

or the same chords:

166b.

C: I IV<sub>7</sub> VII<sup>0</sup><sub>7</sub> III<sub>7</sub> VI<sub>7</sub> II<sub>7</sub> V<sub>7</sub> I

In Ex. 166 a. the first chord of the Seventh in each measure is *complete*, with its *fifth*; the second chord, on the contrary, is *incomplete*, without *fifth*; the leading of the voices in 166 b. shows the same succession of chords in such a manner that the *first* chord in each measure is *incomplete* (without the *fifth*), while the *second* chord is *complete* (with the *fifth*). In both cases the *third* of the one chord of the Seventh always serves as the preparation of the *seventh* of the following chord; its *third*, in turn, is the preparation of the *seventh* in the next chord etc.

The cadencing connection of these chords with triads, as well as with chords of the Seventh, is far more varied if we use the *inversions* of the *secondary chords of the Seventh*.

Each of these chords, like the chord of the Dominant Seventh, can appear in three inversions, in addition to the fundamental position: as chord of the Sixth and Fifth, chord of the Fourth and Third, and chord of the Second. These inversions are formed in the same manner as those of the chord of the Dominant Seventh, which we have already learned. The Bass takes the *third* in the chord of the Sixth and Fifth, the *fifth* in the chord of the Fourth and Third, and the *seventh* in the chord of the Second.

167.

C: I<sub>7</sub> I<sub>7</sub> I<sub>7</sub> I<sub>7</sub> II<sub>7</sub> II<sub>7</sub> II<sub>7</sub> II<sub>7</sub>

etc.

III<sub>7</sub> III<sub>7</sub> III<sub>7</sub> III<sub>7</sub>

The cadencing resolution of these inversions, according as they resolve into the triad or the chord of the Seventh of the fourth degree above, or the fifth degree below, will always give the chords with all their intervals *complete*.

Cadencing resolutions of the inversions into the triad.

168.

C: I<sub>7</sub> IV I<sub>7</sub> IV I<sub>7</sub> IV I<sub>7</sub> IV I<sub>7</sub> IV

Cadencing resolutions of the inversions into the chord of the Seventh.

169.

C: II<sub>7</sub> V<sub>7</sub> II<sub>7</sub> V<sub>7</sub> II<sub>7</sub> V<sub>7</sub>

Exercises.

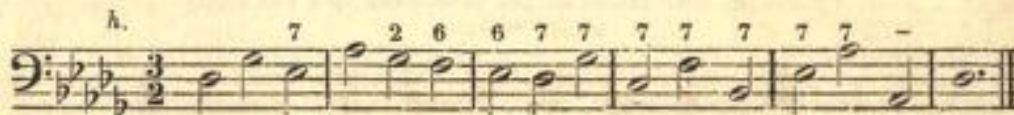
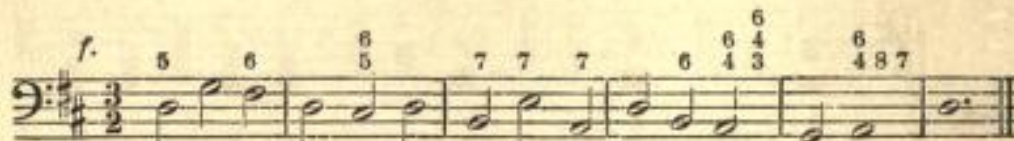
170.

NB.

NB. The three upper voices may remain stationary while the Bass moves downward.



In all triads the seventh can be struck after the octave of the fundamental without any further preparation.



## CHAPTER XI.

### The Secondary Chords of the Seventh in Minor and their Inversions.

§ 42. The most important and most frequently occurring secondary chords of the Seventh in minor are those on the second and seventh degrees. Chords of the Seventh may be formed on the remaining degrees of the scale, but they are rarely used in a cadencing resolution. On examining the following group of secondary chords of the Seventh of the minor scale :



we find three *new* forms of secondary chords of the Seventh: the *minor* triad with *major seventh* on the first degree, the *Augmented Triad* with *major seventh* on the third degree, and the *Diminished Triad* with *diminished seventh* on the seventh degree.

The chord of the Seventh on the first degree is not adapted to a resolution according to the rules so far known to us. Its *seventh*  $g\sharp$ , the leading tone of the scale cannot be led downward a step of an *augmented second*.

In our present exercises this chord need not be considered.\*)

172.

a: I<sub>7</sub> IV<sub>7</sub> I<sub>7</sub> IV I<sub>7</sub> IV<sub>7</sub> I<sub>7</sub> II<sup>0</sup><sub>7</sub>

I<sub>7</sub> VI<sub>7</sub> I<sub>7</sub> VI I<sub>7</sub> II<sub>7</sub>

The chord of the Seventh on the third degree is also little used. Its resolution into the triad of the sixth degree has to take place so that the *fifth*  $g\sharp$  (the leading tone) is always led upward.

173.

a: III'<sub>7</sub> VI III'<sub>7</sub> VI III'<sub>7</sub> VI III'<sub>7</sub> VI

III'<sub>7</sub> VI III'<sub>7</sub> VI III'<sub>7</sub> VI etc.

A cadencing connection of the chord of the Seventh of the fourth degree with the Diminished Triad of the seventh degree cannot be used, on account of its resulting in a forced and faulty leading of the voices.

\*) Later on, in the free resolutions of the chords of the Seventh, we shall again recur to the secondary chord of the Seventh on the first degree in minor. For — although not with descending *seventh* — it does admit of a cadencing resolution into the fundamental position of the chord of the Seventh of the fourth degree, and into the chord of the Sixth of the fourth degree, and of the other, non-cadencing, connections. In modulatory resolutions its *seventh* can also move downward to  $G$  or  $F\sharp$ . (See Chapter XIII § 46, Ex. 199 and 200.)

174.

Tritonus upward. Skip of a dim. fifth. etc.

a: IV<sub>7</sub> VII<sup>0</sup>

But a cadencing resolution of this chord into the chord of the Seventh on the seventh degree, can be used when the Bass skips downward a *diminished fifth*. A skip of the Bass upward into the *augmented fourth* would result in a tritonus (see § 39), and must therefore be avoided. The connection of the two chords is easiest when the *fifth* of the chord of the fourth degree is omitted.

175.

a: IV<sub>7</sub> VII<sup>0</sup><sub>7</sub> IV<sub>7</sub> VII<sup>0</sup><sub>7</sub> IV<sub>7</sub> VII<sup>0</sup><sub>7</sub> IV<sub>7</sub> VII<sup>0</sup><sub>7</sub>

etc.

IV<sub>7</sub> VII<sup>0</sup><sub>7</sub> IV<sub>7</sub> VII<sup>0</sup><sub>7</sub> IV<sub>7</sub> VII<sup>0</sup><sub>7</sub>

A doubling of the leading tone in the chord of the Seventh on the seventh degree must carefully be avoided. The inversions, also, of both chords (the chord of the Seventh on the fourth degree, and that on the seventh degree) are fit for connections.

176.

6 5 2 4 3 7 2 6 5 3

A cadencing connection of the chord of the Seventh on the sixth degree with the triad of the second degree is possible, but rarely

occurs. Here also, the Bass (in order to avoid the tritonus upward) must skip downward into the *diminished fifth*. Nevertheless the connection of the same chords (fourth and seventh degrees) is more easily made in minor than in major. For in minor the *fundamental* (lowest tone) of the Diminished Triad of the second degree is *not the leading tone* of the scale and may therefore be *doubled*. (See § 39, Ex. 151.)

177.  etc.

a: VI<sub>7</sub> n<sup>0</sup> VI<sub>7</sub> n<sup>0</sup> VI<sub>7</sub> n<sup>0</sup> VI<sub>7</sub> n<sup>0</sup> VI<sub>7</sub> n<sup>0</sup> VI<sub>7</sub> n<sup>0</sup>

The connection of the chord of the Seventh on the sixth degree with that on the second degree occurs more frequently. It is effected in exactly the same way in the fundamental position and in the inversions in minor, as in the same chords on the fourth and seventh degrees in major.

178.  etc.

a: VI<sub>7</sub> n<sup>0</sup><sub>7</sub> VI<sub>7</sub> n<sup>0</sup><sub>7</sub> VI<sub>7</sub> n<sup>0</sup><sub>7</sub> VI<sub>7</sub> n<sup>0</sup><sub>7</sub> VI<sub>7</sub> n<sup>0</sup><sub>7</sub>

§ 43. By far the most frequently occurring and most important of the secondary chords of the Seventh of the minor scale is that on the seventh degree, called

the Chord of the Diminished Seventh,

because it is formed by adding a *diminished seventh* (from the fundamental) to a Diminished Triad. It can never form a cadencing resolution into the triad or the chord of the Seventh on the third degree. Progressions of this kind:

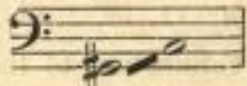
179.  etc.

a: VII<sup>0</sup><sub>7</sub> III' VII<sup>0</sup><sub>7</sub> VII<sup>0</sup><sub>7</sub> III' VII<sup>0</sup><sub>7</sub> VII<sup>0</sup><sub>7</sub> III' VII<sup>0</sup><sub>7</sub>

can *never* be regarded as resolutions of the chord of the Diminished Seventh on the seventh degree into the Augmented Triad of the third degree.\*) The resolution into the fundamental position of the triad is impracticable on account of its resulting in a bad leading of the voices.

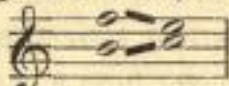
180.

a : vii<sup>0</sup><sub>7</sub> III' vii<sup>0</sup><sub>7</sub> III' vii<sup>0</sup><sub>7</sub> III'

The skip of a *diminished fourth upward* , being ill adapted to singing, is just as strictly prohibited as the tritonus *upward*, or the step of an *augmented second*. In a *downward* direction the skip of a *diminished fourth* may be used at any time and is *always good*; upward, on the contrary, it is difficult to be sung, even within the

same chord

The natural resolution of the chord of the Seventh on the seventh degree in minor, as in major (see Ex. 155, § 39) can lead into the triad of the first degree only. The resolution takes place in exactly the same manner as in example 155. The *fundamental*, (leading tone of the scale) ascends a small chromatic step; the *seventh* descends; the *third* moves a step upward when, in connection with the *seventh*, it forms a

*diminished fifth* ; but it can also be led *downward* when it forms an *augmented fourth* with reference to the *seventh*

The *fifth* of the chord of the Diminished Seventh must *always* move downward. (The reasons for this are given in § 39 and § 23.) The *diminished seventh* of the chord of the Seventh on the seventh degree in minor needs no preparation. The chord can always enter freely.

\*) Later on we shall speak of chord-progressions of this kind as accidental chord-formations (passing chords). (See § 57.)

181. 

It is hardly necessary to remark that a resolution of the chord of the Diminished Seventh into the *chord of the Seventh* of the first degree in minor is *impossible*, although the resolution into the *triad* of the first degree is so natural. The following are connections of the chord of the Diminished Seventh with the triad of the first degree.

182. 

a:  $\text{vii}^0_7 \text{ I}$     $\text{vii}^0_7 \text{ I}$     $\text{vii}^0_7 \text{ I}$     $\text{vii}^0_7 \text{ I}$     $\text{vii}^0_7 \text{ I}$

$\begin{matrix} 6 \\ 5 \\ 3 \end{matrix}$  6    $\begin{matrix} 4 \\ 3 \end{matrix}$  6    $\begin{matrix} 6 \\ 4 \end{matrix}$  etc.

$\text{vii}^0_7 \text{ I}$     $\text{vii}^0_7 \text{ I}$     $\text{vii}^0_7 \text{ I}$

The *seventh* of the secondary chord of the Seventh on the second degree in minor may also enter freely, because it is situated over a Diminished Triad.

In connecting two or more chords of the Seventh of the minor scale in their *fundamental position*, the *fifth* must be omitted in each alternate chord.

183. 

a:  $\text{IV}_7$     $\text{vii}^0_7$     $\text{VI}_7$     $\text{ii}^0_7$     $\text{V}_7$     $\text{VI}_7$     $\text{ii}^0_7$     $\text{V}_7$

In connecting the chord of the Seventh in its fundamental position with the *inversion* of another chord of the Seventh; or in connecting two or more inversions of the chord of the Seventh with each other, the chords will appear complete.



184.

a: VI<sub>7</sub> II<sup>0</sup><sub>7</sub> IV<sub>7</sub> VII<sup>0</sup><sub>7</sub> VI<sub>7</sub> II<sup>0</sup><sub>7</sub> V<sub>7</sub>

Exercises.

185. a.

b.

c.

d.

e.

f.

g.

h.

NB.

At NB. in the last exercise but one, the chord of the Seventh on the third degree with its cadencing resolution into the triad of the sixth degree is introduced. The inversions of this chord of the Seventh are barely suitable for use, and are least adapted to a cadencing resolution. Such connections as the following :

c# : I    V    III'    VI

are forced and unnatural. But in the position of chord of the Sixth and Fifth, this chord is more manageable, as is shown in the following example :

d : I    IV<sub>7</sub>    VII<sup>0</sup><sub>7</sub>    III'<sub>7</sub>    VI

The first few bars of the eighth exercise may be worked in the following manner :

c# : I    V    III'    VI    IV    V<sub>7</sub>    I

## CHAPTER XII.

## Non-cadencing Connection of Chords of the Seventh with Chords of other Degrees.

§ 44. We have so far, in our examples and exercises, always resolved the chords of the Seventh, in their fundamental position or in their inversions, into those chords which were situated a *fourth* above or a *fifth* below. In addition to this resolution most natural in principle, there are free non-cadencing resolutions. Such connections are called

## Deceptive Cadences.

They can be formed in various ways:

1. By connecting the chords of the Seventh with other chords *belonging to the scale* than those which form the cadencing resolutions.
2. By connecting the chords of the Seventh of one key with chords on *other degrees in foreign keys*.

In the last mentioned case arises a

## Modulation.

A modulation therefore takes place, when a chord is introduced which does not belong to the key in which a piece is written, but to a foreign key.

186.

The musical notation consists of two systems, each with a treble and bass staff. The first system is in C major and shows the following chords: C: I, IV, V, I, g: V<sub>7</sub>, F: V<sub>7</sub>, I, a: ii<sup>0</sup><sub>7</sub>. The second system is in G minor and shows the following chords: V<sub>7</sub>, VI, iv<sub>7</sub>, C: I, ii<sub>7</sub>, V, I.

So in Ex. 186, in the third bar, the harmony touches *g* minor, in the fourth bar *F* major, in the fifth bar *a* minor, and in the seventh

bar it returns to *C* major. Modulating and non-modulating *deceptive* cadences can be formed in three different ways.

- a. By the *regular* downward progression of the *seventh*;
- b. with *stationary*, or *non-progressing seventh* (or its enharmonic change to the *augmented sixth*);\*)
- c. by the *seventh* progressing upward *diatonically*.

We will begin the study of deceptive cadences with the chord of the Dominant Seventh, and will show the pupil a few connections of this chord with triads and chords of the Seventh of other degrees and keys, first with *regular downward progression of the seventh*.

NB.

187.

C: V<sub>7</sub> VI V<sub>7</sub> III V<sub>7</sub> a: V C: V<sub>7</sub> a: V<sub>7</sub> C: V<sub>7</sub> F: V<sub>7</sub>

C: V<sub>7</sub> d: V<sub>7</sub> C: V<sub>7</sub> A<sub>7</sub>: I C: V<sub>7</sub> a<sub>7</sub>: VII<sup>0</sup><sub>7</sub> C: V<sub>7</sub> d: II<sub>7</sub> C: V<sub>7</sub> f: VII<sup>0</sup><sub>7</sub>

C: V<sub>7</sub> d: VII<sup>0</sup><sub>7</sub> C: V<sub>7</sub> g: II<sup>0</sup> C: V<sub>7</sub> g: II<sup>0</sup><sub>7</sub> C: V<sub>7</sub> A<sub>7</sub>: V<sub>7</sub> C: V<sub>7</sub> E<sub>7</sub>: I

C: V<sub>7</sub> E<sub>7</sub>: I C: V<sub>7</sub> d: II<sup>0</sup> C: V<sub>7</sub> VI<sub>7</sub> C: V<sub>7</sub> b<sub>7</sub>: II<sup>0</sup> C: V<sub>7</sub> D<sub>7</sub>: V<sub>7</sub>

\*) The change of the *seventh* to the *augmented sixth* is really an upward progression of the *seventh*, because the distance between the fundamental and a *minor seventh* is smaller than that between the fundamental and an *augmented sixth*.

At NB. the connection of the chords of the Dominant Seventh of *C* and *F* major is a Modulatory Cadencing resolution.

We here add the following rule: If in four-voiced writing the fundamental position of the chord of the Dominant Seventh is followed by the triad of the sixth degree, the chord of the Seventh must be rendered *complete*, with all its intervals. In the connection of these two chords in *minor*, the *third* of the triad of the sixth degree must be doubled; e. g.

C: V<sub>7</sub> VI    c: V<sub>7</sub> VI    V<sub>7</sub> VI    V<sub>7</sub> VI

The following are non-cadencing connections of the chord of the Dominant Seventh with chords of other degrees and keys, the *seventh* remaining stationary.

188.

C: V<sub>7</sub> IV    C: V<sub>7</sub> II<sub>7</sub>    C: V<sub>7</sub> II    C: V<sub>7</sub> f: I    C: V<sub>7</sub> c: II<sup>0</sup><sub>7</sub>

enharmonic

C: V<sub>7</sub> a: VII<sup>0</sup><sub>7</sub>    C: V<sub>7</sub> G<sup>b</sup>: V<sub>7</sub>    C: V<sub>7</sub> F<sup>#</sup>: V<sub>7</sub>    C: V<sub>7</sub> f: II<sub>7</sub>

C: V<sub>7</sub> F: II<sub>7</sub>    C: V<sub>7</sub> E<sup>b</sup>: V<sub>7</sub>    C: V<sub>7</sub> d: III'    C: V<sub>7</sub> E<sup>b</sup>: II<sub>7</sub>

NB.

C: V<sub>7</sub> e<sup>b</sup>: II<sup>0</sup><sub>7</sub> C: V<sub>7</sub> B<sup>b</sup>: V<sub>7</sub> C: V<sub>7</sub> a: II<sup>0</sup><sub>7</sub> C: V<sub>7</sub> e<sup>b</sup>: II<sup>0</sup><sub>7</sub>

The chord at NB. is, at present, unknown to the pupil. He will become better acquainted with it as the chord of the Augmented Sixth and Fourth, under the head of "Altered Chords".

Connections of the chord of the Dominant Seventh with chords of other degrees and keys through the upward progression of the *seventh*.

189.

C: V<sub>7</sub> G: VII<sup>0</sup> C: V<sub>7</sub> G: V<sub>7</sub> C: V<sub>7</sub> f<sup>#</sup>: II<sub>7</sub> C: V<sub>7</sub> h: I

C: V<sub>7</sub> g: VII<sup>0</sup><sub>7</sub> C: V<sub>7</sub> E: V<sub>7</sub> C: V<sub>7</sub> D: I C: V<sub>7</sub> D<sup>b</sup>: V<sub>7</sub>

C: V<sub>7</sub> c: II<sup>0</sup><sub>7</sub> C: V<sub>7</sub> c: IV C: V<sub>7</sub> c: IV<sub>7</sub> etc.

The chords used in the last two bars in connection with the progression of the chord of the Dominant Seventh, will also be explained in the chapter on "Altered Chords".

§ 45. The *seventh* must nearly always be *led upward* when, in the resolution of a chord of the Seventh, another interval of that chord progresses in a *downward* direction to the tone into which the *seventh* would naturally resolve. This leading may occur in the ordinary cadencing resolution of the chord of the Seventh on the fifth degree into the Tonic Triad.

Such progressions as the following:

190.

C: V<sub>7</sub> I V<sub>7</sub> I V<sub>7</sub> I

are under all conditions strictly forbidden, because the *concealed octaves* which here occur are just as faulty, in pure writing, as *parallel octaves*, even though the upper voice makes only a *half-step*. This rule is applicable to all voices; the progressions in 190 and 191 are therefore *wrong*, and are *always to be avoided as faulty*, no matter if they occur in cadencing or non-cadencing resolutions of any chord of the Seventh. \*)

191.

C: V<sub>7</sub> I V<sub>7</sub> vi ii<sub>7</sub> V a: V<sub>7</sub> IV

In some cases the upward progression of the *seventh* is advisable even when another interval of the chord of the Seventh moves in the *same direction* to the tone into which the *seventh* would naturally resolve; e. g.

193 a.

C: I V<sub>7</sub> I G: I V<sub>7</sub> I

\*) We give the following chord-connection as one of a few and rarely occurring exceptions to this rule:

192.

C: V<sub>7</sub> a: V<sub>7</sub>

Here the Bass (*B*), instead of progressing to the *third*, skips to *E*, the *fundamental* of the second chord; the *concealed octaves* are also greatly softened by the contrary motion of the Tenor, and the stationary Alto.

Ex. 193 *b.* cannot be called good, because the *seventh* and *fundamental* of the chord of the Seventh are too near each other.

193 *b.*

In conclusion we would remark that the Dominant *Seventh* can also progress downward by a skip. Such a progression can take place in the cadencing resolution  $V_7 I$ .

This resolution has a better effect if the *fifth* of the chord of the Seventh be chromatically raised. (Compare § 49.)

C:  $V_7 I$                       C:  $V_7 I$

It may also take place at the turning point of a modulation, e. g.

193 *c.*

C:  $I V_7 F: V_7 I$                       C:  $V_7 d: vii^0_7 I$

In the following we give a few more examples of the non-cadencing connection of the chord of the Dominant Seventh with chords of other degrees and keys, explanatory to the rule given at the beginning of this paragraph (§ 45).

194.

C:  $V_7 F: V_7 C: V_7 f: vii^0_7 C: V_7 A^b: V_7 C: V_7 b^b: ii^0_7$



not to be recommended.

C: V<sub>7</sub> b<sup>7</sup>: vii<sup>0</sup><sub>7</sub> C: V<sub>7</sub> D<sup>7</sup>: V<sub>7</sub> C: V<sub>7</sub> D: V<sub>7</sub>

In §§ 44 and 45 we have given the pupil a glimpse, which is however only an indication, of the connection of the chord of the Dominant Seventh with other chords. As in the realm of Melody new melodic formations have ever been, and *will* ever be, created by musical authorities, so also in the sphere of Harmony new chord-connections will always be invented.

In the following examples we shall, by no means, use all these progressions of the chord of the Dominant Seventh. We indicate the change of key in an exercise by means of a large letter for major, and a small one for minor. In all later exercises the pupil must for himself indicate the course of modulation.

Exercises.

195. a.

C: I V<sub>7</sub> II E<sup>7</sup>: V<sub>7</sub> C: V<sub>7</sub> VI II<sub>7</sub> V<sub>7</sub> a: V<sub>7</sub> VI C: vii<sup>0</sup><sub>7</sub> III V<sub>7</sub> I

B<sup>7</sup>: I V<sub>7</sub> IV V<sub>7</sub> g: V<sub>7</sub> I B<sup>7</sup>: II<sub>7</sub> V V<sub>7</sub> I

A<sup>7</sup>: I IV V<sub>7</sub> IV I E<sup>7</sup>: V<sub>7</sub> c: V<sub>7</sub> f: V V<sub>7</sub> I E<sup>7</sup>: V<sub>7</sub>

A<sup>7</sup>: I V<sub>7</sub> I A: I IV V<sub>7</sub> f<sup>#</sup>: V<sub>7</sub> b: V<sub>7</sub> I V<sub>7</sub>

c<sup>#</sup>: vii<sup>0</sup><sub>7</sub> I b: vii<sup>0</sup><sub>7</sub> I V<sub>7</sub> I A: I V<sub>7</sub> I

E: I V<sub>7</sub> c#: V<sub>7</sub> I D: V<sub>7</sub> c#: I D: V<sub>7</sub> B: V<sub>7</sub> vi E: II I V<sub>7</sub> I

G: I e: V<sub>7</sub> I C: V<sub>7</sub> a: V<sub>7</sub> I V<sub>7</sub> I G: I V<sub>7</sub>

vi II<sub>7</sub> V<sub>7</sub> e: V<sub>7</sub> VI G: II<sub>7</sub> V V<sub>7</sub> I

d. I V<sub>7</sub> B<sup>b</sup>: V<sub>7</sub> g: V<sub>7</sub> I d: V<sub>7</sub> B<sup>b</sup>: III V<sub>7</sub> g: V<sub>7</sub> I d: VII<sup>0</sup><sub>7</sub>

At NB. the leading tone c# must be led downward to c.

I II<sup>0</sup><sub>7</sub> V V<sub>7</sub> I g: I V<sub>7</sub> III<sup>0</sup><sub>7</sub> VI e: V V<sub>7</sub>

f: VII<sup>0</sup><sub>7</sub> I c: VII<sup>0</sup><sub>7</sub> I A<sup>b</sup>: V<sub>7</sub> g: I IV<sub>7</sub> d: V<sub>7</sub> g: I V<sub>7</sub> I

e: I II<sup>0</sup><sub>7</sub> V<sub>7</sub> E<sup>b</sup>: I V<sub>7</sub> f: VII<sup>0</sup><sub>7</sub> I e: I V I

f: I V<sub>7</sub> A<sup>b</sup>: V<sub>7</sub> I B<sup>b</sup>: VII<sup>0</sup><sub>7</sub> I f: VII<sup>0</sup><sub>7</sub> I V<sub>7</sub> VI vi V<sub>7</sub> I

e: I G: II<sub>7</sub> V<sub>7</sub> a: VII<sup>0</sup><sub>7</sub> I e: II<sup>0</sup><sub>7</sub> V<sub>7</sub> a: VII<sup>0</sup><sub>7</sub> I — e: I V<sub>7</sub> I

m. 3 6 5 7 NB. 6 $\flat$  4 7 6 8 7  
 9 $\sharp$ : I V<sub>7</sub> B: V<sub>7</sub> b $\flat$ : I B: V<sub>7</sub> 9 $\sharp$  V<sub>7</sub> I II<sup>0</sup><sub>7</sub> V<sub>7</sub> I  
 n. 5 6 4 3 5 7 4 2 6 5 6 7 4 NB. 6 4 3  
 f $\sharp$ : I V<sub>7</sub> A: I b: VII<sup>0</sup><sub>7</sub> I E: V<sub>7</sub> f $\sharp$ : VII<sup>0</sup><sub>7</sub> I G: V<sub>7</sub> c $\sharp$ : V<sub>7</sub>  
 E: I f $\sharp$ : VII<sup>0</sup><sub>7</sub> I II<sup>0</sup><sub>7</sub> V V<sub>7</sub> I

At NB. in the exercises m. and n. c $\sharp$ , d $\flat$  and c, b $\sharp$  are enharmonically changed.

## CHAPTER XIII.

### The Connection of the Secondary Chords of the Seventh with Chords of other Tone-degrees and Keys.

§ 46. The secondary chords of the Seventh, also, admit of various non-cadencing connections; some of them, which in cadencing resolutions could be used but little or not at all, prove to be adapted to other progressions. We will show this first in the chord of the Seventh on the first degree in minor, which is the most rarely occurring and most unmanageable. Its *seventh* cannot move downward, because it would then result in a step of an *augmented second*, which is forbidden on the ground of its being unmelodic and also because it is the leading tone of the scale. It could remain stationary or, in a *modulatory resolution*, be led downward to *G* or *F $\sharp$* . The *natural* progression of this *seventh* is upward. In this case it is possible to form a cadencing resolution of the chord of the Seventh on the first degree in minor into the *fundamental position* of the *chord of the Seventh* on the fourth degree, and into the chord of the Sixth of the triad of the fourth degree. Of course, we suppose it to be understood that the chord of the Seventh on the *first* degree is introduced after being prepared, and that the chord of the Seventh on the fourth degree is properly resolved, as we show in the following example, where, on account of the cadencing resolution of the chord of the Seventh on the fourth degree into that on the seventh degree, the progression of the Bass to the lower *G $\flat$*  had to follow necessarily;

196.

a: I VI ii<sup>0</sup><sub>7</sub> V I<sub>7</sub> IV<sub>7</sub> vii<sup>0</sup><sub>7</sub> I

or in the resolution of the chord of the Seventh on the first degree into the chord of the Sixth of the triad of the fourth degree:

197.

a: I VI ii<sup>0</sup><sub>7</sub> V I<sub>7</sub> IV V<sub>7</sub> I

In addition to these cadencing resolutions of the chord of the Seventh on the first degree in minor, we here present still other progressions which appear less forced than the cadencing. Of course the preparation of the chord is presupposed.

198.

a: I<sub>7</sub> VI I<sub>7</sub> ii<sup>0</sup><sub>7</sub> I<sub>7</sub> ii<sup>0</sup><sub>7</sub> I<sub>7</sub> e: V<sub>7</sub>

a: I<sub>7</sub> B<sup>b</sup>: V<sub>7</sub> a: I<sub>7</sub> e: vii<sup>0</sup><sub>7</sub> a: I<sub>7</sub> G: V<sub>7</sub> a: I<sub>7</sub> VI<sub>7</sub>

a: I<sub>7</sub> g: ii<sup>0</sup> a: I<sub>7</sub> d: V a: VI I<sub>7</sub> G: vii<sup>0</sup> etc.

In modulatory connections, however, the *seventh* of the chord in question may be also led downward a step. (See Note § 42, Chap. XI.)

The *seventh* moves a half-step downward.

199.

a: 1<sub>7</sub> d: V<sub>7</sub> a: 1<sub>7</sub> f: vii<sup>0</sup><sub>7</sub> a: 1<sub>7</sub> F: V<sub>7</sub> a: 1<sub>7</sub> F: vii<sup>0</sup><sub>7</sub>  
NB.

a: 1<sub>7</sub> A<sup>b</sup>: V<sub>7</sub> a: 1<sub>7</sub> G: I a: 1<sub>7</sub> g: i a: 1<sub>7</sub> g: ii<sup>0</sup><sub>7</sub> a: 1<sup>7</sup> a<sup>#</sup>: ii<sup>0</sup><sub>7</sub>

The chord marked NB, will be afterwards known as the chord of the Augmented Fourth and Third.

The *seventh* moves a whole-step downward.

200.

a: 1<sub>7</sub> G: vii<sup>0</sup> a: 1<sub>7</sub> G: vii<sup>0</sup><sub>7</sub> a: 1<sub>7</sub> D: iii<sub>7</sub> a: 1<sub>7</sub> h: V<sub>7</sub>  
e: ii<sup>0</sup><sub>7</sub>

a: 1<sub>7</sub> e: vii<sup>0</sup><sub>7</sub> a: 1<sub>7</sub> e: V

etc.

The parallel motion of the Soprano and Tenor is counteracted and balanced by the contrary motion of the Bass; but we do not recommend such progressions to the pupil, although, as an exception, the progression of an *augmented fifth* to a *perfect fifth* downward, as here shown, is permissible in this case. It is different when a *perfect fifth* is followed by an *augmented fifth* downward; e. g.

201.

7 6# 7

e: II<sub>7</sub> III' V<sub>7</sub> I

Such progressions are found with the best masters in pure writing  
They are always allowable when the Bass goes in contrary motion.

good.

202.

6# 7#

b: IV III' V<sub>7</sub> I

But in the outer voices this succession of *fifths* is *not* to be recommended.

not good.

203.

The connection of the chord of the Seventh on the first degree in minor with other chords is also possible when the *seventh* remains stationary.

204.

a: I<sub>7</sub> h: VII<sup>0</sup><sub>7</sub> a: I<sub>7</sub> VII<sup>0</sup><sub>7</sub> a: I<sub>7</sub> V<sub>7</sub> a: I<sub>7</sub> d: IV

a: I<sub>7</sub> d: II<sup>0</sup><sub>7</sub> a: I<sub>7</sub> V<sub>7</sub> etc.

§ 47. If, indeed, some of these connections sound harsh and strange, it must not be forgotten that they are here presented without any connection with preceding and following chord-formations. They can all be employed; but in each case the effect will depend upon the way in which the *first* chord is prepared, and the *second* is resolved.

After having proved that the secondary chord of the Seventh on the *first degree in minor* (which occurs least in practice and is most difficult to manage) can be employed for progressions, there remains to be stated briefly that:

Any chord of the Seventh may be employed, both with regularly descending *seventh* and with stationary or ascending *seventh*, both in cadencing and in free resolutions (deceptive cadences).

It would go far beyond the limits of this book to exhibit a table of all possible resolutions of all secondary chords of the Seventh. In the following exercises the pupil will find a number of *deceptive cadences*. According to the example of the resolutions shown in the chord of the Dominant Seventh and in the chord of the Seventh on the first degree in minor, he may try to form for himself similar chord-connections proceeding from other secondary chords of the Seventh. The following may serve as a criterion for the goodness and fitness of such chord-connections:

In general, any chord-connection is good where one or two tones belonging to two chords in common are retained in the same voice. But even without the natural bridge of a sustained tone, the connection of two chords may be good when the several voices are led from the tones of one chord to those of another in a manner well adapted to singing.

205.

a. b.

*G*: vii<sup>0</sup><sub>7</sub> *C*: V    iv    V    *C*: I    *C*: IV    vii<sup>0</sup><sub>7</sub>    I

c. d. e.

*C*: ii<sub>7</sub>    iii    V<sub>7</sub>    I    *C*: vii<sup>0</sup><sub>7</sub>    I    *C*: V<sub>7</sub>    a: III'    V<sub>7</sub>

*f.* *g.* *h.*  
*i.* *k.* *l.* *m.* *n.*  
*g:* vii<sup>0</sup><sub>7</sub> *C:* I *C:* V<sub>7</sub> I *C:* V<sub>7</sub> I *C:* V<sub>7</sub> IV *C:* V<sub>7</sub> B: I

The pupil will see from the examples 205 *d*, *e*, *f*, *g*, *h*, *i*, *k*, *l* and *m*, that free progressions of certain intervals of the chords of the Seventh are also good.

Attention must here be called to the fact that the *introduction* of the *fundamental* and *seventh* of a chord of the Seventh in *parallel motion* almost always produces a bad effect and must therefore be carefully avoided. All of the following exercises show bad leading of the voices.

206.

But there are individual cases, in examples 193 *c*. and 205 *f*. and *h*., where the introduction of *fundamental* and *seventh* in *parallel motion* can *not* be found fault with.

Exercises.

In all the exercises the pupil must mark the chords with Roman numerals under the Bass, and accurately indicate the course of modulation by means of capital letters for major and small letters for minor, as is shown in the first two exercises.

207.

*a.* 8 7 6 7 4 5 7 6 5  
*C:* I ii<sub>7</sub> I IV vii<sup>0</sup><sub>7</sub> IV vii<sup>0</sup><sub>7</sub> iii vi<sub>7</sub> V vi<sub>7</sub> ii  
*b.* 6 6 5 3 4 7  
*V*<sub>7</sub> I ii<sub>7</sub> V I *d:* i V<sub>7</sub> i B<sup>b</sup>: V<sub>7</sub> I *g:* V<sub>7</sub>



11<sup>5</sup>  
4 3 b 6 7 6 8 7 c. 3 4 3

VI c: V<sub>7</sub> 1 g: 1 d: V<sub>7</sub> 1 11<sup>0</sup><sub>7</sub> V<sub>7</sub> 1

6 6 7 6 6 7 6 5 6 4 3 #

d. 3 6 6 6 4 6 7b 6 4 6 7 4 #

7 # 6 6 6 4 7 c. 7 6 6 6 4 4 2

7 6 7 7 7 7b 6 6 6 8 7

NB.

NB. The line below the 7 (7) indicates the continuation into the next chord, of the sharp (#) marked below the 8 for the third of the Dominant Triad.

f. 5 6 6 6 6 4 2 6 6 7

6 6 8 7 6 7 6 5 7

g. 3 6 6 7 6 4 6 6 7b 8 7b 6

6 7b 7b 6 4 7 h. 3 6 7 6 4 2 7

4 6 4 4 4 6 6 6 6 5 7

i. 8 4 6 3 2 6 7 6 6 6 7b

NB. NB.

At NB. the seventh (A $\flat$ ) of the second chord must make a downward skip of a fourth to E $\flat$ . This leading of the voices is good, although the fundamental and seventh of the chord of the Sixth and Fifth are introduced in parallel motion.

k. 8 7 6 7 6 2 6 4 7 5 7 $\flat$  6 5 6 7  
 5 4 5 $\flat$  7 $\flat$  2 6 5 2 7 5 7 $\flat$  7 7 6 7  
 l. 5 3 5 $\flat$  7 $\flat$  2 6 5 2 7 5 7 $\flat$  7 7 6 7  
 m. 5 6 7 7 $\flat$  6 7 $\flat$  6 4 8 7  
 n. 5 7 6 5 4 4 $\flat$  5 4 5 4 4 7 7  
 3 4 3 2 2 3 2 3 2 6 3 7 7  
 o. 5 7 6 7 7 6 7  
 p. 6 5 # 7 5 3 5 6 4 $\times$  6 5 6 8 7  
 5 # 5 3 6 5 5 # 7  
 q. 3 2 6 6 7 6 4 6 7 5 7 6 8 7  
 3 # 6 7 5 # -  
 r. 3 6 6 # 7 2 6 7 6 7  
 # # -  
 s. 8 4 7 6 5 2 6 7 # 6 - 8 7  
 3 3 3 -

NB

NB. The lines — over the quarter-note  $\frac{6}{5}$  indicate the continuation of the figures  $\frac{6}{5}$ . Hereafter we shall often mark the continuation of a figuring by lines even in changing chords; so  $\frac{6}{5} \frac{4}{3}$  or  $\frac{6}{5} \frac{4}{3}$  indicates a chord of the Sixth and Fifth followed by the chord of the Fourth and Third.

## CHAPTER XIV.


## Altered Chords.

## Triads with Altered Fifth.

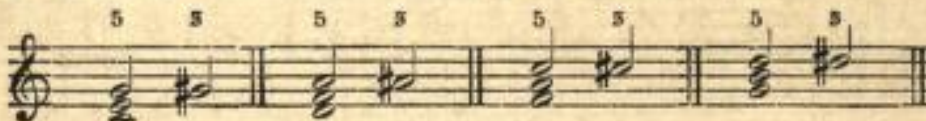
§ 48. Those chords in which one or more tones are chromatically changed are called altered chords.\*) The chromatic alteration of a tone in a triad changes it into a different triad; e. g.

210. 

C: I   d: VII<sup>0</sup>   c: I   bb: II<sup>0</sup>   eb: I   a: III'

We here see the triad of the first degree in *C* major in chromatically altered forms, which are already known to us as fundamental chords. Therefore, with the exception of the last formation, 

we do not consider them as altered chords. This chord can appear as the Augmented Triad of the third degree in *a* minor, and just as well as the triad of the first degree, with altered *fifth*, in *C* major. It is more often used in *C* major, than in *a* minor. The *fifth* is altered, of the triads of the first, second, fourth and fifth degrees in *major*; and of the triads of the fourth and sixth degrees in *minor*.

211. 


C: I   II   IV   V

212. 

a: IV   VI

The *altered fifth* must always be led a small chromatic half-step upward.

\*) There are cases where two or three tones of a chord are chromatically changed; e. g.

208. 

C: III<sub>7</sub>   d: II<sub>7</sub>

209. 

213.

C: I IV I vi I vii<sup>0</sup><sub>7</sub>

C: I ii<sub>7</sub> I G: V<sub>7</sub> C: I IV<sub>7</sub>

C: I B<sup>b</sup>: V<sub>7</sub> C: I g: vii<sup>0</sup><sub>7</sub> C: I a: ii<sup>0</sup><sub>7</sub> etc.

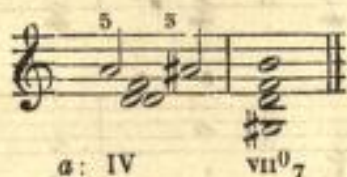
214.

C: ii V ii V<sub>7</sub> ii a: V<sub>7</sub>

C: ii D: vii<sup>0</sup><sub>7</sub> C: ii f#: V<sub>7</sub> etc.

The major triads, with altered *fifth*, of the fourth and fifth degrees in major, and of the sixth degree in minor, can progress in a similar manner to the altered triad of the first degree, shown in Ex. 213. The altered triad of the fourth degree in minor, which progresses most

naturally into the chord of the Diminished Seventh on the seventh degree,



a: IV      vii<sup>0</sup><sub>7</sub>

can also make other similar progressions, as in 214.

It is not necessary for the altered interval, the *augmented fifth*, always to be preceded by the original tone (*perfect fifth*). The triad with altered *fifth* can enter freely (unprepared).

215.

C: IV   I   IV   IV   I   IV   II   —   V<sub>7</sub>

The inversions of the triads with altered *fifth* can also be used, especially the major triads. The minor triads of the second degree in major, and of the fourth degree in minor, do not often occur with altered *fifth* in the position of chord of the Sixth and of chord of the Sixth and Fourth.

216.

C: I   IV   I   IV   IV   II   IV   V<sub>7</sub>

V   I   V   I   II   II   vii<sup>0</sup>   II   II   V<sub>7</sub>

Although the chromatically raised *fifth* is foreign to the dominating key, a modulation is not created by the introduction of an *altered triad*.

Exercises.

217. *a.* NB.  $\overset{6}{5}$   $\overset{5}{5}$   $\overset{5}{5}$   $\overset{5}{5}$   $\overset{5}{5}$   $\overset{5}{5}$   $\overset{6}{5}$   $\overset{8}{7}$

C: I IV II V I VI II<sub>7</sub> V<sub>7</sub> I

NB. The first 5 in this measure shows the position of the Soprano and, at the same time, that of the original (perfect) *fifth* which precedes the altered *fifth*. The *unaltered* figure 5 in the succeeding bars simply indicates that the original *fifth* precedes the altered *fifth* in the same voice.

*b.* 3 5  $\overset{6}{6\#}$  7 5 5 7  $\overset{6}{5}$  2 5 5 2  $\overset{6}{6\#}$

*c.*  $\overset{6}{5}$  8 7  $\flat$  5 5 5 7 5 5 5 6  $\sharp$  7

*d.* 3 5  $\overset{6}{7}$  5 5 8 7 6 7 5 5 5 5  $\overset{6}{5}$  3 5 5

*e.* 5  $\overset{6}{\#}$  5 5 7 6 5 5 7  $\overset{6}{5}$  8 7

*f.* 3 5  $\sharp$  5 6 5 5  $\sharp$  8 7 5 5  $\sharp$  8 7 7 5  $\sharp$

*g.* 3 7  $\sharp$  5 5 5 5 7 6 5 4 5 5 3 7 5 7 7 8 6 7

*h.* 8 5  $\overset{6}{4}$  3  $\overset{6}{4}$  5 3 5  $\overset{6}{4}$  3 5 7  $\sharp$

8 7  $\overset{6}{\#}$   $\overset{7}{\#}$  6 5 5

Chords of the Seventh with Altered Fifth.

§ 49. The *fifth* of the chords of the Seventh on the first, fourth and fifth degrees in major, and on the sixth degree in minor, can also be

raised a half-step. The altered tone must also in these (as indeed in all cases) be led upward. Of the chords of the Seventh so altered:

218. 

C: I<sub>7</sub> IV<sub>7</sub> V<sub>7</sub> a: VI<sub>7</sub>

the chord of the Dominant Seventh only, in its fundamental position, and in all its inversions in major, is used; the chord of the Fourth and Third is *very seldom* used, and then only in the open position. The chord of the Sixth and Fifth is also effective in the open position only; in all the positions of this chord the altered *fifth* must be at a distance from the *seventh*. For this reason the chord of the Second only can be used, both in the *open* and in the *close* position.

219. 

C: V<sub>7</sub> V<sub>7</sub> V<sub>7</sub> V<sub>7</sub>

The inversions of the secondary chords of the Seventh sound hard, are difficult to introduce, and are rarely used. In their fundamental position these chords can be used in the cadencing resolution as well as in the (more often occurring) non-cadencing resolution.

220. 

C: I<sub>7</sub> IV I<sub>7</sub> VI I<sub>7</sub> d: V C: I<sub>7</sub> a: IV C: I<sub>7</sub> VI



I VI C: IV<sub>7</sub> VII<sup>0</sup> IV<sub>7</sub> II IV<sub>7</sub> G: V<sub>7</sub> C: IV<sub>7</sub> d: IV

etc.

C: IV<sub>7</sub> B<sup>b</sup>: I    C: IV<sub>7</sub> II    IV<sub>7</sub> II    C: V<sub>7</sub> I    V<sub>7</sub> F: V<sub>7</sub>

etc.

C: V<sub>7</sub> III    V<sub>7</sub> a: V    C: V<sub>7</sub> d: II<sup>0</sup>    C: V<sub>7</sub> d: VII<sup>0</sup><sub>7</sub>

In many cases the use of these chords will make the *open* or *dispersed* position necessary (compare § 17). The pupil need, by no means, retain the open or the close position throughout one and the same exercise. He can, according as the leading of the voices demands it, change from one position to another, as in the following example, which begins in the open and ends in the close position.

Open position.

221 a.

C: I    V<sub>7</sub> I    IV<sub>7</sub> G: V    I —    IV<sub>7</sub> II

Close position.

V<sub>7</sub> I    V<sub>7</sub> I    V    V<sub>7</sub> e: V<sub>7</sub> —    i a: V<sub>7</sub>

i d: V<sub>7</sub>    C: II    e: II<sub>7</sub>    C: III    V    I



Progressions such as those marked NB. in Ex. 221 *b*, are not to be considered as inversions of the secondary chords of the Seventh of the fourth and first degrees. The pupil will later learn to know such chord-formations as *accidental chords* (compare § 57).

221 *b*.

NB. NB.

NB. NB.

The use of a score of four systems (staves) with four different clefs will afford a better view of the voice-progression, and will be better suited to our purpose in the working of the following examples in the open position, than the method of writing heretofore used. The knowledge of, and perfect familiarity with, the so-called old clefs is indispensable to every musical student. We would urgently recommend the pupil to write all the exercises twice: first in the Treble and Bass clefs on two, or still better, on four systems, and then in such a way that the three upper voices appear in the three *C* clefs, and on three systems. The Bass, of course, always retains the Bass clef.

The following will serve to explain the above:

The *C* clef always shows upon which line *c* (one-lined) *C* is situated, and is placed on the *first* line in the *Soprano* clef, on the *third* line in the *Alto* clef, and on the *fourth* line in the *Tenor* clef; and a clef is called *Soprano*, *Alto* or *Tenor*, according to the position it takes on the staff.

	or		on the first line signifies the <i>Soprano</i> clef;
	or		on the third line the <i>Alto</i> clef;
	or		on the fourth line the <i>Tenor</i> clef.

In the following table we give a succession of tones in the old clefs and also the same notes in the Treble and Bass clefs, to which they can be compared.

Treble or G clef:

Soprano clef:

Alto clef:

Tenor clef:

Bass or F clef:

We here show Ex. 221 a. written in the two ways. By writing these exercises in this manner the pupil will soon acquire the necessary surety in the use of these clefs.

Soprano.

Alto.

Tenor.

Bass.

Soprano.

Alto.

Tenor.

Bass.

C: 1 V<sub>7</sub> I IV<sub>7</sub> G: V I — IV<sub>7</sub> II V<sub>7</sub> I V<sub>7</sub> I

V V<sub>7</sub> e: V<sub>7</sub> - 1 a: V<sub>7</sub> 1 d: V<sub>7</sub> C: u c: u<sup>0</sup><sub>7</sub> C: m V I

Exercises.

Open position.

222. a. <sup>6</sup> 5 - # <sup>6</sup> 6 # <sup>4</sup> 5 5 <sup>4</sup> 2 2 <sup>6</sup> 6 <sup>6</sup> 5 6 5

Close position.

b. <sup>6</sup> 3 6 <sup>4</sup> 2 - # <sup>6</sup> 6 5 <sup>7</sup> 7 8 7 <sup>7</sup> 7 6 6 <sup>6</sup> 5 8 7

Open position.

c. <sup>6</sup> 8 <sup>4</sup> 3 6 <sup>5</sup> 5 # <sup>4</sup> 3 <sup>6</sup> 6 5 <sup>5</sup> 5 # <sup>4</sup> 3 7 6

Open position.

d. <sup>7</sup> 6 - <sup>5</sup> 5 7 <sup>6</sup> 8 <sup>4</sup> 2 2 <sup>6</sup> 6 - x <sup>6</sup> -



The first staff shows a sequence of chords in bass clef with fingering numbers: 7 5x, #, #, #, 6 6, 5, 6 6, 5, 5 5 6 7, 7 6, 5 8 7. The second staff is labeled "Open position." and has fingering numbers: 5, 7, 5 6, #, #, 6 7, #, 5 5 3, 4, 4, 7, 5, 7, #, #. The third staff has fingering numbers: 3, 6, 8 7, 5, 6 4, #, 6, 5 5, 7 5, 6 7, 4 #.

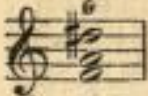
The last exercise may take the close position in the first bar, but must change to the open position in the second bar.

### CHAPTER XV.

#### The Chords of the Augmented Sixth, the Fourth and Third, and the Sixth, Fifth and Third, and their Resolutions in Major and Minor.

§ 50. So far, the *fifth* of triads and of chords of the Seventh was chromatically raised, and altered chords were obtained by this proceeding. But the *fundamental* of a certain triad or of a chord of the Seventh, and the *third* of a certain chord of the Seventh can also be chromatically raised. The *fundamental* is altered in that *minor* triad which is found in two different major keys on the second and the sixth degrees, and, in the parallel minor of these major keys, on the fourth and the first degrees.

Taking the triad , which is found in *C* major on the *second* degree, in *F* major on the *sixth*, in *a* minor on the *fourth*, and in *d* minor on the *first*, and raising its fundamental *D* to *D#*, then placing this chord  in the position of Chord of the Sixth

, we obtain the frequently used triad with chromatically raised fundamental, and in the position of chord of the Sixth, generally known as

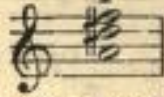
the Chord of the Augmented Sixth.

*Italian 6th*

Although this chord is used in the fundamental position also



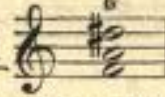
(but more rarely), and as chord of the Sixth and Fourth



(in still rarer cases), we shall at present turn our attention to the chord

*Italian*  
6<sup>th</sup>

of the Augmented Sixth and its resolution only, after which



are modeled the progressions of the fundamental position and of the chord of the Sixth and Fourth.

In the resolution of the chord of the Augmented Sixth we firmly adhere to the principle of leading the altered tone upward a half-step. \*) By letting the *fundamental* move downward a *fourth*, the dissonance of the *augmented sixth* is led either into the perfect consonance of the perfect *octave*, or into the imperfect consonance of the major or minor *tenth*; but the *fundamental*, in certain cases, may also be led a step upward into the imperfect consonance of the major *sixth*.



Since the progression of the *augmented sixth* is always a half-step upward, this tone, in four-voiced writing, can *never* be doubled.

The *third* of this chord and, in many cases, also the *fundamental*, is best adapted to doubling. The following are resolutions, as they occur in the different keys, according as the chord appears in *C* major, *a* minor, *d* minor or *F* major.



\*) For this reason a third with altered *fundamental*, formed from the triad



of the third degree in *B* major could be used neither in the fundamental position, nor as chord of the Augmented Sixth. The key of *B* major has no *E*♯; therefore the upward progression of the altered tone *D*♯ to *E* and the resolution of the chord of the

Augmented Sixth into a chord belonging to the key of *B* major is impossible.



VI V<sub>7</sub> VI VII<sup>0</sup> d: I II<sup>0</sup> I VII<sup>0</sup><sub>7</sub> I II<sup>0</sup> etc.

Of all these resolutions, the one leading to the Dominant Triad of *a* minor occurs by far most frequently. The progression to the Tonic Triad in *C* major is occasionally met with. The resolutions into the chord of the Dominant Seventh of *F* major are more rare; the most rare is the resolution into the chord of the Diminished Seventh and the triad of the second degree in *d* minor. But all these resolutions are *authorized* and occur in practice.

225.

a. 5 4 3 6 # 5 b 6 4 5 4 -

b. 8 6 6 6 7 6 7 2 6 5 4 2

c. 6 7 5 5 6 6 # 7b 8 5b 6 7

d. 8 6 2 6 6 6

e. 8 6 # 6 6 7 6 6 6 7 6 7

f. 5 4 3 5b 7 3 3 4 2 6 7b 7 4 4 3 3 4 5

It will be best to begin the third of the above exercises:

The next to the last should begin:

The last one:

In writing these exercises the close and the open position will have to be interchanged. Only the chord of the Sixth of the triad with altered *fundamental* can be resolved in different ways. The fundamental position and the chord of the Sixth and Fourth of that chord are better adapted to three-voiced than to four-voiced writing, and are generally — as has already been said — much more rarely used than the chord of the Augmented Sixth.

§ 51. By adding to the triad of the second degree in major, or to that of the fourth degree in minor, a *third* below the *fundamental*, or above the *fifth*, two chords of the Seventh are obtained (comp. § 35), viz. those on the seventh and second degrees in major, or on the second and fourth degrees in minor.

226.

C: vii<sup>0</sup><sub>7</sub> II II<sub>7</sub>  
 a: ii<sup>0</sup><sub>7</sub> IV IV<sub>7</sub>

By raising the fundamental tone (*D*), in the triad common to both chords of the Seventh, by a half-step, there is obtained a chord of the Seventh with altered *third*, and one with altered *fundamental*.

227.

C: vii<sup>0</sup><sub>7</sub> II II<sub>7</sub>  
 a: ii<sub>7</sub> IV IV<sub>7</sub>

These two altered chords of the Seventh may be used in the two keys to which they belong in common, in the fundamental position and in all the inversions; however in the first of the chords of the Seventh presented under 227, the position of chord of the Sixth, Fourth and Third, and in the second one that of the Sixth, Fifth and Third is in most frequent use.

Thus, from the chord: is formed the chord of the Augmented Sixth,

*French 6<sup>th</sup>* and from the chord: the chord

*German 6<sup>th</sup>* of the Augmented Sixth, Fifth and Third. The latter chord is also called briefly the chord of the Augmented Sixth and Fifth.

The resolution of the chord of the Augmented Sixth, Fourth and Third takes place in major into the Tonic Triad, in minor into the Dominant Triad.

228.

C: vii<sup>0</sup><sub>7</sub> I II<sup>0</sup><sub>7</sub> I a: ii<sup>0</sup><sub>7</sub> V

8\*



The resolutions are founded upon the resolutions of the natural (unaltered) chords of the Seventh on the seventh degree in major, and the second degree in minor (see § 39 and § 42).

229.   
C: vii<sup>0</sup><sub>7</sub> I    a: ii<sup>0</sup><sub>7</sub> V

Other non-modulating resolutions of the chord of the Augmented Sixth, Fourth and Third are possible in minor, e. g.

230.   
a: ii<sup>0</sup><sub>7</sub> I    ii<sup>0</sup><sub>7</sub> I    ii<sup>0</sup><sub>7</sub> III'    ii<sup>0</sup><sub>7</sub> III'<sub>7</sub>

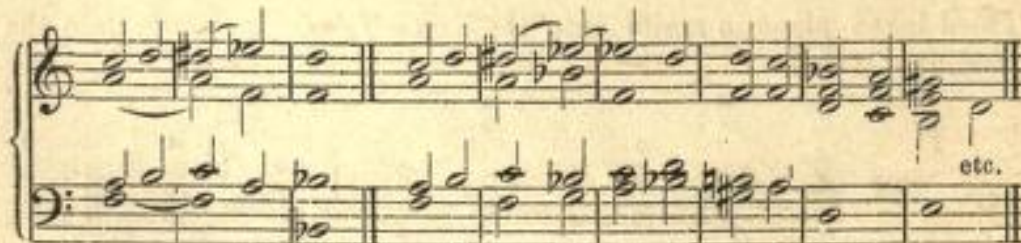
The chord of the Augmented Sixth, Fourth and Third, both in major and minor, can make various other, *modulatory* resolutions; but the principle of leading the altered tone upward — especially when it is preceded by the natural tone — must be strictly adhered to.

231.  and so on.

NOTE. A resolution of an altered chord of the Sixth, chord of the Sixth, Fourth and Third, or chord of the Sixth and Fifth in a way so as to lead the altered tone downward, can perhaps take place when the altered tone is not preceded by the original tone; e. g.

232. 

But the unnatural and forced character of such a chord-connection never produces an agreeable effect. The pupil can see from such forced progressions, to how great an extent the principle of always leading the altered tone *upward*, is correct and natural. Only when the altered tone is enharmonically changed, can it be led downward or be retained, but then it ceases to be an altered tone; e. g.

 etc.

The resolution of the chord of the Augmented Sixth, Fifth and Third follows in major, like that of the chord of the Augmented Sixth, Fourth and Third, into the Tonic Triad :

233.    
 C:  $\text{ii}_7$  I  $\text{ii}_7$  I

A direct resolution of this chord in minor into the Dominant Triad cannot take place. But since the Dominant Triad is the chord into which the chord of Augmented Sixth and Fifth would most naturally resolve, different ways are taken in order to avoid *parallel fifths*, which would result in a direct resolution.

*Direct, faulty resolution.*

234. 

*Indirect resolutions.*

235.    
  $\text{a: iv}_7$   $\text{ii}^0_7$  V  $\text{iv}_7$  IV V  $\text{iv}_7$  III' V   
  $\text{iv}_7$  III' V  $\text{iv}_7$  I V

Other resolutions of this chord are possible in major and minor, when it modulates:

236.  and so on.   
 C:  $\text{ii}_7$  F:  $\text{V}_7$  C:  $\text{ii}_7$  d:  $\text{vii}^0_7$  C:  $\text{ii}_7$  A: III V<sub>7</sub>   
  $\text{a: iv}_7$   $\text{a: iv}_7$  d:  $\text{vii}^0_7$   $\text{a: iv}_7$

It has already been said that the fundamental position and other inversions of the chord of the Augmented Sixth, Fourth and Third, and of the chord of the Sixth and Fifth, also occur in practice. The resolutions remain the same as in the chord of the Augmented Sixth Fourth and Third, and in the chord of the Sixth and Fifth. Here follow some of these resolutions :

Fundamental position.

237.

C: vii<sup>0</sup><sub>7</sub> I a: ii<sub>7</sub> V a: ii<sub>7</sub> I a: ii<sub>7</sub> V

First inversion.

C: vii<sup>0</sup><sub>7</sub> I a: ii<sup>0</sup><sub>7</sub> V a: ii<sup>0</sup><sub>7</sub> I a: ii<sup>0</sup><sub>7</sub> A: iii<sup>-</sup> V<sub>7</sub> I

Third inversion.

C: vii<sup>0</sup><sub>7</sub> iii vii<sup>0</sup><sub>7</sub> I a: ii<sup>0</sup><sub>7</sub> V ii<sup>0</sup><sub>7</sub> iii' V

Fundamental position.

238.

C: ii I a: iv<sub>7</sub> - V iv<sub>7</sub> - i iv<sub>7</sub> - iii' V iv<sub>7</sub> - A: I

Second inversion.

C: ii<sub>7</sub> I a: iv<sub>7</sub> iii' V<sub>7</sub> a: iv<sub>7</sub> d: ii<sup>0</sup> a: iv<sub>7</sub> f: V<sub>7</sub>

Third inversion.

Chord symbols for the first system: C: ii<sub>7</sub> I a: iv<sub>7</sub> V a: iv<sub>7</sub> i iv<sub>7</sub> III' V<sub>7</sub>

Chord symbols for the second system: iv<sub>7</sub> d: vii<sup>0</sup><sub>7</sub> a: iv<sub>7</sub> f: V<sub>7</sub> a: iv<sub>7</sub> d: V

Exercises.

Open position.

239. a. 3 <sup>6</sup>/<sub>3</sub> 6 NB. 6 <sup>6 6</sup>/<sub>5 4</sub> # 3 <sup>6</sup>/<sub>2</sub> 6 # 7 6 5

b. 3 4 6 2 6 6 <sup>6 -</sup>/<sub>3 3</sub> 6 4 # 2 6 4 7 6 7 6 5 7 <sub>3 3 3 4 # -</sub>

c. 3 2 6 4 <sup>6</sup>/<sub>3</sub> # 6 - 6 - <sup>6 -</sup>/<sub>4 5</sub> 6 5 7 <sub>3 - 4 # -</sub>

d. 8 <sup>6</sup>/<sub>4</sub> # 7<sup>b</sup> 4 5<sup>b</sup> 5<sup>#</sup> <sup>6 -</sup>/<sub>3 -</sub> # - 2 6 <sup>6</sup>/<sub>4</sub>

e. 8 4 6 8 7 6 5 <sub>3 3 5<sup>b</sup></sub> NB.

6 5 6 7 7 6 7 <sup>6 6 6</sup>/<sub>5 4 5</sub> 6 - 6 6 5 8 7<sup>b</sup> <sub>4 # 2 6 3 3 3</sub> NB.

l. 8 5 4 2 7<sup>b</sup> 5 3 - 2 2 6<sup>b</sup> 4 2 -

g. 3 5 4 3 # 5 3 5 3 - 3 5 8 7 2

h. 3 3 4 2 3 4 2 2 4 5 7 5 8 7

i. 3 5 6 7 3 - # 2 6 4 5 - # 5 6 7

k. 5 3 4 7 # 5 5 - # 5 #

NB.

**Remarks on these exercises.**

As it is best to begin the first exercise in *open position*, it is specially indicated. At NB. in the third bar the Soprano skips downward a *fifth*. The beginning will be:

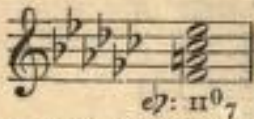
239 a.

In explanation of this the following remark is added:

A leading of one or two voices in skips is also possible even when it is not merely a question of inversion of one and the same chord, provided that the leading of the voices is good and natural otherwise. The skip is made best either when another voice enters in contrary motion, or when one or two voices are retained. In example 239 a. first bar at NB., the Tenor, which has the *seventh* of the second chord, will have to skip downward a *fourth*. Both this skip and the simultaneous entrance of the *fundamental* and *seventh* in parallel motion are here completely bidden by the contrary motion of the Bass.

E<sup>b</sup>: I    V<sub>7</sub> A<sub>5</sub>: V<sub>7</sub>

The chord of the Sixth and Fifth at NB. in the last bar but one is derived from the chord of the Seventh (with altered *third*) on the second degree in *e*7 minor



The chord of the Second on *A*7 at NB. in Example h. is derived

from the chord of the Seventh on the fourth degree (with chromatically raised *fundamental*) in *f* minor: (See examples 237 and 238.)

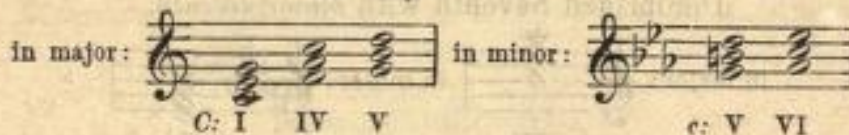


At the close of this chapter which, at the same time, is the close of the first division of this text-book, we present a summary table of all the chords which we have become acquainted with, and have been taught to employ. They are:

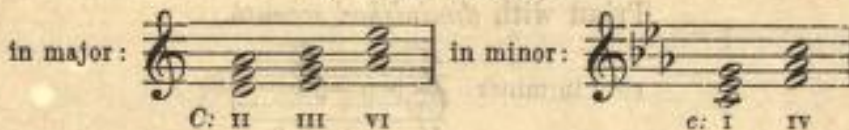
### I. Fundamental Chords.

#### A. Triads in Major and Minor.

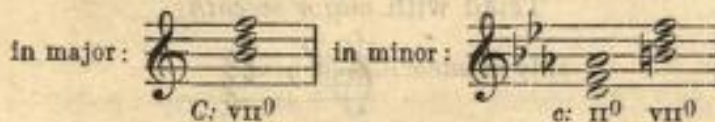
##### a. Major triads.



##### b. Minor triads.



##### c. Diminished triads.

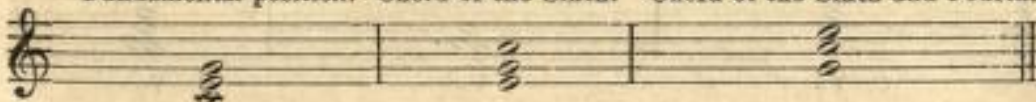


##### d. The augmented triad in minor.





All these triads may appear in the inversions, as chord of the Sixth and chord of the Sixth and Fourth.

Fundamental position. Chord of the Sixth. Chord of the Sixth and Fourth.



## B. Chords of the Seventh.


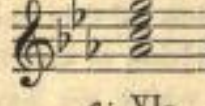
## a. Chord of the Dominant Seventh.

in major:  in minor: 

C:  $V_7$  c:  $V_7$

This chord is always formed from a major triad with *minor seventh*, found on the fifth degree, and is the same in major and minor.

b. Secondary chords of the Seventh, formed from a major triad with *major seventh*.

in major:  in minor: 

C:  $I_7$   $IV_7$  c:  $VI_7$

c. Secondary chords of the Seventh, formed from a minor triad with *minor seventh*.

in major:  in minor: 

C:  $II_7$   $III_7$   $vi_7$  C:  $vi_7$

d. Secondary chords of the Seventh formed from the chord of the Diminished Seventh with *minor seventh*.

in major:  in minor: 

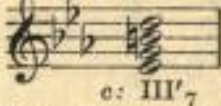
C:  $VII_7$  c:  $ii^0_7$

e. Chord of the Diminished Seventh, formed from the Diminished Triad with *diminished seventh*.

only in minor: 

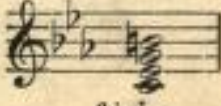
c:  $VII^0_7$

f. Secondary chord of the Seventh, formed from the Augmented Triad with *major seventh*.

only in minor: 

c:  $III'_7$

g. Secondary chord of the Seventh, formed from a minor triad with *major seventh* (rarely used, and then only in the fundamental position).

only in minor: 

c:  $I_7$

*The Inversions of the Chords of the Seventh.*

Chord of the Sixth and Fifth. Chord of the Third and Fourth. Chord of the Second.



C:  $V_7$   $V_7$   $V_7$

## II. Altered Chords.

### A. Triads with Altered (chromatically raised) Fifth.

#### a. Major triads.

in major: in minor:

C: I IV V c: VI

#### b. Minor triad.

in major: in minor:

C: II c: IV

#### Triad with Altered Fundamental.

in major: in minor:

C: II c: VI

Especially used in the position of chord of the Sixth.

### B. Chords of the Seventh with Altered (chromatically raised) Fifth.

C: I<sub>7</sub> IV<sub>7</sub> V<sub>7</sub>

Secondary Chord of the Seventh with Altered Fundamental,  
most frequent in use as chord of the Sixth and Fifth.

in major: in minor:

C: II<sub>7</sub> c: IV<sub>7</sub>

Chord of the Seventh with Altered Third,  
most frequent in use as chord of the Sixth, Fourth and Third.

in major: in minor:

C: VII<sup>0</sup><sub>7</sub> c: II<sup>0</sup><sub>7</sub>