504.—The heart is placed in the middle of this wind-chest, in order to get the blood continually renewed in freshness and purity by contact through thin membranes, with the air in the lungs. But with this we have nothing to do here, except to remind ourselves of the importance of fresh air to health.

505.—We may think of the lungs which fill the greater part of the space in the wind-chest, one on each side of the heart, as two great sponges, full of cells containing air. The wind-pipe coming down from the throat has a number of branches—bronchial tubes, as they are called—running into each of these elastic air-sponges.

506.—The forces by which breathing is carried on, are—first, the natural elasticity of the air cells of the lungs; second, the muscular action which moves the ribs and chest; and third, the muscular action by which the diaphragm can be made to cave upward, or to stand flat or rigid. All these mechanical actions are well described in Professor Huxley’s “Lessons on Elementary Physiology;” but it is enough for the singer to know that there are various sets of muscles controlling both the diaphragm and the ribs which need to be exercised. In breathing, the periodic movements of the diaphragm, and of the lower ribs, are greater in men than in women, and the movements of the upper ribs are greater in women than in men. But in both sexes all these muscular efforts are employed, and the muscles which cause them will, for the singer’s purpose, require special exercise.

507.—The singer’s purpose necessitates a larger use of breath than is needed for ordinary respiration. Professor Huxley shows that if a pair of lungs hold, when filled in the ordinary way, two hundred and thirty cubic inches of air, they can be made to hold, by means of a deep inspiration, three hundred and thirty—that is, not far from half as much more. Now, for every muscular effort, as that of working or of running, as well as of public speaking and singing, more fresh blood is required,—that is, blood newly purified by the oxygen breathed into the lungs. Hence it is that in preparing for any strong effort of the body we naturally fill the lungs. The greater the muscular effort the larger the demand for oxygen in the lungs. A man is strong not merely in proportion to the size of his bones and muscles, but chiefly in proportion to his power of taking plenty of good air into his lungs. “If a man can breathe well,” says Dr. Taylor, “he can generally work well; if short-winded, though he may have the muscles of an Ajax, he will be left behind, to a certainty, in the race of life.” It is on this account most needful that the singer should be practised in these exercises of chest filling.

508.—But it is not only for the muscular effort he is making, that the singer needs to fill the air cells of his lungs so well; he has often to sing long passages or long tones in one breath, and must, therefore, know how to lay in a good store, and that habitually. The ordinary breathing processes are not sufficient for the singer. He must not be surprised if his Teacher requires from him a much fuller and freer use of all the muscles of diaphragm, ribs, and chest. He may take comfort, however, from this consideration, that many an one has been cured of incipient consumption by singing exercises. This has been well known to voice trainers, even before the principles of the “Movement Cure” were developed. But remember always that it is not the foul air of a close room which gives oxygen to the blood, but the fresh air of a room well ventilated.

509.—There is another great distinction between ordinary breathing and the breathing of a singer. It is that, in ordinary breathing, the expiration, or “breathing out,” is done by simply “letting fall” the ribs and diaphragm with very little muscular effort—whereas, in the singer’s breathing, the chief art lies in giving out the breath gradually. To do this the muscles which govern the breath have laid upon them a new and unaccustomed work, that of not allowing the walls of the chest to collapse, and of controlling the economical dealing out of the breath. As the muscles have in this a new task to perform, peculiar to the
singer's wants, they will need special and careful drill—not violent or long sustained, but frequent. That extra one hundred cubic inches of air, of which Professor Huxley speaks, must be easily drawn into the lungs, and carefully and steadily let out.

510.—If the student will now read pp. 2, 3, "Standard Course," he will understand better than before the reasons for the instructions and exercises there given. I may add to the instructions of Exercise 1, that although it is necessary for the singer to take in breath through the mouth as well as the nose, yet it is important for him to form the habit of taking in breath through the nose as much as possible. It will, therefore, be well for the breath to be taken in with closed mouth in Exercise 1. It will also be seen what a refreshment it is to the pupil, when for a moment or two he has nothing to do, if, instead of looking about or whispering, he closes his mouth and breathes fresh air steadily and firmly. The importance of the instructions for position, "Standard Course," p. 2, should also be felt by the singer. Professor Huxley shows that in any violent expiration we naturally contract the muscles of the stomach, and those which connect the chest with the shoulders; while in resolution inspiration [breathing in] we naturally relax both these sets of muscles, and throw the body and head upward and somewhat backward. Now, as the singer has always to maintain a full chest, this habit of keeping a good position is most important. It may be noticed that some Teachers, nevertheless, recommend the drawing in of the muscles of the stomach, as a means of giving steadiness to the frame in the act of singing.

511.—In the quotations below will be found much to confirm what I have just said. Mr. Lewis B. Monroe's little work on "Physical and Vocal Training" is of great value. I here quote from it his description of the best position for speaking and singing, and some of his exercises in breathing. Dr. Taylor's "Movement Cure" also gives us some valuable hints from the physician's point of view. From Mr. Frederick Root's "School of Singing," I quote some useful hints. From Mr. G. F. Root's "Normal Musical Hand-Book," I quote a model lesson, and some "well put" advice on breathing and health, in which Dr. Frank W. Reilly has aided him. See also page 29 above.

512.—Let the young Teacher go back carefully to the practice recommended in "Standard Course," pp. 3, 14, 26, 45, and 81. Especially let him test himself by practice questions 57, p. 13; 43, p. 25; 79, p. 44; 74, p. 79; 77, p. 115. He that can do a thing himself is best able to show others how to do it:—

STANDING POSITION.

513.—1. Heels in a line, and together.
   2. Feet turned equally outward, forming an angle of sixty degrees.
   4. Body square to the front.
   5. Chest expanded and advanced, but without constraint.
   6. Arms hang easily at the side.
   7. Shoulders equal height.
   8. Shoulder-blades flat.
   9. Head erect, raised at the crown, not tipped in any direction.
   10. Chin slightly drawn in.
   11. Forns raised to the full height.
   12. Body poised slightly forward, so that the weight bears mainly on the ball of the foot.
   13. Eyes straight to the front.
   14. Whole figure in such a position that the ear, shoulder, hip, knee, and ankle are all in a line. No pains should be spared to get this position exactly; and the pupil should be required to observe its main points whenever he stands to read or recite, in order to establish as a habit an erect and dignified carriage of the body.

Weak children need to be particularly cautioned against making the back too hollow, and drooping the head.

ACTIVE AND PASSIVE CHEST.

514.—Standing position.

First. Relax the muscles and allow the chest to fall listlessly, as if fatigued. This is the passive chest.

Second. Elevate and expand the chest, in a position of dignity and self-reliance, somewhat as if deying a blow. This is the active chest.

This exercise should be simply muscular, and not depend upon the breathing.

The habit should be established of keeping, without restraint, the active chest in standing, walking, running, and whenever using the voice,—as in reading, declaiming, and singing.

FEARING THE BREATH.

515.—First. Inhale through the nostrils.

Second. Hold the breath a moment with a slight effort similar to that made in lifting a heavy weight. The muscles of the waist and abdomen will be firm and elastic like a drum-head.

Third. Give out the breath as you please. *[But not by closing the larynx.]*

EXPLOSIVE BREATHING.

516.—First. Inhale through the nostrils.
Second. Expel through the mouth as if whispering the syllable Hoo! to a person at a distance. Give out the breath in a firm and full column.

ABRUPT BREATHING.

517.—First. Catch the breath quickly through the nostrils. Second. Emit the breath with a sudden brief whisper.—Hoo!

EFFUSIVE BREATHING.

518.—First. Inhale a full breath. Second. Exhale through the open mouth in the most gradual manner in a prolonged sound of the letter h, making a gentle breathing murmur, as of a sea-shell when held to the ear. The expiration may thus be prolonged from twenty to forty seconds. Never carry the exercise to any painful or fatiguing extent.

RAPID BREATHING.

519.—Breathe rapidly and gently through the open mouth, taking care to impel the breath from the base of the lungs. There will be a slight, elastic motion of the front muscles of the body.

PROLONGED BREATHING.

520.—First. Draw in the breath through the contracted lips as slowly and with as little effort as possible. Second. Breathe out the air through the nearly closed lips slowly and gradually.—"Vocal and Physical Training," by Lewis B. Monroe, pp. 13, 19, and 27.

HOLDING THE BREATH.

521.—Rise! Take the breath fully, and sustain this tone while I count eight.

Gives them eight. Now while I count ten.—Stop the instant I utter my last count.

Now twelve.—Teacher counts about as fast as a moderate pulse beats.

A full breath, quickly taken, with the mouth open wide, will strike against the sides of the throat hard enough to make it cough and cause an irritation. Try it once, and you will see. They try. Close the lips partly, and when you take breath see that the current of air goes to the centre of the throat. When I raise my hand, fill the lungs, thus: Gives the example. When I drop my hand, breathe gently, thus: — Again, and hold the breath as long as my hand is up.

Te. cier’s Manual.

Keep the lungs full three or four seconds. If some bursts of laughter take place, so much the better. Join in their amusement, and try again.

Perhaps you did not notice whether you held your breath by shutting the throat or by keeping the ribs distended. The latter is the right way—the throat should be open all the time.

Let the class exercise. This may be enough here, but should the Teacher think best he can explain, thus:

Filling the lungs is a mechanical operation very much like filling a pair of bellows. The ribs are stretched apart by what are called the intercostal muscles, and the air rushes in to fill up the vacuum. This pressing the ribs apart also draws in the abdominal muscles, and brings them into a position to act quickly and effectively in controlling the breath. When the lungs are full, you can stop the breath, as has been intimated, by shutting the throat, at the same time relaxing, or letting go, as it were, the intercostal and abdominal muscles. This is hurtful, for it compels the delicate organs of the throat to bear an undue pressure, and leaves the great, strong muscles, which should do the work, in idleness.

When the lungs are full, the will should, as it were, keep hold of the abdominal muscles, and by acting upon them gradually for gradual breathing, and suddenly for sudden breathing, leave the throat with only its proper work to do, viz.: Quietly open during the operation of breathing, the vocal chords drawn easily together during the production of tone, and the windpipe acting freely and flexibly in its lengthening and shortening for differences in highness or lowness of sound. This is the delicate work of the throat. With the rough work of forcing the breath, or holding it back, or in any way controlling it, the throat should have nothing to do. That is the office of the intercostal and abdominal muscles.

Take the breath, and sing la again, while I count twelve. Try to control the breath in the right way. Keep the throat free from strain or pressure.

Use little breath. When I raise my hand take breath. I may keep you holding it for a little while, for the lungs should become accustomed to that sensation—it is excellent and healthful if not overdone. When I say sing, commence. Sing.

Now, again, but sustain while I count fourteen. Try to convert all the breath into tone. Do not let the tone sound breathy. Now, again, while I count sixteen.—Now eighteen.—Do not exhaust the lungs—that is hurtful. Stop the tone before reaching that point. — "The Normal Musical Hand-Book," by George F. Root, pp. 101, 102.

THE VIOLIN-BOW.

523.—The breath has been heretofore compared to a violin-bow, which, when drawn firmly and steadily across a string, produces a pure tone. Some of the experience of a person commencing to learn the use of the violin-bow, will illustrate that of a person learning to control the breath. The violin student, as well as the vocalist, must learn to will two kinds of muscular action; with one hand he must make quick, irregular movements, and with the other, slow, regular ones, though naturally the two members will incline to move alike. In attaining to what is correct, rather more thought must, in the outset, be given to the hand that draws the bow than to the other, or the tone would be very disagreeable. If the pupil were taught to direct the thought exclusively to the hand upon the strings, he would be sure to be a long time in learning that use of the bow which gives a good tone, and would, perhaps, acquire some bad habits which would always remain with him. It is even more necessary in singing than in violin playing that the thought at first be principally upon the more active agent in tone production, because the right hand is from habit more easily controlled than the breathing muscles; while, on the other hand, it is less necessary to think of the more passive agent, because the fingers of the left hand must be carefully placed to give different pitches, while the vocal chords can change from one pitch to another almost automatically.

525.—For the merely mechanical part of voice development you should be in the habit of thinking of the vocal organs as an instrument; one that is held still and played upon by the breath. Too many singers concentrate their thoughts upon the throat, and expect there to experience all the action required for singing. Producing high pitches will cause a slight feeling, as of tension, in the throat, and the vibration of all the tones will be more or less perceptible, but beyond these there should be no sensation in the throat during ordinary singing. The vocal organ should be, and be thought of as, a passive agent in tone production, and the breath as the active one. That this
is according to nature is proved by the fact that the muscles used for breathing are under the definite control of the will, while those of the vocal cords are not, but work, as it were, automatically.

To illustrate: We always know exactly what we are doing with our breath, but we do not know whether the vocal cords are at the right degree of tension for a high or a low pitch, or whether they contract or relax at all, till we test it by making a sound.—"School of Singing," by George F. Root, pp. 86, and 16.

**TAYLOR'S MOVEMENT CURE.**

524.—Increased respiration occurs simultaneously with every muscular effort. This follows from the fact that arterial blood, of which oxygen is an important ingredient, is essential in every muscular contraction; for in each contraction oxygen is required, probably, as a second result, to effect the destruction of the acting muscular molecules; hence the necessity of a continual supply of this principle through respiration. It will be noticed that an increased inspiratory effect does not succeed, but immediately precedes the muscular exertion, and is simultaneous with the suggestion of the will, which it seems to render more voluntary and plastic. As the area is raised to strike, the breath is drawn in; and if a strong blow is contemplated, the glottis is for a moment closed; then the muscular pressure is exerted upon the contained air of the chest, to force, as it were, the blood to take in an increased quantity of the power-liberating element. This involuntary "holding of the breath" is, without doubt, a very important aid to the respiratory act. It at the same time expands the chest, and aids, by pressure of the expired air, the solution of the oxygen. * * *

Respiration is entirely a mechanical action. It is performed by the muscles of the chest and abdomen, and the degree of perfection with which it is performed is determined by the condition and habits of the organs performing it. If these muscles are badly nourished and imperfectly used, oxygen can be supplied to the blood to support the body only in limited quantities. So it turns out that the amount of work a man can do is not so much dependent on his muscles as on his breathing capacity. If he can breathe well he can generally work well; if short-winded, though he may have the muscles of an Ajax, he will be left behind to a certainty in the race of life.

**535.**—There are two principal circumstances that control the amount of oxygen received into the system. One is the affinity of the blood and tissues for this element, which we have reason to believe varies with the health, habits, diet, &c. The other is the capacity of the chest in cubic measure, and the degree of the mobility of its walls.

That the walls of the chest are very mobile and well adapted to contain and to charge different quantities of air according to circumstances, is apparent from anatomical considerations. This cavity of the chest is bounded below by thin muscle, the diaphragm, which is convex upward during respiration, but which by contracting is flattened, leaving much space above it to be filled by the air which simultaneously rushes in to supply the vacuum thus produced.

The sides of the chest are formed by their ribs and their tendinous and muscular attachments. The ribs extend downward and forward from the spinal column and are connected with the sternum in front, by long elastic cartilages, except the two lower ones of each side, whose anterior extremities are entirely free. Simultaneously with the contraction of the diaphragm, the external muscles of respiration also contract. This action elevates the forward extremities of the ribs, causing them to incline a larger space; and it also turns them slightly outward, thus contributing to the same result. The extent of this effect is precisely in proportion to the degree of the muscular action. * * It may not only be inferred that the amount of air revived in respiration depends on the amount of the motion of the walls of the chest, but also that the amount of air habitually resident in the lungs depends on the tone of these muscular walls. Habitual immobility of the walls of the chest is characteristic of all chronic diseases.

536.—Great caution is indispensable in movements designed to enlarge the chest, for great injury is easily done in this direction. Persons of feeble habits we would caution earnestly against indiscriminate random movements. Let it be understood, and always borne in mind, that movements of this region tend more than any other to produce congestion. It is to be borne in mind, too, that the same act that causes the chest to become filled with air, assists also the flow of venous blood to the same locality. Hence movements of this region should always be given in such connection and order as to counteract or render impossible these perilous effects.—"Philosophy of Movements," Taylor's "Movement Cure," pp. 87, 104, 105, and 187.

**DR. FRANK W. REILLY.**

527.—Breathing. All material which contributes to the renewal of the atoms is, of course, food; not only what we eat and drink, but the air we breathe is as essentially food as bread and water, and more directly and momentarily necessary. We live and move at the bottom of an immense ocean of this necessary article of food, and out of doors this is always pure and fit for use. For every breath of it which we draw into the body, however, we send out an equal amount of poison—poison so deadly and active that if we enclosed the body in an air-tight bag, so that we had to breathe the same air over again a few times, we should die as suddenly and surely as though poisoned by strychnine or prussic acid.

If pure fresh air is necessary to any one class more than another, it would surely seem that vocalists were that class. For not only do they use this air as we all do, for food, but it is, of course, the spent through which the voice is formed. And yet practice and teaching are not unfrequently carried on in rooms where ventilation is so imperfect as to make them but a few degrees better than air-tight. To breathe well, and to secure fresh, pure air to breathe, are just as important points as to eat well and to eat proper food. The vocalist should make a practice of inflating the lungs as fully as possible, drawing the breath in through the nostrils slowly and steadily, and then allowing it to escape in the same manner. This should be repeated half a dozen times in succession, and the oftener during the day the better. An increase of lung capacity of fully 30 per cent, may be produced in three months by this simple practice, repeated four to six times a day. There is no better safeguard against diseases of the lungs, even including consumption.

528.—Care of the Throat and Lungs. Excessively cold or warm air are both injurious to the throat; hence learning to breathe habitually through the nostrils is of the first importance, as by the passage of the air through the tortuous windings of the nasal chambers, it is warmed sufficiently to prevent the injurious effects of large volumes of cold air striking the opening of the throat, as in breathing through the mouth, and even warm air is tempered in its passage in the same manner. Singers should be especially
careful about going from warm rooms, after use of the vocal organs, into the night air in cold or wet weather. Keep the mouth shut, and if the air is unusually damp, breathe through a folded handkerchief.

Bathing the neck and chest, both back and front, in salt water, and following this by a brisk walk, is beneficial, where there is a predisposition to weakness in these regions. In fact, bathing or washing the throat in cold water, either fresh or salt, and avoiding the too common practice of muffling it in heavy wrappers, should be systematically followed by those who have any tendency to catarrh, bronchitis, or any other disease of the air-passages. Over-protection enravetizes and makes the skin more sensitive to change of temperature; whilst the opposite course increases the vigour of the cutaneous circulation. renders the skin less liable to be affected by sudden changes, and tends to prevent congestion of the parts beneath.

In bathing, however, like so many other hygienic conditions, each individual is a law unto him or her self. When the usual tepid water is followed by depression, instead of by a refreshing, vigorous reaction, it is injurious; and for it should be substituted either water warm enough to produce a vigorous friction, or vigorous dry friction with the hands, a coarse towel, or a flesh-brush. If the tepid bath be necessary, it had better be taken just before going to bed, while cold bathing is more beneficial in the morning. An admirable tonic and invigorating of the cutaneous circulation is the use of a coarse towel, which has been dipped into a strong brine and then dried.

In connection with this advice as to treatment of neck and chest, it may be remarked that there is a deeper wisdom than is generally recognized in our custom of clothing the back more warmly than the front of the chest. The spinal cord and the numerous nerves given off from it lie nearer the surface than any other part of the vital organs; and consequently the back is more sensitive to cold and exposure, and so should be better protected. It is stated that "colds" are more generally caused by the impression produced by cold and damp on the back than in any other manner, except by wet feet; and it is certain that warming the back thoroughly will frequently cut short a "cold in the head."

This malady is so common and distressing to singers in changeable climates, that its cause and treatment should be generally understood. Colds are caused by anything which suddenly arrests perspiration. Perspiration is the passage through the skin of certain waste matters of the body in the form of perspiration. When this is suddenly checked these waste matters are retained in the body, and carried by the blood to other organs which they irritate. For instance, the lungs are generally the first to attempt to discharge them in the breath. Their passage through the throat, mouth, and nostrils irritates the membranes, causing coughing, sneezing, watering of the nose, &c. Obviously the proper thing to do is to start the skin action again as speedily as possible. For this purpose, warm fluids, such as lemonade, herb teas, &c., are useful; and, as, also, as before remarked, the thorough warming of the back as soon as any of the symptoms of a cold make their appearance.

598. — Dress. Unrestricted motion of the lungs is at the foundation of successful vocalization. Even the best adjusted clothing impedes this motion to some extent; for instance, a man of medium height and with a hundred and thirty cubic inches of air, as his maximum when dressed in loosely fitting clothing, will inspire one hundred and forty cubic inches when naked. So it is with women. So it is the effect of tightly-laced corsets in the one sex, and pantaloons buckled about the waist for support, instead of suspenders, in the other, may be imagined.

Pressure around the abdominal muscles is, in fact, as reprehensible in man as in woman, and more injurious to the voice; because in man the motion of the lungs reaches downwards to the abdominal muscles to a much greater extent than in woman. If this were not so, very few women, in the ordinary style of dress, with skirts buttoned or tied around the waist, and corsets tightly laced, would be able to sing at all. But woman is so constructed that she uses largely the upper portion of the chest in breathing, and thus can sustain an amount of pressure from bands and laces, and a weight of hanging clothes around the abdomen, which would make a man gasp for breath. It is not to be inferred, however, that she can do this without injury to other functions, because her voice and breathing do not suffer. It is sufficiently well understood that backaches, special weaknesses affecting the functions and happiness of woman's life, and other ailments are caused by this unnatural compression. "Normal Vocal Hand-Book," by George P. Root, pp. 55, 56, and 59, 60.
breath of an Hau boy pressed too much by the lips of a bad performer; fear or constraint injure the flexibility of the organ; while taking the breath with the voice unsteadily and fluttering. Many plans for lengthening sounds and strengthening the lungs are recommended; but a simple one Mr. Curwen gave me many years ago I have often used with advantage, and especially recommended it to public Teachers whose voices have been too weak to get a full command over their large schools. This is to repeat aloud a verse or part of one making breath of certain parts, and yet not allowing the lungs to collapse till the set-time. "Transactions," pp. 52, 53.

530.—The choice of breathing places (see “Standard Course," pp. 9, 16, 30, and 98), is an exercise of judgment with which even the pupil should be familiar. Much more should the Teacher be well practised and ready in it. He will often have to decide points of this kind off hand. I recommend him to answer carefully to himself questions Nos. 94, 95, and 96, at the end of the Third Step “Standard Course,” and questions 98 and 128 at the end of the Fourth Step. It will be better for him to consult with friends, or even with pupils about the answers, and it is quite essential that he should sing the Music and realize the correctness of his markings. Below are some quotations which will enforce these remarks and aid the Teacher:

Our first attempt

531.—Several friends have objected to the notice we have taken of breathing places in “arranged Reporters,” No. 1, and “Standard Course” Exercises, No. 2, that the management of the breath is a subject which belongs to an Advanced Class, and not to an Elementary one. It is true that the power of sustaining breath in long and difficult passages, is one of the last accomplishments of the best singers; but the simple art of taking breath in the right places (for the sake of clear sense and vigorous intonation) is a most elementary thing. The best Teachers have always paid attention to it. We hope that the attention of all our friends will now be directed to the practical carrying out of the principles laid down in “Standard Course.” Whenever your phrase fails to enunciate the words in a clear, sensible manner, mark the breathing places. Whenever you flatten in pitch, and the end of the line is given with less punch than the beginning, mark the breathing places. Two of our best Teachers who have recently used the books above mentioned, have scored on paper nothing thanks to us for these little innovations to which we have referred.—“Tonic Sol-Fa Reporter,” 1858, p. 28.

Mr. John Spencer Curwen

532.—The chorus singer ought never to forget that he, no less than the soloist, is charged with a double duty as he sings. He has not only to produce the best tone and the finest gradations of force of which his voice is capable, but he has to utter words and sentences which bear a definite meaning to those who are listening. The observance of elocutional rules in singing is a mark of the finest choir. In Teacher’s Manual, its perfection it may be reckoned among the highest accomplishments of choral training. A choir which delivers its words as a good reader would deliver them, not only discourses sweet sounds, but it lights up the Music with an elocutional force and meaning which appeals to the mind as well as to the ear. To listen to a choir which has attained this power is a rare enjoyment.

Yet this habit of elocutional singing, which generally distinguishes the finest choirs, is one which should be, and easily may be, cultivated from the first in Elementary and Intermediate Choirs.

The first, and by far the most important branch of this subject, relates to the management of the breath. The human voice cannot send forth an uninterrupted stream of breath like the organ; it must be interrupted at frequent intervals to obtain a fresh supply. The problem for the singer is, How and when to do this! The untrained singer sings on without taking breath as long as he can hold out. If the music is rapid, and admits of few breathing places, in frantic effort to reach the next breath which is due, he heaves and spills the music. Even when he takes breath he has not the power to emit it gradually, but it rushes out spoiling the tone and spoiling the singing. Untrained singers habitually give the first note after a breath heavily. Here is a line of a well-known hymn-tune, which, sung slowly, they would accent as marked—

\{
| :d | :m ! :s | :d’ ! :d’ | :t | :t | :t | :t |
\}

The reason is that they have not attained that control over the muscles regulating the supply of air to the lungs which is the reward of lengthened exercise. Frequent practice in filling the lungs, in holding the breath, and especially in letting it out in a slow and even stream, will soon give this control. When breath is taken, it is very important to breathe deeply, and not merely to catch a short breath. One of the earliest efforts of the novice is to secure this full draught of air with as little change in the voice or quality of tone as possible. A friend who had heard Mr. Sankey in the “Messiah,” remarked to me that, wonderful to relate, he never took breath during the longest of the Handelian runs. Of course, the explanation was that the breathing places were imperceptible; but what a tribute to the art of the singer this misconception was! We have only to watch public singers to notice what deep draughts of air they take in, and how well they preserve the continuity of their singing: that by merely listening to this tone it is impossible to tell that at one time their lungs have been nearly empty, and at another time they have just been filled. The singer’s rule should be, “Keep yourself comfortably supplied with breath,” and the all-important question now comes, “Where may it be taken?”

In singing, as we have already noticed, the arts of Music and elocution are united. As the poet says, “Music” is “married to immortal verse.” But the two, like other wedded couples, have their differences, and unfortunately these are of constant occurrence. Music has phrases which every one instinctively feels, and between which every one instinctively takes breath. But speech, too, has its phrases and natural pauses which can-
not be disregarded without sadly interfering with its meaning. If the elocutionary and rhythmic pauses always occurred together, the way of the singer would be perfectly clear. But the crossing and conflict of the melody phrases and the verse phrases is very frequent. Fortunately, the singer has only one thing to do when the phrases are in conflict—he must always sacrifice the musical phrases to the elocutional. Every one who reflects for a moment will conclude this. We do not sacrifice the rhythmic proportions of the music from any indifference to them, but because we feel that the sense of the words is of supreme importance. Whatever happens, the meaning must not be obscured or rendered ridiculous. As the aim and pretext of the Music is only to illustrate and enforce the words, to them it must be subordinate.

533. —What are the rules for elocutionary pauses? To know them in full we must study books of elocution, or, better still, observe the habits of good readers. People without special training instinctively feel them and observe them always in their own speech, and generally in their reading. The first rule, and the rule which in its breaking is the cause of nine-tenths of the elocutional errors of ordinary choirs and congregations, is, NEVER TAKE BREATH BETWEEN WORDS CLOSELY RELATED IN SENSE. The following lines from a little piece, entitled, 'Come unto Me' (Reporters 543), with the wrong breathing places, as they may be heard given by a raw Elementary class, will illustrate this rule. The comma shows the breathing places:

Come unto Me when, shadows darkly gather.
Ye who have unburnt when, spring-tide flowers were taken.
When the sad heart is, weary and distressed.
Bloom the fair flowers, the, earth too rudely pressed.
Soft are the tones which, raise the heavenly hymn, &c.

Of course in each of these lines the breath should have been taken one word earlier. When in other lines the phrases of words and Music correspond, the singers will be right:

Seeking for comfort, from your Heavenly Father.
There, like an Eden, blossoming in gladness, &c.

Another example is to hand in Mendelsohn's "Morning Prayer" (Reporters 482). In this phrase—

Singers will naturally take breath between 6 and 7. But see how this suits the words of the three verses—

The woods alone are, bending bowly.
The tears that lately, overweighed.
That I a cheerful, pilgrim borrow.

The second verse is the only one in which a breath in that place is tolerable, and even here it is only the least objectionable place in the line. In the first verse we must breathe after the word 'alone;' in the third after 'pilgrim.' Pol-songs are very fruitful causes of bad breathing, because to the same musical phrase we have to repeat several sets of words, in each of which the elocutional pauses will probably be different. The English, Glee is free from this defect. Only one set of words is sung to the same Music, and the composer can thus match his phrases to those of the poet. The part-song writer would be driven distracted if he tried to make his phrases correspond with three or four verses at once. For cases of violent conflict between musical and verbal phrases, adapters of words are often to blame. When words have to be written to Music, reversing the usual process, the adapter ought to take the greatest care that his words do not at any rate divide over clearly-defined musical phrases. Here it may be remarked that some Tonics Solfegges are a great deal too fond of Sol-faing. They sing pieces over and over to the syllables when they ought long since to have passed on to the words. Not only do they by this practice entirely miss the life and meaning of the Music (which is hidden from them until they have sung the words), but they form habits of breathing according to the Musical phrases, which it is very hard to unlearn when the elocutional pauses come in to contradict the Musical. The syllables, be it ever remembered, are only stepping-stones to the words, and though the opposite extreme of singing at sight to words is, we think, unwise, the syllables should be discarded as soon as the notes of the piece can be sung correctly.

535. —The practice of marking breathing places is a good one, and as it is now being adopted by such composers as M. Gounod and Mr. G. A. Macfarren, conductors, in general, need not fear that following nor need singers consider as childish a plan which has such high sanction. But it is impossible to mark every breathing place, and those that are marked will often be unobserved unless the singer possesses a feeling for the elocutional delivery of the Music. The idea of dividing a word or closely connected words, ought to jar upon his sense; he should feel that he has done a dishonest act. We have seen the pointed remark, "If you were a word, how would you like to be cut in two," produce excellent results in a choir. The conductor can do much to implant a care for elocution in his singers by teaching them to look on the
THE VOICE; DESCRIPTION OF THE LARYNX.

words as an integral part of a composition, worthy of study by themselves as much as the music. He should study reading, and before a new piece is sung to words should read them through with all the elocutional care and skill he possesses, endeavouring to excite in them. It is true, no doubt, that many of the words we have to sing are contemptible, and that in many of them there is no meaning to discover, but we must make the best of them we can. In slow music, especially anthems, we are often obliged to breathe between closely connected words. Similar cases occur sometimes in Secular Music. In Handby’s “Awake Zionist Lyre,” at “Impetuous see it pour,” and “Rebellow to the roar,” the last word is in each case prolonged through several measures in a vigorous, running passage. To do this run properly, it is imperative that the singer should take breath before “pour” and “roar,” contrary to rules. In such cases the breathing should be as much as possible concealed. Do not come down heavily on “pour” and “roar,” but sing them evenly with the previous words. Occasionally the musical and verbal phrases are broken when they coincide. Here is a passage from “Come, merry comadres.”

Mr. 138.

\[ \text{The rhythm of our.} \]

\[ \text{feetLaLaLa la La la La.} \]

Both musical and verbal phrases manifestly end after \( \text{feet} \), yet unaccompanied singers, whose lungs have been tried by the quick music, will give a frightful gasp after “our,” evidently because they feel it is their only chance. Handel’s chorus, “May all the host,” contains a similar passage.

THE LARYNX.

538.—The instrument of voice—the larynx—is that little grizzly, drum-shaped box which we can all feel in our throats. It stands on the wind-pipe, and in ordinary breathing, the air passes up and down through it freely.

539.—But when voice is to be produced, it can be nearly closed by two membranes, or lips, one reaching from either side and capable of meeting tightly stretched in the middle. These membranes, or lips, are called the vocal cords.

540.—Through the narrow slit, called the glottis, between these stretched cords, a little stream of breath forces its way in producing sound.

541.—The pitch of the sound produced is according to the thickness, the tightness, and the length of the vibrating portions of these membranes or lips.
Fig. 1. Open for Breathing.

Fig. 2. The whole Lips Vibrating.

Fig. 3. The Thin Edges Vibrating.

Fig. 4. Open for Breathing.

Fig. 5. The whole Lips Vibrating.

Fig. 6. The Thin Edges Vibrating.

Fig. 7. A Small Part of the Thin Edges Vibrating.

Fig. 8. The Tone Eb, as produced by the Tight Whole Lips.

Fig. 9. The Tone Eb, as produced by the Slack Thin Edges.

542.—To understand rightly these vocal cords, let us first look at them from behind, then from above, and last from one side. While looking from behind, let us suppose these cords or lips (which stretch from the front to the back of the little vocal box), suddenly cut across by a knife passing downwards—so that we may see the inside of the front half of the larynx. Fig. 1 will give some idea of this "vertical and transverse" section, and we shall see that, as Dr. Huxley says, "the vocal cords are, properly speaking, not cords at all, but elastic cushions with broad bases fixed to the larynx, and sharp, free edges, which constitute the lateral boundaries of the glottis." The figure gives the outline of the inside of the larynx. The dotted portions indicate the two vocal cords, or elastic lips, as they would appear, standing somewhat apart. They extend towards the front as indicated by the short dotted lines. Above them, all round, are cavities called the ventricles of the larynx, and above these are other fleshy projections which are sometimes called the false vocal cords, but are known to have no part in the production of voice. What modifying influence either these or the ventricles may possess has not yet been correctly ascertained.

543.—For the production of voice these lips must be brought together and made to vibrate by means of a thin, steady current of air passing up through the slit. This may be done in two ways. Either the whole mass of the lips vibrate, as in Fig. 2, or only their thin edges as in Fig. 3. It is like the difference between using a thick string and a thin string on the violin cella. By means of the thick string the lower tones, generally speaking, are produced, and by the thin string higher tones. But to some extent the same tones can be produced on both strings. The first mode of producing tones of the voice I have ventured to call the Thick Register; the second mode the Thin Register. The point at which the vocal cords naturally must change from the thick to the thin register is just below the tone G, represented by a note standing on the second line of the Treble Staff. Most commonly the change takes place at F or E. This point of change is called the "Great Break." It is important to notice that this break is at the same place, not in relative but in absolute pitch for all voices. That is, it is at the very top of the Bass voice, in the higher part of the Tenor voice, in the middle of the Contralto voice, and in the lower part of the Soprano voice. The idea that the breaks of female voices are the same as those of male voices, only an octave higher is an error—an error which has arisen from the fact that there is a break in the female voice, though another kind of break, an octave higher than this of which we are speaking.

544.—Let us next look at these vocal cords from above. I have myself several times seen, through the kindness of Herr Behnke, with his large laryngoscopic apparatus, the phenomena described in the following diagrams. First, I have seen the glottis (or opening between the cords) wide open as in breathing. See Fig. 4, the upper part of which represents the front of the larynx. Second, I have seen a tone produced in the Thick Register, with the cords vibrating in their whole thickness as in Fig. 5; and third, I have seen a tone produced in the Thin Register, in which only the fine edges of the cords vibrate, See Fig. 6. In the Thick Register I could see the rapid shakings or vibrations of the cord, but in the Thin Register the vibrations were too delicate and too rapid for me to see them. The cords appeared to me to stand close together, and I lost that fuzzy-shaded appearance which I had seen in the Thick Register.

545.—Our view of the interior of the larynx from one side will now help us to understand how the vocal cords are stretched, and so produce gradations of tone, ascending as the cords become tighter. Any one who feels his own larynx may ascertain that its walls are made of two pieces of gristle. The upper piece is called the Thyroid Cartilage and the lower the Cricoid. A little chink, or crevice, between the two cartilages may
easily be felt in front of the larynx. We may even feel this crevice growing smaller and smaller as we sing the Scale upward in either of the registers, as the higher cartilage gradually comes down like a cap upon the lower till the chink is closed up.

546.—If now we take a side view of the inside of the larynx, supposing it to be cut in two vertically from back to front, we shall see of course only one of the vocal cords. We shall see it attached at the back (that is, to the left hand) to a part of the lower cartilage which does not move, and attached at the front to a part of the higher cartilage which does move. We shall also see that from the position of the hinge on which the higher cartilage moves upward and downward, it must necessarily possess the power of stretching or relaxing the vocal cords. Fig. 10 shows a rough outline of this phenomenon. The thick lines represent the cartilages with the chink between them in front, and the thin line at the top represents the single vocal cord which we are supposed to see. The dotted lines represent the upper cartilage having moved down so as to close the chink in front, and with the vocal cord now obviously stretched.

![Fig. 10](image)

c. Outline of front of lower cartilage.  
d. Upper cartilage brought down, closing the chink.  
e. Vocal cords stretched.

547.—If any one in the process of singing, beginning in the Thick Register and going upward, will carefully feel the chink in the front of his larynx, he will notice that it becomes smaller and smaller as the thick cords are tightened until he comes to the great break, when, the larynx ascending a little, the niche or crevice suddenly becomes larger, and then becomes smaller and smaller again as the thin cords are stretched. It is obvious that this process of tightening the cords by the gradual descent of the upper cartilage is carried through twice, first while the cords are vibrating in all their thickness, and then again while only the thin edges vibrate. Indeed, as will be presently seen, it is to some extent carried through a third time.

548.—The early Laryngoscopists thought that it was by the shortening, rather than by the tightening of the cords, that the pitch was raised, and this mistake arose from the fact that as the Laryngoscopist looks with his mirror down into the larynx, over its front wall, the downward movement of the upper cartilage in tightening the cords makes portions of them disappear from the sight. Herr Behnke has, I think, clearly established the fact, that it is by tightening, not by shortening, that the pitch is raised. With this idea corresponds the observation of other Laryngoscopists which is represented in the two following diagrams. Fig. 8 represents the vocal cords producing the tone Eb (on the lowest line of the Treble Staff) in the Thick Register. The thick strings must be very tight to produce so high a tone. Fig. 9 shows the vocal cords producing the same tone with their thin edges. The thin strings are naturally very relaxed in order to produce a tone which for them is so low.

549.—Thus far we have seen that the register is changed by using thin vibrators instead of thick, the tones within each register being raised by tightening. For the next register we cannot make the cords either thinner or tighter. What must we do? As a shorter string gives higher tones than a longer one, the only way would be to shorten the cords, and then use our tightening apparatus again for going up yet higher. This is done in the register which exists at the very top
of the female voice. That register is formed by the shortening of the slit between the vocal cords, leaving a little opening near the front, the edges of which are drawn tighter and tighter as the tones ascend. This mode of producing sound we call the Small Register. See Fig. 7. Madame Seiler says: "It required long and patient practice before I finally succeeded in drawing back the epiglottis, so that I could see the glottis in its whole length. Not until then was I able to observe the following: With the F\* on the fifth line of the Treble Staff, the vocal ligaments suddenly closed firmly together to their middle, with their fine edges one over the other. This closing appeared as a fine red line extending, from the arytenoid cartilages at the back, forward to the middle of the vocal ligaments, and leaving free only a third part of the whole glottis, immediately under the epiglottis, to the front wall of the larynx. The foremost part of the glottis formed an oval orifice, which, with each higher tone, seemed to contract more and more, and so became smaller and rounder. The fine edges of the vocal ligaments which formed this orifice were alone vibrating, and the vibrations seemed at first looser, but with every higher tone the ligaments were more stretched. The larynx remained in its natural state." With this agree Dr. Merkel, of Leipsig, and Herr Behnke, of Birmingham. See Fig. 7.

650.—In one other point the Laryngoscopists agree. It relates to the Thick Register, and to that part of it which lies on or below middle C. They agree that in the production of these tones the little cartilages which form a continuation of the vocal cords at the back of the larynx are open. Herr Behnke thinks that they do not assist the vocal chords by their vibrations, but that they simply allow the air to escape so as to relieve the pressure of wind upon the vocal cords and make the tone purer. We have some analogy to this in the way in which harmonium makers treat the reeds in certain stops. But harmonium makers have not discovered that contrivances for prevent-


ing too sudden a pressure of wind are only necessary in the low tones. This little escape valve at the back of the vocal cords is closed above middle C, and in most male voices and some female voices above the A, below. This changed action of the organs divides the Thick Register into two, the "lower thick" with the escape valve, and the "upper thick" without it.

551.—Madame Seiler thinks that the Thin Register is divided in a similar manner into upper and lower. But although I myself easily detect a difference in the quality of the upper and lower tones of the Thin Register, Herr Behnke and other laryngoscopists do not recognize that change in the organs which Madame Seiler suggests. Further investigations may throw light upon this point; meantime it will be well for practical purposes to recognize Madame Seiler's distinction.

552.—Turning back to the chink, which is felt in front of the larynx, when its upper gristly wall rises from the lower gristle, leaving the vocal cords behind it relaxed; if either a man or a woman sings G (on the second line of the Treble Staff) softly, so as to deliver it in the Thin Register with relaxed cords, this chink will be felt to be quite open. If, then, they sing the F or E below in a strong, decided manner, so as to secure its being at the top of the Thick Register with stretched cords, they will notice that the chink suddenly closes. In the same way, only to a less degree, I have found the chink open at the bottom of the small register in women, and closed at the top of their Thin Register. This shows that the tightening process goes on through each of the registers; that it extends twice as far in the Thick Register as in the Thin; and twice as far in the Thin Register as in the Small. Madame Seiler uses the word "Falsetto" for what we call the Thin Register, and the word "Head" for what we call the Small Register. But the words' Falsetto and Head are used in such different senses by different writers, that I was obliged to abandon them. See above, pp. 17, 18.

553.—These natural registers are, no doubt,
connected with the laws of tension, or "strain," in various substances. Just as a piece of string is capable of one degree of tension, a piece of wire of another, a piece of India-rubber of another, and so on—so there must be a certain degree of tension, of which human membranes are capable. When in singing upward the thick lips of the larynx have been stretched to that degree, there is a sudden change to the thin edges of those lips. These thin edges being at first slack are again gradually tightened to the same degree of tension; and when that is reached, there is another sudden change to a shortened length of those thin edges. This shortened length is at first slack, and then gradually tightened like the others. But as, in experimenting for the Monai bridge, Sir William Fairbairn found that different kinds of iron will bear different degrees of tension; so it may be that there are different qualities of human fibre, the membranes of one person being able to bear a somewhat greater strain than those of another. Thus it comes to pass—first, that one person can naturally carry the lower register a tone or two higher than others; and second, that by daily practice any one can train his vocal cords to bear increased tension, so as to sing with a strong lower register, what is commonly taken with the weaker and higher one. These last are called "made tones," and some unwise voice trainers are very proud of them. They can be retained for a considerable time by constant practice; but they are not natural and will not last. In choral classes any attempt to use them puts the voice out of unison with the other voices, makes it stand out in a painful manner, and should never be endured. The best voice trainers, such as Madame Seiter, protest strongly against "made" tones. "Such tones," she says, "especially in the female voice, have that rough and common timbre which we are too often compelled to hear in our female singers. The glottis also in this case, as well as the parts of the larynx near the glottis, betrays the effort very plainly; as the tones ascend, they grow more and more red." Thus nature revolt against "made" tones. Still there is some difference in different individuals. Thus some voices ascending will break into the Upper Thick Register on B, some on C, and some not till D. Thus also some voices will break into the Thin Register on E, some on F, and some not till G. It is the same with the break into the Small Register at the top of women's voices. On this account it is advisable for the same voice to produce these two or three tones at the top of each register, sometimes in one way and sometimes in another. We call them optional tones.

554.—Although the registers are plainly shown at pp. 28 and 106, "Standard Course," a different way of exhibiting them may be of service. In the diagram on next page, the two sets of five lines are supposed to belong to the Treble and Bass staves, with the one ledger line for middle C between them; and the Minims are supposed to indicate the first definite unmistakable tone, going upwards, of a new register. The two or three tones below are the optional tones. It may help the memory to notice that in beginning at the top there are four tones—C^2 B A G—in the Small Register, and three tones—F^1 E D—in the Upper Thin Register; and that this series repeats itself, there being four tones—C^2 B A G—in the Lower Thin Register, and three—F E D—in the Upper Thick Register.

555.—For the Teacher it is very necessary that the action of the organs of voice in singing should be clearly understood, but for the pupils it is not necessary. If once the habit has been formed of singing easily and singing softly, it is only when pupils are allowed to make violent efforts or to sing loudly that dangers arise. In practice, such commands as these,—"Sing that phrase more softly," or "Take another breath and try and make that tone more beautiful"—will be quite sufficient of themselves to bring out the right register. (See quotations below). The points to be observed in dealing practically with the registers are carefully shown step by step in "Standard Course," pp. 32, 68, 103—110. Voices differ so
much in quality and volume, that it is not always easy for the young student to distinguish the registers. Let him obtain, if possible, a good Teacher in this study. If he cannot do that, let him first study his own voice, making notes upon its quality and volume in the different registers and its most natural places of break. If there are things he cannot understand in his own voice, the probability is that the next voice he examines will explain them. Let him examine some twenty or thirty voices of all kinds, making careful notes, and comparing his notes. It is only in some such way as this that the student can understand the registers. On Tenors and Baritones I strongly urge the habitual marking of optional tones and best places for change of register. (See "Standard Course," pp. 82, 68, and 110).

556.—In the classification of voices the Teacher will necessarily be governed by the opportunities he enjoys. In "Standard Course," p. 29, the principles of a first rough division are given, and the subject is more fully developed at pp. 81, 108, and 109. The plan adopted by Mr. Longbottom, and described above at pp. 69 and 70, will be found to be of great service. The smaller the class, and the more time the Teacher has at command, the better this work can be done.

557.—It is easy to see that as the strengthening of the voice and its facility of action depend upon the power of muscular contractions, exercise—frequent but never fatiguing—is the means, the only means by which these objects can be attained. (See "Standard Course," pp. 150—156).

558.—Men's voice singing. It will be seen in the quotations below from Madame Seiler, Herr Behnke, and Mr. Callaway, how within the last few years Tonic Sol-faists have made some effort to restore the Old English practice of training the first Tenor or Counter Tenor voice, and of avoiding the high "made" tones of the Thick Register. The result of discussions on this subject at our meetings in various parts of the country have been very interesting. Chiefly through the efforts of Mr. Callaway, of Birmingham, aided by the
model choirs of Mr. Stone and Mr. Proudman, and by the generous subscriptions of a large number of friends, Men's Voice Music has become very popular amongst us. Those who have heard a Men's Voice Class at its first beginning, when the counter Tenors began to employ their Thin Register, have been astonished at the end of the season to notice how strong it had become. The neglected thin edges of the vocal cords at first scarcely knew how to vibrate. The muscles which rule them were not strong enough to bear any amount of breath, but constant exercise, which was never allowed to fatigue the organs, soon produced its natural effect, and the cords could easily bear the strain of a stronger breath and a louder tone. The peculiarity of this register, carefully developed, is, that it lasts so wonderfully and keeps up even in old age. This is well known in Choral Societies and Cathedrals, and I have constantly observed it in the German Men's Voice Choirs. It is only due to Mr. Callaway to say that to him I owe my present greatly improved and corrected view of this subject of registers. His own extensive and careful observations, even before the physiological discoveries of Madame Seiler and Herr Behnke were known to him, led him to differ from the commonly received opinions, and to stimulate me to further enquiry. We are I think now a very long way nearer to the truth on this subject than we have ever been before. Our Tonic Sol-fa literature is already rich in Men's Voice Music, and I heartily re-echo Mr. Callaway's strong desire, that it may be quickly and widely introduced into our workshops, our mines, our soldier's barracks, and our college halls. My readers will be much interested in Mr. Callaway's "History of the Counter Tenor Voice, Reporter, 1872, p. 147, in connection with Herr Behnke's article at p. 179 of the same volume. There is also an admirable article by Mr. Proudman on "Men's Voice Music and Men's Voice Chois in Reporter, 1871, p. 195.

559.—Women's voice singing. As a parallel to the Men's Voice Music, some very delightful efforts have been made to promote Women's Voice Music, and to aid such efforts the "Fourth High School Vocalist," some numbers of the "Nightingale," and other pieces have been prepared. When our friend Mr. Sarli sustained for a number of years an influential Sol-fa Institute at Islington, he always adopted the plan of gathering the ladies for three-part singing half an hour before the choral practice, and the gentlemen for four-part singing half an hour after. He found that in this way he could study the voices better, get them better classified, and give them a degree of cultivation which very greatly improved the choral practice itself. On the subject of boy's voices, I have pleasure in referring to the paper by Mr. Evans, Musical Instructor to the School Board for London, quoted below p. 307.

600.—The young Teacher should test his own skill by answering conscientiously the questions of "Standard Course," step by step.—Page 44, Nos. 88—90, 102—104; p. 80, Nos. 117—121; p. 116, Nos. 119—122.

MADAME SEILER.

561.—Upwards of a hundred and fifty years ago, when every good tenor was required to sing A (second space of Treble Staff) with a clear, full chest tone, this note, according to the orchestra pitch then, was not higher than a note between F and G, according to the present orchestra pitch in England and America. Since that time the orchestra pitch has everywhere gradually risen so imperceptibly, that this important fact remained unknown to many singers and Teachers, and until recently has been only rarely noticed.


And yet it is precisely this much higher pitch, and the consequent unnatural extension of the limits of the registers, which is the chief cause why most voices now-a-days last so little while.

That the registers may be forced up beyond their limits is possible, we have seen. But observation teaches us that it cannot be done without a straining of the organs, which may be both seen and felt, and no organ will bear continued over-straining. It will gradually be weakened thereby, and become at last wholly useless.

This is a simple fact, scientifically established, universally known. It admits, therefore, of no doubt that the common custom of forcing the registers beyond their natural bounds injures voices, and seriously affects their durability. Even when the organs are so strong that they can bear the unnatural effort for a considerable length of time, they gain nothing in grace and timbre. Like every thing else unnatural, it carries with it its own punishment. Our tenor singers are, for the most part, only for a few years in full possession of their voices, while the earlier
singers knew how to keep their voices fine and full to their latest age.

The old Italian masters were proud of being able so to educate the Falsetto Register of a Tenor voice, that it was difficult to distinguish chest tones and Falsetto tones from one another, even for an ear accustomed to observe the finest distinctions of sound. And this act is by no means so difficult as is supposed, and is not dependent on the natural strength of the first Falsetto tones. When this equal physical force exists the power of bringing the edges of the vocal ligaments into vibratory motion, and when these tones at the beginning of a song or before the chest tones of the same voice, are weak and thin, then they may, with skill and perseverance, be trained to quite similar female.

That the male voice requires far more time and practice than the female to effect an imperceptible transition from the chest, and offer to the Falsetto, is unquestionable. And while this transition is always so very apparent in the man's voice, it is often scarcely observable to a practised ear, even in uncultivated female voices. Women, in speaking, always use the second chest and the first Falsetto Register, continually passing from one to the other of these registers without any change in the position of the mouth or of the resonance apparatus of the voice. They are thus all their lives long unconsciously practising this transition, and because of this equal physical use of the chest and Falsetto notes, the great physiological difference of these two registers almost entirely disappears. Although men do not use the Falsetto register in speaking, it is not yet proved to be impossible for the male voice to attain the same results as the female.

When in the beginning the Falsetto tones are sung always piano and very staccato, by long-continued, careful practice with entirely the same physical treatment of both registers, a smooth and natural transition from one to the other is most easily obtained. Thus the Falsetto tones gain more and more in fulness and strength, and sound far more agreeably than the forced-up chest tones of our tenorists, sung with swelling-cut throats and blood-red faces.

The education of men's voices involves many difficulties which do not exist in the case of the voices of wo-

men. Almost all men speak and sing in one register—tenors mostly in the second chest register, basses mostly in the first, and oftentimes indeed not even in a correct, natural manner. With this one register they sing as high and as low as they can, and this they consider the whole compass of their voices. The low chest register is rarely found good and natural, as regards the beauty of sound. In order for the production of these low chest tones, to set the vocal cords vibrating in their whole length and breadth, it is necessary that a fuller column of air from the lungs should pass upon the glottis through the wind-pipe, which is readily of itself enlarged thereby. The easier and the more naturally this takes place, the more beautifully and naturally do these tones sound. Under the delusion that only strong singing is beautiful, and that this can be achieved only by extraordinary exertion, most of our masters have a peculiar way of pressing out the wind-pipe, which is not only very fatiguing, but gives to the low tones a rough, disagreeable sound. Among public speakers also this exhausting, faulty way of bringing out the chest tones is not uncommon, frequently rendering their voices quite incapable of use. — The Voice in Singing, by Emma Seter, pp. 60–74.

THE FIRST TENOR VOICE. 562.—The chief difficulty in the way of those who would like to have good men's singing, is that of obtaining tones capable of singing the highest part with good effect. Either a dreadful strain is inevitable, which injures the voice of singers and affects the hearers, or music of a low compass is chosen, which from that cause would be too dull and sombre to please, even if it were not, as it usually is, otherwise uninteresting. The compositions of musicians who have been familiar with the execution of men's choruses, such as Bell, Küchen, and de Rillé, make manifest what experience confirms, that, except in unison passages, the music to be sung should be neither too high nor too low. As for particularly brilliant effects should ascend above G; yet there need be no lasting difficulty in obtaining good and easy singing of such music.

First tenors are not really scarce, nor nearly so scarce as second basses, but they require, more than any other male voice, discreet training and good taste to develop their powers. So little true is it that they are rare and marvellous persons, that one German writer on men's singing recommends that all the tenors should be trained as first tenors, and their division into two parts be regarded as entirely arbitrary, founded on no necessary difference in vocal compass. I believe that writer to be somewhat in error, but far nearer the truth than those who go about singing and seeking for first tenors as if they were strange natural growths, like mistletoe, or even-leaved ash.

The first tenor voice is chiefly distinguished from the second tenor by its freedom and power in the use of the Falsetto or Thin Register. It is usually lighter and more flexible over the greater part of its compass as well; but it is its greater ease on the highest notes which really distinguishes it. It is not usually characterized by a higher chest compass. The powerful voices which can produce exceedingly high chest tones should rather be rejected than preferred for the first tenor part. Their high tones may please themselves, but in part-music will please no one else. Not robustness but brilliance and delicate and feminine sweetness should be the characteristic quality of the higher tones; and those lusty voices, however clear and fine, can only with great difficulty be made satisfactory in the first tenor part.

The fact that the voice required is largely the result of training, lays a preliminary difficulty in the way of the chorus master who wishes to discriminate among the voices at his command at the beginning of a course of teaching. This difficulty is not lessened, but increased, when the chorus is composed of men who have been accustomed to sing in choirs of mixed voices. Such singers will probably have acquired habits of using their voices and notions about them, which render it a matter of great uncertainty where in a men's chorus they should be placed. Experiments to ascertain their compass may be very resultless. A good, clear baritone, may sing a very fair G; while one who would make a splendid first tenor may begin to strain and squeeze as soon as he has passed D. Of those who are unmistakably tenors, the ones whom after experiences reveals to be properly second tenors, may seem to have the higher compass. With such a body of tenors it would often be wise to follow the recommendation of the German writer I have referred to, and train all the tenors as "firsts," dividing them haphazard through the middle when four-part pieces are to be sung. One by one they may be discriminated by separate examination after a course of voice-training has developed their powers.

It is, however, often possible to discover the first tenor by making him leap at once into the Thin Register, and
on the training of the first tenor voice.

leading him up (not diatonically, but by leaps upward and steps downward) to his higher tones. Frequently one who has never heard a good or first tenor voice in his life will thus produce a beautiful though weak C'1, and I have known such an one only become strained at E1 and F1 on the top space and line of the Treble Staff. Some basins can also play about very pleasantly and easily in their Falsetto voice; but I assume that in an examination it has first been heard, from the general quality of the voice, that the subject is really a tenor.

I do not know whether a wide experience might not show the next mode of discrimination which I mention to be unadvisable, but hitherto I have found the surest guide to the real quality of voice to be found in the ordinary speaking voice when used without self-consciousness. The high piping tone of a first tenor, in a lively and careless moment, reveals him unmistakably. It must be in his lively and careless moment, for mere indolence lowers the pitch, and the least self-consciousness leads often to most disagreeable change. With the style of working men, through indulgent habits of speech, constantly produce coarse and gruff sounds far removed in pitch and time space and line of the Treble Staff and so usually do men drop their voices to a pitch unnaturally low when they essay to read or speak in public, that few can avoid at such times some deepening of the tone. All voices can in familiar conversation be raised to the pitch at which a first tenor may speak, but the difference in quality between the voice of one to whom that pitch is natural, and another, is very perceptible. I have usually formed opinions of the character of voices from their speaking quality, and only remember being once deceived.

Whatever be the condition of the voice which a chorus master likes in hand, it will usually require careful drill to get from the first tenors their sweetest and brightest tones.

The first thing needful is to teach those tones in their higher register; the second to teach them to unite that register to the lower; the third to equalize and strengthen the whole.

For the first object—that of teaching them to produce the tones of the higher register—the best plan, the only one I think, is to make them keep to a tone above F and produce it very softly. The endeavour to lead them up from below, and thus gradually approach the higher register, will most certainly lead to their carrying the lower register too high.

In this first production of the tones of the higher register, attention should be fixed on the quality of the tone. Its quantity is of no importance.

The pupils will perhaps be dissatisfied at the weakness of the voice, and will fancy they can do nothing with it. Let them fancy what they like, so that they do as they are told. No straining or pressure in order to strengthen the tone should be allowed. Some experimenters have been troubled at finding they could only get "Falsetto" notes, and supposing the quality of voice to be in some way objectionable, have wearied themselves and worried their pupils in the endeavour to get something that should be higher than the chest and yet not be "Falsetto." Rejection the voice which Nature presents, they endeavour by peculiar crotches and licks of throat to produce something more natural than Nature gives. The wise Teacher will endeavour to develop Nature and not to correct her. He will hold that no register can be used that is not wholesome and in time develop Falsetto into a true and useful voice.

On the lower ones breaking from the thin register into thick; but before these tones are reached, where the thin register only should be used, restraining from breaking into the thick, and getting all the swell possible in the one register.

By such means as these, mingled with the practice of good Music, the true first tenor voice may be developed from E1 on the third space of the Bass Staff to C1 on the third space of the Treble Staff, with a beautiful unity and conscientiousness throughout. The chest voice will be made more delicate, and the Falsetto so strengthened as to appear to be a continuation of it without a break, and the singers, far from being afraid of high tones, will sing them with the highest delight, as the composers intended they should, while those who listen will hardly be able of the one-sexed peculiarity of the choir.

Allusion to the practice of good Music now seems proper. In teaching to read Music that of narrow compass should be used, so that no needless difficulties may be encountered; for the exercise of choir for voice-training purposes, low Music should be feared, and all Music carefully scrutinized. Much requisites will be saved by a judicious choice of pieces in which the composer has used his knowledge of voices and registers with a kindly regard for the
singers. Much of Franz Abt's work will be found exceedingly helpful as a voice discipline; while that of some composers—of whom I look upon Mendelssohn as one—will be found to require all the skill of a practised choir to render it with success.

I think it well before concluding to refer again to the baseless prejudice against the use of the Falsettvoice by tenors. Many of those who object to it have never heard it when cultivated by tenors for part-singing by men's voice, and judge of it from some poor creature's old womanish squeal. By the same method of judgment the chest voice would be condemned, for that may be heard producing tones which the most imaginative ear could not call Music. It has been said that the use of the Falsettvoice is injurious to the voice, but I have never been able to find any evidence of the fact. Five minutes talk with a baffling costume will reveal that the new idea of the chest voice is most certainly injurious, and doubtless the Falsettvoice can be so used as to injure the quality of its tone. There is, however, I believe no evidence whatever that singers who have made large use of the Falsettvoice Register have lost voice sooner than others. In all voices the extreme parts fail first, but there is every reason to believe that the use of different registers on the different parts of the compass is most healthy, as it undoubtedly is most pleasant to the ear.—By W. E. Catliney, in "Tonic Sol-Fa Reporter," 1874, pp. 115-117.

**SING EASILY—SING SOFTLY.**

562.—We have just received a voice-training book from America, in which the author maintains that there are no registers in the voice and no breaks. Nevertheless, he is stated to have been very successful in training voices to tour evenly and well. It is curious to know how this could be, notwithstanding his ignorance of undoubted physical facts. Our perplexity was dispelled when we came to read further on—first, that in his practice at a certain part of the voice, he found a tendency towards what other people call a break, but that he regarded it as a fault and required his pupils to avoid it, which is exactly the thing which we mean by "equalizing the registers," and so concealing the place of break; and second, that in all his voice training he had been careful to make his pupils sing piano. If the exercise is sung piano the voice cannot be strained, and there is a very much greater probability of the proper natural register.

**Teacher's Manual.**

...
A PUBLIC ANALYSIS OF VOICES.

before they became Tonic Sol-faists, and so using chiefly the upper thick, because they cannot produce them singing with the lower thick register from the bottom of their voices to A. They would then sing a bass part with greater ease and power. Mr. B. had an upper thin voice of sharp whistling quality not cultivated, but of the same kind which, when cultivated, is commonly called a bass alto. This last fact makes me doubt whether Mr. B. will ever become a tenor singer, though I think that Mr. A. might do so by cultivating his lower thin register. Mr. C. was examined by Mr. Proudford; he had also a baritone voice. When he first came under training he had only a lower thick which he forced up to C. He now showed a very good upper thick from B to E, and an undeveloped thin voice from E up to A. This gentleman cannot do better than continue to cultivate his upper thick register.

Only one thorough bass voice was examined, Mr. D. This voice was full and strong in the thick register down to A, but was not so good above it, and it was weakness in this register that made him advisable to register with the same resonant quality up to C by singing forte. But it was with the greatest difficulty that Mr. Proudford could bring out on D the upper thick register. He got it at last by giving a pattern of it, and then it was retained on two or three tones below. It could not be carried with piano voice up to E. There seemed to be a necessity on E to change into the lower thin, which was in this case as unascultivated as the upper thick. If enquiry were made why this gentleman strained his lower thick register up to C, never singing that otherwise than forte, the answer would be that he had been for a long time accustomed to certain voice exercises, which are very excellent in the beginning, but which, when brought up, is a "built," and all the registers truly settled, but most dangerous, even ruinous, when applied to raw uncultured voices. I refer to those exercises which ascend with a crescendo, and which in the new "Standard Course" are placed at the very end of the voice training process. I am myself to blame for having placed them much earlier in former editions. When a singer whose voice is not yet formed is told to "hold himself together," and by a little more exertion bring out the higher tones, he or she is sure to force all the registers unnaturally upward. I think it is proved that this gentleman did not naturally sing B, and C with the lower thick, because he cannot produce them singing with the lower thick register from the bottom of their voices to A. They would then sing a bass part with greater ease and power. Mr. B. had an upper thin voice of sharp whistling quality not cultivated, but of the same kind which, when cultivated, is commonly called a bass alto. This last fact makes me doubt whether Mr. B. will ever become a tenor singer, though I think that Mr. A. might do so by cultivating his lower thin register. Mr. C. was examined by Mr. Proudford; he had also a baritone voice. When he first came under training he had only a lower thick which he forced up to C. He now showed a very good upper thick from B to E, and an undeveloped thin voice from E up to A. This gentleman cannot do better than continue to cultivate his upper thick register.

506. —TENOR. The most remarkable thing about Mr. E's voice was, that he had a very good upper thick register which he was able to force up to G, A, and even B, and he did this with ease and safety in that register. I think that the reason of his forcing, although the tones G and A had the hardness of quality which generally comes with a forced voice, was that he had his voice accustomed to the G which was thus produced. When I ascended we reached B or C, Mr. E was obliged to break into the thin voice. Asking him then to keep that register, I brought him down on the G, taking care first to exercise the voice on C, B, A; and when he produced the voice with ease and fullness in this thin register, it was to my ears manifestly sweeter and better in quality than the hard thick G which had been produced before. It would also have—though I did not then test it in this respect—shown the advantage that it could be sung pianissimo and forte with the same good quality. It was evident, however, that our friend had not cultivated this register of his voice, for having early lost the power of forcing the upper thick, he had been reduced to using his lower register (whether by voice exercises, like Mr. D., or otherwise) he had not been led to feel the need of it. A striking difference of opinion occurred amongst us in judging of this voice. In ascendining with the upper thick register, Mr. E made a certain change of quality on the tone E, but seemed to me to resume the former quality when he sang F and upwards. But many friends thought the Eon E a change was made into the lower thin register; while the register I obtained on E and C (and which I brought down to the G) was not the lower but the upper thin register. It is true that this last register had on C, perhaps from the conformation of the mouth at the ton книжки, which was not so full or so long that quality before it got down to the soft, full, easy G of which I have spoken. I have certainly never known so good a quality on G produced by unnatural bringing down the upper thin. When on another occasion I tested the same voice alone, that change of quality on E, with a return on F, entirely disappeared.

I think it must have been in the first night an accidental phenomenon, or the remnant of some old habit (which indeed is common among tenors) of charging into the thin register on that tone. I found the thick or chest G still good, but when I tried to get it piano it failed. I also found that when the voice going upward broke into what I regarded as the lower thin voice, the larynx rose as it does more or less in passing from the thick to the thin register. By the second examination, therefore, my convictions were confirmed, and I have no hesitation in advising Mr. E, if he has not yet to wear out prematurely, and if he wishes to produce every tone of his Scale in every degree of force from ff to ff, to cultivate the natural register produced by strong physical constitution enables him to use those registers to their extreme limit upward, as they are marked by Madame Seiler. I think that he will do his voice harm, in view of the time when physical vigour begins to fail by trying to force the registers higher.

507. —Contralto. Mrs. F. kindly allowed her voice to be examined by Mr. McNaught. The tones about G and F were very rich, and full in the unmistakable lower thick register, and this register was carried up to D, where it broke not into the upper thick but into the lower thin, and the change of quality was very marked indeed. After several trials, however, the upper thick register was produced and found to be good. It only needs cultivation on C, D, E, and then there will no longer be any conflict between the two extremes of the voice. Another contralto lady's voice was examined which served to show a marked contrast. It was not so strong and full in the lower tones down to G, and F; if got weaker as it went down into what should be the lower thick register. This led me to think that Miss G. had not used her lower thick register at all, but others for whose ear and judgment I have great respect thought otherwise. I have noticed in real life as well as real contralto voices, that the tones do not
THE VOICE; THE MOUTH THE CHIEF ORIGIN OF QUALITY.

get weaker and weaker as they go down, but heavier and heavier until they stop. This I thought was the case with Mrs. F.’s voice but not with Miss G.’s. Miss G. had, however, a beautiful quality in her upper thick register, and in consequence of this (and in contrast with Mrs. F.) the break between her upper thick and her thin registers was scarcely perceptible. This gives her a smoothness and evenness of voice which is a great advantage. If she will try to find out and cultivate that real strong resonant lower thick register from G to C, of which she is not yet conscious, she will have a beautiful contralto voice.

559. — Soprano. Mr. T. K. Longbottom examined before the College two voices with which he was previously acquainted, taking each of them through a similar range of tones and by similar intervals. He did not offer any explanation of his own, but left it to the listeners to decide upon the registers. For the most part the decisions by show of hands were almost unanimous. Miss H.’s voice was uncevallated, except by much practice in singing by ear at religious meetings. This had made the upper part of her voice very clear and even. She had only recently joined a Sol-fa class, before which she could not sing the Scale, and even now her intervals were uncertain. The examiner took the key of D. Commencing with a little play upon A to C, he brought the singer to D by a downward leap, and asked the audience to say in what register that tone was. The general answer was upper thick. Beginning again on A, and making a little play on the tones below, he took the voice by an upward leap to F and asked what register was there used. The prevailing opinion was that it was the same as was used on A. Similar experiments followed with the view of further testing this; but the opinion of the audience remained unaltered—that is, they did not discern an upper and lower thin, but thought the tones were all in the same register. Commencing on A again, after playing on the tones up to D, an upward bound was made to Al, which tone was pronounced to be in the small register. The perfect blending of the two thin registers was something very remarkable, especially in an untrained voice. The “much practice” referred to above is the natural way of accounting for it. The small register was rather difficult to bring out. It should be exercised on Al and G and joined to the upper thin. The two thin registers are already well exercised. The upper thick needs a little practice, and especially at its place of blending with the thin. Of course this young lady has yet to learn to read Music; but under a good private teacher her voice might become a valuable Soprano. Miss J. has been a Tonic Sol-fa singer from her childhood, but has only recently enjoyed any special lessons in Sol-fa singing. Her voice was tested by exactly the same process as the last. It was good all through. The small register was worth hearing even up to C2. The places of break were manifest in all cases, and corresponded closely with the natural registers. Her voice is a credit to her Teachers and to herself; but she needs more training and especial care to blend the registers, so that the place of break may not be heard.

560. — Thick and Thin. So great was the excitement among our members on the subject of the training of the registers, that it was always difficult to withdraw the attention to the next subject which followed. Thus it happened that when one occasion the Men’s Voice Choir sang after a discussion on the registers, a number of the keenest ears and eyes were following them on the Voice Modulator, and testing them by tuning forks and chromatic pitch pipes. It was delightful to hear the beautiful tones which they delivered in the higher part of the lower thin register on B and B, and often on A and G; but they forced the upper thick into the place of the thin register very much more than I should have expected, and never without loss in the quality and beauty of the tone. In singing, “Able with me,” the first tenor dwells much on G; in the earlier verses this was taken very nicely, and without appreciable flattening in the natural thin register, but in one of the later verses our friends were so excited with the forte required by the words, that they threw their upper thick upon the tone. The consequence was that at the end of the first line my neighbour with the chromatic pitch pipe told me they had gone down a small step, and at the end of the whole verse—both he and all the others who tested them—agreed in saying that they had gone down a Major Third. This was a great and valuable lesson to me. It confirmed my opinion of the importance of keeping to the natural registers, and never allowing them to overlap upwards. This class have not yet practically laid hold of Mr. Proudnoff’s teaching; he tells them to form the habit of changing into the thin register on E. They must not be misled by the fact that their Teacher’s own thin has been made by long practice much richer and sweeter than theirs. The worst possible imitation of it is the straining of the upper thick. They can always distinguish the thin from the thick on any tone, by asking themselves, “Can I sing it softly,” and by feeling whether in going from the thick quality to that tone the larynx rises. I feel confident that if the teachers of this class resolutely deny themselves for a considerable time all upward Crescendo Training Exercises, shun “a chest G” as they would the plague, and practice at home every day, Mr. Proudnoff’s exercises on the thin register, from B up to C, they will develop not only a sweetness but a power which they have never yet approached.—By John Cornwell, in “Tonic Sol-fa Reporter,” 1899, 27.

41–44.

THE MOUTH

570. — Quality of timbre of tone depends chiefly upon the mouth, though, to some extent, as we shall presently see, on the management of the chest and the natural peculiarities of the larynx. Let us first study the mouth. The accompanying diagrams will show how variable in shape and position the mouth is. It can be opened at the lips more or less widely and more or less broadly. The hanging veil of the palate, at the back of the mouth, can be curled backward or drawn upward so as to guide the stream of vibrating air. Mr. Max Müller mentions that Czerny had by certain ingenious experiments ascertained that this little red tongue hanging down at the back of the mouth is generally raised (more or less according to the vowel) during the production of voice. The tongue can be put into a very great variety of
positions, so as to enlarge, or lessen, or alter the shape of the cavity of the mouth. (See page 198.) The larynx itself, which lies behind and below the root of the tongue, can be raised or lowered to suit different vowels or qualities of tone. The natural shape of the arch of the palate and the other organs is also different in different persons. So that in this wonderfully flexible and varied cavity of the mouth there is ample scope for the production of different qualities of tone.

571.—The direction of the breath is agreed on all hands, to be the chief source of quality in tones. A little thought will show that as the vibrating stream of air comes up from the larynx, it may have a direction given to it by the position of the root of the tongue, and that of the hanging veil of the palate; and that this stream of air may be caught on different parts as the head itself is raised or lowered. There is a universal consent among voice-trainers, that when the voice impinges at the back of the mouth, the quality of the tone is bad. The nose is needed for breathing, but not for speech or song. If the vocal stream passes through the nose it cannot be moulded into vowel or consonant, and if trying to pass through it is thrown back by the closed or partly closed nostrils, the nose then becomes a dissonant resonator, the sound of which mingling with the voice, spoils its quality. People form the habit, in speech as well as in song, of holding the head down, keeping back the root of the tongue, and compressing the nostrils by drawing down the upper lip. I know of one voice-trainer who has partially conquered this last defect, 1st, by requiring his pupils to bathe, the nostrils in hot water before singing so as to relax the smaller muscles, and 2nd, by making them practise real singing through the nose to keep the passage open. It would have been much better if he had made his pupils form the habit of lifting up the head, opening the mouth and throwing forward the tongue, so as to make no use whatever of the nose. Hence the importance of "Standard Course," Exercise 2, pp. 2, 3. Above all things the teacher must himself set a good example. Bad habits in speaking have much to do with bad habits in singing. In some parts of the country it is so much the custom to speak at the back of the mouth, that it is difficult for the inhabitants not to sing there also. But it is always respectful to others, as well as creditable to ourselves, to speak as in as pleasant a voice as possible. It is very difficult, however, to break old habits, and the teacher cannot break the habits of his pupils; they must do so for themselves, and with all the help which he can give them the task will be a long and careful one.

572.—In the Thin Register this throwing forward of the voice is of special importance. It increases the volume of tone if it does not improve the quality. The tone A, for example, sung in the Thin Register, with the stream of air rising, as is very natural, straight up, may have quite a robust character given to it by no other change than that of raising the head and throwing the tone forward. It will be remembered how Mario used to throw his head back easily in bringing out his clear, round, and fluty tones in the highest register. This point is one of great importance for the tenor singer. For in the Thin Register it is the volume of sound about which he is most anxious.

![Fig. 11](image)

![Fig. 12](image)

573.—The pharynx, epiglottis, and uvula. If we look at Fig. 11, we see that, in the position of
the organs there given, the stream of breath would pass up from the larynx straight into the nose, which is all right for breathing, but for singing would produce that nasal tone which we all strive to avoid. First, the epiglottis, that little fleshy lid which falls back to protect the larynx in the act of swallowing, would turn the stream towards the back of the throat, which is called the pharynx; and then the hanging veil of the palate or uvula, in the position there shown, would prevent the voice getting into the mouth. But this epiglottis can lie back against the root of the tongue, and the uvula can be raised and thrown back so as to stop the passage to the nose. Thus when the head is thrown back, as in Fig. 12, the stream of air can easily pass upward and forward through the mouth. It is probable that these parts of the vocal organs influence both the quality of sound and the formation of vowels in various ways not yet explained.

Mr. F. Kingsbury, in his "Voice and its Management," says: "The power of elevating the Soft Palate and Uvula exercises an important influence on the compass of the voice (which is frequently considerably extended by vocal practice), as well as upon the breadth and the quality of tone." Mr. Lewis B. Monroe shows how the easy and natural control of this organ may be gained. His description also of the depression of the back of the tongue, and with it of the larynx, by which a sombre quality is given to the tone, and by the help of which the clear vowels slide into their corresponding obscure sounds, will interest the reader. The hints on the direction of the breath will also be useful.

RAISING THE SOFT PALATE.

574.—The roll of the palate makes a sort of curtain at the back of the mouth, and forms a partition between the mouth below and the nasal passages above it. When it is raised as high as possible, it closes the opening from the back of the mouth to the nostrils, and the vocal current passes out entirely through the mouth. When it is allowed to fall upon the tongue, the passage to the mouth is closed, and the vocal current escapes by the nostril, producing a nasal tone.

When it is partially contracted, the vocal current passes partly through the mouth and partly through the nose. To avoid nasality, the palate must be sufficiently raised.

The soft palate is raised in the act of


The movements of the palate should be studied before a mirror. If the gaping effort should not raise it sufficiently, a more powerful contraction may be obtained by taking hold of some heavy object and lifting with all the might. The palate will be contracted in sympathy with the general muscular effort. The uvula (pendent portion of the palate), if healthy, may be so contracted as entirely to disappear from sight.

Do not get the impression that a great effort is required to lift the palate. It is done almost or quite unconsciously, when the sensation of its movement becomes familiar.

DEPRESSING THE BASE OF THE TONGUE.

575.—In practising the preceding exercises, the pupil has doubtless observed that the base of the tongue has a tendency to descend whenever the palate is raised. But special attention should be given to this movement. The practice of the gape or yawn will depress the base of the tongue to a certain extent. A more perfect control over this organ will be gained by the following exercises:

First, carry the point of the tongue forward between the teeth; then draw the whole tongue vigorously backward, as if trying to swallow it.

Or pass the tip of the tongue along the roof of the mouth to a point as far back as possible.

We may test whether the movement is successfully performed by placing a finger at the front of the neck, close under the jaw. The throat will be thrown forward and outward like that of a canary-bird when singing, thus increasing the interior capacity of the Pharynx.

These movements must be studied and practised till the base of the tongue can be easily and lossily dropped at will.

RAISING AND DEPRESSING THE LARYNX.

576.—The larynx (Adam's apple) rises and falls with the movements of the base of the tongue, to which it is attached. In the act of swallowing it ascends to its highest position. In gaping it descends.
The quality of the voice is affected by the position of the larynx. If the greatest volume of voice be desired, the larynx must be held fixed in its lowest position.

DIRECTING THE COLUMN OF BREATH.

577.—The column of breath proceeding upward through the windpipe will strike different portions of the roof of the mouth, according as the base of the tongue and the larynx are more or less depressed; when these are in their lowest position, the breath naturally takes a vertical direction; but may be inclined more or less toward the lips by properly adjusting the organs.

Watch the direction of the breath while whispering in succession the following vowels: ē, ā, ah, aw, ah, oo. In producing the vowel ē with a prolonged whisper, the air emitted will be felt striking the upper gums. At the second vowel it will strike farther up on the hard palate. At the third it will strike the middle of the roof of the mouth; and farther backward with each successive vowel. But the student must learn to direct all the vowels to any one point at will. In ordinary utterance the column must be directed well forward in the mouth; but certain effects are produced by directing it further backward.—“Vocal and Physical Training,” by Lewis E. Monroe, pp. 38—31.

578.—General resonances is the next cause of quality in the human voice. See “Standard Course,” p. 149. Professor Helmholtz has shown the real nature of quality, or timbre, in tones. See “Musical Statues,” p. 30. It arises from the number and proportion of partials or harmonics which mix with the tone; and these depend to a large extent on the shape which is given to the sounding column of air. Generally speaking, a narrow shape gives brighter and harder tones, and a broad shape gives duller and fuller tones. Garcia has taught very carefully the distinctions between the sombre and the clear styles of singing (which arise from a proper management of the narrowed or distended mouth), and has directed them to be very carefully cultivated, so that the singer may be able to assume the one or the other to suit the sentiment of his song. Mr. Root, in his “Normal School Hand-book,” has distinguished a great many shades of expression which may be given by the help of these resonances. But I do not think that these delicate distinctions can be easily perceived by the elementary pupil. His Table of Emotional Phrases is as follows, and for the Teacher at least it will be a good exercise to sing these phrases as expressively as possible:

<table>
<thead>
<tr>
<th>Sombre (toward grief)</th>
<th>Clear (toward gaiety)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Farewell, dear home, for ever.</td>
<td>1. The breakfast is dancing, tra la, tra la.</td>
</tr>
<tr>
<td>2. The dear one is dying.</td>
<td>2. Come, come, let us be gay.</td>
</tr>
<tr>
<td>3. My heart is broken now.</td>
<td>3. We'll laugh and quota, ha, ha, ha.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sombre (toward reverence and awe)</th>
<th>Clear (toward joyfulness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The shades of eve are falling.</td>
<td>1. They're coming home to-day.</td>
</tr>
<tr>
<td>2. With silent awe adoring bow.</td>
<td>2. Sing for joy: “Tis our native land.</td>
</tr>
<tr>
<td>3. Darkness and glooms are round us.</td>
<td>3. Glory, glory, to our King.”</td>
</tr>
</tbody>
</table>

See also above, SPORZANDO AND THE RESONANCES, p. 44.

579.—Vowel shape is another cause of quality, which for the singer is continually modifying the effect of his tones. Professor Willis, in the “Cambridge Physiological Transactions,” 1828, 1829, showed how the different vowels are connected with the length of the tube by which they may be produced, and we are conscious in singing the vowel scale downward—thus, ee, ai, aa, au, ou, oo—of a progressive lengthening of the vocal organs. Professor Helmholtz went further, and showed that every vowel shape gives a quality or timbre to the tone. By means of his sounders (a set of globes which will resound to particular tones, and, when attached to the ear, enables it to discover harmonic tones otherwise inaudible) he found out the harmonics given with each vowel; and then, by means of another apparatus, he reproduced the vowels which he had thus analyzed. Professor Max Müller, “Science of Language,” Vol. II, p. 125, thus describes the experiments:—“What we call vowels are neither more nor less than qualities, or colours, or timbres of our voice, and these are determined by the form, not by the number of the vibrations, this form being determined by the form of the buccal tubes. This had
to a certain extent been anticipated by Professor Wheatstone in his critique on Professor Willis's ingenious experiments, but it has now been rendered quite evident by the researches of Professor Helmholtz. It is, of course, impossible to watch the form of these vibrations by means of a vibration microscope, but it is possible to analyse them by means of resounding tubes, like those before described; and thus to discover in them, what, as we saw, is homologous with the form of vibration—viz., the presence and absence of certain harmonics. If a man sings the same note on different vowels, the harmonics which answer to our resounding tubes vary as they would vary if the same note was played on different instruments, such as the violin, the flute, or the clarinet. In order to remove all uncertainty, Professor Helmholtz simply inverted the experiment. He took a number of tuning-forks, each furnished with a resonance box, by advancing or withdrawing which he could give their primary tones alone various degrees of strength, and extinguish their secondary tones altogether. He tuned them so as to produce a series of tones answering to the harmonics of the deepest tuning-fork. He then made these tuning-forks vibrate simultaneously by means of a galvanic battery, and by combining the harmonics, which he had first discovered in each vowel by means of the sounding tubes, he succeeded in reproducing artificially exactly the same vowels. We know now what vowels are made of. They are produced by the form of the vibrating air. They vary like the timbre of different instruments, and we in reality change the instruments on which we speak when we modify the buccal tubes in order to pronounce a, e, i, o, u.”

More will be said on the exact configuration of the mouth, in the production of vowels, under the head of “Pronunciation.”

580.—Vowel Resounders. It is well known that one instrument will “answer” to another by sympathy, that a glass tumbler can be set vibrating almost to breaking, when the right tone is produced by its side. See “Musical Statics,” p. 31. Thus every vessel or cavity has its own proper tone to which it will respond better than to any others, and the cavity of the mouth is no exception to this rule. As the vowels make different cavities, Donders, Helmholtz, and others have taken great pains to discover the proper tone to which the different vowel cavities will correspond. And from this they draw the reasonable conclusion that it is easier to sing that vowel on that tone, or on some tone which has that for one of its harmonics, than on any other. But their experiments do not perfectly agree, and it is evident that there is yet more to be discovered on this subject. In only mention it here to show how necessary it is in voice training that every vowel should be carefully sung on every tone. “There is,” says Max Müller, “a pitch peculiar to each vowel whether voiced or whispered. We can best perceive this if we pronounce a whispered ü (eu) and then allow it gradually to become a whistling, in which case we shall always get the same tone; a most useful discovery, a substitute for a tuning-fork.” In my own experiments, when trying to change this whispered eu into a whistle, I find myself producing the pitch tone F¹, and when trying to whistle a whispered oe, I find myself producing C². On asking a friend to make the same experiment, he told me that he had been in the habit, when wanting to pitch a tune quietly, of whistling the tone C to himself, very softly, and he now found that in doing so he had instinctively put his mouth into the oe position. So that there is some reason in the plan of whistling the pitch.

581.—Clatter. This subject of resounding cavities reminds me of an important point to be mentioned here. Professor Helmholtz says that the cavity of the ear itself has a resounding power, which makes it peculiarly sensitive to the highest tones of the seven-octave pianoforte, which therefore have a hard rattling sound. This fact he connects with that peculiar effect of strained voices which I have called “clatter.” “Statics,” p. 31.
Strained voices give the higher and harsher harmonics, and when these harmonics reach the rattling region of tone I have just indicated, they burst out into clatter, and a very painful effect is produced. I have repeatedly heard this effect from a single voice when straining its lower register upward beyond its proper limits, and when a great chorus of strained voices, in vainly trying to sing forte, have burst into clatter together, I have had to stop my ears. The true forte can only be attained by constant quiet practice, with as little breath as possible. See "Standard Course," pp. 153 and 98. Every Teacher should be watchful against this clatter. It is a certain proof to him that his voices are receiving great injury.

582.—Another cause of quality is found in the peculiarities of the larynx itself. Each larynx differs from another in the size and quality and stretching capacity of its vocal cords, in the shape of the parts through which the breath approaches the cords and of those at which it leaves them, and probably in other respects. So that there is ample scope for variety in what scientific men call the "form" of the vibration, and the proportion of the different partials which it carries. And we need not wonder at the variety of qualities in the human voice. In fact, the individuality of the voice is such that we often recognise a friend, after a long absence, by his voice, when we have failed to recognise him by his face.

583.—"Attack" and "release" are yet further causes of quality in voice, just as the style and manner in which the violin bow is "laid on" to the string and taken off it is one cause of quality in the tone produced; and just as the same string will produce different qualities of tone when struck by a hammer, when plucked by the hand, or when drawn by the bow, and yet again when struck, plucked, or drawn at one point of its length or at another. See the important observations of Garcia, Dr. Mason, Mr. Kingsbury, and Mr. Ellis on this subject, in "Standard Course," pp. 95, 96. These observations should be well studied, and the different forms of attack be carefully practised by the teacher; but the pupil should practise only the clear attack. This power of attack and release can only be attained by a proper management of the chest. See "Standard Course," p. 2. I have thus enumerated six or seven different causes of quality, and when the student remembers how every new vowel introduces, among the other causes, a new shape, and therefore a new tendency to quality of its own, he will not think me tedious in repeating that every vowel should be separately studied at all the different pitches. I trust it will make him value the study of pronunciation, to which we shall presently refer.

584.—The young teacher who is convinced of this will not spare himself the trouble of working out thoroughly all the following practice questions of "Standard Course," p. 13, No. 58; p. 26, No. 44; p. 44, No. 80; p. 79, No. 75; p. 115, No. 73; p. 116, Nos. 91, 92, 93; p. 159, No. 114.


LUTHER MASON.

585.—Here, too, the first thing to which the teacher should give attention is the quality of tone produced by the child. And we reiterate what was said above,—the different causes must be guarded against and removed. The "baby tone"—with its accompanying "baby talk"—which has perhaps been petted and cultivated at home, and called "cunning" at school, must give place to a smooth, round, pleasant quality—that is, to a proper tone.

The harsh screaming which boys in particular so often adopt, must never be allowed. They can easily be led to distinguish between voice and music, and can at least be educated to prefer the latter. There is as much difference between the noisy quality often heard in school-rooms and a true musical tone, as between the crash of broken crockery and the ring of a silver bell.

The principal points which require attention in the training of a child's singing-voice are these:—

1. Quality of Tone. It must be clear, melodious, promptly started, and evenly sustained.

2. Power of Tone. Not strained on the one hand, nor so feeble as to be imperfect or husky.

3. Length of Exercises. The voice must not be fatigued. The singing lesson should only be continued so long as the child enjoys it; never till he is physically or mentally weary.

4. compass of voice. The first time a child sings should be in the middle register, or where he makes the notes with the least effort. The extremes of the voice, whether high or low are to be avoided at first, and to be managed carefully when they are used.—From Luther Mason's "National Music Teacher." See Mr. Luther Mason on the projection of tone above p. 30.
Teacher sings the line, catching breath after each welcome; then again the whole line in a breath.

Which way do you prefer? The second. All do it.

Listen.

Sings the same line with the mouth so closed that he cannot give the tones and words distinctly and freely; then again with a free full tone.

Which do you prefer? The last. Do it.

They sing with better tones.

To give our tones good quality, we must take the good position—shoulders back and head up; we must fill the lungs well when we take breath, and must open the mouth enough to give the voice freedom.

Let us sing the line again, and attend to all these things.

They sing until the object is accomplished.

Now, I'll sing two lines.

Teacher sings.

How many syllables in the verse? Twenty-seven.

Then how many tones in the verse? Twenty-seven.

Each tone must have some kind of quality—let it be good. I'll sing it first. Notice the quality, and notice whether I seem sincere in my greeting.

Teacher sings.

Standing is the best position for singing, and we will occasionally stand while we practice.

Rise! Take breath only at the ends of the lines! Sing.


How many syllables in the verse? Twenty-seven.

Then how many tones in the verse? Twenty-seven.

Each tone must have some kind of quality—let it be good. I'll sing it first. Notice the quality, and notice whether I seem sincere in my greeting.

Teacher sings.

Standing is the best position for singing, and we will occasionally stand while we practice.

Rise! Take breath only at the ends of the lines! Sing.
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out his own principle so completely as to have become a byword amongst all who were in the class with him; a notoriety not to be wondered at, for he had stenotic lungs, which he used to their full extent, notwithstanding the room was small. My pupil might have had a fine tenor voice, if the tone had come through his mouth, instead of entirely out of his nose; and what made this wretched loud nasal singing still more conspicuous to all in the class was that he was nearly always wrong in time, taking the tunes either slower or faster than the others, and so leaving off either a note or two before or after the rest. However, he worked on till he took the original certificate, and then, to my great comfort, left. I have recently been engaged by a first-class student of Sol-fa, one who is in every respect a credit to the method, who appears to have attended to everything except the right position of the mouth; and through not opening this properly, much of his really beautiful voice is lost. So that it seems desirable to draw your attention to this point. If the pupil would but use a looking-glass while singing his exercises, it would prevent many mistakes; for our sensations are often not so to be relied upon, as we are apt to fancy our mouths much wider open than they really are. Besides, there is also a possibility of opening the mouth too wide, so making the tones thin, or too deep, making the tones guttural, etc. In Italy, I am told, it is usual for professors of singing to have swing looking-glasses fixed to the top of their pianos, so that the pupils must see themselves whilst taking their lessons; while in other parts of the continent they hold small pocket glasses in their hands. Some teachers recommend holding something in the mouth while practising, and I, at my first lesson in singing, under Miss Paolini, a lady of Italian parentage, had to hold a half- 

588.—Bodily Health is closely connected with the training of the voice, and I have not seen better hints on this subject than those which Mr. Root gives, with the acknowledged help of Dr. Frank Reilly, in his "Normal Musical Hand-book." Part of them have been already quoted above, p. 166. The rest is given here.

Dr. Frank Reilly.

589.—Our bodies are not only made up of organs,—such as the heart, lungs, brain, muscles, and bones, which retain their form and position during life,—but each part of these organs is composed of innumerable particles or atoms, which, during vigorous, healthy life, are constantly changing. That is, some of your atoms, whilst you read these lines, are being used up,—are losing their life or vitality, and new ones are taking their places; and this constantly, waking or sleeping from birth until death.

590.—Eating, Next in importance to breathing well is eating well; and, without describing the process of digestion, we will only say that its essentials
consist in the selection of proper food, properly cooked, and the thorough chewing and swallowing—not "boiling"—of a moderate quantity thereof at regular times. He who observes these rules will never suffer from dyspepsia or indigestion.

With special reference to the throat, however, it should be understood that all food which causes marked sensation in eating and swallowing, whether by reason of excessive heat or cold, or by high spiciness or seasoning, should be avoided by the vocalist, because these sensations are always attended by an increased flow of blood to the throat, which eventually leads to congestion and thickening of its membranes, and also a coarse and perfect vibration of the vocal cords, which are covered by these membranes. A list of such food would embrace all excessively hot drinks as well as all acid drinks. To be exact, hot fluids should never be drunk at a temperature higher than that of the cocoa, say about 100° F., nor cold ones below the temperature of spring water. It is, no doubt, pleasant to drink coffee as hot as possible, or water as cold as ice can make it. But, plunge your hand into cold water for a moment, and note the effect of withdrawing it. It glows with heat from the increasing quantity of blood in it, and if the action be repeated a few times it will get so full of blood as to be visibly swollen, and motion of the fingers will be stiff and awkward in consequence. The same effects follow the application of hot water. Now, if effects are produced as these are produced on the comparatively coarse and thick skin of the hand, how much more powerful will these results be on the delicate skin (vocal membrane, as it is termed) which lines the mouth and throat.

Some of the fatty acids, also have a stimulating action on the brain, and to this is due the objection to cheese, which abounds in these acids, as also the oily nuts, such as walnuts, and especially the cocoa nuts, certain fish, as salmon and mackerel, and fried dishes in general, the action of heat on the fat developing these irritating acids. Certain flavors are also produced as these are produced on the throat, principally those made from bitter almonds, and used in certain cakes, and occasionally in ice cream. Such articles as these should be avoided when about to use the voice, either in practice or exhibition.

Of all fatty matters the least objection is made to Singing, as the voice is pure, new olive oil, because it contains none of these free volatile acids.

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Summing up the wisdom of the best hygienists on diet, it is found that the natural appetite, modified by one's own personal experience, is generally the best guide as to what and how much one should eat. If the appetite has become perverted and unnatural by indulgence and excess, or if one fails to profit by experience, such advice can be here given without prejudice.

591.—Exercise. What use is to the violin, exercise is to the body—the condition and requisite of development and perfection. Want of exercise, or disuse, of an organ or part of the body causes its degeneration. Fish in the darkness of the Mammoth Cave, from want of use for their eyes, have entirely lost those organs. The deaf child who cannot hear his own voice, and consequently never uses his vocal organs, soon becomes dumb: and although he does not lose his tongue or lips, because these are used for other purposes than speech, his vocal organs become modified and degenerate. The muscles of a broken limb shrink and become weak during the time the limb is bandaged, and cannot be used. On the other hand, those organs which are specially trained and exercised acquire special value and usefulness. Hence the neatness of smell and sight in the hunter and Indian; the enormous development of muscles in athletes and labourers, and so on.

The law of Exercise, briefly stated, is, that use or action of a part of the body is attended by an increased flow of blood and nerve-force, or vitality, to that part; this increased supply of blood repairs the waste of the substance caused by the exercise, and the higher vitality, or nerve-force, gives greater functional vigour. If the exercise be repeated regularly, this increased flow of blood and increased vitality result in increased nutrition of the part, and improved function of the organs which, when it be exercised and consequent development of the arms as a blacksmith, the legs as a runner, or of certain faculties of the brain as a composer, of the fingers as a pianist, or the vocal organs as a singer.

Singing, in itself, is one of the best forms of hygienic exercise. The increased respiratory action, by which deeper and fuller draughts of oxygen are taken into the system, and the poisonous carbonic acid more thoroughly expelled, the muscular contractions and relaxations thus induced, and the increased motion of the organs contained in the abdomen, by the more thorough action of the lungs, are all highly conducive to bodily health. Unfortunately there are many singers who rely on this form of exercise too exclusively, and though it is conducive to health, it is not sufficient in itself, either for health or development. Too many sing on nerve-force alone, instead of from out the resources of a thoroughly developed physical system; and there are few sights more distressing than the highly trained soprano, whose every faculty has been devoted to the acquisition of the technique of her art, vainly striving, with every nerve at the highest tension, to make herself audible in an auditorium she should fill with ease, had not this utter neglect of her muscles left her with will and knowledge only, but without adequate power to execute the will or display the knowledge.

Daily bodily exercises, in the open air if possible, and suitably regulated to each individual case, is of the first importance to the student of music. With its vigorous muscles and clear head, freely acting lungs and perfect circulation, steady nerves, and the ability to use to the best advantage all one's gifts and endowments. Do not, however, run into the opposite extreme by striving to excel as an athlete or gymnast, lest you divert vitality from brain to body, and sink in the professional scale as you rise in the athletic. All exercise which leaves one's fatigued instead of refreshed, nervous and depressed instead of buoyant and exhilarated, is injurious and should be avoided.

Although open-air exercise is incomparably superior to any other, it is not always, or often, attainable here and after. When it is not, the "Health-lift," or Oscillating Exercise, as it is now called, is probably the best in-door system yet devised, and its authenticated claims warrant attention and investigation.

592.—Rest. The beating of the human heart furnishes the poet an illustration of continuous activity. So many times a minute, waking or sleeping, through all the days and nights which make up the allotted three score years and ten, its pulsations force on the crimson tide of life. And yet so universal is the law of alternate activity and repose that even this busy heart, rests, above all and entirely, about one third of the time: between each beat is as completely in repose as is the body when wrapped in deep sleep. Rest is as essential to bodily health as either food or exercise; since the repair of certain parts of the body, such as the brain and nerves, is effected only during rest. And so the brain should not be exercised too long at a time on one subject. Three hours of brain-work are estimated to be equal,
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In their wear and tear, to ten hours of active bodily labour. Though very few of us can afford to limit ourselves to this period, very few of us, fortunately, are ever called on to employ all the force of the brain for three hours consecutively. In singing, the amount of time, during which the voice may be continuously used, will vary with different individuals; but the moment there is any sign of fatigue the exercise should cease.

It is chiefly, however, with the value of rest as a mode of treatment of the vocal organs when inflamed, that singers are concerned. During a "cold," sore throat, attack of bronchitis, or any inflamed condition of the air-passages or lungs, there is always a larger amount of blood in the inflamed part than is natural or healthy, and whatever increases the amount of blood in the part increases the trouble. We know that one of the results of exercise of a part is to increase the flow of blood to it. So it is clear that rest of an inflamed organ is the first step to its recovery.

When the eyes are inflamed we instinctively avoid the light; when we sprain a limb, we instinctively avoid motion; why not, then, when the vocal organs are inflamed and sore, refrain from speaking, reading aloud, or singing. Every one knows how speaking will often bring on a "coughing-spell" when suffering from a cold; and this coughing, being in itself violent muscular action, of course increases the inflammation of the affected parts. Though apparently a small matter, the use of a slate, or paper and pencil, to avoid speaking, would often cut short a severe cold or sore throat.

Rest after eating is important to the singer. During digestion the stomach is the seat of wonderful activity in preparing the food for conversion into blood. If, during the height of this activity, one should attempt to sing, either the singing or the digestion will suffer; the blood and vital forces will be withdrawn from the stomach to the brain and vocal organs, and the food will be undigested, but decomposing, and cause pain, flatulence, or some other form of dyspepsia, or the singing will be lifeless, up-hill, and unsatisfactory; the lungs will be unable to expand freely, owing to the enlarged size of the food and gas-distended stomach; the membranes of the larynx, affected by the flavours and suffering for want of perfect nerve supply, will vibrate imperfectly, and false and feeble tones will be produced.

At least one hour should always after eating before undertaking any severe mental or physical labour, and singing is often both. Rest before eating is not always of so much importance, but after any severe or prolonged effort it would be better to wait half-an-hour or so before eating, particularly if the sense of exhaustion or fatigue has affected the appetite. Under such circumstances a cup of best tea is an admirable restorative, as it needs but little preparation in the stomach before being absorbed into the blood. — "Normal Musical Hand-book," by Root, pp. 55–59.

THE TEACHING OF MUSICAL FORM AND EXPRESSION.

598. — Expression, verbal and musical, let us first notice. When the old "Grammar of Vocal Music" was published in 1848, I proposed those type marks for expression which were employed in my little hymn book, and which have since been used by others extensively. These marks show how the Editor wishes a thing sung, but do not insist into the pupil the principles by which he is guided. When the first edition of "Standard Course" was in preparation, I did not know of any work which would assist me to develop the rules of Expression. I had to find out the underlying principles which unconsciously guided men in these matters. I had to make the "Grammar" from the language,—to notice diligently what various forms of expression were actually given to Music under different circumstances, and to ask myself the reason why. I took those pieces with which I was best acquainted, and which I had heard effectively sung. After long observation and experiment I fixed on the Music in Reporter vols. I. and II. for my illustrations, and analysed, as well as I could, the general principles of expression, both musical and verbal.

But as, for the sake of economy, I thus took all my illustrations from another book, I found that the casual readers of "Standard Course" did not take the trouble to refer to the illustrations, and so entirely missed the point and value of the instructions. It was not till the Members' Certificate required an examination of this chapter that I ever got it properly read. And yet probably no portion of the book has won me more gratitude, from those who have once mastered it, than this. The next opportunity I had of studying the matter through, was when I wrote the "Intermediate Secular and Sacred Courses." Here the illustrations were found on adjoining pages, and the instructions were therefore better understood. But when I came to write the new edition of "Standard Course," I felt the responsibility of this part of my work very greatly. I determined that the "Additional Exercises" to be appended, should contain as great a variety as possible of musical style and verbal sentiment, so that my readers should have at hand all the illustrations required. An analysis of the pieces thus selected greatly enlarged my views on the subject. And it was a happy thing for me that while I was in the middle of this work, my old friend, Mr.
Longbottom, whose taste and experience on points of this kind had long been known, was able to give me his constant assistance. I have hope, therefore, that this part of "Standard Course," pp. 94–104, and 130–136, especially as it is all required either by the Members’ or the Advanced Certificate, will be very pleasant to our students, and very fruitful in producing tasteful conductors.

594.—Dr. Lowell Mason’s lesson on Dynamics above, p. 42, can scarcely be surpassed as an example of teaching—not the principles but the practice of musical force. To this I add a lesson to children on the same subject by Mr. Evans. The Rev. James Rennie, of Glasgow, at one time conducted Sol-fa classes which were distinguished for the expressiveness of their singing. His plan of procedure is given above, p. 55. My readers will be interested to see the same plan applied to the daily uses of a school, in the two accounts from Reporter, written at distant intervals, of my friend Mr. Dunlop’s school at Glasgow. The other quotation from Mrs. Stapleton will further illustrate the subject.—

MR. JOHN EVANS.

595.—The Teacher should have a school pointer thin at the one end and thick at the other end, thus — . Holding the pointer in the middle and horizontally before the class the Teacher begins his lesson.

I want you all to look at this pointer and listen to me while I sing this tone to too, and point to the thin end. Listen again while I sing the same and point to the thick end. What difference did you notice in the two sounds? Answer. The tone was soft and the other loud.

I will now sing the same tone, pointing to the middle. That was not a soft tone nor a loud. We call it a medium tone. You must learn to sing as I am pointing these three kinds of sounds.

Let me hear the boys sing this sound to too, while I point to the thin end. That was very noisy and unmusical. I shall not want you to sing to the thick end again for some time.

The only way to learn to sing with soft, medium, and loud tones well, is to begin at the thin end.

Sing this sound to too while I point to the thin end. You shall sing it again and make it more bright and with the mouth well open.

Look at my mouth and listen to me singing.

Now, you sing like my pattern, holding on the tone as long as I hold my finger on the thin end of the pointer.

That was better, but some of you must take more breath.

Now, sing this tone to too as many times as I point on the thin end, and remember I want the tones to be long. Now, sing the same again, but with shorter tones. We will try to sing the medium in the same way. I want you to learn to sing with the medium voice.

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as soon as you can, for all your exercises in singing must be done with the medium voice.

After you have well practised the soft and medium, you shall begin at the thick end and learn to sing loud tones without noise and shouting.

Now let me hear you sing this tone to too to my pointing, and try to increase the force of each tone gradually, as by my hand moves from the thin end to the middle. We will do that several times.

That would be called a crescendo, and written res. Now, sing the same tone, beginning with the middle and gradually go to the thin end, letting each tone decrease in force. This would be called a diminuendo, and written dis. We will now practice both these to one tone, singing the tone to too. Then with one breath sing as from the thin end to the middle back. This would be called the swell. You shall finish this lesson by singing one of your songs that you can sing to words without books, as I want you to look at me while singing. You must sing it according to my pointing on the pointer. When my finger moves from the middle to the thin end, how must you sing? Answer. Softly. Take care that all sing the same word softly and exactly.

See how well you can sing the cres. as my finger moves along the pointer from the thin end to the middle; also the dis., as my finger moves from the middle to the thin end.

This must be our practice till the whole class can sing the soft, medium, and loud; also, the cres., dis., and swell like one voice.—Lesson to a School Class on the Degrees of Force in Singing, by Mr. John Evans.

MR. DUNLOP.

596.—On Friday we visited the school of a genuine Christian Teacher. We noticed that his classes were held under quiet control. He called first upon one class and then upon another to answer questions or to sing exercises. When the children were about to sing "Sister, thou wast mild and lovely," he did not tell them to sing piano, but he talked to them for a moment about the friends they had lost; and when he came to the second verse, he said, "Now, children, we are standing around this grave." Thus he touched their hearts and minds, and linked to the sad experience of most who were present, great lessons by the help of this Christian song. Such a Teacher realizes the true moral fruits of our Tonio Sol-fa labours.


FINNINSTON PUBLIC SCHOOLS.

597.—I gladly seized the only morning I could spare while in Glasgow to visit these schools conducted by our friend, Mr. Robert Dunlop. There was the same quietness, and the same happy look about the boys and girls of this school which we noticed some fifteen years ago. Mr. Herbert Spence himself, who leads so strongly for a quiet and happy mind in a pupil, as essential to a Teacher’s success, would have been satisfied with this school. The children had only just returned from their holidays, but they sang to us in their usual manner. The two upper classes are expected to purchase a new Reporter either once a month or once a quarter, and to have it always ready in their desks. They sang from two of these Reporters in two parts, while the junior classes listened quietly, learning much from the "pattern of soft, sweet singing, which the upper classes set."
them. I was glad to hear again the Teacher’s quiet voice giving directions which were obeyed without bustle, and to notice once more how Mr. Dunlop habitually engages the imagination and the feeling of his children in aid of their voices. The first piece was "By the moonlight," from Reporter 336. In a very few words he pictured a little boat on Loch Long on a summer evening, with the whispering zephyrs and the tender moonlight, then asked them to sing gently and swellingly—to sing in tune with the feelings he had awakened. In a similar way he briefly rebuked idleness and set them singing, "There’s work enough to do," and "The flowers are busy." But when he came to "Little Binnie," the "fragrant blossom" of the household pruned by the angels, and asked if they had not known such a one, if they did not miss him in their own homes, even the younger children could not help joining in the chorus, and there were tears in other eyes besides those of the children. Very touchingly were the early verses sung. That last verse which speaks of our hope beyond the grave was sung with glowing, joyous tone. I remembered hearing, "Sister, thou wast mild and lovely," fifteen years ago in the same room. This is music set to its highest use as a moral and religious power in education. Neither I nor the friends who were with me will ever forget the Finsensteino Public School. Mr. Dunlop writes: "I again ask you to accept my sincere thanks for your many labours which have gone to make my work on week day and Sabbath so enjoyable to myself and so really blessed to so very many." To find one’s self ever so small a help to a man who works in this way is a great honour.—John Curwen, in "Tonic Sol-fa Reporter," 1874, p. 264.

MRS. STAPLETON.

598. One of the most famous of our present Italian masters has relinquished a professional pupil in whose instruction he has taken great interest, and who has an uncommonly fine voice and good knowledge of Music; for he says she cannot be made a singer because she has not enough mind! "To be justly called a singer," says an old writer, "it is necessary that to an excellent and well-disciplined organ should be united an accurate judgment and deep and lively sensibilities, so as to be capable both of feeling, expressing, and producing the various emotions which the art of Music is able to create. Those of us who have had the privilege of hearing Madame Goldschmidt sing in the "Creation," are not likely to forget how gratefully she sang of "the healing plants," as one who had felt the benefits derived from this gift of God to our suffering humanity; and by her expressive utterances produced similar emotions recalling scenes in which we had watched our beloved ones recovering from weary sickness by the help of some of these "healing plants." Nor with what intensity of feeling she sang her part in the second part of "Gracieful sort," This is being a singer, as I understand the term; not merely delighting your audience with beautiful sounds, but instructing their minds and touching their hearts.

599. The great singer is one who identifies himself with the personage whom he represents, with the situation in which he is placed, and the feelings which agitate him; who abandons himself to the inspiration of the moment, and neglects nothing which may contribute to the effect. The union of all these qualities constitutes what is called expression. Without expression there was a great singer, however perfect the mechanical part of his singing might be; and expression when it is real, and not merely laboured acting, has often obtained pardon for an incorrect performance. "Sounds dictated by feeling," says Jouse, "can alone express passions with truth and energy," and to promote this he says to us: "Read several times over the words you are to sing, observe where the emphasis lies, ponder the sense, and try to make your own sentiments expressed by the notes." But some may ask, Can Psalmody, which is Mr. Curwen’s chief care, be improved by such study as these writers recommend? I believe it may. For example, the most instructive hymn singing I ever heard, was from a lady who had acquired such mastery of her art. Familiar to me from childhood as were Watts’s lines, "Salvation, oh! the joyful sound," I felt their full meaning had never been understood till then; and yet she had never been at a time before, and was, unhappily, a total stranger to any experimental knowledge of the blessings she so vividly described. The contrast between her thrilling utterances of truths she had never taught, and the mechanical, unintellectual way I had been accustomed to sing of them in company with others so believed and rejoiced in the glories of salvation, startled and reproved me, and made me resolve to apply to Psalmody every advantage of knowledge and skill that my study of singing as an art could supply me with.—"Transactions," pp. 51 and 55.

600. The subject of Musical Form is closely connected with that of Expression. For without seeing how a tune is divided into Musical phrases and sections, it is impossible for us to select proper breathing places, or to use the arts of expression for setting off one phrase or passage against another, and without being able to perceive quickly the various Musical replies and fugal entries, we shall not know how to adorn and beautify the structure of the piece. Hence the great value to all students, and the necessity for good Teachers of a somewhat systematic study of these elements of Musical Form. I have tried to insinuate this study along with the regular exercises for the more thoughtful students of "Standard Course." (See pp. 69, 70, 104, 144—149, &c.), and I have developed it more carefully in the Honorable Mention Stage of "How to Observe Harmony."

601. For the sake of memory, this parsing of the Musical Form of a piece is of great value. If a conductor wishes to have a piece learnt by heart, or if he wishes to learn it himself, he cannot do better than parse it according to the plan of "Standard Course," p. 70. In class this practice may be introduced after the Time and Tune of a piece have been learnt. A study of the expression
proper to each section and period naturally follows.
When a tune is thus thoroughly measured and analyzed, it easily
fixes itself on the memory.
See specimen lessons below, and go through
the paragraphs of "Standard Course," pp. 70, 71, singing
and testing every point.
602.—A knowledge of this subject is now required
in the Advanced Certificate. But I advise
the student to take the alternative which this certificate
offers, and work through the College Course on the
"Elements of Musical Form" and that on "Expression."
For knowledge quietly gained and thoroughly
digested, is worth incomparably more than the
same amount of information suddenly "crammed"
into the brain for an examination. If the student
is interested in the development of Transition and
Modulation in How to Observe, I think he will be
pleased to pursue the study further in "Musical
608.—The young Teacher, in addition to passing
through this course of exercises should test himself
by the following Practice Questions from "Standard
Course:"—Page 44, No. 37; p. 80, Nos. 99, and
129; p. 116, Nos. 94–117; p. 159, Nos. 82–85.
And also p. 44, Nos. 115, 116; p. 80, Nos. 125–
127; p. 116, No. 118; p. 159, Nos. 109–113.

603.—Parsing of "The Daisy," St.
Co. Ex. 79.—I wish you to learn this
tune by heart. When you try to re-
member a picture or a landscape, so as
to be able to describe it again, what do
you do?—Look at all the parts of it.
See how one thing suits with another.
Look at its shapes. Look at its colours.
"Yes, that is what we wish to do
with this tune. 
As I have it on a chart (Chart 12), you may shut your books
and we will look at the chart together.
1. "What is the key?"—E. —"Does
it go into other keys?"—No. —"Does
the melody go below the key-tone?"
—Only once, to .
2. "What is the measure?"—Three-
pulse measure.—"Has it simple or
divided pulses?"—It has TAAI and
pauses.
3c. "What is the rate of the pulses?"—
—"Can you give me that rate?
—Hold up hands, who can remember it.
George, you may sign it at the proper
rate, batting the time or not, as you
please, and then I will test you by this
metronome." —"Jane, you have seen
the beat of the metronome. That will
help you. Now see whether you can
give the proper time."
3d. "What is the style? Is it bold
and lively?"—Oh, no; you are looking
at a little flower: it is soft and gentle.
—Certainly, and the tune does not
suit any other style.
4a. "Now let us lco it through softly
and you shall tell me where it best
divides in halves or thirds."—It does
not divide in thirds. —"Then where is
the holf? Listen again." * The middle
is where the line ends, like the last
line on m r d. —"You have already learnt
what a Period is, and what a Section
(See "Standard Course," p. 69). Sup-
pose we divide this tune into two Periods,
how many measures would belong to the
first period?"—Eight. —"And how
many to the second?"—Eight.
4b. "Have you learnt what a cadence
are? ("Standard Course, p. 48). What
are the cadences on which each period
ends?"—Both Dor cadences. —"Yes
and that gives a feeling of sameness to
the tune, but that is excluded by the
quiet, meditative frame of the singer."
5c. "Let us look at the melodies of
these two periods. How far are they
like one another or unlike? (For
melodic relation see "relative motion
35, 67.)—The second half is the same in
both. "Yes, but now let us look at the
first halves of each Period. How are
they in rhythm?"—It is all TAAI
TAA TAA (TAAI TAA TAA SHA).—Yes,
rhythmically they are alike, but how
are they in melody?"—The second
Period begins with a little contrary
motion to the first. In the third mes-
Sure it begins with motion that is
oblique to the third measure of the first.
5d. "When you see a picture there is
always one thing in it which strikes
your eye before anything else. It has
more colour, more life, a more central
position, or a more beautiful form than
the rest. That is the point of the
picture. What is the point in this melody?
Sing it and tell me." * Nothing very
remarkable. —"Very true; but when
we are in a very meditative, quiet state
of mind it would be out of place for us
to have a point of great excitement.
But as one phrase is three times repeated,
I think it is meant to gain
impatience and force by the repetition;
so we may take the 6th and 6th mes-
ures of the second Period as the point of
this tune.
6a. "How many Sections are there in
the first Period?"—Four. —We name
the Periods by figures and the Sections
within them by letters. Thus, Period
one (1) has Sections a, b, c, d. What
are the cadences of 3?—Son. —"Of
it?"—Son. —"Of it?"—Son. —"Of
it?"—Son. [They notice that the
Period is made up of four Dances,
"Standard Course," p. 69.]
6b. "What melodic relations do you
notice in this first Period?"—It is and 3
are the same. It 6 and 3 are different
in rhythm, melody, and cadence.
—"Yes, sing again and notice this." *
7a. "How many Sections are there
in II?"—Four Dances. —"What are
their cadences?"—Like those of the
first Period.
7b. What are the melodic relations
within the second Period?"—It opens
with motion contrary to No. 6d varies
from No. 10 in rhythm, melody, and cadence.

THE DAISY.
In mezzo.
{ s s s s m [ s r r ] : }

In piano.
{ d d d m [ s r r ] : }

In piano.
{ s s s s m [ s r r ] : }

In piano.
{ d d d m [ s r r ] : }

try again in order to fix the rate in our memory.
39. "What is the style?"—Steady, dignified.
40. "Sing it in both parts to laa (omitting the coda or close which is not
printed in the Chants) and tell me how it divides?"—The music begins a
different subject in the middle of the sixth measure. —Yes; so we may say that
the first period reaches to the middle of the sixth measure, and the second
extends from the sixth measure to the fourth of the seventh.
41. "What are the cadences?" The
last cadence of I is D, and of II is D♭.
5. "There seem to be no melodic rela-
tions between I and II. Where is the
point of excitement? Listen." * In
the ninth and tenth measures.
60. "Sing again period I, and study
its divisions!" * It has two sections; Ia is three measures, Ib is two and a
half. They are of irregular length.
61. "What melodic relation do you
hear? Listen once more." * The second
voice leads. It gives out a subject and idea two measures long. The first voice
imitates it (starting a fifth higher) before it has finished more than its first
measure. —"In the third measure, what is the second voice doing while the first
is finishing its theme?" —Nothing im-
portant—only accompanying.—"How
would you describe it?" —It is a quiet
play of the music—a symphony—pre-
paring for what comes after.
62. "How does II divide? Laa it
and tell me." * There is no good
dividing-cadence, but there is a change of idea in the middle of the tenth meas-
ure.
70. "What is the melodic relation of
Ha?" The second voice starts a bold
phrase two measures long, which the
first voice imitates, after one meas-
ure, in the fifth above. Then the se-
cond voice takes it up, and the first voice
repeats, both a step higher than before.
—"What are the melodic relations of
I♭?" —There is quite a new theme
started by the second voice. —"Is it
answered by the first voice?" —No; the
first voice only accompanies. But the
second voice echoes itself. Its theme is
one measure long and it is repeated each
time one step lower. —"Yes; it is a
descending melodic Sequence, and the
last measure makes the cadence. Once
more sing II, and notice each of these
points well.
6. Let us look at the expression. How
should accompaniment be given? We
have it in measures 3, 11, and 12. It
should be subdued. "Standard Course,
p. 100." —"Mark it, then." —But in
measures 4 and 5 there is no reason why
one part of the little symphony or in-
terlude should be stronger than the
other. How should the long held
notes be delivered? —Loud and well-
in measures 11 and 12, where they only
accompany a theme. —"How should the
diminishing sequence be delivered?" —
6. Now let us see whether you can
sing this rather complicated piece from
memory. I think you have analyzed
its structure and effects so thoroughly
that after two or three trials you will
be quite able to do so." * "Well, now
you feel yourselves reward for the
trouble of parsing. Many of the little
points we have thus developed, you will
find of service even in analyzing the
works of the greatest masters." J. C.

The Teaching of Pronunciation.

606.—A great Italian teacher, Dr. Bennati, has
said that to sing well in the Italian language may
be easy, but it is less easy in the Portuguese,
and less easy still in the Spanish; while the customary
vowels and consonants of the French language
make it difficult, and those of the German more
difficult, and those of the English most difficult.
As our language stands lowest on the Scale of
"Singableness," surely it is the duty of English
singers to master the difficulty. A little attention
and a few special exercises will do it, but it does
require this attention and these exercises.


607.—Well spoken singing is like good hand-
writing. It carries the sense at once to the mind.
What a pleasure it is to read good handwriting!
What a vexation to try to decipher the bad! A
good solo singer makes you hear every word he
utters, and makes each syllable beautiful. But
how few good solo singers there are! I know of
one or two Choral Societies who habitually make
their audiences hear their words; but are there
more than a few such? I fear that most singers are
content to give us sound without sense and without
feeling. Surely it is sad that Englishmen are so
lazy of lip and tongue—so ashamed to open their
mouths and lift up their heads as this. The rules for clear utterance—plain speech—in singing may be almost summed up in these few words: "Lift up your head so as to open your mouth. Open and close your mouth widely and quickly. Use your lips and tongue with vigour"—and yet laziness conquers. The music alone goes forth from the mouth. The life and soul which the words could give it are absent! At a concert lately, some of Mr. Proudman's Men's Voice Choir stood up to sing a favourite part-song, when a gentleman in the audience whispered to his neighbour, "I know this piece. It is miserably tedious and insipid. Some of the fellows in our house sing it." He had scarcely finished his whisper when his countenance changed from the expression of contempt to that of interest as the first words struck his ear, and then from interest to unbounded delight as the piece went on. The chief difference was that Mr. Proudman's singers spoke the words to ear and heart.

608.—Some efforts were made in the old "Standard Course," and greater ones in the "Secular and Sacred Courses," to induce teachers and pupils to take up this study, and with some effect. But it is the glory of our Tonic Sol-fa movement that it works chiefly among the less educated classes of society, and to these the study of Pronunciation is unwelcome. To study pronunciation properly for singing, it is necessary to apply our studies to every day speech—and this would make some of us singular among our friends. If, however, our friends knew for what purpose we are pursuing the study—how easy it is when pursued on a well-graded plan, and how delightful to ourselves and others—I think they would help us to conquer all difficulties. It is vain to think that we can make sure of speaking correctly on public occasions, unless we make a habit of doing so in private life.

609.—For Teachers, the importance of good pronunciation cannot be over-rated. Good pronunciation is generally accepted in the world as a token of good education and "good breeding," and slovenly or vulgar pronunciation as the contrary. This is undoubtedly the case; and the professional Teacher who wishes to be trusted with the care of the young, must necessarily be able to set a good example in this respect. It may be well to say that the Yorkshire dialect [for example], "in the midst of which I was born, is the true pronunciation of the English tongue," or to plead that according to the investigations of the learned, Shakespeare himself must have spoken in a mixture of the Yorkshire and Lancashire tongues; but "I have to make my way among what are called—rightly or wrongly—'the polite classes of society,' and I must bow to the imperious speech-fashion which they have established—the accepted pronunciation."

610.—Two things were wanted for the student's help when new "Standard Course" was written. First, a set of exercises so graded as to develop the activity of every organ of speech in the order of difficulty; and second, a clear and "workable" Notation and Language of Speech Sounds. Many able elocutionists had written on these subjects. Mr. Isaac Pitman had by his "Phonography," and by his own generous devotedness made the study of spoken sounds popular; and Mr. Melville Bell, in his "Visible Speech," had disclosed to the world a marvellously delicate and beautiful set of speech symbols. But for our musical purpose we required a special classification of organic actions, and a special graduation of exercises; and we required also a notation of the simplest and most useable kind consistent with correct indication of the sounds. Under these circumstances I felt myself peculiarly fortunate in securing the generous help of Mr. Alexander J. Ellis, of whom Professor Max Müller, in his "Science of Language," says that he is "by far the most accurate observer and analyzer in the field of Phonetics." As an old student of our method under Mr. Read, at Edinburgh, Mr. Ellis was interested in our movement and ready to help; and not only so, but with a
kindness and confidence not often shown by a man of science and learning to an educationist, he allowed me to plan the order of the exercises, and sometimes to modify the manner of his statements. I tested everything by Mr. Melville Bell’s “Dictionary of Sounds.” It may be fairly said that the classification of sounds—the exact statement of facts—the admirable selection of words for the exercises are Mr. Ellis’s, while for the order and general planning of the exercises I am responsible.

611.—There are seven exercises on the consonants (along with the principal vowels) in the Fourth Step, and twenty-five on the vowels in the Sixth Step. These thirty-two exercises should be done as a healthy drill—a few of them at the opening of every intermediate or advanced class. They should be regarded, not as instructions to be once clearly understood and then left, but as organic exercises to be constantly practised.

612.—The Sound-Language and Notation adopted is one of great importance for its simplicity and “workableness.” It uses the common types, which any printer can set up. To distinguish long vowels from short ones, it employs such digraphs (double letters for one sound) as are already common and familiar to the eye; and it gives to each of the other letters that one sound with which it is already most commonly associated. The consequence is, that although this mode of writing seems at first strange to the eye, the ordinary reader can scarcely go wrong in it, if he simply yields himself to the sounds suggested. Mr. Ellis calls it the Glossic, or Tongue-Notation, as distinguished from the Nomic, or Established Notation of speech.

613.—Some have objected to our use of two letters (a digraph) for a single sound, but at least twelve vowels had to be expressed with only five letters, I do not see how the digraphs could have been avoided, unless Mr. Ellis had constructed new letters, or surrounded the old ones with various distinguishing signs and marks. But he had found, by devoted and costly experiment, that the whole printing world resisted the new letters, and that learners did not like the “diacritic” signs. To me it is quite wonderful that he succeeded in selecting well-known letters, or combinations of letters, and fixing them to their commonest sounds, without having to use more than two or three new combinations. Mr. Smart, in his well-known “Pronouncing Dictionary,” makes a similar use of digraphs. Indeed, they are abound in our common English spelling, that they fall naturally into use. I think it is only justice to Mr. Ellis to print (at p. 202) his own key to English Glossic, which I copy from the “Transactions of the Philological Society” for 1870.

614.—A considerable portion of this Glossic is already familiar even to our Elementary pupils, through our use of it to express the French Time-Names, and through our constant employment of it in new “Standard Course,” to express the principal vowels—ee, ai, aa, au, oo, oo. I was surprised to find how easy it is to read Glossic. You have only to let the spelling suggest the sound. Begin with the Doxology and the Lord’s Prayer, which I have added at the bottom of p. 202. See also page 208. This will enable you to understand very quickly the valuable pronouncing vocabulary of musical terms which Mr. Ellis has kindly given us, and will prepare our teachers and more advanced pupils to take full advantage of Mr. Ellis’ valuable work, “Pronunciation for Singers, with especial reference to the English, German, Italian, and French Languages, with numerous Examples, and Exercises.”

615.—As an aid to the Teacher, I give pp. 198—201, the condensed diagrams and explanations which Mr. Ellis has kindly supplied.

616.—As a further help to the Teacher, I take at p. 203 each of the exercises of “Standard Course” in the order in which the teacher will use them, and supplement the information of “Standard Course” by reference to these diagrams, and by other hints.
**Positions for Vowels and Consonants.**

*Diagrams of Positions for Vowels and Consonants.*

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*Note.*—The capital letters indicate the received English sounds. It will be seen that in most cases the same organic position is used for several sounds, the difference being made by the way of "setting on the breath" (the voiced consonants being shown by *)—by a slight depression of the larynx and root of the tongue (indicated thus)—and by the rounding of the lips, which is shown thus ('). The Diagrams, the "Descriptions," and the "Index" are by Mr. Ellis. The examples are chiefly from St. Co.—J.C.

*Teacher's Manual.*
These are merely diagrams, not complete drawings of the vocal organs. They are intended to show roughly the positions of the tongue with regard to the palate, teeth, and uvula, and the positions of the lips with respect to each other, and to the teeth during the utterance of the vowels and consonants described in the "Standard Course," pp. 60 to 62; p. 95, col. 2, and pp. 138 to 144, and below, p. 203.

Diagrams 1, 2, 3, 4, 5, 6, 7 (occupying the whole first column) are longitudinal sections of the mouth, supposed to be cut from top to bottom, from the back (on the left), to the teeth in the front (on the right). The shaded parts are the Uvula and the Tongue. The top line denotes the Palate, or roof of the mouth, and the sharp angles on the right, are the upper and lower Teeth. The wavy line at the root of tongue is the Epiglottis, or lid of the larynx. The line against which the uvula rests to prevent the air escaping through the nose is the back of the Pharynx [fur'ingks], or fleshy bag behind the mouth.

Diagrams 15, 16, 17, 18, 19, 20, 21, occupying the whole of the third column, and also 25, 26, in the fourth column, are similar sections, extending as far as the lips (also shaded), but 15 and 18 omit the tongue as its position for P, D*, F, V* is determined by that due to the following sound.

Diagrams 22, 23, 24, in the fourth column are similar sections, including the lips and one Nostril, and also the Upper Bag of the Pharynx, through which the air escapes into the nose. In the direction shown by the dotted line and arrow heads), because the uvula is not pressed against the back of the pharynx, as in 1, 2, 3, &c.

Diagrams 8, 9, 10, in the second, and 27, 28, in the fourth column, are cross sections of the mouth, in front of a line joining the ears. The upper curve is the Palate or roof of the mouth; the side pendants are the Side Teeth, and the shaded part is the upper portion of the tongue.

Diagram 11, in the second column, shows the open or non-rounded lips, and 13, 14, also in the second column, show the lips rounded in different degrees, the teeth behind them being always wide apart. Observe the difference of the corners of the mouth in 11 and 14.

The letters written to the left of each diagram, are the Glosse characters used for the corresponding sounds in the "Standard Course." Sometimes two or three diagrams are required to show the position for one vowel or consonant.

The CAPITAL LETTERS indicate the sounds heard in received English pronunciation. [A corresponding diagram in Mr. Ellis's "Pronunciation for the singer" shows, by small letters, the vowel sounds incidentally mentioned in St. Co. as provincial or foreign.—J.C.]

When ] is placed after a letter, as for AA, the larynx must be depressed. When ( is placed before a letter, as for OA, the lips must be rounded as marked in diagrams 12, 13, 14, in the second column; when no ( is prefixed, the lips are as in 11. When ( is placed before and ] after a letter, as for O], the lips must be rounded and the larynx depressed at the same time.

When * is placed after a consonant, the voice has to be set on.

YH, W* differ too slightly in position from EE, and WH, W* from (OO, to be distinguished from them in these rough diagrams.

H, accompanied or not by unvoiced breath, being produced by a jerk of the diaphragm (di-afram), or muscular layer separating the lungs from the bowels, has no diagram.

In S, Z* the tip of the tongue is tense or stiff. In R* it is soft or loose, and vibrates as the breath passes over it, producing interruptions or beats. Observe that for L*, diagram 27, the centre of the tongue, and for R* diagram 28, the sides of the tongue touch the palate. For T, D* both the centre and the sides touch the palate forming a complete stop.

R* is treated as a vowel, diagram 4, being the sound of U, always followed by R* before a vowel, and permissively, not obligatorily, followed by a very gentle R* in other cases.

Diphthongs and changing positions could not be noted, but are analysed in the following index.

EXAMPLES OF ENGLISH SOUNDS.

A] in tap, pat, pant, sad, mash, fax, plaid, plait, bade.
AA] in baa, papa, father, harp, calf, ass, chance, aunt, laugh, guard, heart.
AI in paid, all, aim, ale, flame, hay, they, weigh, great, grudge.
AIY = AI-I in day, they, lay, pay, say.
AIR = E-glide-U-R' in air, fair, share, glare.
(AO] in roar, tore, ore, more, four.
(AU in Paul, daub, cause, caught, laud, law,
all, talk, broad, brought, cord, fork.
B* in cab, bull, cub, bet, mob, babe, babble, bump.
CH = T-SH in chain, match, catch, choke, each, cheap.
D* in bed, dire, need, droll, cold, badge, rider, tied.
DH* in then, bathe, these, Booth.
E] in threat, dead, health, friend, said, heifer, leopard, any, many.
EE in meet, meat, mete, me, tea, grief, seize, quay, people.
EEIR = I-glide-U-R' in beer, mere, clear, dear.
EI = AA-glide-I in eye, isle, buy, tie.
EIR = EI-U-R' in fire, dire, hire, sire, tire, byre, lyre.
EU = I-glide-O in pew, imbue, tune, dew, cue, few, view.
EUR = EU-U-R' in your, ever, cure, pure, endure, allure, assure.
P in pain, fault, fear, foil, site, serf, safe, muffle, puff.
G* in gape, glass, garter, grate, bag, dug, peg, pig, frog.
H in horse, home, harvest, hat, hollow.
J = D-ZH in judge, jest, college, lodge, edge, postage.
K in class, carter, crate, duck, peck, pick, frock, pack, act, sect, picnic.
L* in lame, lave, loth, lad, literal, listlessly, jollity, foully, ill-look.

M* in map, member, film, minimum, mumble, triumph.
N* in neat, need, nag, nun, nod, don, pen, man, cannon, pennon.
NG* in dingy, singing, sinning, anxious, concord, long, rung.
(O] in nod, pond, stock, odd, dog.
(OA] in load, shoal, coat, blow, hoe, globe, grove, most, folk.
OAR = AO-glide-U-R' in borer, oar, gore, hoar, shore.
OAW = OA-U-O in owe, mow, show, throw, though.
OI = O-glide-I in boil, boy, buoy, toy, quoit, coin, joy.
(OO] in fool, cool, whose, lose, you, soup, two, rheum, wood, rude.
OOR = UO-glide-UR' in moor, poor, boor.
OU = AA-glide-U-O in thou, how, now, cow, out, down, town, house.
OUR = OU-U-R' in hour, tower, flower dower.
P in cap, pull, cup, pet, mop, peep, stop, leap, peal.
R* = U-R' in fair'er, near'er, erring, brid'le, r'we'er'y.
S in asses, assassin, sashes, sere, smile, swear, sue.
SH in ashes, Grecian, chaise, special, treasure.
T in tight, tied, fittletattle, tetragon, tent, trap.
TH in death, loth, them, thrill, path, mouth.
U in but, brush, judge, tun, sun, dun, blood, money, rough.
V* in vain, vault, veer, voice, serve, save, love.
W* in wen, ware, wile, wave, work, wake, world.
WH in when, where, while, whither, whim, whip, wharf.
X* in year, you, yonder, yawl, yacht, yawn.
YH in hew, hues.
Z* in zeal, baize, zest, zenith, sepulchral.
ZH* in incision, seizure, treasure, vision, rouge.

### Index of Vowels and Consonants

Most of the vowels and consonants represented in the diagrams, and described in the "standard course." The figures in () refer to the diagrams, and the other figures to the pages of the "standard course." The sign = precedes the analysis of the diphthongs.

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**Teacher's Manual**
KEY TO ENGLISH GLOSSIC.

Read the large capital letters always in the senses they have in the following words, which are all in the usual spelling except the three underlined, meant for foot, then, rouge.

\[\text{BEET} \quad \text{BAIT} \quad \text{BAA} \quad \text{CAUL} \quad \text{COAL} \quad \text{COOL}\]
\[\text{KNIT} \quad \text{NET} \quad \text{GNAT} \quad \text{NOT} \quad \text{NUT} \quad \text{FUOT}\]
\[\text{HEIGHT} \quad \text{POIL} \quad \text{POUL} \quad \text{FEUD}\]
\[\text{YEL} \quad \text{WAY} \quad \text{'HEY} \quad \text{HAY}\]
\[\text{PEA} \quad \text{BEE} \quad \text{TOE} \quad \text{DOB} \quad \text{CHEST} \quad \text{JEST} \quad \text{KEEP} \quad \text{CAPE}\]
\[\text{FIB} \quad \text{VIE} \quad \text{THIN} \quad \text{DHEN} \quad \text{SEAL} \quad \text{ZEAL} \quad \text{RUSSH} \quad \text{EIOUZHE}\]
\[\text{EAR} \quad \text{'RING} \quad \text{EAR'ING} \quad \text{LAY} \quad \text{MAY} \quad \text{NAY} \quad \text{SING}\]

R is vocal when no vowel follows, and modifies the preceding vowel, forming diphthongs, as in PEER, PAIR, BOAR, BOOR, HERB.

Use R for R', and RR for RR', when a vowel follows, except in elementary books, where r' is retained.

Separate th, dh, sh, zh, ng by a hyphen (-) when necessary.

Read a stress on the first syllable when not otherwise directed.

Mark stress by (') after a long vowel or ei, ei, ou, eu, and after the first consonant following a short vowel.

Mark emphasis by (') before a word.

Pronounce et, em, en, er, ej, a, obscurely, after the stress syllable.

When three or more letters come together of which the two first may form a digraph, read them as such.

Letters retain their usual names, and alphabetical arrangement.

Words in customary or NOMIC spelling occurring among GLOSSIC, and conversely, should be underlined with a wavy line (~), and printed with spait letterz, or else in a different type.

SPESIMEN OV INGGLISH GLOSSIK.

Too fas'il-itait Lerning too Reed.
Too maij Lerning too Spel unnee'eseri.
Too asim'ilait Reeding and Reiting too Heering and Speking.
Too maij dhi Rise'vd Preanunsi-shen ov Ingglishe aksessibil ov aul Reederz, Preavin'shel and Foren.

MEENZ.

Leev dhi Oald Speling untacht.
Introadou's along seid ov dhi Oald Speling a Neu Authohraf'r, konsisting ov dhi Oald Leterz euzd invairrhibl in chair best noan sensez.
Emploi' dhi Neu Speling in Skoolz too Teesch Reeding in booth Authohgrafiz.


Alour eni Reiter too reit in dhi Neu Speling aonli on au okair'henz, without loosing kaast, proav'e'ded hee euz'ee a Rise'vd Preanunsi-shen; dhat iz—

\[\text{[Oald. Aivotej dhi Neu Speling konkwentli with the]}\]

The following is the well-known Doxology expressed in Glossic:— "Gloari bee too dhi Faadder, and too dhi Sun, and too dhi Hoali Gost. Az it woz in dhi begining, iz noo, and ever shal bee, world without end. Amen."

The following is the Lord's prayer:— "Our Faadder which art in Hevn, halaed bee Dhe'i naim, Dhe'i kingdum kem, Dhe'i wil bee dun on crth az it iz in Hevn. Giv us dhis dai our dalli bred and forgiv'us our trespassz az wee forgiv'dhem dhat trespass against us, and leed us not into temta'shun but deliver us from eevil."
DESCRIPTION OF THE EXERCISES.

p. 61. — Ex. 146. "Standard Course," p. 61. The teacher cannot lay too much stress on the glide spoken of in this place, and he cannot be too careful in forming the habit of opening the mouth widely, and both opening and closing the mouth sharply, for the sake of making themselves conspicuous. It is not at all necessary to speak or sing loudly, when once we know this secret of making our voice distinct. This exercise practises the lips in producing P, B, M, WH, W, F, V.

The difference (breathed or voiced) between P and B is shown. "Standard Course," p. 60. The greatest care should be taken by the teacher to make his pupils feel this distinction, by causing them to pronounce strongly, as directed, P B T D K G, in n-p, n-b, p-t, b-t, m-, n-d, s-, z-, s-, g-, g-. The difference, therefore, because the distinction constantly recurs in the study of consonants. Let me here also give another hint to the teacher: I do not know how he is to teach these exercises unless he writes out the example-words on the blackboard, so that he can point to them as he wants them. I should recommend him to write them out in Glossie. Both of them are produced with the shut passage. (See diagram 15, p. 198.)

The position of the lips in the mid-tongue, because it is of no importance when the lips are closed, and it commonly takes its place in view of the sound which is to follow. M is voiced, but passes through the nose. (Diagram 23, p. 198.)

WH and W are the same thing in organic posture except that WH is breathed and W voiced. In both the breath has a central passage, as distinguished from the shut passage of the three last named. See "Standard Course," p. 60, 61. Diagram 5 shows the position of teeth, tongue, and uvula; in the production of these sounds, and diagram 12 shows the position of the lips at the same time. The posture of the mouth is the same as that of the vowel o. But there is a certain apposition or percussion, which gives the consonant effect. Mr. Molville Bell says, "Prolong the sound of the vowel o, and while doing so approximate the edges of the lips by the action of the fingers, from below the chin, and the o will be changed into uo by every approximation."

It should be clearly understood by the teacher that in speaking of diaphones, while we do not forget that they indicate only one sound, we find it convenient to name both letters. Thus we speak of the short vowel A as "aye." and of the long vowel AA as "aye-aye." Thus in this case we speak of "double you" and "double you accent" for W and WH.

F and V, one breathed and the other voiced, allow the breath to pass at the sides of the tongue, as distinguished from a central and shut passage of the letters which precede. See "Standard Course," pp. 60, 61. They are made by the effort of the lower lip touching the teeth. (Diagram 18.) As the passage is almost a shut one there is no need to indicate the position of the tongue, which shapes itself as in F, B, and M, for the coming sound. In working this and the other Exercises, 146 to 148, let not the teacher excuse himself from practising every consonant with each one of the principal vowels, p. 61, because he now knows that the audibility of a consonant depends on the glide with which it is connected, and that the principal glides should therefore be practised. Ex. 147. — T and D differ, like P and B, in one being breathed and the other voiced, and like these they are produced with shut passage, but the passage is shut not by lips but by tongue and palate. (Diagram 16.) See "Standard Course," pp. 60, 61.

N is a nasal consonant like M, but the passage is shut, not by the lips as in M, but by tongue and palate. (Diagram 23.) N is distinguished from M as P and B are from T and D. See diagrams 15, 16, 22, 23. "Standard Course," pp. 60, 61.

S and Z, one breathed and the other voiced, both allow a central passage for the breath over the tongue. They are formed by the mid-tongue (not the very tip) approaching the palate. (Diagram 17.) See "Standard Course," pp. 60, 61.

TH and DH, one breathed and the other voiced, are formed, like F and V, by active pressure against the upper teeth. But this is the pressure, not of the lips, but of the tip of the tongue, and not against the edge, but against the inside of the teeth. (Diagram 23.) See "Standard Course," pp. 60, 61.

L, like F, V, and TH, DH, only more decidedly, allows the breath to pass on both sides of the tongue. (Diagram 27.) The central passage is stopped by the tip of the tongue pressing the palate. (Diagram 20.) It is unmistakably voiced. See "Standard Course," pp. 60, 61. Let the teacher not forget to use with this exercise all the principal vowels for the sake of practising the glides.

Ex. 149.—SH and ZH, one breathed, the other voiced, give the breath a large central passage. "Standard Course," pp. 60, 61. They are formed by the mid-tongue approaching the palate. (Diagram 28.) For SH and ZH the tongue comes back after T and Z. Compare diagrams 19 and 26, p. 198.

K and G, one breathed and the other voiced, are produced with shut passage, like P and T D, but the passage is closed, not by lips, or by tip-tongue and palate, but by the back-tongue and back of the palate or uvula. (Diagram 17.) See "Standard Course," pp. 60, 61.

NG, like M and N, has a nasal passage. But the passage through the mouth is closed, not at lips or palate, but where K and G are closed, at the back of the tongue touching the uvula. (Diagram 24.) In K and G there is only a concusion at this place, but in NG a real friction of the breath.

The trilled R is like Z (both being voiced) except that the tip of the tongue is not held firmly but vibrates loosely in the stream of air. (Diagram 21.) The sides of the tongue are held firmly against the palate. (Diagram 28.) Again let me remind the teacher that it is only by working this exercise through all the vowels that they can practise their pupils in delivering those marked and vigorous glides which are essential to clear speech.

Exs. 149 to 151 add to the above list only YH and Y. The first is breathed and the second voiced. The posture of the mouth is nearly the same as that in the vowel e, giving a central passage to the breath (Diagram 8), and approaching the palate with the back of the tongue. (Diagram 1.) Mr. Molville Bell says, "Prolong the sound of the vowel e, and while doing so, strike the tongue upwards, with the lips of the fingers, from below the chin, and the e will be changed into ye at each stroke." Thus Y is really ee with a slight central consonantal percussion. Mr. Ellis has chosen the words of these exercises very carefully for the purpose of clear, quick, and energetic articulation. The ending consonants and the double consonants will require great care. Notice in Ex. 151 the consonantal diphthongs CH—TSH and J—DH.

Ex. 152. — It will not be necessary to sing the error as a pattern, but only to take care that the following words are sung without error. As they point to very common mistakes of pronunciation they should be carefully recited.

Ex. 274. "Standard Course," page 193. — As the vowel AU (called "aye-you") is often confused with AA, let...
us compare the two. If diagram 6
represents the position of palate, teeth, and tongue in AA, it will be noticed that
the tongue is much lower in AU as
represented in diagram 7. And if dia-
gram 11 represents the opening of the
lips in AA, it will be seen how much they
are allowed to veil the sound in AU.
See diagram 14. It may be added that
in the true Italian AA there is a tend-
cy to lower the larynx, which is not
the case in AU. The full descriptions,
at pp. 137, 138, "Standard Course," will
sufficiently guard the teacher against a false vowel sound. He should hear his class form by form, or part by
part, making sure that all are carefully
holding their mouths to the end in the
proper vowel shape. Note that many
would object to the words "ass" and
"chance" being pronounced AA and
CHANs. They would prefer AS and
CHANs. But undoubtedly for singing
these is better. Some even among educated persons, trying to follow
the spelling, pronounce the words broad,
cord, fork (BRAUD, CAUDE, FARK) with the vowel OA—thus, BROAD,
COARD, FOAR5—but alas! the spell-
ing is no guide. The teacher has already
been shown above, p. 136, how necessary it is that every vowel should be practised on
every tone, and he will watch for the
places where difficulties are likely to
arise.

Ex. 275, p. 138.—The vowel OA
(called "ow-ay") has precisely the
same mouth-shape as AA, but the
opening of the lips is more rounded
than even for AU. (See diagram 12.)
If you take the mouth-shape of AU
instead of AA, and then round the lips,
you do not get the pure sound of OA.

Ex. 276, p. 138.—These comparison
exercises have been carefully prepared
by Mr. Ellis, and should be as carefully
used for frequent drill.

Ex. 277, p. 138.—The mouth-shape
for OO is shown in diagram 5, and it
requires the lips more rounded than any
other vowel, more rounded even
than in diagram 12. The teacher will be
careful to watch the changes of this
vowel at high pitches.

Exs. 278, 279, p. 139.—AI (spoken
of as "eye-eye") is produced, as
described "Standard Course," p. 134,
with the mouth-shape, roughly repre-
sented in diagram 2, with the position
of the tongue as diagram 9, and with
the same opening of the mouth as AA.
See diagram 11. Let the teacher take
pains with his bases on this vowel,
and learn to give the pure unaffected
AI in each comparison exercise.

139.—EE is carefully described in
"Standard Course," p. 137. It takes the
mouth-shape indicated in diagram 1,
and the tongue-position shown in dia-
gram 8. It has the same mouth-open-
ing as AA.

Exs. 281 to 283, p. 140.—The com-
mon obscure vowel-sound U ("Standard
Course," pp. 139, 140) has the mouth-
shape shown in diagram 4, and the same
lip-opening as AA (diagram 11.) Like
all the short vowels, it will be found very
difficult to lengthen, and should
receive all the greater attention from
both teacher and pupils. We are so
accustomed in speech to use these vowels
brevly that we scarcely notice them,
and when we hear them properly pro-
longed in singing they sound new to us.
139. We have, therefore, to learn them
each one by one. This care will be
required for this becomes the more obvious
when we remember that the number of
possible vowels is really endless, for
every new shape which the mouth can
hold steadily for a moment is a new
vowel. To catch and keep the true
vowel-shape is, therefore, a matter of
practice and care. Mr. Melville Bell
says, that this vowel is very liable to
change in singing. "This arise, not
from any difficulty in maintaining the
position, but merely from the English
organs being unaccustomed to maintain
it long. Among English speakers there
is too little precision in this sound.
When the art of speech shall be more
generally studied, such confusions and
diversities will be condemned as un-
worthy of an educated speaker. The
perfect distinction of minutely differ-
ing vowels is no less a test of polished
and elegant speech than is the clear
enunciation of unaccented syllables the
test of a good pronunciation. The
power of marking these vowel and articu-
late niceties with clearness, evidences a
degree of command over the vocal or-
ganic which is rarely obtained without
considerable application. It gives, be-
sides, a refinement and graceful variety
to utterance, which should of them-
selves sufficiently recommend its culti-
vation to the tasteful student." See his
Principles of Speech and Dictionary
of Sounds, p. 141.

Exs. 284, 285, pp. 140, 141.—In
the scale of English vowels, "Standard
Course," p. 137, those on the right-hand
are called short, not because they are
necessarily short, but because they are
commonly short, and not because they
are the same sound, as certain long
ones with only this difference that they
are shorter. They are all made by
different vowel-shapes; but as there is
some correspondence between the gen-
crally long and the generally short
vowels, we should compare them care-
fully the one with the other. It would be
difficult to say what is the correspond-
ing long vowel for the obscure U which
we have just studied, but there is no
doubt that short A has its correspondent
in the long AA. Both A and AA have
the larynx somewhat lowered, and they
both have the same lip-opening. See
diagram 11. But the short A has a
higher tongue, as in diagram 3, and
diagram 10. The AA has a flat tongue
on a level with the lower teeth, but the
A has a flat tongue raised nearly to the
level of the upper teeth. Compare
diagram 5 and 6. "Standard Course,"
p. 140. Thus a very small change pro-
duces a very marked effect.

Exs. 286, 287, p. 141.—The short
vowel E in 6c has the same (or nearly
the same) mouth-shape, tongue-posture,
and lip-opening as the long vowel AE in
beat, with this difference that the larynx
is slightly lowered. Mr. Melville Bell
(in "Visible Speech") indicates a slight
difference also in the tongue-posture.
These two vowels are not very different
from one another, but the singer must
learn to distinguish them, for it will
not do to let his audience mistake a pet
for a put, or a bet for a bat. For the
lowering of the larynx, see Mr. Monros
above, p. 182.

Exs. 288, 289, p. 141.—The short I,
as in Hi, has the same (or nearly the same)
mouth-shape and tongue-posture as the
long vowel EE in beer. See diagrams 1
and 8. But the larynx is slightly
lowered. As in the last case, the dif-
cference is a slight one, but the singer
will have to make the difference, for he
must not let his audience mistake a fit
for a feit, a mill for a mile, or a whip for
a whoop. When such words have to be
broadly distinguished, the eye passes
downward on the vowel scale and
through high vowel. Mr. Melville Bell
is not singing "Wortlee Thee" or "Wort-nall
Thee," but something between the two
sounds, "Wortlee Thee." But this,
however, is much easier to speak than
to lengthen out in song.

Ex. 290, p. 142.—The short vowel
represented in Glossio by O, as in
pool, has the same (or nearly the same)
mouth-shape and lip-opening as the long
vowel OO, as in pool. See dia-
grams 5, 12. But the larynx is very
slightly lowered. The difference of

A STANDARD OF PRONUNCIATION.

sound is slight, but the distinction can be more easily made than in the cases of 'z' and '1', or 's' and 'th', and it is important that an audience should distinguish between 'wooded' and 'would'. In some parts of the country it is maintained that there is no difference, except in length, between 'oo', 'oo', and 'u', 'u', p. 141, that when the vowel is lengthened pool and pull, pool and full are the same. To such friends we commend the words of Mr. Melville Bell, quoted above, under Ex. 284, although Mr. Bell in his earlier works failed to show the undoubted distinction in vowel quality between 'oo' and 'u'. See, however, his "Visible Speech," p. 110, where the words "good" and "poor" are distinguished from "pool." See also Monroe's "Vocal and Physical Training," p. 35, and Dr. Compstuck's "System of Eloquence," p. 19.

Ex. 281, p. 142. — The short O in Pool has the same (or nearly the same) mouth-shape and lip-opening as the long AU, as in "Paul." But the larynx is slightly lowered. The pupil may not think, necessarily, to distinguish a stock from itself, or one who is fond from one who has frozen, but it is quite worth while to distinguish roe from wrought, and Roll from maid, and it is quite necessary to distinguish God from gaud.

Ex. 292, p. 142. — It will be sufficient for pupils to see the wrong pronunciation; let them give the right.

Ex. 293, p. 143. — Diphthongs consist of two vowels joined by a glide, EE (as in eye, idle), consists of AA with a glide on to I. In the glide, the mouth-shape passes rapidly from that indicated in diagram 6 to that in diagram 1. As the first vowel has the wider opening, it should be most dwelt upon in singing.

Ex. 294, p. 142. — OI, as in boil=O—glide—1, the glide in this case passing from the mouth-shape 7 to the mouth-shape 1 is even more marked than that of EE, and according to the same rule the first vowel is that to be prolonged in singing.

Ex. 295, p. 143. — OU, as in thou=AA—glide—OU. The glide is not a great one, passing from the position 6 to position 5. In speech, we dwell on the second vowel, but in singing, we prefer the first.

Ex. 296, p. 143. — EU, as in pure—I—glide—OU. The downward glide from position 1 to position 5 is a considerable one. As the second vowel has the larger opening it should be the one prolonged.

Exs. 227, 296, pp. 143, 144. — AO, as in roar, tore, is a sound between OA and AU. In it the larynx is a little lower than in OA. "Standard Course" gives full directions for it. It is always followed by a vocalised, not a trilled R. The vocalised R has the obscure U sound before it. Thus the word OAR may be analysed AO—glide—U—R. In this case the AO, and not the vanishing U, should be dwelt upon by the voice. It is remarkable that in some districts, even in good society, there is supposed to be no difference between OA and AO, except in length. But the authority of the best orthoepists, and certainly my own ears, confirm the distinction so well shown in Mr. Ellis's exercises. AO is Mr. Melville Bell's eleventh vowel, and OA his tie-fifth.

Let not even the "other diphthongs," p. 14, be neglected by the voice-trainer.

618. — Amid all the different pronunciations of the English language, it seems rather a bold thing to pretend to possess, and to write down for others the "accepted" pronunciation. I can only give what I believe to be true. My own habits of pronunciation differ slightly in several words from the examples in "Standard Course," because I was born in Yorkshire, and like the broad sounds, because I was bred in Somersethshire, and enjoy the pure AI without a vaer, because I have been much in Scotland and delight in the trilled R, and because some of the vowels given in "Standard Course" as obscure, I happen to have formed the habit of making clear; but by listening to the best speakers, I easily convince myself that Mr. Ellis's representation of the sounds in question is one which would be generally accepted by educated Englishmen. In part IV of his "Early English Pronunciation," pp. 1085 to 1217 (published in 1876), he has most carefully examined all the critical points and admitted differences in received pronunciation, and has especially considered in great detail the systems of Mr. Smart and Mr. Melville Bell, who take the lead among English orthoepists, and has given a series of observations on the unstudied pronunciation of various classes of Englishmen. It is indeed at least thirty years since he began to study and write upon the subject.

He always, however, particularly disclaims asserting his own as the only correct or the best habit of speech. He says he has learned by long observation that scarcely two, even if two, educated men pronounce all the words they have in common in the same way, and hence holds that many different pronunciations are received or accepted by educated people. All that he claims, therefore, for his pronunciation is that it may be safely followed. The examples given below on pp. 208 to 216 have been put into Glossic by him, with the omission of the accent mark, for the reason explained on p. 208, but in other respects agreesing with the rules for English Glossic given on p. 202, which should be well studied, especially for the use of obscure et, en, en, er, and of the vocal r generally.

619.—The young teacher, remembering what was said above on the subject of quality, should take great pains with his own pronunciation, and let him remember that it is of little avail for him to practise pronunciation in the singing class, unless he mends his own habits of speech, even in the familiar intercourse of home. Habit will rule him. He should test himself not only once, but often, by working through the following practice questions of "Standard Course:"—Page 80, Nos. 101—108; p. 116, Nos. 91—93; and p. 159, Nos. 86—108.

620.—The summary of a discussion on the definite article in singing, may be of service to some. And the following hints from the "National Music Teacher," by Mr. Luther Whiting Mason, Superintendent of Music in the Primary Schools of Boston, Mass., will be read with interest:—

The Definite Article.

621.—It is pointed out in the "Standard Course," that what are commonly called the short vowels are not only shorter than the others, but also quite different sounds. Some of them are obscure. This is especially the case with the first vowel in our fourth group, "Standard Course," p. 139, 140, the Glossis u. This is the vowel commonly used in conversation and in public speaking, for the word which it comes before a consonant and when we wish to deliver it briefly. When the same sound comes before a vowel, we are obliged to dwell upon its longer, so as to distinguish the two vowels one from the other. But when those sounds are applied to song, the short vowels are made as long, and the long vowels as short as the Music pleases. And, as those obscure vowels have always been pronounced by us quickly, we find it difficult to lengthen them out without variation. Mr. Colin Brown, who has written a long and interesting article in the "Psalmist" on this subject, says: "It is quite impossible to sing short u to a long note." We allow that it is difficult to lengthen this "short u." What are we to do with this little word the in singing a slow Psalm tune as in the following case:—

\[\text{:d} \quad \text{m} \quad \text{f} \quad \text{s} \quad \text{&c.}\]

Eust is the man.

Some argue thus: "Directly you lengthen the vowel, even in speech (as before another vowel), you go back to the clear pure sound as. Much more, then, when the vowel is lengthened by song, should we use the pianissimo form of it." Others reason thus: "Song is the reflex of speech, and if we were to be clearly understood, we must pronounce our words in the same way as in speaking, else we may have an article mistaken for a personal pronoun." For ourselves, remembering that these obscure vowels are not bad for musical quality—are better than the close ee—* we find it difficult to decide, but on the whole we prefer that song should be the reflex of speech. We are afraid that our reply will not be satisfactory to the combatauts on either side of the article. It will be almost as bad as the Yorkshenefit's settlement of another pronunciation dispute. When asked whether he would have the word already pronounced either ee or eee, he said: *Oh! another on 'em.*"—"Tonic Sol-fa Reporter," 1875, p. 348.

The Speaking Voice.

622.—"Listen to a child's tone in speech. Is it clear, sweet, melodious? If not, there is wrong management somewhere. Little children, if healthy, will by nature make agreeable tones. They would continue to do so under proper training. It would cost little effort to keep them in the right path in this respect.

But we often hear a very faulty quality of voice from little children in the school-room and elsewhere. Whence comes it? In a great degree from imitation. They hear and catch disagreeable tones in the street—in the school-room—at home. If they never hear any but a sweet quality of voice, they would catch and retain pleasant intonations unconsciously. The inference is obvious. The teacher should cultivate his own voice in this respect. The little ones should have the opportunity to hear melodious sounds as much as possible; and their attention should be directed to the quality of the sound, whether in musical instruments, in song, or in the speech of those about them. Thus will be established in their minds a standard of excellence as to quality of voice.

The Teacher will do well to call the attention of the children to the quality of his own voice, and ask them to imitate her tones. For this purpose the various sounds of the vowels may be used, as well as familiar sentences. Take, for instance, the common salutations, "Good morning." "How do you do?" &c., and require the children to repeat them politely and pleasantly—not loudly and with strained tones. Good instruction in reading is the best auxiliary to the singing lesson.

One test whether the child is in a way to use the voice properly in reading, speaking, or singing, is found in his countenance. If he is staining the muscles of his face with rowses and frowns, he is probably straining his vocal organs also. A stranger to school customs, hearing and seeing such a child for the first time might be prompted to ask, "Is he in pain?" And it is to be regretted that he would so often have occasion for the question during the reading and concert recitation in many of our schools. A placid—or, better—a cheerful countenance accompanies the right method of vocalization in speech or song.

Above all, avoid a noisy use of the voice. There is a difference between tone and noise; and children should be taught to distinguish between them. Tailing in concert or single recitation, and sing-song methods of spelling and other exercises, are as destructive to the voice as they are offensive to true taste.

One way of breaking up false intonations in scholars is by entering into close and sympathetic conversation with them, upon subjects in which they are interested, and thus making them forget the restraint and formalities of the school-room.

Another cause of faulty qualities of voice—usually taking the form of a husky or half-formed tone—is difference; this includes bashfulness and consciousness of inferiority—the latter where the child comes from the home of poverty and degradation. The remedy in such cases is the same: encourage the child.

Here, as elsewhere, tea little children need encouragement and incentive where one needs reproval or punishment.
ment. If he succeeds, approve him; if he fails, give him credit for what he has done; applaud the effort, and lead him to hope for better results next time.

In a word, begin thus early to cultivate his self-reliance.

In brief, children need training in the following points to qualify them either to sing or read well: 1. Proper position of the body. 2. Light management of the breath. 3. Good quality of voice. 4. Correct sounds of the vowels. 5. Good articulation and pronunciation. 6. Intelligence. 7. Expression. The discipline in these respects is best carried on in connection with the speaking voice.

Such a foundation being laid for instruction in the elements of Music, the method herein given may be pursued without any doubt as to results. Children learn to sing as easily as to speak. The question whether a child has a talent for music need no more be asked, than whether he has a talent for language before he begins to utter words, or before deciding whether it will be safe for him to attempt to acquire the language spoken by his parents. It requires no special gift for a child to learn French, German, English, or any other language if he hears it at the right age and in the right way. So in Music, the same truth will hold.

The Teacher need have no misgivings in commencing her task. The children have the gift, and will rather surprise us by its development, than fall short of our just expectations.

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The Teaching of Recitation and Chanting.

623.—Closely connected with the last subject is that of chanting and good public recitation; for there is no better exercise in enunciation than the clear delivery of a chant. Indeed, I strongly recommend even those students who are not interested in chanting for its own sake, to practise it for the sake of pronunciation. With this view, I have translated all the illustrations from various sources below into Glossic. This will assist the Teacher in writing a few sentences now and then on the black-board for pronunciation practice.

624.—This subject, being difficult, is introduced gradually in “Standard Course.” As imitation comes before invention, it is better to form the habit of reciting well-known passages already prepared for recitation, before pupils are themselves called on to divide passages for that purpose. And as metrical recitation is the easiest form of recitation, we begin with that, in Exercice 110, p. 27.

625.—At pp. 35, 36, there are directions for teaching chanting. Be careful that each of the steps—\(a, b, c\)—are introduced by pattern—and by a pattern of clear and beautiful pronunciation, as well as of carefully-measured rhythms. In the same manner let the chanting exercises at pp. 82, 83, be wrought out—still by pattern and with the processes \(a, b, c\), as directed p. 35. The pupils will thus learn the pleasure of distinct united utterance, and of throwing the emphasis where the sense dictates. Having once been accustomed to this, they will never be content with such chanting as Dr. Elvey thus describes.

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Donnelly. (Michael does not seem to understand. Mary Chapman holds up her hand.)

Teacher. Well, Mary?

Mary. Your voice went up when you said Michael, and down when you said Donnelly.

Teacher. Mary may speak his name as I did.

Mary. Michael Donnelly.

Teacher. That was right. Mary may say it again, and Michael may say it after her.

Mary pronounces his name as before, and Michael imitates her exactly, with a full consciousness of his success, and his countenance beams with delight at the approval of his Teacher, and Mary looks more beautiful in the unconscious experience, that “it is more blessed to give than to receive.” So the Teacher proceeds through the class with a very marked improvement, owing to Michael’s success.

One very important result from this lesson, which did not occupy more than twenty minutes, was, that before the Teacher got through, she had six or eight assistant teachers who seemed desirous to share the honours of little Mary Chapman.

In a class under such careful training in the speaking voice, singing is as easily cultivated as are flowers in Florida, or pine trees in North Carolina.—Lesson to a School Class, by Mr. Luther Whiting Mason, Superintendent of Music in the Primary Schools of Boston, Mass.
628.—"Carelessness in the reciting part is even more to be deplored, perhaps, than the faults [of wrong accent in the cadences] above mentioned. A practice prevailed almost invariably some years ago, and does occasionally now, for choirs to gabble over the earlier—and what are perhaps some of the most emphatic—parts of the verse, and then to make a long pause—where possibly no pause at all should be made—before drawing the remainder to the rest of the chant. ** * * The recitation, which is, perhaps, for its size, the most important part of the chant, should be sung as nearly as may be at the same rate as the rest, and the words should be enunciated with an accent and emphasis corresponding to that which an intelligent reader would adopt in ordinary—I would rather say public—reading. There is no conceivable cause why the recited portion should not be as reverently and as emphatically sung as the termination."

627.—I here give the exercises on p. 27 in Glossic, as there arranged, omitting the accent marks.

From aul-dhat dwel-bi | loa dhi skeiz—
Let dhi-Kri | ait erz praiz a reiz—
Let dhi-Ri deen erz | naim bee sung—
Throo evri | land bei evri tung—

'I ternal aar-dhei | mer siz Laurd—
'I ternal | trooth a tendz dhei word—
'Dhei praiz-shal sound ' from | shoe too shoar—
'Til sunz-shal | reiz and set noa moar—

Glourri-too Dhee-mei God-dhis neit 'faur aul-dhi bissings | ov dhi leit—
Keep-mee-Oa keep-mee King-ov-kingz 'bi neeth dhein | oan aul neit i wingz—

Faur giv-mee Laurd-faur dhei-deer Sun 'dhi il-dhat ei-dhis | dai hav dun—
Dhat width-dhi world-mei self-and dheee 'ei air-ei | sleep at poes mai bee—

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628.—It is chiefly because some Teachers allow their pupils to prepare for the chanting requirements of the Members' and Advanced Certificates theoretically, and do not require a previous vocal drill in all these examples, that we have hitherto had so many failures on this point. But another cause is to be found in the ignorance which prevails on the subjects of Emphasis, Pause, and Time in Speech. Every one uses them, but very few know that they use them—fewer know how they use them—and fewer still know why they use them. On this account, I propose that the Teacher, at least, shall have a series of analytical exercises on the art of Good Reading, and that which is built upon it, good Recitation.

629.—Emphasis. The student should bear in mind the distinction made, in spoken recitation, between Emphasis and Accent. Emphasis is stress laid on a whole word. Accent is stress laid upon a particular syllable in a word. The same word sometimes has and sometimes has not the Emphasis. But the same syllable in a word of more than one syllable, always has the accent. If such a word has Emphasis, the accented syllable has generally unusual stress, and all the other syllables are frequently louder. Mr. Ellis marks the invariable accent by a turned period after a long vowel, or consonant following a short vowel, in the accented syllable, as explained on page 202. But he marks the variable emphasis by placing a turned period
before the whole word, without omitting to indicate the invariable accent. For our present purpose it is more convenient to omit the indication of the invariable accent in all but emphatic words, and to show the emphatic word by placing a little bar (₁), like our lower octave mark, before an emphasized word of one syllable, or before the accented syllable in an emphasized word of more than one syllable, as Mr. Melville Bell has done in his admirable "Emphasized Liturgy."

**Emphasis.**

630.—The Emphasis of Sense is that stress or force which we give to words, which are in contradistinction to other words expressed or understood. This stress consists in making light monosyllables heavy, and in giving additional weight or force to what is commonly called the accented syllable of words of more than one syllable—that is, to that syllable which has the syllabic emphasis. In the following examples the words which have this emphasis are marked by a small bar below and before the emphatic syllable.

The importance of this emphasis is such, that if it be not laid in the proper place, the sense of the sentence may be completely altered; thus,

When dhi cheef pressts dhaifoor and ofisers saw him, dhal kredit out, suia-ing, kroosifeti him, kroosifeti hi. Pelleit setu unto hem, Taaik yee him, and kroosifeti him, for ej feim naa saelf in him.

The sense of the latter clause, read in this manner, is what the Evangelist meant to convey—namely, that Pilate desired them to do, as their own act, and on their own responsibility, what he himself saw no reason for doing. But if we read it thus,

Pelleit setu unto hem, Taik yee him, 'and kroosifeti him, faur ej feind naa saelf in him,—

the sense will be, that Pilate told them to take Jesus and crucify him, because he was persuaded of his innocence.

The following may be taken as another example:—

Shal yoo reid too tong too-dai?

This sentence is capable of being taken in four different senses, according as the emphasis is laid. If it be on the word you,

Shal ,yoo reid too tong too-dai?

the answer may be,

Noa; ej shal send mei servent.


If on the word ride—

Shal yoo reid too tong too-dai?

the answer may be,

Noa; ej proopoo too ywaak.

If on the word tong—

Shal yoo reid too tong too-dai?

the answer may be,

Noa; ei shal reid into dhi kuntri. And if the emphasis be laid on the word to-day—

Shal yoo reid too tong too-dai?

the answer may be,

Noa; but ei shal too moroa?

Such may be the importance of laying the emphasis in the right place.

As the emphasis of sense always implies opposition either expressed or understood, when the opposition is expressed the emphasis is sufficiently obvious, and needs scarcely any additional force to make it perceived. Thus,

It is an observaishen ov an dhi hystorirzenz, dhat wile ,Seecer moid naa diferens ov pour, whether it woz kon,ferd aur enserpt, whether caver dhoazz hoo ,japd aur dhoazz hoo ,feud hime, ,pompey seezd too valeu nun but what woz ,oferd, naur too hav eni dizier too guvern but wih dhi good-erl ov dhi guvernd.

In this passage every word marked by the bar is emphatical, since each is opposed to some other word as its correlative or correspondent; but since, from the circumstance of the antithetic words being all expressed, there can be no doubt as to which are the ideas that are meant to be contrasted, a slight degree of force, in addition to the syllabic emphasis, is sufficient. To this rule, however, respecting the light degree of the emphasis of sense, there are two exceptions—namely, when the antithesis is not only expressed, but denied, and when a comparison is formed by more, less, or rather, and than. Here the opposition between the positive and the negative, or the strong and the weak, member, must be marked by a strong emphasis than in the former case. Thus,

It woz ,Jaems, not ,Jon, hoo tolld dhi faulshou.

When a Pershen scallier woz rivell-irg Alekseander dhi Graiz hiz ofser reprimanded him, sai-ing, "Ser, yoo wuz paid too feit against Alekseander, not too ,rael at him."

But ov dhi too, les daingirz iz dhi ofsen Too ,teir our paishens, dhan mislead dhi oens.

He woz moar to bi piti dhan de speizd.

It is a kustum moar onerd in dhi ,breecch dhan dhi observens.

When the contrariety or opposition is expressed, we are at no loss for the emphatic words; the greatest difficulty lies in discovering those words, which are in opposition to something not expressed but understood. The best method of finding the emphasis in these sentences is, to take the word which we suppose to be emphatical, and try whether it will admit of those words being supplied which as emphasis on it would suggest. If, when these words are supplied, we find them not only agreeable to the meaning of the writer, but an improvement of it, we may pronounce the word emphatical; but if the words which we supply are not agreeable to the meaning of the words expressed, or else give them an affected or fanciful meaning, the emphasis of sense is not admissible. Let us take an example.

Mr. Addison, in one of his “Spectators” (411), showing the advantage of a good taste, says:

A man ov poselk imaishen iz let into a graif meni plechezh dhat dhi vulger sar not kaiabbl ov risenve; hec kan konvers wih a pikter, and feind an agerable kompanyen in a statu.
We shall find but few persons lay any considerable stress on the word *picture* in this sentence; but if we examine it by the method here pointed out, we shall find a stress upon this word (with the failing inflection) a considerable embellishment to the thought, for it conveys to the mind that a man of polite imagination can converse, not only with intelligent, speaking beings, like himself, but even with such a dumb, inanimate object as a picture. Here, then, an emphasis on the word *picture* is not only an advantage to the thought, but in some measure necessary to it.—"A Grammar of Eloquence," by Rev. Samuel Wood, B.A., pp. 91—92.

**Examples.**

631.—"A recild meit understand it." That is, not merely a man, but a child.

632.—On the subject of *pause*, I would also remark how closely it is connected with *emphasis*; for a pause before a word, if that word is emphatic, naturally increases its emphasis, and the tendency of a pause after a word is to give it additional importance, by allowing the mind to rest upon it. See "Standard Course," p. 94. It should also be borne in mind that what is in *elo-cution* a pause, may properly in *chanting* be made a prolongation of *sound*. The elocutionists distinguish different lengths of pause, but this is not necessary for *chanting*. The natural recurrence of rhythm dictates the length of our pauses or continuations. Hence it will not be necessary for us to introduce any of their new marks for pause or quantity. The comma will answer our purpose for all pauses or "expressive divisions," as Mr. Melville Bell calls them, within a sentence. We can use a period, when we need it, for the pause of a whole pulse. The *raised* comma gives time for taking the breath before an unemphatic word or syllable. I have not thought it necessary to give all the grammatical and philosophical rules for pause which the elocutionary works supply. I think that a number of *examples*, with a little common sense on the part of the pupil, is all that we require.

**Rhetorical Pause.**

633.—The *grammatical pauses* which are addressed to the eye of the reader are insufficient for the *speaker*; who addresses himself to the understanding "through the porches of the ear." He requires more frequent stopping-places, at more equal intervals, and of better regulated proportionate duration; both for his own ease and relief, to enable him to acquire fresh *impetus* on his journey, and for the convenience of those who follow his steps, that they may be able with facility to keep in his track.

We have, therefore, *rhetorical pauses*, which are independent of, though consistent with, and assistant to, the grammatical pauses. It is essential that the doctrine of rhetorical pause should be distinctly understood; as it not only marks the proper division of thought, and the condition and relation of one part of the sense to another, but its practice is indispensable to the perfect effect of the orator; *without* it, he must totter and stumble through every long and intricate sentence with pain to himself and his auditory:*with* its aid, his movements become regular, certain, and easy.

To prove this, let the student read aloud the three following sentences, without pause of any kind; for there is no *grammatical* pause marked in them. I give them as I find them printed in the several books from which they are taken.

1. *Nothing is more prejudicial to one's interest than a small dish untidily and Carelessly placed.*
2. *En dou not expect from him manufacturere dhi sain dispatch in eksekutting an auder dhat en dho from dhi shopkeeper and wairhoosmaan.*
3. *Dhair is no durt dhat dhi pershephon or beuti hikuma moor ekswai bei heen studid and rifeid upon an object or art.*

The reader will feel that in each of these sentences one pause is required, both for his own ease in delivery, and to assist the ear and understanding of the auditor, who is otherwise liable to be confused by a jumble of rapidly uttered phrases thrown together without mark or division of sense and relation.

This shows that some system of *pausing* is requisite, in reading and speaking, independent of, though auxiliary to, the grammatical pauses."*Art of Eloquence,*" by Vanderhoff, pp. 56, 57.
THE MEASURES AND RHYTHMS OF SPEECH.

634.—Bishop Lowth, one of the most eminent of our grammarians, has told us, that a simple sentence that is, a sentence which has but one subject and one finite verb) admits of no point by which it may be divided or distinguished into parts. This he illustrates by the following example:

| Dhi pashen faur prai, prodeuzesch ecesent efekts in wimen ov sens. |
| Here the passion for praise is the subject or nominative phrase (as it may be called) to the verb produces, and excellent effects in women of sense is the object, with its concomitant circumstances or adjuncts of specification, as Bishop Lowth very properly terms them. “This sentence,” he says, “is a simple sentence, and admits of no point by which it may be distinguished into parts;” and, as far as grammar is concerned, we will admit (for the sake of argument, at least) that it does not. We will also admit that it is possible to pronounce this sentence without once drawing the breath; but every one will allow that, if a short pause be made after the word praise, not only is the sentence read more easily, but its sense is more clearly and forcibly expressed; and also that, if another pause be made after effects, the reading is still further improved. Thus, Dhi pashen faur prai, prodeuzesch ecesent efekts, in wimen ov sens. But the necessity for additional pauses to those specified by the points in grammar will be more apparent, if we take a simple sentence of greater length than the former. Thus,
| A veialonshen pashen faur emiversal admirashen prodeuzesch dhi moast ridikeulius efekts in dhi jenerel bicaivyer ov wimen ov litt sens. |
| This is strictly a simple sentence, for it has but one subject and one finite verb; it does not, therefore, according to Bishop Lowth, admit of a pause between any of its parts. But it would be very difficult, if not impossible, to read this sentence without drawing the breath once, at least, if not twice. Some pauses, therefore, are necessary: the most necessary would be after the words admiration and effects; and good reading requires one also after passion and behaviour: thus,

636.—It will form a valuable exercise for the pupil to take the last quoted examples and mark them for emphasis. This will show him the close connection there is between Emphasis and Pause.

637.—The Time of Speech. It may be thought that when the accents and pauses of speech have been studied, nothing more is necessary for the ordinary student. It may be true that the study of time in speech requires a more delicate ear than that of rhythm and pause; but it will be found on trial that neither the good speaker nor the good chanter can proceed far without studying the measures and rhythms into which this properly divided and emphasised speech is thrown. Take, for example, the following passage from Walter Savage Landor. Let us suppose that it is properly marked for pause and emphasis, and let us ask ourselves what differences time can make in it. It has already been shown, “Standard Course,” pp. 53, 64, that in any form of excited, elevated, or public utterance, we naturally speak in regular pulses, but that the accents of speech differ from those of song in falling irregularly,—that is, sometimes after two pulses of sound or silence, and sometimes after three pulses, during the progress of the same sentence. But let us first read the quotation, simply attending to emphasis and pause.

638.—Keep paulwaiz too dhi point, aur with an sei upon it, and insted ov sai-ing things too maik peep starr, and wunder, sai whot wil wid, hould them heerrafter, from wundering and stairring. Dhis iz Fijiosof, too maik ri, moat thingz tanjib, kkommen thingz ekstenzivli jesfouli, jesfouli thingz ekstenzivli kkommen, and too leev dhi leest nesesceri faur dhi plaast.

639.—Now let us apply Time to it, and the Metronome (say, M. 100) shall be our test. Let us use the Time-marks of the Tonic Sol-fa Notation. Two modes of reading the first phrase will naturally present themselves. Which is the better?
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: Keep | aulwaiz : too dhi | point aur : with an
| el up : on it.
: Keep | aulwaiz : too dhi | point : aur : with an
| el up : on it.
There can be no doubt that the three-pulse measure allows a better pause of emphasis after
"point." A person feeling strongly what he
said would adopt the latter plan quite naturally.

640.—Let us try two ways of timing the next
phrase.
: And in | sted ov : sai-ing | thingz : too | maik
| peep|l : stair and | wundur.
: And in|sted : o|v| sai-ing : thingz : too | maik
| peep|l : stair : . end | wundur.
Let us try, in the same way, the third limb of this
sentence.
: Sai | whot : wil widh | hoald dhem heer|aafter :
| from : wundering : .and | stairring.

641.—Every one who speaks must adopt some
arrangement of measure and rhythm. Those who
wish to adopt the best must cultivate an exact ear
for Time, and must study above all things the
sense and feeling of the words. To some speakers,
of quick and fine perceptions, these effects of
Emphasis, Pause, and Measure, come by instinct.
To others they come only as the reward of labour
and thought.

642.—Let us now apply all these principles of
Emphasis, Pause and measure, to a single passage
—one which we can afterwards divide for chanting.
Let us take our passage from one of the less
known translations, in order that the judgment of
our students may be independent of existing and
well-known books arranged for chanting.
Kumfort yee,
Kumfort yee, mei peep|l, seth eu God
Spoeck yee animaiting wordz untoo Jiroozalem and
diklair untoo her
Dhat her waurfair iz fuolfild dhat dhie ekspliaishen
ov her inikwiiz iiz aksepted
Dhat shee shal riseev at dhi hand ov Jehovaav.
Blesnz doubl too dhi punishment ov aul her sins.


MARKING EMPHASIS AND PAUSE.

643.—Marking a passage for Emphasis is not
difficult if the student only does, what the best
elocutionists recommend, think a phrase through
before he begins. Let the Teacher write on the
black-board the above verses, and, giving his whole
attention to the subject of Emphasis, let him re-
quire his pupils to direct him in marking it. They
will need first to think through the sentence, or
limb of a sentence, given, and then to speak it as
sensibly as they can—one and another being called
on for the purpose.

644.—In doing this, the pupil will feel that the
emphasis in the first line of the above example is
on pcomfort. In looking at the second line, he will
notice that the principal emphases are on ppeople
and gGod, for these are the new thoughts, but that
a subordinate emphasis is also due to .pcomfort.

645.—In the third line the idea of "Jerusalem"
is already implied in the "my ppeople" of the
previous line, so that "animating words" and
"declare" are the new thoughts, and naturally
receive the principal emphases. In the fourth line
we have two double ideas—"pwarfare fullyfills," and
"xpibation accepted"—and so the emphasis is
dictated.

646.—In the fifth line the point—the apex—of
each thought is on the words receive and Jehovah.
And in the last line the chief ideas seem to be,
that the blessings shall be double as compared
with the punishment, and that not of one but of
all her sins.

647.—Marking Paus es will be a similar exercise
of mind to that just described, because pause, as
already noticed, is closely connected with emphasis.
Pursuing the plan of "thinking through" each
phrase before speaking or singing it, the pupil will
be reminded of his "Standard Course," p. 135.
There the singer is recommended to "form the
habit of looking on words, not singly but in groups,
joined together naturally by the sense." Just
now we are thinking of groups somewhat larger
than those there indicated. And these groups,
sometimes large, sometimes small, require pauses
to separate them. We may call groups “rhetorical words.” Using the comma to represent the place (not the length) of a rhetorical pause, let us examine for pause the example already studied for emphasis. Let the Teacher do the same thing with his pupils. He will have the great advantage of the blackboard.

648.—The first line needs no pause. In the second line there are two obvious rhetorical words, and even if “people” did not need a “pause of emphasis” to follow it, it would require the pause to separate the rhetorical words.

649.—In the third line the most obvious pause is after “Jerusalem.” But even the sentence thus cut off is better divided into two rhetorical words. A slight pause after “words” improves the sense. The Teacher should always take care to ask for the most obvious pauses first. In the fourth line there are two larger groups, each divisible into two rhetorical words. The student will quickly fix the principal pause after “fulfilled,” and will learn by experiment that good reading requires subordinate pauses after “warfare” and “iniquity.”

650.—In the fifth line the division of rhetorical words is like that of the second line, and the pause separating them is also a pause of emphasis. In the last line there is an unmistakable pause of emphasis after the word “double,” and in “thinking the line through,” it will be felt that the sense is better brought out by a slight pause after “punishment.” There are thus three rhetorical words.

651.—Let us now write the passage with its Emphases and Pauses, as thus agreed.

Kumfert yee,
Kumfert yee mei peep, seuth eur God
Speek yee animaiting words, too Ji, roosalem, and dijklaier untoo her
Dhat her waurfair, iz fuoi, fild, and dhat dhi ekspjaioshen ov her inikwit, iz ak, septed.
Dhat dhe shall ri, seev at dhi hand of Je, hoavna Blessing dubl, too dhi punishment, ov and her sizn.

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652.—Measure is the next element we have to apply to our passage. The first line, as soon as we speak it, easily divides into the TAASt TAA of a two-pulse measure. Before proceeding to the second line, the pupils should decide at what rate the pulses are to move in speaking this passage. This will be decided generally by the character of the piece, and the quickness of utterance which seems suitable to its sentiment. The best way is to try, speaking various sentences in various manners, always testing your pulses by the Metronome. Let us suppose that M. 80 will suit this passage, and let us keep the Metronome ready to test our experiments. The words, “Comfort ye my,” we can either make into two pulses—thus, “Comfort: ye:my,” or into three pulses—thus, “Comfort: ye:my.” The first would be more easily sung by the mass of a congregation, but a solo singer who knew how to bring out the loving word “my,” would probably prefer the second. The heavy idea of dividing these words into four pulses would scarcely occur to the pupils. The rest of the line can be divided thus, “[people: saith your: God.]” But we have already decided that there is to be a pause after “people,” and this would suggest, “[people: saith: your:God,” or more rapidly, “[people: saith your: God.”

653.—In the third line, we have accents on the syllables “aa” and “ru.” If we throw the syllables between them into only two pulses—thus, “[animating: words-to-Je:ru],” we get an undifferentiated rhythm and we lose the pause after “words” which we had before thought desirable. A three-pulse measure will suit better—thus, “[animating: words: to-Je:ru]” Of course, “speak ye” falls naturally to one pulse. What shall be done with the rest of the recitation? We want to mark the pause already agreed on, and to give some dignity to the word “Jerusalem.” Will the two-pulse measure—thus, “[Jerusalem: and-de],” or the three-pulse measure—thus, “[rusalem: lem: and-de],” better answer these purposes? I think
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the latter. "clare unto her" is either the TRAA TAATAI TRAA of two-pulse measure, or, as "her" is not emphatic, the TRAA TAATAI TAA of three-pulse measure.

654. In the fourth line we have an accent on "a" in "expiration," and another on "iq" in "iniquity;" a two-pulse measure, thus, "[ation-of -her-in]" will do well for the junction of those two accents. But how shall we manage the words which precede? A decided pause is needed after "fulfilled," in order to divide and set off the two contrasted rhetorical words. "That-her" seems naturally to belong to a weak pulse, and "warfare: is-ful" fall easily into a two-pulse measure. The difficulty lies between the accents of "fulfilled" and "expiration." To get the proper pause we must have a silent pulse, thus, "[illed: that-the: expi.]" The accent which this throws on the word "that" is very slight; I have represented it by a "medium" mark. The close of this line naturally falls into measure for speaking thus, "[iquity: is ac cepted," or with the pause "[iquity: is ac," &c.

655.—In the fifth line, the pause is easily secured, thus, "That: she-shall-re ceive: .at-the." The closing words would fall into measure for speaking, thus, "[haad of Jo: kovah." In the last line, to secure the great pause of emphasis, both a silent pulse and a three-pulse measure will be necessary, thus, ": Blessings [double: : to-tha]." The closing words might, for speech, be delivered thus, "[punish: ment of," &c. But for the sake of the pause, already agreed on, it would be better spoken thus "[punish: ment: .of: all-her: sins."

656.—Our passage may now be written out on the black-board in musical measures, as agreed on, and then revised. It stands thus,—with Emphasis and Pause* preserved, and Time added to them. Let us first read it with metronome, till it is familiar, and then let us sing it on one tone.


*As at page 213.

RECIPIATION AND CADENCE.

| Kumfert : yee | Kumiert : yee : mei | peepl : | seth : eur |
| : .too-Ji- | rooza : lem : .and-di | klar : unttoo : her |
| Dhat-her | warfair : iz-fuol | fild : | dat |
| dhi : ekspi | aishen-ov | her-in | ikwiti : iz |
| -ak | septed |
| : .Dhat : shee-shal-ri | seev : .at-dhi | hand |
| -ov-Je : heavaa |
| Blessings | dubl : | too-dhi | punish : ment |
| : .ov | aul-her : sinz. |

657.—Having thus learnt, as well as we can, to speak this passage, let us adapt it to a chant. We will take the form of the Anglican chant, with two reciting-tones of optional length, the first followed by a "Two-accent Cadence," the next by a "Three-accent Cadence," thus:—

The chant is a compromise between singing and speaking. The Recitation belongs to Elocution and the Cadence to Music. Music lengthens out the tones of a cadence. Excited preachers and other public speakers often break into a musical cadence at the end of their sentences. But it is to be observed that they do not change the rate of their pulses; they only spread out a smaller number of syllables on the closing pulses. Here, then, is a point of unity between Elocution and Music, Recitation and Cadence: the pulses of speech go on at the same rate. If, then, in the Cadence, we have fewer syllables to a pulse, and in the Recitation more, how are we to reconcile this with the principles of Time in Elocution we have just studied? We cannot perfectly reconcile the rhythms of Music and Speech, we must make as good a compromise as possible.

658.—The following examples, taken from various chant books, will show how variously the Cadences are at present cut off. It will be well for the teacher to write them on the black-board, and then require his pupils to give their reasons for or against each of the Cadences.
HOW TO CUT OFF CADENCES.

Two-accent Cadences.

1. Dhairfoar dhi ungodli shal not stand | in dhi | jujment.
   Dhairfoar dhi ungodli shal not | stand in dhi | jujment.

2. Salvaishen bilongeth un | too dhi | Laurd.
   Salvaishen bilongeth | untoo dhi | Laurd.

3. Hou long wil | yee luv | vanitti.
   Hou long wil yee luv — | vanitti.
   Hou long wil yee luv | van i | ti.

   Whot iz man dhat dhou art | meindfuol ov | him.

Three-accent Cadences.

5. Let dhem rettern | and | bee asehamd | sudenli.
   Let dhem rettern | and | bee a | shamed | sudenli.

6. Dhou saistest | in dhi | thraon jujing | reit.
   Dhou saistest in dhi | thraon — | jujing | reit.

7. Needher wilt dhou sufer dhein hoali | wun too | see ko | rupshen.
   Needher wilt dhou sufer dhein | hoali wun too | see ko | rupshen.
   Needher wilt dhou sufer dhein hoali wun too | see ko | rup — | shen.

669.—In studying this art of cutting off cadences, let the pupil read “Standard Course,” p. 94. His rules will be—First, as few syllables as possible in the cadence; second, no dancing rhythm in the cadence; third, the accent to suit the sense. In studying the first line of our passage, he will remember that the prophet was called to the work of comforting, and therefore “comfort” may be dwelt on; but the music is too long for the word; part of it must be slurred. It is easy to see that, in our selected passage, “ye” will take the last accent, but shall we sing “ | com : — | fort : — | ye,” or “ | com : — | — : fort | ye.” Most students will prefer to hold on the first—the accented—syllable.

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In the second line the word “God” takes the last accent, “saith,” the second last, and the first syllable of “people” the third last. In the third line we cannot mistake that the accents fall on “her” and “clare.” But in cutting off the cadence of the fourth line there would be difference of opinion. Some would sing “ | ty : is | ac : cep | ted :— | l.” Such persons sing very quickly, and adhere to a theory of syllabic cadences. Others think that the voice and the thought should dwell on the word “iniquity,” and that the assurance of present acceptance should, if possible, be marked. These would sing “ | i-qui : ty : is : ac | cepted :—.”

This ending with | TAATAI : -AA is not desirable, but it allows, as they think, a better expression of the sense, and is therefore adopted as a compromise. In the fifth line most persons would at once give the last accent to “hovah,” and the second last to “hand,” but others, disliking the TAATAI-AA on so solemn a word, would prefer to sing | Je : ho | vah :—. And in cutting off the “Three-accented cadence” of the last line, while some would at once sing “ | ment : of | all : her | sins :— ;” others, disliking the false accent on “ment,” would risk the rather dancing rhythm | TAATAI : TAATAI, and sing “ | punish : ment-of | all : her | sins :—.”

660.—If now we write down the results of our analysis in Emphasis, Pause, and Time, we shall see to what extent the cutting off of the musical cadence interferes with good elocution. In the following example pains have been taken to prevent this interference. The nearest approach to interference is in the fourth line, where a new emphasis is created on the word “is,” to which, however, we do not object, because it brings in the sense of security. But if the alternative cadence of the fourth line mentioned above had been adopted, we should have had not only two false accents, but a blotting out of the pause, for it is easier to make a short pause at the end of a weak pulse than of a strong one. Notice how easily the proper rhetorical pause is supposed after the word people in the second line.
CHANTING; EXAMPLES FOR PRACTICE. INSTRUMENTS.

1. Hoa! Evri wun dhat thersteth, kum yee too dhi wauterz!
   And dhat hath noa silver, kum yee, bei, and cet!
2. Yai, kum, bei yee without silver,
   And without preis, wein and milk.
3. Whairfoar, doo yee wai wai our silver dhat which iz noa bred?
   And eur richez, dau dhat which wil not satisfie?
4. Atend and harkn untoo mee; and et dhat iz trooli guod;
   And our soal shal feest itself with dhi richest delikesiz.
5. Inklein eur eer, and kum untoo mee;
   Atend, and eur soal shal liv.

For further practice let the Teacher write such passages as the following on the blackboard, and require his pupils to help him in marking them, as above, for Emphasis, Pause, Time, and for chantung cadences. The practice is one requiring much thought and a delicate ear. But it teaches a man to speak his own language with clear pronunciation and in an effective manner. It is also very valuable to any one who has to lead a choir or congregation in chanting.

1. A vois kreig-eth; In dhi wildernes pripair yee dhi wai ov Jeehoavaa!
   Maik strait in dhi dezert heiwaifour our God!
2. Evri vali shal bee egzaulted, and evri mounten and hil bee braut loa,
   And dhi kruked shal bikum strait, and dhi ruth plaizs a smooth plain.
3. And dhi giorari ov Jeehoavaa shal bee riveeled,
   And aul flesh shal see toogedher dhi salvaioshen ov our God,
   Faur dhi mouth ov Jeehoavaa hath spoakn it.

2. A vois Seth: Proaklaim! And ei sed, whot shal ei proaklaim?
   Aul flesh iz graas, and aul its giorari leik dhi flour ov dhi feeld.
1. Dhi graas widereth, the flour raideth,
   When dhi wind ov Jeehoavaa bloaeth upon it.
   *Verifi dhis peeplz iz graas.

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3. Faur mei thauts aar not our thauts; needher aar our waiz mei waiz, seth Jeehoavaa.
5. Faur az dhi heyns aar heier dhan dhi erth,
   Soa aar mei waiz heier dhan our waiz,
   *And mei thauts dhan our thauts.

The Young Teacher will find additional drill in the practice questions, p. 44, No. 110; p. 80, No. 109; and p. 116, Nos. 89, 90.

The Teaching of Instruments, of Absolute Pitch, and of the Staff Notation.

For a long time I made no effort to promote the teaching of instruments by the Sol-fa method. I was interested in the promotion of singing among the people, and knew that most instruments were costly and out of the reach of the poor. Besides, I had my doubts whether the

*These lines must be sung to a repetition of the last section of the chant.
Sol-fa notation would answer well for very rapid music. But our pupils themselves soon began to demand that the Tonic principle should be brought to bear upon instruments. Youths taught themselves to play on the piano, and astoniated their mothers by playing the same tune in several different keys. Drum-and-fife bands in schools where the Tonic Sol-fa method had been taught insisted on trying their tunes in another key. Thus it was found that, in spite of the apparent physical advantage of having one fingering on the fife, and one digital on the piano, for the same place on the music staff, the mind ruled, and key relation predominated. The instinct of our pupils made it so important for them to carry a key relation in their minds, that this consideration over-balanced every other. See above, p. 19, on the wrong mental association of pianists. Mr. Miller was one of the earliest to waken attention to this subject. See his paper below. At the meeting of the Tonic Sol-fa school, in 1862, I pledged myself to prepare methods for all the instruments; and this pledge I redeemed by publishing in succession “The Harmonium and Organ Book,” “The First Piano-forte Book,” “The Brass Band Book,” “The String Band Book,” “The Reed Band Book,” and “The German Concertina Book.”

664.—But this effort exhausted all the means at my disposal, and there still lay the vast field of effort and outlay of providing a literature for the executants who were taught. Mr. Alexander Kennedy, Mr. Cowley, Mr. McNaught, and others were very successful in training an orchestral band. They also arranged music, and provided manuscript copies at great labour and expense. We went farther, and published, by subscription (chiefly through the generous and skilful efforts of Mr. McNaught) a series of orchestral scores. But we were not able to keep pace with the demands of our executants. We must therefore wait patiently till some of us, interested in the matter, have means at command for providing a large instrumental literature before we can reap the fruits of this effort. For the piano-forte and harmonium, however, clever players find the greater part of our vocal literature quite available; we are frequently publishing new music for these instruments, and skill in the use of them is rapidly increasing among Tonic Sol-faists. My proposed “Harmony Player,” in which the ear for harmony is developed at the same time that the fingers are trained to produce it well, I hope, add increased interest to these studies. There is also another direction in which I hope Tonic Sol-fa enterprise will be developed; I mean in the invention of a finger-board instrument with perfect intonation. See “Musical Statics.”

As such an instrument must be played tonically it seems probable that a Tonic Sol-faist will be its inventor, and Tonic Sol-faists its first players. Such an invention will soon be followed (on the plan of Evans’s Orchestrians) by a cheap Orchestra which is another desideratum of modern popular music.

MR. W. M. MILLER.

665.—“Whilst sight-singing has been making such rapid progress amongst the great mass of the people, sight-playing, notwithstanding all the money expended upon instrumental tuition, is an art acquired by few. As far as the pianoforte is concerned, dashing bravura players abound in great numbers—players who have acquired great manual dexterity in running up and down the key-board of the instrument, who can play, by ear, a number of pieces with an amount of dash truly wonderful, yet, after all, cannot play at sight a simple German or English Chorale. The fact is, the present mode of teaching instrumental music in this country produces not sight-players, but musical machines, who play more by rote than rule; and until we get a method and faithful teachers that will inculcate first principles instead of getting up pieces, the result can never be otherwise.

The question has often been asked, Cannot the Tonic Sol-fa method, which has done so much for the spreading of vocal music amongst the people, be adapted to the requirements of instrumental music?

What is the result of our own experience in this matter? Two years ago a flute band was formed amongst the boys connected with the Glasgow Model Schools. The boys composing the band had a very fair knowledge of Sol-fa, but knew nothing whatever of the Old Notation. To me this was a matter of serious consideration. Having formed the band, I had to decide, and that at once, upon a mode of teaching it. In the first place, I resolved to teach the boys to play at sight, and in order to do this, had to decide upon one of two things, either to teach the boys the Old Notation, or abide by the new. I chose the latter.
I got a large sheet of paper. On it I put signs representing the fingering of the key of D, and above the fingering I put the Sol-fa letters, representing all the sounds the flute is capable of producing in that key. When the boys had acquired the power of playing at will the lowest sound of the flute, I hung up the sheet, and taught them the fingering of the first octave, and tried them with a simple melody; they made several attempts to play it, but produced anything but agreeable results. I informed them that I should try the Modulator. To me the idea was a novel one, but it was immediately put into practice; the results were magnificent. The modulator was put into the F, and the boys were able to play any voluntary piece that was put to them.

I taught the boys to play in one key only, viz., D, intending to confine their attention altogether to such tunes as could be played in that key, and containing neither chromatic nor modulating tones. My reason for doing so arose from a certain feeling I had, that Sol-fa would do very well for one key, but would prove rather a hindrance than help the mass of players in several keys coming to be considered.

It was otherwise with the boys; they had evidently no inclination to be confined to one key. One asked the fingering of F#; another said he had been playing the alto of “Good Rule,” but could not play it. Would I be kind enough last some of the boys who could play the fingering of E? A third wanted the fingering of F#, whilst not a few of them shouted as loudly for that of G. They got all they desired, and soon they did themselves that which I, as their instructor, ought to have taught them how to do.

The boys no longer confined themselves to one key, but played in several, and often they told me, somewhat exultingly, that what I taught them to play in D could, if it chose, play also in G. Finding the experiment to succeed much better than I expected, I thought the matter might be extended; I wrote a Sol-fa Flute Instructor, showed it to a Glasgow publisher; he made me an offer for the copyright of it, which I accepted. He has not only published this, but has also arranged with me for Sol-fa Tutors for the Flute and Concina. These may be small things in their way, and, as contributions to art, comparatively worthless; but they are a beginning, and who can calculate the end?

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True, the flute is only a single instrument, but then it belongs to a very large and important class of musical instruments; it also requires as much skill and dexterity in the manipulation as any other instrument belonging to that class. Now if Sol-fa can be applied with profit to one, it may be, and will be, applied to all.

I have hitherto been speaking of the flute, let me now direct your attention to the violin and the pianoforte. To the violin Sol-fa may be readily adapted. When I first directed my attention to this matter, I thought that that characteristic point in our system, so well known to us as the “Better method of transition,” would prove a serious, if not an altogether insurmountable, obstacle in the way of the pupil. Experience has taught me otherwise, and I am now of opinion that the “Better method,” which is calculated to do so much for our advanced Sol-faists, in helping them to tread with comparative ease and certainty the many labyrinths of abrupt modulation, will, in the hands of proper instructors, do as much for our students of the violin, in enabling them to play in tune the most difficult passages, as I have said, in the hands of proper instructors; this is a point on which I would lay peculiar stress, because, if the pupil, although well trained in the art of bowing, fingering, etc., be not well grounded in all the scales and modes—exercises, by the by, which are generally disliked by the instructed, and therefore apt to be laid aside by the instructor—the better method cannot but prove an insurmountable barrier to the progress of the pupil; but let these scale exercises be thoroughly taught, and the advantages of the better method will be abundantly manifested.

Many reasons might be given in favour of the proposed adaptation; our time will only permit me to make mention of two. First, the great advantage it would confer upon the player, in enabling him to transpose, at sight, but of one key into another. Let me not be misunderstood; I do not mean the mere transcribing of notes, but the very simple matter, but the important though difficult art of playing in one key whilst the eye is reading the notes in another. To do this in the Old Notation is considered an extraordinary feat, but it would be a difficulty of no moment whatever in the New.

I do not say that Sol-fa would make the manipulation of every key alike easy; some keys are easier to play than others, each has got its own intrinsic difficulty, which must be the same in every system of tuition, but apart from that, the matter of transposition to the Sol-faist would be absolutely nothing. Second, it would render the harmonic analysis of any score comparatively simple, and this to any student of harmony is a matter of very great importance. In the Old Notation the reading of an instrumental score requires a very great amount of musical knowledge and ability, much more than is necessary to an average of any vocal composition; but in the New any student that can analyze a vocal composition, can analyze an instrumental one, well do he has it in the New Notation.

With regard to the adaptation of Tonic Sol-fa to the pianoforte or the organ, I am not in a position to say much. I have several times tried to play in full harmony from the Sol-fa Notation, but have hitherto found it rather tough work. However, I have seen young persons who could play from the Sol-fa with a precision and correctness truly astonishing. The difficulty with myself would altogether be getting used to the condensed component parts of the chord, as is done in the Old Notation, and this, I am sure, may be easily done.

I have now, my friends, introduced this important subject, I have given you my own experience, and urged a much had we favour the Method I now may be, and will be, said against it, but “time will try all,” and in the meantime I close by making the remark that the subject is at least worthy of judicious experiment.

After Mr. Miller’s paper, a long and very interesting discussion took place. Mr. Jones said that Mr. Miller’s paper had explained to him something of his own experience. He had found that some sixty or seventy boys of his school had taken the law into their own hands, and had applied the Tonic Sol-fa method to instruments, at least to the drum and the lute, with very little help, and in their own way. Meers, Ethell, Cowley, Mellish, Leverack, Hargraves, and Dowling, spoke chiefly about the violin, showing that the proper placing of the fingers in that instrument must be governed by a good ear, and that they had found our study of mental effect a wonderful help to accuracy in this respect. Mr. Proudman advocated the formation of a Tonic Sol-fa band, and showed how Miss Glover and Mrs.
MR. KENNEDY ON STRING QUARTETS.

Stapleton had successfully applied the Tonic Sol-fa method to the piano. The Rev. Isaac Dovey showed how young Tonic Sol-fa was, respecively, to apply the method to the piano, and that in various keys.—if only there happens to be a piano at hand. Mr. Lefel Bird and Mr. Drums in kiely spirit warned us not to attempt too much.—“The Application of the Tonic Sol-fa Method to Instrumental Music,” by W. M. Miller, in the “Reporter” for 1892.

MR. A. B. W. KENNEDY.

696.—I will for the present speak only of Orchestral Instruments, reserving some words about the harmonium and pianoforte till the end.

Mr. Curwen has been well before-hand with us all in pushing Sol-fa in this direction, but I am afraid that as yet he cannot feel very much encouraged by the popularity to which his excellent books have attained among Sol-faists, and it is partly with a view to extending their use that I am anxious to bring forward this subject. In my opinion the worst is reserved for the best wine to the end of the feast. Brass instruments may come (especially the cornet, accompanied) to be considerably used by Sol-faists, the same may be the case with the flute, and possibly the hautbois; but I venture to predict with confidence that by far the greater number of us who take to any instrument will choose one of the strings. This will be the case for many reasons, but principally because they are the only instruments that are naturally harmonious, i.e., that give without any special treatment, the true intonation, and for this cause I hope they will soon come to be used extensively as accompaniments in Tonic Sol-fa singing classes.

It is generally acknowledged that next to the human voice perfectly managed, these (in respect to the pleasure it gives to the ear), a violin perfectly played. An assertion of this kind, however, by a musician, is generally made with great emphasis laid on the “perfectly,” and with some remark about the almost insuperable difficulties in the way of playing the violin anything like perfectly, in fact with the idea that it may be said of the violinist, as of the poet, se wisiur non fit. In this, as in so many other points, I differ from the old sentimentists, for I hold that to a Tonic Sol-fa it is not more difficult to play the violin than the piano, but far more pleasant. They talk of the dismal “screech” of a would-be fiddler,—are “screech and exercises” on the piano altogether agreeable to the listener? They say that it takes years of practice on the violin to make even a moderate proficient,—well, I am sure we all could mention, if it were polite, people who have practised two hours a day on the pianoforte many years, and yet have not got beyond that degree. But they do not consider it hopeless to attempt to master the latter instrument, why should it be so with the former? I reply to this we shall very likely be told that while only time, and a certain amount of earnest application, are necessary to learn to play the piano, we need in addition brains, if we would expect to master the violin. This is perhaps true to a great extent to them, though it is certainly not so to us. It appears to me that the essence of perfect playing on the violin is the playing with the just intonation. Now everyone must admit that to learn a tempered instrument (like the piano) from a tempered notation does not require any extraordinary genius. To learn an untempered instrument from a tempered notation is a very different thing; it may probably require much genius; for to play well the very first principles of the notation will have to be unlearned. But after all, on the principle of like to like, it should not be anything so difficult to master an untempered instrument from an untempered notation, e.g., to learn the violin from Sol-fa. I maintain, not only that it is not reserved to four or five men to be the only players worth hearing, but that we shall, soon if the thing be properly worked, be able to get first-class violinists as easily as the O.N’s can now obtain first-class pianists; that we ought soon to be as well-known for our true violin playing as we are now for our just singing, and that in fact the Sol-fa notation reduces the difficulty which has been made much of, to a more question of nimbleness of fingers, attainable by nine Intermediates out of ten by a reasonable amount of practice.

We all admit that this end is very desirable, most of us are sure that it is really quite practicable; what remains to be settled is, How shall we best set to work to obtain it?

We have not as yet got players amongst us who are competent to instruct the others (i.e., from Sol-fa) at least I do not know of any, and consequently I think it will scarcely be found practicable to establish as yet anything like large classes. Our first business, indeed, must be to instruct the future teachers, and when we have got a sufficient number of experts, let them take in hand the training of Sol-fa orchestras throughout the country. The most feasible plan seems to me to be this (and in it, if you like to adopt it, I offer you my hearty co-operation, and en it I request your criticisms) to have in as many separate districts as possible, quartets, consisting of 1st and 2nd violins, viola, and violoncello; and here I may say that I intend these remarks to be equally applicable to other kinds of instruments, though as well for simplicity’s sake as because I think them the most important I speak only of strings. In these quartets of learners it would not be necessary for any one to have a previous knowledge of the instrument which he played. At the first lesson it might be advisable to have a gentleman present who could play a little, in order to show the right way of handling the bow and holding the instrument, but after that, the four, each being provided with Mr. Curwen’s book, could get on very well by themselves, and where the exercises in it did not allow of their practising together they might take some from the Elementary Vocal Courses in the “Reporter.” I will hold myself responsible for the organization of at least one quartet of this kind if three or four other gentlemen will do the same. After such separate society has attained some reasonable proficiency in their instruments, I would recommend that central orchestral rehearsals be held, say, once a month; not for learning, but for the practice of music as advanced a character as possible. I think that we must feel it no less than due to Mr. Curwen for the trouble he has taken in the matter (as well as due to the notation), that some steps should be taken such as I have endeavoured to sketch out, and that longer delay will show either a want of appreciation of the value of instruments, which none of us ought to have, or else a want of confidence in the notation, which I am sure none of us possess. I would propose to start these quartets as soon as Mr. Curwen’s book is published. Certainly, if we are to report any progress at the next School, no time should be lost.—personally I am quite ready to leave the region of talk for that of work, and I hope very soon to have a fair number of Sol-fa friends with whom to cooperate.

I have thus briefly spoken of a plan for studying orchestral instruments which I have been thinking of for some time, but before I conclude I have to
INSTRUMENTS: SUPPOSED DIFFICULTIES.

Mr. Dobeen doubted whether the mental effort in playing from Sol-fa
was not too great, and he was
not therefore so sanguine as Mr. Kennedy.

On this, Mr. Griffiths remarked that
in lap attempts have been made,
his mind go much quicker than his
fingers would. He also found a know-
edge of singing a great help to any one
learn, and others in which the tones
produced are regulated by the ear of
the performer, the method may be, and
probably is, advantageous, as it un-
leashes the real ear of a brass pupil;
but for instruments such as the
piano, in which the sounds are fixed,
we are unable to see any advantage,
except that of saving the trouble of
learning another notation; while it
cannot, we think, be denied that both
for very full harmony and, even more,
for rapid and fluent music a new
method is very cumbersome and incon-
venient. The idea of such a piece as
'Th'alberg's Home, sweet home!' in
the Tonic Sol-fa notation is really
ludicrous. Besides, all pianists know
that in reading music, especially at first
sight, the position of the notes on the
staves is a great assistance to the player;
and where all are reduced to a dead
level, with only small figures put above
or below each note, to show in which
octave it is to be played, the difficulty
of deciphering a new piece would be
enormously increased. We are there-
fore unable to admit the practical value
of the system for instrumental music
in general, apart altogether from the
not unimportant consideration of the
number of valuable works which neither
are, nor are likely to be, accessible in
the Tonic Sol-fa notation.

Our instrumental movement has been
hindered by the want of sufficient printed music to carry on the work of
the student. But it has proved far
more successful than we expected,
and we are steadily accumulating a suf-
ciency collection for the purposes of the
learner. We are glad that the Record
allows the probable usefulness of our
method as applied to the violin and
other instruments depending on the
ear. We ourselves, years ago, doubled
its application to the piano, on the
ground that the direct correspondence
between a certain absolute pitch note
on the piano and a certain place for
that note on the musical staff was
simple and unmistakable, and there-
fore a valuable help to the learner. We
did not see then that it carried the
mind away from the structure of music
to the structure of an instrument. One
pupil after another began to apply our
method to the piano and insisted on
playing in one key as easily as in
another. Our pupils were as accus-
tomed to carry the sense of key-rela-
tionship in their minds that they could
not endure to play the piano without
it. This sense of key-relationship has
thus proved to us to be a far more
important educational help than that
correspondence of finger-board and staff
which we have just referred to. As to
the difficulty of playing rapid passages
from a Tonic notation our first piano-
forte pupil solved it. She said, 'I pre-
fer the Sol-fa notation to the other
because I can see the accents better;
I can recognise the chords on which the
rapid passages are constructed more
clearly, and this being the case, I can
remember a page of music more easily.'

In this faculty of remembering long
pieces of pianoforte music, the struc-
ture of which she had once mastered,
this young lady greatly excelled. We
are persuaded that the adoption of this
plan in schools generally would make
the study of the pianoforte an intelli-
gent joy instead of a degrading
drudgery. But boarding school pre-
judice is nearly as hard to conquer as
the teacher's, and the school cannot be
expected to have a long sight.

But our case may be made still
stronger. It is intemestingly dimmed into
our ears that Sol-fa notes are on a dead
level, while the common notation is
pictorial, and upon that is founded the
assumption that the latter is preferable
for playing rapid passages at sight.
We confidently affirm, however, that
rapid passages of unusual difficulty are
never played at sight by learners. They
are laboriously analysed, and at first so slowly played that one measure frequently becomes half-a-dozen. This is notably the case with the Record's own example, Thalberg's "Home, sweet home," a piece which certainly no school girl ever played at sight. Here the pictorial argument is sadly at fault. By the sudden insertion of the treble clef in the middle of an arpeggio for the left-hand part, a note which is really a minor third above the previous one looks as if it were an octave and a half below, and this intelligible process is repeated sixteen times in one page! It produces, amongst other results, the striking pictorial effect of notes nearly two octaves apart being written on the same line, or as the Record would have it, on a "dead level." Besides this, there occurs at least eight times in the piece a brilliant flight of more than thirty "quadruple quavers," which should be in the pictorial shape of a cone. But unfortunately, just as the brilliancy is reaching its climax, the notes fall suddenly down, and are ordered to be played an octave higher by the mark "s.va." Thus the beautiful pictorial shape collapses, like a house with its pointed gable smashed in. We might point out the further defect of the melody being mixed up with the arpeggios, and moving from bass to treble and from treble to bass, so that it becomes impossible to follow it at sight. These things occur in a piece known to almost every school girl, and certainly to every teacher. The editor of the Record could scarcely have furnished us with a more striking example. Who, after this, will affirm that the common notation is pictorial?

Now, for our Tonic Sol-fa notation we have never claimed that it is pictorial except in the second degree—that is, through the memory of the three keys of the Modulator and their related minors printed in the mind's eye. But we do claim that such a picture of musical truth, even seen through the glass of memory, is better far for teaching purposes than a direct picture so imperfect and contradictory as that we have described. The teacher knows that such passages have to be analysed, slowly spelt out and mastered before they can be properly played, and we have no hesitation in saying that for this purpose our Tonic Sol-fa notation is immeasurably superior to the old.—"The Tonic Sol-fa Reporter," 1871, pp. 253, 257.

668.—In the teaching of Absolute Pitch we are content at first with fixing in the memory a single pitch tone. See St. Co., pp. 28, 29, and 59. As mentioned above, p. 189, some will learn the whistle of the vowel EE as the means of pitching this tone. But gradually there grows up a power of judging the absolute pitch of other tones by this standard, and as soon as instruments begin to be studied, especially the finger-board instruments, the faculty of pitch-perception increases rapidly. There are various standards of absolute pitch which differ from one another within the interval of a Little Step. It is pretty clearly proved that the pitch for which Handel wrote his music was a Little Step (a semitone) lower than the "concert pitch" of the present day. And it is remarkable that his pitch corresponds very nearly indeed with what is called the philosophical pitch of 512 vibrations in a second for one-C (C). See "Musical Statics," p. 8.

It is the constant desire to make instruments brilliant that has led to the rise in concert pitch. But, soon, voices will be studied more than instruments, and the philosophical pitch will be adopted, not only to save voices from straining, but also to answer every honest purpose of the orchestra. I have myself tested the Tonic Sol-fa tuning forks with the help of my friend Mr. Greaves's well-practised ear. We first tested the large tuning fork kept in the School of Mines, used by Professors Guthrie and Tynall, by means of several careful experiments with the Syren, and found it correct. We then tuned our own standard fork to that. I strongly recommend the use of this pitch to vocal classes and the tuning of harmoniums, pianos, and other instruments to correspond with it.

669.—The Staff Notation was in the earlier stages of our movement made an essential in the Intermediate and Advanced Certificates. This was for the sake of psalmody. So few books of psalmody were printed in any but the Staff Notation at that time that this was our only way of making the certificate helpful to psalmody. In March, 1863, however, so large a portion of the best known psalm-tune books were already published in the new notation that a change was made. The established notation requirements were made optional. "The chief reason," says the Reporter of that date, "which has caused Mr. Curwen's decision is this. In many places, and under the best teachers, it had come to be a question whether, as the classes had only a limited time at their command, they should go on to practise voice-training, and go on to study harmony, or turn aside to study a mere notation which not more than one-third of them cared to use. It will, therefore, be entered as a mark of honour at the bottom of the certificate, when the established notation requirements are taken—but they will no longer be absolutely necessary. We hope our
friends will not forget that far beyond the reach of our Tonic Sol-fa literature there lie vast realms of musical wealth which their ambition should lead them to explore; and we expect that nearly half of those who take the Intermediate Certificates will have the words "Old Notation," followed by the initials of their examiner, written upon their certificate cards." As a matter of fact, since that time fully two-thirds of those who have taken the Intermediate Certificate have, of their own option, taken it with the Staff Notation requirements. It is remarkable that they have done this during a season in which very few class lessons in notation have been given at all. Since the discussion on the subject, in December, 1865, it has become the habit of our teachers not to teach the Staff Notation in class, but to teach it by writing exercises done at home. It is very gratifying to find that so large a proportion of our pupils have thus made themselves self-teachers. Our tonic principle gives us such a grasp of music itself that our pupils sift the chaff from the wheat in the Staff Notation, search all its curious mysteries, and make out the meaning which lies hidden beneath some of its signs, far more thoroughly than is common with other students. My little tract the "Staff Notation," and the course of exercises founded on it are very extensively used. See also No. 9, "Reporter," and "Short Course."*

THE RELATION OF THE TONIC SOL-FA METHOD TO THE OLD NOTATION.

Paper by Mr. Thomas Garbarner, A.C.,
read at Christmas, 1866.

670.—We propose to consider the subject—first, from a teacher's point of view, and second, from a pupil's.

First, the teacher's view of the matter.

As a teacher speaking to teachers I give it as my firm conviction that in most cases it is unwise to introduce the study of the old notation into our classes. In most elementary classes only about one third or one fourth of the members wish to learn the old notation, the number continually decreases when they get to the real difficulties of the subject, and yet some teachers introduce the study of the old notation as a matter of course, thus forcing it upon many who have no desire to learn it. When pupils see their teachers give so much prominence to the study of the established notation, can we wonder if they get to consider the Tonic Sol-fa method as a secondary thing, and only to be used as introductory to the old? I believe that our method has too long walked humbly in the train of the old notation, like a lowly vassal following some great lord. Doubtless the pats on the back we used to get some years ago for not attempting to supercede the established notation, and for so faithfully teaching it in our classes were very pleasant, but how many advanced pupils have we lost thereby? And what have those pupils themselves lost? How much more might they have known than they do at present if they had remained in the Tonic-Sol-fa ranks? How many of them might have been earnest and successful teachers in Sunday schools, in ragged schools, and in evening classes? If Tonic Sol-fa teachers believe that their notation is truthful, easy to teach and learn, and very useful in reading classical music, why should they be so anxious to teach crotchets and quavers? And why should they so often even put themselves to inconvenience to keep the old notation in practice in their classes? But it may be said that many people join Sol-fa classes with the sole object of learning the established notation, and we should lose them from our elementary classes if we did not teach it. But in common with most of our teachers we maintain that the quickest and best way of learning the old notation is to learn the Tonic Sol-fa Notation first. No time is thus lost, for the signs used in our notation being so few, they are learnt in a few minutes; and the pupil who learns the old through the Tonic Sol-fa notation, proceeds on the best plan educationally by learning sounds, first using the new notation, and then the signs of the old. If our teachers in their opening lectures, and otherwise, made this fact prominent, and if they also made it known that it is an easy matter for the pupils, by means of Mr. Curwen's books to teach themselves the old notation; and if, when there were circumstances that really rendered it desirable, they undertook to teach the old notation, but out of the regular time of the class, we should not lose from our elementary classes persons who joined only to learn the old notation. But let us suppose they join a Tonic Sol-fa class where the established notation is thoroughly taught in the ordinary time of the class, and the pupil learns it thoroughly, then not only is the pupil's time taken up in learning a mere notation, which could be better employed in studying some other more important branch of music, but he is much less likely to remain in Tonic Sol-fa classes. He will be very likely to join the first old notation society he meets with in order to hear professional singers, or to perfect himself in the notation. From mixing with old notationists he presently begins to despise and pooh-pooh the new notation as childish, and a friend becomes an enemy. I have no doubt but if it were possible to ascertain how many of our best pupils we have thus lost through our teachers pandering to old notation prejudices, we should all of us be startled. What then is the remedy for this state of things? First, let our teachers give up teaching the old, except in special cases, and keep to the new notation. Second, let them establish classes for the practice of classical music where our certificated pupils can sing music worthy of their powers.

What effect does the introduction of the old notation generally produce in our classes? The result of my own experience is that many of the pupils get discouraged with its difficulties, and stay away. Have sometimes noticed, that those who were most anxious at the first to learn the old notation, are the first to give up the class altogether, when it is begun. This is probably brought about not only from the inherent difficulties of the notation, but also because many join Tonic Sol-fa classes, who have, or think they have, small musical capacity; for it is becoming pretty generally known, that persons can learn to sing from Tonic Sol-fa who cannot from the old, and such persons more easily get discouraged. But, says another, "I shall shut my pupils out
WHEN TO INTRODUCE THE STAFF NOTATION.

This topic, although it should be constantly kept before the mind in considering the relation of the Tonic Sol-fa notation to the old.

Then our pupil will not forget that when he has completed his elementary course, and begins to study classical music, he will derive much greater assistance from the new than from the old notation, and that he will sing with greater intelligence and ease, and if, instead of learning the old notation, he studies harmony, he will read the chords with ten times more facility from the new than from the old.

But let us draw a little closer to our pupil, whose thoughts we are endeavoring to read. Let us examine him as to his motives in thus wishing to learn to sing. We will suppose, as the result of our enquiries, that we find he is a young gentleman of good connections, who wishes to shine at evening parties, to be able to sing a song with taste and expression, to join in a glee or part-song with his musical friends, and who wishes probably to be able to do this from the old notation. Shall he join our class, in which the old notation is not studied? We would recommend him to do so. For what is left of that which he is likely to be taught in his later life under one of the general run of teachers of music, which is what most young gentlemen so circumstances would do? After a few exercises, he would probably be taught one or two songs to the tune of half-a-guinea a lesson, but the pupil will have made little or no progress in learning to sing at sight. Or perhaps his teacher devotes several lessons to studying the proper delivery of the vowels sounds before the pupil can sing the easiest psalm-tune ever composed, at sight.

Will not our song-singing young gentleman accomplish his object much quicker and cheaper by joining a Tonic Sol-fa class, and then studying the old notation from "Standard Course," either with or without the aid of his teacher?

But is our pupil desirous to learn to sing in order to be able to join intelligently and orderly in public worship; or is he an earnest Sabbath school teacher, who wishes to teach his scholars to sing from notes; or the head of a family who would have his children to learn to sing in order to make family worship and the family circle generally more cheerful and happy? To all such, our notation, from the facility with which it is learned, has an immense advantage over the old, and to such it will be peculiarly acceptable and dear, not only from the intrinsic merits of the notation but from the spirit in which Mr. Curwen works it, and which I believe is one cause of its great success. Is our pupil studying for the ministry, or for the secondary or middle class school? Surely the notation that can accomplish the most work in the least time is the best for them.

Yet some Sol-faists say, "Begin with the Tonic Sol-fa, but go on to the established notation." What, leave the simple to go to the complex, when the simple method is more available than the complex for all musical purposes? Leave that which is true to the thing music apart from notation, to go on to that which represents tones on an incorrect principle? Leave that which, in 20 or 30 lessons, enables our pupils to read difficult music, for that which requires years to get familiar with? Leave that which assists so much in the study of harmony, for that which renders the science of harmony one of the most difficult of attainments but leave that which has so many good elementary text-books, for that which (and here I quote the testimony of an experienced old musician) he teaches himself to be a base edition of the elementary works which teach on the tonic principle! Really there must be some confusion in ictus and quavers and the rest of that ancient family. If we believe our notation to be the best, let us rather urge our pupils to adopt it in every department of music, and let us not frighten many of them from our elementary classes, and put a strong temptation in the way of the others to leave our classes altogether, by introducing the practice of the old notation.

Whilst we hold it to be the duty of Tonic Sol-fa teachers in most instances to keep to their own notation, yet we do not desire to ignore objections. Sol-faists are at present entirely dependent upon old notationists, or upon those who understand both notations for instrumental accompaniments; although I hope some of us may live to see the day when not only songs with a pianoforte accompaniment, but oratorios with a full band accompaniment, will all be played by Sol-faists from Sol-fa music. In the meantime let our teachers do their best to encourage their pupils to learn to play instruments from their own notation. We must also candidly admit that it is a subject of regret that there is so much really good music not yet to be obtained in our notation, although I think many people lay more stress on this than it


Now, from No. 9 "Reporter," or from "Staff Notation,"
HARMONY; COMPLEXITY OF OLD THEORIES.

In the discussion which followed, Miss Kenway said, that as a teacher, she could not get on for one day without the old notation. For instrumental music it was at present indispensable.

Mr. Dobson instanced a case in which by teaching the old notation he gradually succeeded in making his pupils see the superior advantages of the Tonic Sol-fa Notation. He thought we might often help Sol-fa by teaching the old notation.

Mr. Sarill said that the old notation must be mastered by every teacher. Thousands have taken up Sol-fa only as an introduction to the old notation. He thought it should be taught in every class. It was necessary also to pupils who were preparing for any of the public examinations in music.

Mr. Longbottom professed a strong attachment for the established notation. He thought that the only concretion at present arrived at was that different classes of pupils required different teaching.

Mr. Bennet said that the Tune Book used at his place of worship (Kemble’s Psalms and Hymns) was not in Sol-fa, it was therefore necessary for all who wished to join in the singing on Sunday, to learn the old notation.

Mr. Griffiths said that in Lancashire the mill hands left the singing classes as soon as the old notation was introduced, the music was too costly and too troublesome. He had carried on a class, consisting largely of wealthy and educated amateurs, for three years. Before this time Mr. Griffiths had imagined it his duty to introduce the old notation into every course of lessons, but this experiment satisfied him that nothing of the kind was necessary.

Mr. Evans did not approve of teaching both notations at once in a class. He recommended that those who want to learn the old notation should be asked to come on a separate evening from that on which the class met.

Mr. Ryder and Mr. Trevorton also took part in this discussion.

Mr. Curwen, in closing the discussion, reminded the members that the study of any system of notation must do good, making us look from another standpoint at music itself. He recommended all teachers to learn O.N. He thought, however, that notation of every kind was best taught by writing, and that writing could be done at home by those pupils who wished to learn the old notation.

He remembered that Mr. Sarill made it a practice for many years, in his school, to give the elder boys No. 9 Reporter, and require them to write the exercises at home, which he corrected. So many Psalm-tune books are now printed in our notation, that we do not need the old notation for psalmody so much as we did, and he had, therefore found his own interest in that notation lessening.

He did not now require it for any of his certificates, or for any of the competitions. He thought the old notation could take care of itself. He had known many classes broken up by the teachers forcing them to use the old notation, and he often had occasion to regret that time was given in class, to that notation, which should be given to Expression, Pronunciation, Development, or Cultivation of voice and Harmony. He had also noticed that whenever the Tonic Sol-fa Method had spread most rapidly among the people it had been in nearly all cases through the agency of teachers, who did not work with the interest of the old notation. — "Transactions," pp. 8 to 10.

THE TEACHING OF HARMONY AND ELEMENTARY COMPOSITION.

671. "What has the teacher of singing to do with Harmony? Why should he puzzle his pupils and delay their progress by introducing so learned and so complex a subject?" These are the questions which naturally rise to the mind, in consequence of the manner in which Harmony has commonly been taught hitherto. But to one whose mind is filled with Miss Glover’s principles of key-relationship, and who possesses the notation which springs from those principles, this subject is neither learned nor complex. He possesses a solvent for the puzzles and mysteries with which theory has belieded simple truth. It is true that I was many years before I could develop the present Tonic system of teaching Harmony and Composition. My hindrance lay, however, not in the nature of the subject itself, but in the difficulty of coming at the naked facts of the case without any theoretical bins. I obtained great assistance in this when living at Zeigelhausen, near Heidelberg, in the year 1856, from Herr Mauch, the organist there. He had been trained, at the Normal School, under
Gersbach, a pupil of Pestalozzi and friend of Nägeli. Gersbach adopted the simplest methods of representing Harmony, using a notation of Chords very much like that adopted by Gottfried Weber in the early part of his great work. His way of looking at dissonances, as *intruders* into concords, seemed to me simple and true, and it has since been confirmed by the discoveries of Helmholtz. See my "Musical Statics," p. 64. It is true that Gersbach did not carry me far; and I had been analysing, by the help of Mr. Stallybrass, the music of the great masters, in search of some principles of chord progression, for a long time before I discovered what seemed to me the right road. Now that the road is laid down it is only wonderful to me that I did not see it before. If any one with the ordinary instinct of a teacher, could only have been made a practical musician, without having to go through all the prevailing, preconceived theories, he would have seen it quickly. In this, as well as in other developments of our method, I have to thank those earnest friends in all parts of the country, who have worked out my various plans, as soon as they were proposed, have faithfully put them to the test, and then sent me their advice. First, I thank those who attended my early attempts at teaching Harmony at Christmas, 1857,—second, those who worked through that elaborate course of exercises (founded on Gersbach, and an analysis of the great masters) which proved a wearisome failure (because I had not brought to the fore-front the habits of composers in approach to a cadence, and along with them the great principles of modal relation, or the keeping in mind of Tonic, Dominant, and Subdominant throughout a piece. See "Statics," pp. 74 to 86),—third, the many hundreds who tested the exercises in the first "How to Observe Harmony."—fourth, those who tested the experimental course of exercises in Elementary Composition, published in the *Reporter* for 1866,—fifth, the Scottish students at the Andersonian University, to meet whose zeal in study "Construction Exercises" were prepared,—and last, but not least, my thanks are due to the "Composition Club," who have carried far beyond the bounds of elementary work, the practice and the love of musical composition in our Tonic Sol-fa movement. The plan of progression in Harmony studies, and the principle of Chord nomenclature which we have adopted, are described above pp. 13, 14, 18, and more fully developed in "How to Observe Harmony" and "Commonplaces of Music."

572.—Harmony may be taught even in an elementary class, almost without letting the pupils know that they are learning it. The teacher has only to introduce, gradually but regularly, the tuning exercises of "Standard Course," which are also on Standard Charts, for a class of ladies or of gentlemen, and the Chord-singing Charts, as suggested in the plan of twenty-four lessons given below, for a mixed-voice class. If he insists upon these tuning exercises being sung *pianissimo*, to one syllable, say *laa*, and insists upon the pupils listening for one another's voices, in order to tune well, they can scarcely fail to hear the chords. And this is the true way of studying Harmony—by the ear, more than by the eye. It will cost no time to show the pupils how to run up the scale in thirds, and so find out the chords. In less than a minute, after singing the exercise once, the pupils (certainly all the forward ones) will name for him every chord as he points to it. If this practice is generally adopted there will be no difficulty about the Harmony Ear-exercise for the Members' Certificate. If a teacher sees in any of his pupils a special aptitude for this study he should encourage them to obtain the Pass Certificate in Harmony Analysis, by working through the first part of "How to Observe." It is better that the pupil should do this under his own teacher (if the teacher is qualified) sending up only Testing Sets to the College. If not, he can go through the whole Postal Course, having his exercises corrected by the College. But a teacher's explanations are always better than any amount of red ink corrections. If the teacher has not time to assist his pupils in learning Harmony by hearing it, he may often find it wise to give them those simple
exercises in "Chord-naming" which he will find in the little book on Harmony which forms part of my new "Grammar of Musical Theory." But the naming of separate chords is not Harmony Analysis, for Harmony is the clinging together of chords. The only excuse for teaching Harmony by sight is that clever pupils may afterwards apply the sight to the sound, and that the teacher really has not time to do more. If the Harmony pupil is inclined to learn the piano or harmonium he should play through the examples in "How to Observe," bringing everything to the test of the ear. My proposed "Harmony Player" will help him in this. The Pass Stage in "How to Observe Harmony," with Ear-exercises, is all that is required for the Member’s Certificate.

673.—When the pupil is thus far interested, I should recommend his taking the Honourable Mention Stage of Harmony Analysis, and the Pass Stage of Elementary Composition at the same time. It will surprise him to find how much his analysis helps his composition, and how much his composition helps his analysis.

674.—Let me above all things recommend the teacher to accompany each step with its appropriate Ear-exercise. The examples in "How to Observe," "Chord-singing Charts," "Harmony Theory," and "High School Vocalist, fourth course," will give him materials for this purpose. A fuller course may be found at the end of each Step in "Construction Exercises," the tunes being selected from the "Text Book," but a more complete course still is provided in the "Harmony Ear-exercises," which Mr. George Oakey has selected and arranged on the plan of my books.

675.—The advantage of having constantly before the eye of the pupil some diagram, representing the main truths to be taught, has been felt by us all in the use of the Modulator. The knowledge of this led me to prepare "The Harmony Chart." In this I have placed the chords, both for the major mode and the minor, in the position of relative importance which belongs to them in actual use. In the centre stands the Tonic Chord, on its right-hand the Dominant Chord and those chords which are occasionally substituted for it, and on its left-hand the Subdominant Chord, with those chords which are occasionally used in its favourite "places." Properly speaking, there can be no chord "substituted" for the Tonic, but rarely certain chords are used where the Tonic would be expected, and these are the chords which are also the outside, or less used "substitutionals" for the subdominant and dominant. This diagram is a useful pointing-board for teaching Harmony. One or two parts can be pointed, and the class consulted as to the making up of the other parts. I hope that this new classification of the chords will become to the young student a helpful thinking instrument. It should be as constantly used in teaching composition to a class as the Modulator is in teaching melody.

676.—My first idea of this Harmony Chart came from France. Mr. Lewis Banks wrote in "Reporter," October, 1869, a description of the Galin-Paris-Chevé diagram and of the voluntaries (in which, the Air and Bass being pointed, the inner parts were filled in at the will of the singers) which are practised by our French brethren. But I do not propose to use the Harmony Chart for voluntaries, because they would necessarily produce no end of bare fifths, consecutive octaves, and other errors, with which we must never allow the ear of our pupils to be satisfied. Besides, Madame Chevé’s Chart does not show that classification of chords which I deem so important. This view of all chords as either Tonic, Dominant, or Subdominant in their character, and of the subordinate chords as only used in place of these three principal ones (for the sake of convenience in making the parts) is undoubtedly implied in all modern composition, and would be admitted by modern composers; but I do not remember to have seen it boldly put forward as the groundwork of instruction till it appeared in the Chord Modulators of "How to Observe Harmony." By keeping this classification constantly before
LESSONS FROM THE HARMONY CHART.

two consonances!"  * Doh soh is strong, the others are sweet. "Then, how many sweet thirds are there in this group of consonances?"  * How many fifths?

When three tones sounding together stand like these (two thirds, one upon the other) we call them a Con- sonant chord. And when a chord stands thus, with its tones as close together as they can be, we call the lowest tone the Root of the chord, the next above its Third and the next its Fifth. What is the Root of this chord?  * What is the Third?  * What is the Fifth?  * We name the chords after their roots. What is the name of this chord?  * We write the names of chords with capital letters. What letter shall I place on the black-board for the present chord?  * I want you to notice another thing about this Doh chord. You said that it contains two Thirds, but is there no difference between them? Let us look on the Modulator. Doh me is a larger Third than me soh. Certainly, you will see that doh me is made of two full steps, and me soh contains only a step and a little step. Doh me we call a Major Third, me soh a Minor Third. Chords which have a major Third at the bottom we call Major chords, those which have a minor Third at the bottom we call Minor chords. What sort of chord then shall we call Doh? A Major chord.

Let us see whether we can find any more Major chords on the Modulator. If I take ray for the Root (pointing on the Modulator) shall I have a Major chord? No, it would be minor. * If I take me? No, that is minor also. * If I take fah? That is a Major chord, fah, doh. * Soh? Another Major chord, soh, te, ray. * Lah? A Minor chord. * Te? It has two minor Thirds. * Then how many Major chords have we found in the scale?}

The notes on systems and methods which follow will show yet more fully what an inefficient and misleading "thinking and teaching instrument" I had, and how glad I must have been to get hints from Weber and Gersbach for a new plan of chord-naming. At p. 14 above I have described the present plan of teaching Harmony on the Tonic Sol-fa method. The quotations which follow will show my first delight at the discovery of Gersbach, my various efforts when I became dissatisfied with his development of the chords, and several other things interesting to the student.

HARMONY CHART LESSONs.

653.—The Chords Doh, Soh, and Fah.—"Assume of you are about to enter the Course of Harmony Analysis in "How to Observe Harmony," and as others have already attained the Pass Stage in Analysis, and are taking up the early "Construction Exercises" concurrently with their further studies in Analysis, I think I can help both of you, by class exercises with the Harmony Chart. "Allow me to select three ladies' voices, a First Soprano, a Second Soprano, and a Contralto,"  * Will the Contralto be kind enough to sing doh to key D, Second Soprano me, and First Soprano soh. Take a good breath and hold the tones as long as I point to doh on the Modulator.  * "A little more softly ladies, and with quiet sustained breath let it."  * "Now let the whole class listen, and each one hold up a hand as soon as he can conscientiously say that his ear can distinguish each of the three tones."  * "Now gentlemen, I want a First Tenor, Second Tenor, and Bass."  * "Please do the same as the ladies have done. Sing very softly, and I shall hold my pointer on doh longer than before, because you have larger and steadier lungs."  * "Hold up hands as before,  * "Yes when they sound softly you could all hear the three tones."  * "Now let us study these three tones sounding together a little more closely. How many couples of tones are there here sounding together. In other words how many consonances?"  Three—doh me, me soh, doh soh.  * Contralto, las doh, Second Soprano, me. Hold the tones as long as my pointer stays on doh.  * "Second and First Soprano, las me and soh."  * "Contralto and First Soprano, las las and soh."  * "We will do this again that the class may listen, and tell me the difference of effect between doh soh and the other.

a chord always so close together and always only three of them? No; for you have four parts in the music and you must have four tones to your chord, and it is sure, for I have noticed, that the chords don’t always stay in that close position. Well then, we want the tones of a chord sometimes wide apart; then let us put the me an octave higher. And we want four tones; then let us add the octave of the doh. Now you may all sing. Bases, with one pointer I will show you the doh. Sopranos, with the other pointer I will show you the me which we are putting in the higher octave. Contraltos, first take the octave of the base doh. Tenors, there is nothing left for you but solf. Let softly as long as my pointers stay on the chord. Listen well to one another.” That distribution sounded very well, let us try another, again ‘doubling’ the root of the chord. [Tries d d’ d’ s’.] Let us try another with the root doubled. [Tries, in key E, d s m d’.] The root is so important that it will always bear to be doubled, and the chord seems to improve in power the wider we distribute it.”

“You are now prepared to study the two principal chords, D and E, together. Contraltos, I shall want you to sing d t a. The t you will get in the chord of E, when my pointers move into that chord. Tenors, you can get your sol in both chords. If, therefore, you sing s s s in a smooth and steady manner your voices will form a mighty tie between the chords. Sopranos and bases, my pointers will show you what you are to sing. All las softly.”

[Points the first half of the following example.] “Let us do it again so that we may listen, and tell me the effect on your mind of the S chord. Before you answer, let us listen to the chord again, just interchanging parts between the soprano and contralto. [Points while they las the second half of the following example.] Which of the chords do you like to rest upon? Which seems to move you most?” Yes; D may be called the chord of rest, and E the chord of motion. Now let us las again these two little phrases.

key D.

```
[s : f | r : s] [d’ : t | d’ : d]
[d : d’ | t : d] [f : r | m]
[f : f ] [d : s | s]
```

“Now, I should like you to try the effect on your mind of the F chord. I will just put it in before the S chord in each phrase. Contraltos, sing d d t, d. Tenors, sing r s s. Bases and sopranos, I will point your parts. [Points, while they las the first part of the next example.] Before you tell me the mental effect of the F chord, let us try again, allowing the soprano and contralto to interchange parts. [Points, while they las the second part of the next example.] Now, what do you feel to be the effect of the chord F’? The same as fah itself. Yes; we may call it the Solenn Chord.”

**KEY E**

```
[s : s | d]
[f : r | m]
```

“Was that Consonance! No; we call it Dissonance. Whenever two tones standing next to each other in the scale are sounded together there is a similar dissonant effect. Listen again.”

Now I will move one of these tones an octave, so that they shall stand further apart. Listen, and tell me what difference there is in the effect!” [Points the following.]

**KEY E**

```
[s : f | s]
[f : r | d]
```

It is not so harsh. “No; because I have put a distance between the two. When the two tones stand close together we call the dissonance Primary. When one of them is moved one octave away we will call it Secondary. Let us alter the key and try the effect when one of the tones is moved two octaves away. [Points the following.]

**KEY C**

```
[s : f’ | s]
[f’ : r | d]
```

“What is the effect?” It is scarcely harsh at all. “Certainly, but still we will call it a Tertiary dissonance.” Of these two tones, fah is the intruder, and therefore we will call it the Dissonating-tone. Soh is simply holding its own in the chord, and we will call it the Retaining-tone. What is soh? What is fah?”

You have heard what different effects are produced by the degrees of dissonance Primary, Secondary, and Tertiary. Now I want you to notice a difference which arises from the way in which the dissonating-tone comes in and goes out. Let us take this, which we call the dissonance of “fah against soh” in the same degree, say the secondary; but let us make the dissonance come in and go out in different ways. First it shall come in from the step above and go out to the step below, as it has already done. Follow my pointer.
### DISSONANCES. POSITIONS OR INVOLUTIONS OF CHORDS. 229

#### KEY G.  
\[
\begin{align*}
 & \text{m} : \text{f} \quad \text{f} : \quad \text{m} \\
 & \text{m} : \text{s}_1 \quad \text{s}_1 \\
 & \text{d} : \text{s}_1 \quad \text{s}_1 \\
\end{align*}
\]

You notice that that sounds well. We may say that the dissonance is "prepared." Obliquely, and smoothly "resolved" downward. Now listen to this—

#### KEY G.  
\[
\begin{align*}
 & \text{m} : \text{f} \\
 & \text{d} : \text{s}_1 \quad \text{s}_1 \\
\end{align*}
\]

"How was the dissonating-tone prepared?" Well, we call it a Horizontal preparation. It is not at all the common preparation for this particular dissonance, but almost any dissonance will sound well if it is prepared and resolved in this way. You notice that it is on a strong pulse, which means that it will bear being emphasised and having attention called to it. Listen again. Which preparation do you like better, the Oblique or the Horizontal?"

In these cases you have given us we like the Oblique better, because the fas seems to be coming down straight from the soh to the m. "Yes, Oblique preparation seems to suit the fas, but Horizontal preparation is generally the best apology for a dissonance, because the dissonance itself is first heard as a consonance in the previous chord. Now listen once more.

#### KEY G.  
\[
\begin{align*}
 & \text{m} : \text{f} \\
 & \text{d} : \text{s}_1 \quad \text{s}_1 \\
\end{align*}
\]

How was it prepared then?" It was not prepared. "Your are right. Fas was there an unprepared dissonance. It is not every dissonance that sounds well unprepared, and they must all be resolved. Fas against soh is the most acceptable of dissonances, and is generally, therefore, either unprepared or only Obliquely prepared.

"Let us go through all these examples with male voices, so as to impress their teachings on our memory." —

"Now let us introduce this intruder into the chord of S. There it will meet with te and ray, let us see how it effects them. Tenors, sing me, ray, doh. Contraltos sing the first teoh soh, soh, me, and the second teoh fas, me. Sonoritas and Bases I will point. We shall first las the chord without the dissonance and then with it.

#### KEY B.  
\[
\begin{align*}
 & \text{d} : \text{t}_1 \quad \text{t}_1 \\
 & \text{s}_1 \quad \text{s}_1 \\
 & \text{m} : \text{r}_1 \quad \text{r}_1 \\
 & \text{d} : \text{s}_1 \quad \text{s}_1 \\
\end{align*}
\]


"What effect did the intruder have upon te?" It grates against it a little. "Yes, fas against te is not exactly a dissonance. We call it the Partial dissonance, for reasons which I may some day show you. Now listen again and tell me what the effect of the intruder is upon ray!" It sounds very well. It makes a Third. "Yes, by coming into the chord this intruder in addition to its Secondary dissonance against the Root soh makes a Partial dissonance with te, and a sweet minor Third with ray. Let us try it with the dissonance in the Air.

#### KEY G.  
\[
\begin{align*}
 & \text{m} : \text{f} \\
 & \text{d} : \text{t}_1 \quad \text{t}_1 \\
 & \text{s} : \text{s} \quad \text{s} \\
 & \text{d} : \text{s}_1 \quad \text{s}_1 \\
\end{align*}
\]

"How did it sound?" If anything rather harsher than the last. "Perhaps so, for we omitted the ray with which fas makes a sweet Third. Suppose, Contraltos, you sing doh, te, ray, doh. We shall then omit the Partial dissonance with fas, but we shall also omit the sweet Third of the chord itself; and, as a general rule, that is never done in consonant chords. Let us try." — "Which do you prefer?" There is not much to choose between them. "Do you think you will know again this chord of S with fas intruding when you hear it? We call it the chord of Seven-soh, because, as you will see if you count, fas is the seventh from the root soh. We write it thus [Writing on black-board '8'].

"Now you may lasa to me and analyse Ex. 3 in Chord-singing Charts as you did with Exs. 1 & 2 yesterday. I shall want you to tell me whether the chord '8' is complete, or whether its Fifth is omitted, or its Third, or anything in it is doubled. Now let us revise our lessons. "After this hope you will all feel yourselves better prepared for the Second Steps of Harmony—Examine, or 'Construction Exercises.'"

[If I were teaching a class of young ladies or of boys, I should simply omit the Tenor in the last example, and in the example before I should do the same, and alter the first and the fourth notes of the Contralto to me instead of soh. I should also require the class to las and analyse Ex. 123 "Standard Course," on "Standard Chart," No. 24.]

#### KEY D.  
\[
\begin{align*}
 & \text{d} : \text{d}' \quad \text{d}' : \text{t} \quad \text{t} : \text{d}' \\
 & \text{m} : \text{f} \quad \text{m} : \text{r} \\
 & \text{s} : \text{s} \quad \text{s} : \text{s} \\
 & \text{d} : \text{s}_1 \quad \text{s}_1 : \text{s}_1 \\
\end{align*}
\]

"How did it sound?" Even we could tell that it was rather hard, but it sounds very well in that place. "Yes, and that's by far the commonest place, on a strong pulse followed by S, D, in the close of a line or cadence.

"Now with a little alteration of the first chord, and the Bass going in the higher octave, we should have a good example of the b position. Listen to it [Gives directions and points as before].

#### KEY B.  
\[
\begin{align*}
 & \text{d} : \text{d}' \quad \text{d}' : \text{t} \\
 & \text{s} : \text{f}_1 \quad \text{f}_1 : \text{m}_1 \\
 & \text{m} : \text{r} \quad \text{r} : \text{d} \\
 & \text{d} : \text{s}_1 \quad \text{s}_1 : \text{d}_1 \\
\end{align*}
\]

"One more slight change in our exercise will show us Fb where we just had Fa. Let the bass open with fas.
HARMONY; THE PRINCIPAL CADENCES. FILLING-IN PARTS.

lah, soh, and the Tenor with seh, feh seh. Listen. You notice how these 3 positions help to make the Bass melody smooth.”

"You are now prepared to lass and analyse as before Ex. 4 of "Chord-Singing Charts." Let us revise this lesson. It will help you in your Third Step of Harmony. If I were teaching young ladies or children, I should probably use for Dc this exercise:"

KEY G

\[
\begin{align*}
\text{m} & : 1 & \text{m} & : r & \text{m} \\
\text{d} & : d & \text{d} & : t, & \text{d} \\
\text{d} & : f & \text{a} & : s, & \text{d}
\end{align*}
\]

and for Dc this—

KEY G

\[
\begin{align*}
\text{s} & : 1 & \text{s} & : r & \text{s} \\
\text{d} & : d & \text{d} & : t, & \text{d} \\
\text{m} & : f & \text{m} & : r & \text{m}
\end{align*}
\]

and for Fb this—

KEY D

\[
\begin{align*}
\text{d} & : d & \text{d} & : t, & \text{d} \\
\text{m} & : f & \text{m} & : r & \text{m}
\end{align*}
\]

681. The D and S Cadences.—"In all the exercises we have had, what has been our last chord? Always D. And what chord came before it? S, or R. "And what before that?" F. "But sometimes a chord came between F and S; what was that?" Dc. "Dc is a sort of integral chord between D & S. Having sch in the strong Bass it suggests the chord S, and having doh me in the upper parts it is like the final chord of D casting its shadow before. Let us examine these three chords on the Chart, and you will find that they contain all the tones of the scale. "In speaking of the effects of chords, what did we call D?" The chord of Rest. "Yes, and it is therefore the best chord to make you feel that a piece of music is ended; and if you make the chords F and S move into it, as we have just been doing, you make the whole scale of musical tones do homage to the chord of Rest. This motion of chords to the chord of Rest is called a perfect close, we may call it a DOH cadence. Let us listen again to two or three of those which we have already practiced."

"But composers often wish to finish a line of music without such a perfect close. They would like us to feel that a line or section of the music is finished, but that there is something more to come. They would like to

the pleasantest to themselves, and always, if they can, the same tone, until he and the class find fault with them. This rule may be observed more safely and more unanimously through their harmony than any one could imagine who has not tried the experiment. But it will occasionally give rise to questions about doubled or omitted thirds, consecutive fifths and octaves. These questions could not come up in a better way for explanation and amendment, because the faults are presented to the ear and the eye at the same moment, and the teacher is able to alter his progressions and point to his chords with great facility. Directly the fault occurs the teacher should say, "Let us see that again, and very softly." The pupils will then probably, under the influence of "How to name it." Various plans for avoiding it may then be proposed and tried. This will really be a lesson in composition.

684. Another exercise may be used with the Harmony Chart—the same which is called in "Construction Exercises" "writing on plan." The Harmony Chart has this advantage that the pupils see at a glance what tones they have at command in each chord as the teacher points to its base. The teacher points to the tones of the bass, touching them in their proper chord. He does that several times slowly, while the members of the class are considering what will make the prettiest melody within those chords. They hold up hands, and the teacher chooses several to propose melodies. He decides which melody they shall take. And then the class only has to do what it has done before—fill in the inner parts. The closing parts of each section in the "plans" of "Construction Exercises," at the fifth step, and the bass in the illustration of "How to Observe," at the same step, will supply materials for the teacher, although it is better to invent. The teacher thus makes the exercise a companion exercise in the art of construction. Many exercise books in composition give no other form of exercise than this of writing on a bass with given chords. But there is another kind of exercise which it would be well for the class to begin as they stand round the Harmony Chart.

685. The harmonising of a given air is a more difficult process, because the pupils have to judge which chord it would be best to write under each tone of the melody. Thus, if the melody to be harmonised were—

\[ \text{Teacher's Manual.} \]

the first, third, and fourth tones can each of them be harmonised with two different chords, reckoning only the few chords we are now dealing with. The teacher Sol-fa (without touching it on the Chart) such a melody, and then points out on the Chart the different chords which can be used, asking his pupils how they will decide. As a means of helping them, he advises that in harmonising they should always consider where they are going. In such sentences as these it is wise to fix the cadence and work back from it. Thus, in this case, the pupils will quickly decide that it is to have under it the cadence chord D; indeed, the Chart, as at present uncovered, gives us no choice. Going backward to \( F \), what two things can the pupils do? They can make a Flipped cadence or a 'SD' cadence. Say they prefer the latter. Then these chords are written on the blackboard. Going backward again to \( G \), they can take the chord of \( S \) or \( D \). Either will do; suppose they take \( D \). Now it is time to settle what bass they will have. With the chords they have chosen the bass may be \( m, t, d, m r, d \); but \( m t, d \) will not do, because it does not sound well to leap from the base of a c position. Suppose they choose \( m r, d \), for the sake of similar motion with the air. Then you naturally put \( F \) to the chord before and \( D \) to the chord before that. Thus gives the bass—

\[ \text{[Other notes follow]} \]

Now you point and sing this bass and air on to "fill it" as before. I hope I have said enough to show any teacher who has taken at least the Pass Certificate in Elementary Composition, and possesses a little guimption, how useful the Harmony Chart may be made to him and to his pupils. For the Sixth Step I should cut off the paper which covers the chord \( R \). For the Seventh Step I should first cut off the paper which covers the chord \( T \), and later, that which covers the chord \( L \). The Eighth Step would uncover all the chords of the major mode; and by that time a true picture of chord-relationship would be impressed on the eye. I would deal in a similar way with the chords of the minor mode. Transition would present a difficulty if it were at all desirable to teach it on the Harmony Chart. Transition, however, is better associated in the mind's eye with the Modulator, and taught from the Chord-singing Charts.—J. C.

686. Systems of Theory.—The greatest influence of names and classifications over our thinking powers is shown by Isaac Taylor, Sir John Herschell, and Dr. Thomas Brown, at pp. 15, 19 above, and at p. 17, par. 78, I have shown what all students admit to be the true principles of a good classification or denomination. 1st, The classes should be dearly separated one from the other, and have names denoting two things, and nothing having two names, and 2nd. They should be so planned and named as to put the most vital and important thing most prominently before the mind. They should denote the principal phenomena and omit the subordinate. Compare p. 18, par. 82, 88, above. With these principles in our mind let us look for a moment at the commonly-received systems of thinking about Harmony. Let me, however, promise, that the tendency of modern thought among musicians to consider everything, even a chromatic chord in its relation to the key-tone. Hence, the attention of such men as Weber, Gerber, Schindler, Richter, Macfarren, Stainer, and others, to burst the bonds of the old systems of thought. (A history of some of the old systems, from Fettis, is given in "Statics," pp. 62, 63.) Mr. Macfarren is more careful than any previous teacher in showing what can be done, or not done, with chords on this or the other tone of the scale.

687. In the naming of chords that which represent by the brief and sufficient title "Seven-soh-c," or by the symbol \( 7c \), would on the old plan be sometimes written thus and so on, according to the key in which it is used, or it would be described by the prolix name "Second Inversion of the Dominant Seventh in the major mode." To have to use this roundabout phraseology every time we want to say \( 7c \), would be very annoying to the Teutonic-f�st. One thing, however, must be said for it: it does put the important idea—Dominant—prominently forward, whereas the figured bass denotes the very subordinate phenomenon of pitch and only connotes (by process of reasoning) the principal phenomenon of key-relation called "Dominant." Our term "Seven-soh-\( c \)" denotes the principal thing "Major Dominant," and connotes the things of next importance, the Dissonant Seventh, and the "second inversion," and does all this in a brief significant way. When theories are added, as they
commonly are, to the title of chords, it becomes quite amusing to compare them with our plain naming of the facts as seen and heard. Thus, a chord sometimes called the "Neapolitan Sixth," consisting of ray fah tese, we denominate "F.A." It is a major chord on F. But Dr. Hiles (p. 44) calls it the first inversion of the triad of the minor super-tonic,—Dr. Stainer (p. 80) entitles it "the first inversion of the common chord of the minor sixth of the subdominant,"—and Mr. Macfarren (the "Musicians'" p. 19), denominates it "the first inversion of the chromatic chord of the minor second of the minor key." A peculiar chord used in the music of the fah lah dohl,ʹ often called the German Sixth, we denominate "Minor-re-fah-one" (reP1). I add the figure one, in this place, lest the composition be incomplete, for if the dots were omitted, the friends of the older theories would call the chord the Italian Sixth. Hiles (p. 125) calls it a combination of the augmented eleventh and minor thirteenth, and Dr. Stainer (p. 85) says that it "consists of the minor ninth of the dominant with the major third, minor seventh, and minor ninth of the second-dominant." One more example of the same sort. The chord which consists of the tones fah lah dohl ray, we name by the tones we actually hear in it, which being placed together in thirds make ray fah lah dohl. We see no advantage to be gained by giving it a longer title than the chord of the eleventh, and Mr. Macfarren makes it (p. 85) "the second inversion of the chord of the eleventh on the Dominant," and Professor Ouseley (excelling all in complexity of theory) (p. 143) calls it the first inversion of the combination of the minor seventh of the Dominant and the fifth and minor seventh of the super-tonic or secondary root. It is obvious that these gentlemen have different theories about the origin of chords. But why should the chords be described or named by their theoretical and disputable origin? Why may we not be satisfied with the unmistakable fact that such and such tones thus and thus related to the key are heard in them? Why should a man be described or named by his pedigree? Surely "John Thomas" is name enough for all purposes of recollection and speech without adding ap David, ap Wellyn, ap Griffiths, &c., &c. 688.—To illustrate yet further the

poverty and awkwardness of the old chord language, I must quote a passage from Mr. Macfarren's "Six Lectures," pp. 128 to 130. Readers unacquainted to Harmony studies will be required to be reminded that Chromatic chords are, according to Mr. Macfarren's excellent teaching, those which are resolved Chromatically. With the exception of two or three peculiar cases they are chords which commonly resolve into the Tonic of a new key, and the very sounding of which would lead the ear to expect a new key, but which really resolve on some characteristic chord of the existing key. This threatened change of key resulting only in a reaffirmation of it, reminds us of the lines—

The falling out of faithful friends
Renewing of love.

In the following passage Mr. Macfarren speaks of the chord 7R, which commonly moves into the first sharp key of the chord 8, but which sometimes makes a chromatic resolution into that most characteristic chord of the existing key 8. And he compares it with the chord 1A, which commonly leads into the first flat key through the chord 7, but which sometimes only reaffirms the key by moving into 8. Notice the roundabout descriptions to which the old chord-language drives him. Mr. Macfarren says—

"You have observed that when the supertonic harmony is followed by that of the dominant—the root then rising a 4th—the chromatic 3rd of the former chord falls a semitone to the 7th of the latter; and when that the Tonic harmony is followed by that of the dominant—the root then falling a 4th—the chromatic 7th of the former chord rises a semitone to the 3rd of the latter."

\[
\begin{align*}
\text{fe} : f & \quad \text{m} : f \\
\text{d} : t & \quad \text{ta} : t \\
\text{l} : s & \quad \text{s} : s \\
\text{r} : s & \quad \text{d} : s
\end{align*}
\]

There is a kind of symmetry which is remarkable in this exceptional resolution of the chromatic notes in the progression of these two chords to that of the dominant, which stands as a centre between them. The symmetry, or reverse likeness of treatment, ceases not here; the 7th of the supertonic falls to the 3rd of the dominant, and the 3rd of the tonic rises to the 7th of the dominant. All the progressions in the resolution of the supertonic chord upon the dominant are, you perceive, reversed in the resolution of the tonic chord upon its dominant, just as the lines in a landscape are reversed in its reflection on the surface of a lake; the root falls instead of rising a 4th, the 3rd rises instead of the 7th falling to the 3rd, and the 7th rises instead of the chromatic 3rd falling a semitone. The reverse, reflected, symmetrical treatment of the super- tonic and tonic discords continues yet further; if the 5th of the supertonic rise to the 3rd of the dominant—the note to which the 3rd ordinarily proceeds—then the 7th with good effect also rises to the 5th in the dominant chord—

\[
\begin{align*}
\text{d'} \quad \text{r'} & \quad \text{t} \\
\text{f'} & \quad \text{s} \\
\text{t} & \quad \text{f} \\
\text{r} & \quad \text{m}
\end{align*}
\]

and you will trace the reflection, if the 5th of the tonic fall to the 7th of the dominant—the note to which the 5th ordinarily proceeds—then the 3rd with equally good effect also falls to the 5th in the dominant chord."

If we wish to express all this in the "Tonic Sol-fa" language, we should say that in the chromatic resolution of 7R into 8, the commonly rises to the, while f/s rises to f and d to t—and that in the chromatic resolution of 1A into 8, d commonly falls to s, t rises to r and s rises to f. But that sometimes, in chromatic 8, t rises to i, and d and f to d and f. But that in chromatic 1A, s falls to r and m to r. This concise statement expresses all the facts of the case quite clearly to the Tonic Sol-faist, and to him it appears not only more brief but more to the point. It occupies nine lines instead of forty-five!

Mr. Macfarren does not notice, although his examples from Beethoven and Mendelssohn show, that the rising or falling from one root to the next depends upon the desire to avoid too much similar motion. When, as in the first case of 7R, there are three tones falling, it is certainly better that the bass should set off this motion by rising. And when, as in the first case of 1A, there are two tones rising, it is better to get contrary motion by letting the bass fall. But the reader must not conclude from Mr. Macfarren's words that the roots in these chords always move thus, for in the examples which follow they do quite the contrary, thus securing a greater variety of motion in the chords. In both these last cases there are two parts going up and two parts going down.
Not only does the arithmetical language, in the use of which Mr. Macfarren has been brought up, lead him to overlook this important teaching about contrary motion, but it fails to serve him in bringing out the proper characteristics of the tones and their progressions,—for the conduct and behavior of any tone in a chord does not depend only upon its being the third, fifth, &c., of that chord, but also on its being a certain tone, holding a certain office in the key, and this important feature of chord relation his chord nomenclature does not help him to show. But the Tonic Sol-faist sees at once why, for these chromatic resolutions, it does not take a natural progression upward, nor in its natural movement downward.

Mr. Macfarren indeed seems to be aware of the confusing effect which his nomenclature of figures would produce, for he says, "the large assemblage of numerals with which I have had to trouble you, may have given to what I have just said rather the sound of a mathematical than of a musical demonstration." He will be glad, however, if it prove to possess some of "the clearness of a mathematical problem." Mr. Macfarren, with his new and original ways of looking at music, and his constant references to the key relation of chords, seems to me, when using the old namings and classifications of chords, like the man who puts new wine into old bottles. He will certainly burst them.

690.—The classification of discords is another point at which the old plans of teaching fail to give a clear insight into the nature of the subject, and a proper set of names for conducting the study. These plans divide discords into Suspensions, Essential (or, as they are sometimes called, Prepared) Discords, and Fundamental Discords; and the pupil is introduced to them one by one. The Suspensions are those "not prepared" by the dissonating-tone having occurred in the previous chord, and are resolved by going down one step in their own chord. The Essential Discord is the same thing except that it is resolved into a different chord from that in which the dissonance strikes, and the Fundamental Dissonances are those which are theoretically supposed to spring from some root in accordance with what is called the Chord of Nature, and which are, or may be, unprepared. Let us test this by the first essential of good classification, distinction, see p. 17 above.

preparations, and our theory that the harsher the discord is in itself, the better must be the preparation, helps us in this case. The fourths displace the third of the chord they enter, and leave no third (no source of sweetness) in the chord. They also commonly dissonate in what we call a primary manner against the tone above them, that is, they are more commonly under-seCONDS than under-ninths or over-seVENTHS to the resisting-tone. This also means that the minor dissonances do not actually displace (as the old definition of suspensions would imply) the tone below them, for it is commonly heard a secondary dissonance. We may call a secondary dissonance, that is a dissonance with one of the tones removed an octave. This secondary dissonance is in addition to the usual primary dissonance against the tone above. It stands to reason that such dissonances must require the most perfect preparation. Let it not be easy to see that nomenclature built upon the tones of the scale is much more likely to assist the pupil both in his memory and in his investigations than the one which we have shown to be misleading and defective.

692. We object to the word "essential" in this connection. We object to its being said that because one thing is added to another it is therefore essential to it. Nothing is essential which you can do without. No dissonance is essential to a chord; the chord can always do without it. If the old writers simply meant that a discord is essential to itself—that you cannot have such a discord without having such a discord itself—we quite agree with them, but we say that this does not teach us anything. 693. Again, why should a chord be called by a different name because it is differently prepared? Will it not help the observer and the composer much more (and that is our object in providing nomenclature) to say that harmonic preparation helps to make the dissonance least noticed as such, and the oblique is next in its power of apology—that when a dissonance is wanted for special effect it is best brought into notice by being placed on a strong pulse, and being long unprepared—that dissonances occurring in some chords (that is, some discords) are so harsh that composers always prefer to prepare them well, and that others are weak in their dissonating power, that they scarcely produce any effect as dissonances unless well brought out in the manner just described? Tonic Sol-faists will search first whether this account of things is true, and secondly whether it helps the observer and composer better than the other accounts. We do not doubt their decision. 694. We have said nothing about usefulness or otherwise of building a theory of unprepared discords on what is called the harmonic chord. See "Statics," pp. 27, 29, 41, 60.

We have no room here to go fully into what we think the unphilosophical cobweb theory of "Nature's chord." They use these unprepared chords only as what other names have used. We shall, therefore, feel at liberty to condemn it strongly. It is enough to say here that the system of partials (parts or qualities of a tone; real harmonics as forced out of a tube or touched on a string, are never really heard) contains all the tones of the scale and a great many more, there is no such great wisdom in telling us to take without preparation "such sounds as are found in this system of partials. When the learner discovers that nearly all sounds are found there, he says, "I thought I had found in this theory a guide—a guide from nature itself by which I might understand what tones could be taken unprepared, and what could not be so taken. Instead of that, I find that these musicians have only set up this theory as a justification for their using any tone of the scale like an unprepared dissonance. Now I beg to say that I did not want any such justification. If they used these unprepared discords, I'd like them, that is enough for me. But to tell me with solemn face that nature guides me to all these dissonances in the scale I'm out of the game, and then to proceed at once to make an artificial selection from them, is not to help me but to confuse me." I believe that nature has given us the common scale of co-ordinate tones with its beautiful harmonic relations quite as much as the vanishing quality-defining partials, and if a scale is easy to use, and every musical art can do with this common scale. It is quite the province of art to make these "artificial selections," but how much better to acknowledge that the selection is one of fine art! If some unhappy pupil really did, under the supposed sanction of nature, make half the discords which the so-called "chord of nature" allows, he would have a din, indeed!

This theory of Nature intruding where Art should rule is a delusion and a snare." No musician acts upon it. Our honoured, and more than honoured friend Mr. Macfarren, does not. It would lead him where ever he dare not follow. He makes his artificial selection of roots; he trusts to his own good ears and fine taste. Tonic Sol-faists may freely trust to his teaching about discords (for it is founded on keenest observation, and the noblest art) if they will only rub out of memory as quickly as possible the miserably misleading theories we have here referred to.

J.C.

685. Methods of Teaching.—In the first chapter of this book we have studied the principles of "method," the most important of which is that the methodiser should seize the most characteristic principle of the thing he has to teach, and keep that always the most prominent, making others gather round it. See pp. 1 to 3 above. The subordinate principles are, that the easy should come before the difficult, the real before the ideal, the elements, one by one, before the compound, the common before the uncommon, and so on. Let us take the three best methods which I know, at the present moment, written by three of the greatest living English musicians and try them by these tests. Before the musicianship of any of these men I should humbly bow, and would not venture even to criticise them in matters of taste or musical knowledge. It is only on educational points that I presume to speak freely of their plans. I call the first exercises A, another B, and another C.

A does better than the two other more modern ones, in putting the enlightening fact of Harmony—the key-relation of chords (See above, p. 224, and "Statics," pp. 79, 80) quite prominently before his pupils. He uses, as Walton, the Roman figures I, IV, V, to represent the tonic, subdominant, and dominant, and the first thing in Harmony with which he familiarises the difficult art of his pupils is a tonic cadence. This is indeed moving more than one step at a time, but it puts the common before the uncommon, and the pupils are not disappointed, however, when only four pages further on, we find four new chords, to each of which belong peculiar habits and characteristics suddenly introduced at once. This is many more than one step at a time, and it introduces some of the less common things (especially the chord on the third of the scale) quite early in the course,—while the dominant seventh, a chord which is to be found in every modern psalm tune has not been introduced. Thus, the young workman has to employ a large number of new tools at once, while one of the best and commonest of the tools is carefully
kept out of his reach. After this, instead of going on to the things which are next easy to manage, such as the inversions, or $b$ and $c$ positions of the common chord, he is suddenly plunged, at the very next page, into the peculiarities of the minor mode, and modulations from minor to relative major. It is true that when this is done a return is made to the simpler things of inversion and cadence. But it is not till after the chapter on cadences, perfect, imperfect, false, and deceptive, that the dominant seventh is introduced! It is not necessary to pursue the plan of exercises in $A$ any further. Notwithstanding these defects in educational progression, the manner in which this book puts key-relationship boldly to the front gives it a great advantage; and during the time that the Society of Arts gave certificates and prizes in Elementary Composition, we found on enquiry that all those who fairly disputed pre-eminence with the Tonic Sol-faists had been taught from this book.

698. B, so far from taking one thing at a time, introduces five chords at once (I, ii, V, vi, $S$) in the very first exercise. And, after three exercises, before the pupil has properly learnt to use them, or can possibly understand the style and manner of their relations to one another, he finds three of the same chords ($L, F, R$) with two additional ones ($e$ if $d$) suddenly thrown down before him, and is told to use them in a different style and manner. In other words, he has to work with five chords in the minor mode and with two forms of the tonic chord, and without any supertonic at all. After thus showing to the very elementary pupils the altered dominant, the double tonic, and the omitted supertonic, $B$ goes back to the more easy matter of the first inversion, or $b$ position, which he requires the pupil to use in seuss different chords at once! Again, he carries his pupils to the minor, with its difficult discrimination of similarity and unharmony as compared with the major. Then he returns to the second inversions, or $c$ positions, and teaches them all at once. And it is not until the 20th exercise, after he has taught a variety of discords, $g$ths, $4$ths, and $5$ths, that he comes to that common, easily managed, and indispensable musical workman's tool, the dominant seventh! It is plain that Mr. Nasmith's plan (See above, pp. 12, 13) of teaching the commonly used words in the language, before those which are uncommon, would not commend itself to this writer. It is enough for him that a thing is; the question of its being common or uncommon does not concern him. But it concerns the pupil, and that is the important matter. He will unshakably be confounded by making acquaintance first with those who are to be his daily companions in his new abode of art, and afterwards, one by one, with those from whom he will receive occasional visits. When, however, the early steps of this method are once mastered, it studies key-relationship, in the advanced steps, so much more closely than is usual, that Tonic Sol-faists have derived great advantage from it.

697. C transcend both the others in its neglect of the principles "one thing at a time," and "the easy before the difficult." In its very first exercise it crowds together the tonic and dominant chords, with their inversions, the subdominant and submediant, each with one inversion, the supertonic, and the inverted mediant; but, as though this were not enough for the bewildered student, he is required also to employ five chords of the relative minor, and to know how to move into the first inversion when he would of course commence the introduction of the comparatively little used and unwieldy dissonances of the 7th and 9th on the tonic, and it is not until the twenty-first exercise that $G$'s pupils are allowed the help of their much-needed friend, the dominant seventh! Even then this chord is not first shown in its common habitus, a tonic cadence, but first in its inversions, in its minor mode form, in the first sharp key and in its resolution on the submediant instead of the tonic! There is very little here of the easy before the difficult, of the common before the uncommon, or of any of the principles of method which are commonly recognised. In one point, however, it puts the easy before the difficult. At each of its steps, it first allows its pupils to "fill in" a Contralto and Tenor to a given Air and Bass. This is of course much easier than the next part of each step, in which the pupil is required to write on a given Bass. In this respect $C$ excels $B$, which now comes in with preliminary effort, but requires everything to be written on a figured Bass. Neither of these methods introduce the higher exercise of harmonising a given Air with a free choice of chords.

Now to the professional student, who gives his whole time to study, and for whom the books do not teach him, it may not be so serious a matter that he has to encounter unnecessary difficulties in his path. But to the ordinary student these accumulating difficulties, whether in the notation of chords, pp. 20, 232, in the system of thinking about them, p. 251, or in the order of teaching how to use chords, are a very serious matter and block up the road to music for thousands of pupils. —J.G.

698. "Zurich, 30th September, 1856.

Sir,—I cannot help dating a letter to you from this place, the fountain-head of the people's song. Here, in the early part of this century — until A.D. 1826—laboured Nägeli—a disciple of Pestalozzi—author of a great and original work on singing, which (for the teacher at least is still unsurpassed; the great reformer of musical education, and the founder and vigorous promoter of those singing-unions which soon spread over the whole island of Germany. We have been here this evening to the High-promenade, overlooking this fair lake. The first thing which attracted our notice was the monument to Nägeli, surmounted by his noble bust. It bears the inscription, 'The Singing Unions of Switzerland to their Father—Nägeli.' And, while the western sky was lighted up by the setting sun, and the grand snow-covered mountains far away to the south, were just tinged with that wondrous roseate hue—the sun's evening kiss—I stood gazing on all that scene of beauty, and singing that little song of Nägeli's which every child in Germany can sing —

'How I love to see thee,
Golden evening sun!'

I have also, this evening, had the honour of a visit from Mrs. Gersbach, the widow of Anton Gersbach, who succeeded his brother Joseph (author of 'The Birds of Passage') as professor of music in the Training College at Carlsruhe. It was through her kindness that I obtained, two months ago, a very valuable manuscript work, the joint production of the two brothers, which had cost those highly educated men—thorough educators as well as musicians—many years of thought and practical testing. It teaches the elements of harmony and composition, not by didactic instruction, but by making the pupil construct for himself little musical sentences, which are constantly increasing in difficulty, and beauty as he goes on. It is the same plan, [only with clearer grammar and more science], which Ollendorf has so successfully applied to the teaching of languages. Ollendorf has done, and very well done, something of this kind for music. But this course of Gersbach, which was begun ten years before the
publication of Logier's plan, is more scientific, more complete, and more beautiful. Even A. B. Marx's great work does not, in the first volume at least, equal Gersbach. The progress of Marx's pupil in the early steps is like that of a spider on a wall,—upwards for a little,—then dropping down again,—then upwards once more. It really does attain the end, but by a miserable process, as it seems to me. Gersbach goes over onesided, leaving nothing unexplored behind him; and he, the surveyor, mapping the country as he goes. A real, practical insight into the principles of harmony,—something more than a book—knowledge of them,—is extremely useful, both to the singer and to the teacher. I need not remind you how often you have a very favourite piece of vocal music, but, unfortunately, it is not harmonized for the kind of voices which your little circle can command. It is written for four men's voices, for instance, but you want it for two men's voices, or for one male and one female voice, or for two (or three) female voices, or for two female and two male voices. How pleasant, and not only pleasant but very useful, the power of 'setting' the time to your voices! Then how necessary that the leader of a choir should understand the meaning of the harmonies which he uses, and know how to bring out their characteristic power! And why not add,—How delightful to express one's own musical thoughts in some endurable shape, however poor they may be! We need not 'bother' other people with them. If we do, they will wish 'Gersbach's Exercises' at the bottom of the sea. But, neither need we deny to ourselves the pleasure of expressing the music we feel. We shall understand and sing the compositions of others all the better for a few such endeavours. Several hundreds of Gersbach's pupils live to bear testimony to these pleasures and advantages. Why may not the English schoolmasters and others of the English people's teachers enjoy the same privileges?"—J.C.—"Tonic Sol-fa Reporter," 1865, p. 102.

699.—At the Christmas meeting of the "School," Mr. Curwen gave a statement of his experiences in the study of harmony, and his enquiries and experiments as to the best method of teaching it. He described the difficulties of the student who uses the ordinary lesson books, and the relief he himself obtained when a musician told him that when he began to compose he had to throw away the grammars, and study the actual music of the best masters. He spoke of the hopes raised in his mind when he discovered in Germany a progressive method for constructing and inventing harmonic sentences (like the method by which Ollendörfl and Ahn teach language, and the joy with which he purchased Gersbach's manuscript,—of the experiment with Gersbach's exercises in the first session of the Tonic Sol-fa School, held at Plaistow, nearly eleven years ago. These sentences he found, though displaying great ingenuity and taste, to be defective in the order of their progression. They also showed signs of being governed in some parts by the theories of Marpurg and Abbé Vogler, rather than by the common usage of music itself. Mr. Curwen, therefore, with the help of Mr. J. S. Stallybrass (who had been his pupil in the course of lessons above referred to), commenced a long series of statistical enquiries and observations on the progression of chords in the best specimens of the great masters. This resulted in the publication of the first "How to Observe Harmony." When the pamphlet was passing through the press, Mr. Miller suggested the importance of a series of exercises in harmony analysis. When "How to Observe Harmony" had been published a short time, Mr. Curwen found that his pupils in harmony analysis considered themselves capable of composition as though the boy who could name the colours in a picture were thereby made competent to paint one. He therefore again attempted a course of Exercises which he tried to make an improvement on those of Gersbach. Some fifty or sixty friends worked through these exercises with him in 1868, in order to test them before publication. This testing process showed him that he had been too minute and exact in his plans, carefully showing every progression of chords that was to be found in the great masters, whether they were much or little used. This course, though technically exact, was wearisome, and lacked interest. Mr. Curwen therefore resolved that in the next course he would teach the commonsense and easiest things first, and leave the minutiae for after study. He therefore asked himself: "What is the commonest thing in harmony?" The answer quickly came,—a tonic cadence. Then our pupils shall be first taught to observe and to take a few exercises in the "Construction Exercises." "What after this is the commonest thing in harmony?" The question was easily answered,—a dominant cadence. Then let our pupils, he said, in the second step, learn to observe and to make dominant cadences. Thus he went on, choosing for every step the commonest and easiest thing which had not been taught before. He found also that by taking the cadences first he had gained two advantages for the study of noncadential harmony. First, the pupil would know the strongly marked cadential forms, which must be avoided everywhere out of a cadence, and secondly, the pupil would find in the great variety of cadences human ingenuity pretty well exhausted in order, on the one hand, to avoid grammatical errors, and on the other, to secure the greatest smoothness and beauty of the parts,—qualities which are as essential out of a cadence, as in it. The result of these studies is to be found in the harmony exercises of Vols. 8 and 9. [Since developed in "How to Observe Harmony" and "Construction Exercises."] In these volumes Mr. Curwen's object has been, not so much to carry the pupil far or to make him learn, as to bring him to a practical stage of common usefulness,—so that his knowledge may be of service to him as a preceptor in judging of harmonies, as a teacher in adapting well-known pieces for different voices, or as a bandmaster, in arranging for his instruments.—"Tonic Sol-fa Reporter," 1865, p. 56.

THE LESSONS OF THE TONIC SOL-FA METHOD.

700.—Let us suppose a young teacher, furnished with all the knowledge which I have tried to communicate in "Standard Course," and in this book, as well as with much more which he has learnt from other sources—coming to meet his class. Is he prepared? Certainly not, if this is all he knows. He must know what to do first, second, third, &c. He must have well in mind and memory his Plan of Employments. He must have all his "places" doubled down. He must be perfectly ready to pass from one employment to the next. Unless he is a very well practised
teacher, he must have gone over everything that he expects to be said or done several times in his own room. To the teacher thus well prepared his work is most delightful. See above, p. 46.

701.—The Plan of Employments must necessarily depend upon the character of the class to be taught, on which subject we shall speak presently. But some general hints may be given, with the understanding that Teachers must necessarily vary their plans according to the wants of their pupils. There is, however, one principle which should be invariable, and which should guide the teacher in every class. It is that of keeping the Certificate in view, and of always doing something towards it—if possible, something toward each one of its requirements—at every lesson. Thus, in Elementary Classes, even if they are of so low a character that the teacher has little hope of getting them certificated, he should work towards the Certificate. The five points of the Elementary Certificate will give him five distinct employments. Whatever else he may do, he will—1st, Cultivate the Memory of Tune by means of the Hand Modulators. See above, p. 104. 2nd, Perfect his class, form by form, in two or three of the Elementary Rhythms. See above, p. 147. 3rd, Give them two or three of his own voluntaries, quickly moving, within the Step, and suitable to his class. See above, p. 101. 4th, See that his pupils are exercised, by turn, in pitching tunes from the fork, and that they have practice in sight-singing. See above, pp. 221 and 124. And 5th, Give them systematic exercises in copying by ear. See above, pp. 118 to 120. In an Intermediate Class, the teacher will work in the same way, at every lesson, for the Intermediate Certificate.

702.—The order in which these employments should be taken is worthy of some consideration. It is well to plan for as much variety as possible in regard to the Faculties called into play, and even to plan which shall be taken standing and which sitting. Consideration also should be given to the length of time to be appropriated to each employment. It will be well for the Teacher to keep the following Plan or “Praxis” before his mind, from which he can vary as occasion requires, Voice, Tune, Time—Sight, Ear, Memory.

**Plan of Employments for an Hour and a Half’s Lesson**

I. 10 min. **Voice Formation Exercises** with Hand-signs for elementary pupils, and “Voice exercises” for advanced pupils. See above pp. 96. Standing

II. 20 min. **Tune Exercises.** Each exercise going through the processes of

a. Pattern, p. 93. Sitting

b. Sol-faing from book, p. 90. Sitting

c. Laaing from book, p. 92. Standing

d. Collective reading, St. Co., p. 15. Sitting

e. Singing to words, St. Co., p. 59. Standing

III. 10 min. **Theory, St. Co., as wanted.** Sitting

IV. 10 min. **Time Exs., p. 147.** Sitting

V. 10 min. **Sight-singing, by Voluntary board, or Book, p. 124.** Standing

VI. 10 min. **Ear Exs., p. 118.** Sitting

VII. 10 min. **Memory Exs., p. 104, 105, by use of Hand Modulator, or by Writing.** Sitting

VIII. **Rest of time. Closing Pieces for recreation.** Standing

703.—The Teacher should time his work by the clock all through, giving a fair and suitable, but by no means an equal proportion of time to each employment. This “submission to the clock” will secure variety for his pupils, and will be a healthy thing for him. See above, pp. 75, 76. All through the lesson he will be trying to save a little time here and there for the recreation singing at the close. He will take care never to fatigue his pupils with any one sort of exercise.

704.—When the Modulator-pattern has become unnecessary the place of a will be occupied by the Time-spelling of the tune, especially in the case of every difficult rhythm. The heavy work of these exercises may be relieved,* if necessary, by

* See page 45.

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introducing Voice Exercises, or Ear Exercises or Modulator Voluntaries, or Time Exercises into the midst of them. They may also be relieved by carrying one tune to the b or c stage and then turning back to some previous tune and carrying it on through the c, d, and e stages; but never have more than two, or at most, three tunes on your anvil, and when you have once begun a tune never leave it long before you bring it to the greatest perfection the class can reach. There is a great joy in well-finished work. The strongest stimulus to this finishing of work is the prospect of a public concert or of an “open meeting” when each pupil will be allowed to invite his friends to hear what the class is doing.

705.—The principal requisite for the conduct of a lesson is, that the teacher be well prepared. If he has to stop and think what to do next, or how to shape his remarks on this or the other subject, it gives the class an opportunity for talking and disorder. He should never let the attention drop, but go sharply from one thing to the next. His remarks should be brief and business-like. He has to be the centre of life for a whole class, and must therefore himself be instinct with unflagging force. All this will be quite impossible unless he has gone over before-hand and realised to himself each transaction of the class, the manner in which he will present his explanations, the mistakes likely to be made, and the questions which will probably be asked on each point. Ample preparation gives the teacher presence of mind, liberty of thought, quickness of action, and confidence. This great work of “helping pupils to teach themselves,” has its ample reward. The self-discipline and painstaking it requires is well repaid. When you have given to a youth his honestly won Elementary Certificate, you have supplied him with an innocent pleasure for all the days of his life, and you have made him a leader in the “service of song in the house of the Lord.”

706.—The Planning of a Course of Lessons is almost as important as that of a single lesson. This also must be very much moulded by the kind of class which has to be taught. One class will move very much more swiftly than another. But some general ideas on the subject will be of great service. Teachers will like to know how much can be done in a lesson under ordinary circumstances. They will like to have a standard by which they can measure the ability of their class and their own teaching power. By the help of Mr. Longbottom, who has several times worked through the “Elementary Standard” (which contains “First Exercises for Mixed Voices,” “Additional Exercises,” Part I., “Elementary Rhythms, and Elementary Transitions”) I have planned out what may be fairly expected from an elementary class in 24 lessons, when the newest appliances in aid of the teacher are employed. I shall number the employments in accordance with the above plan. Mr. John Evans has also kindly supplied me with his scheme for 60 lessons, using the “First Blackbird” and “Blackbird Charts.” Children’s lessons are generally shorter and more frequent than those of adults.

**PLAN FOR TWENTY-FOUR LESSONS.**

**First Step.**

I. 1. Exercise in breathing and pure tone, as Exs. 1 and 2, “Standard Course,” p. 3.

2. Tune. Exercise in tonic relation, as Exs. 3 to 6, “Standard Course,” pp. 3, 4. Exs. like those in “Standard Course,” pp. 6 to 12, being taught first by
pattern with the open aa, second by pattern with manual signs to the Sol-fa syllables, and third by pattern from a “First Step Modulator,” or better, from the same thing written on a blackboard. See above, p. 53.

3. Questions on Mental Effect of d, m, s. “Standard Course,” p. 4.

5. Sight. Voluntary on d, m, s, by hand signs and First Step Modulator.


II.

Repetition of first lesson, especially if new pupils are present.


2. Tune. Exs. 13 to 23. Each exercise—(a) patterned from Skeleton Modulator; (b) Sol-fa from Standard Charts; (c) Read from St. Charts.


Note.—If all pupils have attended lessons I. and II, the teacher can generally go further, and so relieve the work set down for lesson III.


III.


2. Time, being the new subject, may be taken before Tune, in this lesson. Revise lesson on two-pulse measure, and illustrate lesson on three-pulse measure, as Exs. 24 to 31, “Standard Course,” pp. 6, 7. Ex. 32 to 36, first shown by finger-signs, then taught as directed, “Standard Course,” p. 7.

Note.—It is not important to dwell on the “Secondary forms” of the measure, or on three-pulse measure at this step.

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There will be no harm in allowing Taatai to be transferred to the next Step, if the pupils are slow. But if they are quick let them work through Ex. 45, which will be found on “Standard Charts 2 and 5,” introducing the Rhythms by Finger-signs, and then following the directions for taatai-ing p. 7, and taatai-ing in tune p. 10.

2. Tune. Exercises on Charts 3 and 4. Each exercise being—(a) patterned from First Step Modulator, (b) Sol-fa from book, (c) Read from book.


SECOND STEP.

IV.

Revise last Step, making sure of the Time exercise 45, Charts 2 and 5, showing it at first by Finger Signs and Time Chart, and the Tune exercise 53, Chart 5.


2. Tune. Chart 6, Exs. 57 to 59, & 61 to 63, in the manner directed, a, b, c, “Standard Course,” p. 15. When these have all been done by soft pattern from the Manual Signs they may be sung from the Chart. Also Chart 7, Exs. 65, 66, going through the processes a, b, c, d, e, but not singing them as rounds. Before process b call attention to breathing places, “Standard Course,” p. 16. For process c read “Standard Course,” pp. 15, 16.

4. Time. Elementary Rhythms 1 to 4, any or all.

5. Sight. Introduce the book “First Exercises for Mixed Voices,” and use exercises 1 to 6 as sight-singing tests. Let the pupils look through their parts carefully before they begin and observe the breathing places. Voluntary from “Second Step Modulator.” See Hints for Voluntaries, p. 3.

V.
2. Tune. Chart 7, Exs. 67, 68, and First Exercises, “Swell the anthem,” Ex. 7; and “Sweet summer,” Ex. 8. If the previous exercises have been easily done omit the pattern. Before Sol-faing the parts together, in the right key, let the whole class Sol-fa each part separately, taking the Soprano and Tenor a minor third lower, and the Contralto and Bass a minor third higher. Study breathing places before process d.
5. Sight-singing. Voluntary on Second-Step Modulator. See Hints, pp. 3, 4. With, if possible, second-step exercises, from other courses, written on black-board, or lent by the teacher, for the time. A set of either of the following Nos. of Reporter, would do for this step—194, 541. Also “Blackbird,” No. 13. But probably the class will be able to Sol-fa “Music in the valley,” Ex. 8, as a sight test.
VI.
4. Time Exercises from Charts 9, 10, using Finger Signs and Time Chart to introduce each rhythm. Elementary Rhythms, 8 to 10.
5. Sight-singing. Voluntary, from Second-step Modulator, as last lesson. Possibly the class may be equal to “First Exercises,” No. 12, as a sight test.
6. Ear Exercises. “Which is t or t-one?”

Hints, 114 to 121. “Which is r or r-one?” Hints, 84 to 91, and 96 to 99.
7. Memory. Introduce Hand Modulators to the whole class, and try their pointing and Sol-faing from memory the simplest tunes.
8. Sing for pleasure pieces already learnt, or finish off pieces half learnt.

VII.
1. As last lesson.
3. Time Exercises. Practise over again Charts 8, 9, 10. Elementary Rhythms, 11, 12.
5. Sight. Voluntary as last lesson.
6. Ear Exercises disguised by vowels. Hints, 45 to 75, any or all; and 148 to 159.
7. Memory. Use Hand Modulators again for the easiest tunes learnt. Appoint a tune to be prepared for next lesson.
8. Recreation. Bring up every point which has been found difficult in the exercises already learnt, thus making sure the Second Step.

THIRD STEP.

VIII.
2. Tune. Mental effects of f & 1. Exs. 87 to 96, Chart 14, as directed, “Standard Course,” p. 15. Exs. 97, 98, Chart 15, the last not as a round. The four chants in “First Exercises,” Nos. 14 to 17, to be Sol-faad and lead, in order to study the mental effects of f and 1 in the Fah chord. Additional Exercises, part I, “God speed.”
3. As a rest to the pupils, at each of the five lessons in this step, the teacher may speak on the theory of Mental Effects (See above, p. 108 to 118), and give illustrations as in “Studies in Mental Effects.” The teacher knowing by heart the
phrases there given, mentions which tone he means to illustrate, stands by the Modulator, and points to the notes while he sings the words.


5. Sight. Voluntary (See Hints, p. 5), with third-step tests written on black-board, or distributed for the occasion by the teacher. Sets of the following numbers of the Reporter may be useful for this purpose at this step — 98, 100, 123, 124, 171, 172, 195, 542, 543.


7. Memory. Point and sing, in class, on Hand Modulator, the Air of the tune chosen for that purpose at the last lesson.

8. Sing tunes before learnt, to keep them in memory and to prevent their slovenly execution in view of closing meeting.

IX.

1. Chest and Klang Exercise, as at last lesson, with the addition of Tuning Exercises, p. 126, Chord-singing Chart, Exs. 2 and 3.


3. Illustrations of Mental Effect, as in last lesson.


5. Sight. Voluntary, &c., as last lesson.

6. Ear. "Which is f?" Hints, 164 to 167, and 172 to 175.

7. Memory. Point on Hand Modulator, in class, the tune appointed at last lesson.

8. Sing tunes before learnt.

X.


3. Illustrations of Mental Effect, as in lesson VIII.


5. Sight. Voluntary, as lesson VIII.

6. Ear. Hints, 123 to 143, all or part, and 196 to 199.

7. Memory. Point on Hand Modulator, in class, the tune appointed at last lesson.

8. Sing Exs. 98 (Chart 15) 99, 100 (Chart 16), as rounds (See "Standard Course," p. 16) and other pieces, not rounds, before learnt.

XI.


3. Illustrations of Mental Effect, as in lesson 8.


5. Sight. Voluntary, &c. (Hints, p. 6), as lesson 8.

6. Ear. Hints, 176 to 193, all or part, and 260 to 265.

7. Memory. Point on Hand Modulator, in class, the tune appointed at last lesson.

8. Sing, as rounds, Exs. 109, Chart 16, 65, 66, Chart 7, and other pieces, not rounds, before learnt.

XII.


2. Tune. Teach Exs. 116, Chart 22, 120, Chart 23. Additional Exercises, "Fortune Hunter," p. 4. The class must be a very quick one which can also take, in this Third Step, "Thou wilt show me," and "May time."

3. Illustrations of Mental Effect, as in lesson 8.

5. Sight. As lesson 8.
6. Ear. Hints, 194, 195, and 203 to 211, all or part.
7. Memory. Point a last-lesson tune.
8. Recreation. Sing, as rounds, Exs. 67, 68, Chart 7, and 102, Chart 17. Perfect the Step, going over all weak points in Time or Tune.

FOURTH STEP.

XIII.

3. Mental Effects of fe and ta, Ex. 127 to 130, Chart 26, and any or all of Exs. 133, 134, Chart 27, Elementary Transitions, 1 to 9, and Additional Exercises, "Come Freedom's," p. 13.

The teacher will now be planning for his closing concert of certificated pupils, or for a quiet open "visitors' night in his class-room." It is most important that he should not turn aside from his educational work for the sake of pretty pieces. But the Course is planned to include a good variety for a closing meeting. The class has already learnt in First Exercises "Sweet summer," "Music in the valley," "Higher, higher," "Heaven is my home," and "Sweetest, fairest," and in Add. Exs., "Bon Accord," "God speed," "Jackson," "The Cuckoo," "The fortune hunter," "Spring life," and it may be that one or two quartets of the best singers are able to add "Thou shalt show me," "The Maytime," and "The Waits." Even without these, last we have eleven pieces ready by the class. For the rest, "Hope will," "How beautiful," and "Night around," require very delicate treatment and, unless the class is forward, may be left to the quartets. Some classes will not be able to take the broken time of "Come let us," "We fly," is fragmentary. I have allowed ample time for


the teaching of the other seven pieces, in an ordinary class, and, with the other eleven (arranged in a programme so as to give variety without violent contrasts) they will be very telling, and quite enough for a closing night.
5. Sight. Modulator (See Hints, p. 8), blackboard, and reading exercises. Sets of Reporters, Nos. 101, 123, 128, 196, 197, 544, 545, will suit this step.
7. Memory. Write or point from memory a given tune, or tunes.
8. Recreation. Sing Exs. 65, 66, as rounds, and practice old tunes, looking chiefly to tasteful execution.

XIV.

1. Chest and Klang Exercise, as last lesson, and pianissimo Tuning Exercise to be selected from Chord-singing Chart, Ex. 10.
2. Tune. Teach Bridgetones (See above, p. 133), Chart 37, Exs. 135, 136, Chart 28, and Additional Exercises "Time for joy," p. 15. But if there are not sufficient Sopranos to divide, omit this and take "We fly," p. 29 instead.
3. Second lesson on Transition.
5. Sight. As last lesson.
7. Memory. As last lesson.
8. Prepare for closing meeting.

XV.

1. Chest, Klang, and Tuning Exercise, as last lesson. Chord-singing Chart, Ex. 11.
2. Tune. Teach Bridgetones, Chart 37, as last lesson, Elementary Transitions, 17 to 23, each exercise being repeated several times separately, and then the whole sung through as one exercise, and Ex. 137, Chart 29, and Additional Exercises, "Quail Call."