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HARMONY,
TONIC AND CHROMATIC

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Charles Vincent,
Mus. Doc., Oxon.

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HARMONY,

DIATONIC AND CHROMATIC,

BY

CHARLES VINCENT,

MUS. DOC. OXON.

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Price 3/-

LONDON:
CHARLES VINCENT,
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TO

EBENEZER PROUT, Esq.,

B.A., LONDON; MUS. DOC. TRINITY COLLEGE, DUBLIN AND
EDINBURGH; AND PROFESSOR OF MUSIC IN THE
UNIVERSITY OF DUBLIN; ETC., ETC.

A HIGHLY GIFTED AND ERUDITE MUSICIAN, WHOSE VARIOUS
WORKS ON THE ART AND SCIENCE OF MUSIC ARE
THE MOST LUCID AND COMPREHENSIVE
IN EXISTENCE;

THIS LITTLE BOOK IS DEDICATED WITH FEELINGS OF
ADMIRATION, AFFECTION AND ESTEEM, BY HIS
FRIEND THE AUTHOR.

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HARMONY.

DIATONIC AND CHROMATIC.



INTRODUCTION.

T is presumed that the student who seeks to derive instruction from the perusal of this treatise, is already familiar with the elementary principles of Notation, Intervals, Scales, and Time, and that he is able to play the pianoforte or other keyboard instrument fairly well.

The Author is acquainted with many excellent works on Harmony, and has had large experience in teaching the subject, but he has failed to find any system which enables the *beginner* to compose a bass, or to harmonize a simple melody with any degree of accuracy. This treatise will attempt to show how these *desiderata* may be acquired.

The Author bases his system on the Diatonic, Chromatic and Enharmonic scales, and ventures to prophesy that the Text-book of the future must and will follow some such plan, in order consistently to

explain modern combinations, which, under the theoretical systems at present in vogue, require a wrong application of the laws of acoustics, and a complex multiplication of roots.

It may be urged by some that the plan herein adopted keeps the pupil too long at simple uninverted triads. The Author, however, feels confident that the plan he recommends is right, and those who follow it cannot fail to acquire such independence and confidence in the manipulation of uninverted chords (the groundwork of every composition), that inverted chords and discords will subsequently present little difficulty.

CHARLES VINCENT,
HAMPSTEAD HEATH, 1899.



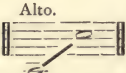
ERRATA

TO


“HARMONY—DIATONIC AND CHROMATIC,”

BY CHARLES VINCENT.

PAGE.

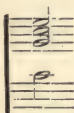
6. Ex. 7 :— 

18. Line 8 of text, “third measure on Root IV” not iv.
19. Ex. 43 : 3rd position, not 2nd position.
19. Ex. 44 : 2nd position, not 3rd position.
21. Par. 31, read carefully, not careful.
23. Ex. 49 ; numeral under third chord II, not V.
40. Underline all the following numerals in Table, par. 61 ;
II, III, IV, v, VII, which will indicate that
these chords should not be employed at the
commencement of an exercise, but rather towards
the middle, as they tend to unsettle the tonality.
See par. 65 and 66.
40. Par. 62, add the words “or *vice versa*,” at the end of
the first line. The line will thus read “In proceed-
ing from V to VI, or *vice versa*.”
47. Par. numbered 47 ought to be 74.
47. Take out comma after the word “part” on the last
line of this page.
49. In the second line of the text following Ex. 94, read
Ex. 88 instead of Ex. 87.
59. Par. 93, take out last four words, “or by contrary
motion.”
61. In Par. 96 add E alto note of first bar of music.
65. Par. 106, line 4, after the word “move” insert partly.
66. Par. 108, last line read, “keep to small intervals”
instead of “keep small intervals.”
68. Par. 118, read *generally* in place of *always*—1st word,
2nd line, and in place of “seldom” in the last
line read “not frequently.”

73. Ex. 142, bar 6, read :— 

PAGE.


84. Ex. 158, last bass note G.
 87. Foot note to Exercise 43 read "(2 is."
 103. Ex. 197, numerals to chords 7 and 8 should be IV, IV, and not VI, VI. The numeral to chord 12 should be a small VI°.
 108. To explain the consecutive fifths, in this example, between the 6th and 7th chords, see addenda at the end of this errata.
 112. Ex. 218, take out the 7 underneath the fourth chord.
 124. Ex. 240, alto in second chord is G and not A.
 127. Par. 184, B♭ not B♯ in musical example on 5th line.
 127. Ex. 247, add 6 under the third bass note.
 145. Ex. 276, last note but one in the bass, A not G.

145. Ex. 277, read  as the first chord, and not C, A, C, E.

145. The numeral under the third chord should be II°.


151. Last two bars of Ex. 283 should be as follows:—

To a Ninth.



C G C bG

155. Ex. 289, bar 3, take ♯ out of bass line.
 158. Note to Ex. 295 read, "The first melody note" in place of "The first beat."

164. Ex. 308, bar 4, accompaniment, read:—  &c.



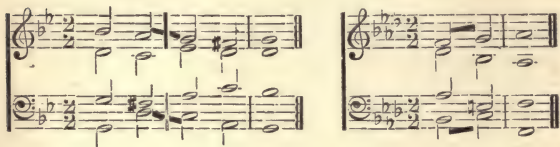
ADDENDA.



Consecutive Fifths by step of a major or minor second are not objectionable in four part harmony, when the two chords in which they occur are chords of the seventh, one of which *must* be a secondary chord of the seventh, containing a minor 3rd, perfect or diminished 5th, and a minor 7th. The remaining two parts should move in contrary motion to the fifths.

An example of unobjectionable fifths by step of a minor second is found in Ex. 207.

In the following examples, the fifths (by step of a major second) are placed in the outside parts, yet when harmonized according to the above rule their disagreeable effect is entirely removed.



Two musical examples in 2/2 time. The first example is in B-flat major (one flat) and shows a progression from a dominant seventh chord (F4, A4, C5, Bb4) to a secondary dominant seventh chord (G4, Bb4, D5, Cb5). The outer parts (Soprano and Bass) move in contrary motion, with the Soprano line containing a pair of consecutive fifths (F4-G4 and G4-A4) that are separated by a minor second interval. The second example is in B-flat major and shows a progression from a dominant seventh chord (F4, A4, C5, Bb4) to a secondary dominant seventh chord (G4, Bb4, D5, Cb5). The outer parts (Soprano and Bass) move in contrary motion, with the Soprano line containing a pair of consecutive fifths (F4-G4 and G4-A4) that are separated by a minor second interval.



Two musical examples in 2/2 time. The first example is in D major (two sharps) and shows a progression from a dominant seventh chord (A4, C5, E5, G4) to a secondary dominant seventh chord (B4, D5, F#5, Eb5). The outer parts (Soprano and Bass) move in contrary motion, with the Soprano line containing a pair of consecutive fifths (A4-B4 and B4-C5) that are separated by a major second interval. The second example is in D major and shows a progression from a dominant seventh chord (A4, C5, E5, G4) to a secondary dominant seventh chord (B4, D5, F#5, Eb5). The outer parts (Soprano and Bass) move in contrary motion, with the Soprano line containing a pair of consecutive fifths (A4-B4 and B4-C5) that are separated by a major second interval.

DIMINISHED SEVENTHS.

In addition to the 16 resolutions of the Diminished Seventh given in Chapter XXVII, eight more are possible, viz., each member of the chord may in turn rise a semitone to the seventh of a Dominant chord, which may resolve to a tonic harmony, major or minor.

Major. Minor. Major. Minor.

♭7 ♭6 6 ♭7 ♭6 6 ♭7 ♭6 6 ♭7 ♭6 6

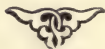
♭5 ♯4 2 ♯4 2 ♭5 ♯4 2 ♭5 ♯4 2

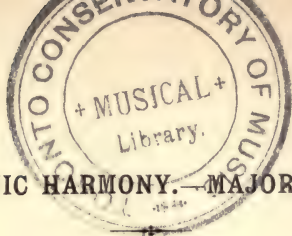
Major. Minor. Major. Minor.

♭7 ♭6 6 ♭7 ♭6 6 ♭7 ♭6 6 ♭7 ♭6 6

♭5 ♯4 2 ♯4 2 ♭5 ♯4 2 ♭5 ♯4 2

It will thus be seen that the chord of the Diminished Seventh can proceed to every major and minor key.






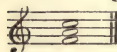
DIATONIC HARMONY.—MAJOR SCALE.

CHAPTER I.

CHORDS OF THE MAJOR SCALE.

1. **Triads.**—Chords composed of **three notes** (Triads) are the foundation of all Harmony. They are formed by a combination of any note with the Third and Fifth above it, taken from a *definite scale*. A chord thus formed takes its name from its lowest note, or **Root**, as it is often called.

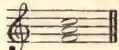
Thus:—  is the Chord of C Major, and

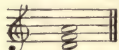
 is the Chord of F Major.

EXERCISE I.—Write chords of three notes on the following roots, using the given note as the lowest in each case:—



2. It is possible to obtain *three kinds* of Chords from the notes comprising a Major Scale, viz:—**Major, Minor, and Diminished.**

(a) A **Major Chord** consists of a note with a Major Third and a Perfect Fifth added above:— 

(b) A **Minor Chord** consists of a note with a Minor Third and a Perfect Fifth added above:— 

(c) A **Diminished Chord** consists of a note (the Seventh degree of a scale), with a Minor Third and a Diminished Fifth added above:— 

EXERCISE 2.—Write Major, Minor and Diminished Chords on the notes D, E, F, G, A, B ♭, and F #.

3. **Common Chords.**—When one of the notes of a *Major or Minor Chord* is doubled, making a chord with four parts, the combination is generally called a **Common Chord** :—

Ex. 1.

(a) (b)

Octave of Bass, or Root, doubled. Bass, or Root, doubled in Unison. Fifth doubled. Third doubled.

Rules for Doubling.—It is always best to **double the Bass** in order to form the fourth part. At (a) the Fifth is doubled; sometimes this may be necessary, but it should be avoided when possible. At (b) the Third is doubled; in this case the effect is by no means good. In fact it is seldom right to double the Third in a *Major Chord*, and when such Third is the *Leading Note* (see par. 4) it must *never* be doubled.

It is frequently desirable, however, to double the Third in a *Minor Chord*; and when such Third is the *Keynote* of the Major Scale, it is *best* to double it :—

Ex. 2.

() (Key note.)

V. vi.

EXERCISE 3.—Write Major Common Chords in four ways, as shown in Ex. 1, on the following notes: D, E, F, G, A, B, adding the necessary sharps in each case to make the chords Major.

4. A Chord may be formed on *each degree* of a

scale, with such Thirds and Fifths as the scale contains, no accidentals being used.

Example of chords on each note of the scale of F, with their technical names and distinctive numerals added :—

Ex. 3.

Degrees of the scale.	I	II	III	IV	V	VI	VII ^o
Technical names.	Tonic.	Super-tonic.	Mediant.	Sub-dominant.	Dominant.	Sub-mediante.	Leading note.

It will be observed that the chords constructed on the First, Fourth and Fifth degrees of the Major Scale are Major. Those on the Second, Third and Sixth degrees are Minor; and the chord on the Seventh degree (Leading note) is Diminished.

The degrees of the scale are given in Roman numerals, large for Major Chords and small for Minor Chords, while the Diminished Chord is distinguished by the addition of a small circle placed above the numeral VII^o; its third is best to double.

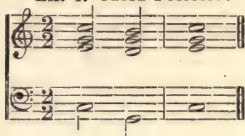
The technical names of the degrees of the scale are *most important*, and should be thoroughly learnt.

It will be observed that the Mediant is midway between the Tonic and Dominant, and the Submediant midway between the Subdominant and upper Tonic.

EXERCISE 4.—Write Common Chords on each degree of the following Major scales: C, D, E \flat , E, G, A, and B \flat . Show which chords are Major, Minor, or Diminished, by the addition of the corresponding numerals, and give to each chord its technical name.

5. **Close and Extended Harmony.**—A chord is said to be in **Close Harmony** when the three upper parts are close together and generally a comparatively wide distance separates the Tenor from the Bass, so that the three upper parts can be played conveniently by the right hand, the left hand playing the bass note only :—

EX. 4. CLOSE POSITION.



6. A chord is said to be in **Extended Harmony** when an approximately equal distance separates the parts from one another, and when the two upper parts are most conveniently played with the right hand, and the two lower parts with the left hand :—

EX. 5. EXTENDED POSITION.



7 It is *not good* to have a very wide distance between the Alto and Tenor, or between the Alto and Treble :—

EX. 6. *Bad.* *Bad.*

EXERCISE 5.—Write the following Major Chords in Close and Extended Harmony : C, D, E, F, G, A, and B.

8. **Compass of Voices.**—Harmony exercises are usually written for **four voices**. The following compass for each voice should not be exceeded :—

EX. 7. Treble. Alto. Tenor. Bass.



The *Treble* and *Bass Clefs* are employed throughout in this treatise, and several of the examples are written in *short score*. It is, however, *most desirable* that the student should be thoroughly acquainted with the *C clefs*, and be able to write and read in *open score*, *i.e.*, each part having a separate staff.

The short score, Close Harmony, is usually employed when the examples are to be played on the pianoforte.

9. **Three Positions.** — Each Common Chord may be written in **three positions**, the First position having the Octave of the root in the Treble :—

Ex. 8.

The Second position has the Third of the chord in the Treble :—

Ex. 9.

The Third position has the Fifth of the chord in the Treble :—

Ex. 10.

EXERCISE 6.—Add three parts (Treble, Alto and Tenor), to the following Bass notes, writing each chord in the three positions, and designate which of the chords are Major, and which Minor.



CHAPTER II.

WRITING A BASS PART.

10. **Composing Basses.**—Upon a Bass part, Common Chords are constructed, by adding above that part a third and a fifth, and doubling one of the parts, usually the Bass, to form the fourth part.

Before proceeding to study the rules of part-writing or the connection between one chord and another, it will be necessary to learn how the Bass part may be written.

TABLE FOR COMPOSING BASSES—MAJOR SCALE.

CHARACTER OF CHORD.	CHORDS ON DEGREES OF THE SCALE.		CHORDS ON DEGREES OF THE SCALE.
Major	I	may be followed by	IV V VI
Minor	II	”	V VI (VII ^o)
Minor	III	”	VI (VII ^o) I IV
Major	IV	”	(VII ^o) I II V
Major	V	”	I II III VI
Minor	VI	”	II III IV V
Diminished.	(VII ^o)	”	III IV V

11. This Table can easily be remembered, as a certain *uniformity in the succession of numbers* will be noticed. For example, as Chords IV, V and VI are to I, so Chords V, VI and VII^o are to II; and so on. The four additional numerals outside of this uniformity can readily be remembered.

EXPLANATION OF THE TABLE.

The first column gives the character of the several chords in the Scale.

The numerals refer to the degrees of the scale, I being the lowest note, the Tonic or first degree (see par. 4).

The numerals representing the lower degrees of the scale, are placed at the top of the Table, as the order can be more easily remembered in this position.

The numeral (VII^o) enclosed in brackets, may only be used in *sequence* (see par. 38); so, for the present, it should be avoided.

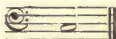
With regard to the selection of Chords in this Table, the Author ought to say that no general law is followed, nor does he see that it is possible to establish such a law. The selection is purely a matter of taste and the result of experiment. The formula here recommended is practical and can be used effectively, but the Author is quite aware that some will differ with him in the choice made. To those he would say: "Make your own Table or selection; I do not argue the point; if the result is practical and effective, that is all that is required."

Composers can frequently be identified by their progressions, and it would be a serious matter if one stereotyped progression of Roots existed for all. Our sensations are given to us, and in a measure are under our control, in order that individuality may appear. In matters of taste we cannot say "this is wrong or that is right;" each experienced writer must decide for himself, and select means which to him appear effective and pleasant.

Some teachers may find it desirable to add to the Table or take from it. The selection does not pretend to be exhaustive or final; the Author, however, would urge the student to be content for the present with the selections given in the table, for they exemplify progressions of chords which can be effectively used in connection, one with another, and frequent experiments have proved them to be practical.

12. Practical Illustration.—The following example will illustrate the method of selecting numerals from the Table, and of translating them into notes.

Each exercise should *begin* and *end* with the Tonic, or Root I, which, in the Key of C, will of course be C:—

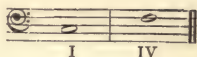


I

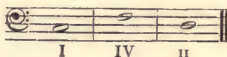
It will be seen in the Table that I may be followed by IV, V, or VI. Let IV be selected, which, in the Key of C, is F, the Fourth degree of

B

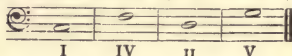
the scale, or Subdominant :—



Referring to the Table, it will be seen that IV may be followed by (VII°), I, II or V. As explained in Par. 11, (VII°) must be avoided. Therefore our choice rests between I, V or II, and as we have had I so recently, we select II for our third Bass note :—

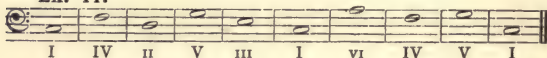


Root II may be followed by V, VI or (VII°). We select V :—



Following on in the same manner, we construct the complete example of a workable Bass part, upon which an exercise of Common Chords can be written :—

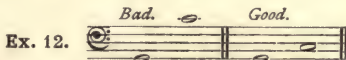
Ex. 11.




Cadence.—The last two Roots of an exercise form the Bass of what is termed a **Cadence**, or Close. The Cadence V-I, as in the above Exercise, is called the **Perfect Cadence**—the Dominant followed by the Tonic. Other Cadences will be explained later.

For the present it will be found advisable to *end each Exercise* with the *Perfect Cadence*, V-I. Some ingenuity will be required to accomplish this within a fixed number of bars or measures.

13. Skips.—All skips greater than an Octave (Compound Intervals), are *forbidden*.




14. The skip of a Seventh should be *avoided*.

Ex. 13. 

IV V IV V

15. Before making the leap of a Fourth, Fifth, or Sixth, it is desirable (and in the case of the Fifth and Sixth almost necessary), to proceed in Contrary Motion, and, after making the leap, to return to an interval *within the skip*.

Ex. 14. *Good.* 

I V II VI IV V I

Ex. 15. *Bad.* 

I V II VI IV V I

These two examples contain the same selection of Roots, yet the second is faulty for the following reasons: In bar 3, the D should *not* be approached by an upward skip, immediately after the leap upwards from C to G; from bar 5 to 6 there is a skip of a seventh.

Example of a bass in the key of G, 8 measures long:—

Ex. 16. 

I VI IV II VI IV V I

EXERCISE 7.—Construct Basses from the Table, omitting (VII^o), in 8, 10 and 12 measures, one note in each measure. Begin each exercise with Root I, and end with a Perfect Cadence, V-I.



CHAPTER III.

PROGRESSION OF PARTS.

16. Before harmonizing the Basses which have been written, certain rules relating to the connection of chords, one with another, must be learnt, and the correct progression of parts thoroughly understood.

17. **Three Kinds of Motion.**—There are three possible ways for parts to move in harmony, viz: By **Similar** motion, by **Oblique** motion, and by **Contrary** motion.

SIMILAR MOTION.—Parts ascending or descending together:—



OBLIQUE MOTION.—One part remaining stationary while the other moves:—



CONTRARY MOTION.—One part ascending while the other descends:—



Contrary motion is generally the *best*, and much Similar motion should be avoided.

18. **Forbidden Progressions.**—*Consecutive Fifths (or Twelfths), Octaves (or unisons), and certain Hidden Fifths and Hidden Octaves (between extreme parts) must be avoided.*

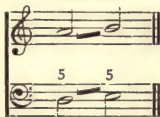
Excepting the Octave, all intervals are considered simple ; therefore the Twelfth (a compound interval) is spoken of as a Fifth ; a Tenth is called a Third, &c., &c.

Consecutive Fifths occur when two voices move in Similar motion in Fifths :—

Ex. 20.

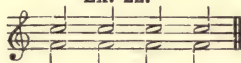


Ex. 21.



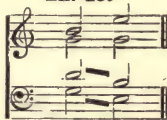
A Fifth may be repeated as frequently as required on the same notes :—

Ex. 22.



Example of Consecutive Fifths between the Tenor and Bass :—

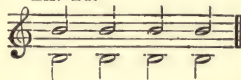
Ex. 23.



19. **Consecutive Octaves (or Unisons)** occur when two voices move in Similar motion in Octaves or Unisons :—

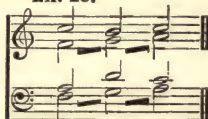
An Octave may be repeated on the same notes as often as required :—

Ex. 24.

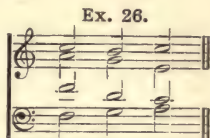


Example of Consecutive Octaves between the Bass and Alto :—

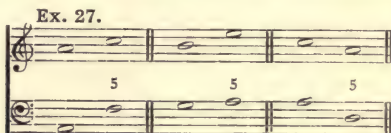
Ex. 25.



The last example corrected :—



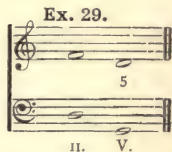
20. **Hidden Fifths** are objectionable when the extreme parts *skip* to a Fifth in *Similar motion* :—



Hidden Fifths are permissible when the upper part moves *one* degree, and the lower makes a leap of a Fourth or Fifth.



An exception is also made when the Chord on the Supertonic Root, is followed by the chord on the Dominant Root, II-V, and when the upper part moves from the Third of the Supertonic to the Fifth on the Dominant.



21. **Hidden Octaves** are objectionable when the extreme parts skip to an octave in *Similar motion* :—



Hidden Octaves are permissible when the upper part moves one degree downwards, or a semitone upwards :—

Ex. 31.

These progressions are objectionable when the disagreeable effect of Consecutive Fifths or Octaves is produced, through the ear filling in the gap and detecting the Fifths or Octaves. In the inner parts, however, this is very seldom felt even by the keenest ear.

22. **Rules for preventing Faulty Consecutives.**—To avoid these faults:

(a). Whenever possible keep all notes that are common to successive Chords in the same part or parts:—

Ex. 32.

The notes common to two chords in this example are tied one to another.

(b) When there is no note in common in two successive chords, take care to make the parts move in *Contrary motion* to the Bass. Thus, if the Bass ascends, as in IV-V or V-vi, as a general rule it is best for the other parts to descend, and *vice versa*:—

Ex. 33.

* See Ex. 2, par. 3.

23. **Good and Bad Progressions.**—It is generally best that a part should move to the *nearest possible note*, small intervals being preferable to large :—

Ex. 34.

I. VI. I. VI.

The second arrangement of these chords shows an example of consecutive octaves in contrary motion.

24. The skip to an **Augmented Interval**

Ex. 35.

is forbidden, excepting in sequence (see par. 38).

The skip of a **Diminished interval** is allowed when the following note is within the interval of the leap :—

Ex. 36.

25. In doubling one of the notes to form the fourth part of a Common Chord, carefully follow the directions given in par. 3.

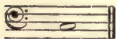


CHAPTER IV.

ADDING THE TREBLE PART TO A GIVEN BASS.

26. In adding Harmony to a Bass part, it will be found best to write the Treble part first. This part may begin with either the Third, the Fifth, or the Octave from the Bass, within the compass of the voice (see par. 8.)

27. It would not be good to commence the Treble part of an exercise on a very high or very low note.

At the beginning of an exercise the Bass note  might have, as a Treble, either of the following six notes:—



Numbers 1 and 2, however, would be too low, and No. 6 too high, for an effective beginning. The selection, therefore, is between Nos. 3, 4 and 5, either of them being good. In making the selection, the position of the Bass part should be taken into consideration; for, should it be low, then a high Treble would not be effective, and *vice versa*.

It will be found useful to compose more than one melody or Treble part to approved Bases, beginning successively in the different positions (see par. 9).

Examples of Treble parts to a Bass already written, (par. 15) :—

Ex. 38.

(a) BEGINNING 1ST POSITION.

I. VI. IV. II. VI. IV. V. I.

In (a), the first Chord begins with the Octave, G, and is therefore in the first position (par. 9). The note (G) being common to the Third (G) of the Chord in the following bar, (E, G, B) on Root VI, E, this G is retained in this second Chord. The G is also common to the G of the Chord in the third measure, on Root IV (C, E, G), and is therefore again retained. The Chord in the fourth measure, on Root II (A, C, E) does not contain a G, so it is necessary for the treble part to move. It may go either to A, to C, or to E. A is selected, as it is the nearest note in Contrary motion; if the Treble part had descended to E, Consecutive Fifths would have resulted :—

Ex. 39.

IV. II.

Had the Treble part gone to the C above, an unnecessary leap would have taken place, and the advice to move to the nearest note in Contrary motion would have been disregarded. In the Fifth measure the Chord on Root VI (E, G, B) does not contain the note A, therefore the Treble part moves to the nearest note in Contrary motion, which is G. This G is common to the Chord in the sixth measure (C, E, G), and therefore is retained. The Bass part now moves alphabetically from C to D. Whenever such a progression occurs Contrary motion *must* be observed, otherwise forbidden Consecutives will result. The Treble part, therefore, proceeds to the nearest note in Contrary motion, F#. Had the part moved upwards, to A, Consecutive Fifths would have resulted :—

Ex. 40.

IV. V.

This F# is the Leading note in the key of G, and it is a general rule that, whenever possible, a Leading note (if derived from the Dominant Harmony) shall ascend to the key-note; the F#, therefore, rises to the G in the eighth measure.

Examples (41) and (42) should be similarly analysed.

Ex. 41.

(b) 2ND POSITION.

I. VI. IV. II. VI. IV. V. I.

Ex. 42.

(c) 3RD POSITION.

I. VI. IV. II. VI. IV. V. I.

28. The following are examples of Treble parts added, according to the rules already given, to Basses constructed from the Major Table (par. 111).

Ex. 43.

1ST POSITION.

I. VI. II. V. VI. IV. V. I.

Ex. 44.

3RD POSITION.

I. VI. II. V. VI. IV. V. I.

Ex. 45.

2ND POSITION.

I. V. VI. III. IV. I. IV. II. V. I.

Ex. 46.

3RD POSITION.

EXERCISE 8.—Treble parts should now be added to the several Basses which have been constructed. Two Examples should be written on each bass.

29. **Summary.**—Before proceeding to add the harmonies to these exercises (of which a considerable number in various keys should be written), it will be profitable to review and summarize that which has thus far been taught. Should any of the threads, which now will be gathered together, appear tangled or knotty, it is earnestly recommended that the student should re-study these early chapters, for it is only by thoroughly mastering each stage, as it is presented, that lasting knowledge can be gained and real progress ensured.

30. It is now presumed that the following subjects are thoroughly understood by the student:—

(a) The construction of uninverted Common Chords, Major, Minor and Diminished.

(b) The distribution of the parts in uninverted Common Chords.

(c) The three positions of the Common Chord.

(d) The compass of each of the four voices for which exercises are written.

(e) The Major Table for composing Basses committed to memory. (See par. 11.)

(f) The method of using this Table in the construction of Basses.

(g) The laws relating to skips.

(h) The construction of a Bass part.

(i) The progression of parts and forbidden Consecutives.

(j) The addition of a Treble part to a given Bass.

CHAPTER V.

ADDING THE INNER PARTS.

31. Little or no difficulty will now be experienced in adding inner parts to the exercises already written, if the following rules are carefully studied :

32. (a) The Alto should be kept lower than the Treble, and the Tenor higher than the Bass, *i.e.*, these parts should not cross one another, although in an exceptional case it is permissible for the Alto and Tenor parts to cross.

(b) All notes common to two chords should be kept on the same line or space (same pitch).

(c) When two Roots follow each other in numerical or alphabetical succession as: III-IV, IV-V, V-VI, or VI-V, care should be taken that the upper parts move in **Contrary movement to the Bass**, excepting in the case of roots V, VI, when the leading note ascends and the two remaining parts descend (see par. 3).

33. Before proceeding to add the two inner parts (Alto and Tenor), it will be advisable to write several exercises *adding one part only* to the Bass and Treble, sometimes Alto and sometimes Tenor, thus making three-part harmony,—Bass, Tenor and Treble, or Bass, Alto and Treble.

34. The **third** of a chord may **never be omitted**, though the fifth may be omitted whenever necessary.

(a) Should the Bass and Treble consist of the Root and Fifth, the Third must be added.

(b) Should the Bass and Treble consist of the Root and its octave, the Third must be added.

(c) Should the Bass and Treble consist of the Root and Third, it is left to the discretion of the student to add the Fifth or the Octave of the Root.

It will thus be seen that there cannot be much difficulty in adding this third part to complete an exercise in three part harmony.

Example of an Exercise in Three parts for Treble, Alto, and Bass :—

Ex. 47. (a) (b)

I IV II V III IV V VI II V I

At (a) the leading note ascends in Similar motion with the Bass, which moves in alphabetical succession (see Par. 32, c). At (b) the note D, which is common to the next chord, skips down to B, instead of being retained, according to the recommendation in Par. 32, (b). Had the D been retained in the following chord :—

the Alto part would have been obliged to move to B, as the chord *must* contain a Third, which note, if ascended to, is beyond the compass recommended for the Alto part and would have produced the skip of an Augmented Fourth, F to B, which is not allowed. If the F had descended to B :—

(a Diminished Fifth), though not a forbidden skip when it returns within the interval of the leap (see Par. 24), the position of the Chord would not have been a good one, such a wide distance separating the Alto and Treble (see Par. 7).

An Example of the same Bass and Treble with the addition of a Tenor part :—

Ex. 48.

I IV II V III IV V VI II V I

EXERCISE 9.—Several Exercises should now be written in Three parts, taking the above Examples as models.

35. Example of the previous exercise in Four parts :—

Ex. 49.

The image shows two staves of music. The top staff is a treble clef and the bottom staff is a bass clef. Both staves contain a sequence of chords. Below the bottom staff, Roman numerals are written: I, IV, V, V, III, IV, V, VI, II, V, I. There are two specific points marked: (a) is above the second V chord, and (b) is above the III chord. The chords are: I (C4-E4-G4), IV (F4-A4-C5), V (G4-B4-D5), V (G4-B4-D5), III (E4-G4-B4), IV (F4-A4-C5), V (G4-B4-D5), VI (F4-A4-C5), II (D4-F4-A4), V (G4-B4-D5), I (C4-E4-G4).

At (a) the Tenor note D is not retained in the following Chord, as the Treble part has the D, and it is not good to double the Fifth; should the D be retained in the Tenor part the Alto must have the B, which takes the Alto beyond the compass recommended for that voice.

At (b) the Major Third is doubled. This is not absolutely necessary here, as the Tenor might have gone to F (skip of Diminished Fifth), returning within the interval of the leap :—

A small musical notation showing a treble clef staff with two notes: a G4 and an A4, illustrating the interval of a Major Third.

It illustrates, however, the possibility of doubling the Major Third—when such Third is not a leading note.

EXERCISE 10.—After freedom has been obtained in writing Three-part exercises, the student should proceed to compose Exercises in four parts, using the Bases and Trebles already written; then composing new Bases from the Table, adding first the Treble part according to the suggestions given in Chapter IV, and then filling in the Alto and Tenor parts together, chord by chord.

36. **Mental Recognition of Harmony.**—In the early attempts at harmonizing, the importance of the following suggestion cannot be over estimated. Each exercise should be played on a suitable instrument many times, the parts first separately, then together; while doing so endeavour to remember the mental effect of each progression, so that it can be recalled when writing similar passages. By persevering in this manner, the eyes will become accustomed to the Chords, and the mind will, as it were, hear their effect through the eye. This necessary accomplishment can be developed by practice.

CHAPTER VI.

SEQUENCES.

37. In the Table for composing Basses it will be observed that root (VII^o) is placed in brackets, which indicated that it was only to be used in sequences.

38. **Formation of Sequences.**—A Sequence may be formed when a passage consisting of two or more Bass notes is immediately reproduced on a higher or lower degree of the Scale, as in the following example :—



The figure or pattern formed by the first two Bass notes, I-V., is reproduced on other degrees of the scale, and consists of rising Fifths and falling Fourths. At (a) it will be noticed that Root (VII^o) is introduced ; remember that this Diminished chord may be used *in* a Sequence, but *not* at the *beginning* or *end* of a Sequence.

39. A considerable number of sequences can be made within the limits prescribed by the Table (par. 11). Experiment will prove, however, that almost *any* pattern of two, three or four Bass notes, which can be correctly constructed from the Table for composing Basses, may be reproduced on other degrees of the scale and form a Sequence, for sequential progressions enable the ear to tolerate many arrangements of Roots or melodic progressions which otherwise might be considered harsh ; for example :—

Ex. 51.

I VI II I IV III VI V I

By referring to the Table (par. 11) it will be seen that I may be followed by VI, and that VI may be followed by II. The pattern for the Sequence is VI-II, (rising Fourths). II is followed by I, which, according to the Table is not allowed, and, if harmonized, experiment will prove it to be a somewhat harsh progression. However, if the ear feels that the VI-II, is the pattern for a Sequence, and that I-IV., is a reproduction on another degree of the scale, at once the harshness in a measure disappears. At (a) and (b) progressions not given in the Table are introduced to illustrate this. Here is the Example worked out :—

Ex. 52.

I VI II I IV III VI V I

The Old Masters were very partial to Sequences.

40. A study of the following examples of sequential Bases, working out the unfinished examples and harmonizing them, will enable the student to construct similar passages for himself, and to introduce Sequences into ordinary exercises :—

Falling Fifths and rising Fourths :—

Ex. 53.

I IV VII° III VI II V I

Falling Thirds and rising Fourths :—

Ex. 54.

I VI II VII° III I IV II etc.

Falling Fourths and rising Seconds :—

Ex. 55.

I V vi iii IV I etc.

Patterns with three Roots :—

Ex. 56.

I vi IV vii° V iii etc.

Ex. 57.

I IV ii ii V iii etc.

Ex. 58.

I V iii ii vi IV etc.

Ex. 59.

I vi IV ii vii° V etc.

Pattern of four Roots :—

Ex. 60.

I V iii IV ii vi IV V etc.

Many other Sequences of a similar kind can be formed.

In completing these exercises, after the Sequence is abandoned, arrange the endings so that a Perfect Cadence, V-I, concludes each.

EXERCISE II.—Conclude the above examples and construct sequential Bases similar to the above.

CHAPTER VII.

WRITING IN FOUR PARTS.

41. **Modifications of a Rule.**—Before harmonizing the various Sequences, or writing exercises introducing them, it will be necessary to relax a rule, which it is presumed has so far been generally followed, viz., that all notes which are common to successive Chords must be kept in the same part or parts. It is desirable to preserve the Melodic Sequence as well as the Sequence of Roots. In order to do this, it is frequently necessary to deviate from the principle of retaining in the same voice a note common to two Chords. For example, in the sequence of rising Fifths and falling Fourths, if the rule in question be observed, the following would be the result:—

Ex. 61.

To introduce a Sequence into the melody, however, the rule relating to keeping the note common to two Chords in the same part would have to be broken, and the exercise worked out in some such manner as this:—

Ex. 62.

42. Further relaxations of this rule are allowed under the following conditions:—

(a) To prevent the melody from *exceeding the compass of the voice*. When a *skip* is necessary, be careful that forbidden progressions are avoided, and that the skip is in *Contrary motion*.

Ex. 63. (a)

At (a) it is advisable to take the Chord into a higher position:—

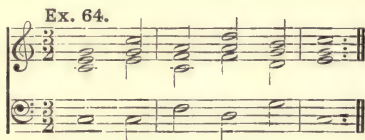
If all the notes of the Chord ascended into the second position at (a):—

Consecutive Fifths by Contrary motion would result. Should it be desirable, however, to take the melody to A (second position), the other parts should be so arranged as to avoid the Fifths:—

Consecutive Fifths by contrary motion should be avoided *whenever* possible.

(b) This rule may also be relaxed to avoid a *too monotonous* Treble part, though the converse of this, *too much movement*, is perhaps a worse fault.

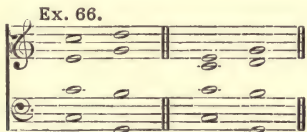
43. **Repeated Roots.**—When desirable, a Root may be repeated, in which case it is generally effective to *change the position* of the Chord on the repeated Root :—



44. **Skips in two parts not good.**—Excepting when the position of a Chord is changed for a special purpose, it is undesirable that two parts of the harmony (not counting the Bass) should move by skips, in four-part exercises written for the four voices (Treble, Alto, Tenor and Bass).



The effect of these progressions is much improved by avoiding these double skips, thus :—



In order to do this, the Fifth in each case has been omitted, and the Root trebled instead.

45. The following is an example of an exercise in four parts, introducing short Sequences and the *Diminished Chord* on Root VII° :—

Ex. 67.

Example 67 consists of two systems of musical notation, each with a treble and bass staff. The first system, labeled (a), shows a sequence of chords with stems pointing upwards in the treble and downwards in the bass. The second system, labeled (b), shows a similar sequence, but with a skip in the bass line to avoid a repeated note.

At (a) the skip was desirable, in order to introduce a better melody pattern for the short Sequence than would have resulted if the note C had been retained.

This is a close-up of the first system of Example 67, labeled (a). It shows the treble and bass staves with stems pointing upwards and downwards respectively.

At (b) the skip into another position was desirable because of the repeated Bass note.

46. Rule for writing Manuscript.—In writing exercises in extended positions with notes having stems, such as minims or crotchets, it is best to turn all the Treble stems upwards, Alto stems downwards, Tenor stems upwards, and Bass stems downwards:—

This diagram illustrates the rule for writing stems. It shows a treble staff with two notes, one with an upward stem and one with a downward stem. Below it, a bass staff shows two notes, one with a downward stem and one with an upward stem.

Stems written upwards should be placed at the right side of the note ($\overset{\uparrow}{\text{note}}$); stems written downwards on the left side ($\underset{\downarrow}{\text{note}}$).

In writing out a single part, it is usual to point the stems towards the third line; the stem of a note on this line may point either up or down:—

This diagram shows a single treble staff with a sequence of notes. The stems are pointed towards the third line of the staff, demonstrating the rule for single-part writing.

EXERCISE 12.—Write a number of exercises in four parts, introducing short Sequences, and carefully observe the rules and suggestions given in the last few chapters.

CHAPTER VIII.

ACCENTS, RHYTHM, CADENCES, AND ELEMENTARY FORM.

47. Hitherto our exercises have been what may be termed formless—merely the joining together of certain Chords without any attempt to produce rhythmical or metrical effect.


48 In order, however, that future exercises may have some additional interest for the student, one or two simple forms will be explained, and suggestions made for future development.


Accents, Rhythm, and the various **Cadences** must be clearly understood before any satisfactory progress can be made in this direction.

49. **Musical Accents** may be classified under three heads, viz., *Natural* or *Grammatical*, *Rhythmical*, and *Rhetorical*. We have only to do with the first two at present.

50. **Natural or Grammatical Accent** is the regular periodic occurrence of accented and unaccented (strong and weak) sounds in bars or measures.

Simple Time measures are accented in the following manner :—

(a) DUPLE. 
Strong, weak.

(b) TRIPLE. 
Strong, weak, weak.

(c) QUADRUPLE. 
Strong, weak, medium, weak.

Rhythmical Accent is the grouping of measures into sections, phrases, and periods or sentences, by means of Cadences or Closes.

CADENCES, OR CLOSES.

51. **Cadences** (closes) are the *momentary pauses* in Rhythm, and in music correspond somewhat to *punctuation* in literature, indicating points of rest.

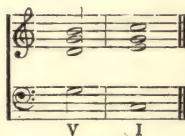
A Cadence or Close, consists of the combination of *two Chords*, the second of which usually occurs upon an *accented* beat of a measure, and is often, though not necessarily, of *longer duration* than the preceding Chord.

The chief Cadences, or Closes, are Concluding Cadences and Middle Cadences. Concluding Cadences are called **Perfect Cadences**, Middle Cadences are called **Half Cadences** and **Interrupted Cadences**.

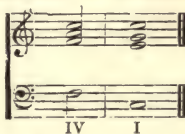
There are two Perfect Cadences, called the Authentic and the Plagal.

(a) The **Authentic Perfect Cadence** is formed by Root V, followed by Root I (Dominant-Tonic), and may be likened to a full stop.

When employed as a final Cadence, it is best for the Tonic Chord to be in its *first position*—the Octave of the Root in the Treble :—



(b) The **Plagal Perfect Cadence** is formed by Root IV followed by Root I (Subdominant-Tonic) and may also be compared to the full stop.

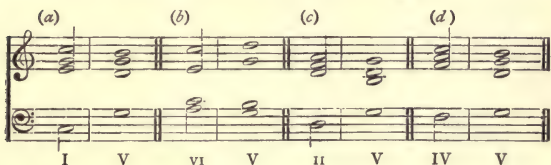


It is often employed as a confirmation of an immediately preceding Authentic Perfect Cadence, at the conclusion of a piece :—



(c) The **Half Cadences** are those ending on the Dominant or Subdominant Chord, which, while indicating a stop, leaves the mind still expecting something to follow. They may be likened to the semicolon.

The chief Half Cadences are the following :—



(d) The **Interrupted Cadences** are formed by Root V (Dominant) followed by *any possible Root other than the Tonic*—usually VI :—

The Interrupted Cadence may be compared to a semicolon, and sometimes to a comma.



The Perfect Cadences are the *only Final Cadences*, the Authentic V-I, being most frequently employed.

EXERCISE 13.—Write examples of the various Cadences in several keys.

52. **Cadence and Accent.**—The concluding Chord of an exercise, generally occurs upon the accented part of a measure, that is the first or strong beat. When a Middle Cadence is introduced *as a Cadence*, (that is, when it is intended to have the effect of punctuation), it is best to arrange the second Chord of the Cadence on an accented part

of the measure ; and it will be still more effective if it be made to occupy a longer division of time than the Chord preceding it.

In the following example, though the Chords constituting the various Cadences are introduced, the effect of Rhythm or punctuation is not produced, because the progressions do not follow the suggestions given in the last paragraph.

Ex. 68.

I VI IV II V VI II V III VI IV I

V I vi IV V I IV I

In the next example, which consists of exactly the same selection of Roots and melody, and in the same order, the effect of the various Cadences is illustrated, by the observance of Rhythm, and by giving to the various Cadences the *accentuation* recommended in par. 52.

Ex. 69.

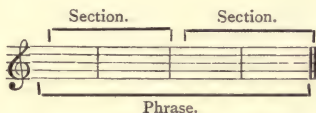
Interrupted.

Half or Imperfect. Perfect Authentic. Perfect Plagal.

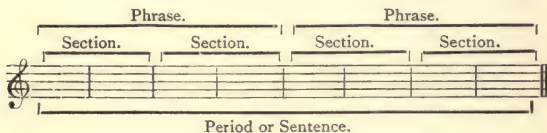
ELEMENTARY FORM.

53. A regular musical sentence may be constructed as follows :—

Four measures divided into two *Sections* form a *Phrase* :—



Two Phrases make a **Period** or **Sentence** of 8 measures :—



The concluding sound of each Phrase should occur on the accented part of the measure, and such sound should equal (or exceed) in duration the longest of the other notes in the Sentence.

Variety in the Rhythm is made by the introduction of notes of different values.

54. **Repetition of Chords.**—A Chord occurring on an accented part of a measure may be repeated on the unaccented part, in which case it is often best to give the repeated Chord a different position :—



When an exercise begins upon the weak or

unaccented beat, the same Chord may be repeated on the accent immediately following it:—

Ex. 71.  etc.

55. In the construction of Sentences, the first Phrase might end with a Half Cadence I-V., and the second Phrase (conclusion of Sentence) *must* end with the *Authentic* or the *Plagal*, as in the following example. The Sections may, or may not, have definite Middle Cadences.

The simple form here described is usually employed for hymn-tunes, songs, marches, dances, etc.

56. The following example, written in close position, will illustrate a musical Period or Sentence, constructed in this form:—

Ex. 72. 

In bar 6 is an example of the Half Cadence ending on the Subdominant.

EXERCISE 14.—(a) Write Sections of 2 bars, (b) Phrases of 4 bars, and (c) Sentences of 8 bars, in various Times and Keys, introducing the several Cadences.

57. The **Single Chant Form** will be found convenient and interesting. It consists of an irregular Period of seven bars, divided into two Phrases, the first Phrase having three measures, and the second four measures. A double bar separates the Phrases :—



The first and last measures of each Phrase should contain semibreves; and measures 2, 5 and 6 minims. A middle Cadence is used to end the first Phrase, and the Perfect Authentic or Plagal Cadence concludes the Chant.

Chords may be repeated for variety, when desired, according to the suggestions in (par. 54).

Example of a Single Chant :—

Ex. 73.

I VI IV V V VI IV II V I

EXERCISE 15.—Write for the four voices several Single Chants in various keys, introducing the different Cadences.



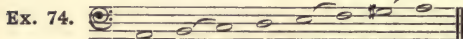
CHAPTER IX.

CHORDS FROM THE MINOR SCALES.

58. The two forms of the **Minor Scale** in general use are the **Harmonic** and the **Melodic**.

The **Harmonic** form has the semitones situated between the 2nd and 3rd, 5th and 6th, and 7th and 8th degrees, with an Augmented Second between the 6th and 7th, and is the same ascending and descending :—

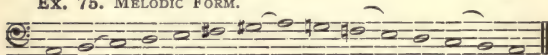
HARMONIC FORM.



This scale is supposed to form the basis of harmonies required for the Minor key. It has, however, the disadvantage of the awkward interval between the 6th and 7th degrees, above mentioned.

To obviate this difficulty, the **Melodic** form of the Minor Scale is also brought into requisition. It has the semitones situated between the 2nd and 3rd, and 7th and 8th ascending, while in descending the 7th and 6th are lowered :—

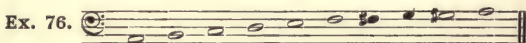
Ex. 75. MELODIC FORM.



(The descending portion of this scale resembles the Æolian Church mode.)

This scale, as its name implies, is chiefly employed for *Melodic* purposes, and is designed to obviate the awkward interval of the Augmented Second.

59. **Combining the two forms.**—In arranging a table for composing Basses, and, as will be subsequently shown, for harmonizing melodies, I have used both forms of the scale, for, if it be admissible to employ the raised Sixth and lowered Seventh in a Minor melody, it is absolutely necessary to indicate possible harmony for those notes; therefore, the following Scale, which includes all possible notes from the two forms of the Minor Scale, is adopted as the *Harmonic* as well as the *Melodic basis* on which the Minor Table is constructed:—



The black notes are from the *Melodic* form of the Scale.

6c. Owing to the number of notes contained in this Scale, it is possible to derive many more chords from it than from the Major Scale.

The following example contains every possible Common Chord (13 in all), which can be obtained from this combined form of the Minor Scales.

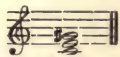


The Chords VI° and VII° are almost unworkable in their uninverted form, they are therefore omitted from the following table.

61. TABLE FOR COMPOSING BASSES—MINOR SCALE.

CHARACTER OF CHORD.	CHORDS ON DEGREES OF THE SCALES.	(may be followed by)	CHORDS ON DEGREES OF THE SCALES.
Minor.....	I	}	IV, IV, v, V, VI.
Diminished.	II°		v, V.
Minor.....	II		V, VII.
Major.....	III		I, III', IV, v, V, VI.
Augmented.	III'		I, V, VI.
Minor.....	IV		I, II°, III, V, VI, VII.
Major.....	IV		II.
Minor.....	v		I, II, III, V, VI.
Major.....	v		I, III', IV, VI.
Major.....	VI		I, II°, III, III', IV, VII.
Major.....	VII		II, III, III', IV, IV, v, VI.

The dash at the right side of III' indicates an Augmented Chord, *i.e.*, a chord containing a Major Third and an Augmented Fifth:—



In using this Chord it is generally best to arrange the Augmented interval in the upper part. When VI is followed by II° the bass must descend to II°.

62. In proceeding from V to VI, it will not be possible to double the Bass of Chord VI to form the fourth part; the Third (keynote) is always the best note to double in this case:—

Ex. 78.

V VI

63. **False Relation.**—A note which has appeared in one chord, if chromatically changed in the next, must be altered in the *same part*, thus:—

Ex. 79.

III III'

When such alteration does not take place in the *same part*, **False Relation** is said to occur. In the following example the G moves to C in the upper part:—

Ex. 80.

IV III'

To avoid the False Relation, the Chromatic alteration should take place in the same part, as in Ex. 79.

64. The following examples will illustrate the correct working of the Minor Table, the method of procedure being exactly the same as with the Major Table, fully explained in Chapter II.

Ex. 81.

Musical notation for Ex. 81, showing a sequence of chords in 4/4 time. The bass line includes a sharp symbol above a note and a '5+' symbol below a note.

I IV II° V III⁺ VI IV VII III VI IV V I IV I

A sharp written immediately above or below a Bass note indicates that the Third in that Chord is to be raised. A #5 or 5+ indicates that the Fifth in the Chord is to be raised.

Ex. 82.

Musical notation for Ex. 82, showing a sequence of chords in 4/4 time. The bass line includes a '5+' symbol above a note and a sharp symbol below a note.

I VI III V VI IV VII III VI IV V I

Ex. 83.

Musical notation for Ex. 83, showing a sequence of chords in 4/4 time. The bass line includes a sharp symbol above a note and a '5+' symbol below a note.

I IV V VI IV V III⁺ I IV V

Musical notation for Ex. 83, showing a second sequence of chords in 4/4 time. The bass line includes a sharp symbol above a note.

I VI III I — VI — III VI IV V I

* See Par. 62.

Ex. 84.

I IV I V II V IV I V -

I V VI III I IV II° V I

* The lowered seventh (derived from the descending Melodic Minor Scale) when it is the 3rd in the Minor Dominant chord, should descend when possible.

† In the last bar but one, the B in the upper part, instead of being retained in the same part falls to G \sharp ; if the B had been retained in the second of the two chords, the F in the second voice could not have proceeded to G \sharp , as the forbidden skip of an Augmented Second would have been introduced:—

EXERCISE 16.—Write several Basses from the table, according to the rules given in connection with the Major Table, Chapter II; then add upper parts to them, according to Chapter IV, and finally fill in the harmony as recommended in Chapter V, remembering the various suggestions as to Chord connections and progressions given in Pars. 62, 63, and 64.

65. **Crude Progressions.**—Some of the harmonies which may possibly be introduced into exercises constructed by means of this Table are rather harsh in effect. Practice, however, will enable the student to mitigate this harshness by employing, in a sparing manner, these progressions, which are not felt to be so acceptable to the ear.

These very harmonies, however, have their place in composition, and when employed with judgment

and skill, are among some of the finest effects produced by our best composers.

66. **Modulation.**—The effect of **modulation** (that is, passing into another key), is sometimes produced in examples constructed from the Minor Table. This is owing to the character of the Minor Scale, which is of a dual nature; for, in addition to its being a **Tonic Minor**, it is also the Relative Minor to the **Major key** situated upon its third degree.

67. The system of Harmony now being explained is not designed upon any method at present in vogue, I must therefore ask those who give it consideration, to judge by the practical results which can be obtained by the application of its teaching, and beg them not to condemn, simply because it does not follow a well beaten track.

I understand the knowledge of Harmony to imply, an acquaintance with *all possible harmonic combinations* and *how to use them with correctness and effect*. My aim in writing this book is to supply such information in a *direct* and *practical* way, without any reference to methods, developed on a plan of teaching how to play from a figured bass, or derived from a system of fundamental roots and a false application of the laws of acoustics, which laws are continually violated and altered to suit the requirements of such system.



CHAPTER X.

HARMONIZATION OF DIATONIC MELODIES.

68. In previous Chapters it has been explained how Bass parts may be constructed, on which to write simple Harmony Exercises, by means of certain tabulated progressions of degrees of the Scale. It will now be explained how to use these tables for the harmonization of Diatonic melodies with *uninverted chords*.

69. A note, when used in a melody, may be harmonized by *three possible chords*, viz.:—(a) the Chord of which it is the *lowest* note; (b) the Chord of which it is the *third* degree; and (c) the Chord of which it is the *fifth* degree.

For example, the note G (in the key of G), may be harmonized by the Chord of which it is the lowest note, viz., G; the Chord of which it is the Third, viz., E minor; or the Chord of which it is the Fifth, viz., C.

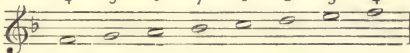
Ex. 85.

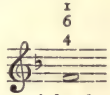
70. **Figuring the Melody.**—A melody note may be figured to denote these three chords with which it may be harmonized, thus in Ex. 85, the G, being common to the three chords I, vi, IV, may be harmonized by either of them, and figured above:—

The figures denote the scalar roots or degrees of the Scale, and refer to the Roman numerals in the Tables for composing Bases.

71. A scale as an upper part or melody, would be figured in the following manner :—

1	2	3	4	5	6	7	1
6	7	1	2	3	4	5	6
4	5	6	7	1	2	3	4

Ex. 86. 

The upper line of figures show the degrees of the Scale ; the second line indicates the roots situated a third below ; and the third line indicates the roots situated a fifth below, thus—  would mean that the note F, being the key-note, might be harmonized either by the chord of F, I, or the chord in which it is the Third, viz., D minor, VI, or the chord in which it is the Fifth, viz., B ♭, IV. Always place the figures in the following order, begin with the root at the top, then the chord situated a third below, and on the lower line add the figure which represents the chord situated a fifth below.

1	1	1
6	6	6
4	4	4

Ex. 87. 

I VI IV

Example 87 shows the note F in the melody, with the three possible harmonies indicated by the figures $\frac{1}{6}{4}$.

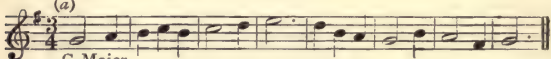
72. The following is an example of a short melody in F major, figured above to indicate the possible harmonies :—

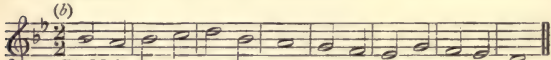
3	5	4	3	2	1	7	1	4	3
1	3	2	1	7	6	5	6	2	1
6	1	7	6	5	4	3	4	7	6

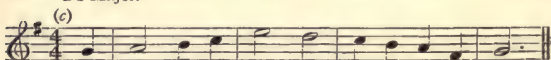
Ex. 88. 

It will be observed that the first note of the melody, A, may be harmonized by either of the following chords, III, I, or VI. The second note C, by V, III, or I, and the third note B ♭, by IV, II, or VII^o, &c., &c.

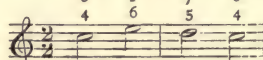
EXERCISE 17.—Add the figures, above each note of the following melodies, which shall show the three possible harmonies for each note :—


(a)

 G Major.

(b)

 B-flat Major.

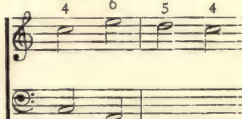
(c)

 G Major.

73. **Choice of Roots.**—By referring to the Tables, the student is always able to decide which of the three roots indicated by the figures placed above the Treble part, is satisfactory to use as a Bass. A short example in C major will make this clear :—

Ex. 89.  etc.

The passage being in C *major*, the Major table in Chapter II must be consulted. As previously explained, when possible, it is desirable to *begin* an exercise with the *Tonic Chord* I. It *is* possible in this instance, as the available chords are I, VI, IV. We therefore write  as the

first bass note. On consulting the Table, we find that Chord I may be followed by either IV, V, or VI. Unless we wish to repeat I for the second chord, which *is* possible, chord VI is the only available chord. We therefore harmonize the second note of the melody by Chord VI :—

Ex. 90.  etc.

I VI

Again referring to the Table, we find that Chord VI may be followed by II, III, IV, and V. Of these, two appear in the figures above the third note, viz., II and V. If V were selected, then Consecutive Fifths would result :—

Ex. 90 a.

VI V

so Chord II is selected :—

Ex. 91.

I	3	2	I
6	I	7	6
4	6	5	4

I VI II

etc.

The Table shows that Chord II may be followed by V, VI, VII°. Of these, only VI appears above the next note of melody, which completes the short example :—

Ex. 92.

I	3	2	I
6	I	7	6
4	6	5	4

I VI II VI

etc.

In Exs. 90 and 90 a, it was shown that Consecutive Fifths would result if Chord V had been selected instead of Chord II.

47. Detection of Faulty Consecutives.— It seldom happens that Consecutive Fifths and Octaves can be made in selecting the Bass notes from the Tables. However, it is always easy to discover, from the figures placed above a melody, and the numerals added below the Bass, whether these faults exist.

To illustrate this, the figures of the last example may be taken. They are :—

Top line	I,	3,	2,	I.
Middle line	6,	I,	7,	6.
Bottom line	4,	6,	5,	4.

To avoid Consecutive Octaves, do not select for the bass part, consecutive figures from the top line.

If the figures on the top line are duplicated by the numerals below the Bass, consecutively, then Consecutive Octaves would result. In the above case, such consecutive duplication is not possible, but, if it were, it would show :—

I, 3, 2, I.
I, III, II, I.

If the figures on the lower line are duplicated by the numerals below the Bass, consecutively, then Consecutive Fifths would result. In the example, such consecutive duplication was only possible between the 2nd and 3rd Chords, which had 6, 5 on the lower line of figures, and below the Bass the numerals VI, V. This duplication indicated that Consecutive Fifths existed :—

6, 5.
VI, V.

To avoid Consecutive Fifths, do not select for the bass part, consecutive figures from the bottom line.

75. Should it happen, however, that the selection of Chords is so limited as to leave no alternative but to introduce a Bass which must move in Octaves or Fifths with the melody, it can generally be so arranged that *another chord be introduced*, intervening between the two Bass notes, thus avoiding the objectionable progression. For example :—

I	4
6	2
4	7

I IV

These Octaves appear inevitable, as I must be followed by IV, there being no alternative.

The Octaves may be avoided, however, by introducing Chord VI, which may follow I, between the I and IV :—

I	4
6	2
4	7

I VI IV —

76. The following are examples of two simple Diatonic melodies harmonized by means of the Tables:—

Ex. 93. MAJOR TABLE.

3	2	1	7	6	6	5	3	4	4	6	6	7	1
1	7	6	5	4	4	3	1	2	2	4	4	5	6
6	5	4	3	2	2	1	6	7	7	2	2	3	4

I V VI III IV II V — I IV II VI II V I

Ex. 94. MINOR TABLE.

3	2	3	5	6	5	4	2	3	5	4	2	1
1	7	1	3	4	3	2	7	1	3	2	7	6
6	5	6	1	2	1	7	5	6	1	7	5	4

I V I V IV I IV V I I IV V I

Example 95 shows four possible ways of harmonizing the first bar of Ex. 87 by means of the Table, par. 10, Chap. II:—

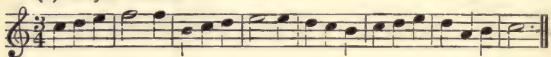
Ex. 95.

(a)	3 1 6	5 3 1	4 2 7	(b)	3 1 6	5 3 1	4 2 7
	I	V	II		VI	III	IV
(c)	3 1 6	5 3 1	4 2 7	(d)	3 1 6	5 3 1	4 2 7
	VI	V	II		III	I	IV

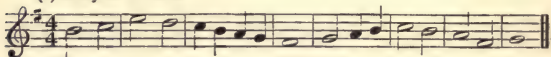
77. The figures above the Treble part, merely indicate the degrees of the Scale, upon which Chords exist which may be used in the harmonization of the melody. These figures do not attempt to show the character of the Chord, that must be determined by a study of the Tables.

EXERCISE 18.—In addition to those given in par. 72, the following melodies should now be figured and harmonized:—

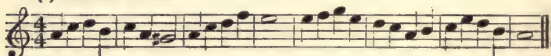
(a) MAJOR TABLE.



(b) MAJOR TABLE.

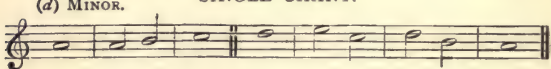


(c) MINOR TABLE.



(d) MINOR.

SINGLE CHANT.



(e) MINOR.

SINGLE CHANT.



CHAPTER XI.

SUSPENSIONS.

78. **Discords.**—Thus far we have only considered the various chords consisting of a Bass note with the addition of a Third and Fifth above, from the notes comprising a definite Major or Minor Scale. We are now, however, about to introduce our *first Discord*.

79. A *Discord* is a *dissonant interval*, introduced into a chord, causing the ear to experience an *unrestful feeling*. To satisfy the craving for rest, the dissonant note must be *resolved into a consonant chord*, usually by *falling one degree*.

The dissonant intervals are the 2nd, 4th, 7th and 9th.

80. **Preparation, Percussion and Resolution.**—A Discord of Suspension delays the appearance of one of the notes forming the Common Chord, which note must have been heard as a harmony in the previous Chord, this is called **Preparation**.

The sounding of the discord is called **Percussion**, and **Resolution** is effected by the dissonant note descending one degree to the note which it suspended.

Thus we see that to correctly introduce a Suspension, it is necessary to have **Preparation, Percussion and Resolution**.

81. The possible Discords of Suspension belonging to uninverted chords are the following:—9-8,

4-3, and 6-5, though this last is not, properly speaking, a Discord.

82. The Suspension 9-8.—This Suspension occurs when the Octave of the Bass is suspended by a Ninth on a *strong part* of the measure. The note forming the Ninth must have appeared on the same pitch in the previous chord. It resolves by falling one degree to the Octave.

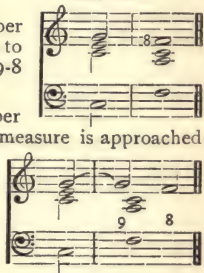
2-1 is not the same as 9-8, and is *not allowed*:—



Ex. 96.

Whenever the progression of an upper part moves one degree downwards to an Eighth, there a Suspension of the 9-8 may be introduced:—

Here we notice that in the upper voice part, the Octave in the second measure is approached from the note above, therefore a 9-8 suspension could be introduced, thus:—



This Suspension 9-8, may take place in either of the three upper parts:—

Ex. 97.

9-8 in the upper part. in second voice. in third voice.



An Example introducing several 9-8 Suspensions :—

Ex. 98.

Ex. 98. Musical notation showing two systems of chords with 9-8 suspensions. The first system shows chords I, V, I, IV, V with suspensions 9-8, 9-8, 9-8. The second system shows chords VII, VI, IV, V, I with suspensions 9-8, 9-8.

EXERCISE 19.—Write several exercises in various Major and Minor Keys, introducing as many 9-8 Suspensions as possible.

83. **The Suspension 4-3.**—This Suspension occurs when the Third from the Bass is suspended by a Fourth on a *strong part* of the measure. The note forming the Fourth must have appeared on the same pitch in the previous chord. It resolves by falling one degree to the Third.

Whenever the progression of an upper part moves one degree downwards to a Third, there a Suspension of a 4-3 may be introduced.

In the following example it will be noticed that in the upper voice part, the Third in the second bar is approached from the note above :—

Ex. 99.

Ex. 99. Musical notation showing a progression from chord I to chord V with a suspension of 4-3.

Therefore the Third may be suspended, producing the Suspension of the 4-3, thus :—

Ex. 100.

Ex. 100. Musical notation showing a progression from chord I to chord V with a suspension of 4-3.

This Suspension 4-3, may occur in either of the upper voice parts, thus :—

Ex. 101.

In the upper voice.

In the 2nd voice.

In the 3rd voice.

The musical notation for Ex. 101 consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The first measure shows a suspension in the upper voice (treble clef) where the note G4 is held from the previous measure while the bass line moves from C3 to D3. The second measure shows a suspension in the second voice (bass clef) where the note G3 is held while the upper voice moves from C4 to D4. The third measure shows a suspension in the third voice (bass clef) where the note G2 is held while the upper voice moves from C3 to D3. In all three cases, the suspension is labeled with '4' and '3' below the notes.

The following example introduces several 4-3 Suspensions :—

Ex. 102.

The musical notation for Ex. 102 consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The sequence of chords is: I (C major), V (G major), II (D minor), VI (F major), IV (D minor), V (G major), VI (F major), IV (D minor), and I (C major). Each chord is followed by a 4-3 suspension, indicated by '4' and '3' below the notes. The bass line moves stepwise downwards from C3 to C2, while the upper voice moves stepwise upwards from C4 to C5.

EXERCISE 20.—Write several exercises in various Major and Minor keys, introducing as many 4-3 Suspensions as possible.

84. Suspension of the 6-5.—This Suspension occurs when the Fifth of a chord is delayed or suspended by a Sixth on the *strong part* of a measure. The note forming the Sixth must have appeared on the same pitch in the previous chord. It resolves by falling one degree.

Whenever the progression of an upper part moves one degree downwards to a Fifth, there a Suspension of the 6-5 may be introduced.

In the following example it will be noticed that in the upper voice part the Fifth in the second measure is approached from the degree above :—

Ex. 103.



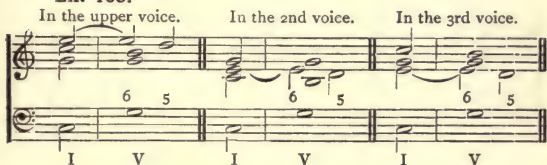
Therefore this Fifth may be suspended, producing the Suspension of the 6-5, thus :—

Ex. 104.



This Suspension 6-5, may occur in either of the upper voice parts, thus :—

Ex. 105.



The following example introduces several 6-5 Suspensions :—

Ex. 106.



EXERCISE 21.—Write several examples in various Major and Minor Keys, introducing as many 6-5 Suspensions as possible.

85. The foregoing examples of Suspensions of the 9-8, 4-3, and 6-5, have been written from the Major Table. The following example is therefore given from the **Minor Table**, introducing the three Suspensions :—

Ex. 107. (a) (b)

I 9 3 9 8 4 3 6 5
IV II° V — IV — I 4 v 3

(c) (d) (e)

9 8 5 5+ 6 5 9 8
4 3 III III' I — IV 4 V #3 I

At (a) a Suspension 9, is introduced, which does not resolve upon the 8, but upon the 3. Had the Bass remained D, the 9 would have resolved in a regular way to 8. It will be observed, however, that the Bass moves to a note which harmonizes with the resolution of the Discord, at (b), (c), and (e), are double suspensions.

86. **Irregular Resolution.**—A Discord of Suspension resolves by falling one degree, but the Bass *may move to another root simultaneously* with the Resolution of the Suspension, provided, of course, that the note of the Resolution exists in the new chord, and that no grammatical fault is made:—

Ex. 108.

I VI 9 5 9 3 4 3
II V I VI III

I 4 5 9 5 9 8 I

87. **Irregular Suspensions, or the Appoggiaturas.**—At (*d*) Ex. 107, a Suspension 6-5 is introduced *without the necessary Preparation*. Properly speaking, such a note is called an **Appoggiatura** (leaning note); but, as it may be classed with the Suspensions, it can be appropriately considered now.

When such a note as (*d*) in Ex. 107, is introduced in a downward Scale, such downward Scale may be considered *equivalent to Preparation*, and the Discord may be introduced *without having been sounded* (prepared) *in the previous harmony* :—

Ex. 109.

88. It is also possible to introduce another **Appoggiatura** resembling a Suspension, provided the dissonant note has appeared in the preceding chord, in one of the other parts, and that the passage ascends to the appoggiatura, and the dissonant note is introduced *on an accent* :—

Ex. 110.

V I

89. In writing Suspensions the following rules should be remembered :—

(a) The note *preparing* the *Suspension* must appear at the same pitch as the *Suspension*, excepting in the case of the *appoggiatura* (par. 88).

(b) *Percussion* should occur on a *strong part* of the measure.

(c) *Resolution* must take place upon the *unaccented* part of the measure, and in a *downward* direction.

(d) *Excepting in the Bass* (and then only in the 9-8), the note suspended *may not be sounded* in another voice-part *simultaneously* with the *Suspension* :—

Ex. 111. *Good.* Ex. 112. *Bad.* Ex. 113. *Bad.*

(e) *Consecutive Octaves* are *not obviated* by the *Suspension* of the second octave :—

Ex. 114.

90. A *Suspension* is frequently tied to the note which prepares it. This however is not absolutely necessary.

EXERCISE 22.—Introduce *Suspensions* in the various Exercises which have been written to illustrate Chapters V, VI, VII, VIII, and IX.

EXERCISE 23.—Write several Exercises in various Major and Minor Keys, introducing *Suspensions* of the 9-8, 4-3, 6-5.

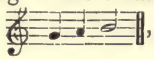

EXERCISE 24.—Write several Exercises in various Major and Minor Keys, introducing *Suspensions* with irregular resolutions (see par. 86).


EXERCISE 25.—Write several Exercises in various Major and Minor Keys, introducing *Irregular Suspensions* or *Appoggiaturas* (see par. 87, 88).

CHAPTER XII.

PASSING NOTES.

91. **Passing Notes** are notes which do not belong to the harmony, but pass from one harmony note to another, by—

(a) Diatonic steps, usually filling in the distance between the interval of a third , or even a fourth , or

(b) Chromatic step, filling in the semitone between the interval of a major second (usually ascending) 

92. Regular Passing notes occur on the unaccented part of the measure and may be in any of the parts.

93. If two or more parts move together as Passing notes in similar motion, it is best for these parts to proceed in thirds or sixths, or by contrary motion.

94. Great care must be taken in adding Passing notes that **Consecutive Octaves** or **Fifths** are not introduced.

The following example consists of a simple bass constructed from the Major Table, and harmonized in four parts:—

Ex. 115.



I IV II V III vi IV II V I

The same exercise into which a few Passing notes are introduced. (Passing notes in small type).

Ex. 116.

Ex. 116 shows two systems of musical notation, each consisting of a Treble and Bass staff. The first system has fingerings I, IV, II, V, III. The second system has fingerings VI, IV, II, V, I. Passing notes are indicated by smaller note heads.

The same exercise with many Passing notes introduced.

Ex. 117.

Ex. 117 shows two systems of musical notation, each consisting of a Treble and Bass staff. This version includes many passing notes, indicated by smaller note heads.

In bars 2 and 4 the Tenor might have doubled the third, in which case several additional Passing notes might have been introduced into that part.

95. When Passing notes are introduced with anything like frequency into an exercise, it is desirable to **keep up the movement**; for a measure without movement, in an example of this kind, has a very halting effect.

96. Another kind of Passing note is one which may be called a **Note of Embellishment**, it is introduced diatonically between two notes of the same name and pitch :—

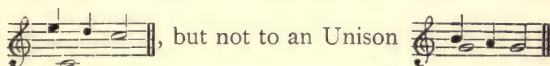


An example introducing various kinds of passing notes.

Ex. 118.



97. A Passing note may proceed to an Octave



The further consideration of Passing notes, will be deferred till a subsequent chapter.

EXERCISE 26.—Introduce into some of the early exercises in three and four parts, Passing notes to fill in every interval of a third.

EXERCISE 27.—Write new exercises introducing :—

(a) Diatonic Passing notes, filling in the interval of the third and the fourth.

(b) Chromatic Passing notes, filling in the interval of a major second with the intervening semitone, taking care that the altered note is not doubled in another voice part.

(c) Notes of Embellishment (see Par. 96).

(d) Passing notes in two or more parts simultaneously, either in similar or contrary motion.

In writing these exercises observe pars. 92, 93, and 94.

CHAPTER XIII.

INVERSIONS—CHORDS OF THE 6TH. (FIRST INVERSIONS).

98. Thus far we have employed Uninverted Triads or Common Chords only, the root of each has been used as the bass note;—**by Root is meant the scale interval upon which the identity of a chord depends**,—consequently our exercises have been somewhat heavy and stiff, chiefly owing to the disjunct movement of the bass part.

99. A number of Chapters have been devoted to the consideration of Uninverted Triads, and the student will have written many exercises, in order to acquire familiarity with this important part of the study of Harmony. The author is convinced, however, that the time thus spent has not been wasted, for a solid foundation will have been securely laid, upon which a satisfactory superstructure can be raised, which will more than repay the time thus expended.

100. In addition to the *root* of a chord being used as the bass, it is also possible to employ the **Third** or the **Fifth** of a Triad as the lowest part.

101. When the **Third** is used as the bass, in place of the root, the chord is said to be in the **First Inversion**, and is figured $\frac{6}{3}$ or 6, in conjunction with the Roman numeral.

Ex. 119.

The root C is a Sixth, and the G a Third above the Bass, hence the figuring of the chord $\overset{6}{3}$, usually 6 is sufficient.

102. **A First Inversion** is possible on each degree of the Major and Minor Scale.

Chords of the Sixth on each degree of the **Major** Scale:—

Ex. 120.

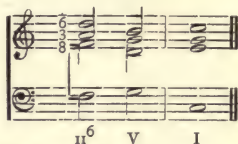
Chords of the Sixth on each degree of the **Minor** Scale:—

Ex. 121. (A minor).

103. When a **Major Chord** appears in its First Inversion, **do not double the bass note**, that is, the original Third of the Chord. The Bass of a

First Inversion of a Minor Chord may be doubled. It is *best* to double the Bass note of the First Inversion of the Supertonic Chord ii^6 in the Major Scale.

EX. 122.



EXERCISE 27.—Write a First Inversion (Chord of the Sixth), on each note of the Major Scales of F, G and D.

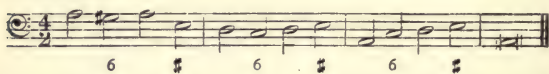
EXERCISE 28.—Write a First Inversion (Chord of the Sixth), on each note of the Minor Scales of E, B, D and G.

104. The following is the Bass to Ex. 94 (Par. 76), improved by the Insertion of Chords of the Sixth.

Original bass :—

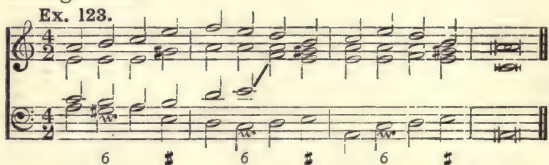


Improved version by the addition of First Inversions :—



Compare the effect of Ex. 94 with the following arrangement :—

EX. 123.



EXERCISE 29.—Write several Bases from the Major and Minor Tables, and improve their melodic flow by the insertion of First Inversions.

105. The following tabulated arrangement for using First Inversions, may be of assistance in writing Basses.

(a) An uninverted triad	may be followed by	its First Inversion.
(b) „ „ „	„ „	a Chord of the Sixth on any degree of the scale.
(c) A Chord of the Sixth	„ „	„ „ „ „
(d) „ „ „	„ „	an uninverted triad (its own included) on any degree of the scale, excepting Chord VII ^o which can only be introduced in sequence.

In (b) (c) (d) the special characteristics of the Minor scale must be taken into consideration, in order to avoid forbidden skips of Melody and False Relations.

106. When several Chords of the Sixth follow one another in succession, it is best to arrange the Sixth (original root) in the upper part. One of the inner voice parts must move in contrary motion, in order to avoid faulty consecutives:—

Ex. 124.

etc., or etc.

107. In **Contrary Conjunct Motion** it is allowable to double the Bass of a First Inversion of a Major Chord:—

Ex. 125.

etc.

When several Chords of the Sixth follow one another in Conjoint Movement, it is generally desirable to double the Bass of each alternate chord to avoid faulty consecutives.

108. Our Bases should now possess smoothness and **melodic** charm ; the choice of possible notes being so extended.

In progressing from one Chord of the Sixth to another, remember that wide skips are not good, even from an Uninverted Triad to a First Inversion it is best to keep small intervals.

109. **Never double the leading note**, and as a general rule, avoid doubling the Bass of a First Inversion of a Major Chord.

110. In Minor Chords of the Sixth, when there is a choice, the best note to write in the upper part is the root.

111. When no figures are placed under a Bass note, an Uninverted Triad $\frac{5}{3}$ is understood ; a First Inversion is always figured 6, or $\frac{6}{3}$.

112. When two chords appear on the same Bass note, and one of them is an Uninverted Triad, the figures $\frac{5}{3}$ must be added under the Triad :—

Ex. 126.

5
3
III

6
I

113. When possible, a note common to two chords is best retained in an inner part :—

Ex. 127.

6

114. First Inversions frequently appear immediately before or after their respective Uninverted Triads :—

Ex. 128.

etc.

I — — V — —

Detailed description: Example 128 shows a musical sequence in 3/2 time. The upper staff is in treble clef with a key signature of one flat (B-flat). The lower staff is in bass clef. The sequence consists of: a first inversion triad (F4, A4, C5), followed by an uninvolved triad (F4, A4, C5), then another first inversion triad (F4, A4, C5), and finally an uninvolved triad (F4, A4, C5). The notes are connected by stems and beams. Below the bass staff, the Roman numerals 'I' and 'V' are placed under the first and third chords respectively, with dashes under the second and fourth chords.

115. The following are examples of short Bases written from the Major Table, with the addition of some First Inversions :—

Ex. 129.

Detailed description: Example 129 is a single staff in bass clef, 2/4 time, with a key signature of one flat. The notes are: F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5. Each note has a '6' written below it, indicating a first inversion.

Ex. 130.

Detailed description: Example 130 is a single staff in bass clef, 2/4 time, with a key signature of one flat. The notes are: F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5. The notes are marked with '6' for first inversion, except for the 10th note (F4) which is marked with '4' and an asterisk, and the 11th note (A4) which is marked with '3'.

Detailed description: This block contains two more staves of musical notation for Example 130. The first staff continues the sequence from the previous block, with notes F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5. The notes are marked with '6' for first inversion, except for the 10th note (F4) marked with '4' and an asterisk, and the 11th note (A4) marked with '3'. The second staff continues the sequence with notes F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5, F4, A4, C5. The notes are marked with '6' for first inversion, except for the 10th note (F4) marked with '9' and an asterisk, and the 11th note (A4) marked with '8' and an asterisk.

* Suspensions or Passing notes.

EXERCISE 30.—Add the Harmony to Examples 129-130, writing the upper part first.

EXERCISE 31.—Write several Bases containing First Inversions, then harmonize them, adding the upper part first.



CHAPTER XIV.

CHORDS OF THE SIX-FOUR. (SECOND INVERSIONS).

116. When the fifth from a root is used to form the bass or lowest part of a chord, it is figured six-four, $\frac{6}{4}$, and the chord is said to be in its **Second Inversion**; the root being inverted from the under part to a fourth above, the original third is then a sixth above the bass note:—

Ex. 131.

The example shows two staves of music. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one flat (B-flat). The music consists of four measures. In each measure, the top staff shows a triad and the bottom staff shows a single note. The first measure shows a C major triad (C-E-G) in the top staff and a C note in the bottom staff. The second measure shows an E major triad (E-G-B) in the top staff and an E note in the bottom staff. The third measure shows a G major triad (G-B-D) in the top staff and a G note in the bottom staff. The fourth measure shows a B-flat major triad (B-flat-D-F) in the top staff and a B-flat note in the bottom staff. Above the top staff, the figures '6 4' are written above the first two measures, and '6 4' are written above the third and fourth measures. Below the top staff, the word 'or' is written between the second and third measures, and between the third and fourth measures. Below the bottom staff, the figures '6 4' are written above the first two measures, and '6 4' are written above the third and fourth measures. Below the bottom staff, the letters 'I' are written below the first two measures, and 'I' are written below the third and fourth measures. Below the bottom staff, the text 'Original Chord.' is written under the first measure, and 'Second Inversion.' is written under the second measure.

117. A Chord of the Six-four is possible upon every note of the scale, but, unlike the Chords of the sixth, they are employed in restricted positions and relations with other chords.

118. In four-part harmony, the **bass note is always doubled** to form the fourth part, and its octave is seldom placed in the top part.

119 Though it is *possible* to introduce with effect a second inversion upon every note of the major scale, it is desirable that the student should become familiar with those most frequently employed, and leave for future consideration the others which are but seldom used. The following example shows

the relative importance of the Six-four chords in the major scale:—

Ex. 132.

Frequent.		Sometimes.			Seldom.		Very exceptional.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	

6 4 I 6 4 IV 6 4 V 6 4 VI 6 4 III 6 4 II 6 4 VII°

(a) The Second Inversion of the Tonic Chord is employed most frequently of all the Six-fours, and often introduces the Authentic perfect Cadence:—

Ex. 133.

6 6 5
II I V I

When a Six-four is followed by an Uninverted Triad on the same Bass note, it is necessary to figure the Second Chord.

(b) and (c) The Second Inversion of the Subdominant and Dominant Triads are frequently met with.

(d) The Second Inversion of the Submediant Triad occurs sometimes in a Bass scale passage (A), or when preceded or followed (B) by its own Uninverted Triad or First Inversion:—

Ex. 134.

(A) (B) etc.

6 6 6 6 6 6
I VII° VI II VII° VI — —

(e) and (f) are very rarely used.

(g) The Second Inversion of Leading-note Triad is only met with when preceded and followed by its own First Inversion or Uninverted Triad.

120. Four Rules for introducing Six-fours.

—The following four rules, if thoroughly understood, will assist the student in introducing Second Inversions into future exercises:—

Rule I.—When preceded and followed by an Uninverted Triad, a Six-four may occur on the same Bass note at the unaccented part of the measure:—

Ex. 135.

5 6 5 6 5 6 6
3 4 3 — 3 4 —
I IV I — V I V —

5 6 5 6
3 4 3 —
III VI III I II V I

When $\frac{6}{4}$ is followed by $\frac{5}{3}$ on the same bass, it is generally best for the 6 to fall to 5, and the 4 to fall to 3.

Rule II.—A Six-four may be approached or quitted by its own Uninverted Triad or First Inversion:—

Ex. 136.

6 6 6 6 6 6 5
4 4 — — — — 4 3
I — — — IV — — — I

etc.

Rule III.—A Six-four may occur in a Bass Scale passage, and may be preceded or followed by a $\frac{5}{3}$, or 6, situated on a diatonic step, either higher or lower. See first two bars of Ex. 139.

Rule IV.—The Second Inversion of the Tonic Triad, when at the strong accent of a measure, may be approached by a skip from the Supertonic Chord in its root position, in fact, in this position the Second Inversion of the Tonic Chord is almost independent; it can be approached or quitted by a leap from or to any chord of the scale in its root position (See Example 141).

Ex. 137.

	6	5
	4	3
II	I	V

The Dominant may also leap to the Second Inversion of the Subdominant in the same manner:—

Ex. 138.

	6	5
	4	3
V	IV	I

Chords of this character resemble Irregular Suspensions mentioned in par. 88.

An example introducing all the Second Inversions

with the exception of that derived from the Leading Note Triad :—

Ex. 139

6 6 6 6— 6 6 6 6 6
 4 4 4— 4 4 4 4 6 4 6
 I V I IV I vi I I V I vi vii° IV V V

6 6 6 6 6 6 6 6 5
 4 4 4 4 4 4 4 4 3
 VI III VI IV II VI vii° I I V II V IV I

* Passing notes.

121. When the Second Inversion of the Tonic Chord is introduced upon an accent as a preliminary chord to a perfect cadence, and is *intended* to progress into the triad on the same bass, it is not necessary for it to proceed immediately to the $\frac{5}{3}$; other chords may intervene, but the progression to the $\frac{5}{3}$ should ultimately take place :—

Ex. 140.

6 5
 4 3
 II I VI II V I

Ex. 141.

6 5
4 3
II I III VI V I

122. It is not recommended that two Six-fours follow one another, but if they should occur on successive degrees of the scale, care must be taken to avoid consecutive fourths with the bass:—

Ex. 142.

6 6 6 6 6 6 6 6 5 6 5
I IV I V I V I — II — I V I V I

123 The following example shows the relative importance of all the Six-four chords in the Minor scales:—

Ex. 143.

Frequent. Sometimes.

Seldom.

6 6 6 6 #6 6 6 6 6
4 4 4 4 4 4 4 4 4
I IV V VI III' v VII III II°

Very exceptional.

6 6 6 6
4 4 4 4
VI° IV VI° II

The four Rules given in par. 120 apply also to the Second Inversions derived from the Minor.

EXERCISE 31.—Write Second Inversions of the Tonic, Subdominant, and Dominant Triads in the Major and Minor Keys of C, G, F, D, B \flat and A.

EXERCISE 32.—Write Six-fours, following and preceding Five-threes, on the Tonic, Dominant, and Mediant of the Major keys mentioned in the previous exercise (Rule I, par. 120).

EXERCISE 33.—Write several Examples of Second Inversions following and preceding their own Uninverted Triads, also their First Inversions, Major and Minor (Rule II par. 120).

124. **To introduce First and Second Inversions.**—The following Examples, which should be carefully studied, will show how a Crude Bass constructed haphazard from the Minor Table (par. 61), can be developed and made interesting by means of Inversions, Suspensions, and Passing notes.

Bass from Minor Table (par 61), showing root positions of chords:—

Ex. 144.

No. 145, harmonized :—

Ex. 146.

6 6 5 6 6 — 5 -6 5 6 5 #6 6 6
4 # 4 3 3 -4 3 4 3 4

6 #6 6 6 #5 6 6 5 5 6 5 —
4 # 4 3 4 # 4 # 3 4 3 —

No. 147 shows the above example with same Passing notes and a few Suspensions added :—

Ex. 147.

EXERCISE 34. — Write several Examples from the Major and Minor Tables in root positions, then improve them by the addition of Inversions ; harmonize these, and then make these more interesting by adding Suspensions and Passing Notes

CHAPTER XV.

INVERSIONS OF SUSPENSIONS,
DEFERRED RESOLUTIONS AND RETARDATIONS.

125. The two previous chapters dealt with the Inversions of Triads or Common Chords. As explained in Chapter XI a Suspension is merely one of the notes of a Triad delayed, therefore Inversions will change the character of the Suspensions just as they change the character of Triads or Common Chords.

126. The Uninverted Suspensions are 9-8, 6-5, and 4-3. These figures are necessarily altered when the Triads, into which they are introduced, are inverted, as the figures merely indicate the distance from the bass of certain upper notes.

In figuring a bass always place the highest figure at the top, the next in value below it, and so on.

127. **The Inversions of Suspension 9-8.**—When a Triad is in its first inversion (chord of the sixth), the original octave of the root becomes the sixth, therefore, what was 9-8, *i.e.*, the octave of the root delayed (*a*), is now 7-6 from the third, which is the bass note of a first inversion, (*b*).

When the Triad is in its second inversion (chord of the six-four), the bass note is the original fifth, and the root becomes the fourth above, so what was 9-8 is now 5-4, (*c*).

It is also possible to suspend the root in the bass, in which case it would be figured $\frac{4}{2}$, (*d*).

The following example shows the Suspension 9-8, and its inversions :—

Ex. 148. 1st Inversion. 2nd Inversion.

(a) (b) (c) (d)

6 9 8 7 6 6 6 — 6 4 —

V I V I II I VII^o I

Lines after figures show the retention of the interval indicated by the figure.

Excepting as a bass, the suspended note should not be sounded in any other part, (a).

128. **Inversion of Suspension 6-5.**—There is practically only one inversion of the suspended fifth, viz., when the Triad is in its first inversion (chord of the sixth). The original Fifth becomes the Third, and what was 6-5 (a), becomes 4-3 (b).

The following example shows the Suspension 6-5, and its inversion 4-3 :—

Ex. 149. First Inversion.

(a) (b)

6 5 6 —

IV I II I

129. **Inversions of Suspension 4-3.**—When a 4-3 suspension is introduced into a Triad the Third is delayed ; when a first inversion of this chord takes place, the original third becomes the new bass, consequently if this be delayed, the

Suspension will be in the bass, and must be figured $\frac{5}{2} - (b)$.

The Second Inversion is figured $\frac{7}{4} \frac{6}{-} (c)$.

The following example shows the Suspension 4-3, and its inversions :—

Ex. 150.

Root Position.	First Inversion.	Second Inversion.
(a)	(b)	(c)
IV	I	IV
		etc.
4 3	5 -	7 6 5 6
	2 -	4 - 3
		IV I V I

130. This chapter should be re-studied in conjunction with Chapter XI. The rules there given in par. 89 hold good when Suspensions are introduced into the inversions of chords.

EXERCISE 38.—Write a few short examples introducing the suspension 4-3, and its inversions, $\frac{5}{2} -$, and $\frac{7}{4} \frac{6}{-}$.

EXERCISE 39.—Write a few short examples introducing the suspension 9-8, and its inversions, 7-6, $\frac{6}{5} \frac{6}{4}$, $\frac{4}{2} -$.

EXERCISE 40.—Write a few short examples introducing the several suspensions and their inversions in major and minor keys.

131. **Deferred Resolutions of Suspensions and Retardations.**—Instead of resolving a Suspension immediately to the note suspended, it is possible to interpose a note of the resolving chord taken by step or leap, or two or more notes of shorter value, between the Suspension and its resolution. The following example will sufficiently illustrate this :—

Ex. 151.

(a) (b) (c) (d)

6 9 5 8 6 9 10 8 6 9 10 9 8 6 9 8 7 8
 I IV V I V I V I

At (a) the fifth of resolving chord is interposed between the suspension and resolution ; at (b) the third of resolving chord is interposed ; at (c) the tenth and ninth are interposed as quavers ; at (d) the eighth and seventh are interposed as quavers.

132. **Retardations.**—A Retardation is virtually a Suspension resolving upwards, in other words, one of the notes of a Triad is resolved by rising one degree. Retardations are not so usual as Suspensions, and most frequently occur in the upper part on the step of a minor second. The following are among those most generally used :—

Root Position (sequence).

Ex. 152.

7 8 7 8 7 8

First Inversion (sequence).

Ex. 153.

5 6 5 6 5 6

It will be observed in the last example, that where the Octave is retarded in the upper part, the retarded note may be sounded in one of the under parts at the distance of a seventh. In other retardations, it is not advisable to allow the retarded note to appear, except in the bass.

133. A Retardation and Suspension may be used together :—

Ex. 154.

Ex. 155.

EXERCISE 41.—Write several exercises introducing some deferred Resolutions, Retardations, and Retardations and Suspensions sounded together.




CHAPTER XVI.


CHORDS OF THE SEVENTH IN THE MAJOR,
ROOT POSITION.

134. It has been shown, that a Triad or Common Chord, is formed by adding, above any degree of the scale, a Third and Fifth.

A Chord of the Seventh is formed by adding an additional diatonic Third above a Triad, the newly added interval being a Seventh above the Root

and designated by the figure 7, thus  is

the Tonic Triad in the key of C major, and

 is the Chord of the Tonic Seventh.

A Chord of the Seventh thus formed is a discord, and consequently a dependent chord, that is to say it may not be used except in conjunction with some other chord, this additional chord being necessary to resolve the dissonance.

In many cases the dissonance must also be prepared like the discords of Suspension (Chap. XI), *i.e.*, preceding the Chord of the Seventh by a chord which shall contain the dissonant note and thus prepare it.

135. The following are all the Diatonic Chords of the Seventh to be found in a Major scale.

Ex. 156.

(a) (b) (c) (d) (e) (f) (g)

I II III IV V VI VII

If these chords be analysed it will be found that:—

$\overset{7}{I}$ and $\overset{7}{IV}$ (a) and (d), are Major Triads with Major Sevenths.

$\overset{7}{V}$ (e), is a Major Triad with Minor Seventh.

$\overset{7}{II}$, $\overset{7}{III}$ and $\overset{7}{VI}$ (b), (c) and (f), are Minor Triads with Minor Sevenths.

$\overset{7}{VII}^\circ$ (g), is a Diminished Triad with Minor Seventh.

Many of these Chords are considered by some theorists to be the Upper Notes of Fundamental Discords derived from either the Tonic, Super Tonic or Dominant Roots, thus:—

The Super Tonic Seventh in the Key of C is said

to be the 5th, 7th, 9th, and 11th, derived from a Dominant

Root being a Chord of the Eleventh with the

Root and Third omitted.

EXERCISE 42.—Write a Chord of the Seventh on each degree of the Major Scales of D, E \flat , E, F and G, stating the character of each Chord.



CHAPTER XVII.

CHORD OF THE DOMINANT SEVENTH.

136. By far the most important and most frequently used of the Chords of the Seventh is $\overset{7}{V}$, called the Chord of the Dominant Seventh, being a Triad on the Fifth Degree of the Scale with a Minor Seventh : this Chord requires no preparation, only resolution.

Chord $\overset{7}{VII}^\circ$ may also appear without any preparation. The seventh of the other chords is best prepared as well as resolved.

137. The Dominant Seventh consists of a Major Third, Perfect Fifth and Minor Seventh, and may be the same in Major and Minor Keys ; it is figured $\overset{7}{5}, \overset{7}{3}$ or 7, which is generally sufficient ; in the *Minor*, however, as a rule the necessary chromatic alteration must be made in order to raise the third, the leading note of the scale, $\overset{7}{\flat}$ or $\overset{7}{\sharp}$:—

Ex. 157.

The musical notation shows two staves. The top staff is in treble clef and the bottom staff is in bass clef. Both staves show a sequence of seven dominant seventh chords. The first four chords are in C major (C major, F major, C minor, F minor), and the last three are in C minor (C minor, F minor, C minor). Each chord is represented by a vertical bar with a '7' above it and a letter below it. The letters are C, c, F, f, E, e, and V. The 'V' is used for the final chord in both staves.

$\overset{7}{C}$ $\overset{7}{V}$ $\overset{7}{c}$ $\overset{7}{V}$ $\overset{7}{F}$ $\overset{7}{V}$ $\overset{7}{f}$ $\overset{7}{V}$ $\overset{7}{E}$ $\overset{7}{V}$ $\overset{7}{e}$ $\overset{7}{V}$

138. Although the Chord of the Dominant Seventh can be introduced with great freedom, not

needing a preparatory chord, care should be taken that the dissonant note be approached in a natural and effective manner.

The Seventh may enter—

(a) Freely in a descending scale passage :—

Ex. 158.

In an ascending scale passage the effect is not always good.

(b) Like a Discord of Suspension, *i.e.*, prepared by a note in the previous chord :—

Ex. 159.

(c) By skip upwards :—

Ex. 160.

(d) By skip, not greater than a third, downwards :—

Ex. 161.

139. **Resolution.**—The most natural resolution is to the Tonic Chord.

The **Bass** moves a fourth upwards or a fifth downwards :—

Ex. 162.

The **Third** as a rule rises a semitone when the **Root** descends :—

Ex. 163.

It is permissible, however, for the leading note to descend a Third in the Tenor or Alto when the **Bass** ascends :—

Ex. 164.

The **Fifth** may fall or rise one degree :—

Ex. 165.

The **Seventh** descends a semitone in Major or a whole tone in Minor :—

Ex. 166.

140. The Fifth of an *uninverted* Chord of the Seventh may be omitted, and the Root doubled instead to form the fourth part.

As a general rule it is found difficult to include a Fifth both in the Dominant Seventh Chord, and in the Tonic Chord to which it progresses, thus, in Ex 167, and in par. 139, in each case the chord of the Dominant Seventh is complete, but, except in Example 164, and (c) 167, where the leading note falls, there is no Fifth in any of the Tonic Chords.

Ex. 167.

(a) (b) (c)

7 I 7 7

(a) The Dominant Seventh Chord is complete—no fifth appears in the Tonic Chord.

(b) The Dominant Seventh Chord has its root doubled, and fifth omitted, the Tonic Chord is complete.

(c) Both Chords are complete, through the leading note falling.

141. The Dominant Seventh is generally introduced into the Authentic Perfect Cadence, in which case the Fifth is frequently omitted in order that the concluding Tonic Chord may be complete.

142. The figuring of the Dominant Seventh Chord is $\frac{7}{5}, \frac{7}{3}$, or $\frac{7}{4}$, or simply 7; however, when the Dominant Triad has appeared, and the Seventh is introduced afterwards, or when some other chord occurs on the same Bass note, the interval or chord preceding the Seventh must also be figured:—

Ex. 168. &c.

8 7 5 7 3 7 6 7 4 5 3

EXERCISE 43.—Harmonize the following figured bass.

The figure 3 over the first bass note shows the interval of the chord with which to commence the treble part : a few passing notes and suspensions are introduced :—

8 7 6 8 7 7 4 3 2 6 4 3 7 3 2 9

Roots. I V I IV — V I — V

1 2 8 7 6 6 6 5 7 3 2 11 V I 11 I V I

I vi ii V I ii I V I

(2 s equivalent to 9, as 3 is to 10).

EXERCISE 44.—Write several basses from the Major and Minor Tables, introducing Dominant Sevenths when V is followed by I.

143. **Resolution to Submediant harmony, Major and Minor.**—The natural resolution of the Dominant Seventh is to the Tonic; it is possible, however, to resolve it to the chord on the Sixth Degree of the Major or Minor Scale, making a deceptive cadence, with but slight modifications of the rules governing the natural resolution to the Tonic.

In this resolution the Bass rises a whole tone in the Major and a semitone in Minor, the other parts proceeding in the same manner as if resolving to the Tonic.

CHAPTER XVIII.

INVERSIONS OF DOMINANT SEVENTH CHORD
AND RESOLUTIONS TO TONIC AND
SUBMEDIANT HARMONY.

146. The Dominant Seventh Chord is inverted in the same manner as a Triad, viz., some other note than the root of the chord is used as the Bass or lowest part.

The Chord, having four notes, has three inversions; in the inversions **no interval of the Chord should be omitted.**

147. The **First Inversion**, having the original third (*leading note*) as the Bass, is figured $\begin{smallmatrix} 6 \\ 5 \\ 3 \end{smallmatrix}$ or $\begin{smallmatrix} 6 \\ 5 \\ 3 \end{smallmatrix}$. The original root now becomes the sixth from the Bass: the Chord is resolved to the Tonic exactly as when uninverted.

Resolutions of the Dominant $\begin{smallmatrix} 6 \\ 5 \end{smallmatrix}$ to Tonic :—

The Bass (original Third) rises :—

Ex. 170.



The Fifth (original Seventh) falls :—

Ex. 171.

The Third (original Fifth) is free :—

Ex. 172.

The Sixth (original Root) remains to form the Fifth of the following Tonic Chord :—

Ex. 173.

EXERCISE 45.—Harmonize the following Bass :—

EXERCISE 46.—Write several basses from the Major and Minor tables, introducing some First Inversions of the Chord of the Dominant Seventh.

148. **The Second Inversion**, having the original Fifth as the Bass, is figured $\begin{matrix} 6 & 4 & \sharp 6 & \sharp 6 \\ 4, & 3, & 4, & \text{or } 4, \\ 3 & & 3 & 3 \end{matrix}$ the bass is free to move upwards or downwards one degree, the resolution of the Chord is practically the same

as in the fundamental position and first inversion, **except** in the following case:—

When the Bass of a Chord of the $\frac{4}{3}$ rises, the third (original Seventh) may rise also, by this means it is possible to avoid doubling the Bass of a Chord of the Sixth:—

Ex. 174.

At (b) it will be observed that hidden consecutive fifths are introduced, Though the second fifth is perfect, this progression is allowable, one of the fifths being diminished.

When there is no possible way of altering for the better what might be considered a fault, it is the best that can be done, and consequently **allowable**.

No passage of harmony is **wrong** that cannot be improved. Whatever in music sounds well to a trained ear is **good**, but if such can be improved, then the passage is not absolutely correct.

Resolutions of the $\frac{6}{4}$ or $\frac{4}{3}$:—

Ex. 175.

$\frac{4}{3}$ $\frac{4}{3}$ 6 $\frac{6}{4}$ $\frac{6}{4}$ 6
 3 3 4 4 6
 C V I V I c V I V I

149. **The Third Inversion**, having the original Seventh as the Bass, is figured $\begin{matrix} 6 & 6 \\ 4, & \sharp 4, & \sharp 4, & 4 \\ 2 & 2 & 2 & 2 \end{matrix}$ or 2.

The Bass always falls one degree, a semitone in the Major, and a tone in the Minor: the **resolution** of the Chord is practically the same as in the fundamental position, and first inversion, though the Sixth (original Fifth), in addition to being able to move one degree downwards (*a*) or upwards (*b*) may, should occasion require, ascend a fourth (*c*) or descend a fifth (*d*).

Resolutions of the $\begin{matrix} 6 \\ 4 & \text{or} & 4 \\ 2 \end{matrix}$:—

Ex. 176.

(a) (b) (c) (d) (a) (b) (c) (d)

$\begin{matrix} 4 & 6 & 4 & 6 & 4 & 6 & 4 & 6 & \sharp 4 & 6 & \sharp 4 & 6 & \sharp 4 & 6 & \sharp 4 & 6 \\ 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 \end{matrix}$

C V I V I V I V I C V I V I V I V I

150. The Root of a Chord of the Seventh can easily be found from the figuring, it being the

lowest even number in each inversion, $\begin{matrix} 6 & 6 & 6 \\ 5, & 4, & 4 \\ 3 & 3 & 2 \end{matrix}$

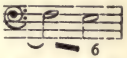
151. Like the Triads or Common Chords, the Chord of the Dominant Seventh and its inversions are interchangeable one with another; the last requiring to be resolved in the usual way :—

Ex. 177.

(a)

$\begin{matrix} 7 & 6 & 4 & 4 & 6 & 4 & 7 \\ 5 & 5 & 3 & 2 & 3 & 5 & 3 \end{matrix}$

The above example in addition to illustrating par. 151 shows that a Seventh may serve as a note of preparation for a Suspension (*a*). Another way is also indicated of figuring

$\frac{5}{2}$, the first inversion of a 4-3 Suspension, viz., 

the oblique dash — indicating that the figure 6, to which it points, is the real harmony.

SUSPENSIONS INTRODUCED INTO THE DOMINANT SEVENTH CHORD.

152. The Suspensions of the 9-8 and 4-3 with their inversions when introduced into the Chord of the Dominant Seventh will require the addition of a figure to represent the Seventh.

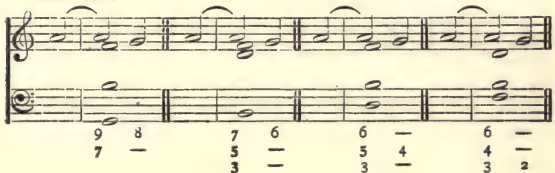
Suspension 4-3 in Dominant Seventh :—

Ex. 178.



Suspension 9-8 in $\frac{7}{V}$:—

Ex. 179.



Suspension 6-5 in $\frac{7}{V}$:—

Ex. 180.

RESOLUTIONS FROM INVERSIONS OF $\frac{7}{V}$ TO SUBMEDIANT HARMONY.

153. In par. 144 it was stated that from the inversions of the Dominant Seventh Chord, the resolution to Submediant harmony should be avoided, though some positions were possible.

Example 181 will show these possible positions, though they are not recommended, excepting for special effects :—

Ex. 181.

EXERCISE 47.—Harmonize the following Bass :—

EXERCISE 48.—Select a series of Roots from the Major or Minor table, arrange them in a simple Form (Chap. VIII), improve the progression of the Bass part by the addition of Inversions of Triads and Dominant Sevenths, a few Passing Notes, and Suspensions, then add the harmony.

Many such exercises should be written after the model of Exercise 37.



CHAPTER XIX.

OTHER DIATONIC CHORDS OF THE SEVENTH
IN THE MAJOR.

154. At the commencement of Chapter XVI it was shown that a Chord of the Seventh was possible on each degree of the Scale, and that $\frac{7}{V}$, the Chord of the Dominant Seventh, was the most important of these Chords. The Chords of the Seventh on the other degrees of the scale are frequently called **Secondary Sevenths** to distinguish them from the Primary or Dominant Seventh Chord.

155. The Seventh in the Chord $\frac{7}{V}$ (Dominant Seventh) and $\frac{7}{VII^\circ}$ (Leading note Seventh) may be introduced freely without any preparation, other than that necessary to introduce it in a natural and effective manner (par. 138).

On the other degrees of the Scale, however, the Sevenths must be introduced in a much more restricted manner.

156. It is best to **Prepare a Seventh** in the same manner as a Suspension is prepared, *i.e.*, the dissonant note to be sounded in the previous chord by the same voice at the same pitch (par. 80).

This restriction must be rigorously enforced with regard to $\frac{7}{I}$ and $\frac{7}{IV}$, which consist of Major Chords with Major Sevenths:—

Ex. 185.

7
III

Ex. 186.

6 7 9 8
5 7 4 3
III VI II V I

158. **The Chord of the Supertonic Seventh,** $\frac{7}{II}$, is by far the most used and most useful of these Secondary Seventh Chords, being frequently employed to precede the Authentic Perfect Cadence, or the Tonic $\frac{6}{4}$ which leads directly to the Cadence.

In its First Inversion $\frac{6}{5}$, it is known as the **Chord of the Added Sixth**, that is a sixth added to the Subdominant Chord.

It may be freely used in the Major or Minor, and even in a Major key the Minor form of the $\frac{7}{II}$ is very effective:—

Ex. 187.

6 6 7
5 4

The Sixth Degree from the Harmonic Minor Scale is frequently introduced with good effect into passages written in the Major.

159. As with the Chord of the Dominant Seventh, the most natural **Resolution** of all Chords of the Seventh is to the harmony situated a **Fourth** above or a **Fifth** below; in which case—

The Root (when uninverted) ascends a fourth or descends a fifth, (*b*) when it is inverted it remains stationary (*c*):—

Ex. 188.

7 II V 7 II V 6 5 7 II V 7 III VI III VI 6 5 7 III VI

The Third ascends a second (*a*) or descends a third (*b*) whichever is most desirable, or it may remain stationary (*c*) to become a Seventh in the following Chord:—

7 VI II 7 VI II 7 VI 4 3 II

The Fifth generally descends a diatonic step, in the case of 7_{VII}° it *must* descend to avoid Consecutive Fifths:—

7 VII^o

The Seventh falls one degree (*a*), though in the case of 7_{II} it remains stationary when the following Chord is the Tonic (*b*), or may rise one degree

when followed by the Dominant Chord when the Fifth of the Dominant rises to the Leading Note (*c*):—

Ex. 191.

(a) (b) or (b) (c)

III VI II II I V

160. The **Chord of the Leading-Note Seventh** $\overset{7}{\text{VII}^\circ}$ has also an additional resolution other than that into the Mediant Chord.

The Seventh may enter as freely as the Dominant Seventh and resolve into the Tonic Chord $\overset{7}{\text{VII}^\circ}\text{-I}$ (Ex. 190) in the same manner as the Dominant Seventh was allowed to progress into the Sub-mediante, $\overset{7}{\text{V}}\text{-VI}$ (par. 143).

When Chords of the Ninth are considered it will be seen that this Chord is the upper part of a Dominant Ninth, and may be treated as such with the root omitted.

When resolving into the Tonic Chord—

The Bass rises a semitone.

The Third *must* rise when it is below the Seventh to avoid Consecutive Fifths; when it is above the Seventh, it may either rise or fall one degree.

The Fifth *must* fall one degree.

The Seventh *must* fall one degree.

161. As a general rule it will be found safer to prepare the Sevenths in all the Secondary Chords in the same manner as the preparation of a Suspension is effected (par. 80).

162. A Seventh or any other interval of a Chord of the Seventh may be employed as a note to prepare a dissonance, in which case its natural resolution is delayed or dispensed with:—

Ex. 192.

$\begin{matrix} 7 & 7 & 7 & 8 & 7 \\ V & I & IV & V & 5 \end{matrix}$

(a) The leading note, which, as a rule should rise, prepares the 7th; its resolution is therefore dispensed with. At (b) the 7th, E prepares the suspension 6-5, its resolution is therefore delayed.

163. The Inversions of the Secondary Sevenths are figured in the same way as the Inversions of the Dominant Seventh, viz., (7) , $\frac{6}{5}$, $\frac{4}{3}$, and $\frac{4}{2}$.

EXERCISE 49.—Construct a table showing all the possible resolutions so far explained, of each Secondary Chord of the Seventh in the Major, thus $\frac{7}{II}-IV$, $\frac{7}{II}-V$, $\frac{7}{III}-VI$, etc.

EXERCISE 50.—Write several exercises from the Major table introducing Dominant and Secondary Sevenths in their Root Position and Inversions, add a few Suspensions, Passing Notes, and harmonize them in four parts in the manner of the following example:—

An example worked out to illustrate the construction of an exercise with various Sevenths, Suspensions, and Passing Notes, &c., on a crude selection of Roots taken from the Major Table (par. 10):—

Ex. 193.
Roots.

I VI III IV II V III VI IV II V I IV I IV II V I

The above arranged into a musical sentence by means of Cadences, &c., according to the rules given in Chapter VIII :—

Ex. 194.



The same Bass with the addition of a few Passing Notes and Inversions to improve the melodic flow according to the rules given in Chapters XII, XIII, and XIV :—

Ex. 195.



The example worked out in four parts :—

Ex. 196.



CHAPTER XX.

SIXTEEN CHORDS OF THE SEVENTH IN THE MINOR,
AND TWO MIXED CHORDS.

163. By adding a seventh above each triad to be found in the combined form of the minor scale (par. 59), we obtain the following sixteen chords of the 7th :—

Ex. 197.

The musical notation for Ex. 197 consists of two systems of two staves each. The first system contains chords 1 through 8, and the second system contains chords 9 through 16. Each chord is represented by a pair of notes on the treble and bass staves. Below the staves, Roman numerals and symbols are provided for each chord:

- 1: I
- 2: I
- 3: II^o
- 4: II
- 5: III
- 6: III'
- 7: VI
- 8: VI
- 9: v
- 10: ♯
- 11: VI
- 12: VI^o
- 13: VII
- 14: VII
- 15: VII^o
- 16: VII^o

No. 10 is the Dominant 7th chord of the key.

The black notes are the raised sixth or lowered seventh from the melodic minor scale.

164. A dozen chapters might be devoted to the possibilities of this formidable array of discords ;

they are all possible, being derived from the harmonic and melodic minor scales combined, and some of them which appear most unusual are capable of most effective treatment. It will be sufficient, however, at this stage of our studies, to give general principles for their resolution.

165. The resolutions of the chord of the Dominant 7th, and of the secondary 7ths, as explained in Chapters XVI, XVII, XVIII, and XIX, will apply to the more ordinary chords found in Ex. 197:—

Minor Triads with	Minor 7ths	(2, 4, 7, 9).
Major	„ „	Minor 7ths (8, 10, 13).
Major	„ „	Major 7ths (5, 11, 14).
Diminished,	„ „	Minor 7ths (3, 12, 16).

In addition to these formations we now have:—

a Minor Triad	with	Major 7th	(1),
an Augmented „	„	Major 7th	(6), and
a Diminished „	„	Diminished 7th	(15).

Some of these combinations might almost be considered as foreign to the key from which they are obtained, but as already explained in par. 66, the minor scale is of a dual nature, consequently the chords obtained from it are in some cases of a like character, and therein lie much of their charm and susceptibility for artistic treatment.

166. In Example 197 the chords numbered 3, 10, and 15, are the most frequently used, and should content the student for the present.

No. 3 is a Diminished Triad with Minor 7th $\frac{7}{110}$.

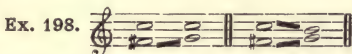
No. 10 is the Dominant 7th Chord, and

No. 15 is the Diminished Triad and Diminished 7th, (called the Chord of the Diminished 7th), which resolves regularly into the Tonic:—



A subsequent chapter will be devoted entirely to the consideration of this chord, as it is one of the most important chords in modern harmony.

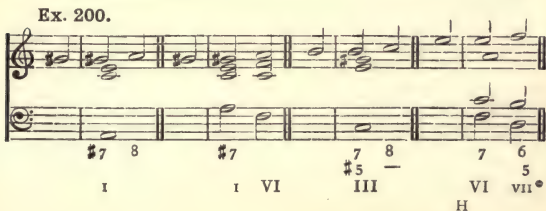
167. In resolving discords the student should bear in mind that the natural tendency of Diminished Intervals is to become smaller, either by one or both notes approaching one another:—



With Augmented Intervals the converse is the case, their tendency being to become larger:—



168. Exceptions to the general rule, that Sevenths *should* fall in resolution, occur in the case of $\sharp 7_I$, the Chord in the Tonic Minor with Major 7th, 7_{III} , and 7_{VI} . These Sevenths may resolve by rising a semitone:—



It is also possible to resolve them downwards, but in the case of $\#7_I$, it is comparatively difficult, and not satisfactory, for, according to the Minor Table (par. 61), the only possible harmony having the raised sixth, which may follow the Tonic Chord, is IV, the Subdominant, and the effect is not good, owing to the false relation of the tritone; it is much better, however, when the Tonic Seventh is followed by a Chromatic Chord, $\#IV^7$, which has yet to be explained:—

Ex. 201.

* *

4 # 6 7 6 7

I V I #IV I V I

There is no difficulty with regard to the Submediant Seventh resolving downward:—

Ex. 202. *

7 4 7 6 8 7

VI II V VI II V I

169. The following examples in A minor will show the resolutions of the Chords given in Ex. 197, which are possible at our present stage of progress.

The student should work them all out in four-part harmony, always beginning each example with an appropriate preliminary chord, which must be added in each case, to prepare the Seventh; thus either of the Chords marked * are necessary to prepare the Seventh:—

Ex. 203.

#5 #7 8
III' I I

Ex. 204.

#7 8
V I I

Chord (No. 1) $\sharp 7$ _I The Tonic Minor Triad with Major 7th:—

Ex. 205.

With Rising Seventh.
From Root Position.

First Inversion.

Second Inversion.

#7 8 #7 6 #7 6 6 6 6 6 6 6 6 6
#7 8 #7 6 #7 6 4 #5 6 #5 8 4 4 4 6 4 8

Could also resolve to iv and VI, with falling Seventh, but this resolution is not a satisfactory one, and may be omitted (see Ex. 201).

Chord (No. 2) $\frac{7}{I}$ —The Tonic Minor with Minor Seventh:—

Ex. 206.

7 7 7 6 6 6 6 6 4 6 4 6
I IV I IV I IV I IV I IV I IV I IV

from below without the skip of an Augmented Second ; if this chord were used with the Seventh, the Seventh must fall, and if the Fifth rise, the Leading Note would be doubled, therefore, this chord is not practicable.

Chord (No. 5) III^7 —The Mediant Major Triad with Major Seventh :—

Ex. 209.

With Rising Seventh.

7 8 7 6 7 6 6- 6- 6- 6 6 6- 6-
 III 4 5 6 5 8 4- 4 3 4 3 8 2-

May also resolve to I and VI.

Ex. 210.

With Falling Seventh.

7 7 6 7 7 6
 III VI III VI III IV III IV
 6 6 6 4 6 4 6
 III VI III IV III VI III IV III VI

Chord (No. 6) III'^7 —The Mediant Augmented Triad with Major Seventh :—

Ex. 211.

#7 6 4 6 #4 6
 #5 5 3 2 6
 III' VI III' VI III' VI III' VI

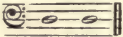
Chord (No. 7) $\frac{7}{IV}$ —The Subdominant Minor Triad with Minor Seventh :—

Ex. 212.

7 7 7 6 6 4 4 7 4 6 4 #6 4 #6
 IV VII° IV V IV VII° IV VII° IV V IV VII° IV V

The resolutions from the above Chord are restricted, owing to the objectionable skips, such as D rising to G # ; F rising to G #, &c. The Chord may resolve in a regular manner to the Chord on the Lowered Seventh of the Scale, which progression usually indicates a modulation to the Relative Major Key :—

$\frac{7}{IV}$ VII

Chord (No. 8) $\frac{7}{IV}$ —Major Subdominant Triad with Minor Seventh. According to the Table (par. 61) this Chord may only progress to the Minor Chord on the Second of the Scale ; with the Seventh added the following would be the only position :—  very unusual and not satisfactory.

$\frac{7}{\#}$ $\frac{6}{\#}$

The Chord might also resolve to the Chord of the Lowered Seventh of the key, but in such a case it could only be effective if proceeding to the Leading Note, as in the following example :—

Ex. 213.

7 6 #4 6 #6
4 2 6 4 3

Chord (No. 9) $\frac{7}{V}$ —The Minor Dominant Triad with Minor Seventh:—

Ex. 214. $\frac{7}{V}$ VI

* This Chord is only employed when the Lowered Seventh of the Minor scale is used in a descending passage.

Ex. 215. &c.

6 7 7 4 6 #
v I II° v VI II° V

Chord (No. 10) $\frac{7}{V}$ —The Dominant Seventh Chord. This Chord has been considered in Chapters 17 and 18.

Chord (No. 11) $\frac{7}{VI}$ —Major Submediant Triad with Major 7th (see Ex. 202):—

Ex. 216. $\frac{7}{VI}$ $\frac{7}{VI}$ $\frac{6}{VI}$ $\frac{4}{VI}$ $\frac{4}{VI}$ $\frac{4}{VI}$ $\frac{6}{VI}$ $\frac{4}{VI}$ $\frac{\#4}{VI}$
7 7 5 3 6 3 7 2 5 or 6 2 #4
VI II° VI II° VI II° VI II° VI II° VI VII°

*The Bass may not rise from the F to B, owing to the Augmented skip. The Seventh in this chord may have an upward resolution.

Chord (No. 12) $\text{VI}^{\circ 7}$ —The Diminished Submediant Triad with Minor 7th:—

Ex. 217.

7 7 $\sharp 6$ 7 $\sharp 4$ 7 4 6 7 6 7 6
 VI° II 5 $\sharp 3$ $\sharp 5$ $\sharp 2$ 5 7 5 7 4
 3

This Chord is chiefly used to enable the raised Sixth to proceed to the Leading Note, see (a) and (b) in the following Example:—

Ex. 218. (a) (b)

$\sharp 6$ 7 7 7 6 7 7 7
 VI° 5 7 5 7 7 7

Chord (No. 13) VII^7 —The Major Triad on lowered Seventh with Minor Seventh:—

Ex. 219.

7 6 6 4 6 7 6 4 4 6 7 7
 VII° I VII° I VII° I VII° III VII° III VII° III VII° III VII° VII°

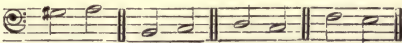
This Chord gives the effect of a Modulation into the Relative Major Key.

Chord (No. 14) $\sharp 7$ —The Major Triad on the Lowered Seventh with Raised Seven.

This Chord can only occur when prepared by the Supertonic Chord with Raised Fifth (a very unusual chord). The note forming its Raised Seven

exists to enable the Leading Note to be approached from below without the skip of an Augmented Second (as a Seventh, however, it would have to fall) ; under these circumstances the Chord need not be considered.

Chord (No. 15) $\overset{7}{\text{VII}^\circ}$ —The Diminished Triad and Diminished Seventh known as the Chord of the *Diminished Seventh* :—

Ex. 220. 

7 $\#6$ 6 6 $\#4$ 6 $\#2$ 4
 5 3 2 4
 $\text{VII}^\circ 1$ $\text{VII}^\circ 1$ $\text{VII}^\circ 1$ $\text{VII}^\circ 1$

The Seventh in this Chord needs no preparation.

Chord (No. 16) $\overset{\#7}{\text{VII}^\circ}$ —The Diminished Triad and Minor Seventh may be employed as follows :—

Ex. 221. 

7 $\#7$
 V VII° 1

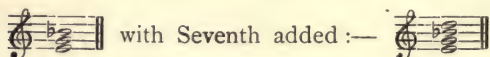
EXERCISE 51.—Write examples introducing each Chord of the Seventh explained in par. 169.

EXERCISE 52.—Write several exercises in various keys from the Minor Table, introducing examples of the various chords of the Seventh.

170. **Two Mixed Chords.**—There are a few Chromatic Chords formed by a combination of notes from the Major and Minor Scales, two of which are now explained.

171. **A Diminished Triad**, consisting of the Third and Fifth degrees from the Major, and

Lowered Seventh from the Minor Scale. These Examples are given in the keys of C major and minor :—



It is resolved as follows :—

Ex. 222.

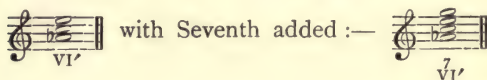
To Subdominant Major or Minor. To Supertonic Major and Minor.

Musical notation for Example 222 showing chord resolutions between subdominant and supertonic chords.

♭5 7 ♭ 6 6 ♭ 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6

III° IV III° IV III II

172. **An Augmented Triad**, consisting of the Sixth degree from the Harmonic Minor Scale and the Tonic and Third from the Major Scale :—



In resolution the Augmented Fifth and Major Seventh rise.

The following two examples will show the practical employment of this chord and its resolution :—

Ex. 223.

Musical notation for Example 223 showing the practical employment of the augmented triad.

— ♯5 6 8 7 8 7

I — VI' IV II° IV V — I

With Seventh added :—

Ex. 224.



7 6 6 ♯
 ♯5 5 5 V
 I VI' IV II^o V I

EXERCISE 53.—Write short examples, introducing the two mixed chords.



CHAPTER XXI.

CHROMATIC CHORDS.

173. The title of this book is "Harmony, Diatonic and Chromatic."

By **Diatonic Harmony** is understood Chords derived from the notes which form a Diatonic Scale.

By **Chromatic Harmony** is understood Chords which contain a note or notes from the Chromatic Scale, not found in a Diatonic form of the Scale, the introduction of which, however, does not necessitate a modulation.

When a Chromatic note is introduced which causes a modulation into another key, such note will generally be found to be *diatonic* in the new key.

174. From the notes used in the Major Scale, both forms of the Tonic Minor, and two Chromatic notes (the Lowered Second and Raised Fourth), a complete Chromatic Scale can be formed. Upon each degree of a Chromatic Scale, a Triad and Chord of the Seventh is possible.

The following example will show the formation of the Chromatic Scale :—

Ex. 225.
Major.

Minor Scale.

Chromatic Notes.

Chromatic Scale.

Enharmonic equivalents.

Detailed description: This example consists of five staves of music. The first staff shows the Major scale (C major) with notes C, D, E, F, G, A, B, C. The second staff shows the Minor scale (C minor) with notes C, D, E♭, F, G, A♭, B♭, C. The third staff shows the Chromatic Notes: B♭, B, C, C♯, D, D♯, E, E♭, E, F, F♯, G, G♯, A, A♭, A, B, B♭, B, C. The fourth staff shows the Chromatic Scale: C, C♯, D, D♯, E, E♭, E, F, F♯, G, G♯, A, A♭, A, B, B♭, B, C. The fifth staff shows Enharmonic equivalents: B♭, B, C, C♯, D, D♯, E, E♭, E, F, F♯, G, G♯, A, A♭, A, B, B♭, B, C. Vertical dashed lines connect corresponding notes across the staves.

175. Eighteen Triads from the notes forming the Diatonic Scales have been considered, viz., seven from the Major, nine from the Minor, and two from the Major and Minor combined. These chords have been considered in previous chapters.

176. The addition of the two Chromatic notes makes it possible to construct sixteen new Triads :—

Ex. 226.

1 2 3 4 5 6 7 8

9 10 11 12 13 14 15 16

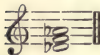
Detailed description: This example shows 16 numbered triads arranged in two rows of eight. Each triad is represented by a chord symbol (e.g., C, C♯, D, D♯, E, E♭, E, F, F♯, G, G♯, A, A♭, A, B, B♭, B, C) and a corresponding musical notation on a treble clef staff. The triads are numbered 1 through 16.

To these can be added all possible Sevenths, in some cases Ninths, and Chords formed by means of the enharmonic equivalents.

177. In such a treatise as this it would be impossible to give these Chords anything like adequate consideration, it is hoped, however, that sufficient will be said to enable the student to explore the rich mine of possible harmonic combinations here shown to exist.

EXERCISE 54.—In other Keys, write out the sixteen possible Chromatic Triads containing the Lowered Second and Raised Fourth as in Ex. 226.

178. **Chord ♭ II.—The Chord of the Lowered Second.**—The first Chromatic Chord given in Ex. 226 is a Major Triad on the flat Second of the Key,

 though, in its first inversion, it may be effectively used in the Major, yet owing to the Fifth being derived from the Minor Scale it is felt to belong to that mode.

179. The Chord is most frequently used in its First Inversion, in which form it is commonly known as the “**Neapolitan Sixth.**” When introducing a final Cadence, it gives to the Cadence the name “**Pathetic.**”

The following examples will illustrate the practical introduction and effect of this Chord :—

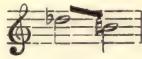
♭ II Chord in Root Position. (*Root doubled*):—

Ex. 227.



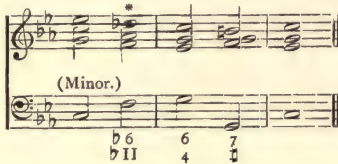
6 - 7 8 7 8 7 6 6

When this Chord progresses to the Dominant the upper part may proceed by a Diminished Third :—

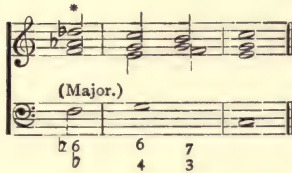


$\flat 6$
 $\flat II$ Chord in First Inversion (*Bass doubled*):—

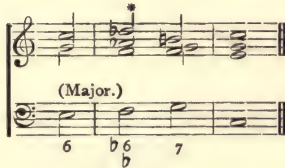
Ex. 228.



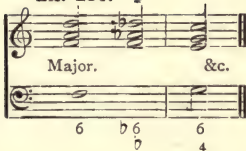
Ex. 229.



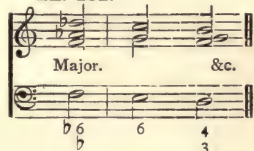
Ex. 230.



Ex. 231.



Ex. 232.



$\overset{6}{\flat} \overset{4}{II}$ Chord in the Second Inversion (*Sixth doubled*).

The following example shows the Chord in the Second Inversion (*a*), and a permissible use of the Chord with its Seventh added (*b*):—

Ex. 233. (a) (b)

&c.

— 6 6 4 4 6 b6 6 6
 b4 4 2 5 4 2
 I bII I V I bII V I

Consecutive Fourths between the bass and an upper part are always to a certain extent objectionable See bar 2, Ex. 233.

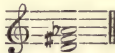
EXERCISE 55.—In various keys write short four bar exercises introducing the Chord $\overset{\flat}{II}$.

The Chord is usually preceded by the Tonic or Supertonic harmony, and followed by the Tonic or Dominant harmony.



CHAPTER XXII.

CHROMATIC CHORDS.—THE AUGMENTED SIXTH.
 SOME CHORDS IN WHICH THE RAISED
 FOURTH APPEARS (FRENCH, ITALIAN AND
 GERMAN).

180. Chord No. 5 in Ex. 226 :—  consists of a Major Third and Diminished Fifth on the second degree of the Minor Scale, and may be called the **Major Diminished Triad** from the Supertonic Root.

In resolution the Third ascends, the Fifth descends, and the Root is free, and may be doubled; the Chord progresses into Tonic or Dominant harmony.

The effect of the Chord is not good in Root Position or in the First Inversion.

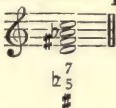
Chord II°* in Second Inversion :—

Ex. 234. To Tonic To Dominant.

Minor.	Major.	
		
#6 4	6 4	#6 4
II°	I	II V

* The large numeral denotes a Chord with Major Third, the ° placed after it shows the Diminished Fifth.

181. This chord is seldom employed as a Triad, but with the Seventh added $\overset{7}{\text{II}}^\circ$ is very effective and much used :—



The following examples illustrate the Chord, its Inversions and Resolutions.

Root Position (a) :—

Ex. 235.

(a) (b)

4 ♯ 6 7 ♯ 6 7 6 5
I V I — II° V I II ♯V I IV I

At (b) is a very beautiful and effective chord, known as the Chord of the **Dominant Thirteenth**, the Chord is certainly Dominant in effect.

It can conveniently be considered as a Dominant Seventh chord, the Fifth of which is preceded by an appoggiatura, and though the Fifth may not occur, as in this case, the imagination supplies it; as a general rule the Fifth does follow the appoggiatura :—

Ex. 236.

May be Major or Minor.

(a) (b) (c) (d)

7 7 7 7
6 5 6 6

At (a) is the Fifth introduced by the appoggiatura, at (b) (c) and (d) the Fifth is left to the imagination; the E ♯ being a Sixth from the Root is not a discord, which fact doubtless accounts for its freedom in resolution. (Also see Ex. 231).

First Inversion (*c*), not an effective position of the chord :—

Ex. 237.

6 5 #6 5 7
II°

Second Inversion (*d*), a most useful and effective position, generally known as the **French Sixth** or Chord of the Augmented Six-four-three :—

Ex. 238.

6 5 #6 8 4 3 #7

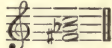
Third Inversion (*e*), a very beautiful Chord :—

Ex. 239.

I - #4 6 7 -
2 5 7 II° V I V I

EXERCISE 56.—Write several examples introducing the Inversions of the Major Diminished Triad with the Seventh added $7 II^\circ$.

Chord on the Raised Fourth of the Minor Scale $\sharp IV^{\circ}$; called the Sharp-Four, or Double Diminished Triad.

182. This Chord is No. 7 in Ex. 226, 

and consists of a Diminished Third and Diminished Fifth on to the Raised Fourth of the Minor Scale; it may be called the **Double Diminished Triad**. The Triad is not effective in its Root position. In Resolution, the Root or Bass ascends, Diminished Third descends, and the Fifth may be doubled; the Chord resolves into the Tonic or Dominant.

Root Position :—

Ex. 240

Major or Minor.	In three-part harmony.
	
6 6	
5 4	♯
$\sharp IV^{\circ}$ I	$\sharp IV^{\circ}$ V

First Inversion, called the **Italian Sixth** :—

Ex. 241.

To Tonic.	To Dominant.
Major.	Minor.
	
	
$\sharp 6$ 6	$\sharp 6$ 6
4	4
	$\sharp IV^{\circ}$ ♯
	V

Second Inversion :—

Ex. 242.

To Tonic.

To Dominant.

EXERCISE 57.—Write several examples introducing the Double Diminished Triad on the Sharp-Fourth of the Minor Scale $\#IV^{\circ}$ and its Inversions.

Chord $\#IV^{\circ 7}$ Sharp-four-seven (*Minor*).

183. This is the **Double Diminished Triad with the Seventh added**, a most effective and useful Chord :—

The Third of the Chord is obtained from the Minor scale.

The following examples illustrate the Chord, its Inversions and Resolutions.

Root Position (*a*) :—

Ex. 243.

First Inversion (*b*), known as the **German Sixth**, or Chord of the Augmented Six-five-three. In sound, it is identical with a Dominant Seventh Chord in the key of D \flat .

Ex. 244.

(b)

6 6 7
5 4
3

I \ #IV⁷ I V

Second Inversion (*c*):—

Ex. 245.

(c)

6 #4 6 7
3 4

I VI #IV⁷ I V I

If the Dominant Chord follows this inversion, it is difficult to avoid Consecutive Fifths.

Third Inversion (*d*):—

Ex. 246.

(d)

6 4 6 5 6 5
2 4 3 4 3

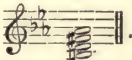
I - #IV⁷ V I IV I

EXERCISE 58.—Write several examples introducing the Double Diminished Triad with the Seventh added, on the Sharp Fourth of the Minor Scale $\sharp IV^7$ and its Inversions.

In exercises introducing the Augmented Sixth it is generally best to keep the Augmented Sixth as a Sixth, and not to allow it to appear inverted as a Diminished Third.

Chord of the Seventh on the Leading Note with the Raised Fourth 7° VII.

184. This Chord has a Minor Third, Perfect Fifth (obtained by employing the Raised Fourth of the scale), and Diminished Seventh; it is called the **Minor Triad with Diminished Seventh** on the

Leading Note:—. The Chord is No.

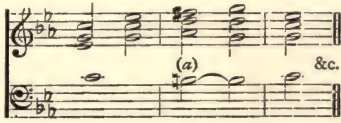
16 in Ex. 226, with a Seventh added. In resolution, the Fifth (original Raised Fourth), and the Seventh (which, together, when inverted, form the interval of the Augmented Sixth) proceed to the Dominant, while the Root (Leading Note) remains stationary or ascends to the Tonic; the Third is free.

The original position of the Chord and the Third Inversion are very beautiful.

The following examples will illustrate its introduction.

Root Position (a):—

Ex. 247.



$\sharp 5$

Third Inversion (*b*):—

Ex. 248.

#6
4
2

EXERCISE 59.—Write several examples introducing the various Chords in which the Raised Fourth appears, as explained in this Chapter.

185. Two other chords of the Augmented Sixth are possible by means of the Raised Fourth.

Chord No. 3, Ex. 226 :—

triad. (a) with 7th. (b)

bII° $bII^\circ 7$

and Chord No. 13, Ex. 226, with Seventh :—

(c)

$bVII^\circ 7$

These Chords are very unusual; however, examples are given which show the possibility of their introduction :—

Ex. 249. (a)

#6
7 4
 bII°

(b)

7
b II°

Besides the special Chord of the Augmented Sixth (*a*) and (*b*) which the above example illustrates, it shows the introduction of other Chromatic Chords from Ex. 226.

The second Chord in bar 1 is the First Inversion of No. 9.

The second Chord in bar 5 is the Second Inversion, and first Chord, bar 8, the First Inversion of No. 14, with the Seventh added

The first Chord in bar 7 is the First Inversion of No. 1.

The Chords in bars 4 and 6 are Chords formed by a combination of intervals from the Major and Minor Scales. See Chapter XX, par. 171, with addition as Seventh of the Lowered Second of the Scale.

Ex. 250. (c)

8 — 6 7 #6 6 5 7 6 7 7
5 — 6 4 4 — — — —
3 3 3 4 2 — — — —
I — — — — b VII° V iv — V I

Chord No. 13. Ex. 226, is shown at (*c*).



CHAPTER XXIII.

CHROMATIC CHORDS CONTINUED.

OTHER CHORDS OF THE AUGMENTED SIXTH.

186. Chords Nos. 10 and 14, in Ex. 226:—

No. 10. No. 14.

have a Diminished

Third between the Leading Note and Lowered Second; when Inverted, this Interval becomes an Augmented Sixth, and is capable of treatment somewhat similar to the Chords of the Augmented Sixths considered in the last Chapter.

187. Chord No. 10, Ex. 226:—

is

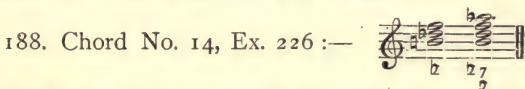
generally used with the Seventh in its Second Inversion $\sharp\frac{6}{4}$. The Chord may be called a **Major Diminished Triad with Minor Seventh on the Dominant Root** $\sharp\frac{7}{V^{\circ}}$.

The following example will illustrate its practical introduction and effect:—

Ex. 251.



This Chord frequently resolves into a Major Chord, in which case the resolving Chord is usually a Dominant and indicates a modulation into the key of the Subdominant.



may be called a **Double Diminished Triad with Diminished Seventh from the Leading Note, VII⁷₂**.

The following example will illustrate its practical introduction and effect :—

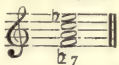
Ex. 252.



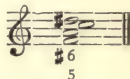
- (a) The Triad No. 14 appears in its First Inversion.
- (b) The Seventh is added, but resolves by passing into—
- (c) Chord No. 10, Ex. 226, in order to avoid the Consecutive Fifths which would otherwise occur.
- (d) When a Major Chord concludes a Minor passage, the Major Third is called the *Tierce de Picardie*.

A Chord of the Augmented Sixth formed by the enharmonic alteration of the Minor Third of a Scale.

189. If a Minor Seventh is added to a Sub-dominant Major Chord :—

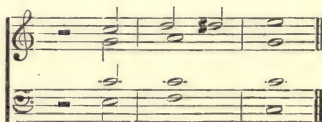


note be Enharmonically changed :—



a Chord of the Augmented Sixth is made, which generally resolves into the Tonic Chord :—

Ex. 253.



The Enharmonic alteration of the Minor Third into an Augmented Second of the scale, makes several Augmented Sixths possible :—

Ex. 254.



Ex. 255.



Ex. 256.



Ex. 257. (c) (d)

(d) Is an Enharmonic form of the German Sixth (see Ex. 244).

Ex. 258. (e)

The Enharmonic alteration of notes such as $E\flat$ to $D\sharp$, in our modern tempered scale, makes no difference to the sound, but enlarges our field of harmonic possibilities considerably.

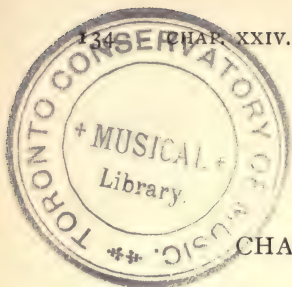
For educational purposes it is necessary to approach the Chromatic and Enharmonic notes in a gradual and systematic manner.

Let it never be forgotten that music is not for the eye but for the ear, and the ear must be the final arbiter in all cases where elaborate and unusual discords are introduced.

A composer feels the necessity for a certain discord, and introduces it as his taste suggests, he does not first discover a far-fetched discord and then write a passage to work it in.

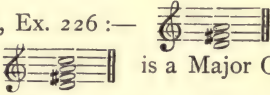
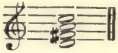
All musicians should be able to analyse any musical composition, and clearly understand all discords which are introduced into it, therefore the necessity for all those who would be musicians to study a system of "Harmony."

EXERCISE 60.—Write examples of the Chords of the Augmented Sixth introduced into this Chapter.



CHAPTER XXIV.

OTHER CHROMATIC CHORDS.

190. Chord No. 6, Ex. 226 :—  with Seventh added :—  is a Major Chord on the Supertonic of the Scale, and may be employed in the Major or Minor mode without modulating from the Tonic key.

191. The Chord is composed of precisely the same notes as the Dominant Triad or Dominant Seventh in the key of the Fifth above ; the context will always show if it has been used as a modulating Chord, or if as a Chromatic harmony in the Tonic series.

192. All the Chromatic Chords given in Ex. 226 may be employed as Chromatic Chords in the key, and the student should acquire the ability so to treat them, or at least the more important ones, in order to gain freedom with the Chromatic element in music.

193. The following examples will show how the **Supertonic Major Chord** may be employed as a Chromatic harmony.

It usually resolves into the Tonic (Second Inversion), the Dominant Seventh, or the Subdominant Chord in its Minor form :—

Ex. 259. (a) Ex. 260. (b)

Ex. 261. (c) Ex. 262. (d)


At (a) the chord is resolved into the Subdominant Minor ; at (b) it appears with its Seventh, after progressing to its First Inversion it is resolved into the Tonic, Second Inversion ; at (c) the chord resolves into the Dominant Seventh in Minor key ; at (d) the chord appears in the Minor mode, and resolves into the Subdominant.

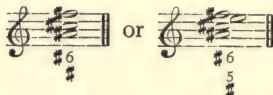
EXERCISE 61.—Write several examples in Major and Minor Keys, introducing the Chromatic Major Chord on the Supertonic.

194. Chord No. 11, Ex. 226:— is a Minor Chord on the Lowered Seventh of the Scale with the Lowered Second for its third ; this Chord is very seldom employed, but when it does appear it is usually in its Enharmonic form:—

Ex. 263.

* The Chord appears as Chromatic passing notes between Subdominant and Dominant Harmony.

195. Chord No. 12, Ex. 226:—  is Chord No. 11 with the Raised Fourth of the Scale as its Fifth Degree; it is usually employed in its Enharmonic form with or without a Seventh:—



Ex. 264.

(a)

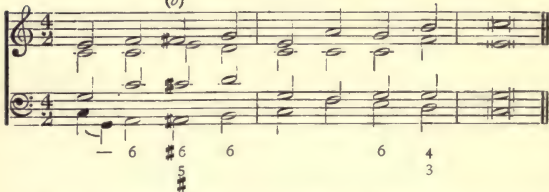


Ex. 265.



Ex. 266.

(b)



At (a), Ex. 264, the Suspensions are introduced to avoid the Consecutive Fifths between the bass and alto. At (a), Ex. 265, these Fifths have been allowed to remain, as they are really not objectionable owing to their being on the step of a Minor Second.

196.—All the Chromatic chords given in Ex. 226, with the exception of No. 15, have been at least referred to and illustrated; to give them anything like adequate consideration would require volumes instead of chapters. Sufficient has been said, however, to lead the student to experiment for himself, and if he has consistently followed out the teaching of this book, he will be in a position to do so with profit and pleasure.



CHAPTER XXV.

THE CHORD OF THE DOMINANT NINTH.

197. To the Dominant Seventh Chord may be added a Third above, making a five-part chord, called the Chord of the Dominant Ninth :—

Major. Minor.

Ex. 267.

198. In four-part harmony one of the intervals must be omitted, this should be the Fifth, never the Third or Seventh.

199. The Ninth must always be written at least nine notes above the root ; though not necessarily in the top part, it is always *best* in that position in the Major form of the Chord.

200. The Ninth is introduced and resolved like the Dominant Seventh (see pars. 138 and 139).

201. The following positions and resolutions of the Chord of the Ninth will sufficiently explain the introduction and use of this chord :—

Ex. 268.

(a) (b) (c)

or to or to

9 6 9 6 9 8
7 4 7 4 7 —

(c) The nine may resolve to eight before the entire chord is resolved :—

Ex. 269.

First Inversion. Second Inversion. Third Inversion.

7 5 6 4 6 4 6
6 4 3 3 3
5 3 2 2

The Dominant Ninth is best at the top in Major keys.

202. The Dominant Ninth in **Minor** has more freedom, inasmuch as it may appear freely in any of the upper parts, care being taken to place the Ninth nine degrees above the root.

203. Like the Chord of the Dominant Seventh the notes forming the Chord of the Dominant Ninth may change places, when no grammatical fault is made, care being taken to resolve the last position or inversion correctly :—

Ex. 270.

Ex. 271.

9 9 9 9 7 4
7 7 7 7 6 3
7 5 5 5

204. The Ninth may appear freely as a suspended eighth, prepared as a suspension; thus prepared, a Ninth may be introduced into almost every chord. The characteristic feature of the Dominant Ninth, however, is that it may, like the Dominant Seventh, appear *without* preparation; it is this independence which gives it the importance it possesses.

EXERCISE 62.—Harmonize the following figured bass which introduces the chord of the Ninth, and write similar examples in several keys, Major and Minor:—

(a)

(b)

(c)

Detailed description of the musical exercises: Each exercise is written on a single staff with a treble clef. Exercise (a) consists of 10 measures. The first measure has a suspended eighth note (G) above a bass line of 9 7. The second measure has a suspended eighth note (A) above a bass line of 6 6. The third measure has a suspended eighth note (B) above a bass line of 4 6. The fourth measure has a suspended eighth note (C) above a bass line of 6 6. The fifth measure has a suspended eighth note (D) above a bass line of 6 4. The sixth measure has a suspended eighth note (E) above a bass line of 4 6. The seventh measure has a suspended eighth note (F) above a bass line of 6 4. The eighth measure has a suspended eighth note (G) above a bass line of 6 3. The ninth measure has a suspended eighth note (A) above a bass line of 4 2. The tenth measure has a suspended eighth note (B) above a bass line of 6. Exercise (b) consists of 5 measures. The first measure has a suspended eighth note (G) above a bass line of 7 6. The second measure has a suspended eighth note (A) above a bass line of 4 2. The third measure has a suspended eighth note (B) above a bass line of 6. The fourth measure has a suspended eighth note (C) above a bass line of 7. The fifth measure has a suspended eighth note (D) above a bass line of 7. Exercise (c) consists of 5 measures. The first measure has a suspended eighth note (G) above a bass line of 7 6. The second measure has a suspended eighth note (A) above a bass line of 4 2. The third measure has a suspended eighth note (B) above a bass line of 6. The fourth measure has a suspended eighth note (C) above a bass line of 7. The fifth measure has a suspended eighth note (D) above a bass line of 7.

At (a) and (b) the Ninth must be in the top part, at (c) the Fifth, a skip of a Seventh being necessary in the melody from the previous chord.



CHAPTER XXVI.

MODULATION.

205. It is possible to introduce into an example, almost any of the notes contained in the chromatic scale of a key, without definitely passing out of that key, be it major or minor; it is this fact which assists the student to decide to what key certain chromatic harmonies belong when analysing a composition.

206.—When chords which require accidentals are used without disturbing the actual feeling of tonality, it is possible to regard them as part of the key, but the moment the feeling of change of key is induced, what is termed a modulation has taken place.

207. Should a lengthy exercise be written from the major or minor tables (pars. 10 and 61), even with the interest which well-contrasted rhythmic phrases could infuse into it, a feeling of tediousness must result. Relief from this can be obtained by modulation.

208. There are two methods of modulating—passing into a new scale or key—either by the use of diatonic chords which are common to several keys, by some called **Transition**, or by means of a characteristic dominant discord of the new key.

By using the Table, par. 10, in the following manner, the first method will be amply illustrated.

209. After an exercise has proceeded a few measures, and a new key is desired, consider the chord you have reached as belonging to another scale, retaining its character only. Thus, in the Major Table (par. 10), Chord I, being Major, may be changed to either IV or V; V may be changed to I or IV. The Minor Chords II, III, and VI, are likewise interchangeable. After such a change has been effected the chords that follow must proceed according to the Table, but in the new key; an example will make this clear:—

EX. 272.

The example consists of two staves of music in treble clef. The first staff is divided into two sections by a bar line. The first section is labeled 'KEY C.' and contains six measures with chords I, V, III, I, IV, and II. The second section is labeled 'KEY G.' and contains three measures with chords VI, VI, and IV V. A bracket groups the VI, VI, and IV V chords under the label 'KEY G.'. The second staff is labeled 'KEY C.' and contains six measures with chords III, III, I, VI, IV, V, and I. A bracket groups the first two measures (III, III) under the label 'KEY C.'. A sharp sign (#) is placed above the first measure of the second staff, and a '5' is written above the first measure of the second staff.

The Seventh Chord, VI, in the key of C, being a Minor Chord, may be considered II or III of another key; if it be considered II we are in the key of G; if it be considered III we are in the key of F. In the above example it is considered II; we thus continue in the key of G according to the table. At the twelfth chord a change is made back to key of C by considering Chord VI of G as the III of C. (Observe that there is no perfect cadence in the middle section key of G). Major chords may be made Minor, and then the new Minor Chord considered as II, III, or VI.

210. Major and Minor tables (pars. 10 and 61) can now be interchanged, and exercises worked introducing various keys. Many beautiful quaint harmonic effects can be produced by this means.

213. A modulation to a related key may be effected by immediately introducing the Dominant 7th of the new key, following it directly by its Tonic triad, *i.e.*, by means of the authentic perfect cadence in the new key, according to the rules given in Chapter VIII. When this effect is not quite agreeable, an intermediate chord common to the two keys is introduced, which leads pleasantly to the New Dominant 7th.

Modulation from C Major to its attendants:—

Ex. 274.

C major to A minor C major to G major.

C I a V I C I G II } I V I

C major to E minor. C maj. to F maj. C maj. to D min.

C I VI e IV II° V I C I F V I C I d V I

Modulation from C Minor to its attendants:—

Ex. 275.

C minor to E♭ major. C minor to G minor.

6 ♯6 6 7 6 5

3 4 4 4 ♯

3 —

* Intermediate harmonies.

EXERCISE 65.—Modulate to the attendant keys of D, E, E ♯, F, and G Major and Minor, in each case passing through the Supertonic in Major, or Subdominant in Minor of the new key (par. 214).

EXERCISE 66.—Modulate to each of the attendants of E, E ♯, F, F ♯, G and A ♯, and return to the original key as in the following example to supertonic and back :—

Ex. 278.

C V I V VI d VII° I C I V I

215. Modulation is said to be extraneous when it is to other than related keys.

216. When a modulation merely touches the tonic of a key, which tonic is an attendant of the key of the piece, and is not confirmed, but immediately returns to the original key, as in Ex. 278, the modulation is called **transient**.

217. If the melody of a passage essentially belongs to the key of the piece, but for reasons of his own the composer harmonizes it, or a part of it, in a nearly related key, as in Ex. 278, such a modulation is **transient**.

218. Change of mode, Major to Minor, and *vice versa*, does not constitute a modulation, it is rather a progression.

219. **Enharmonic modulation** is effected by altering the name of one or more notes of a chord, thereby changing the scale, and consequently the key :—

Ex. 279.

(a) (b)

C I $\sharp IV^{\circ 7}$ D \flat V I

At (a) is the First Inversion of the Chord of the Seventh on the Raised Fourth of C Minor (the German Sixth) changed at (b) by means of the G \flat , enharmonic equivalent for F \sharp , to the Dominant Seventh chord in the key of D \flat , to which tonic it resolves.

220. The Chord of the Diminished Seventh is perhaps the most useful chord for modulating purposes; the next chapter will be devoted to it. To consider the subject of modulation in anything like an adequate manner would be impossible in a book of this size; the student should, however, make himself familiar with the works and methods of good writers, and experiment himself, for after all, this is the most valuable means of acquiring knowledge.



CHAPTER XXVII.

THE CHORD OF THE DIMINISHED SEVENTH.

221. The Chord of the Diminished Seventh is situated on the leading note of the Minor scale, and may be considered as the Chord of the Dominant minor Ninth without the root.

This chord may be freely used in the Major mode, though derived from the Minor :—

Ex. 280.



222. In resolution :—

The Leading Note ascends to the Tonic.

The Third is free.

The Fifth and Seventh descend.

223. A Chord of the Diminished Seventh also appears on the Raised Fourth of a scale, the Minor Third being used to form the Seventh ; it resolves either into the Second Inversion of the Tonic (Major or Minor) or into the Dominant harmony :—

Ex. 281.



224. The Diminished Seventh Chord consists of three Minor thirds, therefore, however inverted, it retains the same character, and is a most valuable harmony whenever an ambiguous tonal effect is required, or enharmonic modulation desired.

225. Since the distance between each of the intervals of this chord is the same, viz, a Minor third, it is evident that each member of the chord is of equal importance, and each may become a leading note to a new key; each inversion may therefore become a new chord, according to the notation, and each having four resolutions, viz., to Tonic Major and Minor, and to the Dominant of new key, Major and Minor, it is evident that a Chord of the Diminished Seventh can progress equally well into sixteen keys.

The sixteen natural or cadencing resolutions of the Chord of the Diminished Seventh :—

Ex. 282. To new key.

Minor.	Major.	Major.	Minor
--------	--------	--------	-------

7 b7 b7 6 5 / 4 3 7 6 5 / 4 3

EXERCISE 67.—Write out the sixteen resolutions of the Diminished Seventh Chords on the notes C, C \sharp , D and D \flat .:

CHAPTER XXVIII.

THE FREE RESOLUTION OF DISCORDS.

226. The Resolution of the Dominant Seventh and Ninth, and other restricted notes, have been treated in a somewhat circumscribed manner; the Dominant Seventh and Ninth have had to fall one degree, and the Leading Note to rise, the Resolution thus effected being to the Tonic or Submediant harmony. Such Resolution being termed Natural or Cadencing.

Dr. Henry Hiles, the distinguished Music Professor at Manchester University, has formulated a very concise system for the resolution of discords, the principles of which he has very kindly permitted me to embody in this chapter.

227. Four Rules for the Free Resolution of Discords.

RULE I.—A Discord, or note having a definite progression, may **fall** a semitone or a tone to a Root, Third, Fifth, Seventh, Ninth, or other dissonance.

The Resolutions of the Dominant Seventh in the Key of C, according to Rule I.

Falling a semitone and a tone :—

Ex. 283.

To a Root.
To a Third.
To a Fifth.

To a Seventh.
To a Ninth.

Keys C A C ♭ A C C C C

C B
C B♭
C G
C A♭

Detailed description: This musical example shows the resolution of a discord (a tritone, G and C♭) to various intervals. The first system shows resolutions to a Root (C), Third (A), and Fifth (C). The second system shows resolutions to a Seventh (B) and a Ninth (A♭). The notation is in treble and bass clefs with a key signature of one flat (F major/C minor).

228. RULE II.—A Discord, or note having a definite progression, may be **retained** ; so as to form in the resolving Chord a Root, Third, Fifth, Ninth, or other dissonance.

The Resolutions of the Dominant Seventh in the key of C, according to Rule II :—

Ex. 284.

To a Root.
To a Third.
To a Fifth.
To a Ninth.

C G♭
C E♭
C A

Detailed description: This musical example shows the resolution of a dominant seventh chord (G7) to various intervals. The notation is in treble and bass clefs with a key signature of one flat (F major/C minor). The resolutions are: to a Root (C), to a Third (G♭), to a Fifth (E♭), and to a Ninth (A).

229. RULE III.—A Discord, or note having a definite progression, may **rise** a semitone or a tone to a Root, Third, Fifth, Seventh, Ninth, or other dissonance; the Third being held, or moved not more than a tone.

The Resolutions of the Dominant Seventh in the key of C, according to Rule III.

Rising a semitone and a tone :—

Ex. 285.

To a Root. To a Third. To a Fifth.

Keys C B C C G C \flat A C B C F

To a Seventh. To a Ninth.

C \flat B C D C \flat B C B \flat

The Rising Resolution of a Seventh should only be adopted when some distinctly good result may be gained, and then, as a rule, avoid the progression in the Bass part.

230. The examples have been given in each case from the Dominant Seventh. The Rules, however, apply to the free resolutions of every note having a definite or restricted progression, such as the Leading Note, Dominant Ninth, and the discords introduced into the Secondary Chords: it will thus be seen what an immense field is open to an ingenious student

231. RULE IV.—When it is possible to **retain** a Dissonant note so that it *may* become a harmony note in the resolving chord, such note may skip to any note of the resolving harmony which does not entail a faulty progression :—

Ex. 286.

The musical notation for Example 286 consists of two staves, a treble clef on top and a bass clef on the bottom. The music is divided into three measures labeled (a), (b), and (c).
 - Measure (a): Treble staff has notes G4, A4, B4, C5. Bass staff has notes F3, G3, A3, B3. A dissonance is shown between the B4 in the treble and the F3 in the bass.
 - Measure (b): Treble staff has notes G4, A4, B4, C5. Bass staff has notes E3, F3, G3, A3. The B4 from the previous measure has moved to the treble staff.
 - Measure (c): Treble staff has notes G4, A4, B4, C5. Bass staff has notes C3, D3, E3, F3. The B4 from the previous measure has moved to the bass staff.

At (a) the F might have been retained in the second chord, consequently, according to Rule IV, it is free to skip to the A or any other convenient note of the chord.

At (b) and (c) the E might have been retained in the resolving chord, consequently, according to Rule IV, it is free to skip to C or G in the resolving chord (see also par. 181).

EXERCISE 68.—The student should write several exercises in various keys to illustrate the four rules given in this chapter.



CHAPTER XXIX.

PEDAL POINT.

232. The Tonic or Dominant notes may be held in the bass or other part while harmonies belonging to certain attendant keys, usually the Supertonic, Dominant, Tonic, and Subdominant, are introduced.

If the fundamental note is impressed on our ears we admit, as pleasing, several discords which would otherwise sound harsh when sounded in conjunction with the pedal point.

233. A Dominant Pedal is frequently employed in the Bass part towards the close of a composition, or of an important section, when we wish the ear to long for the Tonic.

234. A Tonic Pedal is often used to prolong a final cadence, though in modern music more frequent use is made of this device than formerly.

235. A Dominant and Tonic Pedal may occasionally be used together.

236. In writing examples of Pedal Point, it will be found useful to consider the part immediately above the Pedal Point as the real bass of the harmony; and when such part is foreign to the Pedal it should conform to the restrictions which govern an ordinary bass part.

237. When necessary to figure a passage containing a Pedal Point in the bass it is found best to figure the part next above the Pedal (See Ex. 287).

238. A passage in conjunction with a Pedal Point should begin and end with a chord of which the Pedal note forms part.

The following examples will illustrate the various kinds of Pedal Point referred to.

Tonic Pedal Point in the Bass :—

Ex. 287.

Musical notation for Ex. 287. The bass line features a constant C4 note (pedal point). The treble line contains a sequence of chords: C major, D minor, E minor, F major, G major, and A minor. Fingerings are indicated below the notes: 6, 4, 6, 6, 7, 5.

Dominant Pedal Point in the Bass :—

Ex. 288.

Musical notation for Ex. 288. The bass line features a constant G2 note (pedal point). The treble line contains a sequence of chords: C major, D minor, E minor, F major, G major, and A minor.

Tonic and Dominant Pedal in the Bass :—

Ex. 289.

Musical notation for Ex. 289. The bass line features a constant C4 note (pedal point). The treble line contains a sequence of chords: C major, D minor, E minor, F major, G major, and A minor.

Dominant Pedal in top and bottom parts :—

Ex. 290.

Musical notation for Ex. 290. Both the treble and bass lines feature a constant G2 note (pedal point). The other part (treble or bass) contains a sequence of chords: C major, D minor, E minor, F major, G major, and A minor.

EXERCISE 69.—The student should construct exercises into which examples of Pedal Point be introduced.

CHAPTER XXX.

HARMONIZATION OF MELODIES, AND SIMPLE ACCOMPANIMENTS.

239. It was shown in Chapter X how to add a correct uninverted Bass part to a simple Diatonic melody; if the student has carefully studied the succeeding chapters, and has written out the practical exercises to each, he should now have very little difficulty in composing an effective Bass part to almost any melody.

240. The following general principles may assist him in doing so.

The harmony of many melodies consists chiefly of the most generally employed triads (Tonic, Subdominant and Dominant) and their inversions (second inversions are seldom employed), and when modulation occurs it is generally to a nearly related key, usually the Dominant or Relative Minor or Major as the case may be.

241. Florid or embellished melody can as a rule be reduced to a simple form by leaving out all, apparently, unessential notes, and then treated in a diatonic manner, after which the ornamental notes can be re-introduced, and such alteration made to the harmony as may be found necessary.

242. Melodic notes progressing by steps on accented parts of a measure generally belong to different diatonic roots :—

Ex. 291.

Melodic notes of small time value progressing by skips frequently belong to the same harmony :—

Ex. 292.

243. The introduction into a melody of an accidental sharp frequently indicates a Modulation into the key of which the sharp is the leading note. The sharp may however belong to a Chromatic Chord of the Key, or be an appoggiatura :—

Ex. 293.

or occur as an embellishment of a Diatonic note :—

Ex. 294.

in which case the sharp usually occurs on an unaccented part of the measure.

The effect of the appoggiatura in Ex. 293, is as of a note driving into a principal tone. The following example will more fully illustrate this :—

Ex. 295.

Allegretto.

The musical notation for Ex. 295 consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The time signature is 3/4. The melody in the treble clef starts with a quarter note on G4, followed by a quarter note on A4, and a quarter note on B4. Each of these notes has a small wedge-shaped accent above it, indicating an appoggiatura. This pattern repeats for the next two bars. The bass line consists of chords: a G4 chord, an A4 chord, and a B4 chord, each held for the duration of the bar. The piece concludes with the notation '&c.' in the bottom right corner.

The first beat in each bar is an Appoggiatura.

244. The introduction of an accidental flat frequently indicates a Modulation into the key of which the flat (or lowered interval) is the fourth. It may, however, belong to a Chromatic Chord in the key, or be a note of embellishment in connection with a Diatonic note, though, unlike the sharp, a flat is seldom used in this way.

The **Sixth Degree** of the scale is frequently lowered without any Modulation taking place :—

Ex. 296.

The musical notation for Ex. 296 consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The melody in the treble clef starts with a quarter note on G4, followed by a quarter note on A4, and a quarter note on B4. In the second bar, the melody has a quarter note on F4 (a natural flat), which is the lowered sixth degree. The bass line consists of chords: a G4 chord, an A4 chord, and a B4 chord, each held for the duration of the bar.

245. The **Rhythm** of the melody will greatly assist in deciding the importance and character of most of the notes, while the **Tempo** must be taken into consideration, for a quick melody will require perhaps only one chord for each two or three beats (see Ex. 295), while a slow melody, like a hymn tune, will require a chord for each note.

246. As a means to acquire some facility in the harmonization of melodies, it may be found a useful exercise to reverse the process, by inventing additional melodies to given harmonies.

Example 297 is a short four-part harmony exercise, containing a simple Modulation to the Dominant. Above this is added a florid instrumental melody constructed by means of passing notes and appoggiaturas :—

Ex. 297.

Additional Melody.

VIOLIN.

The image shows a musical score for Example 297. It consists of two systems of music. The first system has a Violin part on a single staff and a piano accompaniment on two staves (treble and bass clef). The second system continues the Violin part and piano accompaniment. The time signature is 4/4. The key signature has one sharp (F#). The piano accompaniment consists of chords in the right hand and single notes in the left hand. The Violin part features a melodic line with many passing notes and appoggiaturas.

EXERCISE 70.—Several such exercises should be written.

If it were necessary to harmonize the additional melody of Ex. 297, the process would be as follows.

Write it out and indicate the chief harmonic notes in the following manner:—

Ex. 298.

Musical notation for Example 298, showing a melody in 4/4 time. The melody is written on a single staff. It consists of two lines of music. The first line has four measures, and the second line has four measures. Above the notes, there are 'V' marks indicating ornaments. Below the notes, there are '*' marks indicating embellishments such as Appoggiaturas or Suspensions.

The notes marked * are embellishments such as Appoggiaturas or Suspensions.

The melody is then reduced to its simplest form, and a suitable Bass added:—

Ex. 299.

Musical notation for Example 299, showing a melody and bass line in 4/4 time. The melody is written on a single staff, and the bass line is written on a single staff. Above the melody, there are Roman numerals: I, VI, IV, V, VI, G, V, I. Below the bass line, there are Roman numerals: C, I, V, I, VI, II, V, I. Between the melody and bass line, there are figures: 6, 4, 6, 7. Above the melody, there are figures: 5, 3, 1, 3, 4, 2, 6, 7, 3, 1, 6, 4, 6, 7, 5, 4. Above the bass line, there are figures: 3, 1, 6, 4, 6, 7, 5, 4.

Figures above the melody, and numerals below the bass part, are added according to rules given in Chapter X.

247. Before work of this kind can be undertaken by the student with any hope of a satisfactory result, it is absolutely necessary for him to be able, at least, to realize the effect of a melody; he must be able to hum it in his mind, so to speak, and not have to go to an instrument to discover its effect. Should he not be able to do this, then it is advisable for him at once to take a course of sight-singing lessons, or study the subject, and acquire the ability to read sound by sight, which is an imperative necessity for anyone who wishes to become a musician.

248. The study of Counterpoint will most readily give confidence and accuracy in the harmonization of melodies, and such study is most strongly recommended. The apparent strictness and the conventional figures employed in writing Counterpoint, perhaps allows it to be inferred that the harmonizing of melodies by means of Harmony gives more freedom, and results in a more modern style of music.

Such an inference, however, is inaccurate, for it is only the immature student in Counterpoint who produces the kind of work alluded to. The experienced scholar has an immense field open to him, which is only viewed from a distance by those who have not been through a course of good contrapuntal study.



249. A few words on **accompaniments** may be of use, though they are necessarily superficial and condensed in a small work.

250. Harmonic accompaniments, or figuration of harmony, is generally the ordinary four-part harmony formed into figures, or dividing the chords into notes of shorter value, and repeating them in such

a manner as to give a suitable support to the melody.

Accompaniments to songs, &c., may be studied in order to become acquainted with the conventional figures usually employed.

251. It is, however, of the utmost importance in writing broken chords as arpeggios, to retain the correctness of the original four-part harmony.

Though the notes of a chord may appear successively, instead of simultaneously, the connection between one chord or figure, and another, must be as correct in the part-writing as when the passage is written in chords.

252. The following example contains a simple chord progression which may be broken up or employed as an accompaniment, or figuration, in a number of ways, a few of which are :—

Ex. 300.

The above, as a very simple accompaniment:—

Ex. 301.

In eighth notes, with a little more elaboration by means of the addition of a Chromatic note of embellishment :—

Ex. 302.

With the upper part treated as a melody :—

Ex. 303.

The Tenor part treated as a melody :—

Ex. 304.

The chords in Arpeggio :—

Ex. 305.

The chords broken into Triplets :—

Ex. 306.

The chords broken into Arpeggios of sixteenth notes :—

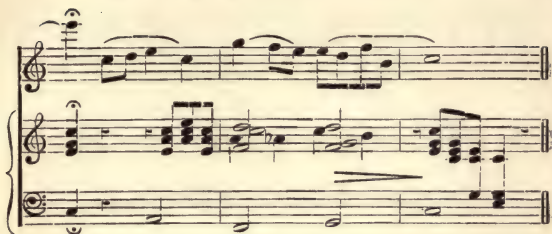
Ex. 307.

Musical score for Ex. 307, showing a melody in the treble clef and a bass line in the bass clef, both in 4/4 time. The melody consists of eighth notes, and the bass line consists of quarter notes.

253. The following example is a simple accompaniment to the melody of Ex. 297, in place of the somewhat stiff chords upon which the melody was written :—

Ex. 308.

Musical score for Ex. 308, showing a Violin part and a Piano part in 4/4 time. The Violin part is marked *p Andante* and the Piano part is marked *p*. The score is divided into two systems. The second system includes a dynamic marking of *f* for the Violin part.



The student will find such books as Dr. Pearce's "Student's Counterpoint," Dr. Greenish's "Tonality and Roots," Dr. Shinn's "Ear Training," and Professor Prout's invaluable series of Text Books, most useful guides and helps on the way to musical knowledge, and the author cannot do better now than leave him in their hands.

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THE FINGERING OF ARPEGGIOS, <i>S. Myerscough, Mus.B.</i>	1 6
FORM IN MUSIC <i>J. Humphrey Anger</i>	2 6
HARMONY, DIATONIC AND CHROMATIC <i>Dr. C. Vincent</i>	3 0
RUDIMENTS OF MUSIC FOR CHOIRS AND SCHOOLS <i>Harvey Löhr</i>	0 6

To be continued.

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