

Manual of Swedish drill : as used in the Swedish Army and Navy, London board schools ... [et al.] for teachers & students / compiled and arranged by George L. Mélio ... with biography of Peter Henry Ling, and valuable paper on scientific physical training by Mrs. Ormiston Chant.

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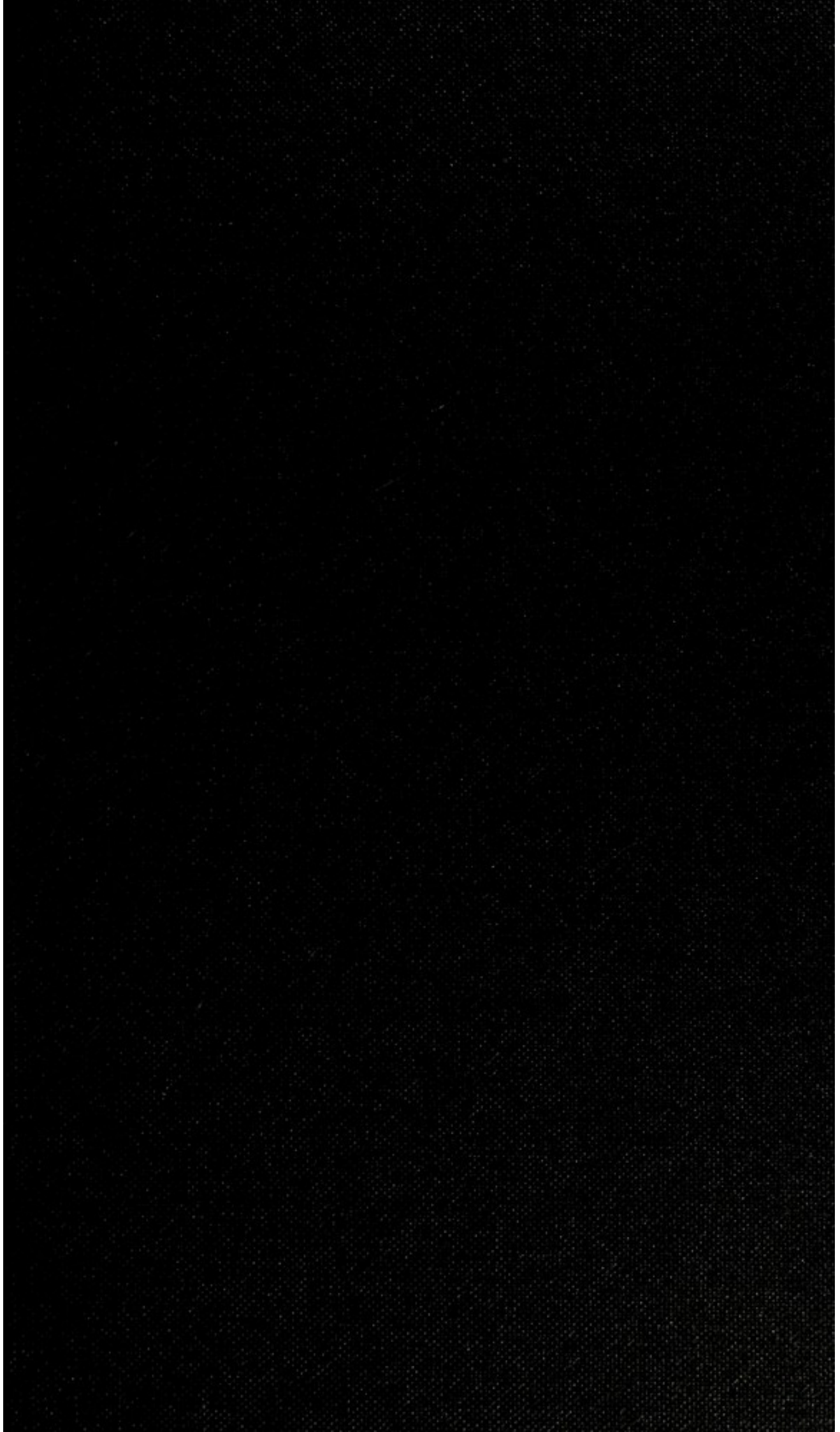
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ILLUSTRATED

MANUAL
OF

FOR

TEACHERS & STUDENTS

ARRANGED & COMPILED
BY

GEORGE, L. MÉLIO,

LEOPOLD GYMNASIUM.

LONDON, E.C.

CONTAINING

A

BIOGRAPHY & PORTRAIT

OF

PETER HENRY LING

FOUNDER OF THE SWEDISH SYSTEM

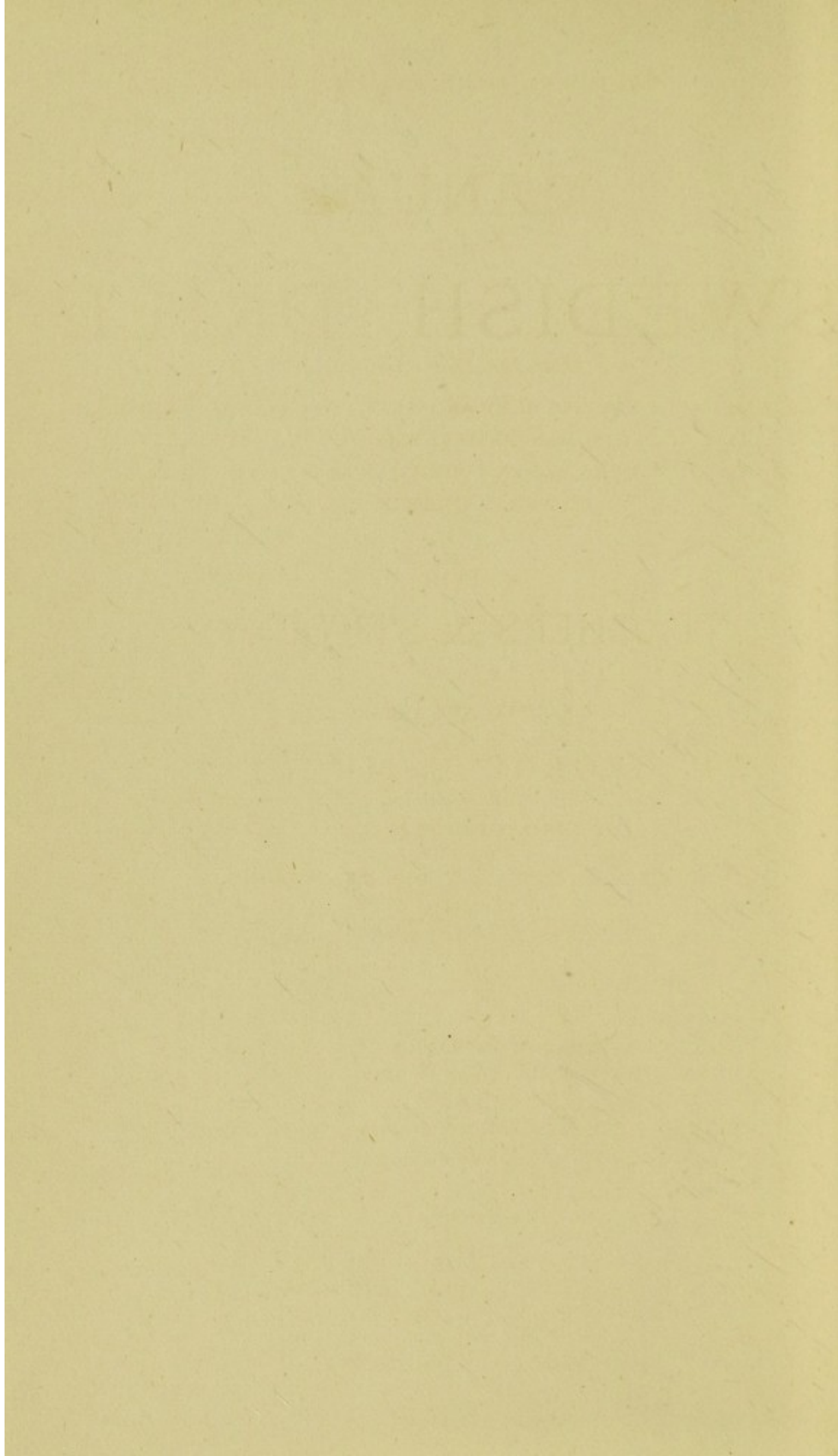


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“The wise for health, on exercise depend.”

MANUAL OF SWEDISH DRILL

(Based on Ling's System),

AS USED IN THE SWEDISH ARMY AND NAVY, LONDON BOARD SCHOOLS,
LEEDS, BOLTON, MANCHESTER, BRISTOL, PLYMOUTH, &C.,
AND AT THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION, LONDON,
NEWNHAM COLLEGE, ETC.

FOR
TEACHERS & STUDENTS.

COMPILED AND ARRANGED

BY

GEORGE L. MÉLIO

(Gold Medallist),

“DIRECTOR OF EXERCISES”

AT THE

CHURCH OF ENGLAND YOUNG MEN'S SOCIETY

AND

YOUNG MEN'S CHRISTIAN ASSOCIATION.

CONTAINING 110 ILLUSTRATIONS AND DIAGRAMS,
WITH PORTRAIT AND BIOGRAPHY OF PETER HENRY LING,
AND
VALUABLE PAPER ON SCIENTIFIC PHYSICAL TRAINING,
BY MRS. ORMISTON CHANT.

LONDON:

SAMPSON LOW, MARSTON, SEARLE, AND RIVINGTON, LIMITED,
ST. DUNSTAN'S HOUSE, FETTER LANE, FLEET STREET, E.C.

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AS

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TO THE

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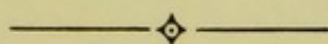
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P R E F A C E .



SOME thirty-five years have now elapsed since a prominent hygienist and medical man ventured to predict that the system of Ling was destined to become a most important branch of any system of education which aimed at producing harmony betwixt mind and body, and that the time must eventually arrive when, even in England, the co-equal development of these powers would be deemed of the most vital importance.

The adoption of Ling's system of rational gymnastics into the London Board Schools since 1881—mainly through the instrumentality of Mrs. Westlake and Dr. M. Roth—and its more recent introduction by the council of the Young Women's Christian Association into their valuable institutions, also at Newnham College, under the supervision of that accomplished lady, Madame Bergman Österberg, tends to confirm the opinion that the above prediction may possibly be realised at a no very distant date.

Whilst endeavouring to check the unostentatious progress of Ling's system in this country even educated persons appear to have over-looked the fact that scientific knowledge cannot be treated as a question of nationality. Science recognises no limitation of that kind. Its one aim is truth its goal the happiness of universal man.

Moreover, it has recently transpired that not a few who have been loudest in their denunciations against the system

possessed but an extremely limited knowledge of either the movements or the physiological basis underlying same.

Under these circumstances it becomes all the more gratifying to note that, in the face of much prejudice and ignorance, the system is slowly, but surely, commending itself to our most eminent medical men and educationalists, who do not hesitate to give it their unqualified approval and support, whilst one of our highest *military* authorities on the subject of physical training, after witnessing the exercises of the London Board School pupils, publicly gave his verdict in favour of the Swedish Drill.

The primary object of this little manual is to set forth, in as comprehensive a manner as possible, a necessarily limited number of Ling's exercises requiring no apparatus, viz., the Free Movements, which, when correctly executed, will be found of the greatest value to children and adults of either sex.

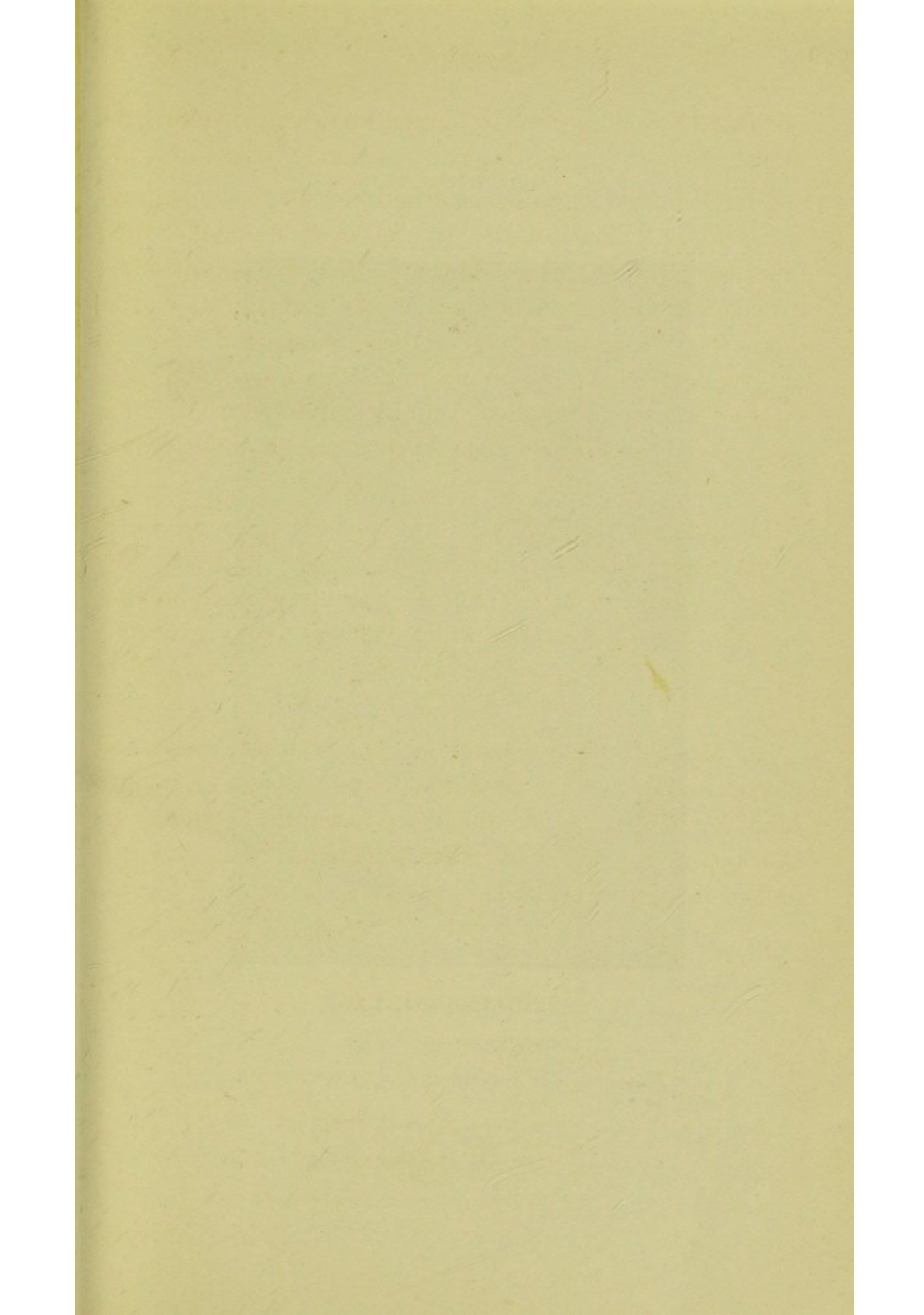
To Mrs. Ormiston Chant, for her valuable paper on physical education, which will be found on page 17, and to Madame B. Österberg, of the Royal Institute of Gymnastics, Stockholm, for her very kind assistance and advice, I tender my sincerest thanks.

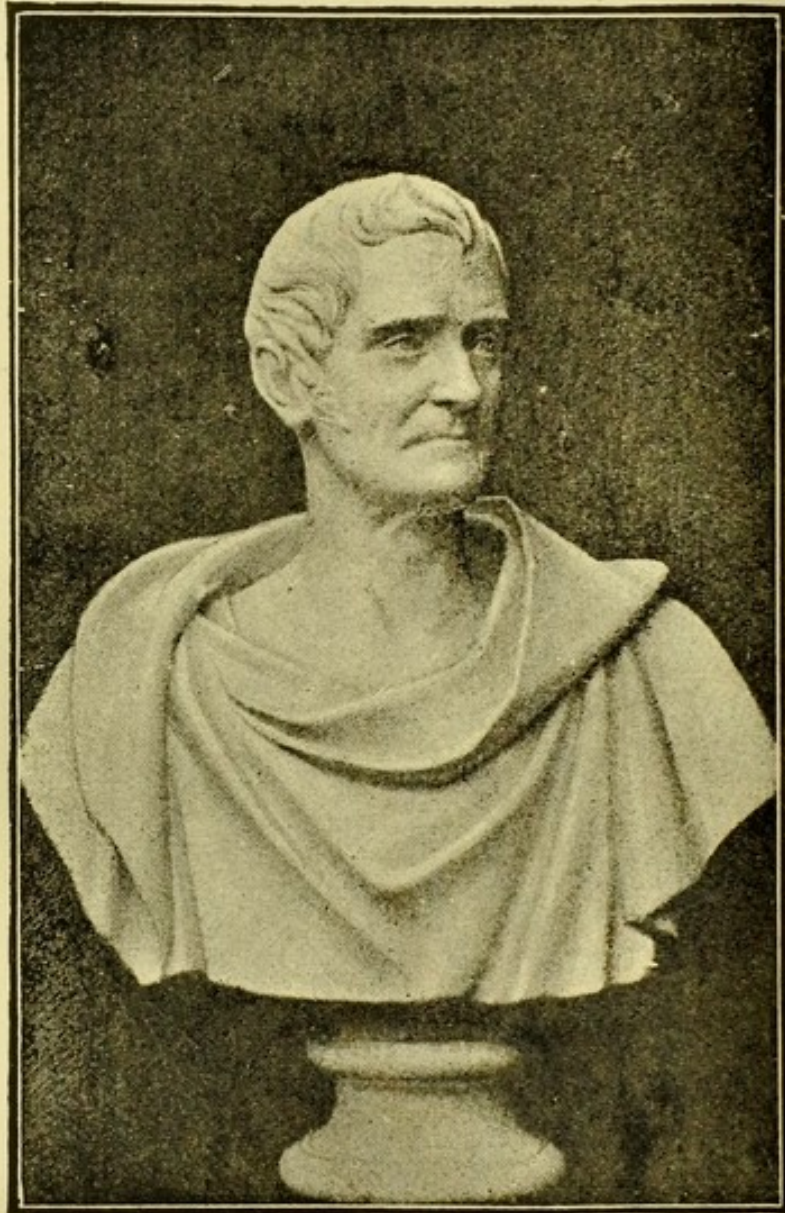
GEORGE L. MÉLIO.

LONDON : 15, CATHERINE STREET,

JUNE, 1889.







PETTER HENRIK LING.

BORN 1766 ; DIED 1839.

Founder of the Swedish System of Gymnastics.

BIOGRAPHY OF PETTER HENRIK LING.



PETTER HENRIK LING, Inventor of the Swedish System of Gymnastics, which produces a harmonious development of the body, and ensures the preservation of health—as well as the cure of diseases—was born at Ljunga, in Småland, on the 15th of November, 1766.

He lost his father (who was a curate) and his mother at an early age, and was placed in the schools of Wexiö, where he quickly distinguished himself by his great abilities, and his energy and devotion to study. From this period, until 1800, when he studied gymnastics in Copenhagen, under the celebrated Nachtigall, it is not known definitely how he was employed, though he appears to have resided at intervals in Upsala, Stockholm, and Berlin, being constantly exposed to vicissitudes, and oftentimes reduced to absolute want and poverty.

He frequently endured the pangs of hunger, and at one time it is recorded he gladly availed himself of the shelter of a miserable garret in Hamburg, where he was compelled to wash the only shirt he at that time possessed.

It was during his sojourn in Copenhagen that we find him participating in a naval engagement, as a volunteer in a Danish vessel, against Nelson, shortly afterwards re-visiting Germany, thence passing on to France and England acquiring a perfect knowledge of the languages and general characteristics of these different countries.

These vicissitudes, however, appear only to have fortified Ling. His great love of travel and desire for developing and improving his knowledge, enabled him to overcome every obstacle, whilst he very naturally prided himself on his ability to endure privations, and to do without what are considered by others as absolute necessities.

During his second sojourn in Stockholm, he acquired the art of fencing from two French refugees, who appear to have established a fencing academy about this time.

Ling quickly developed into an expert fencer, his great skill being generally acknowledged; the more proficient he became, the more he foresaw the great results which might be attained by movements based on sound physiological principles.

His own experience and reflection on fencing—at a period when he was suffering from gout in his arm—first suggested to him the idea that an harmonious development of the body, by exercises considered in relation to the intellectual faculties, ought to form an essential part in the education of any people.

He, however, perceived that the realisation of this elevated idea could not be affected by the mere art of fencing alone even when practised with both arms, so, unlike his predecessors, instead of merely imitating the gymnastics of the Greeks and Romans, Ling appears to have at once aimed at their reformation and improvement.

With this end in view, and during his residence as a fencing master in Lund, about 1804, he commenced the study of anatomy, physiology, and other sciences, which he very properly held should form the basis of any rational system of gymnastics.

In his investigations he opened up new ground, hitherto almost unknown even to the most celebrated physicians and naturalists of his day.

He was most exact in his researches, and earnestly recommended his colleagues to be equally scrupulous. He never introduced a movement, the physiological effects of which he could not scientifically demonstrate, and in his selection of exercises those which did not produce exactly the desired effect were discarded—however classical or beautiful in appearance—in favour of such movements as were found, after much labour and study, to be absolutely essential in producing a harmonious development of the body.

From 1805 to 1815, Ling's dramatic writings and poems, composed chiefly with a view to reviving the national spirit which he considered had materially degenerated, aroused considerable public attention.

In 1813 his movements, as a remedy for certain diseases, were first practised at Stockholm, he having, in the previous year, endeavoured to establish them at Lund, where he solicited the aid of the government, who, in their reply mildly suggested that there were already sufficient mountebanks and rope dancers without further taxing the public treasury.

These and similar rebuffs, together with every form of insult and abuse, failed to diminish the ardour of the indefatigable Ling, who, in spite of all, and with scanty means, so successfully developed his ideas that even prominent physicians, who at the outset had been his greatest opponents, were, in conjunction with the general public, at last compelled to acknowledge his merits, and the importance of the science he taught.

Though he did not live to see his task quite accomplished, the progress his system had already made, and its almost universal adoption, must have afforded him great satisfaction.

The present Royal Gymnastic Institute was founded at Stockholm in 1815, at Ling's own instigation, and remained under his personal supervision until the time of his death, 1839. In this Institution persons of every condition and age—the robust as well as the ailing—are subjected to a course of movements, either in the medical department, late under the direction of Professor Hartelius, or in the pedagogical department, at present under the direction of M. L. Törngren.

With the characteristic generosity of the Swedes, the Institution is thrown open gratuitously to all persons—irrespective of sex—desirous of studying the system either as teachers or otherwise, and who are willing to conform to the same conditions as the Swedish candidates, no one obtaining a diploma or authority to teach without having successfully passed the examinations in physiology, anatomy, and the correct performance of the movements.

In 1820, a gold medal was struck in Ling's honour, and in 1835, in addition to receiving a Professorship, he was elected a Member of the Swedish Academy, an honour bestowed on but few men. A Memorial Stone with Scandinavian inscription was erected by public subscription at Ljunga, his native place, in 1876.

He died May 3rd, 1839, partially blind in consequence of excessive strain caused by too close application, leaving one son, Hjalmar Fredrik, and several daughters. Whilst on his death bed he gave complete directions for the

continuation and development of the science to which he had devoted almost his entire life, and of which it has been truly observed Sweden would never be able to duly acknowledge, nor, indeed, the world at large.

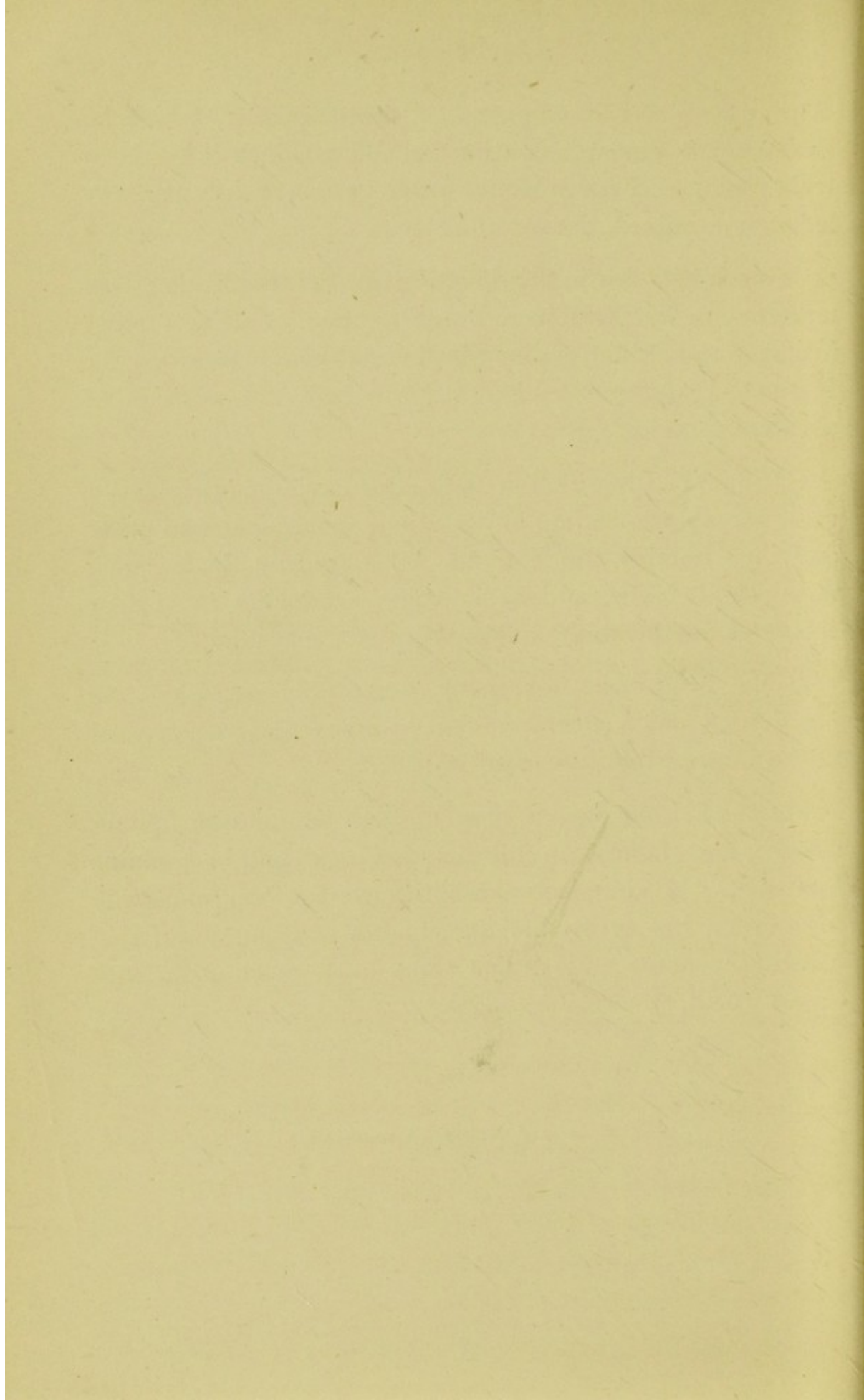
After Ling's death, the direction of the Institution was undertaken by Professor Branting, one of Ling's most intimate and skilful pupils, who in 1858 was succeeded by Hjalmar F. Ling, who had hitherto held the position of assistant director since 1843.

Hjalmar F. Ling died in 1886 after having contributed a most valuable collection of literature, anatomical and other drawings, notably the National Atlas used by the Swedish Army and Navy, and establishing academies in various countries for the study and practice of the system.

Hilda Ling, who for many years ably occupied the position of senior superintendent in the medical department at the Central Institute, died in 1884.

Petter H. Ling was a man of high moral tone, pious, sincere and honest in all his dealings, and a genuine humanist. His intellectual abilities were of an unusually high order, his entire life affording a striking proof that learning, science and genius shine most when allied with moral worth, generosity and piety.





SCIENTIFIC PHYSICAL TRAINING.



IN advocating the great importance of physical training it must always be borne in mind that two great dangers have to be plainly pointed out, and most carefully avoided, if the training is to bring about a maximum of success.

One of these dangers is a sort of confused notion that gymnastic exercises are to provide a spectacular exhibition for the public from time to time.

It is all up with both pupil and teacher of any branch of education when the training of the pupil takes the form of preparation for exhibiting progress ; and this is as true of physical, as well as of mental, or spiritual training. What is pretty and showy, and will provoke the wonder of the majority of onlookers, will then have the first place in the effort bestowed on the pupil, and what is best for the permanent weal of the latter, the second.

All true friends of the rising generation ought to set their faces dead against the introduction of music into gymnastic exercises. Not only is the attention of the pupil distracted from the supreme business of trying to perform as perfectly as possible the movement required, but the very fact of being timed and tuned by music makes the movement more and more mechanical.

It was once my lot to witness the "march out" of fourteen hundred girls to charming music. They were in the habit of marching out from morning prayers daily in that imposing and most beautiful fashion. I noticed that they walked well as long as they were near the music, but that directly it became lost in the long corridor, they drifted into the loose step, and careless gait, common to young people whose feet and hips, shoulders and necks, have been spoilt by traditional clothing for free and graceful pedestrianism. Musical drill is a pastime, and as such to be used for wholesome pleasure and profit. But it is not the serious, earnest, and often patient task of developing all the muscles, and training feeble and inadequate bodies into strong and competent ones.

It is a perverted sense of what is fit, that is bored by the silent performance of scientific gymnastic feats, and a low ideal of the uses of music that requires its aid in so second-hand a fashion as the accompanying of skilled movements of arms and legs.

The second danger against which a warning has to be uttered is the introduction into gymnastic training any unnecessary elements of fatigue. Hence clubs, dumb-bells, and wands ought to have no part in the lessons imparted to young and delicate people ; it is enough to give them the fatigue consequent on calling their muscles into movement, without giving them weights to carry or support.

It is unnecessary fatigue and strain that has made physical training in many countries too often a disaster instead of a blessing ; and unscientific onlookers have laid the blame on the shoulders of physical training instead of the unscientific method of carrying it out.

It is in these two particulars, pre-eminently, that Ling's system so far surpasses any other. It does not seek to appeal to the sense of what is astonishing, or pretty in the onlooker ; it does not suffer the attention of the pupil to be diverted for one instance from the business in hand by music with its charms and limitations ; nor does it fatigue the muscles by adding artificial weight, wand, dumb-bell or club, to the work required to bring every group of muscles, and every individual in that group into adequate and harmonious action.

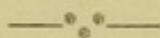
Rigidity, inequality, and final failure have been too often the results of the apologetic and mechanical methods of imparting physical training, so long in use in our midst.

Ease, grace, equality and continuity towards harmony and perfection are the ideal on whose road Ling's system travels with honest, patient, and scientific step.

L. ORMISTON CHANT.



TURNINGS.



As it is scarcely possible to bestow too much attention and care on the primary positions—more especially the various turnings and foot placings—which practically form the groundwork of the Free Standing movements, it may be found advantageous, at the outset, to explain and illustrate the same to each pupil individually, and thus ensure a more perfect execution of the movements by the whole class than could otherwise be attained.

The *Swedish* method of turning, as described below, is decidedly one of the best and most accurate methods ever introduced, and well repays the Teacher for any extra labour and patience entailed.

The turning consists of two movements. When the pupils desire to turn to the left, they (*a*) pivot on the heel of the left and toes of the right foot, which brings them into position shewn in Diagram 3 ; from thence (*b*) the right foot is brought up at right angle to the left, as shewn in Diagram 4, thus completing the turn.

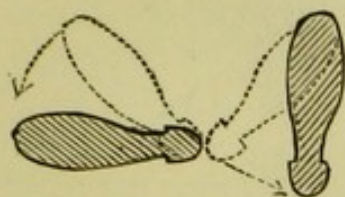
When turning to the right, this order is reversed by pivoting on the heel of the right and toes of the left foot, the entire weight of the body resting on these parts whilst pivoting. These principles apply equally in executing the Half-left, Left, or Left-about-turn, the words of command being :—

To the Half-left (or right)—*turn!* (Diagrams 1-2, used principally in Lungeing Exercises.)

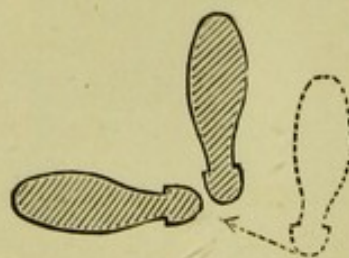
To the Left (or right)—*turn!* (Diagrams 3-4, used in the “prone falling” position.)

To the Left (or right)-about—*turn!* (Diagram 5, used chiefly for exercises requiring support.)

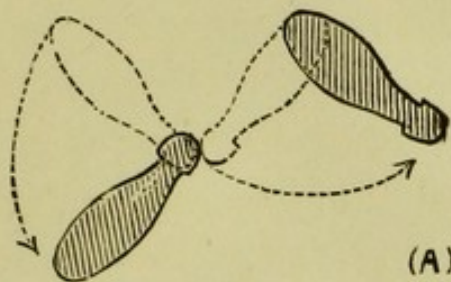
TURNINGS



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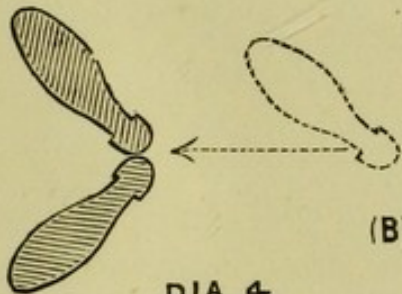


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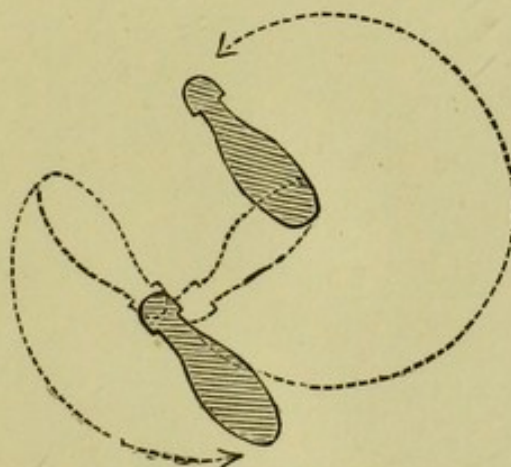
DIA. 3.

(A)

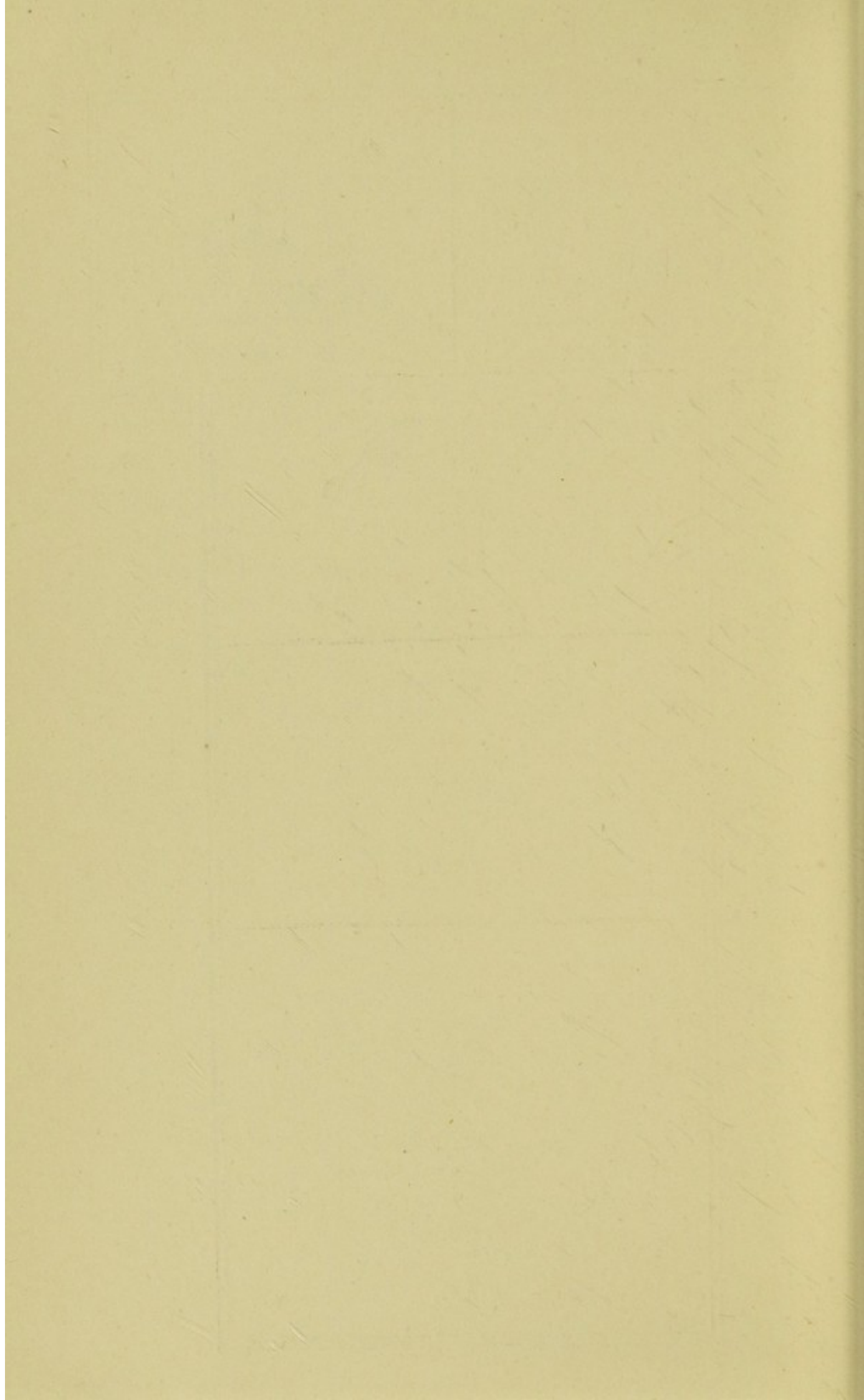


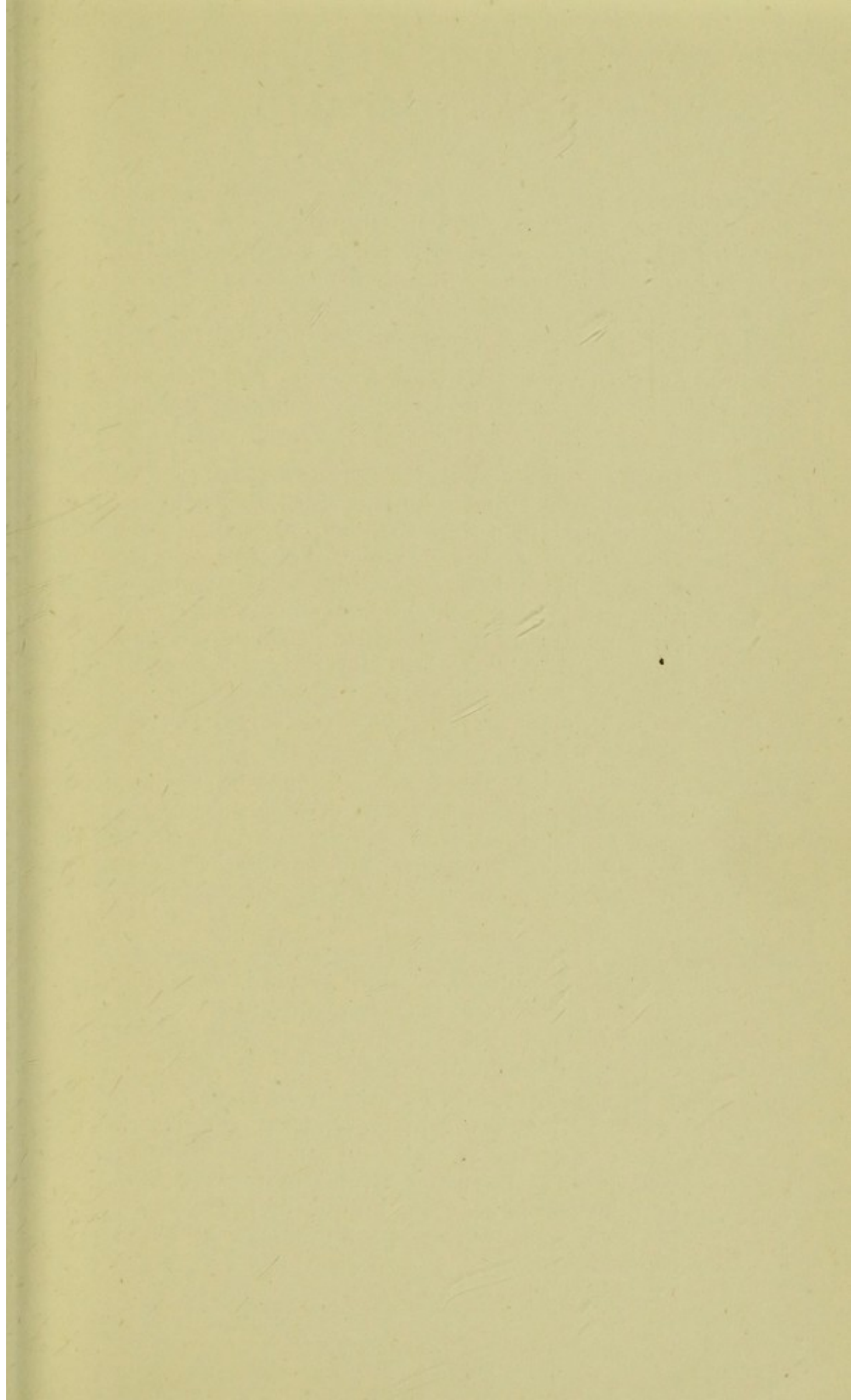
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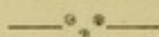


DIA. 5.





FOOT PLACINGS



From the *fundamental position* shewn in Diagram 7 and Figure 2, or from the *close stand position* (Diagram 6), the foot is placed *sideward* (Diagram 10), *outward* (Diagrams 8-9), *forward* (Diagram 14), or *backward* (Diagram 15), usually a distance of from 12 to 18 inches, the entire weight of the body resting equally on both legs, which are to be braced back, and body kept perfectly erect.

In the Large Steps, or Lunges, as shewn in Diagrams 20-21, the foot is placed from 30 to 40 inches, according to the length of limb.

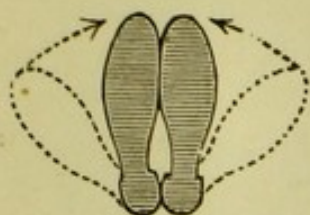
Feet Change! Implies that the left (or right) foot must be brought back to its original position, thence the right (or left) placed in a corresponding position, as shewn in Diagrams 8 and 9. When the arms are stretched upward, forward, or sideward, or flung outward, the arms and feet execute the two movements in unison—for example: on the command “Feet *sideward* and arms upward-*stretch!*” the left foot takes a half-pace, whilst the arms are bent upwards; thence the right foot takes a corresponding pace, and the arms are stretched upward (Diagram 17 and Figure 20).

Position! Implies that the feet (and the arms, if not in the primary position) are to be brought smartly back to their fundamental position. In sideward placing, the left foot makes the first movement both in assuming and in returning from the positions shewn in Diagrams 16-18-19.

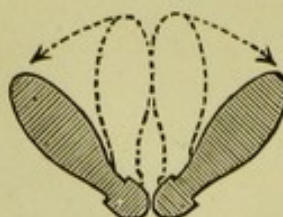
Stand at Ease! Implies that the pupils are to rest for a few seconds—usually after each exercise—by placing the left foot outwards, as shewn in Diagram 8. On the command *position!* the foot should be brought smartly back to the position of “*attention.*”

Irregular Movements.—These occur when an exercise consists of one leg and two arm movements. For example: in “Left foot outward *place* and arms upward-*stretch!*” or vice-versâ, in “Hips *firm* and feet sideward *place!*” In both instances the single movement is executed in conjunction with the second movement, as also on the command *position!*

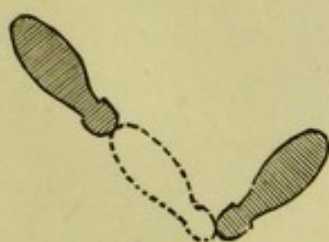
FOOT PLACINGS. I.



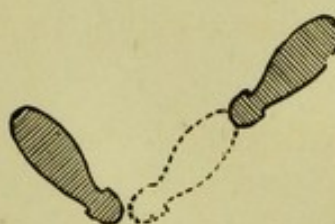
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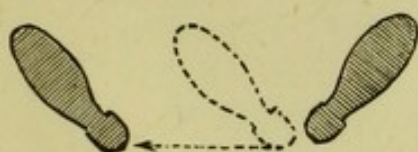
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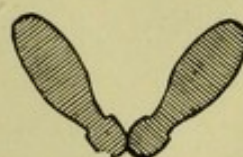
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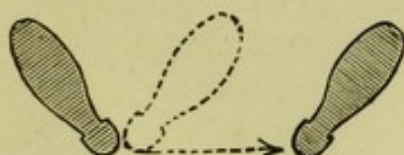
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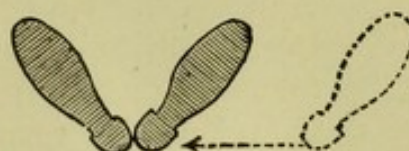
DIA. 10.



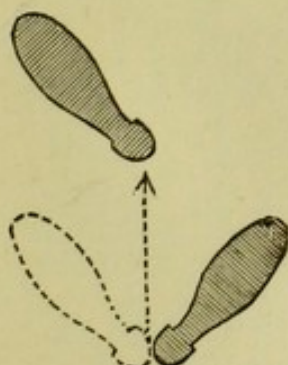
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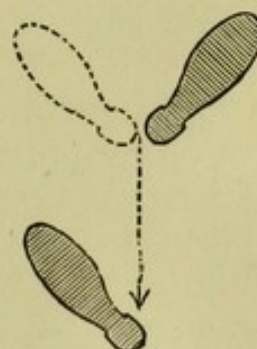
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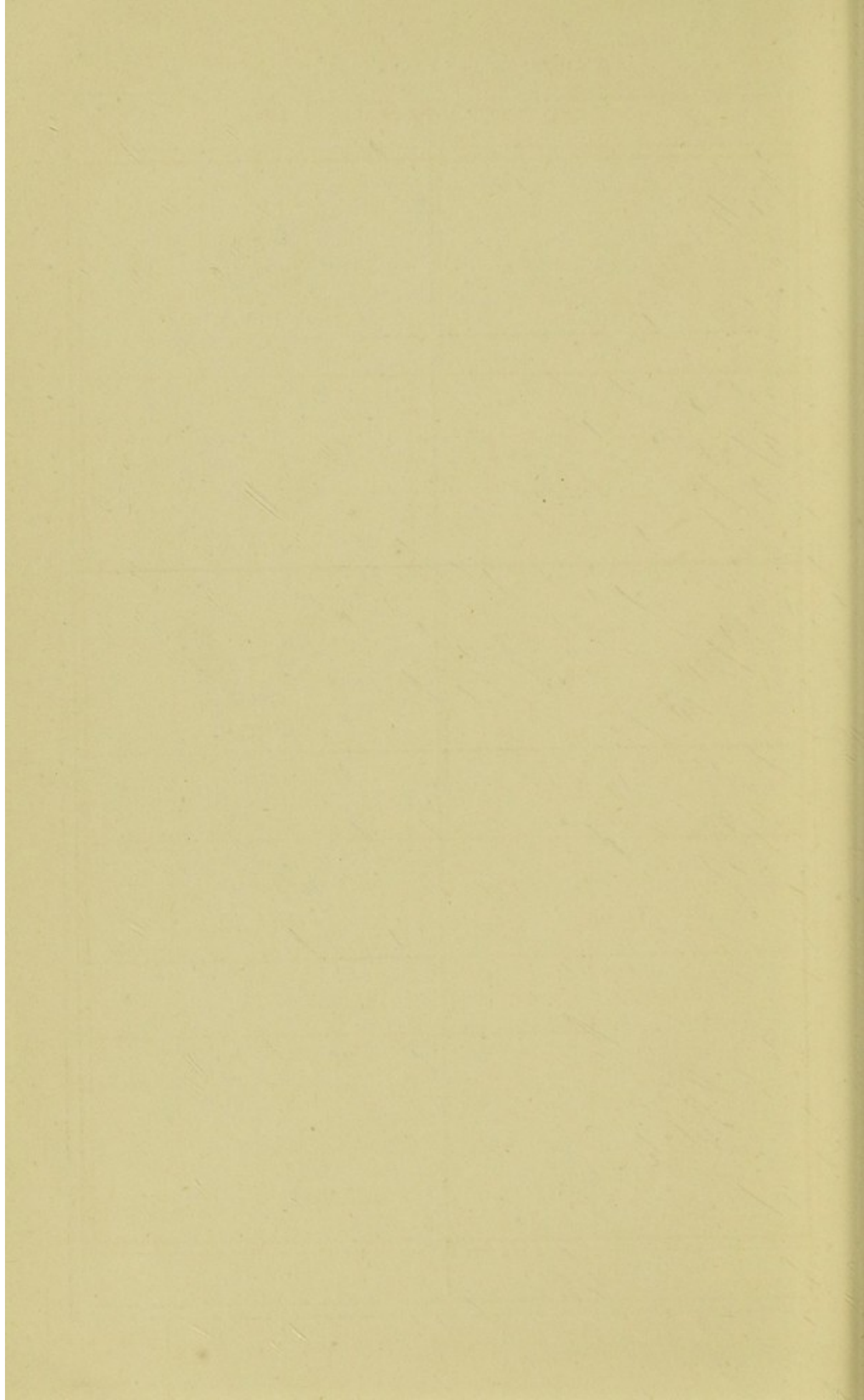
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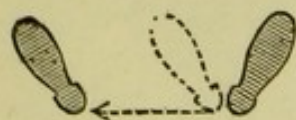
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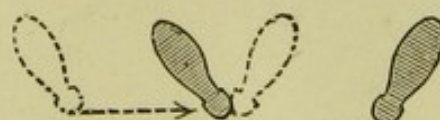
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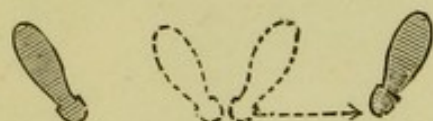
FOOT PLACINGS. II.



DIA.16.



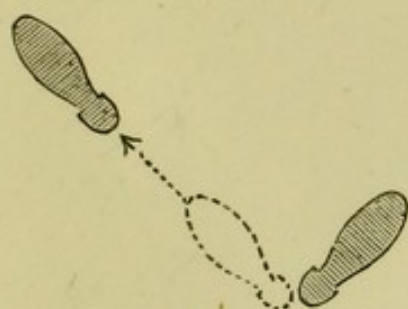
DIA.18.



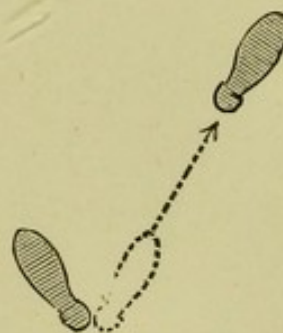
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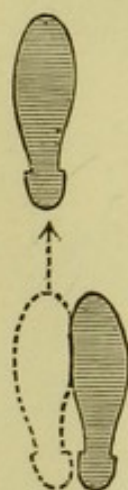
DIA.19.



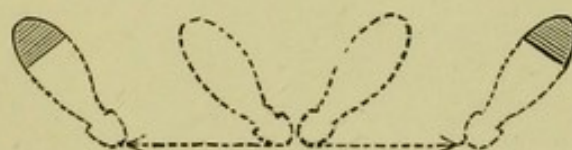
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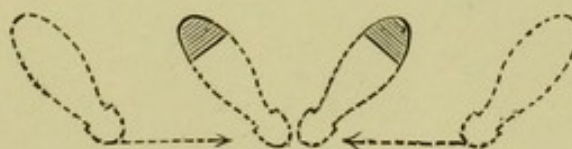
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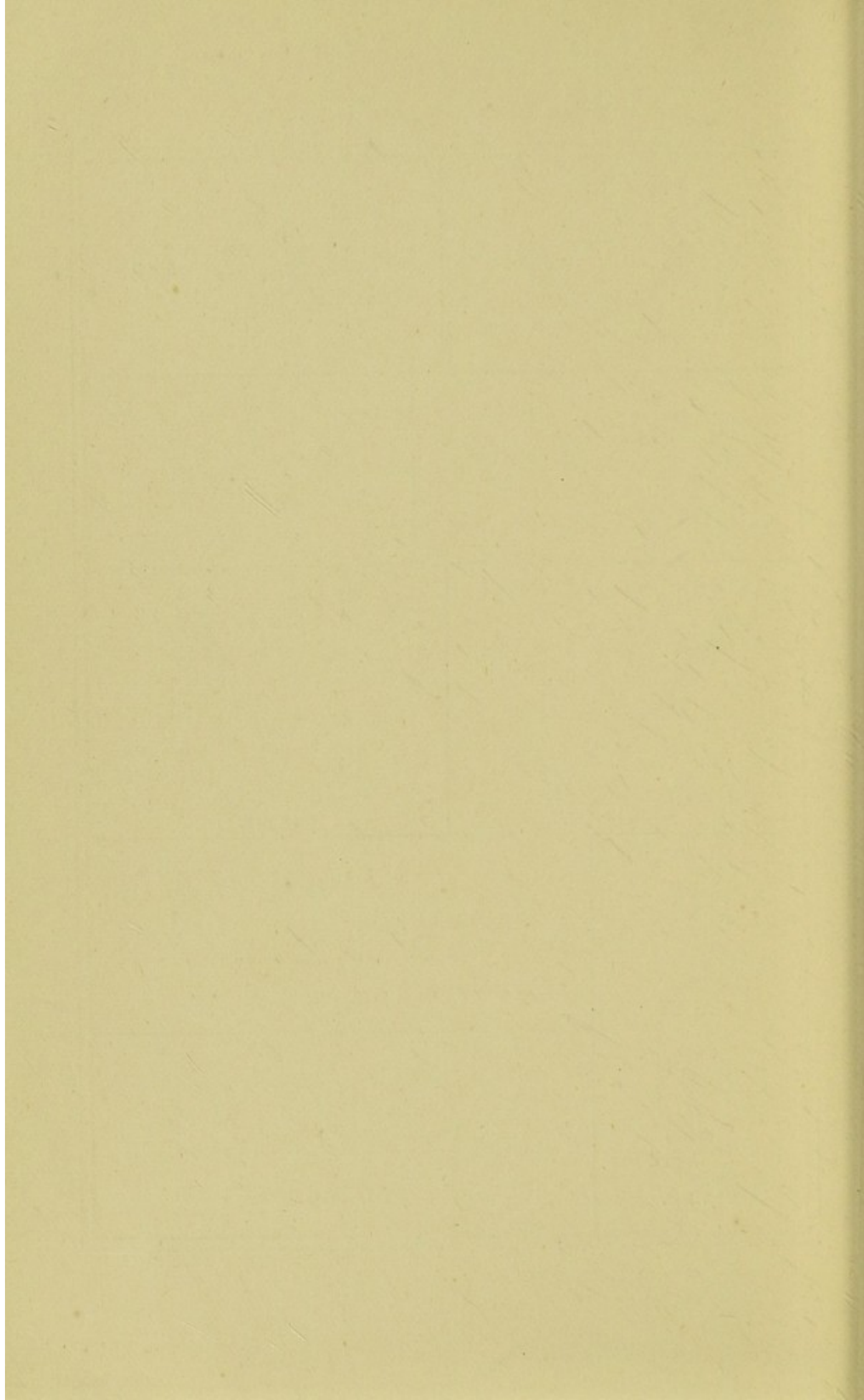
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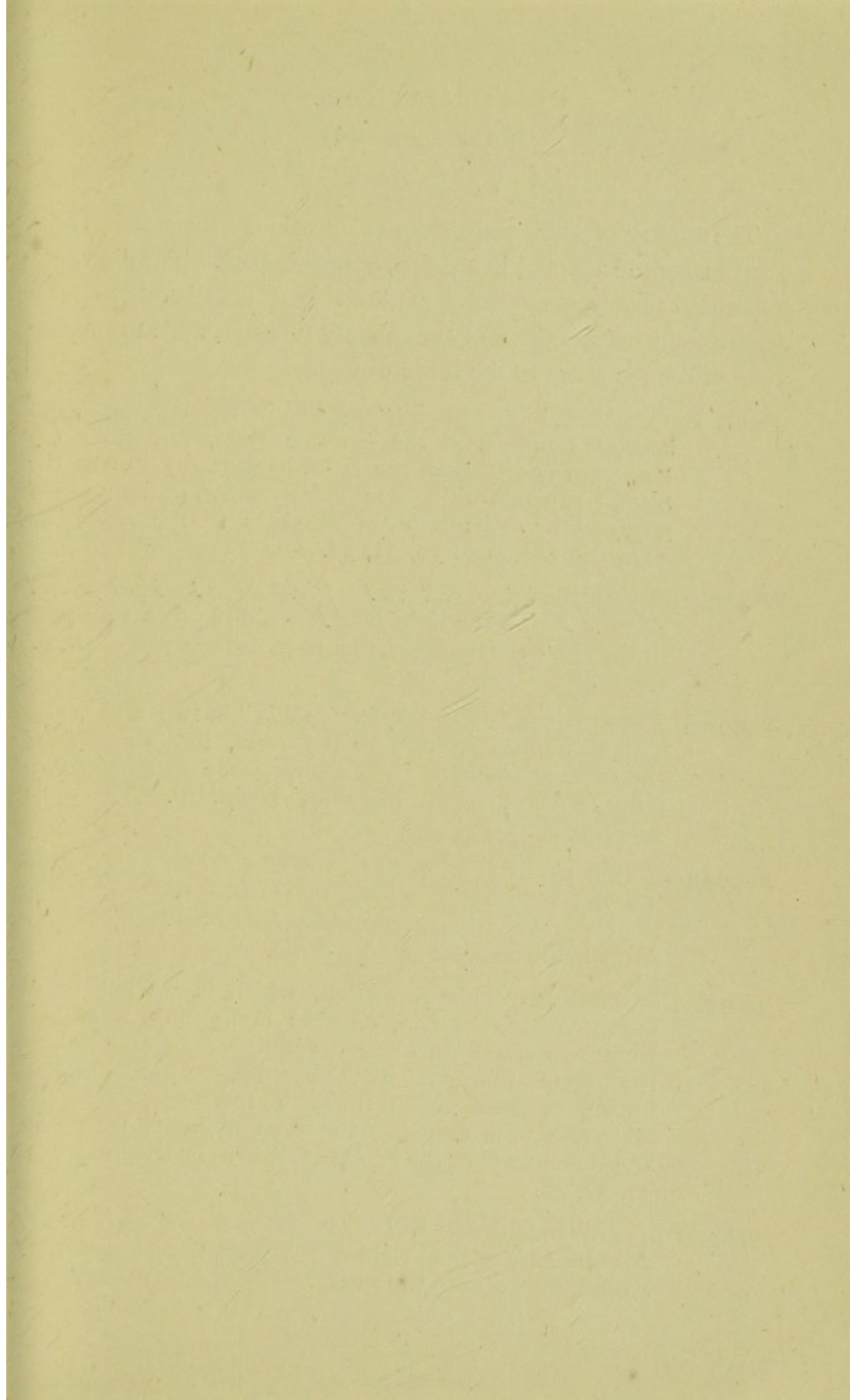


DIA.23.



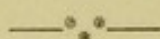
DIA.24.





FORMATIONS.

(BY SECTIONS.)



The number of pupils and space at disposal must necessarily regulate the method adopted in spacing, or opening out. The diagrams submitted merely shew those methods best calculated to call forth a frequent repetition of the primary turnings, and at the same time utilise the space to the best advantage.

First Formation.—The pupils “*fall in*” in a single rank, the shortest standing at the extreme right, and after (a) “*numbering off*” from the right, in twos, (b) turn to the *right*, (c) thence taking one pace *outward*, odd numbers going to the *left*, and even numbers to the *right*, as shewn in Diagrams 30, 31, 32.

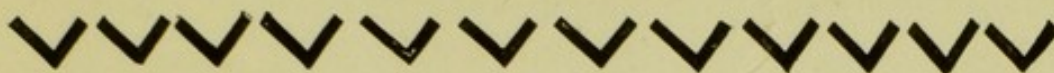
Words of Command.—*Fall in! Right dress! Eyes front! Number! To the right-turn! Odd numbers one pace to the left, even numbers, one pace to the right—March! Cover!*

Second Formation.—The pupils “*fall in*” in two ranks, and without numbering turn to the *right*, and open *files!* thence take distance by extending the arms horizontally *forward*, whilst marching backward. Diagrams 33-34-35-29.

Words of Command.—*Fall in! Right dress! Eyes front! To the right-turn! Open files—March! From the front prove distance—March! Cover! Position! Arms being brought smartly down.*

Third Formation.—This formation, which is we believe of purely *Swedish* origin, consists in forming four files from two ranks in close order, the rear rank taking the same numbers as the front. After numbering off in *twos* and turning to the *right*, each file takes one pace *outward*, the even numbers taking an additional pace to the *right*, as shewn in Diagrams 33, 34, 35, 36.

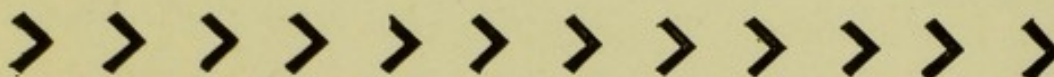
Words of Command.—“*Fall in!*” *Right dress! Eyes front! Number! To the right-turn! Open files—March! Even numbers step to the right—March! Cover!*



DIA. 25. SINGLE RANK IN CLOSE ORDER.



DIA. 26. SINGLE RANK AT HALF DISTANCE.



DIA. 27. SINGLE FILE IN CLOSE ORDER.

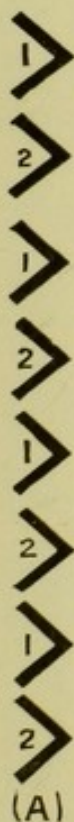


DIA. 28. SINGLE RANK AT FULL DISTANCE.

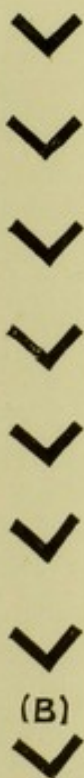


DIA. 29. SINGLE FILE IN OPEN ORDER.

DIA. 30.

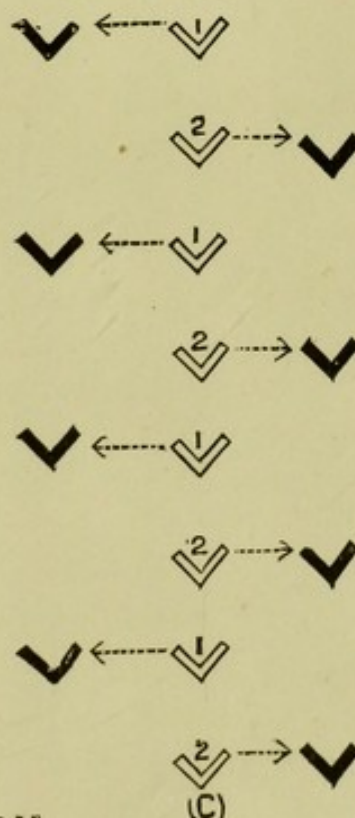


DIA. 31.



FIRST FORMATION.

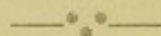
DIA. 32.





FORMATIONS.

(BY ONE WORD OF COMMAND.)



When the foregoing formations are correctly executed by sections, the pupil should then execute the entire formation without the usual pauses, on the last word of command, which, in the third formation, for example, would be:—Right *turn*, open *files*, even ones step to the *right*—*March!* *Cover!*

From a single or double rank in close order, two or four ranks may be formed by the pupils numbering off in twos, even numbers thence stepping backward and sideward (or forward) one pace. These formations are useful for exercises requiring assistance, in which case the front rank executes the movement whilst the rear rank gives support, and on the command, *Ranks change!* the positions of the pupils become reversed, by the even numbers taking one step sideward and forward and odd numbers one step backward and sideward; or the same result may be attained by all turning to the *left*, or *right about*.

Taking Distance.—In taking *distance* either forward or sideward, with one or both arms, the pupils are to step off with the left foot, arms and fingers being extended perfectly horizontal, with the palms of the hands facing downward, remaining so until the command, *position!* is given. *Half distance* is obtained by extending one arm sideward, and *full distance* by the extension of both.

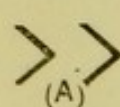
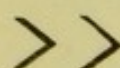
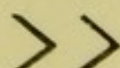
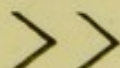
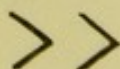
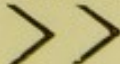
Cover!—Implies that each pupil must stand in flank line, namely, one behind the other, as in Diagrams 27-29-31.

DISMISSAL.

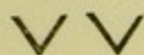
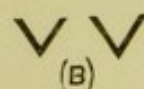
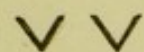
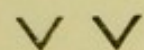
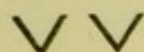
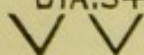
At the conclusion of the lesson the pupils are to resume their original positions of one or more ranks, on precisely the same principles adopted in opening out, after which the teacher commands, *Dismiss!*

FORMATIONS II.

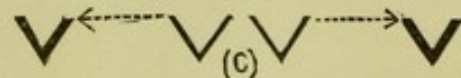
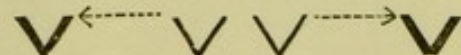
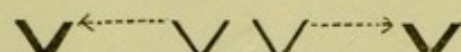
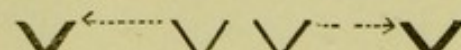
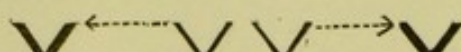
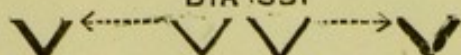
DIA.33.



DIA.34.

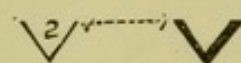
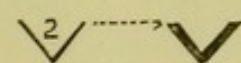
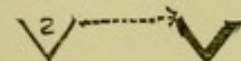
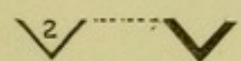
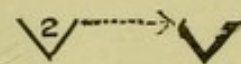
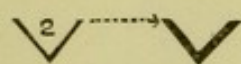


DIA.35.



SECOND FORMATION-WITHOUT NUMBERING.

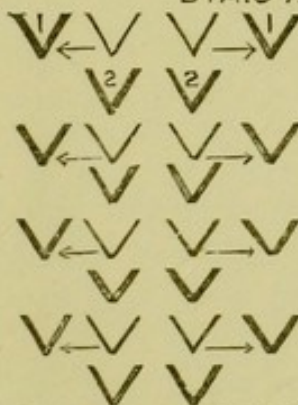
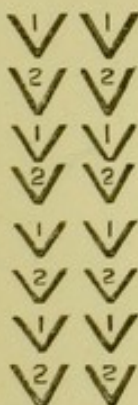
DIA.36.

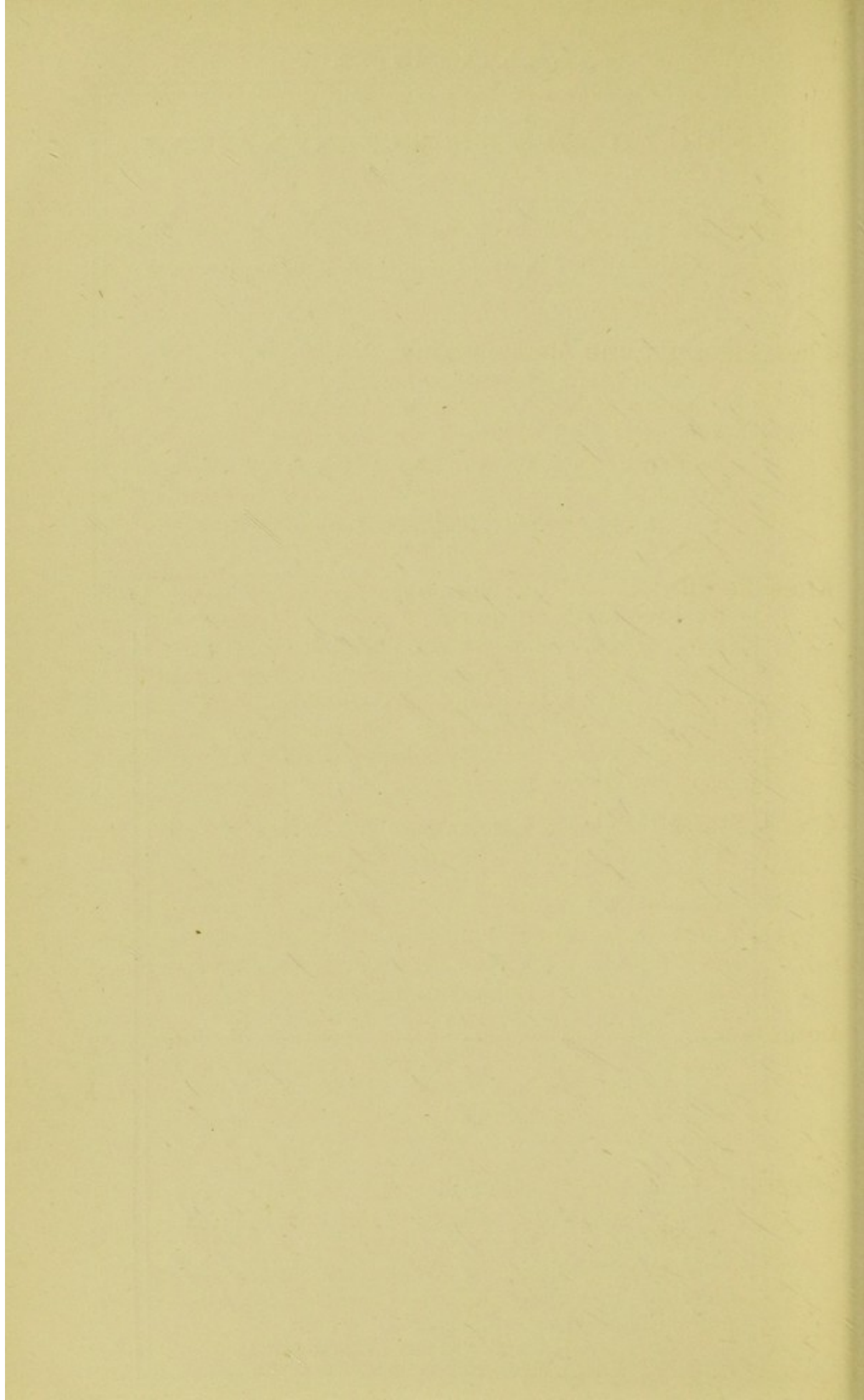


THIRD FORMATION.

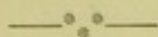
TO BE PRECEDED BY DIAGRAMS 33.34&35.

DIA.37.

METHOD OF FORMING FOURS
NOT INCLUDED IN THE SWEDISH DRILL.



FOOT, LEG, AND BALANCE MOVEMENTS.



In the various positions assumed by the feet, it is most essential that the weight of the body should rest equally on both legs, otherwise an imperfect movement is the result.

Foot Placings and Heel Raising.—The feet can be placed either forward, outward, sideward, or backward, in conjunction with, or without the various arm movements, and with heel raising. In the large steps forward, backward, or outward, the advanced knee must be well bent and rear leg kept straight, as shewn in Figures 40, 47, 54. Further particulars with reference to foot placings will be found on page 24.

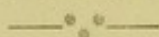
Knee Bendings.—All knee bendings are preceded by raising the heels, and are executed either in *wing stand*, *neck rest*, *stretch* or *half-stretch* positions, from the various foot placings. Whilst bending the knees outward at a right angle, the body and head should be kept erect and the chest thrown forward. In *tense knee bending*, or *sitting position*, the body is lowered to its utmost extent, as shewn in Figure 56.

Crook Standing.—Consists of balancing the body on one leg, whilst the other is bent upward, thence stretched either forward or backward, as shewn in Figure 49, from the *wing stand* or *neck rest pos.* During the execution of these movements, the body and head are to be kept erect, the foot stretched downward, and the knee raised upward until the thigh is in an horizontal position.

Commands.—In the knee flexions and extension, the commands should be given *slowly*, with the exception of exercise shewn in Figure 21, which is subsequently executed in *quick* time, and taken as a preparatory leaping exercise.

Effects.—When correctly performed, the foot and leg movements greatly increase the mobility of the ankles and the power of balancing. They likewise act strongly on the extensor muscles of the leg, and increase the respiration and circulation, more especially when combined with arm raising and sinking.

NECK, TRUNK AND ABDOMINAL MOVEMENTS.



Head and Trunk Turnings.—All head and trunk turnings are first to be acquired in slow time, being subsequently executed *quickly*, without moving the lower part of the body. The rotary movements can only be successfully accomplished by turning the spine at its axis above the hips, which are to remain in a fixed position, the respiration being full and deep, and the feet resting firmly on the ground with knees perfectly straight.

Trunk Bendings.—May be made either whilst in the *knee standing positions*, Figures 31-44, or from any of the various *foot placings*, forward, backward, or in a lateral direction in *wing stand*, *neck rest*, *stretch*, or *half-stretch* positions, as shewn in Figures 15, 26, 35, 69, but in *slow* time.

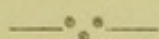
Twist Bendings.—Are executed by first turning the spine, thence bending either forward, backward, or sideward, from the fundamental positions denoted in the preceding movements, or from the *pass* position, as shewn in Figures 57-68.

Directions.—All trunk movements are to be given with great care, a *flexion* being distinguished from a *trunk inclination* in which the spine merely bends at the hips.

Commands.—The various commands (as set forth in the lessons) should be delivered *slowly*, whilst in the *rapid* trunk and head turnings they are to be given with force.

Effects.—When executed in clothing that permits of full inspiration by chest and abdomen, without the slightest pressure, the above movements act in a stimulating manner on all the respiratory, spinal, and abdominal organs, the *rapid* rotary movements acting powerfully on the waist and side trunk muscles.

HAND, ARM AND SHOULDER MOVEMENTS.



With the exception of arm raising and sinking, all arm movements are to be executed with great *force* and *rapidity*, a slight pause being made between the flexion and extension.

Upward Arm Bend.—The arms should be bent at the elbow joint, and held well back close to the sides, the hands slightly clenched, and the chest thrown forward, as shewn in Figure 7.

Parallel Stretching.—From the *upward bend* position the arms and fingers are extended with great force, either forward, backward, upward, or downward, the fingers being straight, and the palms of the hand facing *inward*, as shewn in Figure 22. When extended sideward the palms of the hand face *downward*, as shewn in Figure 33.

Alternate Stretching.—The arms are extended from the *upward bend* position in different directions: (1) one arm downward and one upward, (2) one sideward and one upward, (3) one forward and one upward, (4) one forward and one sideward, (5) one forward and one downward, (6) one sideward and one downward, as shewn in Figures 42, 43, 60.

Forward Arm Bend.—This position is attained by bending the arms at the elbow, and raising them sideward until the hands just touch the chest, which is to be thrown well forward, the head kept erect, and shoulders pressed back, as shewn in Figure 9, some six or eight inches *separating* the hands, the palms of which must face *downward*.

Forward or Outward Arm Fling.—Is executed from the preceding movement, the fore arms being flung outward (without moving the head or the body) with great force, as shewn in Figure 25. After practice, the two movements are to be taken in one time.

Straight Arm Flinging.—These movements are similar to the preceding one, but commence from the fundamental position, and are executed forward and upward, sideward and upward, sideward and downward, and forward and downward, as shewn in Figures 27-30.

Arm Raising and Sinking.—Consists of raising and sinking the arms *slowly*, sideward, forward, upward or downward, as shewn in Figures 27-30.

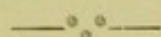
Commands.—Arms upward (or forward)—*bend!* Arms outward (forward, sideward, or downward)—*fling!* Arms forward and upward (or sideward and upward)—*raise!* Downward—*sink!* Arms forward (backward, upward, sideward, or downward)—*stretch!* All arm (and other) movements are first taught by numbers, but are afterwards executed without. The arms and hands should be kept perfectly *parallel* and *straight* in the various stretching, flinging, and lifting movements.

Effects.—The various arm movements act powerfully on the muscles of the chest, arms, trunk and neck, increasing the depth and girth of the chest, and greatly strengthening the respiratory organs, but must be used with *care* by persons whose lungs are weak. By bending and stretching the arms in *different* directions, the general effects become more powerful.



LEAPING.

(WITHOUT APPARATUS.)



As a beneficial exercise leaping undoubtedly ranks very high, though great care should, at all times, be exercised, to prevent the energies of either the awkward or too willing pupils being over-taxed. In order to leap a great distance, or very high, it is not absolutely necessary to receive special instruction, but if one desires to leap in a particular manner, with exactitude and graceful ease, and with judgment as to distance, &c., then a systematic and skilful training becomes indispensable.

Free Leaps.—These are executed without appliances, and form an excellent preparatory course to the leaps over a fixed object. They are made on the *spot*, without turning the body, or by turning to the *left* or *right* in the act of leaping, usually in six distinct movements. (1) Raising the heels, (2) knee bending outward, (3) straightening the legs and leaping upward, (4) alighting on the toes with bent knees and body erect, (5) stretching the knees, (6) placing the heels on the floor.

Compound Leaps.—Another valuable series of leaps on the *spot* are accomplished by (*a*) separating and closing the legs whilst executing the third movement, (*b*) throwing out the arms horizontally sideward whilst executing the leap, (*c*) throwing out both the arms and legs whilst executing the third movement, thence resuming the original position in the fourth movement.

Dancing Step.—This is an excellent movement, and consists of a continuous closing and opening of the legs whilst in the *wing toe stand position*, as shewn in the foot placings, Diagrams 23-24, and Figures 8-28, the relative position of the pupils being maintained throughout.

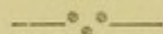
Forward Leap.—Is executed in six movements by taking two paces *forward* from the fundamental position, thence springing *forward*, alighting on the toes, in knee bend position, afterwards straightening the knees and placing the heels on the floor.

Directions.—In all leaping exercises the equilibrium should be preserved whilst executing the fourth movement, the arms being usually kept in a vertical position slightly at the rear of the legs.

Commands.—On the spot (with, or without turning the body)—*Leap!* one, two, three, four, five, six! On the *spot* (with *out-throwing* of the arms or legs, or in conjunction with both)—*Leap!* one, two, three, four, five, six! Forward (by taking two paces, commencing with the *left* foot)—*Leap!* one, two, three, four, five, six! Sideward (to the *left* or to the *right*)—*Leap!*

LEAPING.

(OVER A FIXED OBJECT.)



The powers of equilibrium are not so necessary in the performance of this leap as in the previous *free leaps* on the *spot*, but a greater and more general exertion is called forth.

In the running *high leap*, which is accomplished by taking a short run prior to its execution, the pupils are to spring from the *left* and *right* foot alternately, the *left* being exercised first, a rule which should be strictly enforced.

In the absence of properly constructed appliances, a long cord (half an inch in thickness), held loosely by two pupils, together with a small cocoanut fibre mat, will be found good substitutes. By attaching a piece of coloured material in the centre of the cord the pupils are better enabled to gauge their distance in making the leap.

A small beating board, raised some four inches high at its upper end, is generally used with a view to facilitating the exercise, but from experience we may say that equally beneficial results can be attained by dispensing with this aid, which is not unfrequently the cause of sprains and minor mishaps, due to the habit some pupils acquire of taking their leap from the edge of the board.

MARCHING AND RUNNING.



In all marching exercises the head is to be held up without restraint, the trunk being erect, the chest arched forward, and the shoulders held back and down at an equal height. The legs must be straightened at every step and the toes pointed outward and downward, the arms being permitted to swing slightly. An equal distance should at all times be maintained, and the head and eyes directed to the front.

Slow March.—The pupils are to step off with the *left* foot, making about 70 paces to the minute.

Quick March.—In this the pupils take about 100 paces in the minute, keeping well together in time and file.

Double March.—On the command, *Double!* the pupils raise the hands, which must be closed, as high as the waist, and stepping off briskly with the left foot, execute a run of about 150 paces to the minute, bearing entirely on the toes.

Tip-Toe March.—The pupils change from the *slow* or *quick* march, into the *tip-toe* march, by bearing the entire weight on the toes whilst marching, the heels being raised as high as possible, as in Figure 61, but with arms at the side.

Marking or Sounding the Footsteps.—During a march the pupils denote the *third* or *fifth* step by stamping the foot lightly whilst making the step, the counting to commence or cease immediately after the final command, *March!* is given.

Marching Combined with Arm Movements.—When proficiency has been attained in the various marches, the arms may, whilst marching, be stretched (1) upward and downward, (2) sideward and downward, (3) forward and downward, (4) in contrary directions, but the marching must not be taken too quickly, otherwise the arm movements will be incorrectly executed and thus produce bad results.

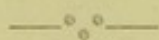
Incorrect Step.—Whilst marching, pupils who are out of step must suddenly bring up the rear foot, to the heel of that which is advanced, and immediately take another step forward with the advanced foot, thereby making three steps in the time allotted to two.

Turnings.—On the command, *Left about-turn!* each pupil whilst marching turns to the *left about*, by executing four distinct steps, the fourth being sounded and the march continued in the reverse direction, the relative inward and outward positions of the pupils being maintained. In *wheeling* to the *left* or *right*, the files or ranks turn in a *right angle* direction, and when *countermarching* make a *left* or *right about-turn*, from thence continuing the march in the opposite direction.

Changing Step.—In all changes from the *quick* to the *slow*, *tip-toe*, or *double march*, or vice-versâ, the pupils are to denote each change by sounding the first footstep made after the command, *March!* has been given.

Halt.—On the command, *Halt!* the foot which is being advanced completes its movement, the rear foot being immediately brought up at right angle to the advanced foot. The two movements should be executed with precision and in unison, the body not being permitted to lean forward.

GENERAL DIRECTIONS.



Lessons.—Each movement should be repeated three times. The lessons are to be taken consecutively, each lesson being thoroughly acquired before passing on to the next. All movements are to be first executed by numbers, but when proficient the pupils may be allowed to judge their own time.

Commands.—The explanatory command should be distinguished from the command of execution by a slight pause, the former being delivered with clearness, the latter with precision and force, and a strong accent placed on the last word of command.

Primitive Positions.—All movements are to be performed with great accuracy, especially the primary ones, as it is only when thus executed that they produce the desired effect.

Illustration.—A correct illustration of each movement by the teacher is indispensable, such illustrations, with directions or corrections, being given whilst the pupils are standing at ease.

Respiration.—The pupils are to take quiet and deep breaths whilst performing a movement, and should only exercise in a room which has been thoroughly ventilated, prior to the lesson.

Left Side.—In order to partially counteract the universal bias attached to the right side of the body, all movements are to be executed on the left side first.

Costume.—A special costume offers many advantages, but must be perfectly loose fitting at the neck, waist, wrist and knee. For girls, a costume of dark woollen fabric or striped flannelette, of light texture, comprising a blouse, sash, and knickerbockers suspended by elastic bands

over the shoulders, will prove the most useful ; whilst for boys, a loose flannel shirt or vest, and trousers, with elastic belt, will suffice. The shoes should have low heels, and permit of perfect freedom for the feet.

Music.—It is impossible to adapt Ling's exercises to music without entirely *altering* the movements and *destroying* their effects, hence their superiority to musical gymnastics, which ultimately become mechanical and one-sided.

Singing.—During a *slow* march singing may sometimes be allowed, but on no account whilst performing the more severe movements, as in the opinion of eminent authorities, the voice *deteriorates* by so doing.

Diagrams.—The shaded and heavy diagrams denote the *final* positions, the *primitive* positions being denoted by dotted and light diagrams.

MODEL OF LESSON, WITHOUT APPARATUS, BASED ON LING'S SYSTEM.

—*.*—

1. Movements for the muscles of the foot and leg.
2. Movements for the muscles of the neck and trunk.
3. Movements for the muscles of the fingers and arms.
4. Movements of *équilibre*.
5. Movements for the dorsal muscles.
6. Movements for the abdominal muscles.
7. Movements for the side trunk muscles.
8. Marching, Running, or a Leaping exercise.
9. Respiratory movement.

SPECIAL NOTICE.

—*.*—

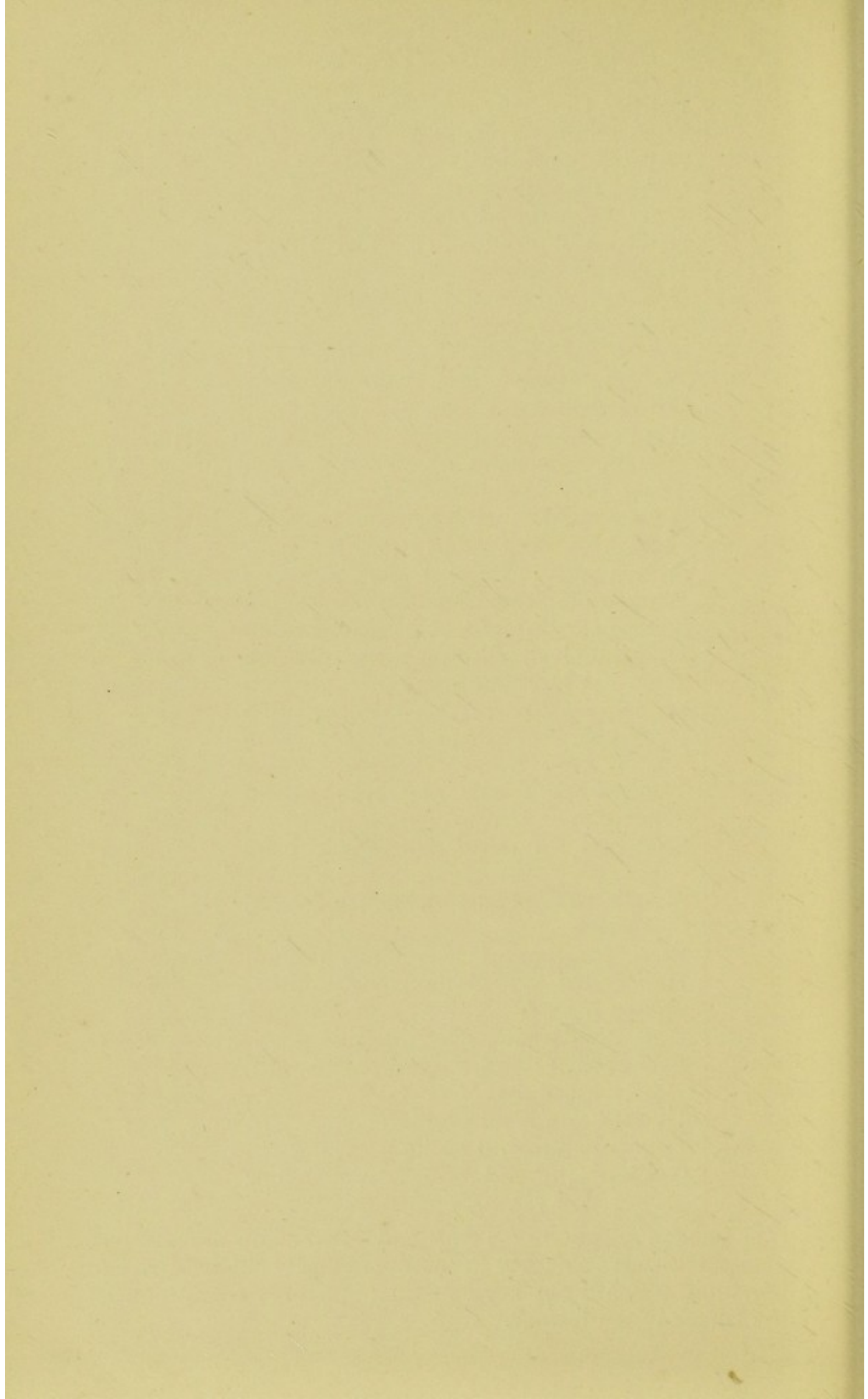
A correct and continuous application of Ling's Movements will be found to greatly relieve and strengthen persons suffering from weak respiration, poorness of blood, bad digestion, asthma, gout, obesity, and heart diseases in the early stages.

In all countries where the *Swedish system* is carried out in its *entirety*, spinal and other malformations are of very rare occurrence.

TECHNICAL TERMS.

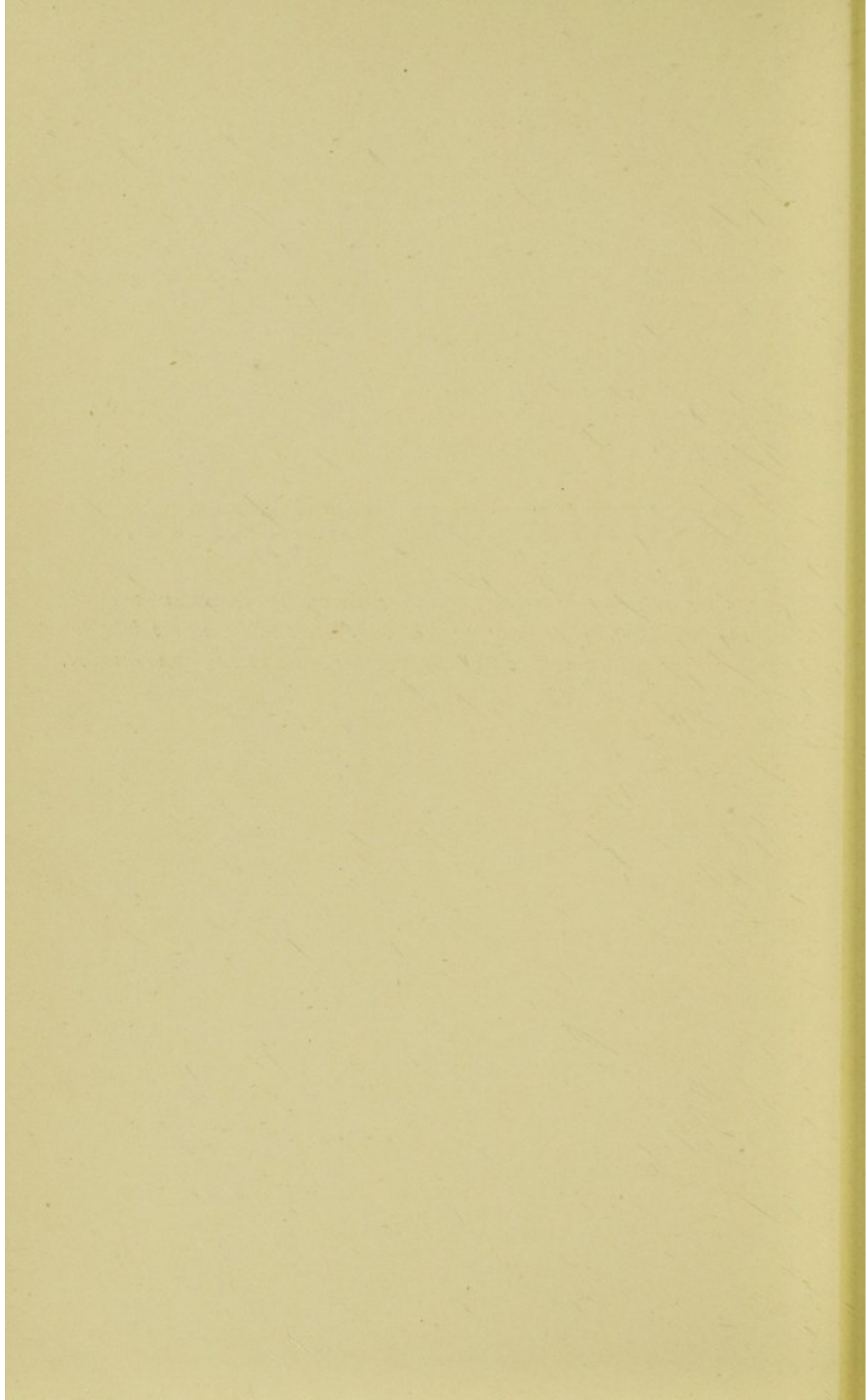
		FIGURE.
PRIMARY POSITIONS.	Position ! or Attention position ...	2
	Wing stand position	1
	Neck rest position	4
	Closed stand position	3
	Wing toe stand position	8
	Stride stand position	5
	Wing walk position	19
	Neck rest stride stand position ...	12
	Stretch stride stand position ...	20
	Stretch walk toe stand position ...	61
FOOT, LEG, AND BALANCE POSITIONS.	Wing stand knee bend position ...	21
	Wing crook stand position	24
	Wing crook stretch positions ...	37, 49
	Stretch stride stand knee bend position	67
	Tense knee bend, or sitting, position...	56
	Neck rest knee bend position ...	29
	Pass, or outward lunge, position ...	54
	Stretch pass, or forward lunge, positions	47, 66
	Wingstride, forward trunk bend, position	15
	Stretch stand, rear trunk bend, position	35
NECK, TRUNK, AND ABDOMEN.	Half-stretch stand, lateral bend, position	69
	Stretch stride, stand trunk twist, position	32
	Stretch walk, rear trunk bend, position	41
	Neck rest, stand trunk twist bend, position	57
	Wing, knee stand, rear trunk bend position	31
	Stretch, knee stand, rear trunk bend position	55
	Stretch, half knee stand, rear trunk bend position	44
	Prone falling or side leaning rest position	36
	Half-stretch, side prone falling, position	63
	Stretch position	27
FINGERS, ARMS, AND SHOULDERS.	Half, or alternate, stretch positions ...	42, 43, & 60
	Backward (forward, upward, or sideward) stretch position	22, 58
	Upward arm bend position	7
	Forward arm bend position	9
	Outward (upward or downward) fling —or slow raising—positions ...	30, 25

N.B.—The above selection of Terms and Movements are merely intended to serve as a key to the numerous positions derived therefrom, which it has been found impossible to introduce in a course of ten lessons.



COURSE OF LESSONS.

Students are requested to make themselves thoroughly conversant with the directions laid down in the preceding chapters, before taking up the following Lessons, each of which should be perfectly acquired before passing on to the next.



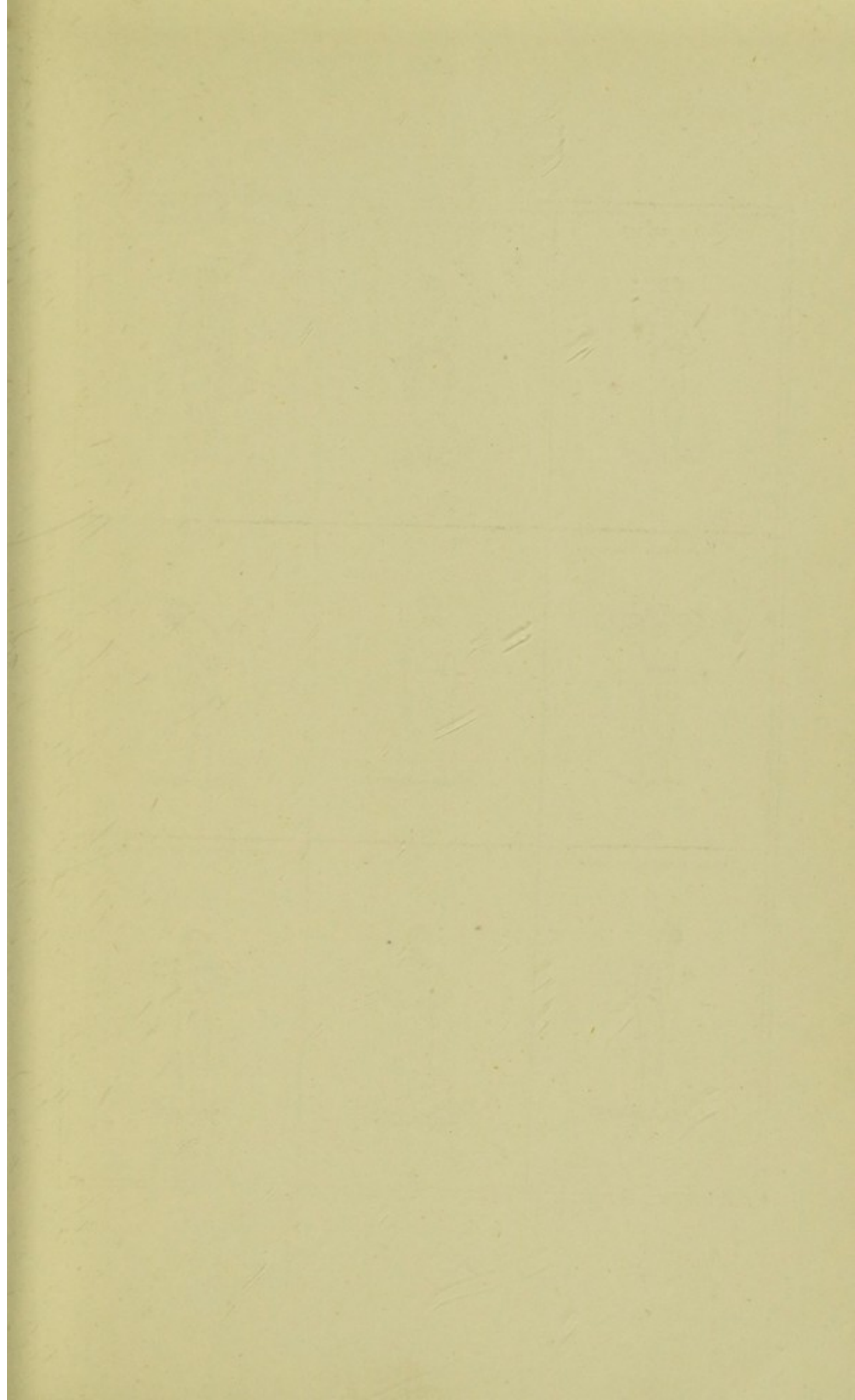
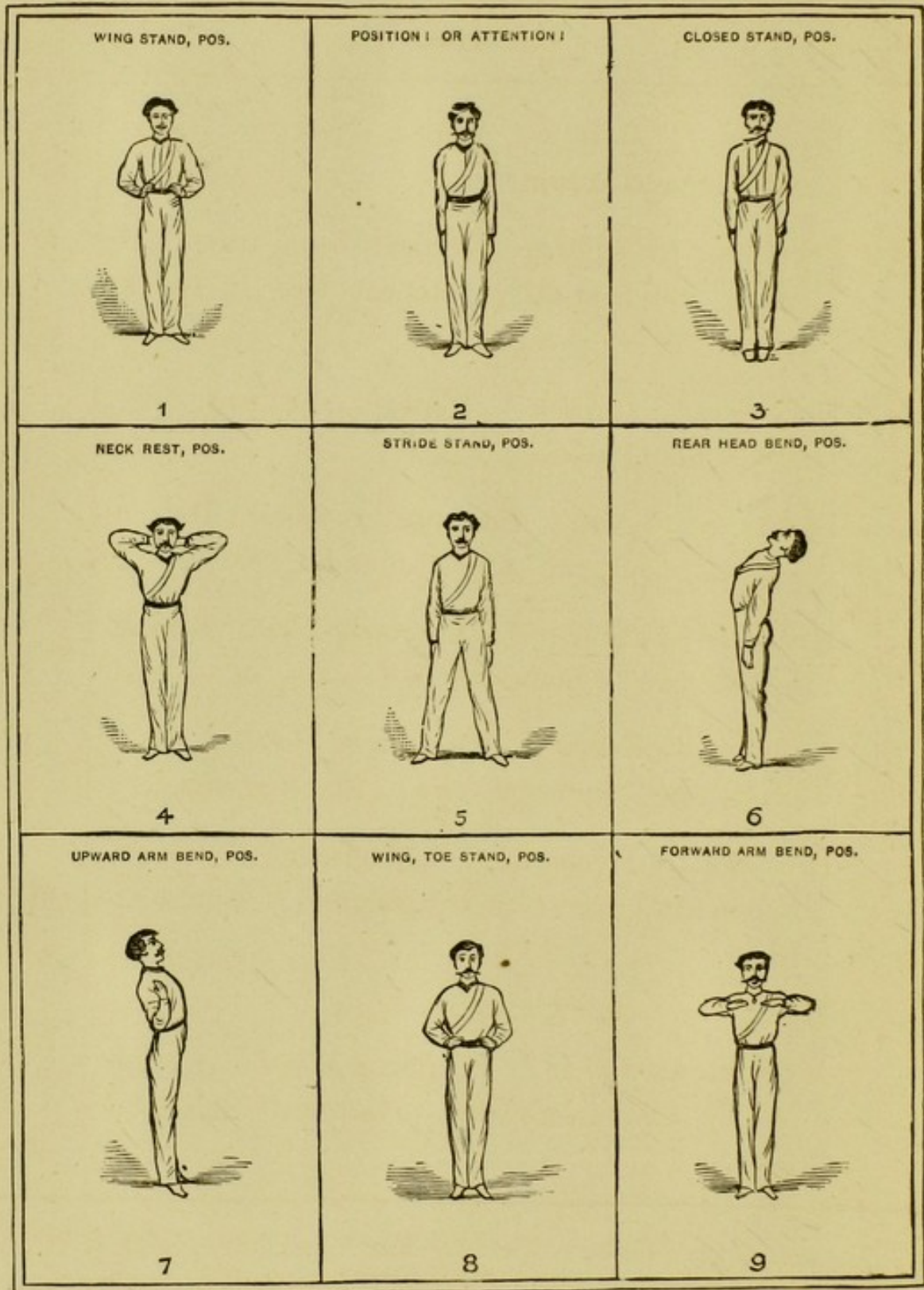


PLATE I.



* FIRST LESSON.

NO.	EXERCISE.	Reference Figure.
1	Hips- <i>firm</i> ! <i>Position</i> ! Repeat—one ! two ! one ! two ! Stand at- <i>ease</i> !	1-2
2	Feet- <i>close</i> ! Feet- <i>open</i> ! Repeat—one ! two ! one ! two ! Stand at- <i>ease</i> ! Repeat also in quick time	3-2
3	Neck- <i>firm</i> ! <i>Position</i> ! Repeat—one ! two ! one ! two ! Stand at- <i>ease</i> !	4
4	Feet sideward- <i>place</i> ! Feet together- <i>place</i> ! Repeat —one ! two ! three ! four ! Stand at- <i>ease</i> ! ...	5
†5	Head backward- <i>bend</i> ! Upward- <i>raise</i> ! Repeat —one ! two ! Stand at- <i>ease</i> !	6
6	Arms upward- <i>bend</i> ! Downward- <i>stretch</i> ! Re- peat—one ! two ! one ! two ! Stand at- <i>ease</i> ! ...	7
†7	Hips- <i>firm</i> ! Heels- <i>raise</i> ! Heels- <i>sink</i> ! Repeat —one ! two ! one ! two ! <i>Position</i> ! Stand at- <i>ease</i> !	8
8	March and Leaping exercise	
9	Arms forward- <i>bend</i> ! Outward- <i>fling</i> ! Repeat —one ! two ! one ! two ! <i>Position</i> ! Stand at- <i>ease</i> !	9-25

* The commands—*Position* ! Stand at-*Ease* ! and full repetitions of an Exercise, only appear in this Lesson.

† Exercises marked thus, with the exception of the *primitive* positions which *precede* them, must be executed *slowly*, the word of command being delivered correspondingly *slow*.

SECOND LESSON.

NO.	EXERCISE.	Reference Figure.
1	Hips - <i>firm</i> and Feet- <i>close</i> ! <i>Position</i> ! Neck- <i>firm</i> and Feet- <i>close</i> ! <i>Position</i> ! Repeat—one ! two ! three ! four !	11-10
2	Neck <i>firm</i> , and left foot sideward- <i>place</i> ! Feet- <i>change</i> ! Repeat—one ! two !	12
†3	Hips - <i>firm</i> ! Head to the left - <i>turn</i> ! Forward - <i>turn</i> ! To the right - <i>turn</i> ! Forward - <i>turn</i> ! Repeat—commencing to the right.	13
4	Arms upward - <i>bend</i> ! Forward, upward, and downward- <i>stretch</i> ! Repeat—one ! two ! three ! four ! five ! six !	14
†5	Hips- <i>firm</i> and left foot sideward- <i>place</i> ! Trunk forward - <i>bend</i> ! Upward - <i>raise</i> ! Repeat— one ! two !	15
†6	Hips- <i>firm</i> and feet - <i>close</i> ! Heels - <i>raise</i> ! Heels - <i>sink</i> ! Repeat—one ! two !	16
†7	Neck- <i>firm</i> and left foot forward - <i>place</i> ! Trunk to the left - <i>turn</i> ! Forward - <i>turn</i> ! Feet - <i>change</i> ! Repeat to the right.	18
8	March and Leaping exercise	
†9	Arms forward and upward - <i>lift</i> ! Forward and downward - <i>sink</i> ! Repeat—one ! two !	17

† Must be performed in slow time.

PLATE II

NECK REST, CLOSED STAND, POS.



10

WING, CLOSED STAND, POS.



11

NECK REST, STRIDE STAND, POS.



12

WING STAND, HEAD TURNING, POS.



13

UPWARD, & FORWARD ARM STRETCH, POSITIONS.



14

WING STRIDE STAND, FOR TRUNK BEND, POS.



15

WING CLOSED, TOE STAND, POS.



16

FOR. & UP., OR FOR. & DOWN., ARM FLING, OR RAISING, POSITIONS.

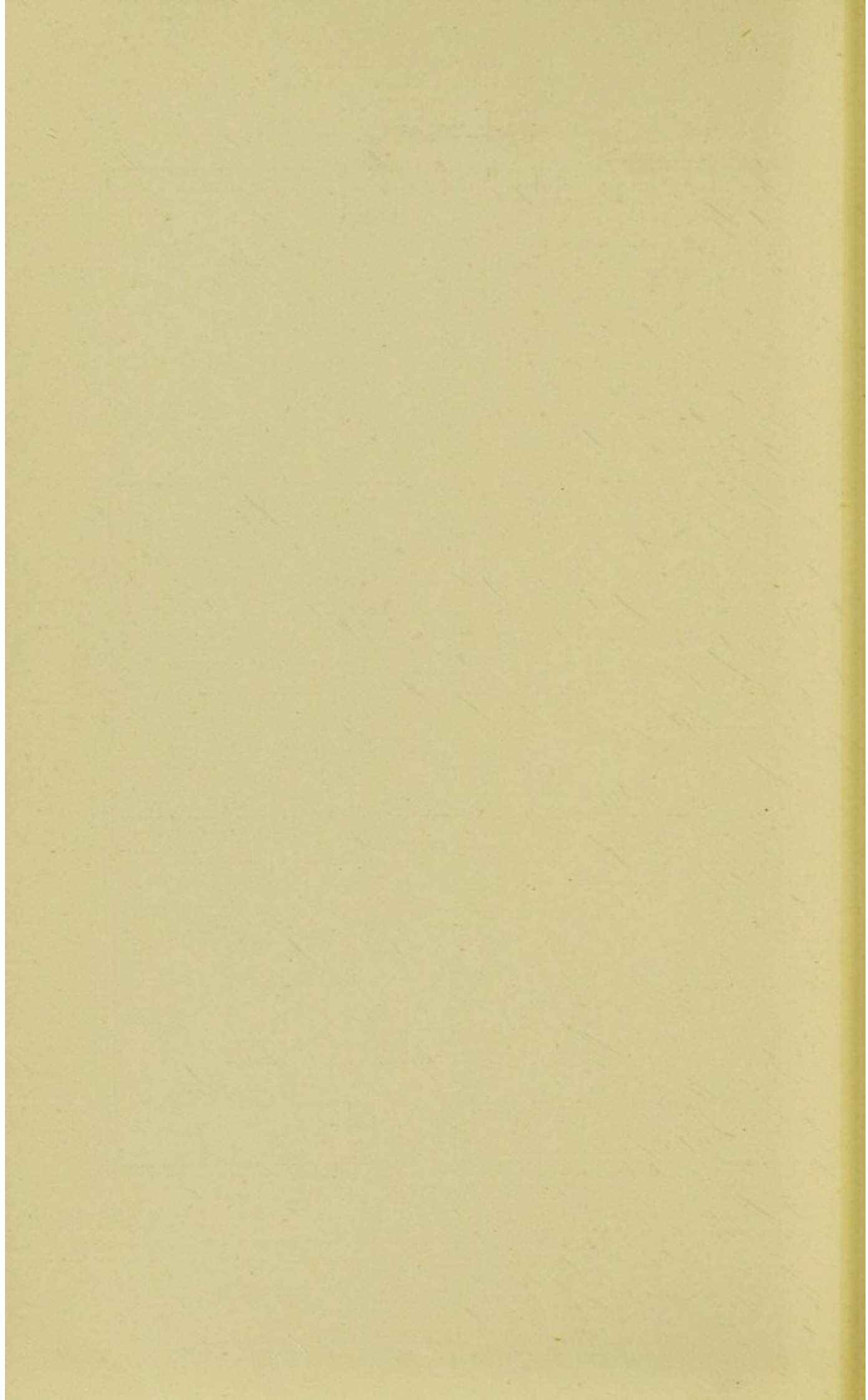


17

NECK REST, WALK TWIST, POS.



18



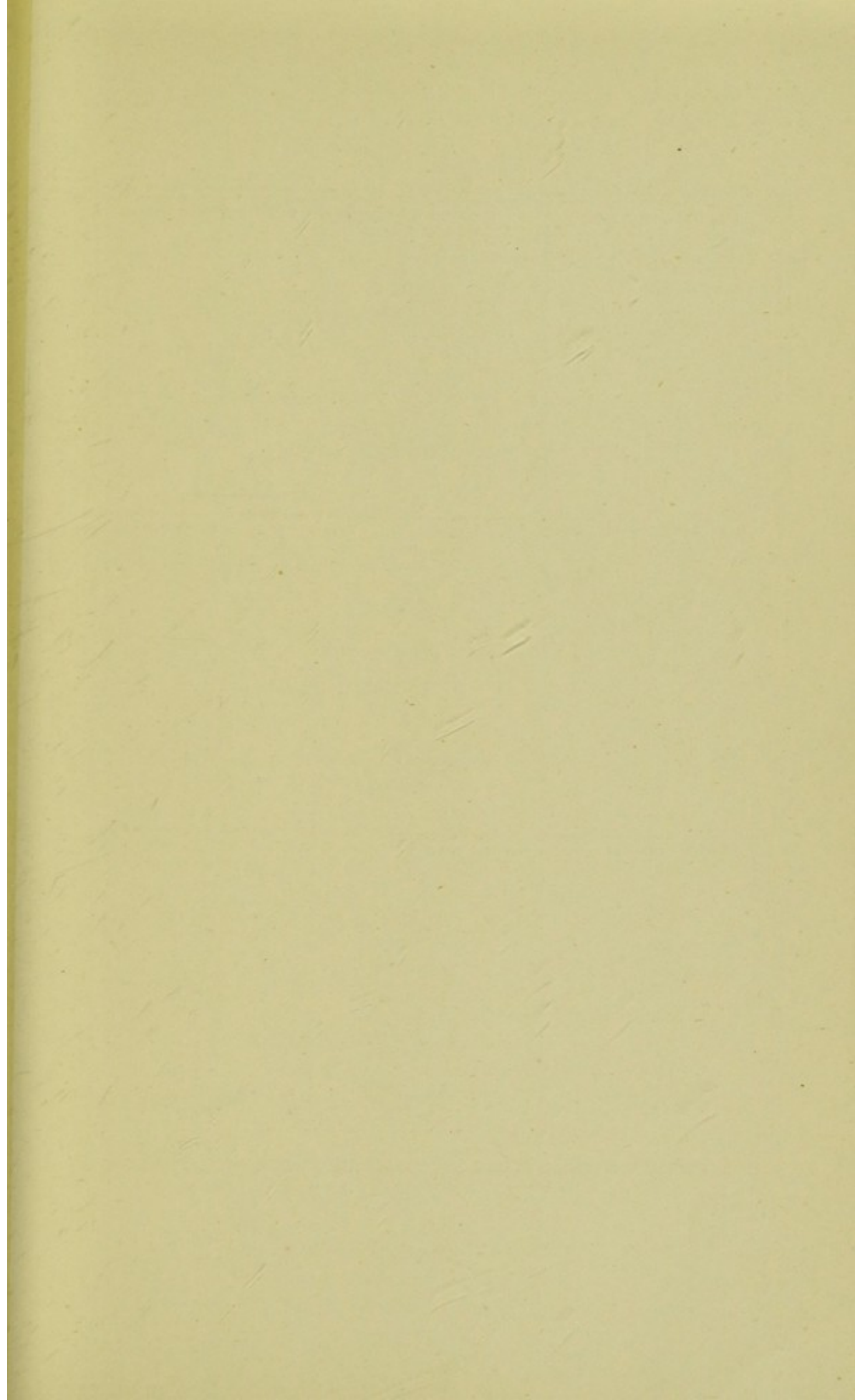


PLATE III.

WING STAND, WALK, POS.



19

STRETCH STRIDE STAND, POS.



20

WING STAND, KNEE BEND, POS



21

FOR., UP. & REAR ARM STRETCH,
POSITIONS.

22

WING STRIDE STAND, REAR TRUNK
BEND, POS.

23

WING CROOK STAND, POS



24

FOR BEND, & OUT. ARM FLING,
POSITIONS.

25

NECK REST, STRIDE STAND, LATERAL
BEND, POS.

26

SIDE & UPWARD ARM RAISING, OR
FLING, POSITIONS.

27

THIRD LESSON.

NO.	EXERCISE.	Reference Figure.
1	Hips - <i>firm</i> and Feet - <i>close</i> ! Left foot forward - <i>place</i> ! Feet - <i>change</i> ! Repeat—one ! two ! ...	19
†2	Feet sideward - <i>place</i> , and arms upward - <i>stretch</i> ! Hips - <i>firm</i> ! Trunk backward - <i>bend</i> ! Upward - <i>raise</i> ! Repeat ! Feet together and arms downward - <i>place</i> !	20-23
†3	Hips - <i>firm</i> ! Heels - <i>raise</i> ! Knees - <i>bend</i> ! Knees - <i>stretch</i> ! Heels - <i>sink</i> ! Repeat—one ! two ! three ! four !	21
4	Arms upward - <i>bend</i> ! Backward, forward, upward, and downward - <i>stretch</i> ! Repeat, in eight movements	22
†5	Hips - <i>firm</i> ! Left knee upward - <i>bend</i> ! Downward - <i>place</i> ! Repeat—with the right—one ! two !	24
6	Arms forward - <i>bend</i> ! Outward - <i>fling</i> ! Repeat, quickly, in one continuous movement—one—two !	25
†7	Neck - <i>firm</i> and feet sideward - <i>place</i> ! Trunk to the left - <i>bend</i> ! Upward - <i>raise</i> ! To the right - <i>bend</i> ! Upward - <i>raise</i> ! Repeat !	26
8	March and Leaping exercise	
†9	Arms sideward and upward - <i>lift</i> ! Sideward and downward - <i>sink</i> ! Repeat—one ! two ! ...	27-33

† Must be taken in slow time.

FOURTH LESSON.

NO.	EXERCISE.	Reference Figure.
†1	Hips - <i>firm</i> and left foot sideward - <i>place</i> ! Heels- <i>raise</i> ! Heels- <i>sink</i> ! Feet- <i>change</i> ! Repeat—one! two! (a) Hips firm and left foot outward- <i>place</i> ! Heels- <i>raise</i> ! Heels- <i>sink</i> !	28
†2	Neck- <i>firm</i> ! Heels- <i>raise</i> ! Knees- <i>bend</i> ! Knees- <i>stretch</i> ! Heels- <i>sink</i> ! Repeat—one! two! three! four!	29
†3	Hips- <i>firm</i> and left foot forward- <i>place</i> ! Trunk backward <i>bend</i> ! upwards- <i>raise</i> ! Feet- <i>change</i> ! Repeat—one! two!	30
4	Arms forward and upward- <i>fling</i> ! Forward and downward- <i>fling</i> ! Repeat—in quick time—one! two!	30
†5	Neck- <i>firm</i> ! Left knee upward- <i>bend</i> ! Downward- <i>place</i> ! Repeat—with the right leg—one! two!	31
†6	Hips- <i>firm</i> ! Knees on the floor- <i>place</i> ! Trunk backward- <i>bend</i> ! Upward- <i>raise</i> ! Repeat—one! two! <i>Position</i> !	31
†7	Feet sideward and arms upward- <i>stretch</i> ! Trunk to the left- <i>turn</i> ! Forward- <i>turn</i> ! To the right- <i>turn</i> ! Forward- <i>turn</i> ! Repeat, commencing to the right	32
8	March and Leaping exercise.	
†9	Arms forward and upward- <i>lift</i> ! Sideward and downward- <i>sink</i> ! Repeat—one! two!	17-33

† Must be executed slowly.

PLATE IV.

WING, STRIDE TOE STAND, POS.



28

NECK REST, KNEE BEND, POS.



29

FOR & UPWARD ARM FLING, OR RAISING, POSITIONS.



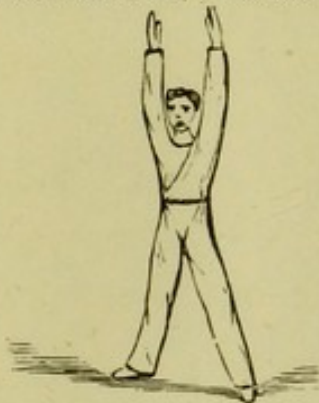
30

WING, KNEE STAND, REAR TRUNK BEND, POS.



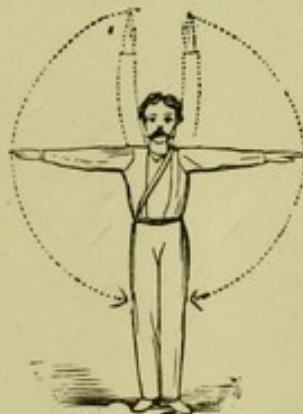
31

STRETCH STRIDE STAND, TRUNK TWIST, POS.



32

SIDE & DOWNWARD, ARM SINKING, POS.



33

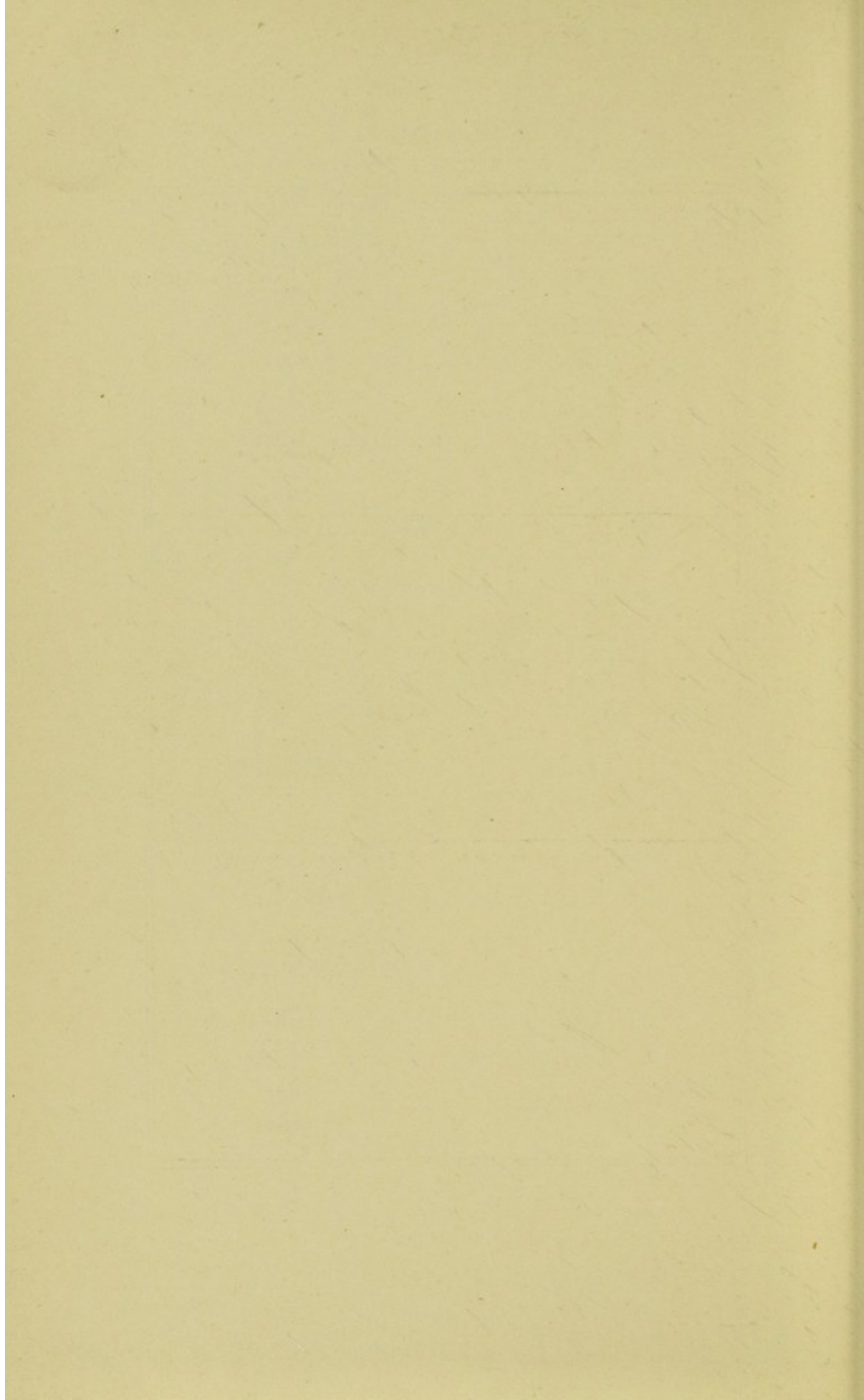




PLATE V.

OUTWARD STAND POS., COMBINED WITH OUT.
ARM FLING.

34

STRETCH STAND, REAR TRUNK BEND, POS.



35

* PRONE FALLING, OR FORWARD LEANING
REST, POS.

36

WING, CROOK STRETCH, POS.



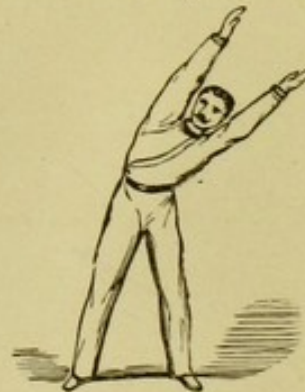
37

NECK REST, KNEE STAND, POS.



38

STRETCH STRIDE STAND, LATERAL BEND, POS.



39

* Hands should be turned inwards, with fingers closed.

FIFTH LESSON.

NO.	EXERCISE.	Reference Figure.
1	Arms forward- <i>bend</i> ! Left foot <i>outward</i> and arms outward- <i>fling</i> ! Arms and feet- <i>change</i> ! Repeat—one! two!	34
†2	Arms upward- <i>stretch</i> ! Trunk backward- <i>bend</i> ! Trunk upward- <i>raise</i> ! Repeat—one! two! ...	35
†3	Hips- <i>firm</i> and left foot outward- <i>place</i> ! Heels- <i>raise</i> ! Knees - <i>bend</i> ! Knees - <i>stretch</i> ! Heels- <i>sink</i> ! Feet- <i>change</i> ! Repeat!	
*†4	"Prone-falling position." Hands on the floor- <i>place</i> ! Feet backward - <i>place</i> ! Arms - <i>bend</i> ! Arms- <i>stretch</i> ! Repeat—one! two!	36
†5	Hips- <i>firm</i> ! Left knee upward- <i>bend</i> ! Forward- <i>stretch</i> ! Upward - <i>bend</i> ! Downward - <i>place</i> ! Repeat—with the right leg!	37
†6	Neck- <i>firm</i> ! Knees on the floor- <i>place</i> ! Trunk backward- <i>bend</i> ! Upward- <i>raise</i> ! Repeat—one! two!	38
†7	Feet <i>sideward</i> and arms upward- <i>stretch</i> ! Trunk to the left- <i>bend</i> ! Upward- <i>raise</i> ! To the right- <i>bend</i> ! Upward- <i>raise</i> ! Repeat! (a) With feet together, left arm <i>upward</i> and right arm <i>downward</i> . To the right- <i>bend</i> ! Arms- <i>change</i> ! To the left- <i>bend</i> !	39-69
8	March and Leaping exercise.	
†9	Arms sideward and upward- <i>lift</i> ! Forward and downward- <i>sink</i> ! Repeat—in slow time—one! two!	27-17

* The hands to be placed in an *inverted* position close to the feet at a distance equal to the breadth of the shoulders, and the entire body sustained in a straight position.

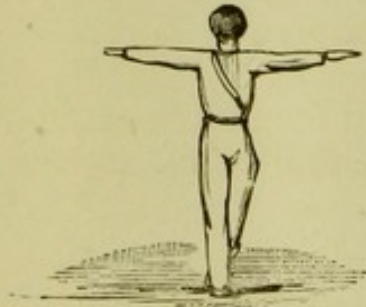
† Must be executed slowly.

SIXTH LESSON.

NO.	EXERCISE.	Reference Figure.
†1	Hips- <i>firm</i> and left foot sideward- <i>place</i> ! Heels- <i>raise</i> ! Heels- <i>sink</i> ! Feet- <i>change</i> ! Repeat—one! two! (a) Foot <i>outward</i> . (b) Foot <i>forward</i> . (c) Combine the three positions, first with the left foot, then with the right, thence commence on the right side	28 and diagrams 10-8-14
2	Arms forward- <i>bend</i> ! Left foot, large step <i>backward</i> , and arms outward- <i>fling</i> ! Arms and feet- <i>change</i> ! Repeat—one! two!	40
†3	Left foot <i>forward</i> , and arms upward- <i>stretch</i> ! Trunk backward- <i>bend</i> ! Upward- <i>raise</i> ! Arms and feet- <i>change</i> ! Repeat!	41
4	Left arm upward and right arm downward- <i>stretch</i> ! Arms- <i>change</i> ! (a) Left arm upward and right arm sideward. (b) Right arm upward and left arm forward	42-43- 60
†5	Neck- <i>firm</i> and left foot outward- <i>place</i> ! Trunk to the left- <i>turn</i> ! Backward- <i>bend</i> ! Upward- <i>raise</i> ! Forward- <i>turn</i> ! Feet- <i>change</i> ! Repeat to the right.	
6	Arms backward- <i>stretch</i> ! Forward and upward- <i>fling</i> ! Forward- <i>bend</i> ! Outward- <i>fling</i> ! <i>Position</i> ! Repeat in six consecutive movements, and in quick time	
†7	Left knee on the floor- <i>place</i> ! Arms forward and upward - <i>raise</i> ! Trunk backward - <i>bend</i> ! Upward - <i>raise</i> ! Repeat—one! two! Arms downward- <i>sink</i> ! Knees- <i>change</i> !	44
8	March and Leaping exercise.	
†9	Heels- <i>raise</i> and arms sideward- <i>lift</i> ! Heels and arms downward- <i>sink</i> ! Repeat — one! two! (a) Raise the arms forward and horizontal	45

† Must be performed slowly.

PLATE VI.

FORWARD LUNGE, COMBINED WITH OUT. ARM
FLING, POS.

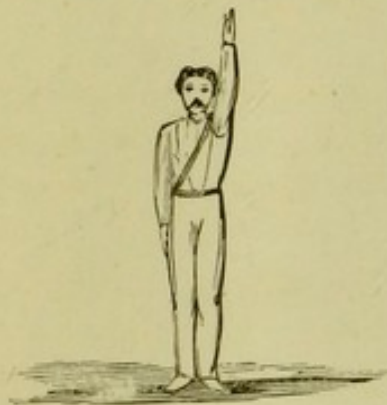
40

STRETCH WALK, REAR TRUNK BEND, POS.



41

HALF STRETCH STAND, POS.



42

ALTERNATE ARM STRETCH, POS.



43

STRETCH, HALF KNEE STAND, POS.



44

SIDEWARD ARM, & HEEL RAISING POS



45



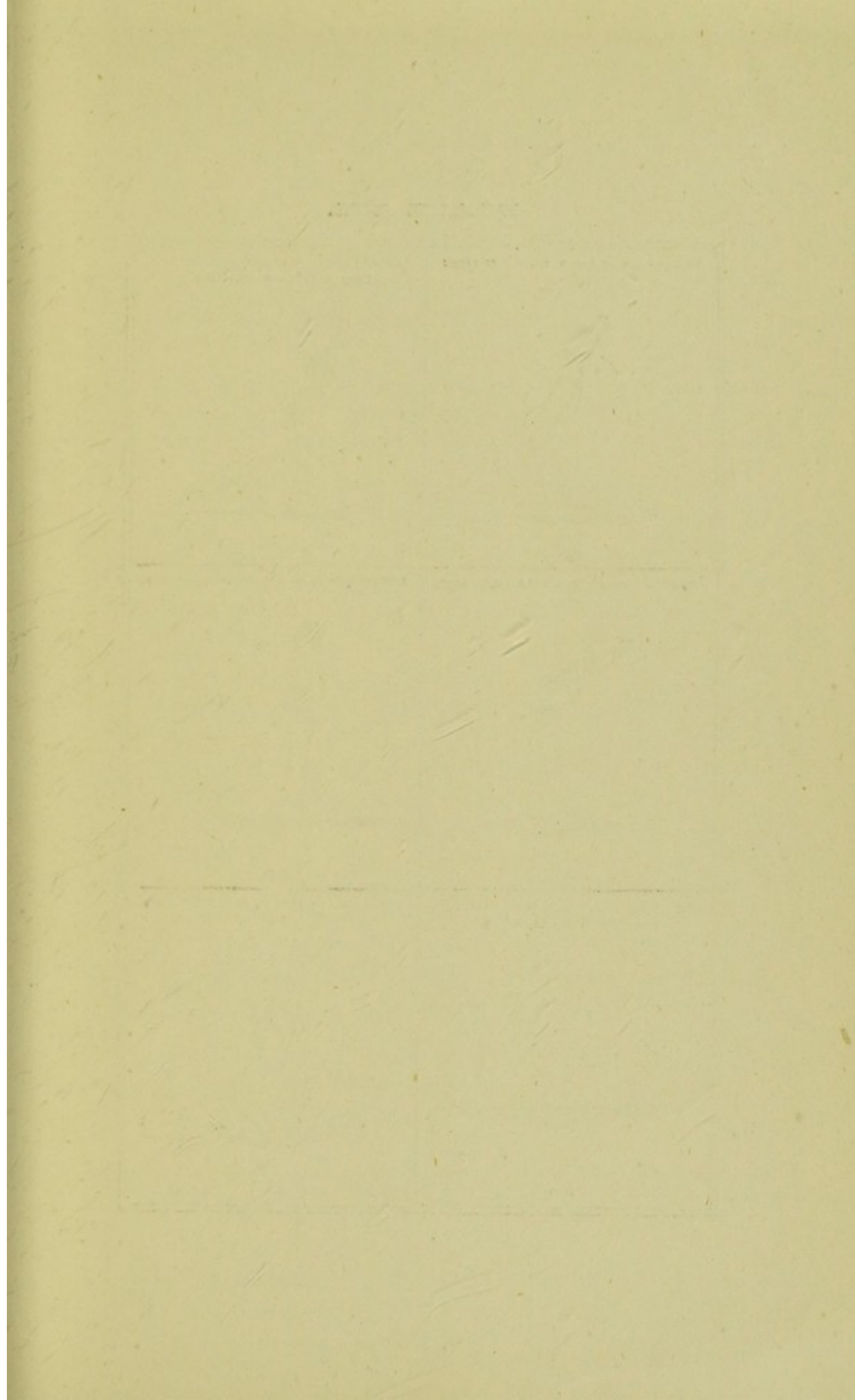


PLATE VII.

STRETCH STRIDE STAND, TENSE FOR TRUNK
BEND POS

46

FORWARD LUNGE, COMBINED WITH UP. ARM
BEND, & STRETCH, POSITIONS.

47

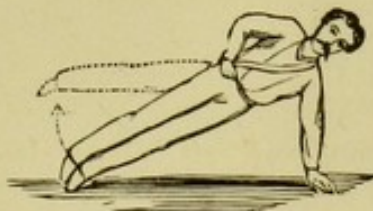
STRETCH STRIDE STAND, REAR TRUNK BEND.
POS.

48

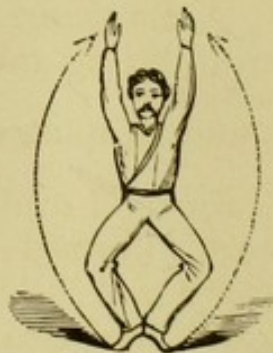
WING, CROOK BEND, & STRETCH, POSITIONS.



49

SIDE "PRONE FALL," OR LEANING REST, POS.,
COMBINED WITH LEG RAISING.

50

SIDE & UP. ARM RAISING, WITH KNEE BEND,
POS.

51

SEVENTH LESSON.

NO.	EXERCISE.	Reference Figure.
†1	Neck- <i>firm</i> and left foot outward- <i>place</i> ! Heels- <i>raise</i> ! Knees- <i>bend</i> ! Knees- <i>stretch</i> ! Heels- <i>sink</i> ! Repeat! Feet- <i>change</i> !	
†2	Feet <i>sideward</i> and arms upward- <i>stretch</i> ! Trunk forward- <i>bend</i> ! Downward- <i>bend</i> ! Forward- <i>bend</i> ! Upward- <i>raise</i> ! Repeat!	46
3	Arms backward, forward, upward, sideward, and downward- <i>stretch</i> ! Repeat in ten movements	22
*4	Arms upward- <i>bend</i> ! Left foot, large step (lunge), outward, and arms upward- <i>stretch</i> ! Arms- <i>bend</i> ! Arms- <i>stretch</i> ! Repeat! one! two! Arms and feet- <i>change</i> !	47
†5	Feet <i>sideward</i> and arms upward- <i>stretch</i> ! Trunk backward- <i>bend</i> ! Upward- <i>raise</i> ! Repeat—one! two!	48
†6	Hips- <i>firm</i> ! Left knee upward- <i>bend</i> ! Forward- <i>stretch</i> ! Upward- <i>bend</i> ! Backward- <i>stretch</i> ! Upward- <i>bend</i> ! Downward- <i>place</i> ! Repeat with the right	49
†7	"Side prone-falling position." Hands on the floor- <i>place</i> ! Feet backward- <i>place</i> ! On the left arm- <i>rest</i> ! Arms- <i>change</i> ! Repeat on the right side (a) with lifting and sinking of leg, one! two!...	50
8	March and Leaping exercise.	
†9	Heels- <i>raise</i> and arms sideward- <i>lift</i> ! Knees- <i>bend</i> ! and arms upward- <i>lift</i> ! Knees- <i>stretch</i> ! and arms sideward- <i>sink</i> ! Heels and arms downward- <i>sink</i> ! Repeat! one! two! three! four!	51

* The body to be supported on the left foot, and toes of the right, and the arm bending and stretching executed in quick time.

† To be executed slowly.

‡ Must not be executed by pupils under 13 years of age.

EIGHTH LESSON.

NO.	EXERCISE.	Reference Figure.
1	Neck- <i>firm</i> and feet- <i>close</i> ! Left foot forward- <i>place</i> ! Feet- <i>change</i> ! Repeat—one ! two ! ...	52
†2	Hips- <i>firm</i> ! Heels- <i>raise</i> ! Knees- <i>bend</i> ! Sit ! Arms forward <i>bend</i> ! outward- <i>fling</i> ! Repeat, in quick time — one—two ! Knees- <i>stretch</i> ! Heels- <i>sink</i> !	56
3	Arms upward- <i>bend</i> ! Left foot, large step <i>outward</i> , with left arm <i>upward</i> , and right arm downward- <i>stretch</i> ! Arms and feet- <i>change</i> !	54
4	Arms backward, forward, sideward, and downward- <i>stretch</i> ! (without counting). Repeat, in ten movements	22
*5	Heels- <i>raise</i> and arms upward- <i>bend</i> ! (1) Knees- <i>bend</i> and arms upward- <i>stretch</i> ! (2) Knees- <i>stretch</i> and arms upward- <i>bend</i> ! Repeat—in quick time—one—two !	53
†6	Knees on the floor- <i>place</i> ! Arms upward- <i>raise</i> ! Trunk backward- <i>bend</i> ! Rapid arm <i>bending</i> and <i>stretching</i> —one ! two ! Repeat—one—two ! Trunk upward- <i>raise</i> ! Arms downward- <i>sink</i> ! ...	55
†7	Neck- <i>firm</i> ! Trunk to the left- <i>turn</i> ! to the left- <i>bend</i> ! Upward- <i>raise</i> ! Forward- <i>turn</i> ! Repeat to the right—one ! two ! three ! four !	57
8	March and Leaping exercise	
†9	Arms upward and forward- <i>lift</i> ! Sideward and downward- <i>sink</i> ! Repeat — one ! two ! (a) Sideward- <i>lift</i> and forward- <i>sink</i> !	30-33

* The heels to be raised throughout the whole of the exercise.

† Must be executed slowly.

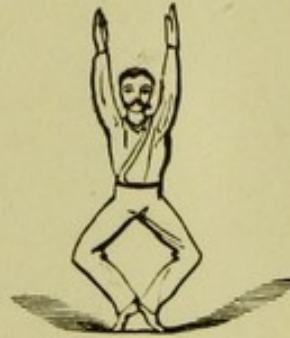
PLATE VIII.

NECK REST, WALK, POS



52

STRETCH STAND. KNEE BEND, POS.



53

PASS, OR OUTWARD LUNGE POS.



54

STRETCH, KNEE STAND REAR TRUNK BEND, POS.



55

TENSE KNEE BEND, POS., COMBINED WITH OUTWARD ARM FLINGING.



56

NECK REST, TRUNK TWIST BEND, POS.



57



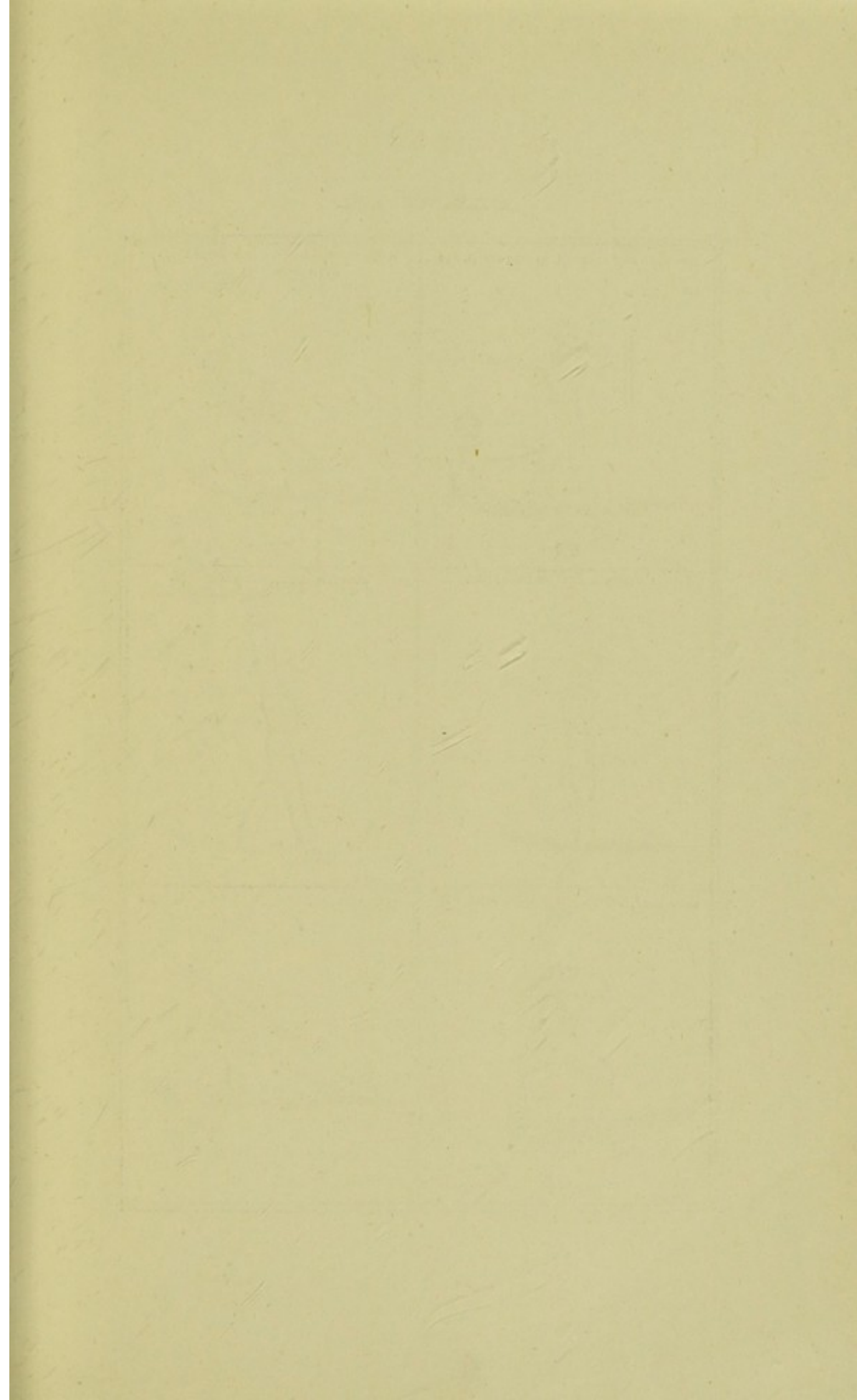


PLATE IX.

SIDEWARD ARM STRETCH, STRIDE STAND, POS.



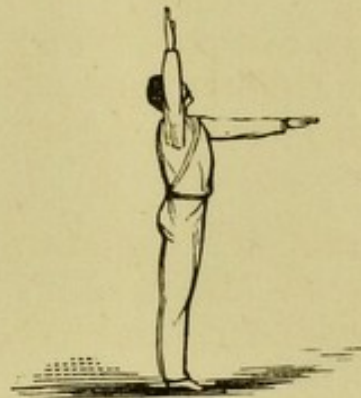
58

WING, OUTWARD LUNGE, POS., COMBINED WITH HEEL LIFTING.



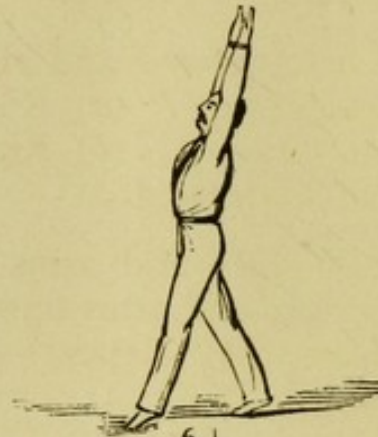
59

ALTERNATE ARM STRETCH, POS.



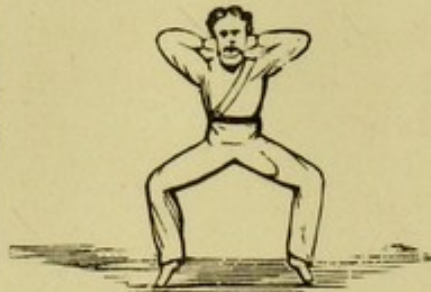
60

STRETCH WALK, TOE STAND, POS.



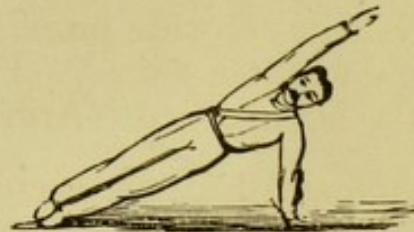
61

NECK REST, STRIDE STAND KNEE BEND, POS.



62

HALF STRETCH, SIDE PRONE FALLING, POS.



63

59, 60

NINTH LESSON.

NO.	EXERCISE.	Reference Figure.
I	Feet <i>sideward</i> , and arms <i>sideward-stretch</i> ! Feet <i>together</i> and arms <i>downward-stretch</i> ! (a) Feet <i>sideward</i> and arms <i>forward-stretch</i> ! Feet <i>together</i> and arms <i>downward-stretch</i> ! Repeat!	58
†2	Hips- <i>firm</i> ! Left foot large step outward- <i>place</i> ! Left heel- <i>lift</i> ! <i>Sink</i> ! Repeat ! Feet- <i>change</i> ! Repeat ! with the right	59
†3	Neck <i>firm</i> and left foot <i>forward-place</i> ! Trunk to the left- <i>turn</i> ! Backward- <i>bend</i> ! Upward- <i>raise</i> ! Forward- <i>turn</i> ! Feet- <i>change</i> ! Repeat ! commencing to the right	
4	Left arm <i>upward</i> and right arm <i>forward-stretch</i> ! Arms- <i>change</i> ! (a) Right arm <i>sideward</i> and left arm <i>forward</i> ! (b) Right arm <i>forward</i> and left arm <i>downward</i>	60
†5	Feet <i>together</i> and arms <i>upward-bend</i> ! Left foot <i>forward</i> and arms <i>upward-stretch</i> ! Heels- <i>raise</i> ! Heels- <i>sink</i> ! Repeat—one ! two ! Arms and feet- <i>change</i> !	61
6	Neck <i>firm</i> and feet <i>sideward-place</i> ! Heels- <i>raise</i> ! Knees - <i>bend</i> ! Knees - <i>stretch</i> ! Heels - <i>sink</i> ! Repeat—one ! two ! three ! four !	62
*7	"Half stretch side prone-falling position." Hands on the floor- <i>place</i> ! Feet backward- <i>place</i> ! On the left arm- <i>rest</i> ! Arms- <i>change</i> !	63
	March and Leaping exercise	
†9	Knees <i>bend</i> and arms <i>sideward</i> and upward <i>lift</i> ! Knees <i>stretch</i> and arms <i>sideward</i> and downward <i>sink</i> ! Repeat—one ! two !	51

* The right arm to be placed vertically with the body, as the left arm executes the 'rest' position.

† Must be executed slowly

TENTH LESSON.

NO.	EXERCISE.	Reference Figure.
1	Hips- <i>firm</i> ! Left foot forward, outward, and side-ward—(with heel raising and sinking)— <i>place</i> ! Repeat to the right in six movements. (a) Repeat consecutively from left to right, and from right to left	65
*2	Feet- <i>sideward</i> and arms upward- <i>stretch</i> ! Trunk forward- <i>bend</i> ! Arms- <i>sink</i> ! Arms- <i>lift</i> ! Sink and lift—(in quick time)— <i>one,—two</i> ! Upward- <i>raise</i> !	
3	Arms backward, forward, upward, sideward, and downward- <i>stretch</i> ! Repeat ! Without counting	
†4	Feet <i>sideward</i> and arms upward- <i>stretch</i> ! Heels- <i>raise</i> ! Knees- <i>bend</i> ! Knees- <i>stretch</i> ! Heels- <i>sink</i> ! Repeat one ! two ! three ! four !	67
5	Knees on the floor- <i>place</i> ! Trunk backward- <i>bend</i> ! Arms upward- <i>bend</i> ! Upward- <i>stretch</i> ! Repeat in quick time— <i>one,—two</i> ! Upward- <i>raise</i> ! (a) Arms forward- <i>bend</i> ! outward- <i>fling</i> !	68
†6	Neck- <i>firm</i> ! Left knee upward- <i>bend</i> ! Forward- <i>stretch</i> ! Upward- <i>bend</i> ! Backward- <i>stretch</i> ! Upward- <i>bend</i> ! Downward- <i>place</i> ! Repeat with the right	
†7	Arms upward- <i>bend</i> ! Left foot large step <i>outward</i> and arms upward- <i>stretch</i> ! Trunk to the right- <i>turn</i> ! To the left- <i>bend</i> ! Upward- <i>raise</i> ! To the left- <i>turn</i> ! Arms and feet- <i>change</i> ! Repeat on the right side	
8	March and Leaping exercise	
†9	Knees- <i>bend</i> , and arms forward and upward- <i>lift</i> ! Knees- <i>stretch</i> and arms sideward and downward <i>sink</i> !	

*The body and head must be kept perfectly steady during the arm flinging.

† To be executed in slow time.

