runner in getting the puck past an opponent, or in passing it to another of his own side, while at the same time he deceives his opponents as to the direction in which it is to go.

The cover-point and point usually lift the puck when near their own goal, so as to drive it near that of their opponents. These two players

act as *feeders* for the forwards, and, whenever possible, they dribble the ball down the rink and pass it to one of the latter.

The goal-keeper rarely leaves his station between the goal posts, and then only to return the puck toward his opponents' goal, when it has been driven behind the line of and near his own goal by a long lift. In this case, the other players will, of course, be near the point from which the puck was lifted, so it is safe for the goal-keeper to leave his goal for a moment. Even then, however, he signals the point to fall back temporarily into the position of goal-keeper.

In Ice Hockey, a player always holds his stick with both hands, thus lessening the possibility of having it struck from his grasp, while, at the same time, the force and precision of his drives are increased.

One of the most important rules in Ice Hockey is the "off-side" rule, which is similar to that which obtains in football. This rule prevents a player from passing the puck forward to another member of his own team, but admits of his passing it across the rink at right angles to the side lines or back toward his own goal.

A player is off-side when he is nearer his opponents' goal than is the player of his own side who was the last to hit the puck. When off-side he is not allowed to touch the puck or to interfere with an opponent until he is again "on-side." He is put on-side if the puck is touched by an opponent, or if at any time he is nearer to his own goal than the one of his side who has the puck in his possession, or who was the last to play it behind the off-side player. If a player obstructs an opponent or touches the puck when off-side, the game is stopped, and the puck is faced at the point where it was when the off-side rule was violated.

The puck may be advanced only by means of the stick, but it may be stopped by the stick, the skates, or any part of the body. The goal-keeper often intercepts a try-for-goal with his body, and in this way sometimes receives a painful bruise from a swiftly driven puck. He is forbidden by the rules to lie, sit or kneel on the ice, and usually stops the puck with his skates when it is driven along the surface.

The position of goal-keeper is one of the most difficult on an Ice Hockey team, for it is through his good play that shots for goal must be prevented from scoring. When he gains possession of the puck, he seldom has room or opportunity either for a long drive or for a direct pass to one of the other players of his team. Instead, he usually drives it toward one of the side lines, thus giving his team an opportunity of getting it, and preventing another try-for-goal until the puck can be worked back to a favorable position again.

There are many opportunities for fouls and tricky plays if the player is so inclined, and both the referee and the umpires should be constantly on the watch to detect and punish all irregularities. The rules forbid a player to raise his stick above the level of his shoulders, or to trip, kick, push or otherwise play with unnecessary roughness, under penalty of disqualification. The referee may rule a disqualified player off the ice for such time as he may think advisable.

Ice Hockey is a game that calls for constant exertion, especially on the part of the forwards, and one who plays it should be in the best physical condition and should have an exceptional amount of endurance and pluck. A beginner should play one of the defense positions and become well hardened before trying to qualify as a forward.

Following are the rules of Ice Hockey, as adopted by the Amateur Hockey League of New York:—

RULES

1. *Team*—A team shall be composed of seven players, who shall be bona-fide members of the club they represent.

2. *Rink*—The rink shall be at least one hundred and twelve feet by fifty-eight feet.

3. *Goals*—A goal shall be placed in the middle of each goal line. It shall be composed of two upright posts, four feet in height, placed six feet apart, and at least five feet from the end of the ice. The goal posts shall be firmly fixed. In the event of a goal post being displaced or broken, the referee shall blow his whistle and the game shall not proceed until the goal is replaced.

4. *Puck*—The puck shall be "faced" by being placed between the sticks of two opponents, each of whom strives to obtain possession of it when the referee calls "Play!"

5. *Match*—Two halves of twenty minutes each, exclusive of stoppages, with an intermission of ten minutes between them, shall be the time allowed for a game. The game shall be won by the team scoring the greater number of goals during that time. In case of a tie after playing the specified time, play will continue for ten minutes more, when, in the event of the score still being even, another game will be played at a time and place mutually agreed upon, such time to be prior to the next scheduled game. Goals shall be changed after each half.

6. *Change of Players*—No change of players shall be made after a game has begun, except by reason of accident or injury during the game. Should any player meet with an accident during a game, and be compelled to leave the ice, his side shall have the privilege of putting on a spare man from the reserves to equalize the teams. In the event of any dispute between the captains as to such player's fitness to continue the game, the matter shall at once be decided by the referee.

7. *Stoppages*—Should a game be temporarily stopped by the infringement of any of the rules, the captain of the opposing team may claim the right to have the puck taken back and faced at the spot from which it was last played before such infringement occurred.

8. *Off-side*—When a player hits the puck, any one of the same side who at the moment of such hitting is nearer the opponents' goal line is off-side, and may not touch the puck himself, or in any way whatever prevent any other player from doing so, until the puck has been played either by an opponent or by one of his own side who is nearer the opponents' goal than the off-side player. A player must always be on his own side of the puck.

9. *Playing, Charging, etc.*—The puck may be stopped, but not carried or played, by any part of the body. No player shall raise his stick above the shoulder. Charging from behind, tripping, collaring, kicking or cross-checking shall not be

allowed, and the referee shall rule off the ice for such time as he think proper a player who, in his opinion, has deliberately violated the above rule.

10. *Puck Off Ice*—When the puck goes off the ice behind the goal line, or a foul occurs behind the goal line, the puck shall be brought out by the referee from the point at which it left the ice to a point five yards in front of and at right angles to the goal line, and there faced. When the puck goes off the ice at the side, it shall be similarly faced three yards from the side.

11. *Goal-keeper*—The goal-keeper during play must not lie, kneel or sit upon the ice, but must maintain a standing position.

12. *Score*—A goal shall be scored when the puck has passed between the goal posts from in front, and below an imaginary line connecting the tops of the posts.

13. *Sticks*—Hockey sticks shall be made of wood, with no harder substance attached thereto, and shall not be more than three inches in width at any point.

14. *Puck*—The puck must be made of vulcanized rubber, one inch in thickness and three inches in diameter.

15. *Officials*—The captains of the contesting teams shall agree upon a referee, a timekeeper and two umpires. One of the latter shall be stationed behind either goal, which positions shall not be changed during a game, except by mutual consent of the captains.

16. *Referee*—All disputes on the ice shall be settled by the referee, and his decision shall be final.

17. *Umpires*—All questions as to goals shall be settled by the umpires, and their decisions shall be final.

FENCING

IN THE opinion of many of the best fencers of the present day, the French school of Fencing is far superior to either the Italian or the German. Each of these, of course, has its advantages, but in this country the advocates of the French system far outnumber those of the two others. The Italian masters still cling to the long foil with a bell guard, and the Germans give preference to the saber, but the French, in accordance with the national character, have adopted a lighter and more supple weapon. In the following brief dissertation on the art of Fencing, reference will be made only to the French school.

It may be said of Fencing, that in no other pastime is the interest so intense, and in no other is the expenditure of muscular and mental exertion so nicely proportioned. The judgment, the eye, the nerves and the muscles—all are trained; suppleness, grace and ease of movement are acquired, and habits of courtesy and fairness are inculcated. Though in every sense a "gentleman's sport," fencing, unlike many of the other pastimes to which that term has been applied, is not beyond the reach of the poor. The outfit need not be expen-

sive, and even without the aid of a professional instructor, much may be learned about the art by practising according to the instructions contained in a good manual on the subject.

THE OUTFIT

IN SELECTING foils, choose a pair that seem to be of the right weight for your strength; it will be best for the beginner to learn with very light weapons. See that each balances, when held with the blade supported by the finger an inch from the hilt. If not provided with good-sized metal buttons, the point of the foil should be wound with good, strong, waxed cord, so as to form a button nearly half an inch in diameter; this is a desirable precaution even when metal buttons are provided. The handle should be curved, and bound with twine. The masks should be strong and serviceable, and the wire should be finely meshed. As a matter of precaution against what might be serious injury, cheaply-made, wide-meshed masks should be avoided.

Ordinary, rubber-soled tennis shoes are often worn by amateur fencers, but the regulation French fencing shoes, which have broad, leather soles, are the best. The principal requirement is that the shoes shall not slip. Jackets should be made of leather, or other strong material, and well padded in front. The gloves should be loose, but not ungainly, and should be gauntlet-shaped, with stiff, patent-leather uppers.

GENERAL INSTRUCTIONS

WHAT may be regarded as the first rule of Fencing should be strictly regarded by both beginners and experts: NEVER FENCE WITHOUT A MASK. To do so is always dangerous, and at once stamps a fencer as either ignorant or foolhardy.

There is no sport in which FORM counts more than in fencing, and for this reason, plenty of time and careful practice should be devoted to the mastery of the first principles, such as the proper holding of the foil, the position, etc. The fingers do all of the real work of foil play, the arm performing a subordinate part, and for this reason the manner of holding the foil is most important. The concave of the handle should rest in the palm of the hand, and the thumb should be stretched along the convex, with the forefinger slightly in advance of the thumb. The foil



(Fig. 1.)

must be held lightly, but firmly, so that the point can be moved by simply moving the fingers. This position, which is the one generally employed,



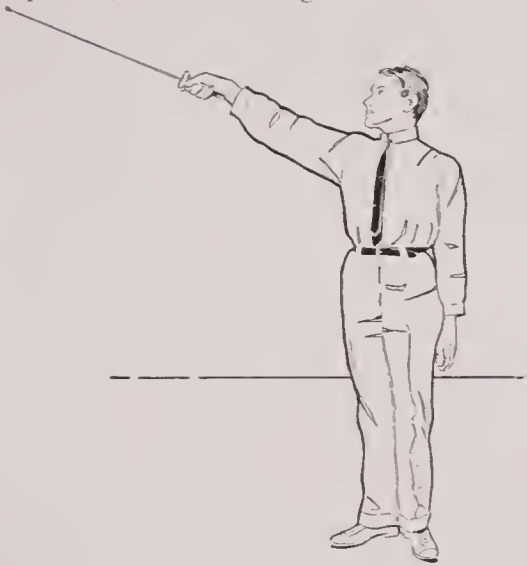
(Fig. 2.)

and which may be recommended to the almost exclusive use of beginners, is called *supination*. (Fig. 1.) The position called *pronation* is assumed by reversing the hand so that the palm is turned downward. (Fig. 2.)

When preparing to get on guard, stand at *attention*, with the feet at right angles to each other, the head erect, the body erect and firm on the hips, without stiffness, and the shoulders thrown well back. The right arm holding the foil should be extended downward in front, so that the button on the point is about four inches from the floor; the left arm should hang naturally by the side. The position taken should be such that the right foot will point toward your opponent. Six movements are necessary in order to come on guard from the position of attention:—

1. Raise the right arm and the foil and extend them toward the adversary so that they shall form one continuous straight line, with the hand at the height of the eyes. (Fig. 3.)

2. Lower the foil naturally toward the left side, reverse the right hand, and when it is opposite the left hip place the back of the left hand on the blade, palm upward, with the fingers toward the guard and touching it.



(Fig. 3.)



(Fig. 4.)

3. Without altering the position of the hands, raise the arms above the head until they are fully extended, keeping the foil horizontal and as close to the body as possible as it rises.

4. Separate the arms, and carry the right hand forward and down to the level of the right breast, and about eight inches from it; the point should be at the height of the eyes, the forearm bent, the elbow in line with the right hip, and three inches directly in front of it. At the same time let the left arm fall back to a curved position with the hand slightly higher than the head.

5. Bend both legs, separating them at the knees without moving the feet. Keep the body well balanced on the hips.

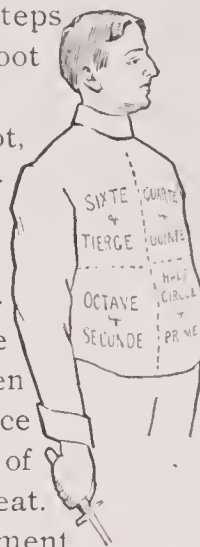
6. Shift the weight of the body entirely to the left leg, advance the right foot about two feet to the front and let it fall in a direct line from the left heel to your opponent. (Fig. 4.)

Having practised coming on guard until thoroughly acquainted with the different positions, the beginner should next learn to advance and retreat. To advance when on guard, take a short step (about twelve inches) forward with the right foot and let the left foot follow the same distance

directly after it, being careful not to alter the position of any other part of the body, or the foil. Practise taking several of these steps as quickly and easily as possible, and without raising either foot more than an inch from the floor.

To retreat, take a short step backward with the left foot, and follow it quickly with the right. Observe the same precautions about alteration of position and the height to which the feet are raised.

Appels, or *calls*, are given as an exercise to test the equilibrium of the body, and the execution requires that the weight be supported on the left leg. To make an *appel* when on guard, strike the ground lightly with the right foot twice in succession, without altering the position of any other part of the body. An *appel* should always accompany a step in retreat.



The beginner should now learn the different lines of engagement, which may readily be understood by supposing the front of the op-

ponent's jacket to be divided into four spaces. (Fig. 5.) These indicate the respective points toward which the foil is directed in different attacks. The two upper spaces are called "high lines," and the two lower, "low lines."

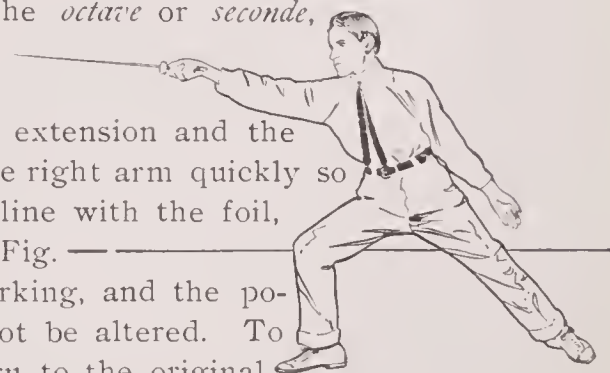
The first high line, called the line of *sixte*, is the upper right-hand quarter of the body. An attack made in this line is called an *attack in sixte*, and the parry is called a *parry of sixte*, if the hand is in supination, or a *parry of tierce* if in pronation. The other high line, called the line of *quarte*, is the upper left-hand quarter of the body. An attack in this line is called

an *attack in quarte*, and the parry is called a *parry of quarte*, if the hand is in supination, or a *parry of quinte* if in pronation. The low lines, as indicated in the figure, are called, respectively, the *octave* or *seconde*, and the *half circle* or *prime*, according to the position of the hand.



(Fig. 6).

A full *lunge* is made in two movements—the extension and the lunge proper. To execute the former, extend the right arm quickly so that the arm shall be straight and shall form a line with the foil, the hand being at the height of the shoulder. (Fig. 6.) The movement should be made without jerking, and the position of the other parts of the body should not be altered. To return to guard, simply bend the arm and return to the original position.



(Fig. 7).

The beginner should practise the movement of extension until able to execute it quickly and easily, since on its perfect execution largely depends the success of the lunge. The lunge is executed as follows (Fig. 7.): Having extended the arm, quickly straighten the left leg, and at the same time carry the right foot as far forward as is possible without losing your

equilibrium, the foot grazing the floor as it advances and being planted firmly, with one appel. The left foot should remain in place, while the right should be at right angles to the left, with the right lower leg and thigh nearly or quite at right angles.

As the body moves forward, let the left arm fall straight to the rear until the hand is about three inches from the left leg, with the fingers extended and joined. The body should be held erect, the head thrown back, and the eyes fixed on the point of the foil. To return on guard, bend the left leg and throw the body back to its original position.

The movements of the lunge should first be executed slowly and separately, and afterward should be accelerated and combined so as to appear to form one movement. This should be practised many times each day until accuracy and precision are attained, and in this practice it is best to direct the point of the foil toward a leather target, or other similar object, secured against the wall at the height of a man's breast.

Special care should be taken to guard against the mistake, common to beginners, of throwing the right leg and body forward before extending the arm. You should also be careful not to step out too far with the right foot in lunging, and to keep the left foot flat on the floor.

The movement known as the *gain* adds to the length of the lunge and is especially valuable to short fencers. It consists in bringing the left foot slightly nearer the right when on guard, without otherwise altering the position of any part of the body. The movement should be made as stealthily as possible, and care should be taken to see that the body does not sway when its weight is shifted to the right leg.

The *recover* is the movement necessary to come from the position of guard to that of attention. It may be accomplished either by *closing to the front* or *closing to the rear*. In executing the former, the right arm is extended, the left hand lowered, and the legs straightened by drawing the heel of the left foot up against the heel of the right. In closing to the rear the only difference is that the right foot is drawn back against the left.

A *bout* is usually preceded by either a *salute* or a *grand salute*, both of which will be described further on. The two fencers then assume the position of guard simultaneously, standing so that the blades of their foils shall touch lightly, and at such a distance apart that each will be able to reach the other easily by a lunge. This distance, of course, varies with different fencers, as it depends largely upon the length of the foils used and the contestants' reach, and it can best be determined by trial.

The foils may first be engaged either in *sixte* or in *quarte*. If in the former, the right sides of the blades are touching; if in the latter, the left sides. The position of the foils should be as explained under *coming on guard* and the hand and point should be held so that the body is *covered*, or protected, in the line of the engagement; that is, so that the opponent could not touch your body with his point by a simple, straight lunge. This precaution should never be neglected, for unless particular attention is paid to it, beginners are apt to leave themselves *uncovered*, and thus are easily touched.

Engagement, or the *disengage*, is the act of crossing blades with your opponent in the opposite line to that in which you were first engaged. Thus, if at first engaged in *sixte*, you may change to *quarte* by executing an engagement. This is done by lowering your point and passing it under your opponent's blade to the opposite side, by moving the fingers only. Care must be taken that you are covered in the new line, and that your point is in line with the opponent's eyes.

As has been mentioned before, fingering is the most important part of foil play, and the beginner should often practise changing the position of the foil by the action of the fingers alone. The following exercise is recommended by a well-known fencer as calculated to promote accuracy and delicacy of touch:—

“Being on guard, throw the point of your foil toward the right by relaxing the grip of the last two fingers, but without moving the hand; then, by replacing these fingers, bring the blade back to its original position, at the same time giving your adversary's blade a sharp, but light, dry *beat*, or tap. This will have a tendency, if he hold his foil as lightly as he should, to throw his point off to the right, whereupon he executes the same beat upon your blade, and so on alternately. This capital exercise should be practised by two beginners for at least fifty or a hundred beats at a time, the greatest care being taken to use only the fingers in moving the foil.”

In order to achieve your object of placing your point upon your opponent's jacket between the belt and the collar, you may attack in either of two ways,—by a *primary attack*, consisting of a straight thrust, a feint and thrust, or some other maneuver in which you, yourself, take the initiative, or by a *secondary attack*, in which you wait for your opponent to attack, and then take advantage of an opening to return the attack. In carrying out any of these attacks the following rules should be kept constantly in mind:—

1. Straighten the arm before lunging, for a thrust made with a bent arm is almost sure to throw the point wide, and besides is very bad form.

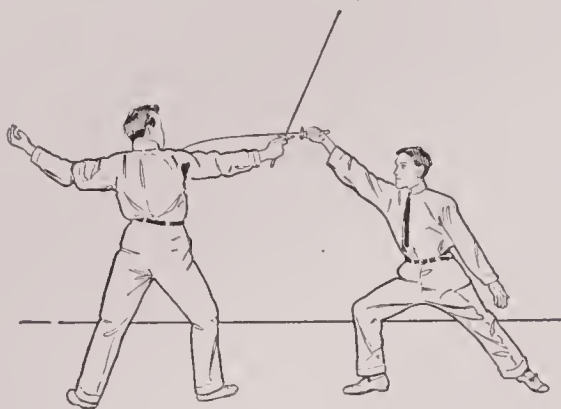
2. Keep the hand up and the point down, to avoid leaving yourself open for a return attack, and to insure your foil bending up, instead of down, if you touch your opponent.

3. Always *oppose* toward your opponent's foil; that is, when you lunge, move the hand and foil into such a position that you are covered, and the opponent cannot reach you by a simple straight thrust. Thus, if when engaged in *tierce*, you drop your point and lunge at your opponent's right breast, you should carry your hand slightly to the right, as his blade is not on the right side of yours. If, however, you carry your hand to the left, you leave your whole body exposed, and when your opponent parries he will be able to touch you by simply straightening his arm.

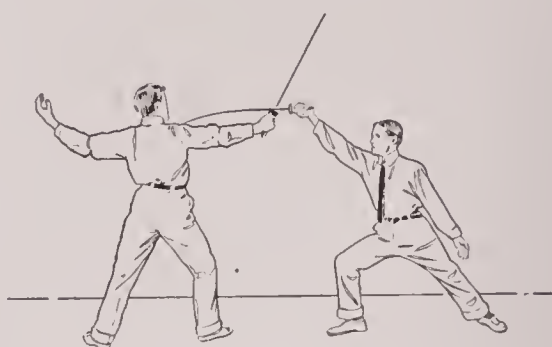
THE ATTACKS

“*Primary attacks*” are divided into *simple*, *feint* and *force* attacks. “Simple” attacks, which are made with one movement, are four in number, and consist of the *direct lunge*, the *disengage*, the *counter-disengage* and the “*cut-over*.” The direct lunge, as has been explained, is used when the

adversary leaves himself open in the line in which he is engaged. A simple straight thrust may also be used on a feint by the opponent, or at the



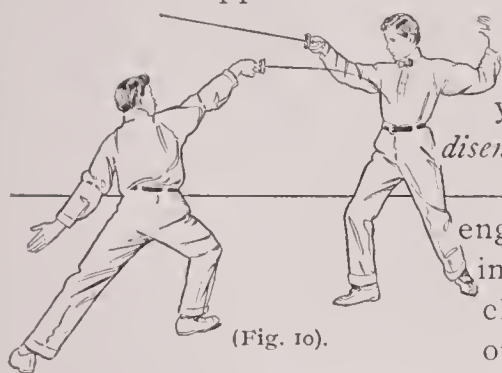
(Fig. 8).



(Fig. 9).

beginning of his attack, but it is then called a "stop-thrust," or "time-thrust," and is really a secondary attack.

The disengage, which has been described, consists in lunging in the line opposite that in which you are engaged. (Figs. 8, 9 and 10.) The disengage is often made use of when an opponent presses against your blade, either purposely, in order to cause you to leave yourself open, or unintentionally. A counter-



(Fig. 10).

disengage consists of a circular motion, followed by a quick lunge the instant the opponent changes the line of engagement. The effect of this maneuver is always a lunge in the same line in which you were engaged before a change was made. Thus, if when engaged in *sixte* your opponent makes a disengage, drop your point, and, following his blade around by a circular movement, lunge in *sixte*, being careful to oppose to the right. Two counter-disengages together are called a "double-change."



(Fig. 11.)



(Fig. 12.)

The "cut-over," or *coupe*, which is used to attack the adversary in the high lines, is really a form of *disengage*. It is executed by passing your

point over, never under, your adversary's blade, and lunging in the new line thus gained. (Figs. 11 and 12.)

The movement of raising the point should be made by using the fingers only, and not by altering the position of the arm.

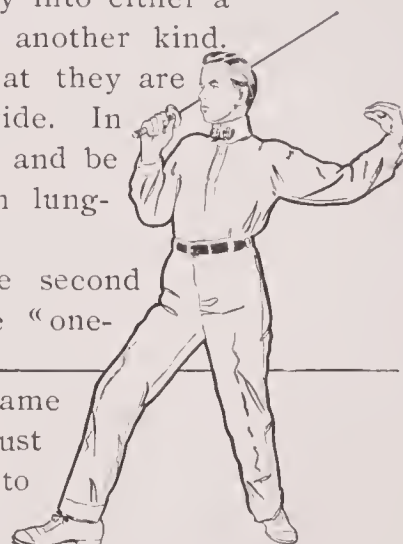
The cut-over is difficult to parry, and is a dangerous attack when quickly and strongly executed. It can be changed instantly into either a parry or some other maneuver culminating in an attack of another kind. (Figs. 13 and 14.)

The great danger with beginners is that they are likely to deliver a slap blow, and thus throw the point wide. In order to avoid this, practise slowly at first, and be careful to keep the hand well up when lunging.

The "feint" attacks, which form the second group of primary attacks, consist of the "one-two," the "one-two-three," etc., and

the *double*. A *feint* which is really the same movement as an extension, is a false thrust made to deceive the adversary into

supposing it a real one. The arm is extended as in the ordinary lunge, but no



(Fig. 13).

other part of the body is moved, except, perhaps, a slight advance of the right foot. (Figs. 15, 16 and 17.) In executing a feint, the arm should be stretched well out and the point directed full at the adversary's breast, as otherwise he is not likely to be deceived by the movement. The foregoing description refers to the simple feint.

The "one-two" is a feint movement executed by making a false attack in one line and lunging in the original line of engagement. Thus, if you are engaged in *sixte*, drop your point under that of your opponent and extend the arm as if to lunge in *quarte*, but instead of completing the lunge, move your point back again the instant he parries, and lunge in *sixte*. The combinations possible for the "one-two" are numerous, as you may feint in any line and lunge in almost any other.

When proficient in the ordinary feints, you may attempt a feint or cut-over as a variation, though this is a difficult movement to execute. The "one-two-three" consists of two feints followed by a final lunge, really three movements. It is made by extending the arm and dropping the point under the opponent's blade to the opposite side, and under and back again to the original side on his parry. Thus, if engaged in *sixte*, feint first in *quarte*, then in *sixte*, and lunge in *quarte*. As in all feints, the movements should be as rapid as possible, and the foil play should be narrow.

The "double" is a combination of the disengage and the counter-disengage. It is impossible to execute the "one-two" if the opponent parries by a counter or circular parry (see description of parries), but you may yourself describe a circle with your point and obtain an opening for a lunge. Thus, if when engaged in *quarte* you feint in *tierce* and are met by the

counter-of-quarte parry, simply raise your point, circle around the opponent's blade again and lunge in *sixte*. This is a very useful form of attack, and if skilfully done, it may often be used to advantage. To check the double, execute a counter-disengage, followed by a simple parry; this will be found a good defense under almost all circumstances.

It will be seen from the foregoing that feint attacks are executed by avoiding the adversary's blade. "Force" attacks, on the contrary, depend upon its displacement. These consist of the *beat*, the *press*, the *glide* and the *bind*. The "beat," to which a slight reference has been

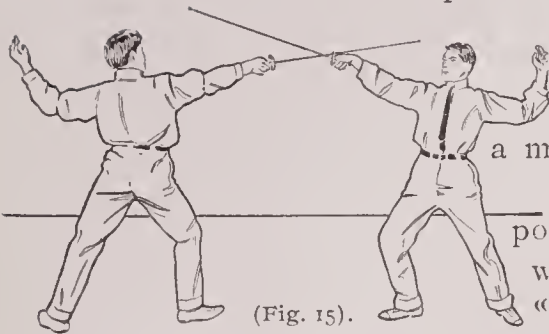
made, is a quick, sharp blow of your blade upon that of your opponent, for the purpose of making an opening for a lunge, which should immediately follow the beat.

Care must be taken that the stroke is made by a movement of the fingers only, and that it is sharp but "dry," that is, that your point returns to its original position, instead of following the opponent's blade as would be the case in a "push" blow. Since your

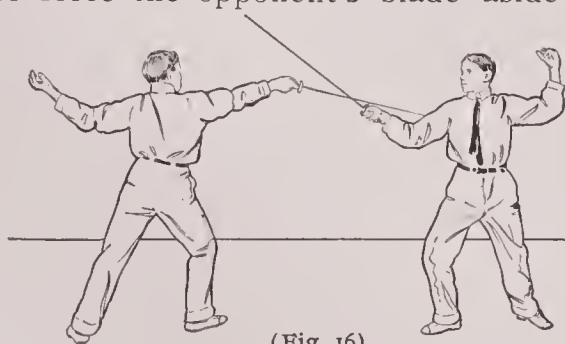
"beat" is often followed by a similar movement on the part of your adversary, it is well to execute a disengage on his return beat. Similarly, a beat may be met with a disengage. A *false beat* is a light blow of a similar kind made for the purpose of worrying the opponent or of drawing his attack.

In executing the *press*, which is similar to the beat, instead of striking the adversary's blade, give it a sudden pressure, just heavy enough to force it aside, and thus make an opening for your lunge. An extreme form of the "press," known as the *traverse*, is made by continuing the pressure and sliding your blade along the opponent's blade until you can force your point for a lunge.

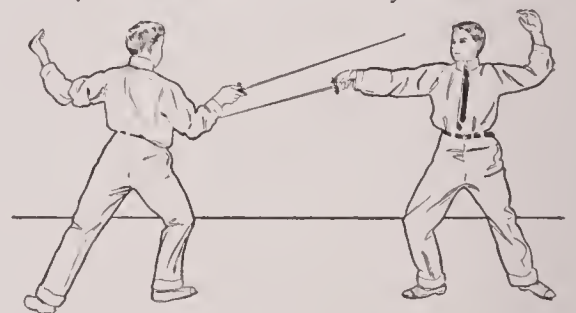
The *glide* is really a light kind of traverse, and is used not so much to force the opponent's blade aside as to deceive him as to your inten-



(Fig. 15).



(Fig. 16).



(Fig. 17).

tion, so as gradually to slide your point toward his hilt without his being aware that you are doing so. You thus secure a good opportunity for a disengage. The *bind* is executed by passing your point over the blade of your opponent and pressing it down into the opposite low line. Your forte, or thicker half of the blade, should be against his foible, or thinner half. The movement of forcing your opponent's blade from high *quarte* to low *sixte* is called *flanconade*. The bind is seldom used, and is not to be recommended to beginners, as it is difficult to execute and very risky.

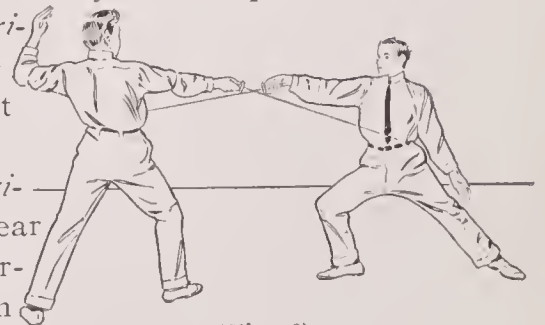
"Secondary attacks," as has been explained, follow some movement on the part of the adversary. They may be made when he begins to attack you, during his attack, or after it if it fails. The first of these, which is usually referred to as an "attack on the adversary's preparation" is made at the instant that you discover your opponent's intention to attack. Thus, instead of waiting for his direct lunge or disengage, you yourself take the initiative, and disengage, or execute some other movement preparatory to a lunge. Suppose, for instance, that he prefaces his attack with a "beat." Avoid the blow by dropping your point under his, and follow the movement with a lunge.

All these attacks on the adversary's preparation depend largely upon a fencer's judgment and the instinct which comes after long practice. The old fencer acquires a faculty of feeling by the touch of his adversary's blade what the latter is about to do. The foregoing attacks are really feasible only when the adversary's preparatory movements are slow enough to permit you to take advantage of them. If, however, you are slow in executing the attack, the result will be that both will lunge at once, and, as his attack was begun first, the advantage will be given to him, if he touches you; for the rules provide that he who is attacked must parry. Thus, if X lunges at Y and hits him fairly, and Y, instead of parrying, simply straightens his arm and hits X fairly, the point is given to X, for Y should have parried. On the other hand, if X's point goes wide, and Y touches, the point is given to Y.

Attacks made during the adversary's attack, which are known as *attacks on the development*, are undertaken in the midst of an attack upon you, and are usually *time attacks*. In the manner of their execution they differ from preparation attacks only in being begun a little later. One of the most common and successful of the attacks on the development is the "bind," which is made easier by the fact that the opponent is closer to you than when he is on guard.

Attacks on the completion, which are called *ripostes*, are undertaken when the adversary has attacked but failed to hit you. Thus, if when engaged in *quarte* he attacks you with the "one-two," lunging in *quarte*, and you parry successfully, the instant his point passes, straighten your arm and touch him before he has time to recover. (Fig. 18.) Naturally, as he is stretched forward for the lunge, his recovery will require some time, and if your parry is narrow and your *riposte* accurate, he is almost sure to be touched. A rule which is observed by all expert fencers is never to omit to *riposte* after the adversary's attack, if unsuccessful.

Care should be taken not to move the body in *riposting*, as your adversary is at this time very near you, and if you move forward you are likely to overreach, thus causing your *riposte* to fly wide. As soon as your opponent discovers that you *riposte* whenever his attack is unsuccessful, he is likely to become cautious, and then he will not lunge unless you give him a good opening.



(Fig. 18)

In case you are opposed to a fencer who always *ripostes*, keep your hand well up and strongly opposed on all lunges. If your lunge is parried and your adversary *ripostes*, recover as quickly as possible, at the same time parrying the *riposte*, and quickly lunge again; or, if you do not lunge, make a return *riposte*. This latter maneuver is known as a *counter-riposte*. A *riposte* may frequently be stopped by executing a quick *counter-parry* while getting back on guard after an unsuccessful lunge.

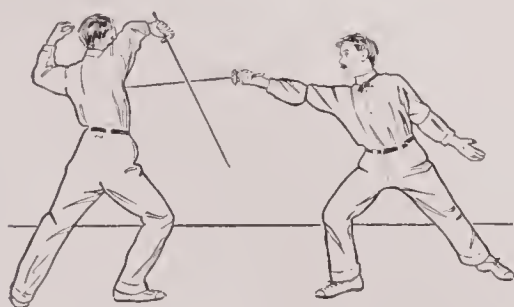
False attacks are not feints, but broader movements, intended to draw the opponent's attack, or sometimes to enable you to discover which is his favorite parry. Nearly all fencers become used to a particular style of parry, and in your first bout with an opponent it is a good plan to *take his measure* by means of a false attack.

There are many kinds of false attacks, such as straightening the arm, taking a step in advance, changing the line of engagement, or executing any other maneuver that will lead the adversary to believe you are attacking him. The faculty of distinguishing between a true and a false attack comes only with practice, and is largely a matter of judgment.

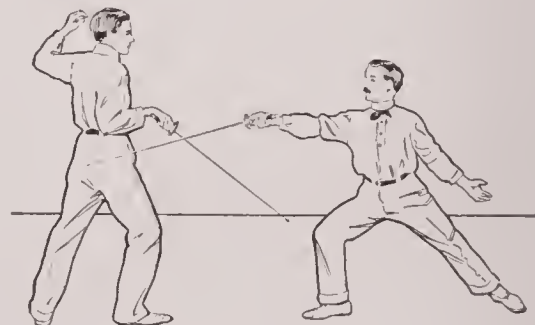
THE PARRIES

THERE are two kinds of *parries*, known as the *simple parry*, in which the attack is opposed by a single movement, and the *counter-parry* in which a circle or series of circles is described with the point of the foil; the direction of these circles may be either to the right or to the left, and the point of the foil returns to its original position. The simple parries consist of the *prime*, *seconde*, *tierce*, *quarte*, *quinte*, *septime* or *half-circle*, and *octave*.

The *parry of prime* is executed as follows: Being on guard, turn the hand nails downward, at the same time moving it to a position opposite the left eye, and keeping the point directed toward the adversary's knee so as to receive the foible of his foil upon the forte of your own. (Fig. 19.) This parry is quickly executed, and is usually effective, since it covers all of the left side of the body; but it is somewhat difficult to execute, and the simpler parry of *quarte* is usually preferred to it.



(Fig. 19).

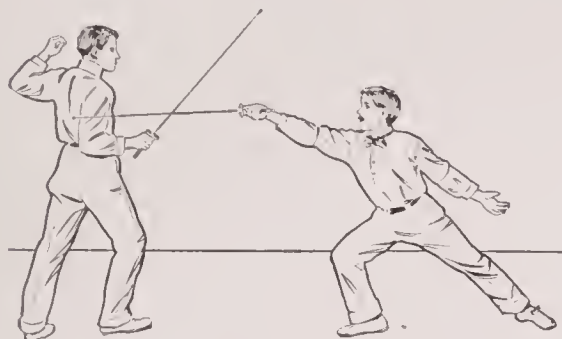


(Fig. 20).

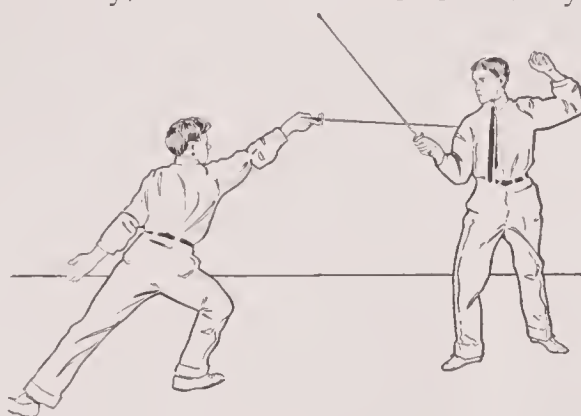
The *parry of seconde* is used to guard a lunge made by your adversary in the right lower line. It is executed by a slight, but very quick, downward movement of the hand, which is turned nails downward. (Fig. 20.)

The parry should be narrow, the hand being moved only enough to turn the attacking blade aside.

The *parry of tierce* is used to guard a thrust in the right upper line. It is executed by turning the hand nails downward and moving the hand slightly to the right, just enough to throw aside the attacking blade. (Fig. 21.) In making all parries, care should be taken that the point of the foil is kept directed toward the adversary, and is not allowed to fly out of position.



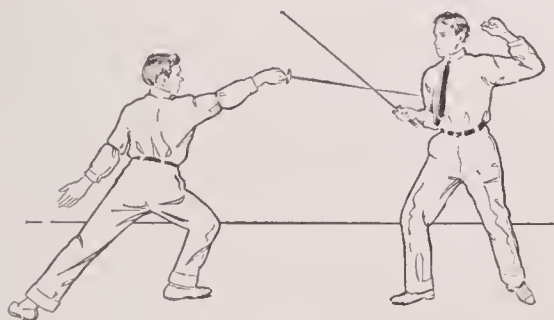
(Fig. 21.)



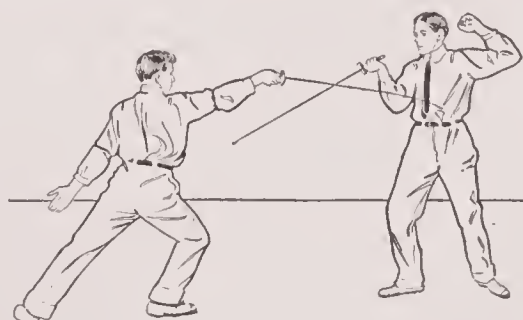
(Fig. 22.)

The *parry of quarte* is very important and is perhaps used more than any of the others. It is used to guard a thrust at the left side of the body, particularly in the high line. The hand is moved to the left until your forte encounters the foible of the adversary's foil and throws it aside. The thumb should be inclined slightly to the right, and, as explained before, the point should be kept directed toward the opponent. (Fig. 22.)

The *parry of quinte*, which is employed to guard a thrust in the left lower line, is executed by dropping the hand slightly toward the left from the position of *quarte* and changing the direction of the adversary's blade



(Fig. 23.)



(Fig. 24.)

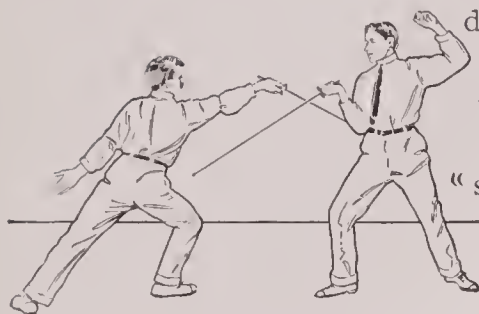
by a light, dry tap. In executing this parry, the hand may be in the position either of supination or of pronation, though the latter is the more common.

The *parry of sixte* is used as a guard for a lunge in the right upper line. It is executed by moving the hand far enough to the right to turn aside the adversary's blade. This parry is next in importance to that of *quarte*, and should be carefully learned. (Fig. 23.)

The *parry of septime*, like that of *quinte*, is employed to guard a lunge in the left lower line. It is executed by describing with the point of the foil a small semicircle downward and to the left, the hand at the same

time being moved to the left just enough to throw aside the attacking blade. (Fig. 24.)

The *parry of octave* is used to guard a lunge in the right lower line. It is executed by describing with the point of the foil a small semicircle downward toward the right, the hand at the same time being moved to the right just enough to oppose the opponent's blade. (Fig. 25.)



(Fig. 25.)

The beginner should be careful in executing all these "simple parries" to make them as narrow as is consistent with effectiveness. As has been said before, the point of the foil should be kept nearly or quite immovable, and the parry should be made entirely by the movement of the hand. But, at the same time, the movements of the hand should also be narrow, so as to avoid uncovering the body and giving the adversary opportunity for a return attack.

The foregoing simple parries are theoretically sufficient to guard any kind of lunge, but, practically, a counter-parry is often better, if not absolutely necessary. Thus, if the adversary feint at your left side, and dropping his point under your blade, lunges at the right, a counter-parry would be more efficacious than any form of simple parry.

Rondelle, the well-known authority on the foil and saber, defines the counter-parry as follows: "The counter is a circular parry, intended to seek the adverse blade in whatever quarter it may threaten you, and to direct it to the opposite quarter or line. In a counter, the point of your foil describes a small but complete circle, while your hand remains stationary." Each of the simple parries has its counter, which is made with the hand in the same position, and on the same side of the body, as in the case of the simple parry. It is unnecessary to describe all of these counter-parries, since they are so nearly alike, and reference will be made only to the execution of the four most important.

The *counter of quarte* is executed as follows: Being on guard in *quarte*, if the opponent thrust in *sixte*, follow his blade around by describing a small circle with the point of your foil, downward and to the right, then up over to the left, and back again to the same position in which your hand and foil were when you began the movement. (Fig. 26.) If the parry is executed quickly and smoothly enough to be successful, you will still be engaged with the adversary in *quarte*, his blade having been caught and forced across your body out of the line in which he thrust. In this parry, as in all of the counter-parries, the circle should be made as narrow as possible.

The *counter of septime*, or half circle, is executed as follows: Being on guard in *septime*, when your adversary thrusts, make the circular parry by raising your point over his to the right and passing it back, under, to the left. (Fig. 27.)

To execute the *counter of sixte*, being engaged in *sixte*, if your adversary drop his point and thrust in high *quarte*, lower your point and describe a small circle from right to left. (Fig. 28.)

To execute the *counter of octave*, being on guard in *octave*, if your adversary thrust in low *quarte*, describe a small circle, beginning the movement from right to left. (Fig. 29.)

All of the parries, with the possible exception of the prime, which is little used, should be practiced continually, both in order to become proficient in their execution and to toughen and strengthen the wrist. In addition to the foregoing, there are numerous complex parries, which,



(Fig. 26.)



(Fig. 27.)



(Fig. 28.)

however, are really only combinations of two or more simple parries, and need not be described here. Their use depends largely on the fencer's judgment and practice to enable him to select those which he finds most effective under certain conditions.

Reference was made at the beginning of this article to the fact that a bout is always prefaced with either a simple salute or a grand salute. A simple salute is executed by standing at the position of attention and carrying the right hand to a position directly in front of the throat, the blade being held vertically before the face, the hilt near the chin and the knuckles outward, then lowering and extending the arm, knuckles down, until the point is about four inches from the floor, and a little to the right of the body.

A formal bout is usually preceded by the grand salute, which is executed both as a matter of courtesy and in order to prepare the combatants for their work and to give them confidence. It will be difficult for the beginner to become proficient in this maneuver without personal instruction, but a clear understanding of it may be obtained from the following description by a prominent English fencer:—

“The two opponents come forward equipped in all respects for the assault, with the exception of the masks, which they carry in the left hand, and place on the ground beside them on the left.

“Then, standing face to face, foil in hand, just out of lunging range of the one with the longer reach, the two opponents assume the preliminary position, and thence proceed to the position of guard, engaging their blades in *quarte*, foible to foible, before advancing the right foot.



(Fig. 29.)

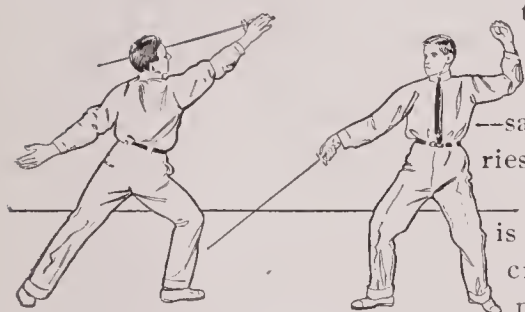
"Thereupon, one of the two, either the more honorable or the one chosen by agreement beforehand, proceeds to measure the distance between himself and his opponent, while the other goes back to the preliminary position in order to leave the way open.

"The one who is selected to open the attack takes distance in the following manner: First, he comes to the upright position, then straightens his arm with the hand well raised and in 'supination,' and then lunges out so as to bring his point close up to the defender's breast, but without touching it.

"After taking distance, the assailant resumes the upright position and draws the hilt of his foil close to and on a level with his mouth, the point directed straight upward. The defender, watching his actions, lowers the hilt of his foil so as to take up a like position at the same time.

"Then both together proceed to salute, first to the left, then to the right as follows: They begin by showing the *parry of quarte*, carrying hand, arm and point farther over to the left than in the ordinary way of forming the parry, so as to emphasize the movement; then, on the return from the parry, they bring the hand back on a level with the mouth, and, changing the hand into 'pronation' by a turn of the wrist, show the *parry of tierce* in a like pronounced manner.

"After this both of the opponents go through the movements necessary to bring them from the 'pronation' position to that of guard, as before, crossing the blades before advancing the right foot. The assailant then proceeds to execute a series of *disengages*—say four—to which the defender offers the corresponding parries.

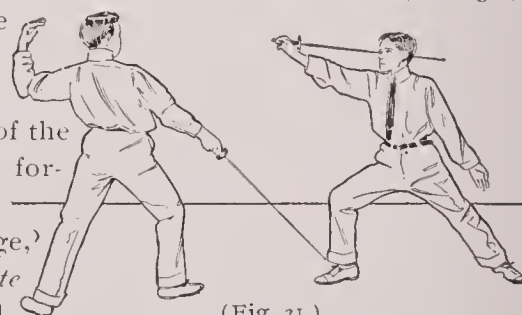


(Fig. 30.)

"Thus the assailant disengages into *sixte*, and, as the arm is straightened in that line, the defender parries *tierce* with a crisp tap, taking care not to harsh his blade. On feeling the parry, the assailant smartly reverses his foil, turning the point toward, and so as to pass close beside, his left ear, the hilt resting on the back of the hand, and the grip being held by the thumb and first finger only, while the other fingers are ranged beneath the first; he then lunges in with the pommel directed toward the defender, whom he keeps in view by carrying his hand far enough to the left to leave an opening between arm and blade. (Fig. 30.)

"In order to make way for the 'lunge,' the defender drops his point from the *parry of tierce* so as to show the *parry of octave*, only carrying the point far enough across the body of the assailant to avoid hitting him on the move forward.

"On the assailant's recovery from the 'lunge,' the defender executes the engagement of *sixte* or *tierce*. Again the assailant disengages, and, on the *parry of quarte* by the defender, reverses his foil as before, but directs the point toward, and clear of, his right ear, and lunging in with the pommel toward the defender, his hand is carried far enough to the right to enable the assailant to see him between blade and arm. (Fig. 31.)



(Fig. 31.)

"Here, to make way for the 'lunge,' the defender shows the *parry of septime*, carrying the point across the body of the assailant to the other side. The remaining *disengages* are given and received with a repetition of the same movements as in the first two *disengages*. In delivering the first and last 'lunges,' the assailant dwells a little time; but he passes the intermediate *disengages* as fast as possible.

"On recovering from the last 'lunge,' the assailant shows a 'one-two' without lunging and the defender shows the *parry of tierce*, so that on this occasion, the blades do not come in contact; they both then resume the upright position, the assailant raising his point as in the preliminary position, and the defender proceeding to imitate in all respects the actions of the assailant taking distance.

"This done, the former defender becomes in his turn the assailant, and the latter now assumes the character of defender, each of them going through the same movements as his predecessor in the past, saluting in *quarte* and *tierce*, 'disengaging' and 'parrying' as before laid down.

"On the 'feint one-two' of the now assailant, both opponents resume the upright position and fall on guard, not in the usual way, but with a backward movement of the left foot about twice its own length, and with the hand in the position of *tierce*.

"Next they both beat twice with the right foot, resume the upright position by bringing the left heel up to the right, and salute in *quarte* and *tierce*.

"In conclusion, both opponents come on guard as from the preliminary position, beat twice with the right foot, bring the left heel to the right, and salute each other by carrying the hilt up to a level with the mouth, the point directed upward, and then lowering hand and point to the position of *seconde*."

All Fencing contests in this country are governed by the following rules: —

FENCING RULES OF THE AMATEUR FENCERS' LEAGUE OF AMERICA

1. The competition shall be conducted by a jury of three or five experienced fencers, for each bout, who shall select a referee from among their number, and his decisions shall be final and without appeal.

2. The English language only shall be spoken by the judges during the competition.

3. At the command of any of the judges, contestants must take the first position and lower their weapons.

4. Each contestant shall fence a bout with every other contestant.

5. Each bout shall be for an aggregate of five (5) touches, each touch to count one point.

6. Each judge, without consulting his fellow-judges, may award to each contestant in the bout a maximum of .50 of a point of defense, .50 of a point of attack and .50 of a point of general good form or any part thereof. The award shall be determined by the average of the points thus allowed by the judges. This method of judging is based upon the idea that the contest is intended as an exhibition of skill, as well as of the securing of touches.

7. Touches shall count only when made upon the body, within the limits bounded by the collar of the fencing jacket, the median line, the hip, and a line drawn from the hip to the posterior limit of the armpit, around the front of the arm and along the crest of the shoulder to the collar. A touch on any of the boundary lines shall count.

8. Whenever a touch is made outside the limits, and it is evident to the judges that it would have been good if the adversary had not made an illegitimate movement, it shall count. An illegitimate movement is one by which the adversary seeks

to avoid a touch within the limits prescribed, by purposely presenting some other part of his body to the point.

9. A touch is of no value when the point is twisted into position on the body after the slap of the foil.

10. A touch, whether fair or foul, invalidates the *riposte*.

11. The competitor attacked should parry; if a stop thrust be made, it shall only count in favor of the giver, provided it be perceptibly in advance of the touch made by the attacking party. If both be touched simultaneously, the count shall be credited to the one who lunged. If both lunged, neither counts.

12. The judges must stop a *corps-a-corps* as soon as made.

13. A disarmament is of no value. A touch immediately following a disarmament, counts.

14. Each contestant shall fence with the same hand throughout the bout.

15. The contestant scoring the highest aggregate of points shall be declared the winner, the next highest second, and so on.

16. A point scored from a thrust started with the elbow behind the body (jab thrusts) shall not count.

17. Each competitor shall wear a dark fencing suit, so that the white chalk marks can easily be seen.

18. Contestants shall fence within a marked space twenty feet in length and thirty-six inches in width. Should any part of a contestant's foot extend beyond the boundary line, .50 point shall be deducted from his final score for each offense. When a contestant oversteps a boundary line, the judges shall stop the bout and start the contestants again in the middle of the marked space.

19. Foil blades shall not be more than thirty-four inches in length.

BOXING

CONSIDERED simply as a physical and mental exercise, Boxing is an interesting and beneficial form of athletic sport. As a desirable accomplishment, it may be compared to swimming, since proficiency in it may some day enable one to protect himself and others from physical danger. The statement, sometimes made, that Boxing is unqualifiedly brutal, lacks confirmation, if we except, as the majority of us do, its relation to the prize ring. Almost any athletic sport may be made brutal by those who participate in it, but in Boxing, as in other sports, the element of brutality may easily be eliminated.

Observation will demonstrate to any unprejudiced mind that in the vast majority of cases physical prowess, derived largely from scientific exercise, is conducive to forbearance and evenness of temper. Good boxers are seldom irritable or quarrelsome, and the qualities of temperance and self-control are nearly always found to have been cultivated in them.

Besides benefiting one's mental and moral nature in the ways referred to, there is perhaps no form of exercise that will more surely cultivate quickness of thought and action, combined with grace, agility and strength of body. It is well to consider that Boxing necessitates an unusual amount of physical exertion, and that for this reason the beginner should be careful not to devote too much time to the exercise at first, and to stop for rest whenever necessary.

One who is not reasonably strong, or who has not been used to exercise, will find his improvement in Boxing much more rapid if, before taking it up, he will cultivate a fair amount of strength and endurance by means of some lighter form of exercise, such as running, or the use of pulley-weights, dumb bells or Indian clubs.

Many teachers of physical training hold that Boxing necessitates too great exertion to make it beneficial for women of ordinary strength, and this is doubtless true. The fact remains, however, that, especially in gymnasiums and among women who have had other athletic training, this has been found an invigorating and healthful kind of exercise.

INSTRUCTIONS FOR BEGINNERS

THE first requisite is a set of good Boxing gloves. The beginner should be careful to select gloves made of soft, smooth leather, and so padded as not to be hard or lumpy. The weight should be about eight ounces. When possible, the room or space used for Boxing should be twenty or more feet square, and should be entirely free from obstructions of any kind. Boxers are sometimes badly injured by coming in contact with chairs or other articles of furniture, or with some piece of gymnasium apparatus.

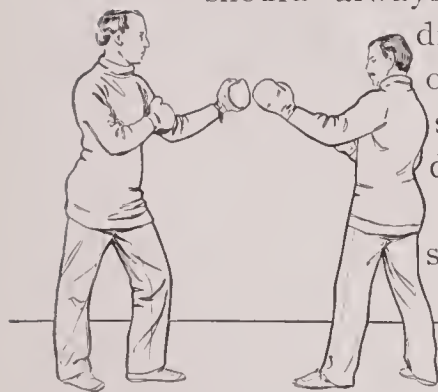
When not Boxing with an instructor, select an opponent who is as nearly as possible your own size and weight. Under no circumstances box with a person who is not even-tempered and companionable, or who is likely to be unnecessarily rough. Remember that in all sports the best way to acquire proficiency is to choose for your opponents those who are more expert than yourself. This is especially applicable to Boxing, since a good boxer is less likely to deliver a hard chance blow, or to lead you to develop faults, than is one who is a beginner like yourself.

There are many faults that are natural with beginners, and which should be carefully avoided. Keep your eyes open and your mouth closed. Do not bite your lips or put your tongue between your teeth. Never slap at your opponent, but deliver your blows with the back of the glove, and keep your hands nearly closed. Endeavor to have your hand reach its mark in the straightest possible line, and

to have the thought and the delivery of the blow almost simultaneous. Give the full reach of your arm to each blow and do not draw back before you have "landed" in order to avoid a return blow, or *counter*. Do not hit below the "belt," that is, below your opponent's waist line.

The movement of all parts of the body should be light, easy and graceful. Do not keep the muscles of the arms flexed, but stiffen them just before the blow reaches its mark. Make each movement as quickly as is consistent with its proper and effective execution. The body should not be rigid, but should be flexible and kept in perfect control. This will enable you to give to each blow the weight of your body, which will make it more effective than if you had depended solely upon the strength of your arm.

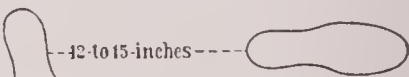
The head should be turned slightly to the right with the chin drawn well in. The neck muscles should be kept flexible, and you should always be prepared to "duck" both head and body in any direction desired. Always look directly into your antagonist's eyes, and endeavor to control your facial expression so as not to indicate to him when you intend to deliver a blow, or what direction it will take.



(Fig. 1.)

In assuming the position of the boxer (Fig. 1.) stand with your left foot flat on the floor in advance of the right and in a straight line with your opponent. The right foot should be to the rear and slightly to the right of the left, with the heel just clear of the floor. The angle between the two feet should be about forty-five degrees, as shown in the accompanying diagram. (Fig. 2.)

Always keep the left foot in a straight line with your antagonist—do not permit the heel to move to the left, as it will have a tendency to do. This fault, if not corrected, will cause you to deliver ineffective, glancing blows, and will render your footing unstable. The distance between the feet should be between twelve and fifteen inches, but this is left largely to the judgment of the boxer.



(Fig. 2.)

A tall man will, of course, require more distance than a short man, and each person should select the position that is easiest for him and that at the same time is reasonably stable. Both knees should be slightly bent, and the leg muscles should be kept constantly at a tension that will permit you to advance or retreat, or to step to one side or the other, quickly and easily.

Special attention should be given to the foot movements, since they are even more important than the manner of using the arms and hands. To advance, move the left foot forward about ten inches

and follow with the right. To retreat slowly, move the right foot about the same distance to the rear, and follow with the left.

To move back quickly after delivering a blow, or in order to avoid one, which is termed "breaking distance," spring back lightly from both feet, keeping them as close to the floor as is possible without dragging them. To step to the right, move the left foot first and follow with the right. To step to the left, move the right foot first and follow with the left. These movements should be practised until they can be made easily and naturally.

The left arm should be half extended, with the hand on a line with your opponent's chin, and the knuckles to the left. The right arm is held easily across the body with the knuckles to the front, so as to guard the pit of the stomach and the kidneys.

After assuming the position of the boxer, you will next be called upon to judge the striking distance between yourself and your adversary. A good way for beginners to learn to do this is as follows: Both you and your opponent should extend your left arms toward each other, keeping the hands in line with the shoulders, and move closer together or farther apart until your left gloves just overlap. If you now assume the position of the boxer, you will be in good striking distance. It is hardly necessary to state that this is done only by beginners and in practice, and should be continued only until the eyes become accustomed to estimating the distance.

In boxing, move continuously around your adversary, generally to the right, keeping your left hand and foot in advance. After you have delivered the blow, this movement to the right will carry you away from the right-hand return blow, or counter. A slight backward and forward movement of the hands is often confusing to an opponent, and will be found of value in other ways. The common tendency to overdo this should be avoided, since when overdone it is useless and awkward. The position of the striking hand in delivering the different blows should be as shown in Figure 3.

A feint is executed by pretending to strike at one part of the opponent's body and, instead, striking at another, or by making some movement to draw any particular blow for which you are prepared to counter. Thus, you may feint by drawing back the right hand and advancing the left foot, then making a quick movement as if to strike with the left hand at the head and delivering the blow with the right; or by pretending to lead with the left hand for the face, and ducking and striking for the body with the other hand.



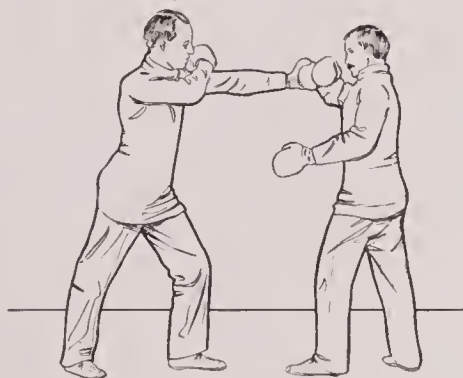
(Fig. 3.)

A feint may also be executed by shifting the eyes from the opponent's face to his waist or feet and striking at his face, or by a sudden start forward as if to strike, a stop, and immediately afterward a genuine blow.

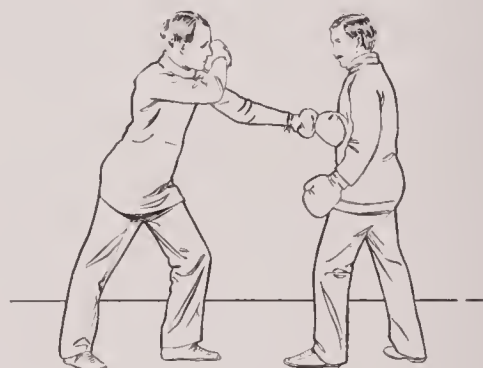
We may now take up in their order the four principal blows used by modern boxers in learning. They are as follows: (1) Left hand blow, or lead, at the face; (2) Left hand lead at the body; (3) Right hand lead at the face; (4) Right hand lead at the body.

In delivering any one of these blows, you should step forward on the ball of the left foot, keeping the right in its original position and bending the left knee slightly. At the same time, incline the body forward, *but not beyond the line of the left knee*. You thus add the weight of the body to the blow, which greatly increases its force. From this position you are prepared to break distance and thus to lessen the danger of a return blow. The shoulder should be thrown well forward with the arms, so that you will get the advantage of your full reach.

In making a left hand lead for the face (Fig. 4), step forward with the left foot, at the same time striking with the left hand for your



(Fig. 4.)



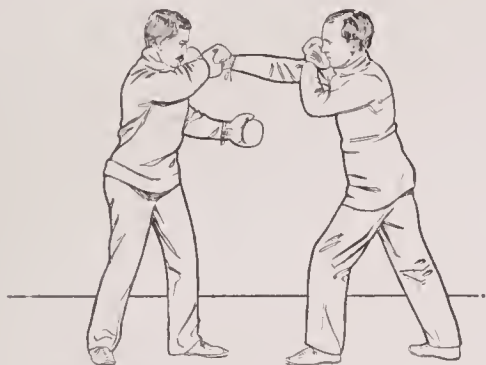
(Fig. 5.)

adversary's face, the right hand taking the position of guard for your head. This latter movement consists of raising the right arm so that the elbow and glove are in the same horizontal plane, the elbow protecting the right, and the gloved hand the left, side of the face, and the forearm taking care of the face itself. You are now protected from a return attack, whether it is by means of a swinging or a straight blow. The body, as may be seen in the cut, is inclined forward and presents a slanting surface to the opponent, thus lessening the chances of his blow landing fairly, in case he should counter for the body.

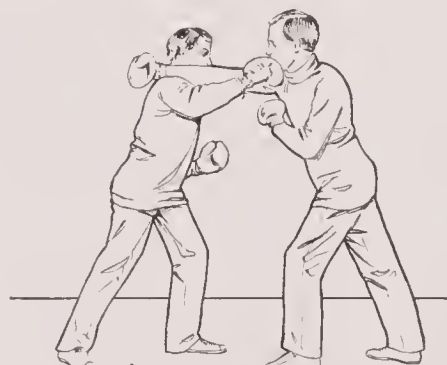
After delivering your blow, whether it lands or is blocked, immediately break distance and return to the position of the boxer. A quick recovery after a blow is one of the prime requisites of good Boxing. In again coming within striking distance, advance the left foot and

follow it with the right, bearing in mind always to keep sufficient distance between the feet. Advance very slowly and cautiously toward your opponent, until you are satisfied that you are close enough to deliver your next blow.

In making a left hand lead for the body (Fig. 5) the preliminary position is the same as in the preceding blow, but your objective point is the pit of the stomach instead of the face. As before, the right hand is raised to the position of guard for the head. When this lead is made, the face is the only possible place on which the opponent



(Fig. 6.)



(Fig. 7.)

may counter, so care should be taken that your guard is firm. Just before the blow lands, turn the hand slightly to the right so that the nails will be down and the knuckles up (Fig. 3); this insures a perfectly straight blow. Break distance as before and recover as quickly as you can.

It is well to precede this blow with a right-hand feint, to induce your opponent to throw up his left hand and thus expose his stomach. Duck to the right when you lead, and, in stepping in, cover twice the distance of an ordinary step.

A right-hand lead for the face (Fig. 6) is likely to be successful only when the opponent holds his left hand too low when on guard. Step in with the left foot, duck to the left, and strike for the face with the right hand, being careful to throw the shoulder well forward.

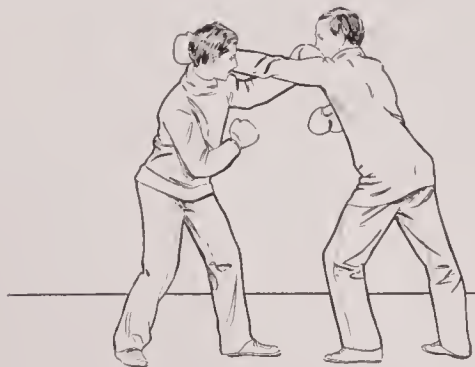
The left hand takes the position of guard for the head. The back of the right hand is turned up just before the blow lands. (Fig. 4) The right-hand lead for the body (Fig. 7) is similar to the above blow, except that the body is inclined slightly more forward, to give full reach to the right arm as it is straightened out in attempting to reach the pit of the stomach.

The movement of the body in these right-hand blows is from right to left, but it should be made from the waist line only. In advancing the left foot, it should be kept pointed straight to the front, in both right-hand and left-hand blows. If, by some mistaken movement, you should get the right foot directly behind the left, instead of to

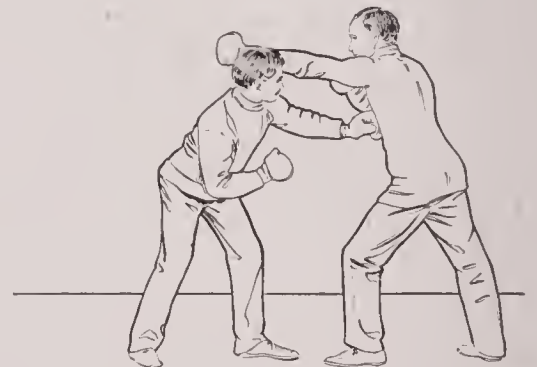
the right of it, where it should be, you will find on attempting a right-hand lead that you will be likely to lose your balance. Always try to keep these facts in mind when leading, and never forget that each lead is likely to be followed by counter blows from your opponent.

It does not always follow, however, that you must guard your head when leading for your adversary's face,—you must depend upon your judgment in deciding whether it is best to guard your head or your body, and practice will teach you to know intuitively your opponent's intentions. But in leading for the body, you should always guard your head, for, as has been explained, that is the only possible point on which a counter would be effective, your body being too far away and inclined at too great an angle to render a return blow dangerous to it.

The counters, or blows that are likely to be struck to offset leads, may best be understood and explained by dividing them into series. For example, should your opponent lead with his left hand for your face, you have the option of any one of five possible counters. The first of these is a left-hand counter for the face (Fig. 8) which is perhaps the most natural of all. When your opponent leads, duck your head quickly to the right, at the same time striking with your left hand for his face, and stepping forward, as if executing a lead. His



(Fig. 8.)



(Fig. 9.)

blow will thus miss your face, and, on account of your duck to the right, will pass between your head and left shoulder. This counter, if successful, is a very strong and effective blow, as it catches the opponent while coming forward on his lead, and thus his forward impetus is added to the strength of your own blow.

The left-hand counter for the body (Fig. 9) is executed in the same manner as the above blow, with the exception that you duck lower in order to bring you in a better line with the adversary's body. This counter is especially valuable if your opponent is taller than yourself, as in that event you are more likely to reach his body than his head.

The right-hand cross-counter (Fig. 10), if carefully executed, is a good return for a left-hand lead for the head. As the opponent's glove comes toward you, duck well to the left, allowing the blow to pass between your head and right shoulder; cross your opponent's incoming left hand with your right arm, and, bending it slightly, strike at the point of his jaw. Care must be taken that your arm is held



(Fig. 10.)

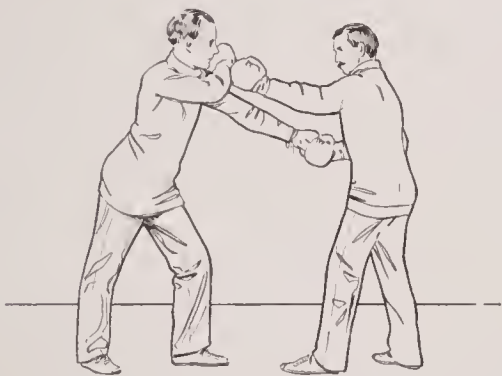


(Fig. 11.)

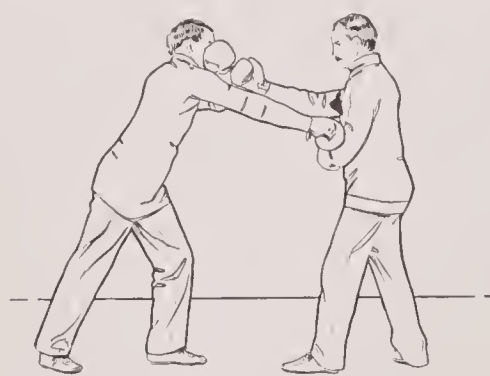
slightly crooked, so as not to interfere with his lead and divert his hand toward your face. Reference to the illustration will show that the effect of this would be to offset the result of your duck. The right-hand counter for the body is similar to the foregoing, except that the blow is landed on the body and the right arm passes under instead of over the opponent's left.

The right-hand upper-cut (Fig. 11) is a counter which, though sometimes used, is not as common as the other return blows that have been described. Step in as if to execute a right-hand cross-counter, but lean to the left instead, and strike upward, with the arm bent at the elbow, your glove passing inside the lead.

The left and right on side step is the sixth possible counter on the lead for the face, and has the distinction of being the only



(Fig. 12.)



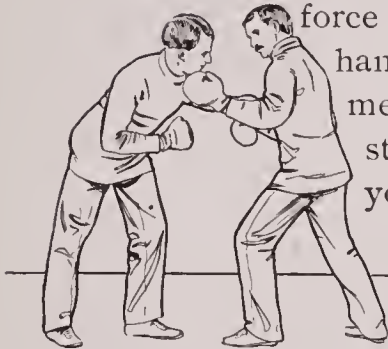
(Fig. 13.)

blow in which it is correct for the right foot to advance beyond the left. As your adversary leads, shift your right foot quickly to the right, in advance of the left, and allow his blow to pass over your left shoulder, at the same time stopping his forward motion with a

left-hand counter on his body. In the position that you now occupy you are free to deliver a right-hand blow at his head, or, by turning slightly on both heels, you may return to the position of the boxer, and thus, by being ready to deliver a new blow, force him to break distance.

There are two possible counters for the left-hand lead for the body, but only one of these is so likely to be effective as to render it important. In using this blow as a return for the left-hand lead for the body, block the lead with your right hand, and, leaning slightly forward, hit directly for the face with the left hand. (Fig. 12)

The right-hand counter for the face (Fig. 13) is similar to the above blow, except that the hands are interchanged, but it is of little value, as the chances are that your adversary's position will cause your blow to fall short, so that you will be forced to receive the full force of his blow on your guard. It is obvious, too, that a left-hand counter is the more feasible, as your adversary's movement is naturally to your left, and he is thus brought within striking distance of your left hand, but is out of reach of your right.



(Fig. 14.)

On the right-hand lead for the body you have the choice of two counters. The better of these is the left-hand hook for the head. (Fig. 14) In this blow, guard the stomach with the right hand, and "hook" your left arm to the point of his jaw or behind his ear. This blow is sometimes termed the "short arm swing," and as your position is favorable, and the opponent's awkward, the return is often effective.

The right-hand counter for the face on a left-hand lead for the body (Fig. 15) is a straight blow struck with the back of the hand up, the left hand at the same time guarding the body.



(Fig. 15.)

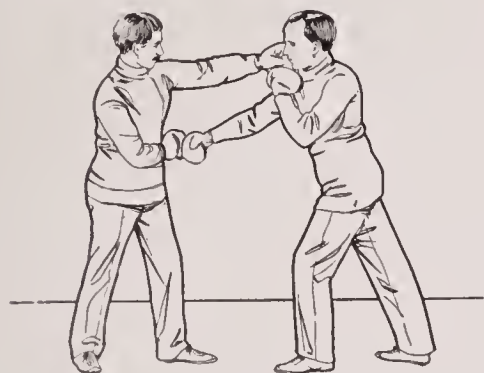


(Fig. 16.)

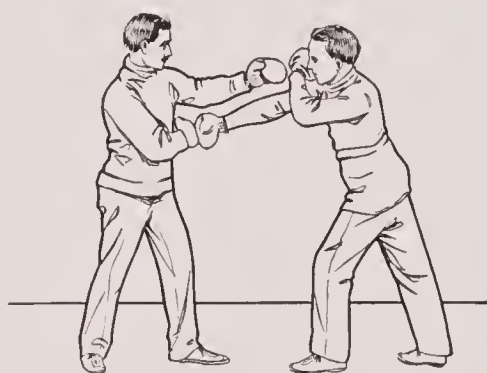
As has been said, the right-hand lead for the face is a dangerous blow to use, unless in taking advantage of an opening which seems to insure your "landing," and for this reason the counters are not

usually well known. The best of these is a side step to the left and a counter with the right hand on the body. (Fig. 16.) The instant your adversary leads, step lightly to the left, allowing his blow to pass over your right shoulder, and direct your blow to his ribs, as his body is squarely in front of you. Or, if you prefer, you may counter on his face, but it is more likely to be protected than his body.

The left hook for the body, while an excellent counter blow, is a very risky one, and requires long practise before it can be properly executed. To deliver it, duck to the right and step in at the same time, allowing the opponent's lead to pass completely



(Fig. 17.)



(Fig. 18.)

over your head, and, bending your left arm, send a hook blow to the right side of his body. Be very careful to have your head well guarded by your right arm, as your opponent is very likely to make a quick, left-hand return to this blow.

The leads, guards, and counters that have thus far been described go far to make up the first principles of Boxing, and must be mastered by every beginner before proficiency can be attained in the more advanced movements.

In the following table the various maneuvers that should be understood by one who has read them carefully, and has practised the instructions contained in this article, are arranged so as to show plainly the proper guard-counter to oppose any blow, as well as those to oppose the return made by the person attacked.

LEFT-HAND LEAD FOR THE FACE

1. Right-hand guard. (See Fig. 17.)
2. Right-hand guard and left-hand counter for the face (1, 2, 4, 8, 9).
3. Right-hand guard and left-hand counter for the body (2, 10).
4. Left-hand guard and right-hand counter for the body. (Fig. 18.)
5. Duck and left-hand counter for the face. (Fig. 19.)
6. Duck and left-hand counter for the body (10). (Fig. 20.)
7. Right-hand counter for the face inside the arm. (Fig. 21.)
8. Right-hand cross-counter (15, 18).
9. Duck and right-hand counter for the body (19, 20). (Fig. 23.)

LEFT-HAND LEAD FOR THE BODY

10. Left-hand guard.
11. Right-hand guard.
12. Right-hand guard and left-hand counter for the face (Same as No. 2).
13. Left-hand upper cut. (Fig. 24.)
14. Right-hand upper cut.

RIGHT-HAND LEAD FOR THE FACE

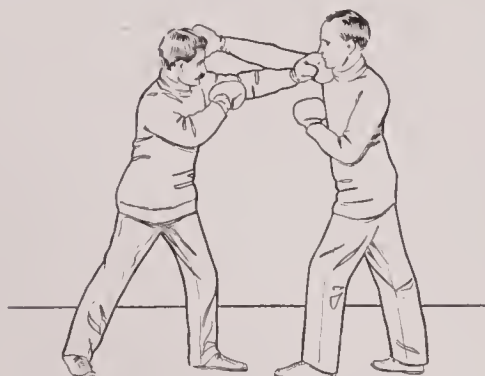
15. Left-hand guard.
16. Left-hand guard and right-hand counter for the face (15).
17. Duck and right-hand counter for the face (15).
18. Left-hand cross counter.

RIGHT-HAND LEAD FOR THE BODY

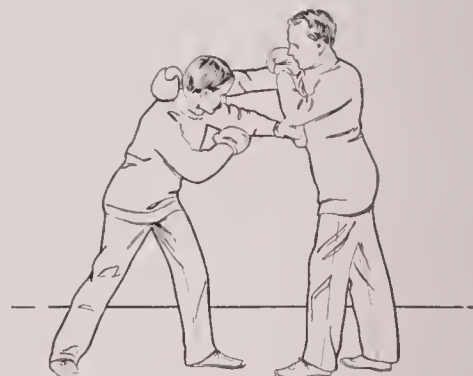
19. Left-hand guard.
20. Left-hand upper cut.

The numbers in parenthesis after each opposing blow show the guard or counter that should in turn be used to oppose that blow.

A beginner should make it a rule to master the defense for each blow, as well as the blow itself. The foregoing movements should be



(Fig. 19.)



(Fig. 20.)

practised in the order given, and each in turn should be thoroughly mastered before attempting another. Practise each blow slowly at first, and gradually increase the speed until the blows are made quickly and easily and with strength. The different blows should follow each other in rapid succession, but you should be careful to return to the position of the boxer after each blow.

The following is an example of the manner in which the double-lead and combination blows are struck: Lead for the face with the left hand, step in and strike again with the left at either the face or the body, or follow the left-hand lead with a right-hand blow at the face or body; a third blow can be struck with either hand in the same manner. The following maneuvers, consisting of feints to draw

out particular blows, and stops or counters to oppose them when delivered, are recommended by a well-known authority to the attention of beginners:—

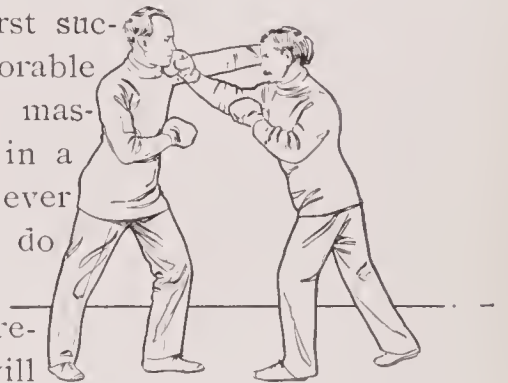
“Feint with the left hand to draw a left-hand counter. Guard the counter and counter it with the left hand.

“Strike with the left hand and let the blow fall short; your face will then be exposed to a left-hand counter, which you can cross-counter, or can duck and counter for the body with your right hand.

“Feint with your left hand to draw a cross-counter, throw the head back, allowing the blow to pass by your face, then spring in and strike over the arm for the face.

“Strike short with the left hand to draw a cross-counter, change the blow to a guard by turning the elbow up, and counter with the right hand.”

If in attempting any maneuver, you do not at first succeed, wait until you have another and more favorable opportunity and try again. When you have so far mastered the first principles of Boxing as to engage in a “set-to,” remember to observe the following rules: Never attempt the same movement twice in succession; do not be too impetuous; try to out-general your opponent, for science is superior to strength in this respect, and if you disregard your science, strength will surely win; do not lose your temper, for coolness always accomplishes more than hot-headedness; never engage in a rough, unscientific bout; BE MANLY AND SEEK NO UNDUE ADVANTAGE.



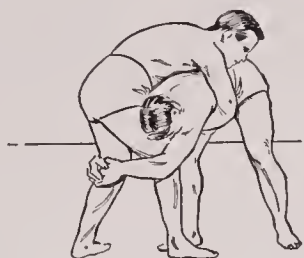
(Fig. 21.)

WRESTLING

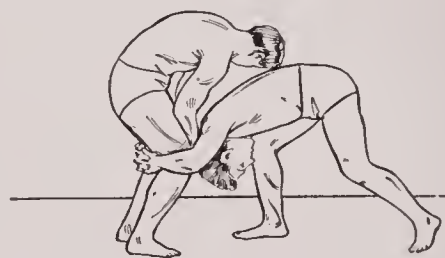
THE “catch-as-catch-can” style of Wrestling has been selected for illustration in this article, because it is the most widely used and comprises practically all the other forms. Nearly every nation has adopted some particular style of “hold,” in which its people become especially proficient, and the one to be described here has for several years been the best known in this country. It is by far the best style for amateurs, including those who enter into the sport principally for pleasure, rather than with the intention of engaging in contests. It is the most natural of all the various styles, is the most effective under all circumstances, and, unlike several of the styles of Wrestling common in Europe, necessitates no especial preparation in the way of clothing.

In beginning a bout at catch-as-catch-can, each contestant may assume the position that seems to him best suited to enable him to

secure advantageous holds and to prevent the securing of such by the opponent. It is customary among the best wrestlers to bend the body well forward on the hips, with the shoulders rounded and the head drawn down between them, the legs spread a good distance apart, and the hands and arms held in such a position as to be prepared to seize the opponent quickly or to ward off an attempted seizure by him. The curved shape of the back helps to prepare the wrestler to oppose a waist hold, the elevated shoulders and indrawn neck are intended to protect him from the dangerous neck holds, and the



(Fig. 1.)



(Fig. 2.)

widely separated legs add stability to his footing and at the same time prevent the seizure of both legs by the arms of the opponent.

The description of the different holds will, naturally, be addressed to the aggressor, while those of the stops, breaks, and doubles, will apply to his opponent. It would be impossible to enumerate the holds that might be available for the one on the defensive after a successful escape, but he must be constantly on the lookout for an opportunity to become the aggressor whenever he is attacked, and must take advantage of any opening that may be offered to him.

Ordinarily in amateur matches, a contestant is credited with a fall if he succeeds in touching both his adversary's shoulders to the floor or mat; this is referred to as *getting two points down*. Three points are sometimes required, but as this is done only after agreement between the two opposing wrestlers, reference will be made here only to the two-point fall.

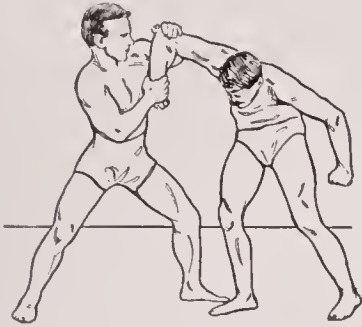
One of the first forms of attack made by beginners is the *both-legs hold*. This is feasible only when the opponent's legs are close together, which would not be likely to be the case when he is on guard. Step quickly forward, stoop and grasp him around his knees with both arms, straighten the body and legs so as to stand nearly erect and throw him backward over your shoulders; turn in the direction of his fall, fall with him and force the two points down. To prevent this throw, bend forward after the leg-hold has been taken, and before the aggressor stands erect clasp him around the waist with both arms and lift his legs from the floor. (Fig. 1.)



(Fig. 3.)

A good break for the both-legs hold is executed by placing both your hands on the back of the aggressor's head, throwing your weight on it so as to force him to the floor, and falling with him; you should then look for an opening for another hold after you are both on the floor. (Fig. 2.)

Another simple hold is the *leg and inside back heel*. (Fig. 3.) Catch the opponent's nearest leg with both hands, advance your opposite foot between his legs so as to back-heel his other leg, and



(Fig. 4.)



(Fig. 5.)



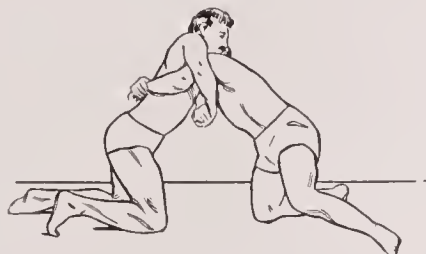
(Fig. 6.)

force him over backward. If he seizes you around the waist or neck and hugs you close, lift him and throw him over your head. To prevent this throw, grasp the aggressor around the neck with your forearm under his chin, seize his wrist with your free hand and squeeze hard. (Fig. 3.) This stop, as is the case with many other stops and holds, is for punishment only, and seldom results in your obtaining a fall. Not infrequently, however, it may result in your opponent giving you the fall, because of his unwillingness to remain in the position in which you place him.

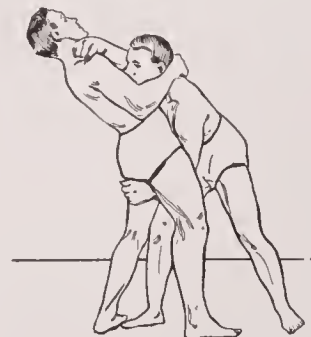
Should your opponent give you an opportunity to seize one of his wrists, place your free hand beneath his elbow, twist his shoulder by forcing his hand backward and his elbow forward, thus forcing him to his knees and thence down until his shoulders touch. (Fig. 4.)



(Fig. 7.)



(Fig. 8.)



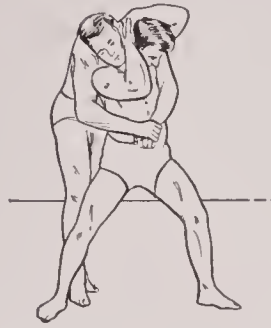
(Fig. 9.)

At the beginning of this hold, an opening is offered for what is known as the "arm up the back, with the brake on." Using his wrist and elbow as a lever, force his arm up his back, let go his

elbow and "put the brake on," that is, slip your forearm under and inside his nearest arm so that you obtain absolute and easy control of it. Let go his wrist, and with the hand thus freed bear



(Fig. 10.)



(Fig. 11 a.)



(Fig. 11 b.)

down on his neck and force his arm up until he is either thrown or acknowledges the fall. (Fig. 5.)

To make use of a simple *waist lock*, grasp the opponent around the waist, lift him until his feet are clear of the floor and throw him either directly backward or to one side. This may be combined with a leg "grapevine," as shown in Figure 6. (A grapevine hold is secured by twining an arm or leg about the opponent's arm or leg.) A stop for the waist lock may be executed by placing your hand on the aggressor's forehead and forcing his head back until the hold is broken. (Fig. 7.)

To double on a waist lock, throw your arm around outside of those of your opponent, clasp your hands tightly together, drop to your knees, thus forcing him to his knees, and by rolling to either side force his shoulders down. (Fig. 8.)

In the *half strangle and crotch hold* catch one of the opponent's thighs from the inside, place your free hand or forearm under his chin, force him backward and fall with him. (Fig. 9.)



(Fig. 12.)



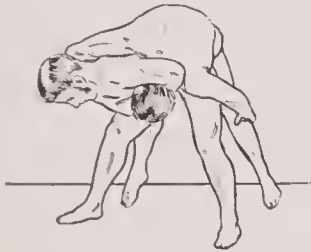
(Fig. 13.)

To stop this hold, when the aggressor attempts to place his forearm across your neck, grasp his wrist and elbow and apply a shoulder twist. (Fig. 10.)

Should an opportunity be given for a *waist lock from behind*, lift the opponent and throw him directly backward to either side. To double on this hold, reach up and catch the aggressor around the neck, drop to your knees, draw his head forward and roll over forward,

pulling him with you until his shoulders touch. (Fig. 11, *a* and *b*.) An expert would not be likely to hold his head so far forward as to leave an opening for this double.

It may be noted here that many falls can be stopped by a *bridge*, which consists in holding the shoulders clear of the floor by support-



(Fig. 14.)



(Fig. 15 a.)

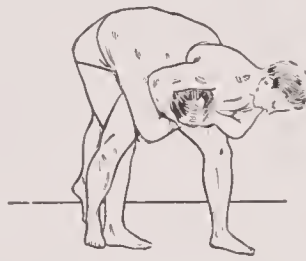


(Fig. 15 b)

ing the body on the head and feet. The bridge may be strengthened by placing the hands on the hips and the elbows on the floor. Figure 12 illustrates the manner of making a bridge after the double described above.



(Fig. 16.)



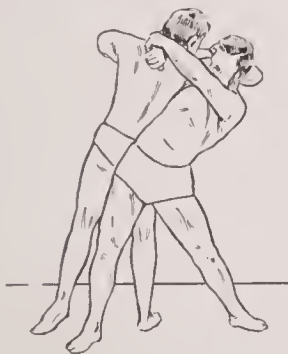
(Fig. 17.)



(Fig. 18.)

To break a bridge, place your forearm across the front of the opponent's neck, and press your free elbow against the pit of his stomach until his shoulders are forced to the floor. (Fig. 13.)

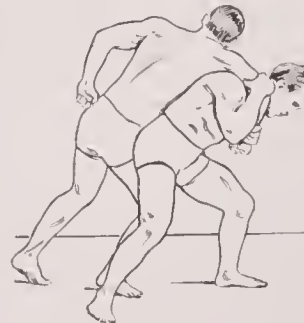
To execute a *buttock*, or *hip lock*, grasp the opponent about the neck, at the same time pulling him forward and throwing him over



(Fig. 19.)



(Fig. 20.)

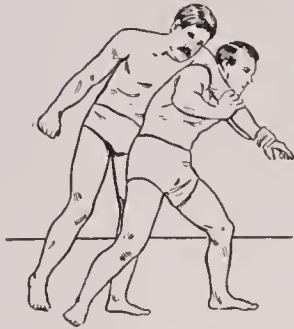


(Fig. 21.)

your hip; retain your hold of his neck, fall with him and force the two points down. (Fig. 14.) To double on this hold, when the aggressor seizes you, and before he has time to lift you over his hip,

drop your shoulder in front of his body, grasp both his legs from behind, lift him clear of the floor and fall with him. (Fig. 15, *a* and *b*.) Another double may be executed by catching the aggressor around the neck and by his nearest leg, or by placing your nearer arm across the front of his neck, grasping his leg and lifting him up and backward. (Fig. 16.)

In the *buttock and outside-leg lock*, catch the opponent around the neck, pull him forward, step in front of his outside leg and force him



(Fig. 22.)



(Fig. 23.)



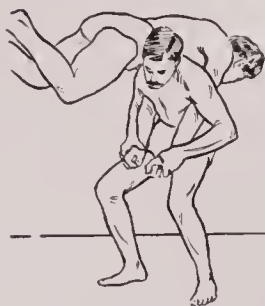
(Fig. 24 a.)

over. (Fig. 17.) To stop and double on this hold, before the aggressor has his foot in position, catch him around the waist, lift and throw him over backward. (Fig. 18.)

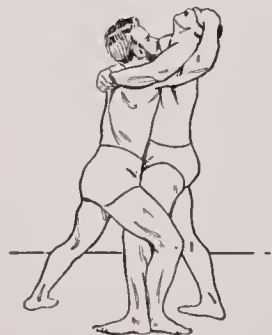
To execute the *cross buttock*, catch the opponent around the neck, or under the arm and over the neck, step well behind him and throw him over your hip. (Fig. 19.)

To make use of a *Cornwall heave*, turn sidewise, and with your nearer arm grasp the opponent around the body in front, at the same time clasping him from behind with the other arm; lift and throw him backward, and fall with him. This hold may usually be stopped by a neck hold, as shown in Figure 20.

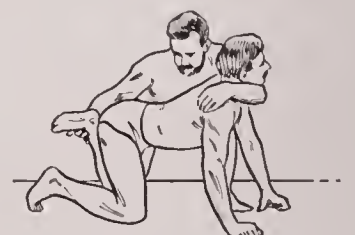
A very pretty hold, often seen in exhibition Wrestling, is the *flying-mare*, which is made use of as follows: Grasp one of the opponent's



(Fig. 24 b.)



(Fig. 25.)



(Fig. 26.)

wrists with both hands, jerk him quickly toward you, turn and lift his arm over your shoulder, with the palm down; using his arm for a lever, throw him over your shoulder, fall with him, and retain your hold until you have forced the two points down. (Fig. 21.) The fall

may be made harder and more punishment may be inflicted by keeping the palm up and throwing him over your shoulder as before. (Fig. 22.)

To make use of the *arm grapevine and cross buttock*, seize the opponent's wrist with both hands, jerk him toward you, turn, step outside and behind his nearer leg, twine your arm about his, and throw him forward over your hip. (Fig. 23.)

The *double front elbows* hold may be secured after trying for a both-legs lock and failing to secure it. To stop the former, the opponent will probably grasp you about the waist. If he does so,



(Fig. 27.)



(Fig. 28.)



(Fig. 28a.)

straighten up and throw him over your back, as in Figure 24, *a* and *b*.

Another hold that may be secured from a waist lock is the *neck-bend and back-heel*. Having secured the waist hold, if the opponent attempt to stop it by grasping you about the waist, reach up and clasp your hands across his face, force his head back, and back-heel him, as shown in Figure 25.

The holds that have thus far been described would naturally be secured from a standing position, and are intended primarily to force the opponent to the floor. But this does not insure a fall, and a large part of the science of catch-as-catch-can Wrestling lies in one's ability



(Fig. 29.)



(Fig. 30.)

to secure the necessary two-point fall by causing the opponent's two shoulders to touch the floor after he has been thrown off his feet, and to prevent this when acting on the defensive.

Suppose, for example, as is often the case, you have forced your opponent to his hands and knees, and desire to "turn him over." One way of doing this is by means of the *foot-and-neck* hold. Grasp his nearer foot, reach under his neck with your free arm, catch his

opposite shoulder, and by applying the leverage thus obtained, roll him over. (Fig. 26.) A fall may be obtained from this hold, but it is used principally for punishment.

One of the commonest of the great number of holds is the *half-nelson*, which may be used alone or in combination with other holds, either to force the opponent to the floor or to secure a fall afterward. The simple *half-nelson from behind* is obtained by thrusting your right arm under the opponent's right, or your left arm under his left, grasping the back of his head or neck, seizing his nearer arm with your free hand, and, by holding it down and using your arm which is under it as a lever, forcing him to the floor and then turning him over so that the two points touch.



(Fig. 31.)



(Fig. 32.)

The *half-nelson from in front* necessitates the thrusting of your right arm under his left, or your left under his right, instead of your right under his right, or your left under his left. To combine this latter hold with the leg lock when on the floor, get a half-nelson, and while turning him over, turn your back toward him and pass your free arm outside and under his opposite leg; bring his head and knee as near together as possible and roll him over. (Fig. 27.)



(Fig. 33.)



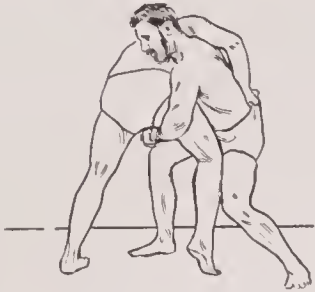
(Fig. 34.)

To stop a half-nelson from behind when on the floor, as your opponent attempts to get his arm under yours, pin it to your side with your elbow and throw your head back. (Fig. 28.)

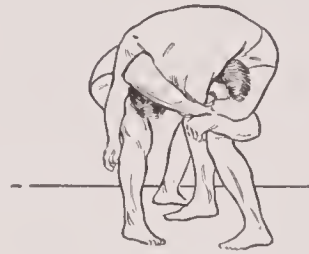
To make use of a *locked half-nelson from behind*, get a simple half-nelson, reach under with your free hand, lock the fingers of both hands, or clasp the wrist of one hand with the other, place your head under his arm, pull his head under, roll him over, and fall upon him. (Fig. 28a.) If your opponent secure a half-nelson, attempt to break it by spinning round on your head, as a pivot, so that you will fall face down. (Fig. 29.) To prevent this action on the part of an opponent, catch him around the waist with your free arm and so prevent him from turning. (Fig. 30.)

To double on a half-nelson from behind on the floor, if his head is near enough, reach your arm over about his neck, pull him over your back and roll with him. (Fig. 31.)

To combine half-nelsons on neck and leg when on the floor, grasp the opponent's foot when he is face down, drop your knee on his leg just above the knee, to hold his leg firm, then bend his knee and get



(Fig. 35.)



(Fig. 36.)

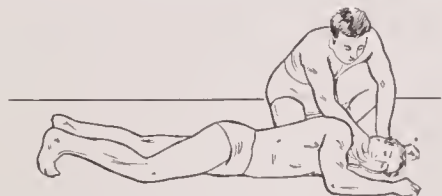
a half-nelson on his leg. Watch for a chance and slip your free arm under his nearer arm so as to get a half-nelson on his neck. You may now roll him over for a fall, and punish him at the same time. (Fig. 32.)

To combine a half-nelson with a crotch hold, when on the floor, get the half-nelson from behind, reach under and catch his nearer leg above the knee, from the inside, and roll him over head first. (Fig. 33.) This may be varied by seizing the farther leg instead of the nearer one. (Fig. 34.)

To increase the effectiveness of a half-nelson secured while standing, combine it with an outside leg hold, as follows: First get a half-nelson from behind, then reach over and place your free hand between his legs from behind, lift up, turn him over, and fall with him. (Fig. 35.) This may be varied by pulling his head down, grasping his opposite leg, doubling him up, clasping hands, lifting him from the floor, throwing him forward, and falling with him. (Fig. 36.)



(Fig. 37.)



(Fig. 38.)

Sometimes when trying for a half-nelson on the floor, you are given a good opening for an *opposite-arm hold*, as follows: Feint for a half-nelson, grasp the opponent's opposite arm near the shoulder with both hands, roll him over, and fall with him. (Fig. 37.) To prevent this action on the part of an opponent, bridge, and spin over on your face.

Though seldom used except for punishment, the *head hold and twist when on the floor* may sometimes be used to lead up to some other

hold. Catch the opponent's chin with one hand and the back of his head with the other, and twist toward you. (Fig. 38.)

In the foregoing brief description of some of the simpler movements in Wrestling, no reference has been made to the *full-nelson* and the *strangle* holds, which are so rough as to be brutal, and which are barred from amateur contests. It may be well to add, as a word of caution to the beginner, that Wrestling is a very severe form of exercise; and, even though in good physical condition, one should take it up gradually, if he desires to escape with the minimum amount of soreness and stiffness of the muscles.

For many centuries Wrestling has been a popular athletic sport. It is not brutal unless it is made so by a resort to violent means to overcome an adversary. As a gymnastic exercise it was encouraged among the ancient Greeks, and high honors and rewards were bestowed on the victorious wrestlers at the Olympic and other games. As practised by the Romans, wrestling was little less than a display of savagery and passion. The contestants were nearly or quite nude, and their bodies and limbs were besmeared with oil, so that it was only with the utmost difficulty that a hold of any kind could be secured and maintained. They grappled and struggled with the fury of wild beasts, and the more brutal the exhibition, the greater was the enjoyment of the multitude that surrounded the arena in which the contests took place. In England, for many hundred years, wrestling has been a favorite sport. Centuries ago it partook of the rough and brutal forms of the Romans, but these were gradually eliminated, and the wrestling bouts of later years have been free from cruel methods and practices. In our own country, the sport is free from objectionable features. The scientific wrestling of to-day is a combination of skill and strength. The latter is, of course, an indispensable factor, and, other things being equal, the stronger man will vanquish his adversary. In match bouts it is always desirable that the antagonists shall be as nearly equal as possible in weight and muscular power, for in such a case victory comes to him who possesses the greater skill.

SPORTS AND GAMES—OUTDOOR

ARCHERY

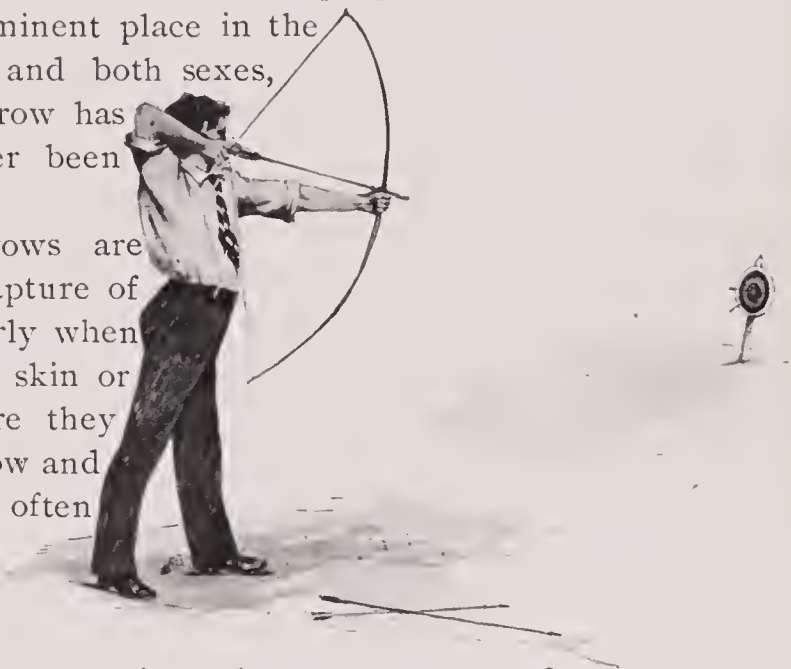
IN THE minds of most of us, the bow and arrow is intimately associated with ancient history and the discoveries and conquests of the various regions which have been found inhabited by primitive man. But neither as an instrument of war nor as an accessory to sport, has its use been confined to these times and peoples. At the present time, Archery holds a prominent place in the list of sports suitable for all ages and both sexes, while, in addition, the bow and arrow has certain uses in which it has never been superseded by any other weapon.

Bows with blunt-headed arrows are often used by naturalists in the capture of small birds and animals; particularly when they desire to avoid breaking the skin or soiling the feathers of the creature they wish to capture. Then, too, the bow and arrow, or some modification of it, is often used in scientific experiments, and it is put to other uses for which it has proved especially available.

But it is to Archery as a modern pastime that we must confine our attention in this article, with only the foregoing brief reference to the history and manifold uses of the various forms of the bow and arrow.

THE BOW

THE BOW is really the most important implement of the Archery outfit, and as such is the first to claim our attention. Bows are of two kinds—"self" and "backed." The former is usually made of yew or lancewood, and consists of two pieces grafted, or spliced, in the middle, so that each limb is in one piece. Yew is the only wood that is suitable for a self-bow, but it is so scarce as to be expensive, and the cheaper lancewood is often used by beginners. Backed-bows are made of two or more strips of wood fastened together. Hickory and various other hard woods are used in the construction of both varieties.



The grain of the wood should be close, straight, and even, and the Bow should be free from knots and pins. Wood that answers these requirements is very scarce, and great care is necessary in purchasing a Bow ready-made or in selecting material from which to make one.

The parts of the Bow are named as follows: That part which is flat and which is farthest from the archer, is called the "back"; the "belly" is the rounded part nearest the archer; and the part in the middle, which is usually covered with velvet or other material, is the "handle."

All Bows should have practically the same shape. When unstrung, the back should be perfectly straight, and the back of each limb should be in the same plane. It is sometimes necessary to follow the grain in self-bows, and for this reason they may have the "Cupid" shape, or may be curved in other ways; but the back of a backed-bow should always be straight. Many backed-bows are made reflexed, and bow-makers often contend that Bows of this kind, and those which are "set back" in the handle, will keep their shape longest; but if accuracy is the prime object of the beginner he will do well to choose a straight Bow. The back should be flat, with the edges slightly rounded, and the belly should be gradually rounded. The back should not be too broad, since in that case the belly would have to be made too pointed and the limbs would be likely to become "cast" with use.

The horns at the end of the Bow, to which the bowstring is fastened, should be carefully secured in place, and the edges of the necks should be very smooth, so that they will not fray or cut the string.

The center of the Bow should be practically unbendable for from sixteen to eighteen inches of its length. From the extremities of this center to the horns, the limbs should bend gradually an equal amount. If one limb bends more than the other, the Bow soon loses its proper cast and the weaker limb is likely to break. The upper part of the handle should extend above the middle of the Bow, so that when grasped in the left hand, the ball of the thumb will rest on the middle of the Bow.

The length of the Bow should be in proportion both to its own weight and to the length of the arrow to be used. For a twenty-eight-inch arrow the Bow should be at least six feet in length; and as the length of the arrow varies an inch or more each way, that of the Bow should vary correspondingly.

The most important point to be considered in the selection of a Bow is that it should be of proper weight. The beginner should

choose a Bow of such weight and strength that he can easily handle it, and especially one that does not draw so hard that he is prevented from loosing the arrow quickly and steadily. Extreme care is necessary to keep a Bow in good condition.

Whenever possible, it should be preserved from dampness, and if used on a damp day, both Bow and string should be rubbed dry with a soft rag. The string should then be rubbed with beeswax. Especial attention should be given to the ends of the Bow and the handle, which are the parts most susceptible to dampness. Should a sliver or splinter be detected, it should be glued down at once and wound with narrow silk ribbon, which should also be glued. A layer of strong thread should then be put on tightly, and, when dry, the mended part should be varnished.

Never draw a Bow to its supposed limit without fitting an arrow to it; you may not estimate the elastic limit of the Bow correctly, and by drawing it too far may weaken or even break it. Bows often break from no apparent cause, even when well cared for, and when no knots, pins, or slivers, can be detected; unfortunately such accidents cannot always be avoided by exercising care in the selection of the Bow itself or of the material for its manufacture.

Fortunately, it is not difficult to mend an ordinary fracture, or even to replace a broken limb, and, if carefully done, these repairs often make the Bow as good as new. The best short rule for the selection of a Bow is, "first, examine it for blemishes in the wood, then *try* it."

THE ARROW

THE Arrow really has more to do with accuracy of shooting than has the bow. It is possible to make good shots with an inferior bow, but not with crooked or weak arrows, unless by accident. Arrows are usually made of red deal, and are called "self" or "footed," according as they are made of one piece, or are footed with hard wood at the "pile," or head end. The latter wear better, and, owing to the heavier point, their flight is truer.

An Arrow should be perfectly straight, and stiff enough to withstand the pressure that must be applied to it in shooting. If an Arrow be weak at the feather end, it will "flirt," or jump, on leaving the bow, and will fly off to the right or left.

In selecting new Arrows, care should first be taken to see that each is straight, after which it should be examined closely to find out if it is at all weak, or bends too much, or bends differently on different sides. The *nock* should be well made, with the edges smooth and the bottom convex, and the sides of the *horn* should not be too thin.

The feathers are a very important part of the fitting of an Arrow, and it is essential that all three should be shaped and curved exactly alike. They should be from one to two inches in length, about half an inch in width, and placed as far back as possible, leaving room for the fingers to grasp the Arrow in drawing.

The average length of an Arrow is, for men, twenty-eight inches; for women, twenty-five inches; but longer and shorter ones are often used. The Arrow should always be drawn to the head to insure accuracy, and for this reason its length must depend partly on that of the shooter's arm. A short Arrow has the advantage of being stiffer than a longer one of the same weight; but for each person there is an "ideal" length and weight which can be known only by experience. The Arrows of a set should be as nearly alike as possible, both in weight and in the location of the center of gravity.

Arrows are made in four patterns: the "bobtail," the size of which gradually decreases from the point to the nock; the "chested," in which from twelve to eighteen inches at the nock end is largest; the "barreled," which gradually decreases in size from the center to each end; the "parallel," which is the same size throughout its length. The last is the best of the four. It flies more steadily than the others, and its shape makes it strong and not liable to become crooked on striking the target.

STRINGING THE BOW



HAVING selected the bow and a set of arrows, the beginner should next learn the correct manner of using them. To string the bow, proceed as follows (one loop of the string is in position on the lower limb): Place the bow with its back uppermost, so that the lower horn rests against the right foot or in the hollow of the right instep; grasp the handle with the right hand, and place the left on the upper limb of the bow at such a distance from the nock that when the fingers are extended they can easily reach it; keep the first and second fingers bent at first, the tips resting against the eye of the string; pull the bow toward you with the right hand, pressing the upper limb down and extending the fingers of the left hand at the same time, till the eye of the string slips into the nock.

In the foregoing description the hands may be interchanged, and the left foot may be used instead of the right. To unstring a bow, the position is the same and the method of procedure is similar; sufficient pressure is applied to the upper limb to allow the eye to be slipped out of the nock, and the pressure is gradually reduced until the bow is straight, as at first.

QUIVERS AND TARGETS

It is necessary for a woman to be provided with a belt with Quiver attached, and though this is often used by men, the majority of them prefer to carry the arrows in a pocket of the shooting coat. There are numerous other little accessories with which archers sometimes provide themselves, such as "tips" for the fingers of the right hand, and "bracers," or arm guards; but these are by no means necessary.

The kind of Target that has been found most desirable is four feet in diameter, is made of straw, and has a canvas face on which four concentric rings are painted. The center is gold-colored; the ring next to it, red; then blue, black, and white. The values of the rings are, respectively, 9, 7, 5, 3 and 1, and the score of an arrow is the value of the highest ring that it touches.

Usually, two Targets are placed opposite and parallel to each other, from two to five yards farther apart than the distance to be shot. The Targets are elevated so that their centers are about four feet from the ground. Each archer stands at the proper distance in front of one Target and shoots three arrows at the other; these three are called an "end." After all have shot, another end is shot from in front of the opposite Target, and so on until the designated number of arrows have been shot.

GENERAL INSTRUCTIONS

IN ARCHERY, position counts for a great deal, and the beginner should give especial attention to it. Stand sidewise, with the feet eight or nine inches apart, at the angle that is most natural, so that a line drawn through both heels would intersect the middle line of the target. The shoulders should be in nearly the same line, the head turned to the left, the body easily erect, and the legs straight at the knees.

Grasp the handle of the bow with the left hand, and adjust it between the second knuckle of the first finger and the ball of the thumb. With the right hand take the arrow from the quiver or pocket, and bringing it *over, never under*, the bow, place it on the knuckle of the left hand, and fit the string to the nock. The "cock-feather," which is at right angles to the nock, should be farthest from the bow.

Place the first finger on the string above the arrow, and the second and third below it, and hold the arrow without pressing the string. The right wrist should be bent slightly outward; the left should be held straight, in its natural position, just above the left hip. Hold the arrow in line with the target.

While drawing, the body should be kept erect and the head turned toward the target. Transfer the weight of the body so that it shall rest more on the right foot than on the left, and more on the heel than on the ball of the foot. Gradually extend the left arm, tightening the grasp on the handle, and draw until the pile of the arrow comes on the bow, and the right hand touches the face near the chin, directly beneath the eye. The hand should be brought to the face, and not the face to the hand.

During the foregoing operation, the point of aim should be covered approximately. The right elbow should not be raised above the line of the arm until the arrow has been drawn about three-fourths of its length, after which it should be kept up and back so as to preserve the true line.

Complete the aim by holding the arrow so that the pile shall cover the point of aim, and be careful not to lessen the pull so that the arrow will "creep." The line and height of aim will, of course, vary according to distance and the strength and direction of the wind, if any. Any change of aim must be made by moving the left hand, as the right should always remain in place. Keep the body erect and prevent tipping forward by keeping the muscles of the back braced and the weight chiefly on the heels.

Now comes the most important part of the shot,—the loose, or release, of the arrow. Keep the right hand in place, endeavoring to bring it back at the moment of loosing, just sufficiently to compensate the extension of the fingers. Be careful to keep the wrist straight and the elbow up; the hand must not leave the face, and thus leave the line of aim, nor must it drop or follow the arrow, even a fraction of an inch. The left hand should also be kept in position until the arrow strikes, since the archer will thus be able to ascertain if he has shifted his position in loosing, and to estimate what change, if any, should be made in his point of aim.

Extreme care and strict attention to every detail are absolutely necessary, if one is to become proficient in the use of the bow and arrow, and, in addition, the beginner should follow the advice of a well-known archer: "Never lose your temper, and never stop trying because you 'can't shoot.'"

BICYCLING

FROM the date of the introduction of the safety bicycle, the popularity of Bicycling increased with such rapidity that thousands of inventors turned their attention to the perfection of the details of cycle construction, and each season witnessed marked advances toward perfection in the machine. Within a little more than

ten years, almost every feature of construction that could contribute to the safety, pleasure, or convenience of the rider had been perfected, and the necessity for changes in the bicycle almost entirely disappeared. Of course, there will continue to be differences in the machines produced by the different makers, and improvements will be made in some of the minor details, but it is safe to say that no more changes of a radical nature will ever be made in bicycle construction.

When compared with the other inventions of the nineteenth century, the bicycle is not ordinarily considered a "great invention," for all the principles of physics underlying its construction were well known many years before their application to that particular vehicle, but there are few, if any, of the great inventions that have given as much keen enjoyment and genuine pleasure to the human race.



With the possible exception of golf, there is no other sport that can claim devotees of ages so widely diversified, and certainly no other sport has ever been so widely popular as Bicycling has been during the past ten years. As the novelty of the bicycle gradually wore off, the enthusiasm of many cyclists also waned, but there are still hundreds of thousands of riders in every civilized country.

The ease with which the cyclist is able to ride long distances, at high speed, is the most attractive feature of Bicycling, and yet it is the one which has caused the sport to be most strongly condemned. The feeling of exertion is so slight, and the exhilaration so great, that the rider feels as if he could completely annihilate space, and unconsciously he increases his speed until he reaches the point of overexertion; or he prolongs his ride until he has overtaxed his strength. The inevitable results of excessive exertion follow, and the blame is improperly thrown on the bicycle. To avoid such unpleasant results, the rider has only to exercise moderation.

HOW TO RIDE

SUGGESTIONS as to the proper use of the bicycle, to avoid injurious effects, would be out of place before a few directions have been given for learning to ride. The best way for one to learn to ride the bicycle is with the assistance of an experienced rider, who should support the machine while the beginner mounts, and continue to do so and to give directions, until the pupil has acquired sufficient skill to

manage the machine unaided. But to those who have to learn to ride without the aid of an instructor, a few directions will be useful.

The first thing necessary is a suitable place for learning, and this should be selected where the ground has a slight slope, and where the beginner has plenty of space to turn from side to side without danger of running into fences or other obstructions. A gently sloping meadow, in which the grass is cut short, makes the best possible place, for in all probability the ambitious beginner will not master the art of riding without a few falls, and the yielding turf of a grass-clad meadow makes a much better surface upon which to fall than a road-bed or the bare earth.

When a suitable place has been found, the bicycle should be taken to the top of the slope and faced toward the descent. To mount, first grasp tightly the handgrips on the handle bar, then place the left foot on the step on the rear axle and, after starting the machine down the slope by a push with the right foot, rise on the step and slip forward into the saddle. The slope of the ground should be sufficient to keep the bicycle in motion until the rider has placed his feet upon the pedals, after which he will have no difficulty in propelling it.

At the first attempt the beginner will probably ride only a few feet before he will lose his balance, and bicycle and rider will tip over to one side; but if he put out his foot quickly on the side toward which the machine is falling, he will be able to dismount without a fall. Even if he fail to do this, he will find that a fall is not a serious matter, and at his next trial he will be less fearful of getting one.

It is more difficult for a woman than for a man to learn to ride a bicycle, since she is not only less accustomed, as a rule, to athletic exercises, but she is hampered by her attire. On account of her skirts, a woman must use a bicycle with a drop frame, and must mount from the pedal instead of from a step on the rear axle. This is a more difficult feat than a man has to perform in mounting.

In order to mount successfully, the woman should place her bicycle in a position that brings the pedal on the right side near to the top of its path, with the pedal crank slightly inclined forward. Then, standing on the left side of the machine and inclining it toward her, she should place her right foot on the right pedal, and, holding the machine steady with her left hand, should carefully ar-



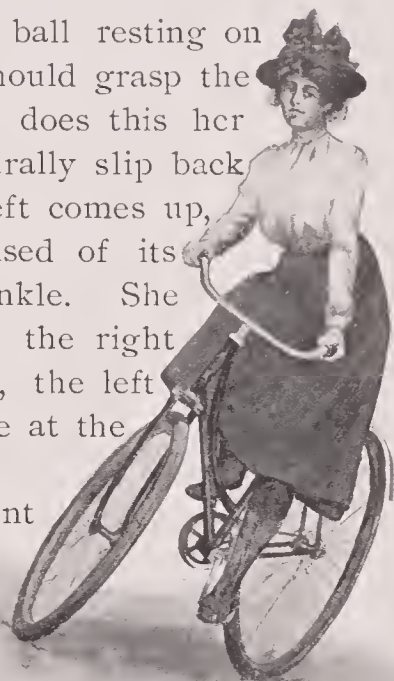
range her skirts so that when she rises on the pedal and slips back on the saddle they will hang evenly on both sides of the bicycle. If she fail to do this, the unevenly hanging skirts will interfere with the freedom of her movements, and may cause a bad fall. It need not be said that in learning to ride a bicycle a woman should always wear a short skirt—one that is at least so short as to leave the foot and ankle unimpeded.

When she has placed her foot in position, with its ball resting on the pedal, and has arranged her skirts properly, she should grasp the handle bar firmly and rise on the right pedal; as she does this her weight will drive the bicycle forward, and she will naturally slip back into the saddle. As the right pedal goes down the left comes up, and, unless she is careful, the novice may be apprised of its coming, by feeling it strike the back of her left ankle. She should guard against this by lifting the left foot as the right descends, and, when the right foot ceases to go down, the left should be lowered upon the pedal which will then be at the top of its path.

After a few attempts, most beginners succeed in mounting and in getting the feet in proper position on the pedals, but it takes a longer time to learn to steer the machine. At first one has a tendency to grip the handle bar very tightly, and to keep the arms rigid; consequently, when one turns the wheel to one side or the other, one is inclined to pull on the handle bar with too much force and thus turn the wheel too far. One is also likely to turn the bar in the wrong direction, but with practice these mistakes will be avoided.

A moment's reflection will make it apparent that when the bicycle tips to one side the front wheel must be turned in the same direction to keep the machine from falling. The reason for this is that by turning the front wheel in the direction in which the bicycle is falling, a support is placed under it on that side, while if the front wheel be turned in the opposite direction all support is removed and a fall results.

When the novice has learned to manage the bicycle fairly well and can mount and steer without difficulty, he should practice dismounting while the bicycle is moving rapidly. This accomplishment is one that comes only with practice, and no directions for acquiring it can be given except the advice to keep a firm hold on the handle bar, and to jump far enough from the machine to keep the pedals from striking you before you can stop yourself and the bicycle, after



your feet strike the ground. If you do not keep a firm grip on the handle bar, you will be almost certain to fall when you dismount while moving rapidly.

Since emergencies frequently make it necessary to dismount instantly, the bicycle rider should never ride at great speed until he has become proficient in dismounting. The neglect of this precaution has caused many serious accidents to reckless riders, while the ability to dismount at once while riding at high speed has frequently been the means of saving both life and limb.

As in all other sports, the novice finds Bicycling even more enjoyable than do the experienced riders, and he seldom knows how far or how fast to ride at first. The unaccustomed speed, the smoothness of the motion, and the apparent absence of fatigue, lead to overexertion, and even if the rider does not carry it to such a degree that permanent injury results, he frequently finds that his muscles stiffen and feel sore for several days after a ride. The tendency to bring on this feeling of soreness and stiffness by riding too hard at first is more common among women and girls than among men and boys, and the former should be especially careful to avoid it, if they would derive the greatest pleasure from the use of the bicycle.

No precise rules can be laid down for the novice in determining how far and at what speed to ride, but he, or, more especially, she, should remember that some time is required for one's muscles to become accustomed to new forms of exercise. At first the rides should be short, and the speed should never be sufficient to make the rider unusually warm, or to make him or her breathe hard. If these facts are borne in mind, the beginner will avoid the disagreeable stiffness and soreness that often last for days after the first long ride.

VACATION TOURS

THE use of the bicycle for Vacation Tours is one of the most enjoyable forms of cycling, and there are few ways of spending a vacation that yield more pleasure than a tour awheel through some beautiful or unfamiliar region. In traveling in this way, the tourist becomes much better acquainted with the natural features of the country he traverses than would be the case if he traveled by rail, and at the same time he obtains the benefit of outdoor exercise.

While bicycle tours, as a rule, are enjoyable, they may prove quite the reverse if they are not properly planned and sensibly carried out. Touring by oneself is generally uninteresting. The pleasure is more than doubled by having one or two congenial companions; but a party of more than four is often undesirable, because it is hard to adjust the daily runs and the pace so as to suit all the members of a large party.

Then, too, there is the difficulty that is sometimes experienced in finding accommodations at night. When the region to be traversed is entirely unfamiliar to the tourists, they frequently find it necessary to seek lodging at farmhouses, and it is often difficult to secure accommodations for more than two persons.

When it is possible to do so, the route should be fully planned before the start and the length of each day's run should be determined in advance. In settling upon the length of the daily runs account must be taken of the character of the roads to be traveled and of the physical condition of the riders. It is well to make the runs, especially for the first few days, shorter than the riders think they can easily accomplish. By doing this, the tour will be without the undesirable accompaniments of sore muscles and stiff joints; whereas, if the strength of the riders is too severely taxed on the first two or three days, the rest of the trip will be deprived of most of its pleasure.

A maxim that the cycle tourist should keep in mind is the old saying that "an ounce of prevention is worth a pound of cure." Many a delay or long walk to the nearest town has been brought about by failure to act on the advice contained in this old saw. Before starting on a tour of considerable length, the cyclist should make sure that his "kit" is supplied with all the tools necessary to keep the machine properly adjusted, and he should also carry some extra spokes, as well as materials and tools for temporary and permanent repairs to his tires. Needless to say, the bicycle should be thoroughly overhauled just before the beginning of the trip, and its perfect condition at the time of the start assured.



RACING

BICYCLE tours and spins for exercise, such as have already been discussed, are the forms of cycling in which all riders may indulge, and which are most beneficial to the health of the riders; but the kind of cycling in which the public takes the keenest interest, and into which every rider who is fitted for it is almost certain to drift at some time, is Racing.

The desire to excel his fellows is as strong in the cyclist as in the devotee of any other sport, and the excitement of the contest makes the pleasures of other forms of bicycling tame in comparison. This feature leads many riders to undertake Racing who are not capable of standing the great strain of muscle, nerve, and heart which it

entails, and in these riders are seen most of the ill effects which some persons regard as the inevitable results of Bicycling.

For young men who are physically sound, and who train properly for their races, however, bicycle racing is not necessarily any more injurious than other contests requiring great physical exertion. There is, of course, a certain degree of danger from accidents while riding at the great speed attainable under the most favorable conditions, but there seems to be a special providence that watches over the bicycle rider, for accidents are comparatively few, and when they occur, the injuries received by the riders seem extremely slight in view of the nature of the falls they receive.

A mishap to one rider in a fiercely contested race sometimes brings down a dozen others and their mounts in a confused mass of men and machines, from which it seems impossible for all the riders to emerge alive. Yet after a fall of this kind they all rise, with no greater injuries than a few bruises and the loss of a little cuticle.

FANCY RIDING

THE last form of bicycling which we shall consider is what is commonly known as "Fancy" Riding. This is hardly a form of sport, — unless it is held to include bicycle polo, — and consequently only a few words need be said about it here. Almost any rider can easily learn to perform a number of feats with the bicycle; indeed, it can be made to run under conditions that seem to defy the laws of motion and of gravity; but it is impossible to give directions for acquiring the skill necessary for such feats. The only way to acquire it is by patient and persistent practice, which in time will bring about the desired result.

It should be remembered, however, by the rider who is ambitious to perform the feats of the professional trick riders, that they ride machines built especially for them and adapted to withstand strains to which an ordinary bicycle would succumb. The ordinary machine is designed to undergo only such strains as are put upon it in riding in the usual way, and when used for Fancy Riding it may soon be ruined.

POLO

BICYCLE POLO, to which reference has been made, does not properly come under the head of trick riding, but to play it successfully requires such complete mastery of the machine that it may not be inappropriate to consider it in this connection. The game is played in a court of varying dimensions, the most common ones being seventy-five feet in length by fifty feet in breadth.

The goals, one of which is at each end of the court, are about ten feet in width, and the number of players on each side varies from three to five. The "ball" is a block of wood two inches square and one inch in thickness; it is propelled by blows administered with the wheels of the players' bicycles.

The court must, of course, have plenty of open space around it, so that the players may go out of bounds without encountering any obstacles. The positions of the players in the court depend upon the number engaged in the game, and this, as well as the periods of play and the plan of scoring, may be determined by previous agreement. The game is a most fascinating one, but bad falls are not uncommon, especially where the number of players is large. It should not be attempted by other than expert riders.



PHYSICAL ADVANTAGES

THE beneficial effects of cycling as an exercise have been touched upon in several of the foregoing paragraphs, so that a lengthy discussion of cycling, from the physician's point of view, will not be necessary. Much has been written on the effects of Bicycling on the health, and the conclusions reached are that, like all other forms of exercise, it is injurious when carried to excess but beneficial when indulged within proper limits. Its especial advantages are that it is an exhilarating form of exercise, and is not onerous when taken regularly; that it brings a considerable number of muscles into play; and that it can very easily be regulated in both character and amount. Its chief drawback is that the rider is unmindful of fatigue and is apt to carry the exercise to excess without becoming aware that he is doing so. The various conditions which most frequently lead to over-exertion have already been mentioned.

CARE OF THE WHEEL

A MATTER that is of much practical interest to all cyclists is the proper care of the bicycle. Many riders of long experience have not learned how to keep their mounts in the best condition, and a few words on that subject may not be amiss. The two essentials in the proper care of bicycles are to keep all parts clean and all the bearing surfaces well lubricated. The bearings should be opened and inspected periodically, and if at all dirty they should be cleaned with oiled waste and then be packed with vaseline. Many riders wait until they can hear a faint grating sound in the bearings before they con-

sider cleaning necessary; but much damage may have been done before the sound is noticed.

In the chain bicycles the proper care of the chain is a matter of great importance, as a dirty chain makes the bicycle run much less easily. The chain may easily be cleaned by placing it in a can of kerosene and shaking it vigorously for a while, and then wiping it perfectly dry. Before replacing it on the sprocket wheels, it should be dipped into melted vaseline or lard, and be wiped again after cooling. When it is in place on the bicycle, the bearing surface of the chain blocks should be rubbed with graphite. This solid material makes the chain run smoothly and noiselessly on the sprockets and, unlike oil, it does not gather dust. Attention to these simple directions will not only make a bicycle last longer than it otherwise would, but will add much to the comfort of the rider.

WALKING CLUBS

AMERICANS, live indoors more than do any other people in the world, dwellers in the frigid zones alone excepted. This is partly due to the character of our climate, which passes quickly from one extreme of temperature to the other. It is partly due to the character of our civilization. Much of even mechanical work is practically sedentary, for the workman's duties are chiefly to feed and watch the machine.

This excess of indoor life has attracted much attention in recent years, and an unmistakable feeling has developed that more outdoor life would be a gain. Surely it is not nature's plan that men and women should spend so large a portion of this life indoors. If it were so, the world would not have been made so beautiful. The grace of the trees, the carpeting of the green meadows, the wild flowers strewn lavishly in unexpected places,—

“ A violet by a mossy stone
Half hidden from the eye,— ”

the dazzle of the winter's snow, the sheen of the water, the songs of birds and brooks, the ever-changing panorama of gorgeous cloud scenery, the clear, crisp air of the morning—nature's champagne—the caresses of the south wind,—surely these were not made in vain. They are nature's invitation to come out into her realm.



The first practical aim of walking is health. This is so evident that it needs no argument. A good walker, whether man or woman, has a sort of independence that is denied to others. People who are utterly unable to walk a mile or two are not rare. If these get caught, as they often do, where there is neither trolley car nor carriage at hand, they are simply helpless.

In this our British cousins put us to shame. When the famous essayist and poet, Matthew Arnold, was in this country, he failed to make a desirable connection at a railway junction. Learning that his destination was only fifteen miles distant, he at once set out afoot. No doubt he would have walked all the way had not, as he expressed it, a kind-hearted man come along in a timber wain (lumber wagon) and given him a lift.

How much better for him thus to start out for the pleasant and healthful walk, than to spend four hours complaining of the inefficient railway service. Such independence is no mean item in life. One who does not like walking is simply suffering punishment when compelled to walk; one who does like it receives pleasure and benefit from the same circumstance. One who cannot walk well is hampered every day of his life.

Walking Clubs are organized to promote this healthful and delightful exercise. These may be permanent organizations, though they will not be less satisfactory if they are temporary, and are planned for one jaunt or for a series of short excursions. An extemporized organization for a trip every second day, for a week, or for a month, might hold the zest of the pedestrians through that limited period, while an attempted permanent organization would fall to pieces by its own weight.

For the specific jaunt, or for the series of short excursions, there should be a measure of intelligent preparation. There is a class of open-air books excellently adapted to this purpose. In this are included Dr. Vandyke's "Fisherman's Luck," Mr. Mabie's "Nature and Culture," and all the works of John Burroughs. Nor should we forget that classic work, perennially fresh, Isaac Walton's "Complete Angler." The appreciative reading of such works is the best preparation, and will add spirit to the tour.

MAKING UP THE PARTY

UNREASONABLE stress is frequently laid upon the making up of the party. Do not forget that, with the utmost care, you are not likely to get together a party of angels. If you did, they might expel *you!* You are to take such men and women as you can get. They should love to walk, and they should be companionable. Instead of trying

to weed out the members so as to get the ideal party, spend the time in cultivating meekness, so that you may keep your temper sweet when your companion, tired, foot-sore, and perhaps ill, grows unexpectedly cross and selfish.

If you can have a kodak in the party, or an artist with a facile pencil for sketches, so much the better. Musicians are better still. Nothing effaces the worries of the day as does good music after a good supper. The writer was one of a party of five who walked through half of Switzerland a few years ago. Four were musicians, three of them being from the Stuttgart Conservatory, and one made charming pencil sketches. None of them was angelic in disposition, but the trip was most enjoyable.

If there be scientists,—botanists, geologists, ornithologists,—that is well. A historical knowledge of the route traversed is also desirable. But the office of historian of the party, one appointed to write up the record of the trip, is almost certain to prove a delusion and a snare. Let that office be omitted. If any individual feel called and inspired to act as historian, let him do it of his own motion and at his own peril. But do not take the responsibility of voting him into the office.

Little need be said regarding the matter of dress.

A costume suitable for the golf links or for the bicycle is correct for walking. The point of chief danger is in the shoes. These should have stiff soles, but must be entirely comfortable to the feet. As soon as one's feet become very sore, that one is peremptorily put out of the game.

LONG DISTANCE WALKS

IF a jaunt of several days or weeks is contemplated, the plans should be elastic. Even though the plans be made wisely and carefully, they cannot provide for every exigency, including change of weather, and least of all for the varying desires of the company. When it seems best to modify the original plan, do not let any misplaced conceit prevent you from doing the wise thing.

Never lose sight of the purpose of the jaunt. It is not to cover a given number of miles. It is not to lay up material for future boasting. If it be a pleasure trip, try to let nothing interfere with legitimate pleasure. Better stop with a satisfactory walk of fifteen miles, than to increase the distance to twenty-five miles, and regret that you were so foolish as to undertake it.

If at any time it become evident that there is no pleasure in the trip, nor any hope of pleasure, even if it be indefinitely prolonged,



then cheerfully acknowledge the fact, yield to the inevitable, go home by the quickest conveyance, and laugh good-naturedly over the *fiasco*.

Do not demand too much of the pleasure you expect to get. It is not reasonable to hope that your ecstasy will be kept up to the operatic pitch for sixteen hours of the day. But it is one of the beautiful arrangements of nature, that the little annoyances and frictions which are exceedingly irritating at the time, will be forgotten, while the main current of happiness will remain to sweeten the memory.

If the plan covers several days, or a longer period, one must make full provision for rainy days. It is astonishing how greatly the soul of the saint may be vexed when one is imprisoned for thirty-six or more hours in a farmhouse, with no music to while away the time, no work to do, no book to read, no game to play. Look out for that and provide against it. The rainy day is likely to be an incident in every extended tour.

In point of distance, don't cover much ground at first. If you walk too far the first day, on the second day you will feel the reaction, so that nothing is gained; and, what is worse, it will take the spirit out of the whole affair. The physical enthusiasm of the first day is delusive.

Another popular error is that the distance can be slightly increased every successive day. For instance, fifteen miles the first day, eighteen the second, and twenty the third. Until the pedestrian is thoroughly inured, every second day may be looked on as an "off" day, or a day of comparatively small progress. The writer's thought can be best expressed by an illustration. The figures are not intended to express precise distances, but approximate proportions. Start on Thursday and make fifteen miles; twelve on Friday; fifteen or twenty on Saturday; rest on Sunday; twenty or more miles on Monday; half as many on Tuesday. Then you will have struck your pace and may do as you please during the remainder of the outing.

It is well to avoid notebooks. They are only less stupid than the formal historian of the party. "But," you ask, "shall we keep no record of the trip?" By all means! And there is just one way of keeping a satisfactory record. It is by writing letters. Write every night to some intimate friend; and let that friend be a young person, if possible. Such a record will have a sparkle, a vividness, a vivacity that you cannot possibly infuse into a diary. After the trip you may borrow those letters and revamp them into the form of a record.

One cannot too highly favor Walking Clubs as a means of recreation to young people. The short trips, out and back in one day, have much to commend them. They are inexpensive, healthful, social, and educational. When time is a matter of consideration, form

in rank and march like soldiers. This is the only defense against the laggard who delights to keep back the whole company. When you come to a fine view, allow time to take it in. Bring out your best social qualities as earnestly as you would at a party, so that the company may break up with mutual congratulations and good wishes, and all be eager for a happy return of the walking day. So doing, you will get your living as you go along, improve in health and in intelligence, and lay up a store of memories, the sweet fragrance of which will refresh future years.

HARE AND HOUNDS

HARE AND HOUNDS is a sport best suited to the crisp days of autumn or early winter, when the harvests have been gathered and the fields are brown and bare — when the ground is firm and the air is fresh and bracing. Then there is a rushing of blood through the veins, an eager desire for activity and freedom from restraint, that are lacking

in the warm summer days. This sport has an element of expectancy and uncertainty which gives it a breathless interest from start to finish. At the same time, it calls forth all the mental sagacity of the participants, as well as their swiftness of foot and their physical endurance.

lit-

or training.

A Hare and Hounds run, or paper chase, as it is sometimes called, requires little preparation and no preliminary practice. It is really a sort of pursuit race over a selected course by those pursued, and known by the pursuers only when they go over it.

There may be any number of participants in the run, and the more the merrier. They are divided into groups, or sides, the members of which are styled respectively Hares and Hounds. The former are usually two in number, and are chosen for their fleetness and endurance. They are given a few minutes' start before being followed by the Hounds, whose object is either to catch them or to cover the course in less time than is taken by the Hares. This course usually forms an irregular circle from five to ten miles in circumference. It is selected by the Hares, and is indicated by them to the Hounds by the scattering of small pieces of white paper, which constitute "scent."



BEFORE THE START

THE accessories of the game are of the simplest description, and consist principally of the scent and the bags in which to carry it. Any kind of paper will do. It should be cut or torn into small pieces; cut paper is preferable, as it is less likely to be confused with any other loose paper that may be near the course.

Newspapers make very good scent, though a heavier paper is desirable on a breezy day, as it is less likely to be blown away. The scent bags may be made of any stout cloth, and each should be fitted with tape loops so that it may be slung from the Hare's shoulders. A hoop of wire sewed into the mouth of the bag will hold the latter open so that the hand may easily be inserted. The paper should be tightly packed in the bags, so that their bulk may not impede the Hares too much in running. A small, pointed stick, to which is secured a white cotton flag, should also be provided for the Hares. This is used to mark the "break," or spot where they stop dropping scent, which they do some distance from the finish.

Both Hares and Hounds should dress comfortably, but should not wear too heavy clothing while running, for even on a cold day a long run will warm one very noticeably. Well-worn, easy shoes, which are not too thin, short trousers, a sweater or jersey, and a knit cap make a desirable costume.

Before the start the Hounds should select a "Master," whose duty it is to decide on the pace and to call one Hound after another to set it. This is necessary in the "close" game, where the Hounds keep together and must have a leader.

In the "open" game, where the Hounds scatter and each man is for himself, the pleasure of companionship is lost and the sport becomes more like a long footrace. In the open game, it is usual to require the Hounds to bring in pieces of colored paper left by the Hares at the extreme limits of the run. This proves that the Hounds, as well as the Hares, have been over the course. In the *closé* game this precaution is unnecessary.

If the run is to be pretentious, and especially if prizes are to be given, two or more judges should be appointed. They should remain at the starting-point, which is also the finish, start the Hares and the Hounds, and note the time taken by each to cover the course. They should notify the "Master of the Hounds" a half minute before the Hounds are to start, or "throw off," in order that he may get the "pack" ready. The judges should compare their watches previous to the start and see that they are set alike, and should note to the second the time taken by both Hares and Hounds to finish the run.

It is usual to allow seven and one-half minutes start to the Hares, and to require them to double this time on the run, in order to win. In other words, if any Hound arrives at the finish within fifteen minutes of the Hares, he is entitled to the prize; if not, the Hares win.

THE RUN

LET us imagine a number of boys ready to start for a Hare and Hounds run. It may prove interesting to see some of the tricks that artful Hares can play on their pursuers.

The judges call "Time for the Hares!" and at a steady, but not rapid, jog trot, off they go with the big bags of paper under their arms. They at once begin to scatter "scent," which they must do in such a way as always to leave a clear trail. It is usual for them to alternate in the dropping of the paper at intervals of about ten minutes, so that neither may be unduly tired by the extra exertion.

Usually the Hares will have laid their plans before the start, and they now proceed to put them into execution. When they come to a fence, one Hare may turn short off to the right or left, while the other goes over it for a hundred yards, and leaves a "blind scent." He must not cut across to his companion, however, but must retrace his steps to the point where the two separated and then join the other Hare. This rule is made because a real hare may double on his track, but he cannot "cut corners" without leaving a trace for the dogs.

Running in loops or circles, so as to cross their own track, is another trick of the Hares, but it loses time for them, as well as for the Hounds, and so should seldom be done. If at any time the Hounds sight the Hares, they may abandon the scent and follow by sight. Otherwise, unless they can see the crossing of a loop, they must not cut across country to where they *suppose* the Hares to be, but must follow up each twist and turn of the trail. The Hares should avoid crossing water except by way of bridges. In the first place, wet feet are neither pleasant nor healthful, and in the second place, scent dropped in water is likely to sink or to be carried away, and thus does not leave a fair trail.

When the Hares have completed half the course, or find their scent half gone, they start toward the finish by a new route, and prepare for their greatest effort. About a mile from the finish, or "home," the last of the scent is dropped in a pile, and the little flag-staff is planted securely in its midst, or, if colored paper is used, it is secured in place by a stone. Then, folding their scent bags, the Hares take the shortest and best way home, where they arrive panting and tired.

After the start of the Hares, the Hounds have still seven and one-half minutes to wait, and a time of "impatient patience" it usually is. Finally, the Master receives word from the judges to "line up the pack," and then exactly on the second comes the word "Go!" that starts the Hounds.

They are usually very eager at first and would put on all possible speed, but this the experienced Master will not allow, knowing that in a ten-mile run it is best to start slowly. Usually he sets the pace at the start himself, and calls on others to relieve him after the pack have secured their "second wind."

When the Hounds come to a fence where the Hares have left a "blind scent," they often fall into the trap and waste time in following the blind trail and in hunting for the real one. A knowing Hound, however, looks along the fence first, and sometimes the Master spreads the pack on coming to a suspected fence, and tells each Hound to notify the others if he finds the trail branching off.

A loop in the trail, while it may save time for the Hares, may not trick the Hounds at all. If they can see where the two parts of the trail cross they may, of course, follow it without going round the loop. From the foregoing it will be seen that the sport is something more than a test of strength and endurance. It is also a trial of wits—Hares against Hounds—and the shrewder often wins.

Finally the flagstaff, or other "break signal" is sighted, and then it is every one for himself. Each Hound strives to be the first in at the finish, which is often hot and exciting. The judges must take each Hound's time accurately, and if the pack is large, each should be numbered and should cry out his number to the judges as he crosses the line.

If prizes are to be given, they may be presented to the winner as soon as the last straggling Hound arrives, —*but never until proper precautions against cold have been taken.* A bath and a rub down are desirable, but if not convenient, warm, dry clothing and shelter will obviate the only danger incident to this healthful sport.

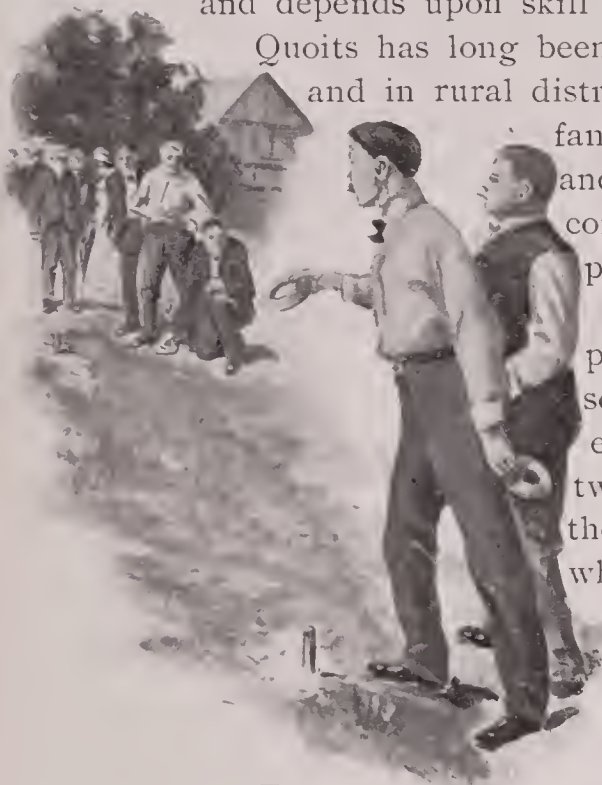
Three things which should be avoided by both Hares and Hounds are the tendencies to run too fast, to change speed too often, and to talk. Every one should expend his strength judiciously so as to finish well, and each will need all his "wind" in running.

Hare and Hounds is one of the few sports that appeal both to the boy and to his parents. To the former by reason of its life, activity and spirit of competition, and to the latter because it is healthful and stimulating, is inexpensive and free from danger. If proper care is taken after a run to prevent the body from being chilled, the after-effects will be limited to an appetite that will surprise even a mother,

and a glow of circulation and a healthy, tired feeling that will induce a strong desire to repeat the run at the earliest opportunity.

QUOITS

THE game of Quoits, or "Pitching Quoits," as it is more commonly called, slightly resembles the ancient sport of throwing the discus. The modern game requires much less exertion, however, and depends upon skill rather than strength.



Quoits has long been a popular outdoor game, especially at schools and in rural districts, and even now it is often enjoyed as a family recreation in which those of both sexes and all ages may take part. There are several considerations that have tended to make the game popular, and that will doubtless go far toward keeping it so. For example, it requires comparatively little space for ground; few accessories are needed, and none of them are expensive; any number of persons greater than two may play; and plenty of opportunity is given the players for the use of skill and judgment, while at the same time the game furnishes a considerable amount of light, beneficial exercise.

THE GROUND

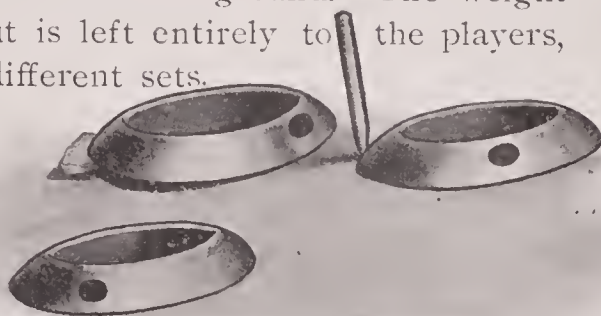
THE space required for a Quoit Ground may be anywhere from twenty to forty yards in length, and must be of sufficient width to allow the players room for pitching; six feet is ample. The ground selected may be either bare or covered with turf, but it should be comparatively soft. Two pegs, usually of iron, are driven into the ground about nineteen yards apart, though this distance may vary, by agreement of the players, between fifteen and thirty yards. These pegs, which are variously called *spuds*, *hobs*, and *spikes*, should project one inch above the surface of the ground, though in ordinary games this rule is not generally adhered to, and the hob often projects four inches or more. The object of the players is to pitch the quoits so as to cause them to fall over the pegs, or as near as possible to them.

THE QUOITS

REGULATION quoits are nearly flat rings of iron, or sometimes of rubber (Fig. 1., *a* and *b*), about eight inches in external diameter, and

one or two inches in breadth. They are convex on the upper side, and slightly concave on the under, so that the outer edge curves downward, and is sharp enough to cut into soft ground. The weight of the quoits is uniform in a set, but is left entirely to the players, and consequently varies greatly in different sets.

Instead of quoits manufactured especially for the purpose, horse-shoes are often used, and they make very acceptable substitutes.



(FIG. 1 a.)

THE GAME

ALTHOUGH there may be any number of players, the game is made more interesting if there is an even number, so that two sides, or teams, may be formed. Each player has two quoits, which he pitches each time that his turn to play comes; and the players pitch in rotation or alternately, according as they are playing individually or by sides.



(FIG. 2 b.)

In beginning the game, all of the players pitch their quoits toward the same hob, from a point near the other hob. The primary object is to pitch the quoit so that it will make a "ringer," that is, will fall so as to encircle the hob. Failing in this, the player's secondary object is to cause his quoits to strike and remain as near as possible to the hob.

When each player has had a turn, the score is decided, and each picks up his two quoits. They then pitch from the second hob toward the one near which they stood during the first round, and alternate in this manner between the two hobs throughout the game. In deciding the score of the players, or sides of each hob, *ringers* count two each, and the two quoits nearest the hob count one each. Thus we see that if a player's two quoits are nearer the hob than are those of his antagonist, he scores two points, while if he has only one nearer, they score one point each. In case the two nearest quoits are equidistant from the hob, and belong to different players, neither scores.

The quoit is held with the forefinger along its outer edge, in which there is a small cup-shaped dent for the end of the finger. This gives a better grip, and prevents the possibility of the finger being cut. The two surfaces of the quoit are held between the thumb and the other fingers, and the quoit is pitched with a slight rise so as to make its fall as nearly perpendicular as possible, and is given a rotary motion which makes its flight regular. In case one quoit strike an-

other and displace it, the new position is the one that decides as to its score.

Following are the essential rules governing the game of quoits:—

RULES

1. The distance from hob to hob shall be agreed upon by the players. The player shall stand in line with one hob and shall deliver his quoit at the first step.
2. No quoit shall be used which measures more than eight inches in external diameter. The weight may be unlimited, or as agreed upon by the players.
3. The hob shall project one inch above the surface of the ground, which, if possible, should be clayey and sufficiently soft so that the quoit will be partially imbedded when it falls.
4. All measurements shall be taken from the hob to the nearest visible part of the quoit; the quoit and the soil must not be disturbed.
5. No quoit shall count unless it is fairly delivered, and strikes so that some part of its outer rim is free from the soil. No quoit on its back shall count unless its rim holds in the ground, or unless it has been knocked out by another quoit. No quoit that rolls on the ground shall count, unless it first strikes another quoit or the hob.
6. Each player must deliver his two quoits in succession, and the different players must alternate in order of delivery.
7. When an umpire is chosen to interpret the rules and to decide disputed points in the game, his decision shall be final.

BASEBALL

FOR many years Baseball has been the American national game. During the past few years, however, other games have, to some extent, displaced it in schools and colleges. Then, too, professionalism has robbed it of some of its former attractions as an amateur sport; but the time is far distant when Baseball will lose the place it has held for nearly half a century in the hearts of the American youth.

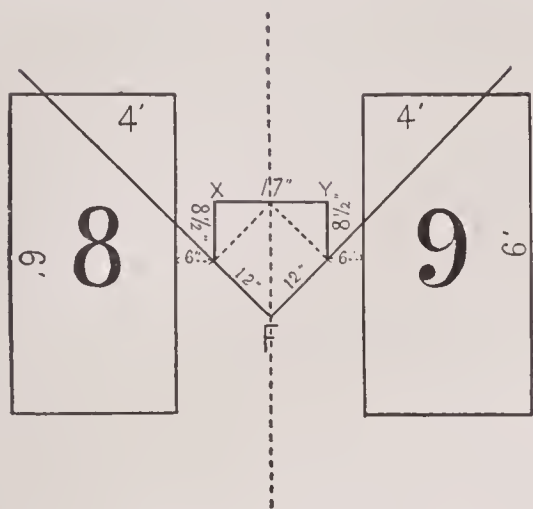
The Spring and early Summer are the times of year best suited to the game, and the advent of Spring is hailed with delight by the young people of both sexes, and by many of their elders, as being coincident with the beginning of the Baseball season.



THE GROUND

THE space on which the game is played may be either turf or bare ground, and should be as level and smooth as possible, and free from all

obstructions. A simple way of laying out the "diamond," and marking the necessary lines, is as follows: (See Diagram.) Select a spot at one end



of the field which is suitable for *home base*, or *home plate*, and drive a peg in the ground at that point. To this peg secure a tape measure, and, walking in a straight line toward the center of the field, drive a peg at a distance of sixty feet six inches to mark the *pitcher's plate*, and another at a distance of one hundred and twenty-seven feet three and one-half inches from the home plate to mark *second base*. At a spot ninety feet from the home plate and sixty-three feet seven and three-fourth inches to the right

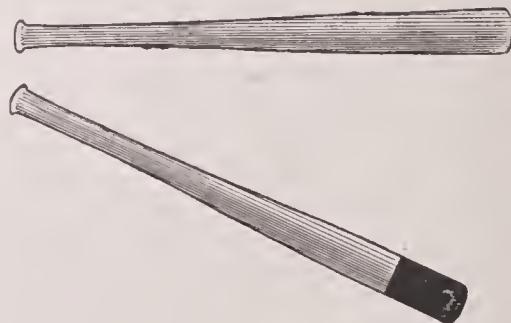
of the center line, drive a peg to mark *first base*, which will then be ninety feet from second base. At a corresponding position on the left side of the center line mark *third base*. By connecting the four bases thus located by means of lines marked with lime, the diamond is formed. Now extend the line connecting home base and first base, and that connecting home base and third base, to the limits of the field, and thus mark the *foul lines* and the catcher's position. These are the principal lines of the field, but other auxiliary lines, called the *players' lines*, the *coachers' lines*, etc., must be marked. Their position and extent relative to the diamond will best be understood by reference to Nos. 2 to 12 of the appended rules.

The home base is a plate six inches square, made of wood, whitened rubber, or other suitable material, and fixed in the ground so that it is level with the surface. It is placed in such position that two of its corners are in the center line of the field. The pitcher's plate is made of similar material and is twenty-four inches long and six inches wide. It is placed with the middle of its longer sides in the center line of the field. The first, second, and third bases are marked by white canvas bags filled with sawdust or other soft material, and are secured to pegs firmly driven into the ground.

BALL, BAT, AND TEAM

THE regulation Baseball is a leather-covered sphere, between nine and nine and one-fourth inches in circumference, and weighing between five and five and one-fourth ounces.

A Baseball bat is made entirely of wood, except that the handle may be wound with twine or other suitable material to assist the player in securing a firm hold. It may not be more than forty-two inches in length, nor more than two and three-fourth inches in diameter, at its thickest part.



A Baseball team is composed of nine players, and two teams take part in each match. The game is divided into nine parts, called innings, which are subdivided so that each team has nine half-innings at bat, and nine half-innings in the field; one team being in the field while the other is at bat. The object of each team is to score as many runs as possible during the time its players are at bat, and to prevent the opponents from scoring. The side scoring the greater number of runs during the entire game wins the match. In case of a tie score, other innings are played until one side gains an advantage, but each side must have the same number of innings at bat. To score a run, a player must start from home plate, and after making a complete circuit of the bases, return to the home plate without being put out.

Previous to the game an umpire is selected who is satisfactory to the captains of the opposing teams, and he is the judge of the players, the score, the rules, and, in fact, of all matters connected with the game. No player, except the captains, is allowed to address the umpire regarding any decision made by him. This manner of selecting the umpire applies either to an amateur or to a non-professional game. In each of the national, state, or other professional leagues, a staff of salaried umpires is appointed at the beginning of a season, and these officiate as directed from time to time by the league official charged with that duty.

THE GAME

IN BEGINNING the game, the two captains toss for choice of innings, and the one who wins the toss usually prefers to have his team take the field, and gives his opponent the first inning at bat, thus reserving the final inning at bat for his own team. His team then take their positions in the field, as will be explained in detail, and the players of the opposing team take their turn at bat in the order that has previously been arranged by their captain. The order is usually such that the good batsmen alternate with the poorer ones, thus preventing several poor batsmen from going to bat in succession.

The pitcher of the fielding team takes his position behind the pitchers' plate and at the word "Play!" from the umpire, pitches the ball to the catcher, who stands behind the home plate. The batsman stands on either

side of this plate, as is most convenient, and endeavors to strike the ball with his bat as it passes from the pitcher to the catcher. Each batsman is entitled to three *strikes* or four *balls*, each of which is called by the umpire as it passes the home plate. (The terms *strike* and *ball* are explained in the accompanying "Glossary of Terms.")

If the batsman receives three strikes without making a *fair hit* he must run to first base. He will then be "out" if the ball is fairly caught by the catcher when the third strike is made, or, when not caught, is thrown



by him to another player, who, while holding it, touches first base with it, or with some portion of his body or clothing, before the runner touches that base. If the runner does not reach first base safely, in the opinion of the umpire, he is "out" and is temporarily retired from the field.

If four balls be delivered by the pitcher to the batsman before he receives three strikes or makes a fair hit, he is permitted to go to first base "on balls." If the batsman be struck by a pitched ball, he is sent to first base on a "dead ball." If the batsman strike a pitched ball with his bat so as to make a fair hit, he must immediately run to first base. Should the ball be caught by any player of the opposing team before it touches the ground, or, if not caught, be thrown to a player who touches the base in advance of the runner, the latter is out. As soon as the first batsman has either been put out, or has safely reached first base, he is succeeded at bat by the player of his side who is next in batting order, and the batting proceeds as at first.

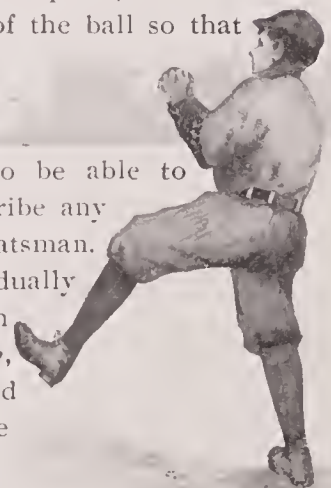
After a batsman reaches first base safely, he endeavors to advance successively to second base, third base, and the home plate, either when the ball is batted or when some other circumstance enables him to do so, without being touched by the ball in the hand of one of his opponents when he is not touching a base. When three men of the batting side have been put out, that half of the inning is finished, and that side goes into the field and their opponents take their inning at bat.

The game thus progresses in a series of innings, all of which are played in a manner similar to that just described for the first inning. The foregoing is intended only to embody the general principles of the game; the numerous intricate points of play, which require careful study on the part of one who wishes to become thoroughly familiar with the scientific game of Baseball, are clearly set forth and explained in the appended rules.

DUTIES OF THE PLAYERS

The Pitcher—The pitcher takes his position behind the pitcher's plate, and delivers the ball to the batsman. He should have thorough control of the ball so that he may pitch a greater number of strikes than balls, and should learn to judge different batsmen so as to know what style of delivery will be most likely to confuse each. It is desirable that he should pitch the ball with great speed, and he should also be able to deliver it so that it will revolve rapidly and thus be made to describe any one of several curves, which in pitching are used to deceive the batsman.

These include the *out curve*, in which the path of the ball gradually curves to the left of the pitcher; the *in curve*, or *in shoot*, which curves to his right; the *up shoot*, which curves upward; and the *drop*, which curves toward the ground. Two of these, such as the out and the drop, may be combined, thus causing the flight of the ball to be still more erratic. In addition to pitching the ball to the batsman, the pitcher should endeavor to stop any batted ball that passes near him, and should watch the runner to prevent him from "stealing a base."



The Catcher—The catcher's position is perhaps the most difficult and dangerous one on the team. His duties are comparatively easy until "two strikes" or "three balls" are called, or unless there are runners on the bases. He must then stand close behind the home plate and catch the ball the instant it passes the batsman. He is protected from injury by a wire "mask," a rubber body protector inflated with air, and heavily padded gloves, but even these do not always prevent him from being seriously bruised. The catcher should arrange a code of signals with his pitcher, so that he may let the latter know what style of ball he desires to have delivered each time, or may signal him to throw the ball to one of the other players so as to prevent a runner from stealing a base.

First Baseman—The first, second, and third basemen, and the short stop, constitute what is called the "*infield*." The first baseman usually stands about fifteen feet from first base and just back of the line between first base and second base. He is expected to stop batted balls that pass near his position, and to catch the ball whenever thrown to first base to put the runner out.

Second Baseman—The second baseman stands a few feet from second base, and just behind the line connecting first base and second base. His duties are similar to those of the first baseman.

Short Stop—The short stop stands near the line between second base and third base, and a few feet nearer to the latter than the former. He should be especially good at stopping batted balls, and at throwing accurately to the different bases. He must be very active and vigilant, for, besides playing in his own position, he is expected to "back up" the second and third basemen whenever the ball is thrown to either of them, so as to stop it in case of a wild throw, or a "muff."

Third Baseman—The third baseman stands within a few feet of the third base, and near the line between second base and third base. His duties are similar to those of the other basemen.

Outfield—The left fielder, right fielder, and center fielder constitute what is known as the "*outfield*." Their positions remain, relatively the same, but are continually changing according to their judgment.

The left fielder stands well back of the line connecting second and third bases, and nearer to the latter than the former. The center fielder stands at a varying distance back of second base. The right fielder stands in a position corresponding to that of the third baseman, back of the line, between first and second bases.

The duties of the three outfielders are similar. They should be able to make long, accurate throws, and should be good judges of batted balls, especially *flies*. Since each of them is held responsible for a large amount of field space, they are required to be very active, and must exercise good judgment in deciding the positions they are to occupy for each of the different batsmen, and the player to whom it is best to throw the ball when it comes into their possession. The outfielders are expected to "back up" the players of the infield who are nearest to them; for instance, if the ball be thrown to the first baseman and is missed by him, the right fielder is expected to stop it and to throw it in time to prevent the runner from making a base.

From the foregoing brief description of the duties of the various players it is seen that at no time in the game is any player of the fielding side idle. Each is constantly on the alert, and at some time during the game each has opportunities to distinguish himself by good plays both at the bat and in the field. The game is fair, manly, honorable, and exciting, and well deserves the place it has held for so many years in the estimation of the American people.

GLOSSARY OF TECHNICAL TERMS

Assist—Any fielder cooperating with another or others in retiring a base-runner is credited with an *assist*.

Balk—When a pitcher, with a view to deceiving the batsman, makes a motion as if to pitch the ball to him, and fails to do so, the umpire must declare a *balk*.

Ball—A pitched ball that does not pass over the home plate at an altitude not higher than the batsman's shoulder, nor lower than his knee, must be declared a *ball*, provided the batsman does not strike at it.

Base Hit—Any ball so hit that it cannot be fielded in time to prevent the batsman from reaching his base.

Base on Balls—A base accorded the batsman when the pitcher has delivered four "balls."

Batsman's Box—The space on either side of the home plate in which the batsman must stand.

Battery—The pitcher and catcher.

Block Ball—A ball in play touched by a spectator or by one of the batting side when not actively engaged in the game.

Bunt Hit—A ball deliberately batted so slowly to the infield that it cannot be fielded in time to put out the base-runner.

Coacher's Box—The space in foul territory near first and third bases devoted to the use of the coaches.

Dead Ball—A ball delivered by the pitcher which, when it has not been struck at, touches any part of the batsman's person or clothing, or any part of the umpire's person or clothing, while on foul ground, without first passing the catcher.

Diamond—The ground is so called on account of its shape.

Double Play—A play in which the ball is handled quickly enough to retire two men.

Earned Run—When the round of bases is made without the help of a fielder's error, the run is "earned."

Error—The mistake of a fielder which helps the opposing side.

Fair Ball—A ball passing over the home plate not higher than the batsman's shoulder, nor lower than his knee.

Fair Hit—A ball batted within the foul lines and remaining in that territory till it has passed first and third bases, or a ball batted outside the foul line which rolls inside before passing first or third base.

Fly Ball—A ball batted into the air.

Forced Out—When a base-runner is compelled to make room for his successor, and is touched by the ball held by a fielder, or cannot reach the next base as soon as the fielder holding the ball.

Foul Ball—A ball batted into foul ground, except in the case of a foul tip (which see).

Foul Lines—The lines running from the home plate through the first and third bases to the extremity of the field.

Foul Strike—A ball batted by the batsman out of position, or a ball bunted which rolls into foul ground.

Foul Tip—A foul hit that does not rise above the batsman's head, and is caught by the catcher within ten feet of the plate.



Home Run—A complete circuit of the bases made on a hit without the help of a fielder's error.

Infield—First, second, and third basemen and short stop.

Outfield—Right, center, and left fielders.

Passed Ball—A pitched ball which passes the catcher and allows base-runner to advance a base.

Plate—The home base.

Pitcher's Box—The space in which the pitcher stands when delivering a ball to the batsman.

Sacrifice Hit—When the batsman purposely hits a ball in such a way that he is put out, in order that he may advance a base-runner.

Shut Out—An inning in which a side does not score a run.

Slide—When a base-runner, to avoid being put out, slides feet or head foremost to a base.

Stolen Base—A base obtained by a runner without help from a hit by a batsman.

Strike—When the batsman tries and fails to hit a ball delivered by a pitcher, or when he does not strike at a fair ball.

Strike Out—A batsman "strikes out" when three strikes have been called on him and he is put out.

Triple Play—A play in which the ball is handled quickly enough to retire three men.

Wild Pitch—A ball pitched out of the reach of the catcher, which allows a base-runner to advance a base or bases.

Wild Throw—A ball thrown out of reach of the fielder to whom it was directed.

RULES

FOLLOWING are the rules of Baseball as adopted by the National League and the American Association of Professional Baseball Clubs:—

RULE 1—THE BALL GROUND

The ground must be an inclosed field, sufficient in size to enable each player to play in his position as required by these rules.

RULE 2

To lay off the lines governing the positions and the play of the game known as Baseball proceed as follows (Figs. 1 and 2):—From a point A, within the grounds, project a right line out into the field, and at a point B, one hundred and fifty-four feet from point A, lay off lines BC and BD at right angles to the line AB; then, with B as a center and 63.63945 feet radius, describe arcs cutting the line BA at F and BC at G, BD at H and BE at I. Draw lines FG, GI, IH, and HF, and these lines will be the containing lines of the diamond or infield.

RULE 3—THE CATCHER'S LINES

With F as center and ten feet radius, describe an arc cutting line FA at L, and drawing lines LM and LO at right angles to FA, continue them out from FA not less than ten feet.

RULE 4—THE FOUL LINE

From the intersection point F, continue the straight lines FG and FH until they intersect the lines LM and LO, and then from the points G and H in the opposite direction until they reach the boundary lines of the grounds.

RULE 5—THE PLAYERS' LINES

With F as center and fifty feet radius, describe arcs cutting lines FO and FM at P and Q; then with F as center again and seventy-five feet radius, describe arcs cutting FG and FH at R and S; then, from the points P, Q, R, and S draw lines at right angles to the lines FO, FM, FG, and FH, and continue them until they intersect at the points T and W.

RULE 6—THE CAPTAIN'S AND COACHERS' LINES

With R and S as centers and fifteen feet radius, describe arcs cutting lines RW and ST at X and Y, and from the points X and Y draw lines parallel to lines FH and FG, and continue them out to the boundary lines of the ground.

RULE 7—THE THREE-FOOT LINE

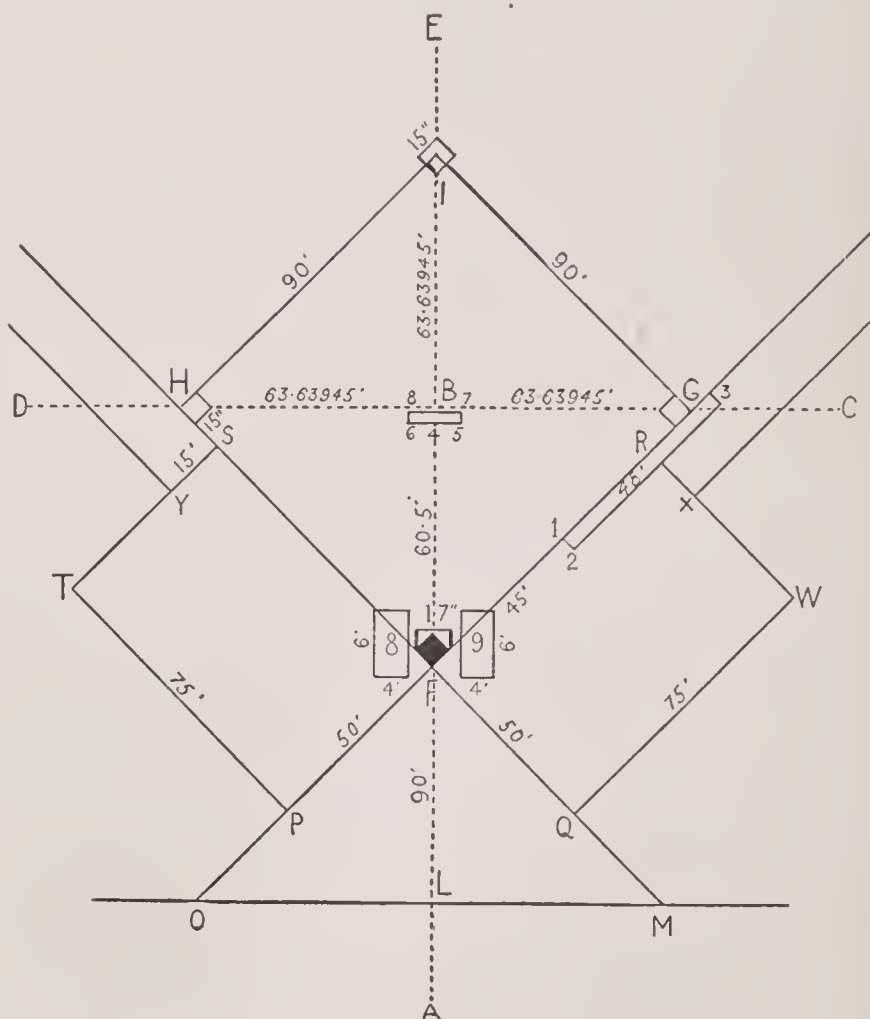
With F as center and forty-five feet radius, describe an arc cutting line FG at 1, and from 1 draw a three-foot line at right angles to FG, to point marked 2; then, from point 2, draw a line parallel to the line FG to a point three feet beyond the point G, marked 3; then, from point 3 draw a line at right angles to line 2, 3, back to and intersecting line FG, and thence back along line GF to point 1.

RULE 8—THE PITCHER'S PLATE

With point F as center and 60.5 feet radius, describe an arc cutting the line FB at the point marked 4, and draw line 5, 6, perpendicular to FB, passing through point 4 and extending twelve inches on either side of it; then with line 5, 6, as a side, describe a parallelogram twenty-four inches by six inches.

RULE 9—THE BASES

Within angle F describe a five-sided figure, two of the sides of which shall coincide with the lines FG and FH to the extent of twelve inches, thence parallel to the line FB eight and one-half inches; a straight line between the ends of these lines—seventeen inches long—will form the front of the plate. Within angles G and H describe squares, the sides of which shall be fifteen inches;



let the two outer sides of the squares lie on lines FG and GI, and FH and HI, respectively, and at angle I describe a square whose sides shall be fifteen inches and shall be parallel to GI and IH, and have its center immediately over the angular point E.

RULE 10—THE BATSMAN'S LINE

On either side of the line AFB, describe two parallelograms six feet long and four feet wide (marked 8 and 9), with their length parallel to the line AFB, their distance apart six inches added to each end of the diagonal of the square within the angle F, and the center of their length on the diagonal.

RULE 11

The Home Base at F and the Pitcher's Plate at 4 must be of whitened rubber, and so fixed in the ground as to be even with the surface.

RULE 12

The First Base at G, the Second Base at I, and the Third Base at H, must be of white canvas bags, filled with soft material and securely fastened in their positions described in Rule 9.

RULE 13—MARKING THE LINES

The lines described in Rules 3, 4, 5, 6, 7, and 10 must be marked with lime, chalk, or other suitable material, so as to be distinctly seen by the umpire.

RULE 14—THE BALL

SECTION 1. The ball must weigh not less than five, nor more than five and one-quarter ounces avoirdupois, and must measure not less than nine, nor more than nine and one-quarter inches in circumference. The Spalding League Ball or the Reach American Association Ball must be used in all games played under these rules.

SEC. 2. For each championship game, two regulation balls shall be furnished to the umpire by the home club. When the ball in play is batted to foul ground and out of sight of the umpire, the other shall immediately be brought into play. As often as one of the two in use shall be lost, a new one must be substituted, so that the umpire shall at all times after the game begins have two balls in his possession ready for use. The moment an umpire delivers an alternate ball to the pitcher, it comes into play, and shall not be exchanged until it, in turn, passes out of sight to foul ground. At no time shall the ball be discolored intentionally by rubbing it with soil or in any other manner. In the event of a new ball being discolored intentionally, or otherwise injured by a player, the umpire, on appeal from the captain of the opposite side, shall forthwith demand the return of that ball, and shall substitute another new ball and impose a fine of five dollars on the offending player.

SEC. 3. In all games the balls played with shall be furnished by the home club, and the last ball in play shall become the property of the winning club. Each ball to be used in championship games shall be examined, measured, and weighed by the Secretary of the League, inclosed in a paper box, and sealed with the seal of the Secretary, which seal shall not be broken, except by the umpire, in the presence of the captains of the two contesting nines after play has been called. The home club shall have at least a dozen regulation balls on the field ready for use on the call of the umpire during each championship game.

SEC. 4. Should the ball become cut or ripped so as to expose the interior, or in any way so injured that, in the opinion of the umpire, it is unfit for use, he shall, on appeal by either captain, at once put the alternate ball into play and call for a new ball.

RULE 15—THE BAT

The bat must be entirely of hard wood, except that the handle may be wound with twine, or fitted with a granulated substance not to exceed eighteen inches from the end. It must be round, and must not exceed two and three quarters inches in diameter in the thickest part, or forty-two inches in length.

RULE 16—THE PLAYERS

The players of each club in a game shall be nine in number, one of whom shall act as captain, and in no case shall less than nine men be allowed to play on each side.

RULE 17—POSITIONS

The Players' positions shall be such as may be assigned them by their captain, except that the pitcher, while in the act of delivering the ball to the bat, must take his position as defined in Rules 8 and 29; and the catcher must stand within the lines of his position, as defined in Rule 3, whenever the pitcher delivers the ball to the bat, and within ten feet of the home base.

RULE 18—REGULATION

Players in uniform shall not be permitted to occupy seats on the stands, or to stand among the spectators.

RULE 19—UNIFORMS

SECTION 1. Every club shall adopt a uniform for its players, and the suits of each team shall be similar in color and style. No player who shall attach anything to the soles or heels of his shoes other than the ordinary baseball shoe-plates, or who shall appear in a uniform not conforming to the suits of the other members of his team, shall be permitted to take part in the game.

SEC. 2. The catcher and first baseman are permitted to wear a glove or mit of any size, shape or weight. All other players are restricted to the use of a glove or mit weighing not more than ten ounces, and measuring in circumference around the palm of the hand not more than fourteen inches.

RULE 20—THE PLAYERS' BENCHES

SECTION 1. The players' benches must be furnished by the home club, and placed upon a portion of the ground not less than twenty-five feet outside the players' lines. One such bench shall be for the exclusive use of the visiting club, and one for the exclusive use of the home club. The benches must be covered by a roof and closed at the back and at each end; a space, however, not more than six (6) inches in width may be left just below the roof for ventilation. All players of the side at bat must be seated on their bench, except such as are legally assigned to coach base-runners, and the batsman when called to the bat by the umpire, and under no circumstances shall the umpire permit any person, except managers and players in uniform, to occupy seats on the benches.



SEC. 2. To enforce this rule, the captain of the other side may call the attention of the umpire to a violation, whereupon the umpire shall immediately order such player or players to be seated. If the order be not obeyed within one minute, the offending player or players shall be fined five dollars each by the umpire. If the order is not then obeyed within one minute, the offending player or players shall be disbarred from further participation in the game, and shall be obliged to leave the playing field forthwith.

RULE 21—THE GAME

SECTION 1. Every championship game must be commenced not later than two hours before sunset.

SEC. 2. A game shall consist of nine innings for each contesting nine, except that: (a) If the side first at bat scores less runs in nine innings than the other side has scored in eight innings, the game shall then terminate. (b) If the side last at bat in the ninth inning scores the winning run before the third man is out, the game shall terminate.

RULE 22.—A TIE GAME

If the score be a tie at the end of the nine innings, play shall be continued until one side has scored more runs than the other in an equal number of innings, provided that the side last at bat scores the winning run before the third man is out; the game shall then terminate.

RULE 23—A DRAWN GAME

A drawn game shall be declared by the umpire when he terminates a game on account of darkness or rain, after five equal innings have been played, if the score at the time is equal on the last even innings played; except, when the side that went second to bat is then at the bat, and has scored the same number of runs as the other side, in which case the umpire shall declare the game drawn without regard to the score of the last equal innings.

RULE 24—A CALLED GAME

If the umpire "calls" the game on account of darkness or rain at any time after five innings have been completed, the score shall be that of the last equal innings played, but if the side second at bat shall have scored in an unequal number of innings, or before the completion of its unfinished inning one or more runs more than the side at bat, the score of the game shall be the total number of runs made.

RULE 25—A FORFEITED GAME

A forfeited game shall be declared by the umpire in favor of the club not in fault, at the request of such club, in the following cases:—

SECTION 1. If the players of a club fail to appear upon the field, or, being upon the field, fail to begin the game within five minutes after the umpire has called "Play" at the hour appointed for the beginning of the game, unless such delay in appearing, or in commencing the game, be unavoidable.

SEC. 2. If, after the game has begun, one side refuses or fails to continue playing, unless such game has been suspended or terminated by the umpire.

SEC. 3. If, after play has been suspended by the umpire, one side fails to resume playing within one minute after the umpire has called "Play."

SEC. 4. If a team resorts to dilatory tactics to delay the game.

SEC. 5. If, in the opinion of the umpire, any one of the rules of the game is wilfully violated.



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