

LESSONS IN ARTISTIC DEEP BREATHING

FOR STRENGTHENING THE VOICE.

Also designed for the Health, Strength, and Energy of
the Body, on the principles established by Nature
for renewing the Vitality of Nerve and
Blood by Oxygenation.

ARRANGED IN SERIES

For Teachers of Elocution; for Schools; for Self-Training;
also for Invalids; and containing also a series
of excellent alisthenics in Breathing.

By EDMUND SHAFTESBURY, ^{pseud}

A author of "The Shaftesbury Method of Voice Building,"

"Rules of Emphasis," "Personal Magnetism,"

Etc., Etc., Etc.

AUTHOR'S EDITION:

THE MARTYN COLLEGE PRESS,
WASHINGTON, D. C., U. S. A.

Copyright, 1888, by
WEBSTER EDGERLY.
All rights reserved.

PREFACE TO AUTHOR'S EDITION.

The Lessons in Artistic Deep Breathing are printed in book form, now, for the first time, and the Edition is a limited one.

The object is one of philanthropy, not profit; for, if every copy of this Edition that has thus far been printed should be sold, the expenses will not have been fully met.

It is gratifying to the Author to know that persons who will become purchasers of these "Lessons," will not only correct in themselves the faults of breathing and increase their general health, their power and richness of voice; but may also aid others in the same direction.

There is too much *experimenting* with the breathing organs by people who only *guess* at Nature's designs, and injuries are often caused thereby. Even the advocates of Abdominal Breathing will find that Deep Respiration is fifty per cent. *its superior*.

Had people breathed in the way, and to the extent, intended by the Creator, the human race would have been larger in frame, five times stronger in body, purer in blood, more vital in nerve force, and much longer lived.

The office therefore of this little book, called "Lessons in Artistic Deep Breathing," is to aid mankind to acquire new health, new voice, and new life, by methods taken direct from Nature, and proved to be correct by over one hundred thousand tests.

4006
319

70295

CHAPTER ONE.

OBSERVATIONS.

Although there are many ways in which people may breathe and *do* breathe, Nature has but *one correct way*. The human race was created for the open air and to spend at least one-half of the day time on the feet ; sitting only as a temporary relief to standing ; never supporting the back ; sleeping in a partially prone position ; and never supporting the head above the level of the body.

Degeneracy in all the organs, muscles, and bones of the body is very rapid. If a person should tie his arm in a sling and carry it unused for a few weeks, it would become very feeble. Any man, however strong, who should lie abed for a fortnight would be too weak to stand. The bones of the body become dry and brittle when not exercised ; but when put to proper use the pores of the bony structure are filled with a healthy sap.

The race, by its bad habits of life, too much sitting, supporting of the back, its indoor life, its improper methods of sleep, and many other enervating causes, has brought upon itself a torpid and feeble action of the organs of respiration.

It may be safely said that not one person in a thousand breathes air enough to support life moderately well. This fact becomes apparent to many people ; who seek to

correct the error by any method of artificial breathing that may occur to them, without stopping to think that Nature has but one correct way. Injuries to the lungs have been caused by thus trifling with them.

The exercises which constitute the lessons of this book are not based upon *theory* merely ; they are the result of over one hundred thousand experiments and observations, whereby the most beneficial methods of breathing have been discovered, methods that do not fail in *practice*, whatever the *theory* may be.

It has been claimed that the breathing organs in females are constituted in a way that prevents abdominal breathing. Whether this be true or not, as to abdominal breathing, it is not true as to DEEP BREATHING. Deep breathing may be employed at all times, whether the stomach be full or empty, by people of all ages, and by ladies equally as well as the opposite sex, whether married or single. And yet perfect deep breathing is acquired more readily by first learning abdominal breathing. When the former is mastered the latter may be abandoned.

To recur for a moment to the objection raised against abdominal breathing for ladies, we will say that medical authorities have generally made the objection on *theory*, and never on the results of *experiment*. This is not the only instance in which long-established *theories* have succumbed to the actual facts of *experiment*. A fact is, at all times, better than a theory.

It is a fact, that the greatest of the world's female singers have accomplished more through the adoption of abdominal and deep breathing, than would have ever been possible had they clung to the chest breathing of the medical fraternity. Chest breathing in either sex is unnatural. This is proven in every case when a test is made.

The *Scientific American* of August 20, 1887, says :

“ It has always been a stereotyped statement of physiologists that the respiration of woman differs from that of man in being limited almost entirely to the chest. On the other hand we have the apparently contradictory fact that abdominal respiration is the most potent of all factors for returning the blood through the veins to the heart.

“ We have, at least, some investigations which promise to solve this interesting problem. These investigations tend to show that the exclusive use of the chest in respiration is a result of the restrictions of circulation, and is hence *unnatural*. In order to investigate this subject scientifically, Dr. Mays, of Philadelphia, devised an ingenious instrument for examining the respiration of the native Indian girls in the Lincoln Institution. The girls had not yet been subjected to the restrictions of civilized dress. The results of his investigations will be found recorded in the *Therapeutic Gazette* of May 16, 1887. He says :

“ In all I examined the movements of eighty-two chests, and in each case took an abdominal and a costal tracing. The girls were partly pure and partly mixed with white blood, and their ages ranged from between ten and twenty years. Thus there were thirty-three full-blooded Indians, five one-fourth, thirty-five one-half, and two were three-fourths white. *Seventy-five* showed a *decided abdominal* type of breathing, three a costal type, and three in which both were about even. *Those who showed the costal type, or a divergence from the abdominal type, came from the more civilized tribes, like the Mohawks and Chippewas, and were either one-half or three-fourths white; while in no single instance, did a full-blooded Indian girl possess this type of breathing.* From these observations it obviously follows that, so far as the Indian is concerned, the abdominal is the original type of respiration in both male and female, and that the costal type in the civilized female is developed through the constricting influence of dress around the abdomen.’ ”

However clearly the *facts* may demonstrate the superiority of abdominal over chest-breathing, there will probably be many physicians who will cling to the *theories* of the past. Even *they* will not yield to that higher type

of natural breathing known as the *deep*, which possesses none of the objections of the abdominal type. To perfect this is the design of the lessons of this book. It must, however, be borne in mind, as has already been stated, that the abdominal breathing must first be mastered or the deep will have no natural foundation.

CHAPTER TWO.

EXPLANATIONS.

To the Pupil :—The following explanations should be carefully read once a week for four weeks. Committing them to memory will not suffice. The attention should be called to them at least once a week.

1—*Disuse, improper use, and over use* of the organs and muscles of the body, produce injury.

The first develops weakness, the second erroneous habits, and the third breaks down tissues, produces waste, and shortens the period of vitality.

2—*Breathing* is an exercise of an organ, aided by muscles. The organ is called the *diaphragm*; the muscles are those of the abdomen and lower chest.

3—*The Diaphragm* is the floor of the lungs, and at the same time it serves as a roof for the abdominal cavity. During the act of drawing in breath *correctly*, the diaphragm contracts and descends, and at the same time the body, at and below the lower portion of the chest, becomes larger.

4—*The words* Inhalation and Inspiration mean, the act of drawing in breath; exhalation and expiration mean breathing out; respiration means to breath in and out, or continuous breathing, in and out.

5—There are five general ways of respiration: 1st,

Shoulder Respiration ; 2d, Upper Front Chest Respiration ; 3d, Upper Side Chest Respiration ; 4th, Abdominal Respiration ; 5th, Deep Respiration. The first two are exceedingly vicious and bad ; the third is of some value ; the fourth is very valuable and is next to the best ; the fifth, or Deep Breathing, is by far the best breathing, not only for song and speech, but also for health.

6—*In Abdominal Respiration*, the expansion of the abdomen will be very great at the navel when breath is drawn in, and the contraction equally great when breath is expelled.

7—*Deep Breathing* cannot be acquired until abdominal respiration is fully established, and as some pupils may be over-ambitious and undertake to acquire the former before the latter is mastered, the description of Deep Breathing is omitted, but the successive steps in its acquisition are all given in the following lessons.

8—*For Vocal Use*.—Voice is nerve force expending itself on a salivated or slimy surface in the throat and mouth. The covering of the surface of the throat and mouth, therefore, should be protected from three things, viz : dryness, dust, and cold. All atmospheres, when inhaled through the mouth, are too dry for the throat ; they may have dust in them ; and they often chill the throat, even in mild weather. The nostril chamber is quite large ; it contains a filter designed by Nature to protect the throat and lungs from dust ; its moisture is imparted to the air passing through it ; its warmth is received by the air before reaching the throat.

Therefore, *always inhale through the nostrils* ; otherwise rich tones cannot be produced, and sore throat will ensue.

9—*For Health*.—Inhaling through the mouth, as has just been stated, is accompanied by dryness, cold, and dust, any and all of which will cause irritation to the throat and the organs connected therewith. This irrita-

tion may extend to the wind-pipe and lungs below, or to the nasal passages above, causing many diseases, and giving rise to a constant presence of phlegm. In addition to this, the malarial and other dangerous poisons of the atmosphere are neutralized to a great extent by the filtering contents of the nasal chamber. Observation has proved that nearly every person who has mastered the art of inhaling through the nose, is exempt from the diseases named.

10—*An Unconscious Habit* of inhaling through the mouth while conversing rapidly will cling to many persons who have overcome mouth-breathing in every other respect. To cure this habit, some friend or relative should watch the pupil during rapid conversation, and at every such inhalation, a caution should be given.

11—*The Purpose of Inhalation*, is to carry oxygen into the lungs, where the blood is purified by its aid. Exhalation has a double purpose : First, the impurities are carried off ; second, the outgoing breath is the foundation of voice.

12—*Oxygen*, united with, and forming a constituent part of the air breathed into the lungs, is the life, light, heat, energy, and nerve-power of the body. It gives vigor to the blood, and imparts tone to every organ of the body.

13—*Chest Breathing*.—Nature designs and experiments unanimously prove that the diaphragm should take the initiatory step in every inhalation ; that the upper portion of the chest should not be used as a pumping organ. A full chest position helps in deep breathing, but the position of the chest should be a fixed one. The lower portions of the chest-frame may be more or less involved in the motion necessary to good breathing, while the upper chest is nearly quiet. A familiar illustration that is not altogether exact, but which is true in principle, likens the organs of breathing to a pump and pail. The chest-

frame corresponds to the wood-work of the pail ; the lungs to the inside or hollow of the pail ; the diaphragm to the box of the pump. The box draws the water ; the diaphragm the air ; the water is pumped into the pail ; so the lungs are mere reservoirs to hold the air ; the chest-frame surrounds the whole ; so the sides of the pail merely contain the contents. The chest-frame should no more be used to breathe with than the wood-work of a pail should be used to pump water with.

CHAPTER THREE.

RULES FOR GUIDANCE IN EXERCISING.

The following rules should be committed to memory, before the lessons are begun.

RULE 1.

Always inhale through the nostrils.

RULE 2.

Stand with the heels and balls of the feet touching the floor, but the weight of the body on the balls of the feet.

RULE 3.

The meaning and details of an exercise must be carefully understood before practising.

RULE 4.

Where "time of practice" is given, it is intended as an maximum limit, not to be exceeded, and a full hour must elapse before the exercise is repeated.

RULE 5.

Where a "caution" is given, the pupil must keep it in mind constantly while performing the exercise.

RULE 6.

As it is better to have the stomach entirely empty while performing the exercises in breathing, they should be practised before eating, or not sooner than two hours after eating. However, very quiet exercise in breathing may be taken at any time.

RULE 7.

The clothing must be worn very loosely about the chest and abdomen, until the lessons have been completed; then tight fitting clothing may be worn at the waist if desired, although not always preferable.

CHAPTER FOUR.

GENERAL EXERCISES ARRANGED FOR PUPILS WHO ARE IN FAIRLY GOOD HEALTH.

Persons under 15 years of age and invalids should not practice all of the exercises given in this chapter, as subsequent portions of this book are designed specially for them, and appropriate selections made therein.

GENERAL EXERCISE No. 1.

STANDING POSITION FOR BREATHING.

Stand in the military position, with the heels together, and the toes apart as in the letter V, at an angle of about 75 degrees. The heels and the balls of the feet rest on the floor, but the entire weight is to be placed on the balls of the feet. This may be done by inclining the body forward slightly, without, in the least, bending it. A test of the true standing position may be made by rising on the balls of the feet. If this may be accomplished without a forward motion in rising, and a backward motion in falling, it indicates a correct standing position.

GENERAL EXERCISE No. 2.

SITTING POSITION FOR BREATHING.

Sit with the body well back in the chair. The back

must not touch the chair. The body from the hips up must be straight, and inclined forward slightly, without bending.

GENERAL EXERCISE No. 3.

LYING POSITION FOR BREATHING.

Lie down on a carpeted floor, with the back of the head and both shoulder blades touching the floor; the heels and the rest of the body touching the floor in such a manner as to have the entire body facing upward. There must be no support for the head, except the floor. The hands may rest lightly folded on the abdomen.

GENERAL EXERCISE No. 4.

POSITION OF SHOULDERS FOR BREATHING.

Take the Sitting Position (General Exercise No. 2), and breathe in the fullest possible breath; at the same time the shoulders should not be allowed to rise in the least; by a mental effort keep them well down as the breath is inhaled. Repeat this several times.

Caution. Do not throw the shoulders back at any time, but always down. The points of the shoulders should be as far distant from each other as possible.

GENERAL EXERCISE No. 5.

POSITION OF UPPER CHEST FOR BREATHING.

Take in the fullest possible breath, extending the chest to the utmost capacity, at the front and sides. If this position can be maintained fully while all the breath is being expended, the chest position will have been acquired. To breathe out completely and keep the chest up will seem at first impossible. It can be accomplished

by steady practice. Forcing the abdomen to cave in, or hollow itself at every expiration will help to rapidly master the chest position. The size, age or weight of the pupil must not be considered an obstacle; everybody can succeed by practice. One of the most beneficial habits that can be acquired is that of carrying a full chest position at all times, at home, on the street, or elsewhere. In doing this the muscles of the chest may become tired, or lame and sore; but these unpleasant features should cause no alarm; moderation in practice will lessen the aches somewhat.

GENERAL EXERCISE No. 6.

LIGHT ABDOMINAL BREATHING.

Take either the Standing Position (General Exercise No. 1) or the Lying Position (General Exercise No. 3). The latter is preferred. Breathing is carried on more easily in a lying position, and all pupils who practice at home should try this. The class pupils and persons not at home will, of course, stand. Place the palms of both hands on the abdomen, at the navel. Fill the lungs about half full, and breathe out gently a small portion of the air, at the same time pressing the hands against the abdomen to cause it to contract slightly as the air goes out. The chest should be immovable during exhalation; the shoulders likewise. Inhale gently and slightly, allowing the abdomen to fill out to its former position. Repeat this for five minutes, remembering that, 1st, the abdomen contracts during exhalation; 2nd, the abdomen expands during inhalation.

N. B.—While the foregoing exercise is not true abdominal breathing, it is a *necessary step* toward its accomplishment; the true abdominal breathing will be taken up in another exercise.

GENERAL EXERCISE No. 7.**SINGLE NOSTRIL BREATHING.**

Stand or sit. Place the thumb of the left hand gently over the opening of the left nostril ; inhale very slowly through the right nostril, without making the slightest noise; that is, you must not hear your own breathing. Continue the inhalation until all the air possible has been drawn into the lungs. Now raise the thumb of the right hand to the right nostril, closing it completely; remove the left thumb and allow the air to escape very gradually through the left nostril, breathing out all the air possible very slowly. Inhale through the left nostril as completely, and in the same manner, as through the right nostril, the latter being closed, of course. When the lungs have been completely filled, close the left nostril by the left thumb, open the right and allow the air to escape slowly. Inhale through the right nostril as before, exhale through left; inhale through the left; exhale through the right; inhale through the right, etc.; always inhaling through the nostril exhaled from, and changing the nostril at every exhalation.

This should be done for five minutes once a day; always slowly; and every breath should be complete.

Purpose.—The purpose of the foregoing exercise is to clear the nostrils of the foreign matter, and prepare the way for smooth and easy respiration through this important organ.

GENERAL EXERCISE No. 8.**NASAL EXPANSION.**

This exercise is like No. 7, with the addition of the following :

After inhaling through the right nostril as much air as possible, the thumb and finger of the left hand will be placed over both nostrils, completely shutting *in* the air. While so holding in the air, open the throat, so as to allow the air to come into the nasal chamber, even to the sides of the nostrils, close to the finger and thumb, thereby puffing out the nose. This must be done gently and carefully, without pressure. If any pressure is made, a closed sensation in the ears will be felt, or a slight pain in the forehead. This should be avoided.

Caution. Only perform this exercise, *two minutes* at a time, *twice* a day.

Purpose.—The purpose of the foregoing exercise is to expand and enlarge the nasal chamber, and thereby prepare the way for instantaneous inhalation and for resonance in speech.

GENERAL EXERCISE No. 9.

THE DROP MOVEMENT.

Stand as directed in General Exercise No. 1. Place the hands on the hips, the thumbs to the front. Breathe out all the air possible, and *hold* it out, allowing none to enter the lungs while performing the Drop Movement. Cave in the front wall of the abdomen as much as possible, directing the will to the abdominal muscles in so doing. It may be necessary to aid the will by a pressure of the hands. Having caused the abdomen to cave as much as possible, suddenly throw it forward to its fullest expansion. This is a difficult exercise, but it is very essential to those who cannot do it, and should be persisted in, in spite of its seeming impossibilities.

Caution. Do this three times only at each trial; two trials each day. If over done the effects may be unpleasant.

Purpose.—The purpose of the foregoing exercise is to strengthen and make flexible the muscles of the abdomen, especially those that control the exercise of the diaphragm in breathing, and likewise to strengthen and stimulate the nerve action of the stomach in digestion.

GENERAL EXERCISE No. 10.

RAPID NOSTRIL BREATHING.

Take Standing Position as in General Exercise No. 1, and breathe in through the right nostril as rapidly as possible without making it audible; exhale rapidly and inaudibly through the left nostril; inhale rapidly and inaudibly through the left nostril; exhale in the same manner through the right nostril; inhale likewise through the same; and so continue for three minutes, three times a day.

GENERAL EXERCISE No. 11.

FULL ABDOMINAL BREATHING.

If possible take the Lying Position, as in General Exercise No. 3; if inconvenient, or away from home, take the Standing Position.

Breathe out slowly and gently, but completely; at the same time pressing upon the front wall of the abdomen at the navel, so as to contract or cave it in at that place. The will must be directed to the muscles of the abdomen so as to help draw it in. The exhalation must *accompany* this action, not precede nor follow it.

Having breathed out all the air possible commence to inhale with moderate speed, at the same time gradually releasing the abdomen from its contracted state, and expanding it as the air passes into the lungs, until, when all the air possible has been drawn in, the abdomen will be fully expanded.

Now inhale as before, but this time try to draw in the walls of the abdomen by the muscles alone, assisted only by the will. If much difficulty is experienced in this exercise, a rope may be placed around the body, crossed once in front, the ends being held, one in each hand, and pulled until tight when exhaling, and slackened when inhaling.

This exercise should not be done rapidly or slowly, but with moderate speed, and in no case carelessly. The lungs should be *completely* filled and *completely* emptied, to make a good respiration.

Five minutes at a time twice a day will make this a good exercise for the general health as well as for the voice. It ought to be continued for three months in every case.

GENERAL EXERCISE No. 12.

HOLDING THE BREATH.

First Day of Trial.—Hold the breath for five seconds, noting the time on a watch with a second hand. On the next respiration, hold the breath for ten seconds.

Second Day.—Hold the breath five seconds. Respire, and hold the breath ten seconds. Respire, and hold the breath fifteen seconds.

Third Day.—Hold the breath ten seconds. Respire, and hold the breath fifteen seconds. Respire, and hold the breath twenty seconds.

Fourth Day.—Hold the breath fifteen seconds. Respire, and hold the breath twenty seconds. Respire, and hold the breath twenty-five seconds.

Fifth Day.—Hold the breath twenty seconds. Respire, and hold the breath twenty-five seconds. Respire, and hold the breath thirty seconds.

Sixth Day.—Hold the breath twenty-five seconds.

Respire, and hold the breath thirty seconds. Respire, and hold the breath thirty-five seconds.

Seventh Day.—Hold the breath thirty seconds. Respire, and hold the breath thirty-five seconds. Respire, and hold the breath forty seconds.

Eighth Day.—Hold the breath thirty-five seconds. Respire, and hold the breath forty seconds. Respire, and hold the breath forty-five seconds.

When directions are given in subsequent chapters for holding the breath as in this exercise the pupil may disregard the limit as to days, and perform as many of the foregoing in a single day as the time allotted in those chapters may permit.

Purpose.—The purpose of the foregoing exercise is to teach breath control, so that, in using the voice, the air will not be suddenly blown out in the beginning of speaking, reading, or singing, thereby compelling a new inhalation which may likewise be lost. Without mastering breath control, a person is apt to become easily tired or even exhausted in attempting to use the voice.

GENERAL EXERCISE No. 13.

CONTRACTION EXERCISE.

Take either a standing, sitting, or lying position; place the palms of both hands firmly on the upper part of the chest (not too near the neck); and breathe out rather slowly but completely, following the outgoing breath with a steady pressure of the hands, thus causing the upper chest to sink and contract as far as possible. Now inhale at a moderate speed, holding the two hands firmly on the chest in order to keep it from rising, and at the same time, by a mental effort, directing the breath into the lower lungs and expanding the abdomen as the

breath is drawn in. Retaining the pressure of the hands upon the upper chest, breathe out all the air again until no more can be exhaled. If the chest has been kept down by the pressure of the hands during the last inhalation, the upper chest will not sink during this exhalation.

The purpose of this exercise is to allow none of the air as it is breathed in, to go into the upper chest. It is not intended for a permanent habit of breathing but only to force open the lower lungs and bring them into action.

Purpose.—The purpose of the foregoing exercise is to commence action in the lower portions of the lungs and among the abdominal muscles in breathing.

GENERAL EXERCISE No. 14.

ATTENUATED INHALATION.

Take either a standing, sitting, or lying position as may be convenient. First, exhale all the air possible with moderate speed while holding the chest extended. Have a watch with a second hand, so as to observe the length of time occupied during the inhalation to follow. Starting with the lungs entirely empty, commence to inhale very slowly and steadily, and continue the inhalation for 45 seconds. This must be done with perfect smoothness and without jerks or halts. It should be persisted in until it can be done smoothly. If the lungs are filled before the expiration of the 45 seconds, it will be because the air is drawn in too rapidly. After each inhalation of this kind, the pupil should take five full respirations as a rest—the term “respiration” meaning inhalation and exhalation.

Purpose.—The purpose of the foregoing exercise is to

complete the benefits commenced in Exercise No. 12, and especially as applied to the use of the voice.

GENERAL EXERCISE No. 15.

ATTENUATED EXHALATION.

Take a standing, sitting, or lying position, as may be convenient. Breathe in all the air possible, and commence to exhale very slowly and smoothly, and continue this without any jerks or stops for 45 seconds. This exercise is one of the most important in breathing, as upon its successful acquisition depends the control of the breath in speaking and singing. If the air has been exhaled before the time expired, it will be because it has been breathed out too rapidly. After each exhalation, the pupil should take five respirations as a rest.

GENERAL EXERCISE No. 16.

DIZZY EXERCISE.

Take a standing position as in General Exercise No. 1. Breathe in all the air possible, taking the fullest possible chest position as described in General Exercise No. 5. This full chest position must be maintained throughout this entire exercise, both during inhalation and exhalation. Place the hands upon the abdomen near the navel and blow out all the air from the lungs in a quick, explosive whisper, using the word "far," and not stopping until the lungs have been completely emptied. Draw in a full breath as rapidly as possible, filling the lungs completely full, and then pronounce the word "far" in a whisper as before. Repeat this ten times, with all the force possible.

Caution I.—The word "far" must be whispered without the slightest vocality.

Caution II.—This must not be continued over three minutes at any one time, and not more than three times in one day. If the pupil becomes dizzy before completing the exercise, it should be discontinued for a short time to allow the dizziness to pass away. Dizziness may be averted by balancing the body on the toe of one foot, and swinging the other leg.

Purpose.—The purpose of the foregoing exercise is to test whether the abdomen is properly caved during exhalation, and whether the shoulders are kept down during inhalation.

GENERAL EXERCISE No. 17.

PIPE-STEM PACKING EXERCISE.

Take either the standing, sitting, or lying position. Inhale with moderate speed (through the nostrils, of course) as much air as can be drawn in; place a piece of a pipe-stem, about one inch in length, in the mouth, without allowing any of the air to escape; and then, by exercising the will, draw in as much more air as possible, *in addition* to that already in the lungs. This exercise is valuable as a means of gently expanding the lungs without any danger of injury to them. The pipe-stem possesses an aperture of standard size for this kind of breathing, the common clay pipes being as good as any. Three minutes at a time not more than five times a day may be devoted to this work. After each inhalation the pupil should take five complete respirations as a rest.

Purpose.—The purpose of the foregoing exercise is to gradually enlarge the lungs and bring into action portions of the lungs hitherto unused.

GENERAL EXERCISE No. 18.

PIPE-STEM EXHAUSTING EXERCISE.

↓ Take either a standing, sitting, or lying position as may be convenient. Breathe out all the air possible with moderate speed; place the pipe-stem in the mouth; and continue breathing out as much longer as possible. The pupil will find that it requires an exercise of the will to properly continue this exhalation; but the dead air of the lungs ought to be removed occasionally, and this will accomplish that, if the fact can be impressed upon the mind that exhalation can be continued long after the air *is supposed* to have been all breathed out. When the exhalation has been made as complete as possible, a quick, full, deep breath should be drawn in (through the nose, of course) completely filling the lungs in every nook and corner, and five full respirations taken thereafter as a means of rest. This may be continued three minutes at a time, not more than five times, a day

GENERAL EXERCISE No. 19.

PIPE-STEM INHALATION.

Exhaust all the air from the lungs as completely as possible through the nose. Put the pipe-stem in the mouth and commence to inhale very slowly and smoothly without any jerks or stops, and continue this for sixty seconds before the lungs are filled.

Caution. If the stream of air seems to chill or dry the throat it may be directed towards the sides of the mouth, or, better still, so that the air will strike under the point of the tongue; but the tongue should not touch the pipe-stem. After each inhalation, the pupil should take five complete respirations as a means of rest.

GENERAL EXERCISE No. 20.

PIPE-STEM EXHALATION.

Breathe in all the air possible through the nose; place the pipe-stem in the mouth and breathe out very slowly and smoothly without any jerks or stops for sixty seconds, being careful not to empty the lungs before that time. After each exhalation the pupil should take five full respirations as a means of rest.

GENERAL EXERCISE No. 21.

PIPE-STEM RESPIRATION.

Empty the lungs completely through the nose. Put the pipe-stem in the mouth, and inhale slowly and smoothly without any jerks or stops for 45 seconds, and immediately exhale with like smoothness and without stopping for 60 seconds. This will constitute one respiration which should occupy 105 seconds. A variation may be had by breathing in a full breath through the pipe-stem as rapidly as possible, and then breathing out the entire breath with like rapidity through it, continuing this rapid pipe-stem respiration until five full breaths have been drawn in and exhaled.

Caution. In these exercises the pipe-stem must be the only means of breathing, no relief being received by respiring, even for a short time, through the nose or mouth.

GENERAL EXERCISE No. 22.

PIPE-STEM FORCIBLE EXHALATION.

Take a standing or sitting position, and breathe in all the air possible through the nose. Place the pipe-stem in the mouth, and blow out all the air through it with as much force as possible.

Caution. The force must come from the lungs, abdomen, and diaphragm, and not the slightest pressure must be made upon the blood-vessels of the head.

GENERAL EXERCISE No. 23.

EXTREME NATURAL EXHALATION.

Take a standing position as described in General Exercise No. 1. Place the hands upon the corners of the ribs. (These corners are situated on the right and left side of the line of the ribs, each about half way between the centre of the abdomen and the sides. If the clothing is partially removed, these corners may be easily found by a complete abdominal contraction which should occur during exhalation.) With the thumbs on each of these corners, take the fullest possible breath, and exhale with moderate speed, pressing with the thumbs upon the corners of the ribs as the breath is going out, and continue to breathe out, by an exertion of the will, long after it seems that no more air can be exhaled. The pressure should be continued to the last. The mouth should be closed through this, (as through all breathing exercises unless otherwise directed), and when the exhalation ceases, a rapid, full, and deep breath should be drawn in through the nostrils, completely filling the lungs in every nook and corner, after which five full respirations should be taken as a means of rest. This exercise may be practiced for three minutes during every hour of the day with advantage.

GENERAL EXERCISE No. 24.

EXTREME NATURAL INHALATION.

Take standing position as described in General Exercise No. 1. Exhaust all the air through the nose, and

immediately commence to refill the lungs, placing the thumbs upon the corners of the ribs in the same manner as directed in the last exercise. As the air is being drawn in, the mind should endeavor to assist the muscles of the ribs to expand as much as possible at the corners; these being the greatest points of expansion in this method of inhalation. After each trial the pupil should take five full respirations as a means of rest.

Purpose.—The purpose of the two foregoing exercises is to increase the normal range of respiration so that the lungs will naturally breathe (during the hours both of waking and sleep) a larger breath, thereby drawing in larger quantities of oxygen and increasing the health and vitality of the nervous system as well as of the entire body.

GENERAL EXERCISE No. 25.

BREATHING ON FULL LUNGS.

Stand as described in General Exercise No. 1; breathe in all the air possible, filling the lungs as fully as in the last exercise; and, while maintaining the full chest position, breathe out only one-half of the air taken. Breathe in again enough air to completely fill the lungs, and again breathe out only one-half, continuing this mode of respiration for one minute without any rest, using moderate speed in the exercise. It is better to breathe out too little than too much in this exercise, and the pupil should be sure to fill the lungs full at every inhalation. Continue this three minutes at a time, not more than five times a day.

GENERAL EXERCISE No. 26.

BREATHING ON EMPTY LUNGS.

Take standing position as in General Exercise No. 1.

Empty the lungs as completely as possible by pressing the thumbs upon the corners of the ribs, and then fill the lungs a little less than one-half full. Exhale as completely as before, and again fill the lungs a little less than one-half full, continuing this mode of respiration for one minute. May be practiced three minutes at a time, not more than five times a day.

GENERAL EXERCISE No. 27.

INSTANTANEOUS MOUTH INHALATION.

Take standing position as described in General Exercise No. 1. Empty the lungs completely, while holding a full chest position, and suddenly expand the abdomen and cause the diaphragm to descend, drawing in a quick, full breath in less than one second, completely filling the lungs in every nook and corner. This instantaneous inhalation will not be accomplished until after many hundreds of trials. It may be done through the open mouth, the throat being so widely open as to allow a large volume of air to pass through it, without being heard even by the pupil. The exercise is greatly assisted by maintaining the fullest possible chest position.

Caution. Do not perform this exercise where the air is either chilly or dusty.

GENERAL EXERCISE No. 28.

INSTANTANEOUS NOSTRIL INHALATION.

Take standing position, as described in General Exercise No. 1. Exhaust all the air from the lungs, keeping the chest expanded while doing so. Close the mouth, and suddenly throw the walls of the abdomen out, causing the diaphragm to descend, and drawing a quick, full

breath through the nostrils, completely filling the lungs in every nook and corner.

Purpose.—The purpose of the foregoing exercise is to train the diaphragm to draw in a full breath in about one-fourth of a second, and very powerfully.

GENERAL EXERCISE No. 29.

COUNTING IN ONE BREATH.

Take sitting position as described in General Exercise No. 2. Fill the lungs as full as possible and count in one breath as follows: One, two, three, four, five, six, seven, eight, nine, ten. Take three good respirations as a rest; then, filling the lungs as full as possible, count in one breath as follows: One, two, three, four, five, six, seven, eight, nine, ten, one, two, three, four, five, six, seven, eight, nine, twenty. Take three good respirations as a rest; then fill the lungs to their utmost capacity and count as follows: One, two, three, four, five, six, seven, eight, nine, ten, one, two, three, four, five, six, seven, eight, nine, twenty, one, two, three, four, five, six, seven, eight, nine, twenty, one, two, three, four, five, six, seven, eight, nine, thirty, one, two, three, four, five, six, seven, eight, nine, thirty, one, two, three, four, five, six, seven, eight, nine, forty. Take three good respirations as a means of rest, and, filling the lungs to their utmost capacity, count as follows: One, two, three, four, five, six, seven, eight, nine, ten, one, two, three, four, five, six, seven, eight, nine, twenty, one, two, three, four, five, six, seven, eight, nine, thirty, one, two, three, four, five, six, seven, eight, nine, forty, one, two, three, four, five, six, seven, eight, nine, fifty. Take three good respirations as a means of rest, and then count to fifty, pursuing the same method as above. Continue this method of counting, adding ten to each trial, taking a rest after each count as described, and commencing each count with "one." In ten counts the number one hundred will have been reached. On the eleventh trial, after counting

up to one hundred, continue as follows: One, two, three, four, five, six, seven, eight, nine, one hundred and ten. In this manner adding ten, without repeating the full name of each number. The pupil must not pause to take breath, and must count rapidly enough to prevent an unconscious inhalation, however short. Rising inflections must be used, up to the last number. The counting must not be so rapid as to prevent perfect pronunciation of every vowel and consonant. The maintenance of a full chest position, even down to the last end of the breath, will assist the pupil in not blowing out too much air at the beginning of the count. This exercise may be practiced with perfect safety as long as the pupil desires to do so, and should be continued for several months until the pupil can count three hundred, clearly and distinctly and in a fair manner, in one breath.

Caution. At the end of each count, the pupil should instantly take in the fullest possible breath, before taking the three respirations. This will make the exercise a most valuable one, both for the breathing and the voice, and is most excellent for the health.

Purpose.—The purpose of the foregoing exercise is to train the diaphragm to a careful movement in the use of the voice, so as not to waste the air.

GENERAL EXERCISE No. 30.

WALKING WHILE INHALING.

Stand, taking the military position; empty the lungs completely; then, counting the steps in the mind (or having some person in attendance do the counting aloud), advance the left foot on the count of "one," the right foot on "two," and so walk—the left foot keeping time with the odd numbers, and the right foot with the even

numbers. Now commence breathing in as slowly as possible while counting the first ten numbers; stand, and take three good respirations as a means of rest; again exhaust the lungs completely, and breathe in, very slowly and smoothly, until twenty has been counted; rest as before, and then in like manner inhale until thirty has been counted. Continue this adding ten to each count. In a few weeks a pupil in ordinary health ought to be able to count one hundred while breathing in a single breath. The speed of walking makes no difference, provided the pupil takes steps of ordinary length.

Caution. After inhalation commences, it should not cease until the lungs have been filled. The breathing should be very slow and smooth.

GENERAL EXERCISE No. 31.

WALKING WHILE EXHALING.

Stand and walk as in the preceding exercise. Fill the lungs as full as possible and breathe out all the air while walking ten steps. Take three good respirations as a means of rest, and again filling the lungs full, breathe out all the air while taking twenty steps. Rest by respiring as before; then continue exhaling, adding ten at each count, until the pupil can walk one hundred steps while exhaling a single breath.

GENERAL EXERCISE No. 32.

WALKING WHILE INHALING AND HOLDING THE BREATH.

Take standing position as in the last two exercises; completely empty the lungs before starting; breathe in, during five steps, as little air as possible, holding this small amount while walking the next five steps; breathe in a little more for the next five steps; hold this amount

while walking the next five; breathe in more for the next five; hold for five more; and so continue until sixty steps have been taken. During half of this time, at intervals, the pupil will be drawing in air; and during the other half of the time, at intervals, he will be holding the breath. None of the air must be let out until this exercise has been completed, and the walking must continue during the whole of it.

Purpose.—The purpose of the three foregoing exercises is to train the entire body, in conjunction with the lungs, into healthy and vigorous activity, as originally designed by Nature in the life of man.

GENERAL EXERCISE No. 33.

A NERVO-MUSCULAR GYMNASTIC APPLIED TO BREATHING.

Stand as in General Exercise No. 1; take in all the breath possible until the lungs are completely filled; and, while holding the breath, raise both arms at full length on a level with the shoulders, and parallel with each other in front of the body, with the hands hanging lifeless from the wrists. While still holding the breath commence to clinch the fists very gradually, at the same time drawing them toward the shoulders. This gradual compression of the fists must continue until they are brought back as far as possible, close up to the arm-pits, at which point they must be clinched with all the force that can possibly be given to them, by a concentrated effort of mind and muscle. The fists must not be compressed by jerks or at any time suddenly, but very gradually. The more tightly they are compressed, the greater will be the benefit derived from this exercise. The breath must not be allowed to escape as long as the fists can continue to be clinched with increasing force. A single respiration, if full, will serve as a sufficient rest. This exercise should

be repeated fifteen times at each trial, and as many trials may be attempted each day as the pupil desires. The exercise is highly beneficial to the health of the pupil, giving great vigor to the circulation of the blood, and assisting in building up a strong nervous system. It is taken from the series of nerve calisthenics in the School of Personal Magnetism.

Purpose.—The purpose of the foregoing exercise is to impart an intensity of nerve force into breath and voice. It stimulates the nerves, and gives great vitality to the circulation of the blood as well as to the blood itself.

GENERAL EXERCISE No. 34.

CHEST-TAPPING EXERCISE.

Inhale all the air possible. Raise the elbows at the sides to a level with the shoulders, and, while holding the breath, tap lightly, with the ends of the fingers, the whole surface of the chest wherever you may be able to find any rib bones. Continue this not longer than two minutes at a time, resting to take sufficient breath after each respiration. Do not do this more than three times a day.

Caution. In tapping the chest neither the lower arm nor the elbows should move; the only movement being at the wrists.

GENERAL EXERCISE No. 35.

KNEADING THE CHEST.

Place the hands upon various parts of the chest, both in front and at the sides, at various times; fill the lungs full; and then exhale completely, following the outgoing air with a strong pressure of the hands upon whatever part of the chest they may be placed. At every inhalation, by a mental effort, endeavor to expand the chest

at the points where the contraction took place under the pressure of the hands during exhalation. At each exhalation the hands should be placed upon different portions of the chest. This may be done for three minutes at a time not more than five times a day. The pressure of the hands during exhalation should be very firm and the bones should be compressed as much as possible and should be made to spring out on each inhalation as far as possible. A variation of this exercise may be had by exhaling completely with the same pressure of the hands, and, instead of inhaling, knead the lungs with the hands while entirely empty of air.

Purpose.—The purpose of the foregoing exercise is to strengthen the muscles and bones constituting the frame work of the chest, making them very flexible and easily controlled.

GENERAL EXERCISE No. 36.

RAISING THE CHEST BY ABDOMINAL PRESSURE.

Stand as in General Exercise No. 1; inhale all the air possible, filling the lungs to their utmost capacity; and, while holding the breath, compress the abdomen either by a pressure of the hands, or, better still, by controlling the abdominal muscles, causing the chest to expand from the contraction of the abdomen. Do this five times, still holding the breath, and not allowing even the slightest quantity to escape.

GENERAL EXERCISE No. 37.

CHEST-STRETCHING EXERCISE.

Take the standing position as in Exercise No. 1. While counting eight mentally, (or having some person in attendance do the counting aloud,) slowly fill the lungs

to their utmost capacity; then, when the lungs have been completely filled in this way, hold the breath while another eight is being slowly counted, and during that time gradually stretch the frame of the chest, using its own muscles for that purpose. Persons who have no control over the chest muscles, will, in time, learn the use of them by persisting in the effort to perform this exercise.

Caution I. Do not perform this exercise more than three times at one trial, and no more than two trials should be attempted in one day.

Caution II. In stretching the chest-frame, the exercise should not take place at any time suddenly, but very gradually during the count of eight. A sudden expansion may cause a feeling of dizziness, or *may* burst some blood-vessels. When performed as directed, and in moderation, it may be placed in the foremost rank of breathing exercises.

Purpose.—The purpose of the two foregoing exercises is to increase the size of the chest.

GENERAL EXERCISE No. 38.

SIDE BREATHING.

Place the palms of the hands at the sides of the upper chest, close up to the arms at the arm-pits, with the fingers pointing toward each other. The hands should be completely at the sides and high enough up to touch the arms. Breathe in all the air possible, and exhale completely, following the outgoing air with a pressure of the wrists. Now inhale, endeavoring by a mental effort to expand these particular spots more than any other parts of the chest. After having done this five times, lower the hands to the middle of the sides of the chest and repeat the same exercise.

GENERAL EXERCISE No. 39.

SPOT BREATHING.

Put on an easy-fitting dark jacket buttoned around the body. Find the two corners of the ribs, and make a chalk mark upon the jacket directly over these two spots. Then place the thumbs at the lower sides of the ribs as far down as any movement in breathing is observable, and make a chalk mark over each of these spots. Then make a chalk mark half way between these last spots and the corners of the ribs on each side. Now place the thumbs as high up on the archway of the ribs as there is perceptible movement in breathing, and chalk two spots—one on each side of the center of the arch. There will be four spots on each side of the archway of the ribs, or eight altogether. What is meant by the "corners of the ribs" will be found by reference to General Exercise No. 23. It is well to sew stitches of white thread into the jacket at the spots marked, so that they may become permanent. With these spots properly marked, take a standing position; place the two thumbs, one on top of the other, on the lowest right hand spot; and breathe out all the air in the lungs, pressing hard in this particular spot. Then inhale, and, directing the will to this spot, try to expand it as much as possible. This should be done twenty-five times in a single spot, before trying another. Continue the same method of breathing on the next spot above, and so go on until the whole eight spots have been brought into action. These should be marked on the edges of the ribs, quite near to the softer portions of the abdominal wall. While performing this exercise, which will require two hundred respirations, it is better to give the whole time to this branch of the work, taking up no other breathing exercise the same day.

GENERAL EXERCISE No. 40.

NATURAL PACKING—INSTEP ACTION.

Stand; fill the lungs to their utmost capacity through the nostrils; and then, without letting out any air, raise on the balls of the feet five times as high as possible, each time adding more air to that already in the lungs, and not allowing any to escape. If this exercise is properly done, a greater quantity of air will be breathed into the lungs than can be taken without such assistance. After each trial five good respirations should be taken as a means of rest.

GENERAL EXERCISE No. 41.

NATURAL PACKING—LEVEL ARM MOTION.

Stand; fill the lungs to their utmost capacity; then raise the arms to a horizontal position level with the shoulders in front of the body. Open the arms by spreading sidewise to a lateral position still keeping them on a level with the shoulders. At the same time inhale more breath in addition to that already taken. This spreading of the arms should occur five times, and breath be taken simultaneously with it each time, allowing none to escape. Five good respirations may afterwards be taken as a rest, and the exercise repeated a half-a-dozen times.

GENERAL EXERCISE No. 42.

NATURAL PACKING—RISING ARM MOTION.

Stand; fill the lungs to their utmost capacity; raise the arms to a level position parallel with each other in front of the body; and spread them apart, raising them at the same time to a lateral position slightly above and away

from the head, at the same time breathing in an additional amount of air. Do this five times in a single breath, each time inhaling more air and allowing none to escape, after which take five good respirations as a means of rest. Repeat this six times.

GENERAL EXERCISE No. 43.

NATURAL PACKING—FALLING ARM MOTION.

Take a standing position; fill the lungs to their utmost capacity; raise the arms in front of the body parallel with each other and on a level with the shoulders; and then spread them apart, keeping them at full length, and causing them to descend at the same time until the hands have reached a lateral position, each hand being about two feet distant from the knees at the side. During this backward and downward motion additional air should be inhaled quickly, and the motion repeated five times, additional amounts of air being taken in each time, after which five good respirations may be indulged in as a means of rest. Repeat the exercise six times.

GENERAL EXERCISE No. 44.

NATURAL PACKING—SWINGING ARM MOTION.

Take a standing position; fill the lungs to their utmost capacity; raise the arms in front of the body until they are level with the shoulders and parallel with each other. Swing both arms together quickly toward the right as far as possible, inhaling more air and letting none escape. Suddenly swing both arms to the left, the body turning with them, inhaling more air and letting none escape. Repeat by swinging to the right and then to the left as long as there may be added to the air already in the lungs.

GENERAL EXERCISE No. 45.

RESPIRATION WITH ARM MOVEMENTS.

Take standing position; fill the lungs to their utmost capacity; raise the arms at the sides to a level with the shoulders, the arms being at full length. Breathe out slowly, swinging the arms at full length toward each other, keeping them on a level with the shoulders, and timing the progress of the exhalation so that the breath will have completely escaped from the lungs when the hands shall have met in front of the body. Now commence inhaling and moving the arms outward, spreading them apart as the breath is being drawn in, until they shall have been carried back as far as possible, still keeping them on a level with the shoulders. This inhalation should be timed so as to have the lungs packed to their utmost capacity by the time the arms are fully open. Continue this method of exhalation and inhalation until twelve full respirations have been taken. A pleasant variety may be had by gradually increasing the speed of this movement, and at the same time increasing the speed of the respirations, being sure that each respiration is complete.

Purpose.—The purpose of the eight foregoing exercises is to impart new and better growth to the whole upper half of the torso, as well as to strengthen the lungs and voice.

GENERAL EXERCISE No. 46.

WAIST MOVEMENTS.

Stand in the position described in General Exercise No. 1; place the hands upon the hips, with the thumbs directed toward the front and the knees touching each

other at the inner sides; and bend the torso, or upper half of the body, toward the right. Be sure that the entire bend of the body occurs at the waist. Now bring the body to an upright position and bend as before but toward the left. Again resume the upright position, being sure in the bending that the torso be carried downward as far as possible and that the lower half of the body be not moved. Continue this on the count of sixteen, eight to the right and eight to the left. Resuming the standing position as before, bend the body as far forward as possible, being sure that the hips do not participate in any way in the bending. Bring the body to an upright position and then bend at the waist as far backward as possible. Perform this exercise to the count of sixteen—eight to the front and eight to the back. This exercise may be completed by what is called the circular motion or "inverted cone." This is commenced by bending the body to the right, and, instead of bringing it to a perpendicular position, bending to the front, then to the left, then to the back, and so on until the body has passed around in this circular motion five times, at no time coming to a perpendicular. It is better to close the eyes while doing this, to keep from being dizzy. The success of this exercise will depend entirely upon closely following the direction to bend only at the waist.

GENERAL EXERCISE No. 47.

WAIST MOVEMENTS—HOLDING THE BREATH.

Take standing position as named in the last exercise, and perform Exercise No. 46, in the same way as therein described, except that before commencing each exercise the pupil should take the fullest possible breath, and hold it during the entire exercise without allowing any por-

tion of it to escape. After so doing, five good respirations should be taken as a means of rest.

GENERAL EXERCISE No. 48.

SHOULDER MOVEMENTS.

Take the fullest possible inhalation, and, while holding the breath, raise both shoulders as high as possible, reaching the level of the ears, and suddenly lower them. Then raise and lower them twenty times, increasing the motion in rapidity until the exercise terminates with considerable speed.

GENERAL EXERCISE No. 49.

SHOULDER TWISTING MOVEMENT.

Take standing position as before; fill the lungs to their utmost capacity; place the elbows at the sides and move the right shoulder forward as far as possible while moving the left shoulder backward, without twisting the body; then reverse, moving the left forward and the right backward as far as possible, and, without allowing any air to escape, continue the exercise until performed twenty times, increasing the rapidity of the motion.

Purpose.—The purpose of the four foregoing exercises is to give greater muscular power to the organs of respiration.

GENERAL EXERCISE No. 50.

LATERAL NERVO-MUSCULAR GYMNASTIC.

Take the standing position as described in General Exercise No. 1; fill the lungs to their utmost capacity; raise the arms in front of the body at full length on a level with the shoulders and parallel with each other; and,

while holding the breath, commence to move the arms slowly backward, keeping them on a level with the shoulders, and gradually clinching the fists, increasing the pressure of the hands so that when they have been brought back as far as possible, the fists will have been clinched with the utmost tension of the muscles. Now exhale; take three respirations; and repeat the same exercise until it has been performed five times.

Purpose.—The purpose of the foregoing exercise is similar to that of General Exercise No. 33, except that it works upon a different set of muscles or upon the same set of muscles in a different way.

GENERAL EXERCISE No. 51.

LOWER CHEST BREATHING.

Place the hands upon the lower wall of the chest near the abdomen in the following manner: Place the index fingers upon the corners of the chest (as previously described) with the palms of the hands down, and the thumbs near the lower edge of the chest along the line of the abdomen; if properly placed, the whole length of the index finger will lie along the bony edge of the chest near the abdomen. Take the fullest possible breath, filling the lungs to their utmost capacity, and expanding at this portion of the chest where the thumbs and index fingers are placed. Exhale with moderate speed, following the outgoing breath by a firm pressure upon the edges of the chest where the thumbs and fingers are thus placed, until the breath has been completely exhausted. Refill the lungs with moderate speed, causing the lower chest at the point just mentioned to expand more than any part of the body during this inhalation. This exercise must be accompanied by the most thorough inhalation and exhalation.

GENERAL EXERCISE No. 52.

COMBINATION BREATHING.

Empty the lungs, and commence to inhale in the following manner: Cause the abdomen at the front and at the sides, and the lower edges of the ribs all at the same time to expand during an inhalation carried on moderately—that is, neither fast nor slow—until the lungs are completely filled. This exercise differs from any of the others previously performed in the fact that neither the abdomen nor the lower chest becomes the greatest point of contraction and expansion, but both together, as well as the sides of the torso.

CHAPTER FIVE.

THOROUGH DRILL.

THE METHOD OF SELF-TRAINING IN ARTISTIC DEEP BREATHING.

(This chapter contains a series of one hundred lessons covering period of one hundred week days, for pupils of ordinary health. It is not intended for invalids, nor for persons seeking special benefit in diseases.)

This series contains every exercise in the various kinds of good breathing. If the directions are carried out by the pupil to the letter, the benefits to be derived from this special series will be very great. The pupil must, however, bear in mind that haste is to be avoided. The course prescribed here ought not to be completed in less than one hundred days, and the person who thinks time will be gained by shortening the course will find that the contrary will prove true. The order of exercises is the result of careful tests in watching the growth of the lung power, and the mixing of the exercises is designed to effect the best development in them in the shortest time, consistent with permanent benefit. Persons not in strong health should avoid this chapter until the "Leisure Drill" of chapter six has been completed.

First Day—First Lesson. The pupil should devote a portion of this lesson to committing the Rules to memory.

The Explanations should be carefully read over until understood. General Exercises 1 and 2 (and No. 3 if convenient) should be studied and practiced.

Second Day—Second Lesson. General Exercises 4 and 5 should be practiced until mastered.

Third Day—Third Lesson. Practice Exercises 4 and 5 by way of review, and devote the rest of this lesson to Exercise No. 6.

Fourth Day—Fourth Lesson. General Exercise No. 6 should be practiced the first half of this lesson, and the balance of the time devoted to Exercises Nos. 4 and 5.

Fifth Day—Fifth Lesson. Divide the time into equal thirds between Exercises 4, 5 and 6.

Sixth Day—Sixth Lesson. Spend one minute in General Exercise No. 7, connecting with it No. 6. The two exercises may be performed at the same time. Then spend five minutes in Exercises 4 and 5; then one minute in Exercise No. 7 as before; and so on, alternating the two lines of work until thirty minutes have been spent in this lesson.

Seventh Day—Seventh Lesson. Spend two minutes in General Exercise No. 8; then eight minutes in Exercises 4, 5, 6 and 7; and so continue, alternating, until thirty minutes are spent on the lesson.

Eighth Day—Eight Lesson. Spend five minutes in reviewing Exercises 4 and 5; five minutes in Exercise No. 6; then five minutes in Exercise No. 5; and ten minutes in Exercise No. 8.

Ninth Day—Ninth Lesson. Perform the Drop Movement in Exercise No. 9 twice only; and spend three minutes in Exercise No. 5; five minutes in Exercise No. 6; five minutes in Exercise No. 7; three minutes in Exercise No. 8; and the rest of the half hour in Exercise No. 6.

Tenth Day—Tenth Lesson. Perform the Drop Movement twice, as described in Exercise No. 9; spend two

minutes in the Nasal Exercise described in Exercise No. 8; five minutes in Light Abdominal Breathing as described in Exercise No. 6; three minutes in Exercises Nos. 4 and 5; then perform the Drop Movement in Exercise No. 9 two times; the Nasal Expansion, as described in Exercise No. 8, for three minutes; spend five minutes in Exercise No. 10; five minutes in Exercise No. 6; then three minutes in Exercise No. 10; two minutes in Exercise No. 7; and five minutes in Exercise No. 6.

Eleventh Day—Eleventh Lesson. Perform the Drop Movement twice, as described in Exercise No. 9; the Light Abdominal Breathing five minutes as described in Exercise No. 6; the Single Nostril Breathing for two minutes; then spend three minutes in Nasal Expansion as in Exercise No. 8; perform the Drop Movement twice as in Exercise No. 9; then three minutes in Exercise No. 11; two minutes in holding the breath as described in Exercise No. 12; five minutes in Exercise No. 6; four minutes in Exercise No. 11; and two minutes in Exercise No. 12.

Twelfth Day—Twelfth Lesson. Perform the Drop Movement twice as in Exercise No. 9; spend five minutes in Light Abdominal Breathing as in Exercise No. 6; two minutes in Single Nostril Breathing as in Exercise No. 7; three minutes in Nasal Expansion as in Exercise No. 8; then the Drop Movement twice as in Exercise No. 9; three minutes in Rapid Nostril Breathing as in Exercise No. 10; three minutes in Full Abdominal Breathing as in Exercise No. 11; three minutes in holding the breath as in Exercise No. 12; two minutes in Contraction Exercises as in Exercise No. 13; and five minutes in Exercise No. 6.

Thirteenth Day—Thirteenth Lesson. Perform the Drop Movement twice as in Exercise No. 9; spend five minutes in holding the breath as in Exercise No. 12; two

minutes in Contraction Exercises as described in No. 13; three minutes in Nasal Expansion as in Exercise No. 8; perform the Drop Movement twice; review Exercises Nos. 4 and 5 for five minutes; spend five minutes in the Full Abdominal Breathing of Exercise No. 11; three minutes in Exercise No. 10—Rapid Nostril Breathing; and five minutes in Exercise No. 6.

Fourteenth Day—Fourteenth Lesson. Spend five minutes in Exercise No. 12—holding the breath; five minutes in Exercise No. 11—Full Abdominal Breathing; perform the Drop Movement twice as in Exercise No. 9; three minutes in Nasal Expansion as in Exercise No. 8; three minutes in Single Nostril Breathing as in Exercise No. 7; one minute in the Contraction Exercises of Exercise No. 13; three minutes in Rapid Nostril Breathing as in Exercise No. 10; and ten minutes in Light Abdominal Breathing as in Exercise No. 6.

Fifteenth Day—Fifteenth Lesson. Spend one minute in Contraction Exercises as described in Exercise No. 13; four minutes in holding the breath as in Exercise No. 12; five minutes in Light Abdominal Breathing as in Exercise No. 6; five minutes in Full Abdominal Breathing as in Exercise No. 11; three minutes in Nasal Expansion as in Exercise No. 8; two minutes in Single Nostril Breathing as in Exercise No. 7; perform the Drop Movement twice; and spend five minutes in Exercises Nos. 4 and 5.

Sixteenth Day—Sixteenth Lesson. Recite from memory, aloud, the Rules given in the early part of this book, and read over carefully the Observations preceding the Rules; spend five minutes in holding the breath as in Exercise No. 12; five minutes in Light Abdominal Breathing as in Exercise No. 6; and five minutes in Full Abdominal Breathing as in Exercise No. 11.

Seventeenth Day—Seventeenth Lesson. Spend five minutes in Attenuated Inhalation as described in Exer-

cise No. 14; five minutes in holding the breath as in Exercise No. 12; two minutes in Contraction Exercises as in Exercise No. 13; two minutes in Nasal Expansion as in Exercise No. 8; two minutes in Single Nostril Breathing as in Exercise No. 7; five minutes in Light Abdominal Breathing as in Exercise No. 6; five minutes in Full Abdominal Breathing as in Exercise No. 11; and four minutes in reviewing Exercises Nos. 4 and 5.

Eighteenth Day—Eighteenth Lesson. Spend five minutes in Attenuated Inhalation as in Exercise No. 14; five minutes in holding the breath as in Exercise No. 12; five minutes in Light Abdominal Breathing as in Exercise No. 6; five minutes in Light Abdominal Breathing as in Exercise No. 11; perform the Drop Movement twice; spend one minute in Rapid Nostril Breathing as in Exercise No. 10; one minute in Single Nostril Breathing as in Exercise No. 7; and one minute in Nasal Expansion as in Exercise No. 8.

Nineteenth Day—Nineteenth Lesson. Read over carefully the explanations given in the early part of this book; spend five minutes in Attenuated Exhalation as in Exercise No. 15; five minutes in Light Abdominal Breathing as in Exercise No. 6; four minutes in reviewing Exercises Nos. 4 and 5; three minutes in Single Nostril Breathing as in Exercise No. 7; three minutes in Rapid Nostril Breathing as in Exercise No. 10; and five minutes in Full Abdominal Breathing as in Exercise No. 11.

Twentieth Day—Twentieth Lesson. Spend five minutes in Attenuated Exhalation as in Exercise No. 15; five minutes in Light Abdominal Breathing as in Exercise No. 6; five minutes in Full Abdominal Breathing as in Exercise No. 11; five minutes in holding the breath as in Exercise No. 12; two minutes in Single Nostril Breathing as in Exercise No. 7; two minutes in Nasal Expansion as in Exercise No. 8; perform the Drop Movement twice;

and spend five minutes in reviewing Exercises Nos. 4 and 5.

Twenty-first Day—Twenty-first Lesson. Spend five minutes in Attenuated Exhalation as in Exercise No. 15; three minutes in Attenuated Inhalation as in Exercise No. 14; two minutes in Contraction Exercises as in Exercise No. 13; three minutes in holding the breath as in Exercise No. 12; two minutes in Single Nostril Breathing as in Exercise No. 7; perform the Drop Movement twice; and spend three minutes in Rapid Nostril Breathing as in Exercise No. 10.

Twenty-second Day—Twenty-second Lesson. Spend five minutes in holding the breath as in Exercise No. 12; four minutes in Light Abdominal Breathing as in Exercise No. 6; three minutes in reviewing Exercises Nos. 4 and 5; perform the Dizzy Exercise of Exercise No. 16 twice; spend five minutes in Attenuated Exhalation as in Exercise No. 15; three minutes in Attenuated Inhalation as in Exercise No. 14; four minutes in Light Abdominal Breathing as in Exercise No. 6; and four minutes in Full Abdominal Breathing as in Exercise No. 11.

Twenty-third Day—Twenty-third Lesson. Perform the Dizzy Exercise as described in Exercise No. 16 twice; spend five minutes in holding the breath as in Exercise No. 12; two minutes in Contraction Exercises of Exercise No. 13; perform the Drop Movement twice as in Exercise No. 9; spend two minutes in Nasal Expansion of Exercise No. 8; two minutes in Single Nostril Breathing as in Exercise No. 7; five minutes in Light Abdominal Breathing as in Exercise No. 6; and five minutes in Full Abdominal Breathing of Exercise No. 11.

Twenty-fourth Day—Twenty-fourth Lesson. Repeat aloud, from memory, the Rules preceding the General Exercises; spend three minutes in the Pipe-stem Packing Exercise of Exercise No. 17; four minutes in reviewing

Exercises Nos. 4 and 5; five minutes in Light Abdominal Breathing; and five minutes in Full Abdominal Breathing.

Twenty-fifth Day—Twenty-fifth Lesson. Carefully read over the Explanations given in the early part of this book; spend five minutes in the Pipe-stem Packing Exercise of Exercise No. 17; three minutes in the Pipe-stem Exhausting Exercise of Exercise No. 18; five minutes in the Attenuated Exhalation of Exercise No. 15; five minutes in the Light Abdominal Breathing of Exercise No. 6; and five minutes in the Full Abdominal Breathing of Exercise No. 11.

Twenty-sixth Day—Twenty-sixth Lesson. Spend two minutes in Pipe-stem Inhalation as in Exercise No. 19; five minutes in the Attenuated Exhalation of Exercise No. 15; three minutes in reviewing Exercises No. 4 and 5; two minutes in the Single Nostril Breathing of Exercise No. 7; two minutes in the Nasal Expansion of Exercise No. 8; perform the Drop Movement twice as in Exercise No. 9; and spend two minutes in Rapid Nostril Breathing as in Exercise No. 10.

Twenty-seventh Day—Twenty-seventh Lesson. Read over the Observations given in the early part of this book; spend five minutes in holding the breath as in Exercise No. 12; three minutes in Pipe-stem Exhalation as in Exercise No. 20; two minutes in Exercise No. 5; two minutes in Exercise No. 8; perform the Drop Movement twice; spend two minutes in the Pipe-stem Packing Exercise of Exercise No. 17; and three minutes in the Pipe-stem Exhausting Exercise of Exercise No. 18.

Twenty-eighth Day—Twenty-eighth Lesson. Spend five minutes in the Pipe-stem Respiration of Exercise No. 21, taking sufficient rest between each respiration for relief except where otherwise described in that Exercise; spend five minutes in Attenuated Exhalation as in Exercise No.

15; five minutes in Light Abdominal Breathing as in Exercise No. 6; and five minutes in Full Abdominal Breathing as in Exercise No. 11.

Twenty-ninth Day—Twenty-ninth Lesson. Spend one minute in Forcible Pipe-stem Exhalation as in Exercise No. 22; two minutes in Pipe-stem respiration as in Exercise No. 21; two minutes in the Contraction Exercise of Exercise No. 13; three minutes in reviewing Exercise No. 5; five minutes in the Light Abdominal Breathing of Exercise No. 6; and five minutes in the Full Abdominal Breathing of Exercise No. 11.

Thirtieth Day—Thirtieth Lesson. Spend one minute in Extreme Natural Exhalation as in Exercise No. 23; one minute in Pipe-stem Forcible Exhalation as described in Exercise No. 22; four minutes in Pipe-stem Respiration as in Exercise No. 21; four minutes in Pipe-stem Exhausting Exercise of Exercise No. 18; spend one minute in the Dizzy Exercise of Exercise No. 16; four minutes in holding the breath as in Exercise No. 12; five minutes in the Light Abdominal Breathing of Exercise No. 6; and five minutes in the Full Abdominal Breathing of Exercise No. 11.

Thirty-first Day—Thirty-first Lesson. Perform the Natural Packing Instep Action described in Exercise No. 40; perform the Drop Movement twice as described in Exercise No. 9; spend two minutes in Nasal Expansion as described in Exercise No. 8; five minutes in Light Abdominal Breathing as described in Exercise No. 6; three minutes in Exercises 4 and 5; then perform the Drop Movement in Exercise No. 9, two times; the Nasal Expansion as described in Exercise No. 8 for three minutes; spend five minutes in Exercise No. 10; two minutes in Exercise No. 7; and five minutes in Exercise No. 6.

Thirty-second Day—Thirty-second Lesson. Perform the Natural Packing Level Arm Motion as described in

Exercise No. 41; perform the Drop Movement twice as described in Exercise No. 9; the Light Abdominal Breathing for five minutes as described in Exercise No. 6; the Single Nostril Breathing for two minutes; then spend three minutes in Nasal Expansion as in Exercise No. 8; perform the Drop Movement twice as in Exercise No. 9; then three minutes in Exercise No. 11; two minutes in holding the breath as described in Exercise No. 12; five minutes in Exercise No. 6; four minutes in Exercise No. 11; and two minutes in Exercise No. 12.

Thirty-third Day—Thirty-third Lesson. Perform the Natural Packing Rising Arm Motion as described in Exercise No. 42; perform the Drop Movement twice as in Exercise No. 9; spend five minutes in Light Abdominal Breathing as in Exercise No. 6; two minutes in Single Nostril Breathing as in Exercise No. 7; three minutes in Nasal Expansion as in Exercise No. 8; then the Drop Movement twice as in Exercise No. 9; three minutes in Rapid Nostril Breathing as in Exercise No. 10; three minutes in Full Abdominal Breathing as in Exercise No. 11; three minutes in holding the breath as in Exercise No. 12; two minutes in Contraction Exercises of Exercise No. 6.

Thirty-fourth Day—Thirty-fourth Lesson. Perform the Natural Packing Falling Arm Motion as described in Exercise No. 43; perform the Drop Movement twice as in Exercise No. 9; spend five minutes in holding the breath as in Exercise No. 12; two minutes in Contraction Exercises as described in Exercise No. 13; three minutes in Nasal Expansion as in Exercise No. 8; perform the Drop Movement twice; review Exercises 4 and 5 for five minutes; spend five minutes in the Full Abdominal Breathing of Exercise No. 11; three minutes in Exercise No. 10—Rapid Nostril Breathing, and five minutes in Exercise No. 6.

Thirty-fifth Day—Thirty-fifth Lesson. Perform the Natural Packing Swinging Arm Motion as described in Exercise No. 44; spend five minutes in Exercise No. 12—holding the breath; five minutes in Exercise No. 11—Full Abdominal Breathing; perform the Drop Movement twice as in Exercise No. 9; spend three minutes in Nasal Expansion as in Exercise No. 8; three minutes in Single Nostril Breathing as in Exercise No. 7; one minute in the Contraction Exercises of Exercise No. 13; three minutes in Rapid Nostril Breathing as in Exercise No. 10; and ten minutes in Light Abdominal Breathing as in Exercise No. 6.

Thirty-sixth Day—Thirty-sixth Lesson. Perform the Respiration with Arm Movements as described in Exercise No. 45; spend one minute in the Contraction Exercises as described in Exercise No. 13; four minutes in holding the breath as described in Exercise No. 12; five minutes in Light Abdominal Breathing as in Exercise No. 6; five minutes in Full Abdominal Breathing as in Exercise No. 11; three minutes in Nasal Expansion as in Exercise No. 8; two minutes in Single Nostril Breathing as in Exercise No. 7; perform the Drop Movement twice; and spend five minutes in Exercises Nos. 4 and 5.

Thirty-seventh Day—Thirty-seventh Lesson. Perform the Waist Movements described in Exercise No. 46; recite from memory, aloud, the Rules given in the early part of this book, and read over carefully the Observations given in Chapter I; spend five minutes in holding the breath as described in Exercise No. 12; five minutes in Light Abdominal Breathing as in Exercise No. 6; and five minutes in Full Abdominal Breathing as in Exercise No. 11.

Thirty-eighth Day—Thirty-eighth Lesson. Perform the Waist Movements while holding the breath as described in Exercise No. 47; spend five minutes in Attenu-

ated Inhalation as described in Exercise No. 14; five minutes in holding the breath as described in Exercise No. 12; two minutes in the Contraction Exercises described in Exercise No. 13; two minutes in Nasal Expansion as in Exercise No. 8; two minutes in Single Nostril Breathing as in Exercise No. 7; five minutes in Light Abdominal Breathing as in Exercise No. 6; five minutes in Full Abdominal Breathing as in Exercise No. 11; and four minutes in reviewing Exercises Nos. 4 and 5.

Thirty-ninth Day—Thirty-ninth Lesson. Perform the Shoulder Movements of Exercise No. 48; spend five minutes in Attenuated Inhalation as described in Exercise No. 14; five minutes in holding the breath as in Exercise No. 12; five minutes in Light Abdominal Breathing as in Exercise No. 6; five minutes in Full Abdominal Breathing as in Exercise No. 11; perform the Drop Movement twice; spend one minute in Rapid Nostril Breathing as in Exercise No. 10; one minute in Single Nostril Breathing as in Exercise No. 7; and one minute in Nasal Expansion as in Exercise No. 8.

Fortieth Day—Fortieth Lesson. Perform the Twisting Shoulder Movement of Exercise No. 49; read over carefully the Explanations given in the second chapter of this book; spend five minutes in Attenuated Exhalation as in Exercise No. 15; five minutes in Light Abdominal Breathing as in Exercise No. 6; four minutes in reviewing Exercises Nos. 4 and 5; three minutes in Single Nostril Breathing as in Exercise No. 7; three minutes in Rapid Nostril Breathing as in Exercise No. 10; and five minutes in Full Abdominal Breathing as in Exercise No. 11.

Forty-first Day—Forty-first Lesson. Perform the Lateral Nervo-Muscular Gymnastic of Exercise No. 50; spend five minutes in Attenuated Exhalation as in Exercise No. 15; five minutes in Light Abdominal Breathing

as in Exercise No. 6; five minutes in Full Abdominal Breathing as in Exercise No. 11; five minutes in holding the breath as in Exercise No. 12; two minutes in Single Nostril Breathing as in Exercise No. 7; two minutes in Nasal Expansion as in Exercise No. 8; perform the Drop Movement twice; and spend five minutes in reviewing Exercises Nos. 4 and 5.

Forty-second Day—Forty-second Lesson. Spend five minutes in Extreme Natural Inhalation as described in Exercise No. 24; five minutes in Pipe-stem Packing Exercise as described in Exercise No. 17; two minutes in Rapid Nostril Breathing as in Exercise No. 10; and five minutes in the Full Abdominal Breathing of Exercise No. 11.

Forty-third Day—Forty-third Lesson. Spend three minutes in Breathing on Full Lungs as described in Exercise No. 25; two minutes in the Dizzy Exercise of Exercise No. 16; one minute in holding the breath as in Exercise No. 12; one minute in the Drop Movement of Exercise No. 9; another three minutes in Breathing on Full Lungs as in Exercise No. 25; two minutes in Nasal Expansion as in Exercise No. 8; and five minutes in Single Nostril Breathing as in Exercise No. 7.

Forty-fourth Day—Forty-fourth Lesson. Spend five minutes (with occasional rests) in Breathing on Empty Lungs as described in Exercise No. 26; five minutes (with occasional rests) in Breathing on Full Lungs as described in Exercise No. 25, three minutes in Extreme Natural Exhalation as described in Exercise No. 23; three minutes in Extreme Natural Inhalation as described in Exercise No. 24; one minute in Forcible Exhalation as described in Exercise No. 22; five minutes in Light Abdominal Breathing as described in Exercise No. 6; and five minutes in Full Abdominal Breathing as described in Exercise No. 11.

Forty-fifth Day—Forty-fifth Lesson. Spend three minutes (with occasional rests) in Instantaneous Mouth Inhalation as described in Exercise No. 27; three minutes in Breathing on Full Lungs as described in Exercise No. 25; three minutes in Breathing on Empty Lungs as described in Exercise No. 26; five minutes (with occasional rests) in Instantaneous Mouth Inhalation as described in Exercise No. 27; five minutes in Light Abdominal Breathing as in Exercise No. 6; and five minutes in the Full Abdominal Breathing of Exercise No. 11.

Forty-sixth Day—Forty-sixth Lesson. Read over carefully the Explanations given in Chapter II, and recite from memory the Rules given in Chapter III; spend three minutes in Instantaneous Mouth Inhalation as described in Exercise No. 27; one minute in the Pipe-stem Packing Exercise of Exercise No. 17; one minute in the Pipe-stem Exhausting Exercise as described in Exercise No. 18; three minutes in Pipe-stem Inhalation as in Exercise No. 19; three minutes in the Pipe-stem Exhalation of Exercise No. 20; and three minutes in the Instantaneous Mouth Inhalation of Exercise No. 27.

Forty-seventh Day—Forty-seventh Lesson. Spend three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; five minutes in the Light Abdominal Breathing of Exercise No. 6; three minutes in the Instantaneous Mouth Inhalation of Exercise No. 27; five minutes in the Full Abdominal Breathing of Exercise No. 11; three minutes in the Instantaneous Mouth Inhalation of Exercise No. 27; and two minutes in holding the breath as in Exercise No. 12.

Forty-eighth Day—Forty-eighth Lesson. Read carefully the Observations of Chapter I; spend three minutes in Instantaneous Mouth Inhalation as described in Exercise No. 27; two minutes in Breathing on Full Lungs as in Exercise No. 25; two minutes in Breathing on Empty

Lungs as in Exercise No. 26; two minutes in Forcible Exhalation as in Exercise No. 22; three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; and five minutes in the Attenuated Exhalation of Exercise No. 15.

Forty-ninth Day—Forty-ninth Lesson. Spend three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; two minutes in Rapid Nostril Breathing as in Exercise No. 10; three minutes in Light Abdominal Breathing as in Exercise No. 6; three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; five minutes in Full Abdominal Breathing as in Exercise No. 11; two minutes in holding the breath as in Exercise No. 12; and three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27.

Fiftieth Day—Fiftieth Lesson. Spend three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; two minutes in Single Nostril Breathing as in Exercise No. 7; two minutes in Nasal Expansion as in Exercise No. 8; perform the Drop Movement three times as in Exercise No. 9; spend three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; two minutes in holding the breath as in Exercise No. 12; five minutes in Full Abdominal Breathing as in Exercise No. 11; and three minutes in Instantaneous Mouth Inhalation as described in Exercise No. 27.

Fifty-first Day—Fifty-first Lesson. Perform the Instantaneous Mouth Inhalation of Exercise No. 27 for five minutes; spend two minutes in holding the breath as in Exercise No. 12; three minutes in Extreme Natural Exhalation as in Exercise No. 23; three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27.

Fifty-second Day—Fifty-second Lesson. Perform the Natural Packing Instep Action as described in Exercise No. 40; spend five minutes in Extreme Natural In-

halation as described in Exercise No. 24; five minutes in Pipe-stem Packing as described in Exercise No. 17; two minutes in Rapid Nostril Breathing as in Exercise No. 10; five minutes in Full Abdominal Breathing as in Exercise No. 11.

Fifty-third Day—Fifty-third Lesson. Perform the Natural Packing Level Arm Motion as in Exercise No. 41; spend three minutes in Breathing on Full Lungs as described in Exercise No. 25; two minutes in the Dizzy Exercise of Exercise No. 16; one minute in holding the breath as in Exercise No. 12; one minute in the Drop Movement of Exercise No. 9; another three minutes in Breathing on Full Lungs as in Exercise No. 25; two minutes in Nasal Expansion as in Exercise No. 8; and five minutes in Single Nostril Breathing as described in Exercise No. 7.

Fifty-fourth Day—Fifty-fourth Lesson. Perform the Natural Packing Rising Arm Motion as in Exercise No. 42; spend five minutes (with occasional rests) in Breathing on Empty Lungs as described in Exercise No. 26; five minutes (with occasional rests) in Breathing on Full Lungs as in Exercise No. 25; three minutes in Extreme Natural Exhalation as described in Exercise No. 23; three minutes in Extreme Natural Inhalation as in Exercise No. 24; one minute in Forcible Exhalation as described in Exercise No. 22; five minutes in Light Abdominal Breathing as described in Exercise No. 6; and five minutes in Full Abdominal Breathing as described in Exercise No. 11.

Fifty-fifth Day—Fifty-fifth Lesson. Perform the Natural Packing Falling Arm Motion as described in Exercise No. 43; spend three minutes (with occasional rests) in Instantaneous Mouth Inhalation as described in Exercise No. 27; three minutes in Breathing on Full Lungs as described in Exercise No. 25; three minutes in Breath-

ing on Empty Lungs as described in Exercise No. 26; five minutes (with occasional rests) in Instantaneous Mouth Inhalation as described in Exercise No. 27; five minutes in Light Abdominal Breathing as in Exercise No. 6; and five minutes in Full Abdominal Breathing as in Exercise No. 11.

Fifty-sixth Day—Fifty-sixth Lesson. Perform the Natural Packing Swinging Arm Motion as described in Exercise No. 44; read over carefully the Explanations given in Chapter II, and recite from memory the Rules given in Chapter III; spend three minutes in Instantaneous Mouth Inhalation as described in Exercise No. 27; one minute in the Pipe-stem Packing Exercise of Exercise No. 17; one minute in the Pipe-stem Exhausting Exercise of Exercise No. 18; three minutes in Pipe-stem Inhalation as in Exercise No. 19; three minutes in the Pipe-stem Exhalation of Exercise No. 20; and three minutes in the Instantaneous Mouth Inhalation of Exercise No. 27.

Fifty-seventh Day—Fifty-seventh Lesson. Perform the Respiration with Arm Movements as described in Exercise No. 45; spend three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; five minutes in the Light Abdominal Breathing of Exercise No. 6; three minutes in the Instantaneous Mouth Inhalation of Exercise No. 27; five minutes in the Full Abdominal Breathing of Exercise No. 11; three minutes in the Instantaneous Mouth Inhalation of Exercise No. 27; and two minutes in holding the breath as in Exercise No. 12.

Fifty-eighth Day—Fifty-eighth Lesson. Perform the Waist Movements of Exercise No. 46; read carefully the Observations of Chapter I; spend three minutes in Instantaneous Mouth Inhalation as described in Exercise No. 27; two minutes in Breathing on Full Lungs as in Exercise No. 25; two minutes in Breathing on Empty Lungs as in Exercise No. 26; two minutes in Forcible

Exhalation as in Exercise No. 22; three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; and five minutes in the Attenuated Exhalation of Exercise No. 15.

Fifty-ninth Day.—Fifty-ninth Lesson. Perform the Waist Movements while holding the breath as described in Exercise No. 47; spend three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; two minutes in Rapid Nostril Breathing as in Exercise No. 10; three minutes in Light Abdominal Breathing as in Exercise No. 6; three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; five minutes in Full Abdominal Breathing as in Exercise No. 11; two minutes in holding the breath as in Exercise No. 12; and three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27.

Sixtieth Day.—Sixtieth Lesson. Perform the Shoulder Movements of Exercise No. 48; spend three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; two minutes in Single Nostril Breathing as in Exercise No. 7; two minutes in Nasal Expansion as in Exercise No. 8; perform the Drop Movement three times as in Exercise No. 9; spend three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27; two minutes in holding the breath as in Exercise No. 12; five minutes in Full Abdominal Breathing as in Exercise No. 11; and three minutes in Instantaneous Mouth Inhalation as described in Exercise No. 27.

Sixty-first Day.—Sixty-first Lesson. Perform the Twisting Shoulder Movement of Exercise No. 49; perform the Instantaneous Mouth Inhalation of Exercise No. 27 for five minutes; spend two minutes in holding the breath as in Exercise No. 12; three minutes in Extreme Natural Exhalation as in Exercise No. 23; three minutes in Instantaneous Mouth Inhalation as in Exercise No. 27.

Sixty-second Day—Sixty-second Lesson. Perform the Lateral Nervo-Muscular Gymnastic described in Exercise No. 50; perform the Natural Packing Instep Action as described in Exercise No. 40; spend five minutes in Extreme Natural Inhalation as described in Exercise No. 24; five minutes in Pipe-stem Packing as described in Exercise No. 17; two minutes in Rapid Nostril Breathing as in Exercise No. 10; five minutes in Full Abdominal Breathing as in Exercise No. 11.

Sixty-third Day—Sixty-third Lesson. Spend three minutes in Instantaneous Mouth Inhalation as described in Exercise No. 27; three minutes in Instantaneous Nostril Inhalation as described in Exercise No. 28; five minutes in Light Abdominal Breathing as described in Exercise No. 6; two minutes in Single Nostril Breathing as described in Exercise No. 7; three minutes in Instantaneous Nostril Inhalation as described in Exercise No. 28; three minutes in Attenuated Exhalation as described in Exercise No. 15; two minutes in holding the breath as in Exercise No. 12; and three minutes in Full Abdominal Breathing as in Exercise No. 11.

Sixty-fourth Day—Sixty-fourth Lesson. Spend ten minutes in counting on one breath as described in Exercise No. 29; three minutes in Instantaneous Nostril Inhalation as described in Exercise No. 28; two minutes in holding the breath as described in Exercise No. 12; one minute in Nasal Expansion as described in Exercise No. 8; five minutes in Exercises Nos. 4 and 5; and three minutes in Instantaneous Nostril Inhalation as in Exercise No. 28.

Sixty-fifth Day—Sixty-fifth Lesson. Spend three minutes in Instantaneous Nostril Inhalation as in Exercise No. 28; ten minutes in counting on one breath as in Exercise No. 29; five minutes in walking while inhaling as

described in Exercise No. 30; and perform the Drop Movement twice as described in Exercise No. 9.

Sixth-sixth Day—Sixty-sixth Lesson. Spend ten minutes in counting on one breath as described in Exercise No. 29; three minutes in Instantaneous Nostril Inhalation as in Exercise No. 28; five minutes in walking while exhaling as described in Exercise No. 31.

Sixty-seventh Day—Sixty-seventh Lesson. Spend five minutes in walking while inhaling and holding the breath as described in Exercise No. 32; ten minutes in counting on one breath as described in Exercise No. 29; five minutes in Extreme Natural Exhalation as in Exercise No. 23; and three minutes in Pipe-stem Packing as in Exercise No. 17.

Sixty-eighth Day—Sixty-eighth Lesson. Perform five times the Nervo-Muscular Gymnastic described in Exercise No. 33; spend ten minutes in counting on one breath as in Exercise No. 29; three minutes in walking while inhaling and holding the breath as in Exercise No. 32; and three minutes in Attenuated Exhalation as in Exercise No. 15.

Sixty-ninth Day—Sixty-ninth Lesson. Perform five times the Nervo-Muscular Gymnastic described in Exercise No. 33; spend ten minutes in counting on one breath as in Exercise No. 29; three minutes in walking while inhaling and holding the breath as in Exercise No. 32; three minutes in Extreme Natural Exhalation as in Exercise No. 23; two minutes in the Pipe-stem Packing Exercise of Exercise No. 17; and two minutes in Single Nostril Breathing as in Exercise No. 7.

Seventieth Day—Seventieth Lesson. Perform five times the Nervo-Muscular Gymnastic as in Exercise No. 33; spend one minute in the Chest-Tapping of Exercise No. 34; spend five minutes in walking while inhaling as

in Exercise No. 30; and ten minutes in counting on one breath as in Exercise No. 29.

Seventy-first Day—Seventy-first Lesson. Perform five times the Nervo-Muscular Gymnastic of Exercise No. 33; spend one minute in the Chest-Tapping of Exercise No. 34; spend two minutes in Kneading the Chest as in Exercise No. 35; two minutes in Breathing on Full Lungs as in Exercise No. 25; two minutes in Breathing on Empty Lungs as in Exercise No. 26; and two minutes in Instantaneous Nostril Inhalation as in Exercise No. 28.

Seventy-second Day—Seventy-second Lesson. Perform five times the Nervo-Muscular Gymnastic described in Exercise No. 33; spend two minutes in Raising the Chest by Abdominal Pressure as in Exercise No. 36; one minute in Kneading the Chest as in Exercise No. 35; one minute in Chest-Tapping as in Exercise No. 34; one minute in holding the breath as in Exercise No. 12; and five minutes in Light Abdominal Breathing as in Exercise No. 6.

Seventy-third Day—Seventy-third Lesson. Perform the Chest-Stretching Exercise three times as described in Exercise No. 37; spend one minute in Raising the Chest by Abdominal Pressure as in Exercise No. 36; two minutes in Kneading the Chest as in Exercise No. 35; one minute in Chest-Tapping as in Exercise No. 34; ten minutes in counting in one breath as in Exercise No. 29; and three minutes in Instantaneous Nostril Inhalation as in Exercise No. 28.

Seventy-fourth Day—Seventy-fourth Lesson. Perform the Chest-Stretching Exercise three times as described in Exercise No. 37; spend one minute in Raising the Chest by Abdominal Pressure as in Exercise No. 36; two minutes in Kneading the Chest as in Exercise No. 35; two minutes in the Chest-Tapping of Exercise No. 34; perform the Nervo-Muscular Gymnastic as in Exercise No.

33; spend five minutes in walking while inhaling as in Exercise No. 30; and three minutes in Extreme Natural Exhalation as in Exercise No. 23.

Seventy-fifth Day—Seventy-fifth Lesson. Spend three minutes in Side Breathing as in Exercise No. 38; ten minutes in counting on one breath as in Exercise No. 29; perform the Nervo-Muscular Gymnastic as in Exercise No. 33; two minutes in Kneading the Chest as in Exercise No. 35; one minute in Raising the Chest by Abdominal Pressure as in Exercise No. 36; and perform the Chest-Stretching Exercise three times as in Exercise No. 37.

Seventh-sixth Day—Seventy-sixth Lesson. Spend five minutes in Side Breathing as in Exercise No. 38; perform the Nervo-Muscular Gymnastic five times as described in Exercise No. 33; spend five minutes in Walking while Inhaling as in Exercise No. 30; three minutes in Walking while Exhaling as in Exercise No. 31; and three minutes in walking while inhaling and holding the breath as in Exercise No. 32.

Seventy-seventh Day—Seventy-seventh Lesson. Spend five minutes in Spot Breathing as in Exercise No. 39; perform the Nervo-Muscular Gymnastic five times as described in Exercise No. 33; spend one minute in Raising the Chest by Abdominal Pressure as in Exercise No. 36; one minute in Chest-Tapping as in Exercise No. 34; and ten minutes in counting on one breath as in Exercise No. 29.

Seventy-eighth Day—Seventy-eighth Lesson. Spend five minutes in Spot Breathing as in Exercise No. 39; three minutes in Side Breathing as in Exercise No. 38; perform the Chest-Stretching Exercise three times as in Exercise No. 37; perform the Nervo-Muscular Gymnastic five times as in Exercise No. 33; and spend five minutes in walking while inhaling as in Exercise No. 30.

Seventy-ninth Day—Seventy-ninth Lesson. Perform the Waist Movements as in Exercise No. 46 for three minutes; the Nervo-Muscular Gymnastic five times as in Exercise No. 33; the Chest-Stretching Exercise three times as in Exercise No. 37; spend three minutes in Side Breathing as in Exercise No. 38; and five minutes in Spot Breathing as in Exercise No. 39.

Eightieth Day—Eightieth Lesson. Spend two minutes in Respiration with Arm Movements as in Exercise No. 45; spend three minutes in performing Natural Packing Level Arm Movement as in Exercise No. 41; perform the Nervo-Muscular Gymnastic five times as in Exercise No. 43; spend three minutes in Kneading the Chest as in Exercise No. 35; perform the Chest-Stretching Exercise as in Exercise No. 37; and spend five minutes in walking while Inhaling as in Exercise No. 30.

Eighty-first Day—Eighty-first Lesson. Spend five minutes in Lower Chest Breathing as in Exercise No. 51; three minutes in Respiration with Arm Movements as in Exercise No. 45; two minutes in the Waist Movements of Exercise No. 46; three minutes in Side Breathing as in Exercise No. 38; perform the Chest-Stretching Exercise three times as in Exercise No. 37; and spend one minute in the Chest-Tapping of Exercise No. 34.

Eighty-second Day—Eighty-second Lesson. Spend five minutes in the Lower Chest Breathing of Exercise No. 51; three minutes in the Waist Movements while Holding the Breath as in Exercise No. 47; two minutes in Kneading the Chest as in Exercise No. 35; and perform the Nervo-Muscular Gymnastic five times as in Exercise No. 33.

Eighty-third Day—Eighty-third Lesson. Spend five minutes in Lower Chest Breathing as in Exercise No. 51; perform the Lateral Nervo-Muscular Gymnastic five times as in Exercise No. 50; spend one minute in the

Shoulder Movements of Exercise No. 48; three minutes in the Waist Movements of Exercise No. 46; five minutes in Spot Breathing as in Exercise No. 39; and ten minutes in counting on one breath as in Exercise No. 29.

Eighty-fourth Day—Eighty-fourth Lesson. Spend five minutes in Lower Chest Breathing as in Exercise No. 51; two minutes in Side Breathing as in Exercise No. 38; one minute in Kneading the Chest as in Exercise No. 35; one minute in Chest-Tapping as in Exercise No. 34; and five minutes in walking while exhaling as in Exercise No. 31.

Eighty-fifth Day—Eighty-fifth Lesson. Spend five minutes in Lower Chest Breathing as in Exercise No. 51; one minute in Shoulder Movements as in Exercise No. 48; one minute in the Twisting Shoulder Movement of Exercise No. 49; perform the Lateral Nervo-Muscular Gymnastic five times as in Exercise No. 50; spend ten minutes in counting in one breath as in Exercise No. 29; and five minutes in walking while inhaling as in Exercise No. 30.

Eighty-sixth Day—Eighty-sixth Lesson. Perform the Nervo-Muscular Gymnastic five times as in Exercise No. 33; spend one minute in Chest-Tapping as in Exercise No. 34; perform the Lateral Nervo-Muscular Gymnastic five times as in Exercise No. 50; spend two minutes in Waist Movements of Exercise No. 46; one minute in Respiration with Arm Movements as in Exercise No. 45; and one minute in Spot Breathing as in Exercise No. 39.

Eighty-seventh Day—Eighty-seventh Lesson. Spend five minutes in Lower Chest Breathing as in Exercise No. 51; three minutes in Combination Breathing as in Exercise No. 52; two minutes in the Waist Movements of Exercise No. 46; five minutes in Spot Breathing as in Exercise No. 39; and perform the Chest-Stretching Exercise five times as in Exercise No. 37.

Eighty-eighth Day—Eighty-eighth Lesson. Spend one minute in Raising the Chest by Abdominal Pressure as described in Exercise No. 36; three minutes in Side Breathing as in Exercise No. 38; perform the Chest Stretching of Exercise No. 37 three times; spend three minutes in Attenuated Exhalation as in Exercise No. 15; three minutes in Breathing on Full Lungs as in Exercise No. 25; and three minutes in Breathing on Empty Lungs as in Exercise No. 26.

Eighty-ninth Day—Eighty-ninth Lesson. Spend five minutes in the Lower Chest Breathing of Exercise No. 51; three minutes in the Combination Breathing of Exercise No. 52; two minutes in Waist Movements as in Exercise No. 46; two minutes in Side Breathing as in Exercise No. 38; perform the Chest-Stretching Exercise three times as in Exercise No. 37; spend three minutes in Kneading the Chest as in Exercise No. 35; and five minutes in Spot Breathing as in Exercise No. 39.

Ninetieth Day—Ninetieth Lesson. Spend five minutes in Combination Breathing as in Exercise No. 52; five minutes in Lower Chest Breathing as in Exercise No. 51; two minutes in Waist Movements—Holding the Breath as in Exercise No. 47; five minutes in Spot Breathing as in Exercise No. 39; and ten minutes in Counting on One Breath as in Exercise No. 29.

Ninety-first Day—Ninety-first Lesson. Spend five minutes in the Combination Breathing of Exercise No. 52; five minutes in the Lower Chest Breathing of Exercise No. 51; one minute in Chest-Tapping as in Exercise No. 34; perform the Nervo-Muscular Gymnastic ten times as in Exercise No. 33; and spend three minutes in the Instantaneous Nostril Inhalation of Exercise No. 28.

Ninety-second Day—Ninety-second Lesson. Spend five minutes in Combination Breathing as in Exercise No. 52; five minutes in Lower Chest Breathing as in Exercise No.

51; two minutes in Breathing on Full Lungs as in Exercise No. 25; two minutes in Breathing on Empty Lungs as in Exercise No. 26; one minute in the Pipe-stem Packing of Exercise No. 17; and three minutes in the Attenuated Exhalation of Exercise No. 15.

Ninety-third Day—Ninety-third Lesson. Spend five minutes in Lower Chest Breathing as in Exercise No. 51; five minutes in Combination Breathing as in Exercise No. 52; five minutes in Spot Breathing as in Exercise No. 39; perform the Chest-Stretching Exercise five times as in Exercise No. 37; two minutes in Chest-Tapping as in Exercise No. 34; one minute in Kneading the Chest as in Exercise No. 35; and one minute in Raising the Chest by Abdominal Pressure as in Exercise No. 36.

Ninety-fourth Day—Ninety-fourth Lesson. Spend five minutes in Spot Breathing as in Exercise No. 39; two minutes in Side Breathing as in Exercise No. 38; perform the Chest-Stretching Exercise five times as in Exercise No. 37; the Nervo-Muscular Gymnastic five times as in Exercise No. 33; and spend five minutes in walking while inhaling and holding the breath as in Exercise No. 32.

Ninety-fifth Day—Ninety-fifth Lesson. Spend five minutes in Side Breathing as in Exercise No. 38; five minutes in Spot Breathing as in Exercise No. 39; five minutes in Lower Chest Breathing of Exercise No. 51; five minutes in the Combination Breathing of Exercise No. 52; and five minutes in walking while exhaling as in Exercise No. 31.

Ninety-sixth Day—Ninety-sixth Lesson. Spend five minutes in the Light Abdominal Breathing of Exercise No. 6; five minutes in the Full Abdominal Breathing of Exercise No. 11; one minute in Forcible Exhalation as in Exercise No. 22; perform the Chest-Stretching Exercise seven times as in Exercise No. 37; spend three minutes in Side Breathing as in Exercise No. 38; five minutes in

Spot Breathing as in Exercise No. 39; five minutes in Lower Chest Breathing as in Exercise No. 51; and five minutes in Combination Breathing as in Exercise No. 52.

Ninety-seventh Day—Ninety-seventh Lesson. Spend two minutes in the Waist Movements of Exercise No. 46; perform the Lateral Nervo-Muscular Gymnastic five times as in Exercise No. 50; spend two minutes in the Shoulder Movements of Exercise No. 48; two minutes in the Twisting Shoulder Movement of Exercise No. 49; two minutes in Lower Chest Breathing as in Exercise No. 51; and seven minutes in the Combination Breathing of Exercise No. 52.

Ninety-eighth Day—Ninety-eighth Lesson. Spend two minutes in the Pipe-stem Packing of Exercise No. 17; two minutes in Extreme Natural Exhalation as in Exercise No. 23; two minutes in Breathing on Full Lungs as in Exercise No. 25; three minutes in Pipe-stem Exhausting as in Exercise No. 18; spend three minutes in Breathing on Empty Lungs as in Exercise No. 26; three minutes in Attenuated Exhalation as in Exercise No. 15; two minutes in Instantaneous Nostril Inhalation as in Exercise No. 28; five minutes in Lower Chest Breathing as in Exercise No. 51; and five minutes in Combination Breathing as in Exercise No. 52.

Ninety-ninth Day—Ninety-ninth Lesson. Spend five minutes in Spot Breathing as in Exercise No. 39; one minute in Kneading the Chest as in Exercise No. 35; one minute in holding the breath as in Exercise No. 12; three minutes in Full Abdominal Breathing as in Exercise No. 11; perform the Drop Movement ten times as in Exercise No. 9; spend five minutes in performing Exercises Nos. 4 and 5; two minutes in Attenuated Inhalation as in Exercise No. 14; three minutes in Attenuated Ex-

halation as in Exercise No. 15; and one minute in Forcible Exhalation as in Exercise No. 22.

One-hundredth Day—One-hundredth Lesson. This being the last day, and the last lesson in this series of Thorough Drill, the pupil had better attempt to repeat from memory as many of the Rules as possible as given in Chapter III, and to review from memory as many of the Exercises as he can recall, giving as little time to each one as possible, consistent with the thorough performance of it. After having done this the pupil should lay out such exercises for future drill as he (or she) may prefer. If the pupil has no choice the author would suggest that the following are the best for the future growth of the chest and the power of the voice: (1) The Chest-Stretching Exercise of No. 37; (2) The Nervo-Muscular Gymnastic as in No. 33; (3) Walking while inhaling as in No. 30; (4) The Waist Movements of No. 46; and (5) The Combination Breathing of No. 52. These exercises may be practiced by any person without taking the attention from his employment or whatever may be occupying his mind.

CHAPTER SIX.

LEISURE DRILL, REQUIRING ONLY FIVE MINUTES DAILY, AND OCCUPYING 210 DAYS.

(This chapter is designed for persons who are so pressed for time that they can only spare about five minutes a day for this kind of practice. The drill is not so thorough as that laid down in Chapter V, and will extend over a longer period of time. The lessons will be divided into series, each series containing one week's work, and requiring six days to the week, and five minutes to each day.)

First Week.—1-6 days inclusive. 1st Day.—Read the Observations of Chapter I; 2nd Day.—Read the Explanations of Chapter II; 3d Day.—Read the Rules of Chapter III; 4th Day.—Commit to memory the Rules of Chapter III; 5th Day.—Learn the standing position for breathing as described in General Exercise No. 1 of Chapter IV; 6th Day.—Learn the sitting position for breathing as in General Exercise No. 2.

Second Week.—7-12 days inclusive. 7th Day.—Repeat from memory the Rules of Chapter III; 8th Day.—Practice the standing and sitting positions as in Exercises Nos. 1 and 2; 9th Day.—Practice the lying position as in Exercise No. 3, in addition to reviewing the Observations of Chapter I; 10th Day.—Practice the position of the shoulders for breathing as in Exercise No. 4, reviewing

the standing, sitting and lying positions as heretofore given; 11th Day.—Practice the position of the upper chest for breathing as in No. 5, at the same time reviewing the standing, sitting and lying positions of the preceding days; 12th Day —Spend the five minutes of this day in the Light Abdominal Breathing as described in No. 6.

Third Week.—13–18 days inclusive. 13th Day.—Practice the Light Abdominal Breathing of Exercise No. 6; 14th Day.—The Single Nostril Breathing of No. 7; 15th Day.—The Light Abdominal Breathing of No. 6; 16th Day.—The Single Nostril Breathing of No. 7; 17th Day.—The Light Abdominal Breathing of No. 6; 18th Day.—The Single Nostril Breathing of No. 7.

Fourth Week.—19–24 days inclusive. 19th Day.—Practice the Nasal Expansion of No. 8; 20th Day.—The Light Abdominal Breathing of No. 6; 21st Day.—The Single Nostril Breathing of No. 7; 22nd Day.—The Nasal Expansion of No. 8; 23rd Day.—The Light Abdominal Breathing of No. 6; 24th Day.—The Single Nostril Breathing of No. 7.

Fifth Week.—25–30 days inclusive. 25th Day.—Perform the Drop Movement three times as described in No. 9, and the rest of the five minutes devote to Nasal Expansion as described in No. 8; 26th Day.—Practice the Light Abdominal Breathing of No. 6; 27th Day.—The Single Nostril Breathing of No. 7; 28th Day.—The Rapid Nostril Breathing of No. 10, and perform the Drop Movement three times as in No. 9; 29th Day.—The Light Abdominal Breathing of No. 6; 30th Day.—The Single Nostril Breathing of No. 7.

Sixth Week.—31–36 days inclusive. 31st Day.—Read over the Explanations of Chapter II; 32nd Day.—Recite from memory the Rules of Chapter III; 33d Day.—Practice the Light Abdominal Breathing of No. 6; 34th Day.—The Single Nostril Breathing of No. 7; 35th Day.—The

Full Abdominal Breathing of No. 11; 36th Day.—The Full Abdominal Breathing of No. 11.

Seventh Week.—37-42 days inclusive. 37th Day.—Practice the Light Abdominal Breathing of No. 6; 38th Day.—Holding the Breath as in No. 12; 39th Day.—The Full Abdominal Breathing of No. 11; 40th Day.—The Single Nostril Breathing of No. 7; 41st Day.—The Light Abdominal Breathing of No. 6; 42nd Day.—The Full Abdominal Breathing of No. 11.

Eighth Week.—43-48 days inclusive. 43d Day.—Recite from memory the Rules of Chapter III; 44th Day.—Perform the Contraction Exercises of No. 13; 45th Day.—Practice Holding the Breath as in No. 12; 46th Day.—The Light Abdominal Breathing of No. 6; 47th Day.—The Full Abdominal Breathing of No. 11; 48th Day.—The Rapid Nostril Breathing of No. 10.

Ninth Week.—49-54 days inclusive. 49th Day.—Practice the Attenuated Inhalation of No. 14; 50th Day.—The Attenuated Exhalation of No. 15; 51st Day.—The Contraction Exercises of No. 13; 52nd Day.—The Light Abdominal Breathing of No. 6; 53d Day.—The Nasal Expansion of No. 8; 54th Day.—Holding the Breath as in No. 12, and the Drop Movement three times as in No. 9.

Tenth Week.—55-60 days inclusive. 55th Day.—Practice the Attenuated Inhalation of No. 14; 56th Day.—The Attenuated Exhalation of No. 15; 57th Day.—The Full Abdominal Breathing of No. 11, and the Drop Movement three times as in No. 9; 58th Day.—The Rapid Nostril Breathing of No. 10; 59th Day.—The Nasal Expansion of No. 8; 60th Day.—Holding the Breath as in No. 12, and the Drop Movement three times as in No. 9.

Eleventh Week.—61-66 days inclusive. 61st Day.—Practice the Dizzy Exercise as in No. 16; 62nd Day.—The Attenuated Inhalation of No. 14; 63d Day.—The Attenuated Exhalation of No. 15; 64th Day. The Full

Abdominal Breathing of No. 11; 65th Day. The Rapid Nostril Breathing of No. 10, and the Drop Movement three times as in No. 9; 66th Day.—The Light Abdominal Breathing of No. 6, and the Drop Movement three times as in No. 9.

Twelfth Week.—67-72 days inclusive. 67th Day.—Practice the Dizzy Exercise as in No. 16; 68th Day.—The Light Abdominal Breathing of No. 6; 69th Day.—Holding the Breath as in No. 12; 70th Day.—The Full Abdominal Breathing of No. 11, and the Drop Movement of No. 9 three times; 71st Day.—The Rapid Nostril Breathing of No. 10, and the Drop Movement three times; 72nd Day.—The Contraction Exercises of No. 13, and the Drop Movement three times as in No. 9.

Thirteenth Week.—73-78 days inclusive. 73d Day.—Read carefully the Observations of Chapter I; 74th Day.—Perform the Pipe-stem Packing Exercise as described in No. 17, and the Drop Movement three times as in No. 9; 75th Day.—Nasal Expansion as in No. 8; 76th Day.—Single Nostril Breathing as in No. 7; 77th Day.—The Light Abdominal Breathing of No. 6; 78th Day.—Pipe-stem Packing as in No. 17.

Fourteenth Week.—79-84 days inclusive. 79th Day.—Read over carefully the Explanations of Chapter II; 80th Day.—Practice the Pipe-stem Exhausting Exercise of No. 18; 81st Day.—The Pipe-stem Inhalation as in No. 19; 82nd Day.—The Light Abdominal Breathing of No. 6, and the Drop Movement three times as in No. 9; 83rd Day.—The Full Abdominal Breathing of No. 11, and the Drop Movement three times as in No. 9; 84th Day.—Holding the Breath as in No. 12, and the Contraction Exercises of No. 13.

Fifteenth Week.—85-90 days inclusive. 85th Day.—Practice Pipe-stem Exhalation as in No. 20; 86th Day.—Pipe-stem Respiration as in No. 21, and the Drop Move-

ment three times as in No. 9; 87th Day.—Light Abdominal Breathing as in No. 6; 88th Day.—Single Nostril Breathing as in No. 7; 89th Day.—The Nasal Expansion of No. 8; 90th Day.—The Full Abdominal Breathing of No. 11, and the Drop Movement three times as in No. 9.

Sixteenth Week.—91–96 days inclusive. 91st Day.—Practice Pipe-stem Forcible Exhalation as described in No. 22; 92nd Day.—Pipe-stem Respiration as in No. 21; 93d Day.—The Pipe-stem Packing Exercise of No. 17; 94th Day.—Pipe-stem Exhausting Exercise as in No. 18; 95th Day.—Pipe-stem Inhalation as in No. 19; 96th Day.—Pipe-stem Exhalation as in No. 20.

Seventeenth Week.—97–102 days inclusive. 97th Day.—Practice Extreme Natural Exhalation as in No. 23; 98th Day.—Extreme Natural Inhalation as in No. 24, and the Drop Movement three times as in No. 9; 99th Day.—Light Abdominal Breathing as in No. 6; 100th Day.—Extreme Natural Exhalation as in No. 23; 101st Day.—Extreme Natural Inhalation as in No. 24; 102nd Day.—Full Abdominal Breathing as in No. 11, and the Drop Movement three times as in No. 9.

Eighteenth Week.—103–108 days inclusive. 103d Day.—Practice Breathing on Full Lungs as in No. 25; 104th Day.—Breathing on Empty Lungs as in No. 26; 105th Day.—Single Nostril Breathing as in No. 7; 106th Day.—Rapid Nostril Breathing as in No. 10; 107th Day.—Breathing on Full Lungs as in No. 25; 108th Day.—Breathing on Empty Lungs as in No. 26.

Nineteenth Week.—109–114 days inclusive. 109th Day.—Practice Instantaneous Mouth Inhalation as in No. 27; 110th Day.—Breathe on Full Lungs as in No. 25; 111th Day.—Instantaneous Mouth Inhalation as in No. 27; 112th Day.—Breathe on Empty Lungs as in No. 26; 113th Day.—Instantaneous Mouth Inhalation as in No. 27; 114th Day.—Full Abdominal Breathing as in No. 11.

Twentieth Week.—115-120 days inclusive. 115th Day.—Recite from memory the Rules of Chapter III, and perform the Drop Movement three times as in No. 9; 116th Day.—The Dizzy Exercise of 16; 117th Day.—The Instantaneous Mouth Inhalation of No. 27; 118th Day.—Extreme Natural Exhalation as in No. 23; 119th Day.—Instantaneous Mouth Inhalation of No. 27; 120th Day.—The Extreme Natural Inhalation of No. 24.

Twenty-first Week.—121-126 days inclusive. 121st Day.—Recite from memory the Rules of Chapter III; 122nd Day.—Spend this five minutes in counting on one breath as in No. 29; 123d Day.—Walk while Inhaling as described in No. 30; 124th Day.—Count on one breath as in No. 29; 125th Day.—Spend three minutes in Breathing on Full Lungs, and two minutes in Breathing on Empty Lungs as described in Exercises Nos. 25 and 26; 156th Day.—Count in one breath as in No. 29.

Twenty-second Week.—127-132 days inclusive. 127th Day.—Read over the explanations of Chapter II; 128th Day.—Practice counting on one breath as in No. 29; 129th Day.—Walk while Inhaling as in No. 30; 130th Day.—Walk while Exhaling as in No. 31; 131st Day.—Count on one breath as in No. 29; 132nd Day.—Walk while Exhaling as in No. 31.

Twenty-third Week.—133-138 days inclusive. 133d Day.—Review the position of the shoulders and of the upper chest as described in Nos. 4 and 5, and practice the Light Abdominal Breathing of No. 6; 134th Day.—Count in one breath as in No. 29; 135th Day.—Walking while Inhaling as in No. 30; 136th Day.—Walking while Exhaling as in No. 31; 137th Day.—Walk while Inhaling and Holding the Breath as in No. 32; 138th Day.—The Full Abdominal Breathing of No. 11, and the Drop Movement twice as in No. 9.

Twenty-fourth Week.—139-144 days inclusive. 139th Day.—Repeat the Rules of Chapter III from memory; 140th Day.—Practice the Nervo-Muscular Gymnastic as described in No. 33; 141st Day.—Walk while Inhaling and Holding the Breath as in No. 32; 142nd Day.—The Nervo-Muscular Gymnastic of No. 33; 143d Day.—Walk while Inhaling as in No. 30; 144th Day.—The Nervo-Muscular Gymnastic of No. 33.

Twenty-fifth Week.—145-150 days inclusive. 145th Day.—Review the Observations of Chapter I; 146th Day.—Practice the Chest-Tapping Exercise of No. 34; 147th Day.—Count on one Breath as in No. 29; 148th Day.—The Nervo-Muscular Gymnastic of No. 33, and holding the breath as in No. 12; 149th Day.—The Chest Tapping Exercise of No. 34, and Breathing on Full and on Empty Lungs as in Nos. 25 and 26; 150th Day.—Count on one Breath as in No. 29.

Twenty-sixth Week.—151-156 days inclusive. 151st Day.—Practice Kneading the Chest as in No. 35, and Walking while Inhaling as in No. 30; 152nd Day.—The Chest-Tapping Exercise of No. 34, and Walking while Inhaling and Holding the Breath as in No. 32; 153d Day.—Kneading the Chest as in No. 35, and Holding the Breath as in No. 12; 154th Day.—The Nervo-Muscular Gymnastic of No. 33, and the Extreme Natural Exhalation of No. 23; 155th Day.—Kneading the Chest as in No. 35, and Extreme Natural Inhalation as in No. 34; 156th Day.—Counting on one Breath as in No. 29, and the Nasal Expansion of No. 8.

Twenty-seventh Week.—157-162 days inclusive. 157th Day.—Practice Raising the Chest by Abdominal Pressure as described in No. 36, and the Single Nostril Breathing of No. 7; 158th Day.—Kneading the Chest as in No. 35, and the Drop Movement of No. 9; 159th Day.—Practice Raising the Chest by Abdominal Pressure as in No. 36,

and the Attenuated Exhalation of No. 15; 160th Day.—The Chest-Stretching Exercise of No. 37, and the Nervo-Muscular Gymnastic of No. 33; 161st Day.—The Chest-Tapping Exercise of No. 34, and Walking while Inhaling as in No. 30; 162nd Day.—The Chest-Stretching Exercise of No. 37, and Walking while Inhaling and Holding the Breath as in No. 32.

Twenty-eighth Week.—163-168 days inclusive. 163d Day.—Practice the Side Breathing of No. 38, and the Chest-Stretching Exercise of No. 37; 164th Day.—The Chest-Tapping of No. 34, and Walking while Inhaling as in No. 30; 165th Day.—The Spot Breathing of No. 39, and the Side Breathing of No. 38; 166th Day.—The Spot Breathing of No. 39, and the Chest-Stretching of No. 37; 167th Day.—The Spot Breathing of No. 39, and the Nervo-Muscular Gymnastic of No. 33; 168th Day.—The Spot Breathing of No. 39, and Kneading the Chest as in No. 35.

Twenty-ninth Week.—169-174 days inclusive. 169th Day.—Practice Natural Packing Instep Action, as in No. 40, and the Spot Breathing of No. 39; 170th Day.—Natural Packing Level Arm Motion, as in No. 41, and the Spot Breathing of No. 39; 171st Day.—The Chest-Stretching Exercise of No. 37, and the Spot Breathing of No. 39; 172d Day.—Kneading the Chest as in No. 35, and the Spot Breathing of No. 39; 173d Day.—Chest-Tapping as in No. 34, and the Spot Breathing of No. 36; 174th Day.—The Nervo-Muscular Gymnastic of No. 33, and the Spot Breathing of No. 39.

Thirtieth Week.—175-180 days inclusive. 175th Day.—Practice Natural Packing Rising Arm Motion as in No. 42, and the Spot Breathing of No. 39; 176th Day.—Natural Packing Level Arm Motion as in No. 41, and the Spot Breathing of No. 39; 177th Day.—Natural Packing Instep Action as in No. 40, and the Spot

Breathing of No. 39; 178th Day.—The Side Breathing of No. 36, and the Spot Breathing of No. 39; 179th Day.—The Chest-Tapping Exercise of No. 37, and the Spot Breathing of No. 39; 180th Day.—Kneading the Chest as in No. 35, and the Spot Breathing of No. 39.

Thirty-first Week.—181–186 days inclusive. 181st Day.—Practice the Natural Packing Instep Action of No. 40, and the Spot Breathing of No. 39; 182d Day.—Natural Packing Falling Arm Motion as in No. 43, and Spot Breathing as in No. 39; 183d Day.—Natural Packing Swinging Arm Motion as in No. 44, and the Spot Breathing of No. 39; 184th Day.—Respiration with Arm Movements as in No. 45, and the Spot Breathing of No. 39; 185th Day.—The Chest-Stretching Exercise of No. 37, and the Spot Breathing of No. 39; 186th Day.—The Side Breathing of No. 38, and the Spot Breathing of No. 39.

Thirty-second Week.—187–192 days inclusive. 187th Day.—Practice the Waist Movements of No. 46, and Spot Breathing as in No. 39; 188th Day.—Waist Movements while Holding the Breath as in No. 47, and Spot Breathing as in No. 39; 189th Day.—The Chest-Tapping of No. 37, and Spot Breathing as in No. 39; 190th Day.—Chest-Stretching as in No. 37, and Spot Breathing as in No. 39; 191st Day.—The Nervo-Muscular Gymnastic of No. 33, and the Spot Breathing of No. 39; 192d Day.—Kneading the Chest as in No. 35, and the Spot Breathing of No. 39.

Thirty-third Week.—193–198 days inclusive. 193d Day.—Practice the Waist Movements of No. 46, and the Spot Breathing of No. 39; 194th Day.—Waist Movements while Holding the Breath as in No. 47, and the Spot Breathing of No. 39; 195th Day.—The Shoulder Movements of No. 48, and the Spot Breathing of No. 39; 196th Day.—The Shoulder Twisting Movement of No. 49, and

the Spot Breathing of No. 39; 197th Day.—The Chest Stretching Exercise of No. 37, and the Spot Breathing of No. 39; 198th Day.—The Nervo-Muscular Gymnastic of No. 33, and the Spot Breathing of No. 39.

Thirty-four Week.—199–204 days inclusive. 199th Day.—Practice the Lateral Nervo-Muscular Gymnastic of No. 50, and the Spot Breathing of No. 39; 200th Day.—Walk while Inhaling as in No. 30, and the Spot Breathing of No. 39; 201st Day.—Walk while Exhaling as in No. 31, and the Spot Breathing of No. 39; 202nd Day.—Walking while Inhaling and Holding the Breath as in No. 32, and the Spot Breathing of No. 39; 203rd Day.—Lower Chest Breathing as in No. 51; 204th Day.—Combination Breathing as in No. 52.

Thirty-fifth Week.—205–210 days inclusive. 205th Day.—Practice Lower Chest Breathing as in No. 51, and the Chest Stretching Exercise of No. 37; 206th Day.—The Combination Breathing of No. 52, and the Chest Stretching of No. 37, and the Nervo-Muscular Gymnastic of No. 33; 207th Day.—The Lower Chest Breathing of No. 51, and the Instantaneous Nostril Inhalation of No. 28; 208th Day.—The Combination Breathing of No. 52, and the Instantaneous Nostril Inhalation of No. 28; 209th Day.—The Nervo-Muscular Gymnastic of No. 33, and the Instantaneous Nostril Inhalation of No. 28; 210th Day.—Practice the Chest-Stretching Exercise of No. 37, the Combination Breathing of No. 52, and the Instantaneous Nostril Inhalation of No. 28.

NOTE.—The pupil may continue the three Exercises named in the practice for the 206th Day, for any length of time he pleases, and from day to day in his practice may vary them by adding such other Exercises as he may momentarily recollect.

CHAPTER SEVEN.

CALISTHENIC DRILL IN DEEP BREATHING.

(For use in schools, colleges, academies, or universities, where the pupils are of any age exceeding fourteen years.)

FIRST EXERCISE.

SLOW RESPIRATION.

On the count* of eight (or with musical accompaniment) slowly fill the lungs until they are expanded to their utmost capacity, at the same time holding the shoulders down by the will-power during the entire inhalation. Then without allowing the chest to sink, slowly exhale to the count of twelve.

SECOND EXERCISE.

SLOW RESPIRATION AND HOLDING THE BREATH (Part I).

Slowly fill the lungs on the count of eight; hold the breath on the count of eight; and slowly exhale on the count of twelve, observing the precautions named in the First Exercise.

*The count in these Exercises should be about one to the second.

THIRD EXERCISE.**SLOW RESPIRATION AND HOLDING THE BREATH (Part II)**

Fill the lungs slowly to the count of eight; hold the breath to the count of sixteen; and then exhale slowly to the count of twelve.

FOURTH EXERCISE.**SLOW RESPIRATION AND HOLDING THE BREATH (Part III).**

Fill the lungs slowly to the count of eight; hold the breath to the count of twenty-four; and slowly exhale to the count of twelve.

FIFTH EXERCISE.**SLOW RESPIRATION AND HOLDING THE BREATH (Part IV).**

Slowly fill the lungs to the count of eight; hold the breath to the count of thirty-two; and slowly exhale to the count of twelve.

SIXTH EXERCISE.**WAIST MOVEMENTS—HOLDING THE BREATH (Part I).**

Fill the lungs to the count of eight, and, placing the arms akimbo, bend the body to the waist first to the right and then to the left, each movement being made on the count of each number until sixteen has been counted. Then exhale slowly to the count of twelve.

SEVENTH EXERCISE.**WAIST MOVEMENTS—HOLDING THE BREATH (Part II).**

Fill the lungs full to the count of eight, and, while

holding the breath, bend the body at the waist forward and backward to the count of sixteen; and then slowly exhale to the count of twelve.

EIGHTH EXERCISE.

CHEST-STRETCHING EXERCISE.

Fill the lungs full slowly to the count of eight; slowly stretch the frame-work of the chest to the count of eight while holding the breath; and then slowly exhale to the count of twelve.

NINTH EXERCISE.

NERVO-MUSCULAR GYMNASTIC.

Fill the lungs to the count of eight, and while holding the breath, raise the arms in front of the body, stretching them as far forward as possible, holding them on a level with the shoulders and parallel with each other, and having the muscular tension of the arms entirely passive. Now begin to draw the hands toward the shoulders, at the same time gradually closing the hands and clinching the fists until the hands are totally closed with all the pressure possible when they reach the shoulders; this should be performed to the count of eight. Then exhale slowly to the count of twelve.

TENTH EXERCISE.

ABDOMINAL BREATHING.

Fill the lungs full slowly to the count of eight, at the same time bearing down upon the shoulders by the will-power; exhale to the count of four, caving in the abdomen as far as possible, and slightly raising the chest at the same time; now inhale to the count of eight as before,

allowing the entire breath to expand the abdomen as the air goes in, and being careful to bear down upon the shoulders during this inhalation; then exhale to the count of four as before. Repeat this mode of respiration six times.

ELEVENTH EXERCISE.

SPOT BREATHING.

Fill the lungs slowly to the count of eight; place the two thumbs upon the corners of the chest, and exhale slowly to the count of twelve, following the outgoing breath with a steady pressure upon these two corners. Repeat this six times.

The corners of the chest are the projecting bones of the lower ribs, situated about half-way between the centre of the abdomen and its sides. They have been described in Chapter IV, in General Exercise No. 39.

TWELFTH EXERCISE.

LOWER CHEST BREATHING.

Place the two thumbs at the lower edge of the ribs near the sides of the body, and the index fingers along the front edge of the lower ribs near the abdomen, holding the palms of the hands down; inhale to the count of eight; exhale to the count of twelve, following the outgoing breath with a steady pressure of the hands along the whole length of the lower edges of the ribs; inhale again to the count of eight, expanding the lungs at this particular place more than at any other; again exhale to the count of twelve, continuing this manner of respiration six times.

CHAPTER EIGHT.

CALISTHENIC DRILL IN DEEP BREATHING FOR CHILDREN.

FIRST EXERCISE.

SLOW RESPIRATION (Part I).

Inhale slowly to the count of four; and then exhale to the count of four. The counting should be about one to the second in this and the following exercises of this chapter.

SECOND EXERCISE.

SLOW RESPIRATION (Part II).

Fill the lungs slowly to the count of eight; and then empty them to the count of eight. See that the shoulders are kept down by the will-power and prevented from rising during inhalation. This caution should be observed in all the Exercises, as children especially are liable to raise the shoulders in the attempt to inhale.

THIRD EXERCISE.

SLOW RESPIRATION (Part III).

Fill the lungs slowly to the count of twelve; then empty them to the count of twelve.

FOURTH EXERCISE.**SLOW RESPIRATION (Part IV).**

Fill the lungs slowly to the count of sixteen; and empty them to the count of sixteen.

FIFTH EXERCISE.**SLOW RESPIRATION—HOLDING THE BREATH (Part I).**

Fill the lungs slowly to the count of four; hold the breath four seconds; then without allowing the chest to contract, slowly empty the lungs to the count of four. The contraction during exhalation should take place at the abdomen.

SIXTH EXERCISE.**SLOW RESPIRATION—HOLDING THE BREATH (Part II).**

Fill the lungs slowly to the count of eight; hold the breath eight seconds; then slowly exhale to the count of eight.

SEVENTH EXERCISE.**SLOW RESPIRATION—HOLDING THE BREATH (Part III).**

Fill the lungs to the count of twelve; hold the breath for twelve seconds; then exhale to the count of twelve.

EIGHTH EXERCISE.**SLOW RESPIRATION—HOLDING THE BREATH (Part IV).**

Fill the lungs very slowly to the count of sixteen; then hold the breath for sixteen seconds; and exhale slowly to the count of sixteen.

NINTH EXERCISE.

WAIST MOVEMENTS—HOLDING THE BREATH (Part I).

Inhale slowly to the count of four; while holding the breath bend the body to the right and left to the count of four; and exhale to the count of four.

TENTH EXERCISE.

WAIST MOVEMENTS—HOLDING THE BREATH (Part II).

Fill the lungs slowly to the count of eight; move the body to the right and left to the count of eight; and slowly exhale to the count of eight.

ELEVENTH EXERCISE.

WAIST MOVEMENTS—HOLDING THE BREATH (Part III).

Fill the lungs slowly to the count of four; while holding the breath bend the body backward and forward at the waist to the count of four; then exhale to the count of four.

TWELFTH EXERCISE.

WAIST MOVEMENTS—HOLDING THE BREATH (Part IV).

Fill the lungs slowly to the count of eight; while holding the breath bend the body backward and forward to the count of eight; and slowly exhale to the count of eight.

CHAPTER NINE.

(This Chapter contains Exercises for persons of weak lungs, and those in the early stages of consumption or in general ill-health. They are not to be performed by persons who are very weak, as Chapter X is especially intended for that class of invalids. They should be practiced at home and very carefully. The lying position is preferred in every instance, as weariness very rarely results from breathing in that position.)

FIRST SERIES.

FIRST EXERCISE.

Take the Lying Position as described in General Exercise No. 3 of Chapter IV. Breathe slowly a moderate inhalation; breathe it out slowly; inhale again, adding, if possible, two seconds to the length of the inhalation; exhale slowly, adding to the length of the exhalation about two seconds.

SECOND EXERCISE.

Inhale as much air as possible; hold it for a second; exhale very slowly, and, if possible, continue the exhalation for five seconds.

THIRD EXERCISE.

Inhale slowly; hold the breath two seconds; and ex-

hale very slowly, continuing the exhalation, if possible, for ten seconds.

FOURTH EXERCISE.

Inhale very slowly; hold the breath five seconds, and exhale for fifteen seconds. If this exercise cannot be performed exactly as stated, the pupil may continue to repeat this or the preceding Exercises until the time stated can be accomplished.

Caution.—Do not continue any of the Exercises thus far named in this Chapter long enough to produce weariness.

SECOND SERIES.

FIFTH EXERCISE.

Fill the lungs as full as possible; clinch the fists at the side while holding the breath, increasing the pressure upon the fists as long as the breath can be held without wearing the pupil.

SIXTH EXERCISE.

Inhale all the breath possible; hold the breath and place the hands upon the lower ribs near the corners; then exhale, pressing very lightly indeed upon this portion of the chest. Continue this exercise, increasing the strength of the pressure as rapidly as the pupil can endure it without weariness.

SEVENTH EXERCISE.

Exhale all the air possible; then, placing the hands upon the lower ribs, commence to inhale, directing the mind to the lower ribs, and endeavoring to raise the hands by the power of the breath.

EIGHTH EXERCISE.

Exhale as completely as possible; then, placing the hands upon the lower ribs and bearing down with a slight pressure of the hands in this position, inhale, attempting to overcome the pressure of the hands by the power of the breath.

NINTH EXERCISE.

Exhale all the air possible; then place the hands upon the lower ribs and inhale, pressing as hard as possible with the hands with a view to compelling the breath to raise the hands and overcome the pressure at this particular point.

THIRD SERIES.

TENTH EXERCISE.

Fill the lungs as full as possible; place a pipe-stem in the mouth, and through this exhale very gently until the lungs are half empty; then, removing the pipe-stem, continue the exhalation rapidly through the open mouth, and immediately take in the fullest possible breath through the nostrils.

ELEVENTH EXERCISE.

Fill the lungs as full as possible; place the pipe-stem in the mouth, and through this gently and slowly exhale all the air; then instantly refill through the nostril to the utmost capacity of the lungs.

TWELFTH EXERCISE.

Fill the lungs as full as possible; place the pipe-stem in the mouth and blow out all the air from the lungs

with a moderate pressure; then instantly inhale, quickly and very fully, through the nostrils.

THIRTEENTH EXERCISE.

After Exercise No. 12 has been performed hundreds of times, so that the lungs have grown stronger through its use, this exercise may be taken: Inhale as much air as possible through the nostrils; then blow it all out rapidly, being careful not to allow any pressure to be felt in the blood vessels of the head.

FOURTEENTH EXERCISE.

Fill the lungs as full as possible; place the pipe-stem in the mouth, and, without allowing any of the air to escape, continue to inhale, adding as much more air as possible to that already taken in. This Exercise should be persisted in until considerable air can be taken in through the pipe-stem in addition to that inhaled naturally.

FIFTEENTH EXERCISE.

Exhale all the air possible; place the pipe-stem in the mouth, and continue exhaling through the pipe-stem until this additional exhalation has continued five seconds.

SIXTEENTH EXERCISE.

Exhale all the air possible; then place the pipe-stem in the mouth and continue exhaling through this for ten seconds. This Exercise and the one just preceding should be followed carefully and repeated until the time stated can be accomplished.

FOURTH SERIES.

SEVENTEENTH EXERCISE.

Exhale nearly all the air from the lungs; place the hands upon the abdomen near the navel; commence to inhale slowly and continue this for about two seconds, expanding the abdomen very slightly during the inhalation; exhale very lightly, pressing in the abdomen a very little as the breath goes out.

EIGHTEENTH EXERCISE.

Fill the lungs nearly full of air; place the hands upon the abdomen near the navel, and exhale slightly, accompanying the exhalation with a slight pressure of the hands, causing the abdomen to sink slightly; inhale, and at the same time expand the abdomen slightly; and exhale as before. Continue this light abdominal breathing as long as it may be done without producing weariness.

NINETEENTH EXERCISE.

Fill the lungs as full as possible; place the hands upon the abdomen near the navel and exhale all the air, following the outgoing breath by a steady pressure of the hands until the abdomen is caved in as far as may be done; inhale, expanding the abdomen to the utmost; then exhale as before, continuing this mode of respiration as long as can be done without producing weariness.

TWENTIETH EXERCISE.

Fill the lungs full; place the thumbs upon the corners of the ribs, and exhale, following the outgoing breath by a steady pressure with the thumbs; then inhale, expand-

ing at this particular point as far as possible. Continue this mode of respiration as long as it may be done without producing weariness.

TWENTY-FIRST EXERCISE.

Exhale all the air from the lungs; commence to inhale, expanding at the same time the lower chest and the abdomen, until all the air possible has been taken in; now exhale, caving the lower chest and abdomen at the same time, until all the air possible has been breathed out.

TWENTY-SECOND EXERCISE.

Remove the clothing from about the chest; fill the lungs as full as possible; then, while holding the breath, tap very lightly upon the chest with the balls of the fingers, passing the hands over every portion of the ribs. This Exercise may be practiced only once at a time, for it produces weariness.

Caution.—The tapping must be very light indeed. Great benefit may be derived from following this note, but injury may be caused by tapping strongly upon the lungs.

TWENTY-THIRD EXERCISE.

Fill the lungs as full as possible; then exhaust all the air, at the same time pressing upon the sides of the ribs, with the hands, following the outgoing air by a steady pressure; now, while holding the air out, raise the ribs to their original position and again press them down.

TWENTY-FOURTH EXERCISE.

Fill the lungs as full as possible; place the hands upon the sides of the ribs, and breathe out, following the out-

going breath with a steady pressure of the hands; then inhale, extending the chest as much as possible, and continue the pressure of the hands during the next exhalation.

TWENTY-FIFTH EXERCISE.

Fill the lungs as full as possible on the count of eight; then on the count of four steadily raise the chest by its own muscles.

N. B.—When the Exercises of this Chapter have been thoroughly mastered, and can be done any length of time without weariness, the pupil will be prepared to take up the General Exercises described in Chapter IV.

CHAPTER TEN.

EXERCISES FOR INVALIDS WHO ARE VERY WEAK.

The mind should be directed to the "corners" of the lower chest. These are the two projecting points of the ribs near the abdomen, each point or corner being situated about four inches from the centre of the abdomen. All the breathing of the patient should be directed to these "corners" so that every inhalation should expand the lower chest and every exhalation contract it.

Practice this kind of breathing as often and as long as it may be done without wearying the patient.

There is no harm in overdoing it, as this is the most perfect, the most gentle, and most beautiful of all breathing exercises. A continuance of it will in time establish a stronger and better mode of respiration than that hitherto employed. When the patient has sufficient strength to commence holding the breath the following series of exercises may next be undertaken:

FIRST SERIES.

1st Exercise.—Hold the breath one second. Rest by respiring with the "corner" movement.

2nd Exercise.—Hold the breath two seconds.

3d Exercise.—Hold the breath three seconds.

4th Exercise.—Hold the breath four seconds.

5th Exercise.—Hold the breath five seconds.

6th Exercise.—Hold the breath six seconds.

And so continue, adding a second to each Exercise and respiring several times between each, with the "corner" movement.

SECOND SERIES.

After the patient is able to hold the breath five seconds the following may be commenced:

1.—Hold the breath two seconds or more, as may be convenient, and let it all out through the pipe-stem as rapidly as possible without producing any unpleasant feeling.

2.—Take a new breath after a few respirations and exhale more rapidly if possible.

3.—Take a new breath and hold it five seconds, and blow it out still more rapidly through the pipe-stem.

4.—Inhale as full a breath as can be done without inconvenience, and placing the pipe-stem in the mouth, add more air to that already taken.

5.—Inhale an ordinary breath, then let out as little air as possible, caving in the abdomen as gently as possible; continue to inhale and exhale very slight quantities of air in short respirations, accompanied by quiet abdominal action. This is a very soothing mode of breathing if connected with abdominal movements, and in time it will bring about true abdominal breathing, thereby strengthening the diaphragm. The patient must remember that the abdomen should swell slightly as the breath is coming in. Many persons get the reverse idea and practice incorrectly. All breathing of the upper-chest type is weakening and tiring to a person in ill health. When this exercise is mastered the patient should gradually increase

the length of the inhalations, and accompany such increase with a fuller abdominal expansion. The exhalations should likewise be increased, accompanied by deeper contractions of the abdomen.

6.—The method of practice described in No. 5 should, when mastered, be varied by transferring the location of movement to the lower edges of the bones of the chest frame. The short and quiet forms of respiration should be accompanied by a slight rise and fall of these edges of the chest. As the respirations are increased in fullness the movement of the lower chest should be correspondingly increased.

It must be understood that all the exercises of this chapter are intended to be performed at first very gently. They need be no more active than the ordinary breathing of sick persons, and may be practiced in such a way as to produce no excitement whatever; and yet, when the patient begins to find new strength coming, as will be the case, the action of each exercise may be increased.

A cot may be placed out of doors on the sunny side of the house when the weather is neither too warm nor too cold, and the patient may practice the exercises lying on the back.

When the strength that should follow the work laid out in this chapter has come to the patient, the lessons of the preceding chapter may be next attempted.

CHAPTER ELEVEN.

Exercises designed merely for developing the strength and muscular flexibility of the body, and for enlarging the chest.

FIRST SERIES.

1st Exercise.—Fill the lungs as full as possible and hold the breath five seconds.

2nd Exercise.—Repeat and hold the breath ten seconds.

3d Exercise.—Repeat and hold the breath fifteen seconds.

4th Exercise.—Repeat and hold the breath twenty seconds.

5th Exercise.—Repeat and hold the breath thirty seconds.

6th Exercise.—Repeat and hold the breath forty seconds.

Caution.—Never attempt to hold the breath longer than 40 seconds, and do not perform Exercise 2 until the first is well mastered; nor do not undertake the others until each preceding exercise has been thoroughly practiced. Undue haste will be merely time wasted.

Time.—Three minutes at a trial is sufficient for practice in the above; and no more than two trials daily.

SECOND SERIES.

7th Exercise.—Fill the lungs as full as possible, and while holding the breath, gently tap the entire surface of the chest with the balls of the fingers. Be careful not to bend the arm at the elbows; the only bending should be at the wrists; this prevents injury to the lungs from too heavy a blow. One minute at a time, twice a day.

8th Exercise.—Fill the lungs full, and place the palms of the hands on the sides of the chest near the arm pits. Exhale completely and follow the outgoing air with a steady pressure of the hands, causing the chest to sink in as much as possible. Inhale with moderate speed, keeping the shoulders down firmly, and expanding the chest fully. Repeat this twelve times at a trial. One trial daily will be sufficient, until the soreness, which accompanies new efforts, has passed away, then three or four times daily may be undertaken.

9th Exercise.—Fill the lungs full, and place the palms of the hands on the sides of the chest near the arm pits. Exhale completely, and follow the outgoing breath by a steady pressure of the hands until the frame-work of the chest has been completely crushed. Now hold the breath out, and while the lungs are empty, expand the frame of the chest to its utmost extension. Still keeping the lungs empty, press in the chest and again expand it as before. Instantly take a full inhalation and five full respirations as a means of rest.

10th Exercise.—Continue the 8th and 9th exercises with the following variations: Instead of placing the palms of the hands on the sides of the chest near the arm pits, place the thumbs at the lower sides of the chest and the length of each forefinger along the lower rib bone until the points of the fingers nearly meet on the bones just above the stomach. In this position, the

crushing and expanding of the lower chest may be performed effectually.

11th Exercise.—Hold the breath and perform the following exercises: Take a standing position, place the arms akimbo, the fore-fingers resting on the fleshy sides of the lower waist just above the hips. Bend the torso to the right, leaving the waist to act as a hinge, and return the torso to a perpendicular position. Bend to the left and return to the perpendicular position. Bend in front and return, then backwards and return. Then perform the circular motion, involving all four of the above directions, without bringing the body to a perpendicular until the last position has been taken.

12th Exercise.—Hold the breath and raise the shoulders as high as possible, then lower and raise them again until this has been done twelve times while holding the the breath.

13th Exercise.—Fill the lungs as full as possible, then while counting 8 mentally and holding the breath, stretch the frame-work of the chest slowly, by extending it, and keep the shoulders down.

14th Exercise.—Walk 60 steps during one slow, smooth inhalation.

15th Exercise.—Walk 60 steps during one slow, smooth exhalation.

CHAPTER TWELVE.

SPECIAL CASES.

FIRST—CURE OF SORE THROAT.

It is claimed by some scientists that no person ever had a sore throat who did not at some time inhale through the mouth.

It is probable that this statement is founded on fact, but a conclusive demonstration of it is impossible.

As far as the author's personal experience goes, he has proven to his own satisfaction, at least, that sore throat cannot be acquired if air is never drawn in through the mouth. Many of his pupils testify to the same fact in their own experience.

The first remedy to suggest for the *prevention* of a sore throat is, always inhale through the nostrils. If the nose is closed or catarrh has control of it, the suggestions hereinafter made will prove beneficial in relieving these difficulties. When the nostrils have become cleared, the only thing to do is to form a habit of constant nasal inhalation. This may be done in one or both of the following ways: 1st—Assign the first five minutes of each hour during the day and evening to the task of closely observing the action of breathing and watch very carefully to see that every breath is taken in through the

nose, especially when conversing. 2d—Ask some friend to watch you occasionally and remind you of your manner of breathing, when not conversing. 3d—Ask some friend to observe you and speak to you every time you inhale through the mouth. 4th—All upper chest movement in breathing is tiresome for the entire body, and such breathing is sure to weary the neck and throat. Therefore, use the lower chest respiration as much as possible. 5th—Saliva is the most beneficial of all natural remedies. All animals cure their wounds by its use. Human beings often move the hurt finger to the mouth. A sore throat may be helped very much by swallowing the saliva and holding it in the throat. This combined with nasal breathing will always help a physician in curing the worst cases. Mild cases will never need a physician and should quickly cure themselves if the above suggestions are strictly followed. 6th—The habit of scraping the throat or making the sound commonly call "hem" will counteract any attempt to cure a sore throat.

Never clear the throat !

SECOND—CURE OF WEAK THROATS IN VOICE PRODUCTION.

The voice for ordinary conversation or daily use does not wear upon the throat so much as it does in its larger use, as in singing, speaking, reciting, and acting.

The throat not being prepared for making stronger tones or for constant use in its full strength will soon resent such usage.

New habits will have to be formed and new vocal power acquired, not suddenly, but very gradually.

The following observations, will, if adopted, produce the desired results:

1.—Never breathe with the upper chest while using the voice.

2.—Carry the upper chest fully extended and immovable, while using the voice, and at all other times, if possible; but do not throw the shoulders back. Keep them down.

3.—All strong tones should be thrown out by the abdominal action. Tones of middle force should be expelled by a steady, general pressure of abdomen and lower chest combined.

THIRD.—CURE OF CATARRH AND CLOSED NOSTRILS.

Catarrh is the result of inflammation or some derangement of the secretions of the nose and throat. The secretory glands are excited to an abnormal action by inflammation; therefore, in the exercises given below, do not overdo them, for any excitement may irritate the glands and do injury thereby.

First Exercise.—Take hold of the nose with the thumb and forefinger and gently pinch and rub that organ until it is red. This may be continued for a minute or two, and never should be tried except when other Exercises are to follow.

Second Exercise.—Immediately after the first Exercise the following should be tried:

Fill the lungs full of air, and place the thumb and forefinger to the nose in such a way as not to pinch the nose. Then allow the air from the lungs to flow into the head, and hold it there until an inconvenience is felt. *Do not under any circumstances allow the air to press upon the blood vessels of the head.*

When it is possible to allow the air to flow into the nasal chamber without producing any pressure in the head, it should be done. The main object of this Exercise is to get the moist air from the lungs into the nose.

Many trials per day may be necessary, and it may require days or even weeks to effect the object proposed.

Third Exercise.—After the foregoing have been tried for at least two weeks, the following should be next attempted.

Make an effort to get control of the muscles that move the outer portion of the nose, so as to expand and contract the nostrils at will, as a rabbit does. This will in time be accomplished, but may not for some weeks. This will enable the person to open and shut the two nostrils whenever, by so doing, the respirations may be assisted in passing through the nose.

The object of the foregoing is to get the air once started in its passage through the nose. Do not be discouraged if it requires time to accomplish this. *Do not hurry.*

Do not *press* the air in the nose. Any pressure, especially if great, is apt to close the nostrils, and retard the progress of opening them.

As soon as an opening is made, the only work left to be done is to practice, daily, closed mouth breathing. This will compel the air to pass through the nose.

Caution I.—Breathe as long and as deeply as possible each inspiration.

Caution II.—Never breathe too rapidly. When the air passes rapidly enough to cause irritation, it increases the catarrhal discharge. It is better to assign for daily practice, one hour in the morning and one hour in the evening for closed mouth breathing. The person afflicted must make a business of this work, and must have patience.

FOURTH.—CURE OF NEURALGIA AND RHEUMATISM.

To oxygenize the blood without irritation is almost

always a cure for both of the above diseases; while they differ as to their causes and symptoms, the cure may be effected by means somewhat similar.

An impoverished blood, or a weak condition of the nerves, through excitement, excessive or long-continued pain, grief, or insufficient food, will often produce neuralgia. Reading at twilight excites the nerves of sight, and causes neuralgia. Reading in a lying position may do the same thing by straining the optic nerves.

Therefore, before undertaking to cure neuralgia, let us understand what are some of the means of prevention. The following are *things to be avoided*:

1. Do not excite the nerves by exposure to drafts while in a state of perspiration.
2. Do not allow the facial nerves to be excited by toothache any longer than necessary.
3. Do not read by a dim light, either at twilight or by the flicker of gas.
4. Do not read while lying down.
5. Do not strain the eyes by looking steadily at any object, especially at a distance.
6. Do not read while facing any light, artificial or natural. The light should fall sidewise on the matter to be read.
7. Do not indulge in excessive emotion, either of anger or sorrow. The nerves are unstrung and become easily subject to neuralgia.
8. Do not retire later than 9:30 or 10 if neuralgia is a frequent assailant.
9. Matrimonial excesses are chargeable with more cases of neuralgia and rheumatic pains than any other cause. It may not be out of place to say, here, that the same excesses are fruitful sources of *weak throats* and *impaired*

voices. This fact is too important to be concealed, and is too little known to be guarded against.

10. Never eat less than three meals a day, if subject to this trouble. Plenty of good food plain and coarse, will oxygenize the blood.

11. Avoid too much brain work

The foregoing suggestions will assist in overcoming these diseases, and will nearly always prevent them. But deep breathing is a most powerful oxygenizer of the blood. The best exercises are the following:

1. Take a full, deep breath and hold it, while walking, it convenient.

2. Take a full breath, hold it, and clinch the fists with all the fury possible, while holding it. This excites the nerves very little, but enough to enable them to absorb the oxygen of the breath.

3. Take a full breath, and while holding it, perform the Nervo-Muscular Gymnastic of Chapter III, as in Exercise No. 33.

4. Rapid breathing, not too fast, and full, deep respiration continued for ten minutes, is very beneficial. But the breathing must not be rapid enough to excite the body, as this produces an opposite effect.

The same exercises are adapted to rheumatism. The joints or places affected should be rubbed dry every hour. If very painful, weak ammonia, followed by sweet oil, should be rubbed on.

FIFTH.—DYSPEPSIA.

1st Exercise.—Fill the lungs as full as possible by a slow and steady inhalation.

Hold the breath in five seconds.

Repeat and hold the breath in ten seconds.

Repeat, and each time add five seconds to that pre-

viously taken, until the breath can be held thirty seconds.

2d Exercise.—Empty the lungs completely and hold the breath out for five seconds. While the lungs are empty, move the front wall of the abdomen in as far as possible, and hold it in a few seconds, then move the abdominal wall out suddenly. Repeat this seven times for a single exercise. The exercise may be renewed once an hour. Do not overdo it as it causes some inconvenience.

3d Exercise.—Hold the breath, after taking the fullest and deepest possible inhalation; then walk five steps, keeping the air in the lungs.

Repeat, and walk ten steps while holding the breath.

Repeat, and add five steps each time, while walking and holding the breath, until 45 steps can be taken while holding the breath.

Then commence over again at the first part of this exercise and go through the whole of it. This should be practiced for one half hour in the open air if possible, not less than three times a day; make one and one-half hours daily practice in this kind of work.

Afterwards, each day, practice the Nervo-Muscular Gymnastics as described in Exercise No. 33, of Chapter III.

SIXTH.—HEADACHE.

Headache is often caused by a sluggish flow of the blood in the brain, causing a painful pressure there; or it may be caused by neuralgic pains. In the latter case the remedies and prevention suggested in a former part of this chapter will be found applicable.

If the headache is caused by the first named trouble, the following exercise is the most effective and speediest cure:

Take a full, deep, determined breath in the open air, hold it for five seconds, and then without allowing it to escape, clinch the fists in a most furious and energetic manner. Then breath out and take five rapid, but full breaths, as a means of rest; after which repeat the foregoing exercise. This will not cure a headache in a minute, but is sure to do it in a very short time. The determination of the person attempting it must be of a very resolute character.

SEVENTH.—HEART DISEASE.

This is sometimes caused, and always aggravated by, dyspepsia. Therefore, if the latter exists it should be eradicated by following the suggestions of the exercise for that purpose in this chapter.

Many persons have found much relief from attacks of heart disease by trying the following exercises:

Stand or sit erect without supporting the back, and fill the lungs as full as possible by a slow and steady inhalation, at the same time distending the wall of the chest to its fullest extent, but not allowing the shoulders to rise at all. Now exhale, holding the chest out until all the air has passed out of the lungs. It will be found quite difficult to hold the chest out while the lungs are empty; but this must be mastered. Constant practice is necessary; and the best way to do is to devote five minutes each hour to this special work. In a few weeks a new habit will be formed, to wit: That of carrying the chest forward, and as extended when empty as when full of air.

After doing this the rest of the exercises may be taken from Leisure Drill of Chapter —. These should be mastered.

EIGHT.—TO CREATE APPETITE.

The Special Exercises for this purpose are the following, which are fully described in Chapter 3.

1. The Drop Movement, Exercise No. 9.
2. Light Abdominal Breathing, Exercise No. 6.
3. Nervo-Muscular Gymnastics of Exercise No. 33.
4. Full Abdominal Breathing of Exercise No. 11.
5. Spot Breathing of Exercise No. 39.
6. The Waist Movement of Exercises Nos. 46 and 47.
7. Walking while Inhaling of Exercise No. 30.
8. Walking while Inhaling of Exercise No. 31.

RESUME OF CONTENTS.

	PAGE.
CHAPTER I.—Observations. This Chapter is devoted to a full description of the theory of Deep Breathing	7
CHAPTER II.—Explanations. All the technical terms, commonly used in teaching Deep Breathing, are fully explained, and all descriptions are rendered simple and easy. These explanations will enable any person to understand the subject thoroughly.....	11
CHAPTER III.—Rules for Guidance in Exercising. There are seven Rules in this Chapter, which, if kept constantly in mind, will render errors impossible.....	15
CHAPTER IV.—General Exercises arranged for pupils who are in fairly good health.	
Persons under 15 years of age and invalids should not practice all of the exercises given in this Chapter, as subsequent portions of this book are designed specially for them and appropriate selections made therein.....	17
The numbers and names of the Exercises are given at this place, in order to furnish a convenient reference, whereby the pupil or teacher may, at a glance, see the entire work of the Chapter.	
No. 1. Standing Position for Breathing.....	17
2. Sitting Position for Breathing.....	17
3. Lying Position for Breathing.....	18
4. Position of Shoulders for Breathing	18
5. Position of Upper Chest for Breathing	18
6. Light Abdominal Breathing.....	19
7. Single Nostril Breathing.....	20
8. Nasal Expansion.....	20
9. The Drop Movement.....	21
10. Rapid Nostril Breathing.....	22
11. Full Abdominal Breathing.....	22
12. Holding the Breath.....	23
13. Contraction Exercises.....	24
14. Attenuated Inhalation.....	25
15. Attenuated Exhalation.....	26
16. Dizzy Exercise.....	26
17. Pipe-stem Packing Exercise.....	27
18. Pipe-stem Exhausting Exercise.....	28
19. Pipe-stem Inhalation	28
20. Pipe-stem Exhalation.....	29
21. Pipe-stem Respiration.....	29
22. Pipe-stem forcible Exhalation.....	29
23. Extreme Natural Exhalation.....	30
24. Extreme Natural Inhalation.....	30
25. Breathing on Full Lungs.....	31
26. Breathing on Empty Lungs.....	31
27. Instantaneous Mouth Inhalation.....	32

	PAGE.
No 28. Instantaneous Nostril Inhalation.....	32
29. Counting in One Breath.....	33
30. Walking while Inhaling.....	34
31. Walking while Exhaling.....	36
32. Walking while Inhaling and Holding the Breath.....	35
33. A Nervo-Muscular Gymnastic Applied to Breathing.....	36
34. Chest Tapping Exercise.....	37
35. Kneading the Chest.....	37
36. Raising the Chest by Abdominal Pressure.....	38
37. Chest-stretching Exercise.....	38
38. Side Breathing.....	39
39. Spot Breathing.....	40
40. Natural Packing, Instep Action.....	41
41. Natural Packing, Level Arm Motion.....	41
42. Natural Packing, Rising Arm Motion.....	41
43. Natural Packing, Falling Arm Motion.....	43
44. Natural Packing, Swinging Arm Motion.....	43
45. Respiration with Arm Movements.....	43
46. Waist Movements.....	43
47. Waist Movements, Holding the Breath.....	44
48. Shoulder Movements.....	45
49. Shoulder Twisting Movements.....	45
50. Lateral Nervo-Muscular Gymnastic.....	45
51. Lower Chest Breathing.....	46
52. Combination Breathing.....	47
CHAPTER V. Thorough Drill. The Method of Self Training in Artistic Deep Breathing.	
(This Chapter contains a series of one hundred lessons, covering a period of one hundred week days, for pupils of ordinary health. It is not intended for invalids, nor for persons seeking special benefit in diseases).....	48
CHAPTER VI. Leisure Drill. For persons who have but little time. The Combinations are made for Five Minutes daily practice...	75
CHAPTER VII. Callisthenic Drill in Deep Breathing.	
For use in schools, colleges, academies, or universities, when the pupils are of any age exceeding fourteen years.....	85
CHAPTER VIII. Callisthenic Drill in Deep Breathing for children; and for schools of young persons.....	
	89
CHAPTER IX. Exercises for persons of weak lungs, or those who are in ill health.....	
	92
CHAPTER X. Exercises for Invalids who are very weak.....	
	99
CHAPTER XI. Exercises designed merely for developing the strength and muscular flexibility of the body, and for enlarging the chest.....	
	102
CHAPTER XII. Special Cases.	
No. 1. Cure of Sore Throats.....	105
2. Cure of Weak Throats in Voice Production.....	106
3. Cure of Catarrh and Closed Nostrils.....	107
4. Cure of Neuralgia and Rheumatism.....	108
5. Cure of Dyspepsia.....	110
6. Cure of Headache.....	111
7. Cure of Heart Disease.....	112

THE LEADING AMERICAN INSTITUTION
—OF—
VOICE TRAINING,
THE MARTYN COLLEGE
—OF—
ELOCUTION AND ORATORY,
313 SIXTH STREET, N. W.,
WASHINGTON, D. C.

Its methods of developing, strengthening, and enriching the voice have no equal in this country, and are of the same high standard as the best European systems.

American methods have long been deficient in two particulars: 1st, building a rich, strong voice, without forcing it. 2d, natural expression.

These two great deficiencies are overcome by the Shaftesbury method, which is taught in this country only at the Martyn College of Elocution and Oratory, no other institution having the right to use this system.

The Shaftesbury method has all the valuable things of the Delsaite theory, with none of its tiring details that so seriously handicap professional work. It has a much superior system of gesture, movement and attitudes. It saves years of work and accomplishes more for the great life work of the ambitious aspirant.

This college has three collegiate courses:

1st collegiate course, 1 school year of 8 months, called the Non-Professional Course of Elocution. The graduate receives a diploma and degree of B. E. Tuition \$95 for the year.

2d collegiate course, 2 school years, called the Professional Course of Elocution and Oratory. The graduate receives a diploma and the degree of B. E. O. Tuition \$95 for each year.

3d collegiate course, 2 school years, called the Professional Course of Elocution and Acting. The graduate receives a diploma and the degree of B. E. A. Tuition \$95 for each year.

Short courses may be had for \$25 and \$50.

Illustrated catalogues sent free on application.

Address—

THE MARTYN COLLEGE OF ELOCUTION AND ORATORY,
P. O. BOX 291, WASHINGTON, D. C.

COURSES OF INSTRUCTION
 —IN THE—
 COLLEGIATE COURSES
 —OF—
 THE MARTYN COLLEGE
 —OF—
 ELOCUTION AND ORATORY,
 WASHINGTON, D. C.

—*—

“Elocution is the art of all art ; no person’s education is complete without it.”—EMERSON.

“We cannot tell what powers we may possess until this art develops us.”—SALVINI.

—

Non-professional studies under the most skilled MALE INSTRUCTORS.

(1st school year of 8 months.)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Voice Culture. 2. Deep Breathing. 3. Elementary Elocution. 4. Articulation. 5. Pronunciation. 6. Analysis for Emphasis. 7. Physical Harmony and Grace. 8. Gesture and Attitudes. 9. Expressive Reading. | <ol style="list-style-type: none"> 10. Recitations to both private and public audiences. 11. Inflections. 12. Tone Color. 13. Conversation. 14. Shakespeare. 15. Deportment. 16. Bible and Hymn Reading. 17. Authors. 18. Calisthenics in Grace and Gesture. |
|--|---|

Professional studies under the most skilled MALE INSTRUCTORS.

(2d school year of 8 months.)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Personation. 2. Dramatic Gesture. 3. Facial Expression. 4. Studies of Moods and Feelings. 5. Dialect Reading. 6. Pantomime. 7. Acting (to audiences). | <ol style="list-style-type: none"> 8. Comedy. 9. Elocution (advanced). 10. Shakespeare (advanced). 11. Oratory. 12. Extemporaneous Speaking. 13. Oral Translation. 14. Parliamentary Practice. |
|--|---|

N. B.—Pupils who cannot afford the time necessary to complete collegiate courses may take any of the above lessons in shorter courses.

Illustrated catalogue mailed free. Address Box 291, Washington, D. C.

THE UNITED STATES JOURNAL
—OF—
ELOCUTION AND ORATORY.
DEVOTED TO INSTRUCTION AND ENTERTAINMENT.

Every Elocutionist should have it!

Every Professional Person should have it!

**Every Family interested in the cultivation of the Voice for Singing,
Reading, or Speaking, should have it.**

Its mission is to convey lessons in voice training, grace and gesture to persons who cannot find the time or means to attend a college of Elocution, Oratory or Acting. This journal is the only one of its kind in this country. Its columns will be school rooms of instruction. It will furnish, in a quiet way, to all classes of people, just the help they need for all avocations. This Journal is sustained by the Martyn College of Elocution and Oratory, which Institute is indorsed by the most prominent and reliable men of the country. This Journal will contain during the years 1888 and 1889, lessons for

The Clergyman,
The Lawyer,
The Physician,
The School Teacher,
The Scholar,
The Reader,
The Elocutionist,
The Orator,
The Actor,
The Merchant,
The Clerk,
The Mother,
The Daughter.

Subscription Price, 50 Cents per year.

Address, U. S. JOURNAL OF ELOCUTION AND ORATORY,

P. O. Box 291,

WASHINGTON, D. C.

**A PAPER OF GREAT VALUE
TO ALL CLASSES OF PEOPLE.**

The Reader, The Elocutionist, The Actor.

The reader, the elocutionist, the actor, will find in these columns from month to month, the latest, the best, the most scientific methods of voice and action, fully explained.

The orator and the aspirant to oratory must remember that the greatest of the world's orators (with very rare exceptions), were trained by teachers or trained themselves from suggestions and hints gathered from others. They had wisdom, and that wisdom told them that the voice should receive its share of attention in their studies, as well as the mind. A good speaker is always in demand. A trained voice, if well trained, loses its harshness and "spread eagle" style, and develops power, beauty and richness of modulation.

The Merchant and Clerk.

The merchant and clerk who reads these columns from time to time during the present volume, will learn many things in manner, ease, modulation and conversational power that are essential to the best success in trade. The voices of clerks are tiresome, owing to their harshness or sameness of style, but rich tones, well modulated are irresistible.

The Mother and Daughter.

The mother and daughter, the representatives of home, will find the art of home reading treated of in this Journal from month to month, and voices now considered monotonous will develop into tones of beauty. Then the sound of your own voice will not weary you. You should learn how to dive down into the best thoughts of the best authors and by the use of expression make them felt by others around you.

A Noble Occupation.

This is better than wasting time in reading sensational trash. No nobler occupation can be found than the study of the great thoughts of the world's greatest thinkers.

PRICE, 50 CENTS PER YEAR.

Subscribe now, if you wish an unbroken series of numbers.

Address, U. S. JOURNAL of ELOCUTION and ORATORY,

P. O. Box 291,

Washington, D. C.

U. S. JOURNAL OF ELOCUTION AND ORATORY,

PUBLISHED AT WASHINGTON, D. C.

This Journal will be valuable to ALL CLASSES OF PEOPLE.

The Clergyman.

To the clergyman it will afford the means of cultivating both the voice and manner, so as to improve the rendition of sermons and make them impressive. Many a clergyman after a course of such training, HAS SO IMPROVED THAT HIS SALARY HAS BEEN RAISED, or he has been called to larger fields of labor.

The Lawyer.

The lawyer may be finely educated in legal lore, but if he wishes to win laurels as an advocate he must educate his voice. The able advocate is a MARKED MAN, and his reputation as a speaker will win for him not only forensic honors, but a lucrative office practice beside. All lawyers who subscribe for this Journal will find many valuable lessons in voice culture for home practice.

The Physician and Surgeon.

The physician and Surgeon who would be skillful, should have grace of carriage, gentleness of touch, and sympathy of voice. These are the results of training, such as will be found in the subsequent numbers of this Journal.

The School Teacher.

The school teacher must control himself or herself before the pupil can be controlled. In the public schools of the country thousands of teachers are employed, and not one in a hundred is able to perfectly master the scholars, except by force or anger, which results in unpopularity. A single tone from a trained voice will instantly command attention, and give to the teacher a superior dignity that wins the respect of everybody. This Journal will be found of great value to all teachers.

The Scholar.

The scholar in every school in America should know how to read well, how to speak well and the rules of gesture. In the future numbers selections for reciting and declaiming will be arranged for use at entertainments, and suggestions given that will be of great value.

Price, 50 Cents per Year.

Address, U. S. Journal of Elocution and Oratory,

P. O. BOX 291, WASHINGTON, D. C.

IN PRESS

“The most Remarkable Book ever offered to the
Public.”

THE MECHANICS OF PERSONAL MAGNETISM,

By EDMUND SHAFTESBURY.

PRICE THREE DOLLARS, POST PAID.

ORDERS MAY BE FORWARDED NOW.



The Shaftesbury method of PERSONAL MAGNETISM has been thoroughly tested and found to be very effective, although simple and easily mastered, requiring only patience and application on the part of the pupil.

The Mechanism of Personal Magnetism consists of two kinds of training. First, Negative. Second, Positive.

The Negative removes every trace of nervousness from the body. This, alone, is valuable, not only because it makes the pupil at perfect ease and establishes self-control under all circumstances, but also because it permanently cures nervous troubles, and *averts nervous prostration*—a disease that is prevalent at the present day.

The positive training follows the good work of the Negative, and completes the first year's course, or, *The Mechanics of Personal Magnetism*. The science, which might otherwise be considered complicated, is rendered simple by

1. Illustrated Lectures.
2. Exercises.
3. Regime.

[CONTINUED FROM PREVIOUS PAGE.]

PERSONAL MAGNETISM EMBRAGES,

Among other things, a series of interesting exercises, called "Nerve Calisthenics." These strengthen the nerves, and give them wonderful energy and vital power. They are not at all like muscular gymnastics, which often injure the nerves.

"My observation has confirmed in me the belief that success in life is attended by a certain power called Personal Magnetism."—**HON. S. J. TILDEN.**

"He who wishes to accomplish a high order of success in Professional Life must learn the art of Personal Magnetism, either by self-study or by some kind of training."—**REV. HENRY WARD BEECHER.**

"In this age of Nervous Prostration it is every ones duty to educate the nerves to a sound action."

"Muscular Exercises often ruin the nerves, on the other hand Nerve Calisthenics will build up strong nerves, strong muscles, and a healthy brain."

SEND THREE DOLLARS

BY MONEY ORDER, BANK DRAFT OR REGISTERED LETTER,

—to—

WEBSTER EDGERLY,

Principal of Martyn College of ELOCUTION AND ORATORY.

WASHINGTON, D. C.