Gregorian Chant

for

The Teacher, the Choir, and the School

 $\mathbf{B}\mathbf{Y}$

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PREFACE

ON the feast of St. Cecilia, November 22, 1903, His Holiness, Pope Pius X., issued a *Motu Proprio* on sacred music, in which we find the following words concerning the Gregorian Chant:

"The Gregorian Chant has always been regarded as the supreme model for sacred music. . . . The ancient traditional Gregorian chant must, therefore, be largely restored to the function of public worship, and everybody must take for certain that an ecclesiastical function loses nothing of its solemnity when it is accompanied by no other music but this. Special efforts are to be made to restore the use of Gregorian chant by the people. . . . Whenever then it is desired to employ the high voices of sopranos and contraltos, these parts must be taken by boys, according to the most ancient usage of the Church. . . . In seminaries of clerics and in ecclesiastical institutions, let the above-mentioned traditional Gregorian chant be cultivated by all with diligence and love, according to the Tridentine prescriptions, and let the superiors be liberal of encouragement and praise toward their young subjects. . . . Let care be taken to restore, at least in the principal churches, the ancient Scholæ Cantorum, as has been done with excellent fruit in a great many places. It is not difficult for a zealous clergy to institute such Scholæ even in the minor and country churches. . . . We do therefore publish, motu proprio and with certain knowledge, our present Instruction, to which, as to a juridical code of sacred music, we will, with the fulness of our Apostolic Authority, that the force of law be given, and we do by our present handwriting impose its scrupulous observance on all."

Commenting on this subject the Apostolic Delegate, Archbishop Diomede Falconio, says:*

"After this formal declaration issued about two years ago, what would one be led to think of some pastors who have not, as yet, made a single move toward the desired reform ? . . . What is the cause of this aberration ? . . . It is said that it is difficult to follow out our Holy Father's instructions."

The present little work is published in the hope that it will remove some, at least, of the difficulties which beset the pastor or choirmaster who is anxious but unable to carry out the instructions of the Holy Father. Great care has been taken throughout the work to have the explanations and instructions written in such a manner as to bring them within the comprehension of those who are to

* Introduction to Manual of Church Music, Rev. W. J. Finn, C.S.P.

sing the chant. The book is self-contained, having sufficient material in its copious exercises and examples to train up a choir without needing to place other books in the hands of the singers, which is always an inconvenience. The only exception to this rule is Chap. XV. As this chapter is explanatory of the notation used in the new Vatican edition of the liturgical music-books, the student is supposed to have the Gregorian notation edition of the new *Kyriale* before him. The proper time for this is after Chap. VI has been mastered. As a guide to the use of the *Kyriale* we suggest the following order in which the various pieces may be studied :

Kyrie: XII, XI, VIII, IV, IX, etc. Gloria: XV, X, VIII, IV, I, II, etc. Credo: I, III, IV. Sanctus: XVIII, XIII, VIII, IX, XVII, IV, etc. Agnus Dei: XVIII, IV, XVII, IX, etc.

While it is, of course, proper to have the whole Mass sung according to the rite of the feast, this rule may be relaxed in the case of a new choir, and the easier settings learned first.

When you start your new choir class, don't waste time in trying the voices of the boys. Get as many as you are able to handle easily, and start them all on the first exercises. Boys may be taken as soon as they are able to read. You will soon find out whether you have any one whose ear is deficient, by his not being able to follow the tune. You may have some boys who try to sing an octave below. These, and those whose ears seem to be defective, should be taken out of the main class and worked with separately for a time before you finally decide whether you will retain them or not.

The choir should have a comfortable practice room — one which is used for no other purpose. Besides the seats, coat and hat hooks, book closets, etc., you should have a blackboard and a grand or square piano, which should be *always kept in good order*. An upright piano is not suitable, because the teacher, when using it, must necessarily turn his back to the class.

As Gregorian chant can be sung intelligently from its own notation *only*, don't get editions of the chant books in modern notation.

If you do so, you will have to teach your singers to attach to the various signs meanings which do not belong to them; and when you come to the study of modern music, all this work will have to be undone.

Don't send your new choir into the church before it is properly prepared for the work expected of it. The time required for the preliminary training will, of course, depend a great deal upon the quality of your raw material. At any rate,

PREFACE

you must not expect too much at first. If you have had a professional quartette, you will find that the individual singers have probably spent years in study before they came into your choir; and if you have had a mixed chorus, you must bear in mind that girls generally get more opportunities for musical culture than boys; moreover, the voices of girls and women come, as it were, ready made, and you can go on with their training without having very much to undo. With boys, the case is very different. Their voices have almost invariably been spoiled by their habitual shouting and loud talking generally, and must be *made over* before you may hope for any good result.

The musical equipment of the choir before it enters upon its duties in the church should include at least the following, all thoroughly learned and well sung: Two complete *Masses*; the *Asperges* or *Vidi aquam*; the *Responses* for High Mass (including the proper chants for the *Deo gratias* as given in the missal); one set of *Vespers* * with the antiphons and hymn, which may be used every Sunday until the proper Vespers can be sung; the *Responses* for Vespers; the *Antiphon* of B. V. M. for the current season; the *Tantum ergo* and some other pieces for Benediction; and the *Requiem* Mass.

The *Proper* of the Mass may be recited on one tone by two of the singers accompanied by the organ; but as soon as the singers are able, it should be sung to its proper chants, of which the *Introits* are generally the easiest and should be introduced first, then the *Communions*, the *Offertories*, and last of all the *Graduals*. None of these chants present any greater difficulties than are to be found in some of the *Kyries*.

Don't commence the study of modern music until your singers are able to read chant quite fluently; for having learned all about the intervals, staff, etc., they will find very little difficulty with the measured notes. Don't let any one sing *by ear*. Insist from the very first on having every note read and understood, and in a very short time your choir will be able to read almost any ordinary music at first sight.

Don't be in a hurry to start singing in parts before you have a good repertoire of unison chant. You may then harmonize the responses. After these are learned, you may harmonize the *Gloria Patri* at the Introit, the melodies of which are given in this book, commencing at page 41. These should be used even when the Introit is recited.

Get a good book of English hymns set in four-part harmony. The hymns may be used for processionals and recessionals, in non-liturgical services, and in assisting the congregational singing.

EDMUND G. HURLEY.

* This may be either the Vespers of the Holy Name of Jesus, or the common of B. V. M., but not the common Vespers of Sunday.

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CHAPTER I.

Musical sounds differ from each other in Pitch, in Duration, in Force, and in Quality.

By the **pitch** of a sound is meant, whether it be a *high* or a *low* sound; that is, whether it be the result of a higher or a lower number of vibrations in a given time.

A Note is a character which represents a musical sound. We can *see* a note and *hear* a sound.

The pitch of a sound is shown by the position of the note representing

it on a set of four or five lines; for instance,

In each of these examples the first note represents a *lower* sound than the second.

The set of lines upon which the notes are placed is called a **Staff**. Four lines are used for the Gregorian staff, and five for the Modern.

The pitch of sounds may be **absolute** or **relative**. The letters A, B, C, D, E, F, and G, are used to denote the **absolute** pitch of sounds, and the syllables Do, Re, Mi, Fa, Sol, La, and Ti, or the numbers 1, 2, 3, 4, 5, 6, and 7, the **relative** pitch.

The absolute pitch of a sound is determined by the number of vibrations in a given time which are necessary to produce that sound; thus, Middle C on the piano is produced by a string making 256 vibrations in a second. (This is what is called *Mathematical* pitch. The pitch in common use is somewhat higher, namely, 261 vibrations, and is called *International* pitch.)

Relative pitch is determined by the proportion existing among a series of seven sounds which we call a *scale*. The Gregorian Notation deals with *Relative pitch only*, and does not show Absolute pitch.

Various scales have been used at different times. Gregorian Music uses fourteen, and Modern Music two. If we arrange the numbers or syllables representing the scale around a circle having twelve equal divisions like a clock-dial, we shall find that we can construct all scales, both ancient and modern, by taking each number in succession as the point of departure.

(1)

For example, if we take 1 or Do for our point of departure, we have the Modern Major Scale; if we take 2, or Re, we have the Dorian, or First Gregorian Mode; etc.



CHAPTER II.

The scale selected for our first illustration is the most familiar one, the **Modern Major Diatonic Scale.**

This scale consists of a sound called the Tonic, or Keynote, and six other sounds; each of which bears a certain fixed relation to the keynote. If we sing or play these seven sounds in succession, the ear is not satisfied until another sound is added. This sound is a higher replicate of the Keynote, and is the beginning of another similar series. The vibration-rate of this eighth sound is exactly double that of the keynote.

These eight sounds are named by the syllables Do, Re, Mi, Fa, Sol, La, Ti, Do'; or by the figures 1, 2, 3, 4, 5, 6, 7, 8.

The pupil should accustom himself to use both figures and syllablenames in reading the notes, before singing them; as it cannot be too strongly impressed upon the mind that the syllables do, re, mi, etc., mean nothing more than the figures I, 2, 3.

The names of the scale-notes should now be thoroughly learned, both by figures and syllables. After the class has read and memorized the names, both forwards and backwards, the teacher will call out the syllables at random, and the pupils must give the figure corresponding to the syllable called. The teacher will then reverse the method, calling the figure, the pupils answering with the syllable.

Fig. 2.	
Do'-8 or 1	The Modern Major Scale consists of eight sounds differ-
ti —7	ing from each other in pitch, of which the 1st and 2d, 2d and
1a —6	3d, 4th and 5th, 5th and 6th, and 6th and 7th, are separated by
	the interval called a Whole Tone; and the 3d and 4th, and 7th
Sol —5	and 8th, by the interval called a Semitone. The semitone is
fa	the smallest interval used in melody.
Mi —3	The intervals of the scale must now be learned.
	The teacher should draw diagram Fig. 3 on the black-
re —2	board and point on it the names of the notes of each exercise,
Do —1	singing them softly as he points; the class meanwhile listening
	attended in the algorithm the state of the s

attentively. The class must then *imitate the teacher's pattern* as he points out the names again.

This plan should be pursued with all the other diagrams introducing new sounds. The teacher should *not* sing *with* the class. The pattern should always be imitated softly, thereby rendering any mistake easier of correction.





In the foregoing exercises three lines are used, and do is placed on the first line, in the first space, and in the space below the first line.

Always remember that when do is on a line, mi and sol will be on the two lines above; and when do is in a space, mi and sol will be in the two spaces above.



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In these exercises the upper do^{\dagger} is used. *Remember*, when lower *do* is on a *line*, upper do^{\dagger} is in a *space*, and vice versa.





In these exercises the new sound introduced is low Sol.

VOICE-TRAINING EXERCISES.

Exercises I to 8, on page 3, should now be sung in the keys from F by semitones up to B^{\ddagger} for Sopranos and Tenors, and by semitones from E^{\ddagger} down to A for Altos and Basses. Do not use the syllables in this exercise. Vocalize on vowel-sounds: a (as in *father*), e (as in *obey*), i (as in *police*), o (as in *go*), (u as oo in *goose*). Be careful that the vowel chosen is not changed in the course of each exercise. These voice-training exercises *must* be sung very softly. Consult Chap. VII, "Voice-Training Exercises."

CHAPTER III.







In the foregoing exercises the places of the notes have been indicated by their names. In Gregorian Chant the names of the notes are determined by characters called *clefs*. There are two of these clefs, the *Do*-clef , and the *Fa*-clef \P . Either might be used on any one of the four lines; but the *Do*-clef is used on the second, third or fourth line, and the *Fa*-clef on the second or third line only.

Fig. 7. (a) The line running between the two points of the clef is Do. do do do (b) The line running between the two points of the clef is Fa.

has an *absolute* time-value. The note with the stem is used to mark the *accent* of the word or of the *musical phrase*, and is therefore sung a little louder as well as a little longer than the other notes. The lengths of the notes depend entirely upon the words to which they are set. For example: 29.



These exercises should be sol-fa'd carefully; but the words need not be attempted as yet.

VOICE-TRAINING EXERCISES.

SECOND STEP.

Exercises 23, 24 and 25 are to be repeated as voice-training exercises, using different vowel-sounds and consonants.



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Use also the consonants D, B, F, H, K, M, N, P, T, etc., instead of L. See that all the consonants are pronounced clearly and very decisively. These three exercises are to be used for all voices together, in the keys from $E\flat$ by semitones up to B. The Sopranos and Tenors continue up to F. Altos and Basses rest; or they may sing the octave below. Exercise 27 is to be sung in the same manner by the Altos and Basses, repeating by semitones from F *down* to $B\flat$. Altos need not begin below D, which takes them down to A. It is not necessary at each practice hour to sing *all* the syllables at each pitch. One syllable at each pitch is sufficient. When the class is familiar with the exercise, the teacher should give the pitch and then call out the syllable he wishes to be sung.

CHAPTER IV.

THIRD STEP. New Sounds: Fa, La and Ti, Completing the Scale.





Bars are lines drawn perpendicularly through the staff, and are used in Gregorian Music to mark the pauses for breathing. Bars are of three kinds: The Short Bar ______, which marks a hardly perceptible rest; the Long Bar ______, which marks a longer rest; and the Double-bar ______, which marks the end of a section or the end of a piece.

The Guide, \bullet or \P , is a mark placed at the end of each line of music to show the name of the first note on the next line.

It sometimes happens that in the course of a piece, the clef is placed on a line higher or lower than that on which it was placed at the beginning, thereby extending the compass of the staff. The guide is always used before such a change of clef.



In this example the *Do*-clef is placed on the third line. After the third note the clef is changed to the second line. Before the change of clef, the guide is placed upon the space which would be occupied by fa, showing that to be the name of the next note.

The other changes can be easily understood. By means of these changes of clef the compass of the staff is increased to seven lines.

The following piece illustrates the change of clef and the use of the various bars.



CHAPTER V.

FOURTH STEP. Singing Words to the Chant.

The pronunciation of Latin differs from that of English chiefly in the vowel-sounds :

a is pronounced as ä in fär.

e is pronounced as e in obey when it ends a syllable.

e is pronounced as ĕ in chĕck when followed by a consonant.

i is pronounced as i in police in an accented syllable and as i in it in an unaccented syllable.

o is always pronounced as \bar{o} in note when it ends a syllable and as o in obey when it does not.

u is always pronounced as u in rule.

The consonants are pronounced as they are written, except the following:

c before e, i, æ, œ, eu, and y, as s - cedrus, cibo, cæcus, cœli, ceu.

c before all other letters is pronounced as k: caro, charitas, claritas, cogito, etc.

j is pronounced as i.

ti before a vowel is pronounced as s; if, however, it is preceded by s, t, or x, it is pronounced as t.

qu is pronounced as kw.

gu is pronounced as goo.

su is pronounced as soo.

A word has as many syllables as it has vowels. Words of one syllable which are nouns or pronouns are accented; all other monosyllables are unaccented. Words of two syllables are accented on the *first* (Hebrew words are accented on the last). In words of more than two syllables the accent is generally marked in the Chant Books.

EXERCISE IN PRONUNCIATION.

(a as ä in fär.)

a, ab, ad, da, alma, caro, dare, ea, fame, habent, mane, nares, pater, ramos, salve, tamen, vale, ánimas, bárbaro, cháritas, eámus, fámulis, grátias, hábitas, lábiis, máneat, natális, orávit, pátria, rádium, tália, sánitas, vánitas, adorávit, castitátis, decorávit, elevátis, ferebámus, habitávit, manducándo, laborávit, palátium, saturávit, transeámus, vanitátem.

(e as e in obey.)

de, se, te, bene, ceu, dele, felix, gere, hei, Jesu, legis, meo, nemo, pene, regit, tecum, veni, zelus, bénedic, débitas, flébiles, génuit, mémores, orémus, pétiit, régere, sédibus, ténuit, vénient, celebrémus, defecérunt, emendémus, sedébitis, venerémus.

(e as ĕ in chĕck.)

et, ex, es, sed, carnes, dextris, festo, gemmæ, fluent, dicent, inter, sermo, super, lumen, nomen, excéssu, célebrent, nesciétis, rectis, semper, tentatiónem, venter.

(ï as in polïce.)

ibi, ei, cives, dico, finem, gigas, hiems, minor, nivem, pie, vives, siti, tibi, viam.

(i as in ĭt.)

in, inde, ait, bibit, ignis, illi, imminéntibus, inánis, infínitas, infirmitátis.

(ō as in note.)

bono, coram, dono, domo, dóceo, eo, fóveo, homo, loco, móneo, novo, ponam, rogo, sono, volo.

(o as in obey.)

con, coctus, cognómen, collo, comméndo, cómmodat, concéptio, confírma,

doctus, fontis, forma, horrésco, hortus, longe, móllio, mortálitas, noctis, non, noster, occído, occásum, offénso, omnis, sollíciti, sómnium, torrens.

(u as in rule.)

currus, ducem, fugo, gusto, huic, jucúndus, lutum, murus, núntius, obscúrus, pugnus, pulchrum, quacúmque, rubrum, sumus, túmulus, uno, unus, vúlpium.

In using these exercises, take the one and two-syllable words from each section at first; then the longer words can be used later.

The following pieces may now be practised. They should be practised thoroughly with the names of the notes, before being sung to words.





In putting the words to the music, some difficulty will be found in singing two or more sounds to a syllable. The following is the method of overcoming this difficulty. After the exercise has been learned by the sol-fa syllables, take the words by syllables and proceed thus (Ex. 43): Sing the first two notes s-l, and immediately afterwards sing them to the syllable "ad." Proceed thus with the whole of the first line: s-l "ad," d'-t "re," l-s "gi," d'-t "as," d'-r' "a," d'-t-l |"gni da-pes "|| Now take the notes for two syllables, thus: sl-d't "ad re-," ls-d't "gi-as," d'r'-d'"a-gni," etc. Then take the whole line: sl d't ls d't d'r' d' t l "ad re gi-as a-gni da-pes." Proceed thus with the whole exercise. This method should be used in all cases. Another difficulty which singers of Chant sometimes have is inability to count at all times the right number of notes when a considerable number are to be sung to one syllable; for example:



Sing the examples first to the syllables, then *count* the notes while singing, and afterwards sing to words; thus:









When these pieces are thoroughly known, they may be used as voicetraining exercises by vocalizing on the various vowel-sounds at various pitches. The method of doing this should be as follows. Taking the last exercise, "Jesu dulcis," as an example, we find that by taking the sound G for fa, the piece is in the scale of D major. The compass of the piece is therefore one octave, from D to d. All the voices may sing it from the key of B^{\dagger} by semitones up to E (B^{\dagger} , B^{\dagger}_{\dagger} , C, D † , D, E † , E), the Tenors and Sopranos continuing up to A † , and the Basses and Altos downwards to G.

In vocalizing these examples, take *one* syllable for each *separate* note and *one* syllable for *each group*, thus :

R									
1							\		Ŧ
	la	la							
	ti	ti							
	I	2	3	4	5	6	7	8	
	koo	koo,	etc						

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CHAPTER VI.

FIFTH STEP. On the Use of the Flat.

The Flat (\mathbf{b}) is a mark placed before a note to tell us that we must sing a sound a *semitone* lower than that indicated by the note. In Gregorian Chant the use of the flat is restricted to the note *ti*. When a phrase occurs in the course of a piece, of which *fa* and *ti* are respectively the lowest and highest sounds, the unmelodious relation of the *Tritone* (so called because between the sounds *fa* and *ti* there are three whole tones, *fa-sol*, sol-la, la-ti) is established; to avoid which, a sound a semitone lower than *ti*, called *ta*, must be sung instead. This is indicated by the flat (\mathbf{b}) placed before *ti*.

The Tritone f s l t l is avoided by singing f s l t l

A Tritone is either *expressed* or *implied*. It is expressed, when both fa and ti are written as in the above example; and implied, when the fa is omitted, but the leading notes of the phrase in which the ti occurs are contained in the compass of a chord of which fa would form a part:



Occasionally passages are met with which contain an *expressed* Tritone; and yet the *ti* is *not* flatted; thus, in the *Lauda Sion*:



In hy-mnis et can-ti-cis.

The reason why the ti is not flatted in this case is because the ear has become so impressed with the sounds of the chord Do-Mi-Sol, which have been sung before, that the notes ti and fa, though they be the highest and lowest notes of the phrase, are considered only as *passing*-notes. Sing the whole strophe :





Flat the ti in the last line, and all the brightness and vigor of the melody will be lost.

When the flat is placed at the beginning of a piece immediately after the clef, every ti is flatted.

The rule for such pieces is to call the flatted note fa, as we do in modern music.







Examples with the Flat at the Beginning.

In these pieces the flat marks the place of fa, thus :



They may be sung also in the ordinary way, giving the flat its name ta, as ti flat :







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Sometimes, instead of changing the clef, a small line called a leger-line is added to the staff for the purpose of extending its compass.





Bén - ja - min, Ma - nás - se. et

CHAPTER VII.

VOICE-TRAINING EXERCISES.

The human voice, as an instrument of music, is classed among the "Reeds". The various musical instruments are divided into different classes. We have the "Stringed instruments" played by means of a bow (in this class is included the whole violin family), stringed instruments played in other ways, as the pianoforte, the harp, the guitar, and so forth; the "Woodwind," which includes the flutes, oboes, bassoons, clarinets, saxophones; and the "Brass," which includes the horns, trumpets, cornets, trombones, etc.

A reed-instrument, such as the clarinet or oboe, consists of a pipe, sometimes cylindrical in section (as the clarinet) and sometimes conical (as the oboe); which pipe can be shortened by means of holes bored in its sides. The column of air contained in the tube is set in vibration by a "reed." This, in the clarinet, consists of a thin piece of cane, held in a clamp and covering a hole in the mouthpiece. In the oboe the reed is double, and in vibrating the edges of the two reeds strike together. The human voice is an instrument of the double free reed class; in place of the two pieces of cane are two membranes which are known as the "Vocal Cords," which are not really cords at all, but more like a pair of lips, capable of closing entirely the opening in the "LARYNX," which is the vocal instrument. When we sing we cause these vocal cords to approach each other, and force air through between them from the lungs. The pressure of the air and the elasticity of the cords alternately overcome one another and the result is a vibration of the vocal cords. In the first chapter we learned that the speed of the vibrations determines the pitch. The rate of vibration of the vocal cords is, or should be, absolutely under the control of the singer. When he wishes to sing a sound, he unconsciously fixes the tension of the cords to give the number of vibrations required for the sound he wishes to produce.

The *raw material* of sound, if we may so call it, is projected into the "pipe" (consisting of the cavities of the *mouth* and *pharynx*), and finally emerges as a formed musical tone through the lips and nostrils. It is formed into speech, or song-speech, by means of the tongue, teeth, lips and palate. In song-speech the pitch of the sounds formed by the vocal cords is made to

conform to the degrees of the musical scale; whereas, in ordinary speech, it is not.

When we *whisper*, the column of air passes through the Glottis (the opening between the vocal cords) without setting the cords in vibration. We can *whisper* a melody. In this case we form the melody by enlarging or decreasing the size of the vocal cavity by means of the tongue and lips. When we nearly close the lips, leaving a small orifice only, we form the mouth into an instrument of the "flute" class. The result is what is known as "whistling." If we sing a musical tone at our ordinary *speaking*-pitch, the vocal cords are neither very tight nor very loose in tension. We can, by greater or less effort, sing tones which are higher or lower by increasing or relaxing the tension.

THE REGISTERS OF THE VOICE.

On examining the voice of a boy who has a fairly good ear and a reasonably good tone, we shall find that if we start him singing a scale commencing at his natural speaking-pitch he will experience increasing difficulty in producing the tones as he ascends; to overcome which he will use greater effort, thereby causing his voice to become harsh and strident. This may be tried with the scale of C or D. If we start him with a higher sound, say F or G, and let him sing, *not the scale*, but the chord-notes d, m, s, d^{\dagger} :

he will not be able to sing the two upper tones with his former strident tone, but his voice will most likely "crack" into a much softer, *fluty* tone. This tone is the tone of one of the *upper* registers of the voice, and can be easily imitated by a Bass or Tenor who tries to sing what is commonly known as "falsetto."

A register of the voice consists of a number of tones *produced* by the *same mechanism*. The vocal cords, in construction, are muscular ligaments, with an outside covering of mucous membrane. When we sing at the ordinary pitch of our speaking-voice, the muscular portion of each cord is brought well forward, making the edges round and firm. Hence the fuller, rounder tone of the voice thus produced. When we ascend in the scale, the tension of the cords is increased, until at last we arrive at a limit, and can go no higher. This limit may be modified by cultivation, or misuse, of the voice. Boys, on account of their habitual tendency to shout, nearly always have this register forced too high. This accounts for the strident quality of so many boys'

voices; the unnecessary effort which they use in singing in this manner tires their muscles, and they sing flat in spite of naturally good ears. It is this habit of forcing up the lower register which makes a boy's voice appear different from a girl's. There is no natural difference whatever between the two voices. If girls habitually shout, as they sometimes must to make themselves heard above the din of machinery in workshops and other places, they acquire the strident boy-voice, and it is found upon examination that the lower register has been forced upwards several semitones. If, on the other hand, boys are brought up in such a manner that loud shouting is the exception rather than the rule of their lives, their lower register will be found generally to be about normal. The upper limit of the lower register of the human voice is in the neighborhood of F or G (the first space and second line of the Treble staff), their vibration-rates being 348 and 3911 respectively. This sound is a moderately low sound for the Soprano, a middle sound for the Alto, quite a high sound for the Tenor, and generally above the ordinary compass of the Bass voice.

When we use the *middle* register of the voice, the muscular part of the vocal cords is retracted, leaving the edges thin and loose. In ascending with this register we come to a limit as before; but it is not so apparent in some voices as in others. The tones of the middle register can be made to overlap the tones of the lower register considerably. The following experiment may be tried. Ask the boys to sing the following two sounds without any break between the sounds and tell them you want them to be particular to give the "boy's" voice : to hold on to the last sound and to notice how it feels



the following, but with a girl's voice; holding the last sound as before, and



find that the second sound approached from *below feels* like a high sound ; while the same sound approached from above, feels like a low sound, because less effort is required to produce it and it really is a comparatively low sound in the middle register.

The Head or Upper Register extends to the top of the voice. There is sometimes a bad break between the middle and head-registers, but not nearly so often as between the lower and middle.

Contrary to the general opinion, all voices have these three registers; but the upper registers are generally unavailable in men's voices on account of the dissimilarity in tone and the consequent difficulty in blending them.

The following are the characteristics of the various voices.

The Soprano : — *Lower register* not very strong, the break between the lower and middle registers is generally very marked ; *middle and upper registers* full and strong ; break between middle and upper registers generally hardly perceptible.

The Alto: — Lower and middle registers very full and strong. Break between lower and middle not nearly so strongly marked as in the Soprano; in many cases it can be detected with difficulty. *High register* weak. Break between middle and high strongly marked.

The Tenor: — Ordinarily, the Tenor voice consists of *lower register* only, though in most Tenors the *middle register* may be developed, provided that the tone is not too dissimilar. All Tenors should, however, cultivate the *middle register*.

The Bass. The compass of the Bass voice lies entirely within the *lower* register.



The Three Registers of the Human Voice.

Choir-Training.

In commencing the training of the voices for the Choir we take it for granted that the boys are entirely untrained. As, at first, they sing only the principal notes of the scale, D - M - S, these must be used for the first training exercises as set forth in Chapter II. The other exercises met with from time to time are taken from the material which has been learned under the "step," and are to be used as directed. As a general rule, all the voice-training exercises are to be sung *very softly* at first.
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Exercises for the Middle Register.







For Blending the Lower and Middle Registers.



The notes with the stems down are to be taken on the *lower* register; those with the stems up, on the *middle*.

Sing also in F_{\pm}^{\dagger} and G upwards, and in E and E_{2}^{\dagger} downwards.









Exercises for the Middle Register.

(Tenor Only.)



Continue upwards to Bp. At first the two registers will probably be quite dissimilar in tone. The upper sounds of the lower register must be toned down so as to made the blending better. The following are some Formulas for General Exercises for all the voices. We give them in one key only. They are to be continued upwards and downwards as far as each voice will reach. Generally they are to be sung softly; sometimes they may be sung, for special practice, ff, but this must not be kept up long. They should also be practised staccato and legato. Each exercise is marked in a special manner; but each of the exercises should be practised in all the methods given below it.

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CHAPTER VIII.

On the Gregorian Modes.

A Mode, in music, is the method of using the sounds of the scale. As we have seen in the earlier part of this work (page 2) we may take any sound of the scale for the starting-point of a Mode. When we start with the sound Do, and compose melodies in the scale so formed, we make the

sounds Do, Mi and Sol especially prominent. The tendency of the sounds re, fa and la is to fall to Do, Mi and Sol respectively; and the sound ti tends to ascend to Do. This is explained more fully in the next Chapter. This method of using the scale is called the "Modern Major Mode." It is called a *major* mode because its third, Do - Mi, and its sixth, Do - la, are major and because the principal harmonies used in it are the major chords Do - Mi - Sol, Sol-ti-re and fa-la-Do. It cannot be too strongly impressed upon the mind that *this peculiar use* of the sounds constitutes the mode; for if we make any other sounds than Do, Mi and Sol principal, we are not in the major, but in some other mode.

The Gregorian Modes (or Tones, as they are sometimes improperly called) are the scales upon which are constructed the various Gregorian melodies. There are fourteen Gregorian Modes in use. They are divided into two classes, Authentic and Plagal. The Authentic modes are those which are numbered *unevenly*, namely, the first, third, fifth, seventh, ninth, eleventh and thirteenth.

The Plagal modes are those which are numbered *evenly*, the second, fourth, sixth, eighth, tenth, twelfth and fourteenth.

Each mode has, theoretically, a compass of one octave; though in practice the melodies extend higher or lower than the normal compass of the mode.

The melodies formed from each of these modes have certain sounds made especially prominent. It is by means of these salient points that we can identify a mode.

The melodies written in any *one* mode always end on the same note; this note is called the *Final* of the mode.

In the Authentic modes the final is always the lowest note of the scale; hence, the definition of an Authentic mode is : One whose scale ascends to the octave above its final.

A Plagal mode is one whose scale ascends a fifth above, and descends a fourth below, its final.

The following examples of an Authentic and a Plagal mode will show their construction.



Diagram Showing the Final, Compass and Dominant of Each of the First Eight Modes. 86.

The Finals and Dominants are printed in larger characters.



The Modes are subdivided into pairs; each pair consisting of an Authentic Mode, and a Plagal (borrowed) Mode having the same final.

The final of the First Pair, consisting of the First and Second Modes, is Re. The final of the Second Pair, consisting of the Third and Fourth Modes, is . . . Mi. The final of the Third Pair, consisting of the Fifth and Sixth Modes, is Fa. The final of the Fourth Pair, consisting of the Seventh and Eighth Modes, is . . . Sol. The final of the Fifth Pair, consisting of the Ninth and Tenth Modes, is . . . La. The final of the Sixth Pair, consisting of the Eleventh and Twelfth Modes, is . . . Ti. The final of the Seventh Pair, consisting of the Thirteenth and Fourteenth Modes, is Do.

Each Mode has also a note round which the phrases of its melodies seem, as it were, to cluster; this note is called the Dominant.

In the Authentic Modes this is the fifth above the final, excepting in the Third Mode, the Fifth of which is ti. Ti is a variable note, being sometimes flat and sometimes natural; consequently, it cannot be used as a dominant; Do is used instead.

In the Plagal Modes the dominant is a third below the dominant of the authentic mode on the same final, excepting when such note is *ti*, as in the Eighth Mode, whose dominant is therefore *Do*. The Dominant is always the reciting-note of the Psalm-tone of the Mode.

The remaining six modes will be explained later.

CHAPTER IX.

On the Characteristics of the Gregorian Modes.

In order to appreciate the peculiar character of the melodies of the different Gregorian modes, we must become acquainted with some of the rules which govern the construction of Melody.

If we strike the key C on the piano or organ, we hear a single sound. As *Melody* is a "succession of different sounds," it follows, that even if we strike the key C a number of times we do not make a melody. To have melody we must have motion. There is nothing about the sound of C which tells us whether to move higher or lower; for any single sound is necessarily a keynote, because our first impression of it is that it is the first note of a scale. Now strike C, follow it by D, and pause. The ear asks the question, "What next?" because it is not satisfied to rest on D. Now play C-D-C, and the ear is satisfied. Try the same experiments with C and B, and you will find that the ear is not satisfied until B is followed by C. These experiments *prove* that C is a Keynote; because a Keynote, or Tonic, is a sound having a sound a whole tone above it which has a tendency to fall, and another sound a semitone below it which has a tendency to rise.



The following melody is constructed from these three sounds :



C is no longer a point of rest, but has an unmistakable tendency to fall to $B\flat$, thus proving that $B\flat$ has become the keynote. Try the following experiments with the third of the scale:



When we pause on E, as at (a) and (b), there is a feeling of suspense. If we fall to D or rise to F, the feeling of suspense is still greater. We find from this that the *Third* has no definite progression.

The Fourth of the scale has a tendency to fall to the third :





The tendency of the Sixth is to fall to the fifth :



The character of a melody is determined by the predominance of certain sounds.

The predominance of the Fifth lends a certain sprightliness and gayety to a melody :



The Second and Fourth tell us of hope, and the Sixth of sorrow. (The Sixth, as we have seen, is the keynote of the Minor Mode.)





The following specimens include a characteristic piece; the Psalm-tone and the solemn Gloria Patri used at the Introit of each mode.

First Mode. Final, Re; Dominant, La; Compass, Re to Re'; Principal Chord, Re-Fa-La-Re'. The melodies are constructed on the Minor chord Re-Fa-La and the Major chord Fa-La-Do'; consequently, the music will vary in character as either one or the other chord is used.



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Second Mode. Final, Re; Dominant, Fa; Compass, La_1 to La; Principal Chord, La_1 -Re-Fa-La. The melodies are included principally in the Minor Chord Re-Fa-La.



De pro-fúndis clamávi ad te, Dó - mi-ne: Dómine exáudi vo-cem me - am.

Third Mode. Final, Mi; Dominant, Do^{\dagger} ; Compass, Mi to Mi^{\dagger} ; Principal Chord, $Mi - Sol - Do^{\dagger}$.



pal chords, Re-Fa-La and Do-Mi-La.

Character of the Mode, MYSTICAL.



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Gló-ri-a Patri, et Fílio, et Spirítui San-cto.

Sic-ut erat in princípio, et nunc, et sem-per, et in sǽcula sæcu-ló-rum. А-мел. 90. Psalm-tone.



Lau-dáte Dóminum, omnes gen - tes. Laudáte eum, o - mnes pó - pu-li. Sixth Mode. Final, Fa; Dominant, La; Compass, Do to Do^{\dagger} ; Principal Chord, Do-Fa-La (practically, $Sol_1-Do-Mi$).



Gló-ri - a Patri, et Fílio, et Spi-rí - tu - i Sanc-to. Sic - ut erat in princípio,



Læ - tá-tus sum in his quæ dicta sunt mi - hi; in domum Dó-mi -ni í - bi-mus.

Seventh Mode. Final, Sol; Dominant, Re; Compass, Sol to Sol'; Principal chord, $Sol-Ti-Re^{I}-Fa^{I}$. These sounds form the Chord known as the Chord of the Dominant Seventh.

Character of the Mode, EXPECTANT, HOPEFUL.



Eighth Mode. Final, Sol; Dominant, Do'; Compass, Re to Re'; Principal Chord, Mi-Sol-Do'.



CHAPTER X.

ON THE SIX TRANSPOSED MODES.

The six Transposed Modes are the Ninth, Tenth, Eleventh, Twelfth, Thirteenth, and Fourteenth. In the following diagram these modes are compared side by side with the modes which are used in their stead. It will be seen that the Fa of the original mode becomes Ta in the transposed mode. The uneven numbers are the Authentic, and the even the Plagal, modes. The Finals and Dominants are printed in larger letters.



The following are specimens of the transposed modes. It will be noticed that all the ti's are flatted.



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Thirteenth Mode, Transposed to Fifth.





Fourteenth Mode, Transposed to Sixth.

CHAPTER XI.

ON PSALMODY.

To secure a proper method of chanting the Psalms (Psalmody) is one of the greatest difficulties of the choirmaster. Each of the Eight Modes has its own Psalm-tone, and each Psalm-tone requires a different division of the words. The verses of the Psalms consist of two parts separated by an asterisk.

A Psalm-tone consists of five parts: (1) the *Intonation*, which consists of two or three notes leading up to (2) the *First Reciting-note*, which is followed by a melodic phrase called (3) the *Mediation*, and (4) the *Second Reciting-note*, which is followed by (5) the *Termination*, or Ending.

In fitting the words of the Psalm-verse to the Psalm-tone, the words terminating at the asterisk belong to the Intonation, First Reciting-note, and Mediation; and the words following the asterisk, to the Second Reciting-note and the Termination. If all the Psalm-tones were made on the same model, and all the verses of the Psalms had the same accentuation of the words assigned to the Mediation and Termination, our task would be easy; but, unfortunately, such is not the case. The examples on page 51 exhibit the Eight Psalm-tones with one termination to each.

The Intonation is used for the first verse only of the Psalm, and for every verse of the Magnificat and Benedictus.

From this example it will be seen that we must have, for the Mediation, one pointing for the Second, Fifth and Eighth Tone; another for the Third, Fourth and Seventh; one for the First and one for the Sixth; making in all four different pointings. For the Termination, three different pointings are given here, and for the last ending of the Fourth Tone another is required.



As it is absolutely necessary that the choir be provided with a pointed edition of the Psalms, separate from the Vesperale or Antiphonarium, we will not enter into any discussion of the various *methods* which have been put forth from time to time. Whatever method is adopted, it will be explained in the Preface of the work in question.

In teaching the chanting of the Psalms, the teacher should first read the Psalm through word by word; the class immediately repeating each word after him, taking care that all pronounce the word together, thus: -- con-fi-té-bor: con-fi-te-bor; ti-bi: ti-bi; Dó-mi-ne: Do-mi-ne; etc.

After this the teacher should read two or three words at a time, the class repeating thus :—confitebor tibi Dómine : confitebor tibi Domine ; in toto : in toto; corde meo: corde meo; in con-si-li-o ju-stó-rum: in con-si-li-o ju-sto-rum; et con-gre-ga-ti-ó-ne: et con-gre-ga-ti-o-ne. The whole Psalm should then be sung upon one sound, for instance, G or A, taking care that every word is pronounced correctly, distinctly, and slowly. After this it may be sung to one of the easier tones (Eighth Tone, 1st ending; or Sixth Tone). In chanting the Psalms the same rate of speed should be maintained throughout each verse : that is to say, the very common error of singing the mediations and terminations slowly, and the recited parts quickly, should be avoided.

There are two ways of singing the Gregorian Psalm-tones, the Festival and the Ferial. The Festival is used on Doubles and Semi-doubles, and the Ferial on Simples and Ferias.

As the ordinary choir has generally to sing on Sundays and Holydays, besides Holy week and at Funerals, the following rules are given for ordinary use : —

The Festival Tone is used on all Sundays and Holydays throughout the year; at the Office of the Tenebræ and at the Office of the Dead (Matins, Lauds and Vespers) on All Souls' day, and at funerals when the body is present; also on the third, seventh and thirtieth day, and the anniversary. The Ferial Tone is used for Compline; for the Psalm Deus in adjutorium after the Litany of the Saints; and a few other occasions of minor importance

The following are the Eight Tones, Festival and Ferial, with their endings.





sic fi - ní - tur. sic fi - ní - tur.

FIRST TONE: Ferial.

Primus Tonus etc. me-di - á - tur.

In the Ferial tone the Intonation is omitted. This rule applies to all the Tones.

As there is only one word in the first part of the first verse of the Magnificat, it is sung as follows : —



(The Intonation is used for every verse of the Magnificat and Benedictus.)



The Second Tone has only one ending:



Di-xit Do-mi-nus, Do-mi-no me - o: Se - de a dex-tris me-is. When the first part of the Psalm-verse ends with a monosyllable or a Hebrew proper name, the last note of the mediation is omitted.



The Ferial of the Second Tone is the same as the Festival, excepting that the intonation is omitted.

The Solemn Intonation for the Canticles, Magnificat and Benedictus:



The rule for monosyllables and Hebrew proper names, given under the heading of the Second Tone, applies to this tone also.

R					日日
Glorióse enim magn Ascendérunt pópuli	ifi - et i	-	cá rá	- tus est. - ti sunt.	
Convértere Dómine voluntáte	tu	-	us a	- que quo Si - on.	•

Omit the Intonation for the Ferial Tone.



Ma-gní - fi-cat á - ni - ma me - a Dó-mi-num, et ex - ul-tá-vit spí -ri-tus me - us.

The Fifth Tone has one ending :



Lau-dá - te pú - e - ri Dó - mi-num.Lau-dá - te no - men Dó - mi-ni. The rule for monosyllables and Hebrew proper names, given under the heading of the Second Tone, applies to this tone also.

Omit the Intonation for the Ferial Tone.

The Magnificat is sung thus:



Ma-gní - fi - cat á - ni -ma me - a Dó - mi-num, et ex - ul - tá - vit spí - ri-tus me-us.

The Sixth Tone has one ending:



Sex-tus tonus sic incípitur, et sic me-di - á - tur, at - que sic fi - ní-tur.

Omit the intonation for the Ferial Tone.

The intonation of the Magnificat is the same as that of the First Tone; but in some editions it is given as below :





which see.

The Perigrine Tone is used for the "In exitu Israel," in the Common Sunday Vespers, when the antiphon is "Nos qui vivimus."



In éxitu I-sra-el de Æ-gýp-to, Domus Jacob de pó-pu-lo bár-ba-ro.

This is sometimes called the "Irregular Tone," because it has a different reciting-note for each part.

CHAPTER XII.

ON THE RENDITION OF CHANT.

As the notes of Chant have no definite value of their own, but are entirely dependent upon the words, it may be supposed that we will give a proper rendition of Chant if we sing the notes with proper regard for the accent and quantity of the syllables to which they are set, and understand and give proper expression to the words of the piece. Such will be the case in pieces which have but one note to a syllable; but, as we have seen, there are many pieces in which the syllables are set to groups of notes. These notegroups are called *pueumæ* (anglicised into *neums*), though this name would seem to belong more properly to the assemblage of note-groups sung on one breath. These various neums were represented in the old Mss. by various fanciful signs, instead of the notes now in use. A few such signs are still retained in modern music: thus we have the turn, the trill, the mordent; and students of Bach and the other old masters will recall several others. There is ample evidence to show that the meaning of these neums was exceedingly obscure: thus, the *podatus* (a lower followed by a higher note), and the *clivis* (a higher followed by a lower note), might mean any interval from a semitone to a perfect fifth. The same uncertainty existed with regard to the other neums; for it must be remembered that for several hundreds of years these neums were not looked upon as being composed of separate definite sounds, but were regarded as twists or inflections of the voice, and their interpretation depended a good deal upon the singer.

In these old times there were very few books of chant, and as these few were exceedingly valuable the singers did not use them, but learned their chant by ear. One book stood in the middle of the choir for the use of the director, who most probably regarded the figures of the neums as pictures of the various portions of the melody, and reproduced the forms of these pictures before the singers with his hands in much the same way as a modern conductor beats the figures representing the various time-signatures, thus helping the singers to remember the various chants. There is very little doubt that with each succeeding generation of singers slight changes crept in. It is only upon this supposition that we can account for the many variations of the chant which are found in various countries and which, for want of a better name, may be called *Chant Dialects*. Guido d'Arezzo was the first to discover that these neums were not merely twists or inflections of the voice, but could be resolved into several separate sounds. He invented (i. e., completed) the staff, and so made it possible to learn Chant in three months, a task which before his time required from seven to ten years. Of course, his interpretation of the neums was in accordance with the particular dialect of chant which he had learned by ear in his youth. As an example of the variations which thus crept into the chant, we give the tune of the hymn "Pange Lingua" as it appears in the four chant books best known in this country, namely, the Montreal, the Ratisbon, give the melody in the *First* mode, and the other two place it in the *Third*. In these examples we see not only four totally different interpretations of the neums, but also two different readings of the intervals of the tune.





This is one of the best-known melodies in chant, and yet notice the difference between the first two and the second two variations. In the first and second examples set in the *First* mode, the melodies are nearly alike as long as the words have a note to a syllable; but when the neums are employed, how different are the ideas of the editors as to what the neums really mean and how they are to be set to the words. In the second two variations, the melody is a whole tone higher, being set in the *Third* mode, and the variations, both in the melody and in the use of the neums, are even greater than in the first two. This is not a solitary example. We can find hundreds of others.

The following are the forms of the neums with their names and approximate rendition in modern notes.





Neums Formed by the Union of Two of the Above:

The words under the modern notes give an approximate idea of the way in which each group should be sung. Sing the English word, and then vocalize the neum to the syllable to which it is set.



CHAPTER XIII.

ON THE ACCENTUATION OF THE NEUMS.

It is very probable that the origin of these neums may be traced to the habits of some singers who, not content with singing what is written, interject other sounds which do not belong to the piece, but which, by constant repetition, gradually become incorporated into it. This was, of course, much more likely to happen when musical notation was extremely obscure and singing by ear was the rule, than it would be now; but even now numberless instances could be quoted where changes in the original composition introduced by singers have become the accepted version.

To illustrate this growth of the neums we give a so-called plain-chant, Tantum ergo, from the Solesmes Liber usualis, and the original tune as written by Samuel Webbe :



The derivation and growth of the neum are here very plainly seen. We also see the development of the neum in the Solemn chant for the *Preface*, as contrasted with the Ferial chant :





Mi - se - ré-re me - i, De - us, secúndum magnam misericór - di-am tu- am.

It is quite evident from these examples that the neums were considered as ornamental forms, or turns upon one note, which were supposed to give greater solemnity to the chant. We have many proofs of this. There are the solemn and the simple Te Deum, one with the neums more developed than the other; and the Ferial, Semi-double and Solemn Ordinaries of the Mass are distinguished from one another by the number and extent of the neums.

It is sometimes taught that the first note of every neum should be the accented note, and that the various notes of the neums should be as long as any other notes of the piece. Both these ideas are erroneous. As we have seen, the neums, being but developments of single notes, should take up very little more time than the notes they represent; for in each neum there is generally one note which is salient in that neum *because of its position in the scale of the mode.* There is also an old rule, "Plures chordæ dum una nota propertur"; as it is clearly impossible to sing two or three notes as "one note," the meaning of this rule must be, to sing the sounds of each neum as nearly as possible in the *time* it takes to sing one note. The idea that the neums *must* be accented on the *first* note only is absurd, because this rule would make the *shapes of the groups* govern the accentuation of the melody, rather than the musical value of the sounds of which the melody is made up.

We need only examine the Tantum ergo quoted in this chapter. If we accent the first note of each neum, we make *nine false musical accents*. In the example of the Psalm *Miserere* (Solemn Chant), the accent should fall on the note *re* on the third syllable of the first word, and not on *do*, the first note of the neum; in *mei* the accent is on *fa*, the *last* note of the neum, because it is evident that *fa* is the principal note. It does not matter which view we take of the melodies of this chant. Whether we consider the *ferial* as a simplification of the *solemn*, or the *solemn* an amplification of the *ferial*, the rule holds good in either case.

In a *syllabic* chant (a note to each syllable) the accentuation of the notes is governed entirely by the accentuation of the words. In a chant in which neums occur, the accentuation is governed by the accent of the words and *also by the musical accent of the mode*. We have seen in Chapter IX, on the Characteristics of the Modes, how each sound of the scale has *certain tendencies* depending upon whether it be in the minor or major mode. Each of the Gregorian modes is constructed upon similar principles, some of its sounds being sounds of rest, and others sounds of progression; and it is the proper observance of the tendencies of the various sounds that constitutes *musical accent*. A neum placed on an accented syllable will, as a whole, receive a greater force of accent than one placed on an unaccented syllable :





a - pos-to - ló-rum gló - ri - am tel - lus et a - stra cón - ci - nunt.

In the word *Exúltet* the neum on *ul* will take a heavy accent, because the accent of the word and the musical accent coincide. The same rule applies to the first syllable of *órbis*, láudibus, téllus, ástra and cóncinunt; and to the second syllable of *resúltet* and the fourth of *apostolórum*. The remaining neums are sung lightly; a slight accent only being given to the salient notes of the mode. Of these we will now speak more in detail. On analyzing the chord formed by the sounds d-m-s, we find that the sounds d-m form a major third, and the sounds m-s a minor third. There are two other major thirds in the scale: f-l and s-t. As a major third is always made up of two whole tones superposed, it follows that these three major thirds d-m, f-l and s-t are alike in construction; consequently, if either the third f-lor s-t govern the melody for the time being, it is treated actually as if it were a d-m chord. This fact is taken advantage of in modern music in making new keys; the f-l and the s-t thirds becoming the d-m or tonic third of the subdominant and dominant keys respectively. With the minor chords the case is different. A minor third is always made up of a tone and a semitone. In some thirds the semitone is the upper member and in others it is the lower. The model minor third is l-d, because it is the *minor* third of the *minor* tonic chord of the *minor* mode. The third r-f is The other built in the same manner, of a tone with a semitone *above* it. minor thirds, m-s and t-r, are built with the semitone as the lower member, and they are really only complementary thirds; their office being that of upper minor third to a major chord.

These complementary minor thirds always have a *falling* semitone; the others have a *rising* semitone. In a musical passage whose compass is a third, the first and third will have preference for accent in ascending passages; thus $\overline{d} r m - d r \overline{m}$; $\overline{m} f s - m f \overline{s}$; and not $d \overline{r} m$, $m \overline{f} s$, etc. The middle note will have preference for accent in descending passages: $m \overline{r} d, s \overline{f} m$, etc.

In a melody whose compass is a fifth, the fifth may be considered as an enlarged third; the middle note having preference for accent in descending, and the first and fifth in ascending passages. Passages of a fourth are treated in chant as a third with an extra note either above or below; thus: s l d', d r f, r m s, m f l, are thirds with an extra note below, while $l_1 d r$, $t_1 r m, m s l$, are thirds with an extra note above. We have seen already how an extra note is allowed for, both above and below the scale of the mode. We now see that we may have an extra note above and below a third. We may have an extra note also above and below a fifth. These extra notes always have a preference for accent.

These rules are illustrated below.



It must be borne in mind that these rules of accentuation are the *laws of musical truth.* Musicians compose their melodies and observe these rules, consciously or unconsciously, and make the meaning of what they write apparent, to us who sing, by the position of the bars, which in modern music mark the accent. In Gregorian Chant our position is very much the same as if we had to discover the accentuation of a piece of modern music which had neither bars nor any other means of finding the accent; but in this case the work would be comparatively easy, because we should only have to count the notes off in twos or threes; whereas in Chant, which has no timethythm, we must, as we have seen, find the accentuation of each individual phrase.

We will now study the accentuation of each Mode in detail.

CHAPTER XIV.

The Accentuation of the Modes.

THE FIRST MODE.

The compass of the First Mode is from re to re^{i} ; extra notes, do below, *mi* above, and ta. The principal notes are re, fa, la and re^{i} . The melodies are found in the fifth re-la, built up of the minor third re-fa (rising semitone) and the major third fa-la; and in the fifth $fa-do^{i}$, built up of the major third fa-la and the minor third $la-do^{i}$ with the falling semitone ta. When ti is not flat, it is a rising semitone in the minor third $ti-re^{i}$ of the major chord $s t r^{i}$.




The essential notes of the piece which may be considered as the --- Re¹ Do'_{\uparrow} fundamental notes of the neums are marked \wedge . The word *Rorate* shows the lower fifth with the two extra notes do and ta. Cali Ti Та desuper, are included in the major chord sol-ti-re¹. Et nubes 1 - La**Sol** pluant justum, are in the major chord f-l-d', which, having the ti \downarrow flatted, is exactly like the chord *do-mi-sol*. The influence of - Fa Mi, this chord continues as far as the first note of *terra*. The remain- $-\mathbf{Re}^{\downarrow}$ der of the piece, commencing with the *first* note of *terra*, is in the do \uparrow minor chord re - fa - la, with the extra note do. Notice also the treatment of the groups made up of *fourths*. The notes marked x are accented as musical accents, because they are all falling notes, and this tendency must be brought out rather prominently.

THE SECOND MODE.

The compass of the Second Mode is from *la*, to *la*; being derived - La from the first tone, its Final is re. Its principal chord is re-fa-la. So1 The melodies within this compass are treated exactly like the melo-—Fa↓ dies of the corresponding compass in the first mode. The lower Mi fourth is generally used thus : $la_1 do re-re do la_n$, a minor third with - Re an extra note. The extra notes sol_1 (below the lowest note) and taDo (above the highest) are seldom used. In the following piece all the Ti, peculiarities of the mode are shown: La.



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On the words "Collegerunt pontifices" we have all the lower notes of the Second Mode. Notice what an important part the *fourths* play in this mode: $l_1 dr$, rf s, $l_1 t_1 dr$, dr f, dm f, f l ta.

THE THIRD MODE.

— Miⁱ The compass of the Third Mode is from mi to mi'. Its Domi-Re¹ nant is do!. Its principal notes are mi-sol-do, an inversion of the Do major chord; built up of the minor third mi-sol with the falling Ti semitone, and of the *fourth sol-do*', which is generally treated as a La \downarrow minor third, la-do', with an extra note, sol. The melodies never So1 extend above the highest note of the mode, but they extend below Fa to re. Ta is sometimes used, but not so often as in the First Mi Mode. re



Repleatur. This is a characteristic commencement for pieces in the Third Mode; the extra note re and the Dominant do^{\dagger} are the accents. Notice the germs of two changes of key; on the first *alleluia* we have a suggestion of a change to the dominant key indicated by do^{\dagger} falling to ti, and on the words *ut possim cantare* a change to the subdominant key.

THE FOURTH MODE.

As this mode is derived from the Third Mode, it has the same Final. Its compass is from ti_1 to ti, and its Dominant is la. The lowest note is very rarely, if ever, used. The compass of the mode is therefore practically from do to do^1 . Its principal chords are $m - l - d^1$ and r - f - l, both minor chords. The most characteristic portions of the melodies are contained in the fourth m - l.





THE FIFTH MODE.

 $Mi^{|T|}$ The compass of the Fifth Mode is from fa to $fa^{|}$. Its domi- Re'_{\downarrow} nant is do. Its principal chord is $fa - la - do^{|} - fa^{|}$. Pieces in the Do'_{\uparrow} fifth mode with ti natural are very rare. An example will be Ti_{\uparrow} found on page 44, under the Fifth Mode. When ti is flatted, La^{Ta}_{\downarrow} the mode is the modern major mode; and when some of the ti'sSolare flatted and some natural, the naturals are treated as chro-Famatics, just as the sharp fourth is treated in Modern music.

In the example mentioned above, *do*, being the Dominant, will carry the principal accent.



There are musical accents on the second note of "*re-*" and the second note of "*-gum*," because they change what would be practically a monotone into a melody, and because we naturally emphasize the *falling* tendency of *re* and the *rising* tendency of *ti*.



The principal accent on *honore* will come on the second note of *no*, because it is the Dominant, and because the first note of the neum, la, is really a repercussion of the previous la. A musical accent falls on the second and fifth notes of o (in "tu-o").

It will be noticed that the melodic phrases are generally in *fifths*; the phrases "Filiæ regum in honore tuo," "dextris tuis," "-rato circumdata," being in the fifth la - mi, the phrases "astitit regina," "in vestitu," and "varieta-" in the fifth sol - re'; and the phrases "de - au-" and the last ten notes being in the fifth fa - do'. [See pp. 44, 45.]

- Fa'

THE SIXTH MODE.



THE SEVENTH MODE.

The compass of the Seventh Mode is from sol to sol'; its principal Sol1 chord is sol - ti - re' - fa', known in modern music as the chord of the -- Fa' Dominant Seventh. Its principal phrases are contained in the fifth Mi sol - re', in the fourth do' - fa', and in the fourth re' - sol'. Re¹ Do'↑ – Ti 111. La 5 Sol 0 - cu - li ó mni -um in te spe - rant, Dó mi --

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THE EIGHTH MODE.

The compass of the Eighth Mode is from re to re'. Being Re' derived from the Seventh Mode, its Final is sol. Its principal Do! Ti | phrases are contained in the fourth re-sol, in the third fa-la, in La the fourth sol - do', and in the fourth la - re'. Sol, Fa 112. 3 4 Mi Re O - mnes gen - tes quas-cúm-que fe - cí - sti, vé - ni - ent, 3 a - do - rá-bunt co -ram te, Dó-mi - ne, et glo-ri - fi - cá - bunt et 3 quó -ni - am ma-gnus es tu, et fá - ci-ens mi no-men tu um:



CHAPTER XV.

The Notation of the Vatican Edition of the Liturgical Chant Book.

In the Motu Proprio of November, 1903, His Holiness Pope Pius X ordered the restoration of the Gregorian Chant to its legitimate place in the services of the Church ; and in furtherance of this object he directed that a typical edition of the Liturgical Chant Books be issued from the Vatican press. The "Kyriale," that portion of the "Graduale" containing the Ordinary of the Mass, is the only one which has, as yet, appeared. The Sacred Congregation of Rites has issued a decree, a copy of which will be found in the Kyriale, which "declares and ordains that the aforesaid edition be considered by all persons as the Standard or Norm"; thus apparently superseding all others.

As there are several peculiarities in the notation used, a few words of explanation are necessary. It will be noticed that the Fa-clef is seldom used; the small bars are placed at the *top* of the staff; leger-lines are used instead of changing the clef; and the flat is formed differently from the modern flat. All these peculiarities may be observed in the Gloria of Mass II.

In the "Asperges me" [Page 1] we find over the first and last syllables of the word *asperges* and in several other places a character built up of two notes, one placed above the other. This is the form given to the *podatus*, and the lower note is sung first. Over the second syllable of *secundum* and over *in* (*sæcula*) the second note is made exceedingly small. This is the *epiphonus*, or liquescent form of the *podatus*. It is used when the syllable ends with a consonant, or when a syllable ending with a vowel is followed by a syllable commencing with a vowel. In the "Vidi aquam" [Page 2] we find over the words *templo* and *pervenit* a similiar character, but reversed; this is the *cephalicus* or *clivis liquescens*, and over the third syllable of the last *alleluia* but one we find the *torculus liquescens*. The use of these liquescent neums is to enable us to pronounce the words properly! The heavy oblique line with a note above it, to the right, is the *porrectus*. The oblique line stands

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for two notes only, one at the beginning and the other at the end of the line; so that the first three examples over the words *dextro* and *alleluia* are $d' s l_{i}$ lf s, and d' l t, respectively. Over the last syllable of the first Kyrie in Mass I we find a *podatus* and a *climacus*; the double-note formed by the meeting of these two neums is called a pressus. Examples will also be found over the last syllable of the second and third Kyrie. Over the first syllable of templo, latere, aqua, and salve in the "Vidi aquam," we find a character formed of two notes close together **HE**, the *bistropha*; and in the "Asperges" over the first syllable of Amen we find **man**, the tristropha. The single note before the bistropha over templo, latere, and salvi is called the apostropha. In the Solesmes edition these notes appear as diamond notes of a somewhat modified form. In the "Asperges," over the first syllable of Domine, we find a group of three notes, the second of which is denticulated at the top and bottom. This group is called the quilisma. There is another note which, however, is very seldom used; it is called the oriscus, and its place is after a neum on the same degree as the last note of the neum. Examples will be found in Mass I, last note of (glorificamus) te, and in the "Benedictus" of the same Mass over the second syllable of excelsis.

Learned treatises explanatory of this notation have appeared from time to time, from which, up to date, we gather the following information.

A. says :

"All the notes have the same duration."

"All the notes have approximately the same duration."

"A theme composed of equally long notes is conceivable."

B. says:

"The different tones are to be sung equally long."

"Much less can we favor the practice of giving all the notes exactly the same duration."

"In neumatic songs where the melody is quite independent of the text there can be no objection to giving the notes the same length. But in syllabic chants where the text still has great influence it will be well to yield somewhat to the present, though, perhaps, vitiated taste by *discarding strict equality* of tone-duration."

"Though the tones are of equal duration," etc.

C. says :

"Though the notes have the same form, it must not be supposed that

they have the same value. On the contrary, the value of the single notes is very variable, and is determined by the length of the syllables to which they are joined."

The very latest word is : "The notes are of the same length, the tones are not always of the same length."

They all seem to agree, however, that the note with a stem is not a longer or a louder (accented) note, but only a higher one. As the argument is rather amusing, we quote it : "The acute accent of speech when written as a musical note naturally assumes the form of an upward gesture of the hand; the grave accent, that of a downward gesture. The one signifies a raising of the voice, and the other a lowering thereof. They drew a red line. . . . The *punctum* at once took its place upon the line or above or below it; its position was clear from the first. Not so with the *virga;* placed upon a line, its position was quite indefinite. In order to determine its position, they simply put a dot at the top of the bar; the *virga* and *puncta* then appeared on the line as in the relation of higher and lower notes. The *virga*, therefore, is not long; but it is a relatively high note."

Now, in the first place, we do not write musical notes to represent speech. The essential difference between speech and song is that in song the sounds have a definite pitch, and in speech they have not. Secondly, as a matter of fact a speaker naturally brings his hand *down* when he wishes to emphasize a word. Thirdly, in oratory, to raise or to lower the voice does not necessarily mean to raise or lower the pitch in a musical sense; but to speak louder or softer. To sum up: The *virga* represents the acute accent of speech; the acute accent of speech is louder but not necessarily higher; and as the acute accent of Latin (the tonic accent) is long in quantity, the *virga* must represent a longer (quantity) and louder (accent) tone,— as has always been taught in Plain-chant.

The oriscus, apostropha, bistropha, tristropha and quilisma are characters whose meaning is absolutely unknown. They represented some trick of vocalism, or ornamental group of some kind, which could be learned only from a living teacher. At present we are told to sing the oricus and apostropha like any other single note, the bistropha twice the length, and the tristropha three times the length of a single note; and the first note of the quilisma is to be somewhat lengthened and the second note shortened.

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