

PART SECOND.

CHAPTER XVI.

The Suspension.

§ 52. In the chord-connections so far shown, the movement of the voices from the tones of one chord to those of another was always simultaneous. If, in the progression from one chord to another, one voice retains a note of the first chord after the other voices have moved into the tones of the new chord, and if the sustained voice then moves into the interval belonging to the new chord, there arises, through this delay, a *Suspension*.

The characteristic of a suspension consists in its forming a *dissonance* to a chord, which cannot properly be called a *dissonant chord*, nor which represents any form of the dissonant dependent chords known to us, with *all of its intervals complete*. We must therefore regard the following connection of the triad of the first degree with that of the seventh degree as being delayed by a suspension, because the form of the chord of the Seventh of the second degree, (on the accented part of the measure) is not *complete*; the *fifth* belonging to the chord of the Seventh is wanting.

240.

C: 1 vii°

Ex. 241, on the other hand, represents a succession of two chords of the Seventh.

241.

I II₇ vii°₇

NOTE. Suppose the *D F C*, in the second measure of Ex. 240, were explained as a chord of the Seventh on the second degree with omitted *fifth*, still the point in question would remain the same. *Sevenths*, like suspended notes, are dissonant intervals. They both partake of the same nature. Both must be prepared; both must be resolved. The essential conditions of the suspension are fulfilled in example 240, and, in order not to confuse the pupil, we must show him the suspension to be a form of chord which does not correspond to any form of chord so far known to him, complete in all its intervals. By many years of experience in teaching we have learned not to explain at length in the beginning, what is of little consequence in later practice, viz. the similarity in sound between augmented and altered chords, between incomplete chords of the Seventh and suspensions; but rather teach the pupil all these things separately, for riper knowledge will give him the insight necessary to distinguish between such formations. In the treatise on the means for modulation we shall recur to it.

242.

a: VI C: I a: II⁰ I V₇ I

Ex. 242 shows us a number of suspensions which dissonate sharply against the chords which enter upon the second part of the measure. Cases may occur in which the connection of two independent chords takes the character of a suspension, though, of course it cannot be called a dissonance. This generally occurs when one of those chord-connections is formed in a sequence of suspensions; e. g.

243.

NB. etc.

C: I V VI I II I

The Soprano at NB. is considered a suspension, although the chord on the accented part of this measure could be called the chord of the Sixth of the triad of the sixth degree in *C* Major, and the Soprano by no means forms a dissonance to the other voices. By its situation among other real and unmistakable suspensions the chord-connection in the fourth measure receives the character of a suspension, and accomplishes in this position an effect similar to a real, dissonant suspension; e. g.

244.

NB. etc.

3 5 4 3 9 8 7 7 4 3 9 8

F: I II I V₇ VI a: V₇

It is easy to see the reason why certain non-dissonant chord-connections take the character of a suspension, and are considered as such, when placed among a number of suspensions, although they do not bear the real characteristic (the dissonance) of a suspension. In the suspensions preceding NB. (Ex. 243) the pure chord is not heard until on the second part of the measure, and so we expect also in the succeeding similarly formed chord-connections, the real, principal chord of the measure on its second part. Those chords which appear on the accented part of the measure, even though they are not dissonant chords, may be considered as a delaying of the principal chord, which we expect on the second part of the measure, in conformity with the preceding bars which contain such suspensions.

Ex. 245 contains two such chord-connections in close succession (bars 4 and 5).

245.

etc.

4 3 9 8 6 5 6 5 4 3 6 7

F: I V IV I V₇ I II₇ V₇ I

§ 53. The following five rules are to be observed for the introduction and resolution of the suspension.

1. The suspension most often occurs upon the *accented* (first) *part of the measure*, whether in two-, or three-divided time.

246.

etc.

4 3 4 3 4 3 5 9 8 7

C: I V VI III IV I II₇ V₇ I

2. The suspension must be *prepared* in the same voice in which it is *introduced*.
3. The tone of resolution, that is that interval of a chord the entrance of which is delayed by the suspension, cannot be taken by any voice except the Bass. If the *suspension* is in the *Bass*, no other voice can take the tone of resolution.
4. The suspension must resolve in a downward direction, upon the *unaccented* (second or third) part of the measure.
5. The suspension does not mitigate *parallel octaves* that are merely delayed by it.

NOTE. The few cases in which the suspension can resolve upward will be discussed later.

The preparation (as has already been said in treating of the *seventh*) must generally enter upon the unaccented (second) part of the measure, and must be at least as long as the suspension.

The suspension can appear, in any voice before the *third* or the *octave* (the doubling of the *fundamental*) of the triad.

Suspension of the *octave* of the *fundamental*.

247.

C: V I V₇ I V₇ I V₇ I

Suspension of the *third*.

248.

C: IV I I V IV I IV I

NOTE. Occasionally a suspension of the *prime* by the *second* (2 1) is found between the Tenor and Bass. This is easily explained by the fact that the bass-voice is often not deep enough to be able to form the real suspension 9 8.

A real suspension of the *fifth* of a Triad cannot be formed. Chord-formations such as follow in 249, can take the character of a suspension when they are among a number of suspensions (as shown in examples 243 and 245); but when alone, they do not have the effect of a suspension.

249.

C: IV IV vi I I III IV IV vi vi I

All these chord-connections, which — as shown by the numerals under them — prove themselves to be complete chords with all their intervals, lack the essential character of a suspension, viz. *dissonance*.

There can, however, be formed a suspension of the *fifth* of a chord of the Seventh, and also of its *fundamental* or *third*. A suspension of the *seventh* can be formed *only* when it is preceded by a *diminished*, or (as in 250 d) an *augmented octave*.

250.

a. b. c. d.

8 7 8 7 8 7 8 5 3

The *perfect octave* preceding a *seventh* can never serve as a suspension; nevertheless this chord-connection:

251.

6 5

in rare exceptional cases — one of which is shown in Ex. 245 bar 5 — may occasionally take the appearance of a suspension.

Suspensions of the *octave* of the fundamental, and of the *third* and *fifth* of the chord of the Seventh.

Suspension of the octave.

252.

C: IV V₇ IV V₇ II V₇ IV V₇

Suspension of the third.

253.

C: IV V₇ IV V₇ IV V₇

II₇ V₇ II₇ V₇

Suspension of the fifth.

254.

a: I V₇ I V₇ I V₇ I V₇

All these suspensions can also be used in connection with *Secondary Chords of the Seventh*.

Any interval of a Triad or chord of the Seventh can be used as the preparation of a suspension. But the *Diminished Seventh* is least, and the *seventh* of the chord of the *Dominant Seventh* is best adapted thereto. In general, *minor sevenths* are much better adapted for preparing a suspension, than are *major sevenths*.

Preparation by

the dominant seventh,	the minor seventh,	the major seventh,	the diminished seventh.
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255.

Preparations of the suspension by the *octave* of the fundamental, and by the *third* and *fifth* of the Triad and of the chord of the Seventh, are contained in examples 242 to 254 inclusive. It is therefore not necessary to again illustrate similar preparations. The pupil should rather again study the examples mentioned, in order to clearly understand and become familiar with the preparation of the different intervals of the Triad and of the chord of the Seventh.

We have already said — in the third rule to be observed in the use of suspensions — that the tone of resolution of the suspension can be anticipated in no other voice than the Bass, and if the suspension is in the Bass, none of the upper voices can have the tone of resolution as long as the suspension itself remains unresolved. The following examples are all bad.

256.

C: IV V₇ d: I vii⁰ a: ii⁰₇ i IV₇ vii⁰₇

These faulty examples are shown corrected in 257.

257 a.

C: IV V₇ d: i V₇ a: ii⁰₇ i IV₇ vii⁰₇

A middle voice can take the tone of resolution of a suspension in *one exceptional case* only; namely, in a *sequence* of suspensions, when

the tone of resolution is the fundamental of the Tonic Triad (occasionally also of one of the other primary triads of the key). But this fundamental must

1. be prepared in the same middle voice, and
2. lie at a distance from the suspension.

257 b.

C: I good. V I II⁷ I

II⁷ I VII⁰ I

NOTE. In this case the voice having the fundamental tone (here, and in examples 257 c. and 257 d. the Tenor) has the character of a stationary voice, and for this reason the suspension is allowed.

We here give — in a sequence of suspensions — an example of a suspension of the *fundamental* of the Dominant Triad, the *fundamental* being already contained in the Tenor.

257 c.

C: I good. V VI⁷ V IV I II⁷ V⁷ I

Such a suspension would be seldom used in connection with the Sub-dominant Triad, although it may occasionally occur, as shown in 257 d.

257 d.

good.

C: I V₇ IV V₇ IV I II₇ V₇ I

§ 54. The Bass generally suspends the *third* only, seldom the *fifth* of a chord of the Seventh, and still more seldom the *fundamental* of a Triad or chord of the Seventh. In the last case the suspension forms an incomplete chord of the Second (the *fifth* being omitted) before the Triad, and a chord of the Second with all its intervals before the chord of the Seventh, and for this reason is always ambiguous.

Suspension of the *third* by the Bass.

258.

C: I V I V₇

The chord of resolution must always be a chord of the Sixth or a chord of the Sixth and Fifth.

Suspension of the *fifth* of
the chord of the Seventh
by the Bass.

259.

C: I a: vii⁰₇

The chord of resolution must always be a chord of the Sixth, Fourth and Third.

Suspension of the *fundamental* by the Bass.

260.

C: V₇ I F: IV₇ V₇

Suspensions in the Bass in which one of the upper voices has at the same time the tone of resolution, are unallowable in pure writing. All the suspensions in 261 are wrong.

261.

The pupil can see in examples 258, 259 and 260, how to *avoid* the anticipation of the tone of resolution in any of the upper voices.

We have seen by all the above examples that the suspension always falls upon the accented (first) part of measures of two divisions. This principle must be followed in measures of three divisions also, as shown in Ex. 246, although exceptions may occur; e. g.

The suspension does not remove *parallel octaves* that are merely delayed by it; therefore Ex. 262 is wrong.

262.

On the contrary, the *real dissonant* suspension fully removes *parallel fifths*, which are delayed by it, between *all*, even *neighbouring* voices, when the leading of the other voices is in other respects correct.

263.

C: IV_7 V_7 a: VI V_7

The suspensions with delayed *parallel fifths* shown in 263, are *good*, although the *parallel fifths* are between *neighbouring voices*. They are used in four-voiced compositions by the best classical authors.

Even in chord-connections that have the *character* of suspensions, delayed *parallel fifths* are allowable, especially when contrary motion is introduced, because the unpleasant effect of the *parallel fifths* is fully removed, partly by the delay of one voice, partly because the chord-connection takes the character of a suspension, and *especially by the contrary motion of other voices*.

a. good. good. good.

a.

264.

C: IV_7 (III) V a: VI (III') V iv_7 (III') V

Little remains to be said about the figuring of the suspension, since it has already been shown in the above examples. The suspension is figured according to its interval in relation to the bass-note; thus we figure the suspension of the *octave* of the fundamental by the *ninth* with 9 8.

265.

C: V I V I ii_7 V_7 a: iv V_7

The suspension of the *third* of the Triad by the *fourth* is usually figured 4 3 only, because the Triad in its fundamental position needs no special figuring. The suspension of the *third* by the *fourth* in the chord of the Seventh is figured $\frac{7}{4} \frac{-}{3}$.

266.

F: I V I V₇

It can also be more completely figured $\frac{8}{5} -$ and $\frac{7}{5} -$ in connection with the Triad and the chord of the Seventh respectively.

The suspension of the *fifth* by the *sixth* is figured, in the fundamental position of the chord of the Seventh, with $\frac{7}{6} 5$, or complete $\frac{7}{6} 5$; in the position of chord of the Sixth and Fifth, with $\frac{6}{5} 4$; and in the position of chord of the Second, with $\frac{7}{4} 6$.

267.

So the suspension is in all cases figured as an accidental interval (from the Bass) with the appropriate numeral; besides the figure which indicates the suspension stands the figure which shows its resolution. Therefore the figures that indicate the *chord* more particularly are placed over or under the figure which shows the *suspension*; thus *a.* $\frac{5}{4} 3$ is written for the Triad in its fundamental position, *b.* $\frac{9}{6} 8$ for the chord of the Sixth, *c.* $\frac{7}{4} 6$ for the chord of the Sixth and Fourth; *d.* $\frac{7}{3} 6$ shows the chord of the Sixth, Fourth and Third with the *sixth* suspended by the *seventh* etc., as has already been shown many times in the examples already given.

268.

When the suspension is in the Bass, the upper voices are figured accidental intervals over the note of suspension; viz. $\frac{5}{2} -$, $\frac{5}{4} -$. The

dashes indicate that the intervals are to remain after the resolution of the suspension; so it is equally good if figured $\begin{smallmatrix} 5 & 6 \\ 2 & 3 \end{smallmatrix}$ or $\begin{smallmatrix} 5 & - \\ 2 & - \end{smallmatrix}$, $\begin{smallmatrix} 5 & 9 \\ 2 & 3 \end{smallmatrix}$ or $\begin{smallmatrix} 5 & - \\ 2 & - \end{smallmatrix}$.

269. $\begin{smallmatrix} a. & \text{or } b. & c. & \text{or } d. \end{smallmatrix}$

Formerly the suspension was indicated by an oblique dash over the note of suspension, and the figure that determined the real chord was written over the note of resolution.

270.

This much more simple and comprehensible indication of the suspension in the Bass is now little used. In all the following exercises, we indicate the suspension in the Bass by the figures that are necessary to the accidental intervals over the bass-note, and show the continuation of those tones by dashes over the tone of resolution ($\begin{smallmatrix} 5 & - & 5 & - \\ 2 & - & 4 & - \\ & & & 2 & - \end{smallmatrix}$), as was done in 269 *a*, and *c*. We only use the figuring shown in 269 *b*, and *d* in such cases where a chromatic changing of an interval enters with the resolution; viz. $\begin{smallmatrix} 5 & 6 \\ 2 & \# \end{smallmatrix}$ or $\begin{smallmatrix} 5 & 6 \\ 4 & 5 \end{smallmatrix}$ etc.

271.

272.

In order not to confuse the pupil, we shall, in these exercises, $7 \frac{6}{5}$ the chord of the Seventh $\frac{7}{5} \frac{7}{3} \frac{7}{3} \frac{8}{3} \frac{8}{3} \frac{8}{3}$ also in its fundamental position, and the chord of the Sixth and Fifth $\frac{6}{5} \frac{5}{3}$. The figure 7 before a 6 shows, on the contrary, that the *sixth* of a chord of the Sixth is suspended by the *seventh*. This is the case with the Bass of the third measure of 272. In working these exercises the pupil must mark the degrees upon which the chords are situated within the key by large and small Roman numerals, and the course of modulation by large and small letters under the Bass, as shown in 273 (the working of the Bass of 272). A merely mechanical changing of figures and chromatic signs into notes is only a translation of thorough-bass into notes. This alone cannot lead to a clear knowledge of chords and their connections. While working, the pupil should always know what key he is in, and what chord of the key he has at the moment before him. For this purpose we now give the working of 272. The pupil must manage his work in exactly the same manner, *but write it in four different clefs*.

273.

Figured Bass for 273:

Measure 1: $\frac{3}{5} \frac{8}{5}$ C: I

Measure 2: 9 8 7 6 II

Measure 3: $\frac{6}{2} \frac{5}{2} \frac{4}{2}$ I

Measure 4: 6 5 9 8 V_7

Measure 5: 6 5 9 8 I

Measure 6: 6 5 9 8 I_7 IV

NB.

Measure 1: 6 5 $\frac{9}{7} \frac{8}{7}$ $viio^0$

Measure 2: 8 7 $\frac{9}{7} \frac{8}{7}$ II a: V_7

Measure 3: 8 7 $\frac{9}{7} \frac{8}{7}$ d: V

Measure 4: 8 7 $\frac{9}{7} \frac{8}{7}$ V_7 C: II

Measure 5: 8 7 $\frac{9}{7} \frac{8}{7}$ II

Measure 6: 8 7 $\frac{9}{7} \frac{8}{7}$ V_7 I

The preparation and the suspension must always be connected by a slur —. In two-divisioned time the figures 9 8 7 are always to be understood to mean that the suspension is to occupy the whole of the first part of the measure; the second part remains for the resolution and the following *seventh*, as is shown at NB. in the tenth bar of 273. In three-divisioned time, the suspension, the Triad, and the chord of the Seventh are of equal value.

dashes in^dthe sr^g

figure

137

ed time.

Three-divisioned time.



which follows upon the *octave* cannot, in this case, be given to the voice, and can still less be previously taken by another voice.

Bar 3 of 273 shows in the chord of the Sixth a suspension of the *sixth* by the *seventh*. Such an accidental chord-formation arising from a suspension must be considered as a *suspension* and not as a *chord of the Seventh* of the third degree, because the Bass is figured 7 and not $\frac{7}{5}$ or $\frac{7}{3}$, and here a chord of the Seventh with all its intervals is *not* meant to be represented (compare § 52).

Exercises.

a. $\frac{3}{8} 7$ $\frac{9}{8} 8$ $\frac{7}{3} 6$ $\frac{7}{5} -$ $\frac{6}{4} 5$ $\frac{6}{3} 4$ $\frac{6}{5} 5$

275. $\frac{9}{8} 7$ $\frac{9}{8} 8$ $\frac{6}{5} 4$ $\frac{7}{4} 3$ $\frac{7}{3} -$ $\frac{6}{4} 5$ $\frac{6}{3} 4$

b. $\frac{7}{3} 6$ $\frac{7}{5} -$ $\frac{6}{4} 5$ $\frac{6}{3} 4$ $\frac{6}{5} 5$ $\frac{6}{3} 4$ $\frac{6}{5} 5$

c. $\frac{9}{8} 7$ $\frac{9}{8} 8$ $\frac{6}{5} 4$ $\frac{7}{4} 3$ $\frac{7}{3} -$ $\frac{6}{4} 5$ $\frac{6}{3} 4$

Open position. $\frac{9}{8} 7$ $\frac{9}{8} 8$ $\frac{6}{5} 4$ $\frac{7}{4} 3$ $\frac{7}{3} -$ $\frac{6}{4} 5$ $\frac{6}{3} 4$

NB. $\frac{7}{3} 6$ $\frac{7}{5} -$ $\frac{6}{4} 5$ $\frac{6}{3} 4$ $\frac{6}{5} 5$ $\frac{6}{3} 4$ $\frac{6}{5} 5$

At NB. of example c. bar 4, comp. Ex. 257 c. bar 4.

d. 8 6 4 3 4 # 7 5 3 6 - 4 3 8 7 6 - 5 4 3 6 7 6 4 - 3 -

[illegible]

c. 3 6 4 3 2 2 5 9 8 2 2 5 9 8 7 4 3 -

f. $\begin{matrix} 5 & 9 & 8 & & 6 & 7 & 6 & & 7 \\ 3 & 7 & - & 7 & 5 & 6 & 4 & - & 5 \\ 3 & 3 & - & 4 & 3 & 4 & 3 & - & 3 \end{matrix}$ $\begin{matrix} 6 & 7 & 6 & & 7 \\ 4 & 3 & 4 & - & 5 \\ 3 & 3 & 3 & - & 3 \end{matrix}$ $\begin{matrix} 7 & 6 & 7 \\ 5 & 4 & 3 \\ 3 & 3 & 3 \end{matrix}$ $\begin{matrix} 7 & 6 & 7 \\ 5 & 4 & 3 \\ 3 & 3 & 3 \end{matrix}$ $\begin{matrix} 6 & 7 \\ 4 & 3 \\ 3 & 3 \end{matrix}$ $\begin{matrix} 4 & 3 \\ 3 & 3 \\ 3 & 3 \end{matrix}$

Open position.

g. 3 7 6 5 6 - 6 - 8 - 7
5 - - 5 4 6 4 - 4 - 5 - -
3 - - 2 - 3 2 6 2 7 3 4 3 5 4 3 -

h. 3 7 7 6 7 6 5 4 # 7 5 4 3 7 6 5 4 #

[illegible]

k. 3 6 4 2 5 2 6 4 2 4 3 4 3 6 4 3

1. 5 6 9 8 7 6 # 4 7 6 9 8 7 6 5 4 #

m. 8 2 2 6 5 3 6 7 6 3 5 4 3 9 8

The image contains ten staves of musical exercises, each in bass clef. The exercises are as follows:

- Staff 1:** Key signature of two flats (B-flat, E-flat). Fingerings: 7 6 4 3, 4 2, 7 6 4 3, 7 6 5 4, 4 2.
- Staff 2:** Key signature of three sharps (F-sharp, C-sharp, G-sharp). Fingerings: n. 8, 4 3 2, 7 4 2, 5 2 6 4.
- Staff 3:** Key signature of three sharps (F-sharp, C-sharp, G-sharp). Fingerings: 2 6 5, 4 3 6 5, 6 7 4 4 3.
- Staff 4:** Key signature of two flats (B-flat, E-flat). Fingerings: o. 8, 9 8 6 5, 9 8 4 5, 9 8 7 7.
- Staff 5:** Key signature of two flats (B-flat, E-flat). Fingerings: p. 6, 4 2, 7 6 5 4, 7 6 9 8 7, 7 6 5 4.
- Staff 6:** Key signature of two flats (B-flat, E-flat). Fingerings: 7 6 5, 9 8 4 5, 7 6 9 8, 7 6 5 4.
- Staff 7:** Key signature of three sharps (F-sharp, C-sharp, G-sharp). Fingerings: q. 9 4 3, 6 5 4 2, 6 4 5, 4 3 4, 7 6 4 5 3.
- Staff 8:** Key signature of three sharps (F-sharp, C-sharp, G-sharp). Fingerings: 6 5 3, 6x 4 3, 6 5 4, 7 5 3, 4 3 5, 9 8 7.
- Staff 9:** Key signature of C major. Fingerings: r. 3 2 6, 5 2, 7 4 3, 7 4 3, 7 6 5.
- Staff 10:** Key signature of one sharp (F-sharp). Fingerings: 9 7 6, 8 5 4 3.

The "Open position" or "Close position" at the beginning of some of these and of the following exercises is not to be understood to mean that the whole exercise must be worked in the same position. The position must change according to the leading of the voices.

CHAPTER XVII.

Suspensions in Several Voices.

§ 55. In four-voiced writing suspensions may be made at the same time in two, and also in three voices; e. g.

Suspensions in two voices.

276.

C: I vii⁰ a: I V₇ I

Suspensions in three voices.

277.

C: I vii⁰ a: I ii⁰₇ V₇ I

The accidental intervals, forming the tones of suspension against the Bass, are figured so that the larger numbers are placed over the smaller ones without any consideration for the position of the upper voices $\begin{smallmatrix} 9 & 8 \\ 7 & 6 \\ 4 & 3 \end{smallmatrix}$, $\begin{smallmatrix} 9 & 8 \\ 7 & 6 \\ 5 & 4 \end{smallmatrix}$ etc., as is shown in the preceding examples.

All suspensions so far shown were resolved downward. This is the natural and correct progression; therefore the *resolution* of a suspension need not be indicated in a freer progression of the voices. It is supposed to be generally understood that it progresses downward. But in one instance the resolution of the suspension takes place upward. This occurs when the tone of suspension progresses upward to the tone of resolution by a small *half-step*.

This resolution is explained by the fact that the progression of a small half-step upward always partakes of the *character of the leading tone*. Suspensions of this kind most often occur from the leading tone to the *octave* of the fundamental, or from an altered tone to its natural tone of resolution (above). They rarely stand *alone*.

278.

Suspensions resolving upward are much more frequent in connection with others resolving downward.

279.

Two suspensions may simultaneously resolve upward both in connection with a suspension resolving downward, and alone.

280.

A suspension upward over a whole-step can, in pure writing, never be employed *alone*.

Suspensions of this kind sound stiff and unnatural. Were this to be explained by the omission of the proper downward leading of the tone of resolution, mistakes against the rules for the resolution of suspensions would result; namely, suspended *parallel octaves* or the presence in a middle voice of the proper tone of resolution.

281.

282.

The faultiness of the suspension in 281 *a.* is shown in the progression in 281 *b.* where the proper tone of resolution, downward, is added in a parenthesis. But this tone is already present in the Alto. The faultiness of the suspension in 282 *c.* is shown in the progression in 282 *d.* The interpolated proper tone of resolution shows the *parallel octaves* which are delayed by the suspension.

But in pure writing a suspension over a whole-step upward may be employed in connection with another suspension upward over a half-step; e. g.

283. a. b.

9 10 9 10#
7 8 7 8
6 5

Example 283 *a.* shows such a double suspension upward. 283 *b.* shows the double suspension upward in connection with another suspension downward. Both progressions are good.

§ 56. Thus far the Bass has always remained stationary until the suspension was resolved. Accordingly the suspension and its resolution formed but *one single* chord. But the Bass may progress simultaneously with the resolution of the suspension, so that it either goes over to another interval of the chord of resolution or, by its progression, requires another chord-formation. In both cases *the suspension itself* is indicated in the thorough-bass-notation, but not its resolution. Then the resolution of the suspension is presupposed to be always downward and must be made in that direction. In Ex. 284 are shown suspensions where the Bass goes over to another tone of the chord of resolution, simultaneously with the resolution of the suspension.

284.

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

C: I a: IV V V₇ I C: III II₇ a: I V₇ I

In the sixth measure of the preceding example the suspension and its resolution could be figured as *one chord of the Seventh* with the *fundamental* introduced afterward on the second part of the measure. This may be done in all similar cases; e. g.

285.

C: I V₇ vi vii⁰₇ V vi₇

Although the middle voices in examples 284 and 285 do not change their position, there may be cases where also a middle voice has to leave its place simultaneously with the resolution of the suspension, when the Bass progresses to another tone of the chord of resolution; e. g.

286.

a: I V₇ 1 V₇

In Ex. 286 *a.* if the Tenor had not progressed, the *third* would have been wanting in the chord of resolution. In 286 *b.* if the Alto had not progressed, the *third* (leading tone) of the chord would have been doubled.

But as the Bass progresses, simultaneously with the resolution of the suspension, to a tone foreign to the proper chord of resolution, and thus forms another chord, it forces one or both middle voices also simultaneously to progress to the nearest lying tones of the new chord.

287.

C: I ii a: vii⁰₇ C: I IV a: vii⁰₇ 1

A suspension may be retained through several chords. It must then, at each new chord-formation, be indicated by the numeral required by its accidental distance from the Bass. Of course, the new chord-formations which are to be given during the continuation of the suspension must also be accurately marked by the thorough-bass-notation. Ex. 288 shows a suspension lasting through several bars.

288.

C: I G: V₇ C: V₇ a: vii⁰₇ I

C: I G: V₇ C: V₇ a: vii⁰₇ I

NOTE. Between the tone of suspension and the tone of resolution one or more tones may be interpolated. These may be proper or foreign to the chord of resolution; they may be led to the tone of resolution by steps or by skips; the real tone of re-

solution may even sometimes be omitted entirely; e. g.

289.

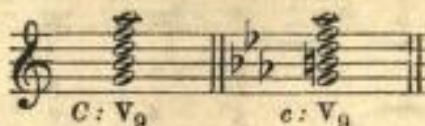
In the following exercises the pupil will have little opportunity to insert such intermediate notes before the tone of resolution, and he must not strive to apply them. In the study of counterpoint he will learn the value and the importance that such intermediate notes may sometimes have for the movement and embellishment of a contrapuntal voice. For the sake of completeness this had to be mentioned in this connection.

In the examples and exercises contained in Chapters XVI and XVII the figuring 9 8 or $\frac{9}{7} \frac{8}{-}$, also $\frac{9}{7} \frac{8}{3} \frac{-}{-}$ is frequently found over the Bass for the indication of the suspension of the *octave* by the *ninth* in a Triad or before a chord of the Seventh.

This is the figuring of the Bass which older theoreticians used for

Jadassohn, Harmony.

the chord of the Ninth. For the most part this chord was constructed on the Dominant only, in major and minor.



Some books speak also of secondary chords of the Ninth on other degrees of the scale. We regard these as accidental chord-formations, arising from the suspension of the *octave* by the *ninth*, and think it superfluous to teach a form of chord, which by some theoreticians is not recognized at all, by others only on one degree of the scale, and which, for the most part, can be employed only in the fundamental position and not in the inversions. In the use of this chord (chord of the Ninth) in four-voiced writing it is evident that *one* interval, (the *fifth* or the *seventh*) had to be left out. Since the *ninth*, being a dissonant interval, must always be prepared, each so-called chord of the Ninth presents itself as a suspension of the *octave* of a Triad by the *ninth*, if the *seventh* is omitted; or of a chord of the Seventh, if the *fifth* is omitted. But when a chord of the Ninth enters without preparation of the *ninth*, it always proves to be the chord of the Seventh on the seventh degree in major or minor over an organ-point, and the *seventh* of this chord may enter freely, e. g.



We shall make more particular mention of this in Chap. XVIII, § 57, "The Organ-point".

The free entrance of a *ninth* by a step or a skip over a chord of the Seventh or a Triad in embellished (*figurirt*) counterpoint, has the same character and must be explained in the same way, e. g.



Such *ninths* generally are found only on the unaccented part of a measure. A few unprepared *ninths* exceptionally occurring on the accented part of a measure, do not authorize the admission of a real chord of the Ninth and are easily explained by the free leading of the voices permitted in embellished counterpoint. Nobody will take the note *D* in Ex. 292 to be anything other than a changing note before the chord-note *C*, which may enter freely and which, without moving to the chord-note *C*, skips to the *fifth* of the chord of the Seventh.



In the study of counterpoint the pupil will get full information concerning such liberties in voice-leading. Besides, the really *strict* style in *pure* contrapuntal writing does not admit of such free leading of the voices as in Ex. 292, because the changing note can only appear diatonically before the real chord-note, e. g.



Here also, any unprejudiced person will recognize a changing note preceding the chord-note, and not chords of the Ninth which, indeed, must always be prepared. Whether such a leading of the voices, as in Ex. 293 is *at all permitted* in strict style, or not, does not need to be discussed in this connection.

All fundamental chords introduced by us, whether Triads or chords of four tones (chords of the Seventh), can be formed on all degrees of the major and minor scale and used both in the fundamental position and, for the most part, in their inversions also. Chords of five tones (chords of the Ninth), of six tones (chords of the Eleventh) or even of seven tones (chords of the Thirteenth), which in modern (free) style occasionally occur as accidental chord-formations, e. g.

Open position.

b. 3 6 # - 2 3 3 5 9 4 3 6 3 - 4 6 3 3 # -

c. 3 6 6 9 6 6 9 3 7 9 8 7 5 - 4 3 -

d. 8 6 4 # 5 6 4 3 7 6 6 # 2 3 6 8 7

9 8 6 5 7 7 5 6 6 9 7 6 6 7 4 #

e. 8 6 6 9 6 5 7 9 8 7 7 6 5 7 4 3 3 4 - 4 3

f. 3 2 - 2 7 4 8 5 4 2 -

6 4 7 5 3 7 6 - 6 6 7 7 9 8 5 4 3 3 - 4 - # 4 3

g. 3 7 6 4 - 5 - 7 6 7 9 8 6 5 6 - 7 - 4 3

Open position.

h. 5 9 8 7 9 8 7 5 6 3 4 # 2 6 5 3 4 3 3 4 - #

i. 3 6 6 7 - 4 3 6 2 6 4 6 6 8 7 6 5

The musical notation consists of six staves in bass clef, each with a key signature of one flat (B-flat). The notation includes various musical symbols such as notes, rests, and accidentals. Above the staves are numerical figures (fingerings) and some letters (k., m., l.) indicating specific musical concepts or exercises. The staves are arranged in three pairs, each pair representing a different musical exercise or example.

CHAPTER XVIII.

Passing Notes, Passing Chords; Changing Notes. The Organ-Point.

§ 57. Those notes which are inserted *diatonically* between two tones of one or two chords, and which may either belong to the first of these chords, or form with it a closely related and richer accidental transitory chord-formation, are called Passing Notes. But they may also be foreign to the first chord and form a dissonance with it.

A dissonant passing note must be led *diatonically* to a note belonging to the first or the second (new) chord. *Passing notes can never occur on the accented part of measure.*

295.

C: I

Ex. 295 shows us the passing notes *D* and *F* (marked with an asterisk), which are foreign to the chord, inserted diatonically between the tones *C E G* of the *C* major Triad.

296.

Ex. 296 shows the same passing notes between two chords.

297.

C: I IV vii°7 I

Ex. 297 shows passing notes between the chords of the first, fourth, seventh and first degrees in *C* major, which either form new chords accidental to those chords, or belong to the principal chord.

Ex. 297 might be figured as follows:

298.

But this is not necessary; we shall indicate the passing note in the Bass by a dash over the note, no matter if it represents an accidental chord-formation to the principal chord or not.

299.

The dash over the note shows that *no new chord* is formed, but that the chord already represented continues to sound during the transition of the passing note.

Passing notes into two or more voices can form passing chords.

300.

Passing notes can also be introduced chromatically.

301.

Chromatic passing notes must, however, not be introduced too frequently. Successions such as in Ex. 302 are not fit for pure writing.

302.

Passing notes and chords in the *upper voices* must be marked, over the Bass, with the appropriate figuring. (Compare § 58. "The Organ-point").

303.

Five-voiced.

Changing notes are those notes foreign to a chord, which occur on the accented part of the measure and precede (by a whole-, or a half-step) a note belonging to the chord, and bear the character of an unprepared suspension. They may enter before the chord-note freely, from above or below, by a step or a skip (comp. Ex. 293, bars 2 and 3).

The changing notes in Ex. 304 are marked with 0.

Passing and changing notes are employed only in embellished counterpoint, on the lesser divisions of a measure, in order to give movement to the rhythm. The former are much more frequently used than the latter. According to our view the occasional use of changing notes does not necessarily mar the purity of the musical syntax; its too frequent use, however, is not to be recommended in strict style. The pupil will learn the details of this subject in the study of counterpoint.

The Organ-point.

§ 58. An organ-point arises when the Bass is retained throughout a rhythmically and metrically bounded part of a piece of music and carries, after its first pure chord a number of partly pure and partly passing chords which often have no direct relation to the organ-point tone. At the beginning of a piece of music the organ-point can take the Tonic; in the middle or near the end, the Tonic or Dominant, or both Tonic and Dominant at the same time. The first, as well as the last chord of the organ-point, must always be consonant independent chords. The

Organ-point on the Dominant may, however, begin with the chord of the Dominant Seventh. The chords over an organ-point should be alternately consonant and dissonant to the bass-note. Too great a number of dissonant chords (which do not accord with the bass-note) make a bad effect.

The close of an organ-point is best when formed on a rhythmically and metrically bounded part of a piece of music. An arbitrary breaking off of the organ-point is not to be approved of. The lowest of the voices above the organ-point (in four-voiced writing the Tenor) forms, as it were, an independent Bass to the upper voices. So, on the organ-point on the Dominant, through the appearance of the chord of the Seventh of the seventh degree, arises the accidental chord-formation which many theorists call the chord of the Ninth (compare § 56).

305.

Figured bass notation for example 305: 6 4 7 3 9 7 3

We here give several examples from which the pupil will see that the thorough-bass-notation of the principal and the passing chord-formations over the organ-point is purely mechanical. The figures indicate the exact intervals from the Bass.

306.

Organ-point on the Tonic.

Figured bass notation for example 306: 8 7 8 6 8 5 6 8 7 7 7 5 6 5 6 3 2 3 2 3 4 3 2 3 2 4 3 4 3 4 3 6 -

Organ-point on the Dominant.

307.

Figured bass notation for example 307: 6 7 6 5 7 7 - 9 9 7 9 4 2 4 4 2 3 - 4 3 4 4 5 3 4 6



Organ-point on the Tonic and Dominant.

The thorough-bass-notation is based upon the Tonic.



If the Soprano or one of the middle voices holds a tone under similar conditions as the organ-point, it is called a *stationary voice*.

Stationary voices are much less used than the organ-point in the Bass, and are less adapted to the strict, than the free style.

Exercises.



The musical score consists of six staves, each with a key signature of one flat (B-flat) and a common time signature (C). The notes are written in a bass clef. Above the staves, there are various musical notations including accidentals (sharps, flats, naturals) and fingerings (numbers 1-5). The staves are labeled with letters 'c.', 'd.', and 'e.' at the beginning of the first, fourth, and sixth staves respectively. The music is written in a style typical of 19th-century pedagogical texts, with a focus on interval training and harmonic progression.

CHAPTER XIX.

Concealed Octaves and Fifths; the Cross-Relation.

§ 59. The most important rules for avoiding the forbidden progression of *octaves* and *fifths* have been given in former chapters. Since we have returned to this subject, it is proper to remark that all that has been said concerning *concealed octaves* and *fifths* has reference principally to simple

four-voiced writing. In writing for more than four voices, progressions that would sound disagreeable if in four voices only, are often concealed by the greater number of voices in such a way as not to be prominent or striking. Particular care must be taken in writing for three, and especially two voices, as all faulty progressions are then much more obvious.

Concealed octaves and *fifths*, of course, arise only in parallel motion, when two voices move from any two different intervals to an *octave* (or *double-octave*), *fifth* or *twelfth*.

Concealed octaves, by skips.	Concealed octaves, one voice moving diatonically, the other by a skip.
---------------------------------	---

The musical examples are presented in two systems. The first system shows two staves (treble and bass clef) with two voices. The first measure shows a skip of an octave in the upper voice while the lower voice moves diatonically. The second measure shows both voices moving diatonically. The third measure shows a skip of an octave in the lower voice while the upper voice moves diatonically. The second system, labeled 'Concealed fifths', also shows two staves with two voices. The first measure shows a skip of a fifth in the upper voice while the lower voice moves diatonically. The second measure shows both voices moving diatonically.

The *parallel octaves* and *fifths* would be evident by filling out the intervening spaces with small notes.

An unforced and natural chord-connection without any *concealed octaves* and *fifths* is impossible even in four-voiced writing. Our object now is to show the pupil those *concealed octaves* and *fifths* which, in four-voiced writing, cause a bad effect.

We shall therefore briefly review the conditions under which the pupil must avoid *concealed octaves* and *fifths* in four-voiced writing. But we would remark in addition, that he must not make it a rule to avoid *all concealed octaves* and *fifths*, but only those here put down as objectionable, because, in trying to avoid imaginary faults, he could easily fall into the error of writing stiffly and unnaturally. But the progressions into *octaves* and *fifths* here censured must be avoided as much as possible also in the most difficult contrapuntal forms of art, such as the Canon, the Fugue and the Stretto (*Engführung*) of the fugue.

Concealed octaves and *fifths* must be avoided when, in progressing from *one chord to another*, two voices *skip* into an *octave* or a *fifth* (or *twelfth*).

310.

a. b. c. d.

e. f. g. h. i.

k. l.

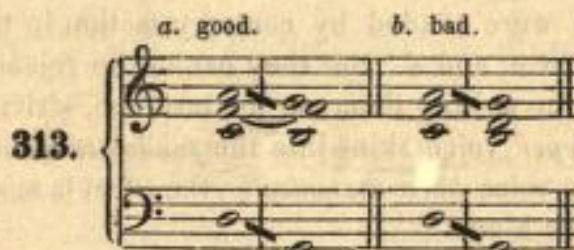
Although some of these *octaves* and *fifths* entering by skips are introduced under the most favorable conditions possible (as those at *b*, *c*, *d*, *f*, *h*, *i* and *k*, where we have endeavored to diminish the disagreeableness of the faulty progressions by means of contrary motion and, at *h*, of oblique motion of the other voices) they nevertheless must all be rejected. If, however, *one and the same* chord is merely inverted, such *octaves* and *fifths* entering by skips are permitted; e. g.

311.

Furthermore, *concealed octaves* are prohibited between outer voices, when one voice moves upward a *whole-step*, and the other skips into the *octave* (comp. § 21).



If the *upper* of the two voices moves downward a whole-step into the *fundamental* of the chord into which the other outer voice skips, the *concealed octaves* are permitted, provided that the combined leading of the voices contains nothing objectionable. Accordingly, Ex. 313 *a*, is good, *b*, is not good, because all four voices move downward.



If, however, the *lower* of the outer voices moves a whole-step into the *fundamental* of the chord into which the upper voice skips, the *concealed octave* resolution is not good; e. g.



If one of the outer voices moves downward a step into the *third* or the *fifth* of the chord, and the other outer voice, at the same time, skips into the same interval, the effect is very disagreeable, and such *concealed octaves* are strictly prohibited.



All the *concealed octaves* in Ex. 315 are bad and must be carefully avoided; only the one at NB. might be permissible, because there the effect is less disagreeable, on account of the close relation of the two chords.

Between a middle and an outer voice *concealed octaves* are less prominent when the *upper voice* moves upward a whole-step into the *fundamental* of the chord into which the *lower voice* skips.

316.

Progressions of this kind would certainly have a better effect if the *concealed octaves* were evaded by contrary motion in the Bass; this is especially true at *a.* and *d.* But they cannot be rejected, if there are higher motives for writing them as, for instance, strict imitation.

But if the *upper voice* skips into the *fundamental* of the chord into which the *lower voice* moves *diatonically*, the effect is more disagreeable. Succession of this kind:

Progressions 317.

must be carefully avoided.

If one of the outer voices does not skip into the *fundamental*, but into *another interval* of the chord into which the other voice moves by a *whole-step*, the *concealed octaves* resulting have a very bad effect and must by all means be avoided. Progressions of this kind:

318.

must always be avoided.

All these *concealed octaves* immediately lose the disagreeableness of their effect, when the voice moving diatonically upward or downward makes a progression of a *half-step* into the *fundamental* of the chord,

into which the other voice skips. But with other intervals the effect remains a bad one, and progressions of this sort:



cannot be permitted, even though the one voice does progress by a half-step. So also, when the one voice moves *downward* a *half-step* into the *third* of the chord, progressions of this kind:



are very hard and disagreeable, through the doubling of the leading tone resulting therefrom.

However, such *concealed octaves* may be written, when the *lower* voice descends a half-step into the *fifth* of the chord, while the other voice skips into the same interval, and progressions of this kind:



may unhesitatingly be employed.

Sometimes such progressions may, however, have a bad effect, as shown in Ex. 321 b.



A good effect is rarely attained, when the *upper* voice progresses a half-step into the *fifth* of the chord, while the *lower* voice skips to the same interval. Of the progressions in 322, only that under *c.* can be tolerated, those under *a.* and *b.* must be rejected.

322. a. b. (perhaps.) c. (not to be rejected.)

Furthermore, all *concealed octaves* arising from the resolution of a *seventh*, — no matter whether it descends a *whole*-, or a *half-step* — must be carefully avoided, as altogether faulty in all voices (comp. § 45). All the chord-connections under No. 323 are bad.

323.

Only certain connections of two chords of the Seventh are rare exceptions to this prohibition of *concealed octaves* over the *seventh*. If in some of these cases *concealed octaves* arise, they can be permitted, if the resolution takes place into the fundamental position of the second chord of the Seventh, because then the effect is not bad. Thus, the chord-connections, for instance, under No. 324 can not be found fault with.

324.

C: V₇ a: V₇ f: u⁰₇ A₇: V₇ C: vii⁰₇ V₇ c: vii⁰₇ V₇

Even between a middle and an outer voice *concealed octaves* in the connection of two chords of the Seventh may sometimes have a good effect and are then permissible; e. g.

325.

F: V₇ d: V₇ A: vii⁰₇ V₇ d: vii⁰₇ V₇

Occasionally, even a resolution into a Triad may occur, in case the disagreeable effect of the *concealed octaves* is counteracted by a strong contrary movement. So the progression at 326 *a.* is tolerable; that at *b.* is perfectly correct; that at *c.* is more doubtful.

326.

It is evident that, whatever has been said concerning *concealed octaves*, is good also for *concealed unisons*, which result in a bad leading of voices even in a higher degree than *concealed octaves*.

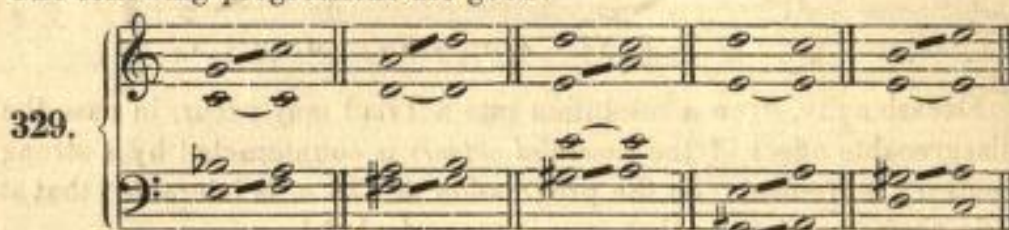
§ 60. It has already been said in § 59, that *concealed fifths* between any two voices must be avoided, when both voices skip. If the upper voice progresses diatonically into the *fifth*, while the lower one skips to the same interval, the *concealed fifths* thereby resulting are permissible between any two voices, provided the leading of the voices is in other respects correct.

327.

The chord-connections at 327 *a.*, *b.*, *c.* are good; that at *d.* is decidedly faulty and not allowable on account of the *concealed octaves* by a skip between Tenor and Bass, as well as on account of the general upward movement of all the voices. The progressions under 328 are perfectly good.



But when the *upper voice skips* to the *fifth*, the connection is good only when the lower voice moves by a *half-step* to the same interval. The following progressions are good:



The connections under No. 330 are not admissible, because the lower voice moves a *whole-step*.



The rules and prohibitions here given in respect to certain *concealed octaves* and *fifths* may serve the pupil as an indication for what he is allowed to write and what he must abstain from. It is hardly possible to give definite rules that can be correctly applied to all cases where *concealed octaves* and *fifths* might occur in four-voiced writing. Consideration must always be had for the voice-leading in general. Wherever progressions have been interdicted as being faulty, they formed a bad leading of the voices, and can be avoided by a better leading. The following simple rule might therefore be given: *Concealed octaves and fifths are not allowed, when they cause an awkward and stiff leading of the voices.* Otherwise they can unhesitatingly be written, as in purposely shunning all *concealed octaves* and *fifths* in four-voiced writing, it may well happen that a perfectly natural, good and unobjectionable leading of the voices is given up and one less good substituted for it. Matured experience, artistic judgement and good taste will afterwards show the advanced pupil how to treat each single case.

A cross-relation can occur in pure four-voiced writing only at the turn of a modulation*).

*) This rule, however, is applicable only to simple four-voiced writing in plain counterpoint (*gleicher Contrapunkt*), i. e. that counterpoint in which notes of equal

331.

C: I V F: V₇ I G: V₇ I F: vii⁰₇

I d: V₇ i V₇ G: I g: i

duration are written to a *cantus firmus*. In embellished counterpoint the best masters proceed quite freely. Without the least consideration for cross-relation Bach writes passages such as the following:

In the study of counterpoint the pupil will get more particular information concerning the cross-relation. In the following example it is clearly seen that the cross-relation could not be evaded.

The free employment of a chromatically altered tone in *another voice* than that in which the natural tone was contained in the preceding chord, has a very bad effect. The chromatic alteration must then be made *in the same voice* and within one and the same measure. Ex. 332 shows how the faults in Ex. 331 can be avoided.



CHAPTER XX.

Application of Chords to the Accompaniment of a Cantus Firmus in Four-voiced Writing.

§ 61. So far the pupil has constructed and connected chords with each other above a given figured Bass only. He has learned thereby the principles by which the middle voices are led in the most quiet and flowing manner possible. To the leading of the Soprano were applied only the general rules for voice-progression, no special regard having been given to its being the uppermost voice. The pupil has had no opportunity to form a Bass for himself. Before we begin the following work, which is an introduction to the study of Counterpoint, we will give some rules concerning the manner of writing for chorus in general, and the formation of the Soprano and Bass in particular. Although in pure writing each voice must be formed melodiously, one voice, in simple four-voiced writing, will have a predominating melody. This predominating melody is called the *Cantus Firmus*. The other voices will have to be subordinated to it, as accompaniment, as far as their own free and independent leading admits.

The *cantus firmus* may be given to any voice. If it is in the Bass, or in a middle voice, the highest voice (Soprano) must not be treated merely like a middle, or filling-out voice; and although the principal melody (the *cantus firmus*) is given to another voice, it must be so formed as not entirely to lose its character of a melodious upper voice. In the first place, the rule holds good that the Soprano must not retain one tone longer than three bars, and that it must — as much as possible —

be led diatonically, or in easy and singable skips. Furthermore, it is to be observed that the middle voices, even in the open position, must not be placed too far from each other. It is best not to separate the Alto from the Tenor more than an *octave*, at the utmost. If these bounds must occasionally be overstepped, the voices must return to a closer position as soon as possible; a piece for chorus thus constructed (like that given in 333) would not sound well because the middle voices are too distant from each other.

333.

Example 333 shows a musical score with two staves. The top staff is in treble clef and the bottom staff is in bass clef. Both are in common time (C). The music consists of a series of chords. The interval between the middle voices (Alto and Tenor) is excessive, exceeding an octave.

Although in this example each individual voice is correctly led, and the connection of the chords is not unnatural or forced, the whole example must be rejected because the middle voices are too far apart from each other. We show it improved in No. 334, where the middle-voices simply exchange places.

334.

Example 334 shows a musical score similar to 333, but the middle voices (Alto and Tenor) have exchanged places, resulting in a more compact and singable arrangement.

The distance of the Soprano from the Alto can also only occasionally exceed the bounds of an octave. For this reason the following example must be rejected, even though it presents nothing censurable with regard to the leading of the voices and the succession of chords.

335.

Example 335 shows a musical score with two staves. The top staff is in treble clef and the bottom staff is in bass clef. The music consists of a series of chords. The interval between the Soprano and Alto is excessive, exceeding an octave.

In No. 336 it is improved by the inversion of the middle voices.

336.

Example 336 shows a musical score similar to 335, but the middle voices (Alto and Tenor) have been inverted, resulting in a more compact and singable arrangement.

Likewise, the Tenor, as indeed all three upper voices, must not be kept too far away from the Bass (the voice which determines the chord) for too long a time.

337.

A better effect is obtained by transposing the Bass of Ex. 337 into the upper octave, e. g.

338.

or:

The effect is made still better, if the middle voices are interchanged at the beginning; in the seventh measure the chord of the Seventh is changed to the triad on the same degree, and the middle voices then progress in the same manner as before.

339.

or:



The following rules therefore hold good for chorus writing.

1. The voices must be led so as not to continue long in a very high or a very low position.

In a very high position a *piano* or *pianissimo* would be difficult, under some conditions impossible, to a chorus. The intonation would therefore often be unsure and wavering, even when sung by a good chorus. In a very low position an energetic *forte* or *fortissimo* would be impossible. If the voices are to enter freely on the highest tones of their compass it must be done in a *forte* or *fortissimo* passage. If the entrance occurs upon the lowest tones, only a *piano* or *pianissimo* can be effected.

2. The voices must not be separated too far from one another.

If the voices lie at a distance from each other they cannot effect an equable shading. The following chord could easily be sung *forte* or *fortissimo* by the three upper voices; the Bass, on the contrary, would be



weak:

. The effect is still worse if the *middle voices* lie at

a distance from each other:



If the voices lie at a dis-


tance from each other, they are unable mutually to support one another. The surety and pureness of intonation must suffer under such conditions. The lowest voice — here represented by the Bass; in female chorus by the Alto, and in three-voiced writing occasionally by the Tenor — must always receive special attention. It is still less adapted to sustaining a tone, than is the Soprano. Except as an organ-point, the bass-note can only be sustained when it is the preparation of a suspension of a chord of the Second, possibly of a chord of the Sixth and Third, and, in the closing cadence, in connecting the chord of the Sixth and Fourth of the first degree with the Dominant Triad, or the chord of the Seventh.



When the chord of the Sixth and Fourth appears unprepared upon the accented part of a measure, it always creates the impression of a full close. Therefore, except in a cadence, it can only be used as a *passing chord* (compare § 57). It is a passing chord :

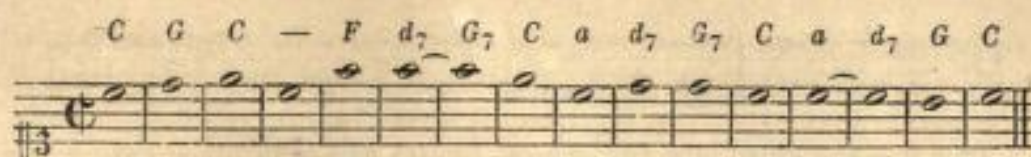
1. When the *fourth* of the chord of the Sixth and Fourth is prepared ;
2. When the lowest tone of the chord of the Sixth and Fourth, i. e. the *fifth* of the primal chord, passes *diatonically* between other tones.

Both conditions, however, must be complied with at the same time, so as to give the chord of the Sixth and Fourth the character of a *passing chord* ; e. g.

341. 

The pupil must now endeavor to write the three lower voices to a *cantus firmus* in the Soprano, using the chords that are indicated above it, and connecting them according to the rules of voice-progression now known to him. We use large letters for the indication of the major Triad, and small ones for the minor Triad ; for the chord of the Seventh, the figure 7 is added.

The following *cantus firmus* in the Soprano has in the first measure the *octave* of the fundamental of the Triad of the first degree in C major ; in the second measure, the *fifth* of the Dominant Triad ; in the third and fourth measures, the *third* and the *octave* of the fundamental of the Tonic Triad. The Bass in the latter two measures can neither remain stationary nor form the chord of the Sixth and Fourth in the second measure ; in such cases, only the fundamental position and the chord of the Sixth can be used. In the fifth measure the Soprano has the *octave* of the fundamental of the Sub-dominant Triad ; in the sixth measure the *third* of the chord of the Seventh of the second degree ; in the seventh measure the Dominant *seventh* ; in the eighth measure the *third* of the Tonic Triad ; in the ninth measure the *third* of the triad of the sixth degree ; in the tenth measure the *fundamental* of the chord of the Seventh of the second degree ; in the eleventh measure the *fifth* of the chord of the Dominant Seventh ; in the twelfth measure the *octave* of the fundamental of the Tonic Triad ; in the thirteenth measure the *third* of the triad of the sixth degree ; in the fourteenth measure the *seventh* of the chord of the Seventh of the second degree ; in the fifteenth measure the *third* of the Dominant Triad, and in the last measure the *octave* of the fundamental of the Tonic Triad.



The *cantus firmus* can be worked in the following manner :

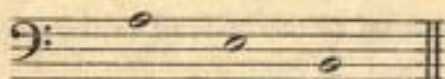
342. C G C — F d₇ G₇ C a d₇

C: I V I — IV II₇ V₇ I VI II₇

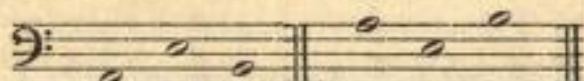
G₇ C a d₇ G C

V₇ I VI II₇ V I

The pupil will see by the leading of the Bass in Ex. 342, that it can move by degrees, as well as by skips of a *third*, *fifth* or *sixth* in contrast to the more quiet progression of the middle voices. All skips that are easily executed are allowed in the Bass. On the contrary, all those progressions that are difficult to be executed are forbidden. So, even two successive skips of a *fourth* downward are not good.

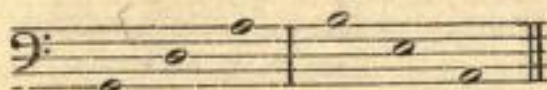


They can be avoided by a skip of a *fifth* and a skip of a *fourth*, or *vice versa*.

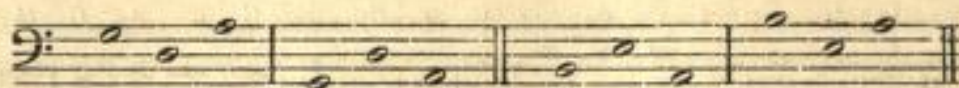


Two skips of a *perfect-fourth* upward can unhesitatingly be written, as shown in Ex. 342; they present no difficulties of intonation.

On the contrary, the succession of two skips of a *fifth*, either in an upward or a downward direction, must carefully be avoided.



They are improved by changing one of the skips of a *fifth* to a skip of a *fourth* in the opposite direction; e. g.



The *upward* skip into the *minor seventh* can take place only when the *seventh* is thereby added to the Triad; but it can never be used between *two different chords*.

343. good. good. good. bad. bad.

The *downward* skip of a *minor seventh* is not to be recommended, even when in the same chord.

The skip of a *major seventh* upward or downward must always be avoided. Furthermore, all *augmented* intervals must be avoided, and be changed into *diminished* intervals by a downward progression.

344.

345.

We therefore write the *diminished seventh* downward, instead of the *augmented second* upward; the *diminished fifth* downward, instead of the *augmented fourth* upward; the *diminished fourth*, instead of the *augmented fifth*; the *diminished third*, instead of the *augmented sixth*. Only the *augmented prime* is good. The skip into the *perfect octave* is allowed both upward and downward.

We here give the working out of the following *cantus firmus* in a minor.

a: I V I IV I V₇ I IV₇ VII⁰ VI

VII⁰ I IV₇ II⁰ I V I

We have added to this *cantus firmus* the degree-numbers of those chords which, as indicated by the letters over the notes, will serve us

in the working of this example. We give the chromatic raising of the seventh degree in minor, only where that tone appears in the *cantus firmus*.

346.

Chord progression for example 346:

System 1: a , E , a , a , a , E_7 , a , d_7 , g^\sharp_7 , d

System 2: g^\sharp_7 , a , d_7 , h_7 , a , E , a

Bass line figures (from left to right): \sharp^6 , 6 , 6 , 4 , 2 , 6 , 2 , 6 , 5 , 6 , 4

Chord symbols below the first system: $a: I$, V , I , IV , I , V_7 , I , IV_7 , VII^0_7 , IV

Chord symbols below the second system: VII^0_7 , I , IV_7 , II^0_7 , I , V , I

The above example, in the fifth and tenth measures, shows us the prepared introduction of the chord of the Sixth and Fourth of the first and fourth degrees, and, in the fifteenth measure, its free introduction on the first degree, in the closing cadence. In the seventh bar the tone C (in the Bass) prepares the *seventh* of the chord of the Seventh of the fourth degree, and, therefore, retains the same tone in the following bar. The *seventh* (C) in the Tenor (bar 13) must progress a degree upward, because the Bass steps to its real tone of resolution, (B). Finally, in the last two bars is found the progression from EB , to AE in contrary motion: This progression, which in parallel

motion would result in *parallel fifths*, is allowed in *contrary motion*. We find it used by the best classical masters. In two-voiced writing this progression is impossible, because there *bare fifths are altogether* forbidden. In four-, and three-voiced writing this progression can take place, even between the outer voices.

347.

four-voiced. three-voiced.

Parallel fifths and *octaves* can therefore be avoided by contrary motion, and such progressions are allowed, if the leading of the other

voices is otherwise natural and correct. *Parallel octaves*, however, can never be avoided by contrary motion, and progressions such as in No. 348 are always faulty (compare Ex. 343).

348.

The following exercises for the working out of a *cantus firmus* in the Soprano must be worked after the manner shown in examples 342 and 346, and written in four different clefs.

Exercises.

349.

a. F B \flat F B \flat C \flat B \flat C \flat F g F g \flat F g \flat C \flat F

b. B \flat F \flat B \flat E \flat B \flat c \flat F \flat B \flat E \flat a \flat B \flat F \flat B \flat c \flat F B \flat

c. G D \flat G a \flat D \flat G D G C D \flat G e a \flat D \flat G

d. E \flat A \flat E \flat c A \flat B \flat c \flat f \flat E \flat f \flat B \flat E \flat

e. Open position.
G \flat D \flat e \flat b \flat e \flat D \flat D \flat G \flat — a \flat D \flat G \flat e \flat a \flat D \flat G \flat

f. A E A D A b \flat E \flat f \sharp b \flat E \flat A b \flat A E \flat A

g. E B \flat E B \flat E f \sharp B \flat E A B \flat E — c \sharp B E E \flat

X

h. A_7 B_7 E A f^\sharp B_7 c^\sharp f^\sharp E f^\sharp E f^\sharp B_7 E

i. d A_7 d A d g A_7 d c^\sharp d c^\sharp d e A d

Open position.

k. f C D_7 b_7 A_7 C_7 f g f C f — g C_7 f

l. b e b a^\sharp b c^\sharp F^\sharp G e b c^\sharp — b F^\sharp b

m. c f e f G c G c f e A_7 d G c

§ 62. The task is incomparably more difficult when the *cantus firmus* is in a middle voice. Then the Soprano requires special consideration; it cannot be treated like a middle voice. As far as possible, it, as well as the *cantus firmus*, must be a melodiously progressing voice. The following *cantus firmus*, if worked in the manner shown in Ex. 350, would entirely deprive the Soprano of its peculiar character.

350.

C F C d_7 C a F G_7 C

C F C d_7 C a F G_7 C

7 8

If we give the Tenor-part of 350 to the Soprano, and the Soprano-part to the Tenor, as shown in Ex. 351, the result is much better.

351.

As the *cantus firmus* of the following exercises is in the Alto, most of them can be worked to advantage in the open position. In one single instance the exercise can be commenced in the close position.

Cantus Firmus in the Alto.

a. C d₇ G₇ a d G₇ C G₇ C F b C d C G₇ C

352.

b. F C₇ F g₇ C₇ F₇ B₇₇ e₇ F g F C F

c. d A₇ d g e A₇ d g A₇ B₇ g A₇ d

Close position.

d. B₇ F₇ B₇ F g d E₇ B₇ F g₇ e₇ F₇ B₇

e. E₇ B₇₇ E₇ A₇ B₇₇ E₇ f₇ B₇₇ E₇ A₇₇ d₇ g₇ A₇ B₇ E₇ B₇ E₇

f. D₇ e₇ D₇ e₇ A₇ b₇ e₇ A₇ D₇

g. c G₇ A₇ d G₇ c d₇ c b₇ c d₇ G₇ c

Close position.

h. c₇ f₇ c₇ f₇ G₇ c₇ b₇ c₇ f₇ c₇ A d₇ c₇ G₇ c₇

The following examples, with the *cantus firmus* in the Tenor, are to be worked in the close position.

Exercises.

353. a. $E\flat_7$ d $E\flat_7$ $A\flat_7$ $B\flat_7$ $E\flat_7$ $A\flat_7$ f_7 $B\flat_7$ $E\flat_7$ f_7 $E\flat_7$ f_7 $B\flat_7$ $E\flat_7$

b. g $f\sharp_7$ g c g a_7 D_7 g a_7 g D $E\flat_7$ a_7 D_7 g

c. d A_7 d A d g A_7 d $c\sharp$ d e_7 A d

d. g D_7 $E\flat_7$ a_7 g a_7 g a $E\flat_7$ a g D g

e. f C $D\flat_7$ $b\flat_7$ C C_7 f e f e f $b\flat_7$ f C_7 f



CHAPTER XXI.

Modulation.

§ 63. In the exercises of this text-book the pupil has become acquainted with various modulatory turns. He knows that "Modulation" means the abandoning of the dominating key in a piece. If this principal key is abandoned altogether and a new key is introduced, the new key becomes the dominating one for the time being, and — unless the two keys are very closely related to each other — it is necessary carefully to establish the new key. It must be introduced by a modulation. With respect to the art of modulating, we shall give the pupil some points as to:

1. How to go from one key into any other;
2. How to establish the foreign key, in order to bring the modulation to a definite end.

A new key is not reached by hearing its Tonic Triad merely; for the sounding of that chord alone does not establish the new key. Hearing the following chords, we would regard them all as belonging to *C* major.

354.

C: I V I vi I IV I ii I iii

And also, if a second chord can no longer be classed in the same key with a first chord, its appearing on the *unaccented* part of a measure will never give the feeling that it is the Tonic Triad of a new key. It is merely felt to be a chord foreign to the preceding key and beginning a modulation, and not the Tonic Triad of a key just reached.

355.

We arrive at a new key under the following two conditions only:

1. The Tonic Triad, in two-divided time, must fall on the first part of the measure:
2. It must appear as cadencing resolution of the chord of the Dominant Seventh.

356.

C: I D: V₇ I C: I A: V₇ I C: I a: V₇ I

C: I B: V₇ I

It would be easy, starting from the Tonic Triad of any key, to get to the chord of the Dominant Seventh of most keys, since that chord has one or two (in one case even three) tones in common with nine of the twelve chords of the Dominant Seventh, and in the remaining three chords a direct connection could easily be managed with correct lead-

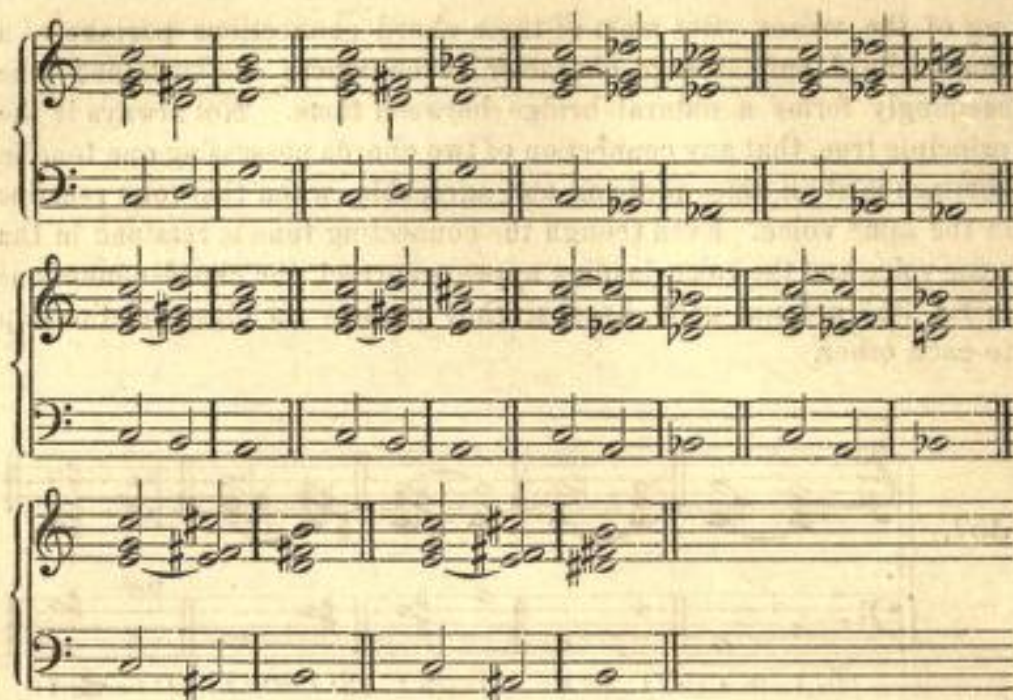
ing of the voices. But most of these chord-connections partake of a rough, hard and strange character, even where *one* sustained tone seemingly forms a natural bridge between them. Not always is the principle true, that any connection of two chords possessing one tone in common is at all times pleasing and agreeable, when that tone remains in the same voice. Even though the connecting tone is retained in the same voice and the voice-leading appears correct, the chord-connections in Ex. 357 are not good, because they possess no close relationship to each other.

357.

c : I a : I f : I a : I a : I f# : I f# : I b♭ : I b♭ : I c# : I

So also the direct connection of the Tonic Triad of *C* major with the twelve chords of the Dominant Seventh and their cadencing resolutions into the twenty four major and minor keys would in most cases *not* be a sufficient modulation for reaching a new key. The connections under No. 358, with few exceptions, have a constrained and forced character.

358.



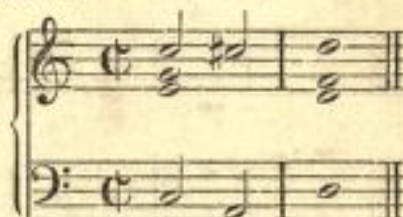
Even the abrupt succession of the Tonic Triads in major and minor, although they have *two* tones in common, has a strange effect, which is not always destroyed in connecting them by means of their mutual chord of the Dominant Seventh; e. g.

359.



Therefore it is well to have the chord of the Dominant Seventh of the key to be reached preceded by a chord which is related both to the triad started from and to that chord of the Seventh. This is done in all those cases in which the keys to be connected by modulation have no direct relationship with each other. In modulating from *C* major to *d* minor, the *C* major triad can be immediately followed by the chord of the Dominant Seventh of *d* minor, and then be resolved into the Tonic Triad of *d* minor. This connection partakes of no harsh character, because the Tonic Triad of *d* minor is also found in *C* major, on the second degree; thus:

360.



The modulation to *D major*, in this manner would be much harsher, because the triad *DF#A* is not found in *C major*. It is better, therefore, to insert after the *C major* triad, a chord which bears a relation both to *C major* and to *D major*.

361.

C: I D: III D: V₇ I C: I D: IV D: V₇ I

C: I D: II₇ D: V₇ I

In a similar manner the following modulations are formed:

362.

C: I f: I D: V₇ I C: I f: I D: V₇ D#: I
f: V D: III D#: V₇

C: I f: I E: V₇ I C: I f: I E: V₇ E#: I
f: V E: II E#: V₇

C: I VI e: V₇ E: I C: I V₇ b: IV₇ f#: V₇ I
e: IV E: V₇

a May 18 1874, Aug 4th

The last modulation (from *C* major to *f* \sharp minor) can be made still smoother by first resolving the chord of the Augmented Sixth and Fifth into the triad of *b* minor.

363.

Chord symbols for exercise 363:

System 1: *C*: I *V*₇ *b*: IV₇ *f* \sharp : IV *f* \sharp : V₇ I

System 2: *C*: I *V*₇ *b*: IV₇ *b*: I *f* \sharp : V₇ *F* \sharp : I *F* \sharp : V₇

It is generally better, in modulations into remote keys, to make the approach gradual by the use of several chords; e. g.

364.

Chord symbols for exercise 364:

System 1: *C*: I IV *b* \flat : I *A* \flat : V₇ *g* \sharp : V₇ *g* \sharp : I

System 2: *C*: I *f*: I *A* \flat : II₇ *V*₇ I *C*: I *V*₇ *b*: IV₇ *A*: V₇ I

System 3: *C*: I *V*₇ *b*: IV₇ *B*: I *V*₇ I

§ 64. The last modulation shows:

1. The similarity in sound between the chord of the Dominant Seventh and the chord of the Augmented Sixth, Fifth and Third;
2. The entrance of the chord of the Sixth and Fourth on the accented part of the measure.

The enharmonic change of the chord of the Dominant Seventh with the chord of the Augmented Sixth, Fifth and Third offers one of the best and most natural means for modulation. Since both chords can be used in major and minor, and the chord of the Augmented Sixth and Fifth can be resolved into the position of chord of the Sixth and Fourth of the Tonic Triad, remote keys can easily and agreeably be connected with each other by means of few chords.

When the chord of the Sixth and Fourth — as already mentioned — appears on the accented part of the measure, it calls forth in a striking manner the feeling of a complete close. Although it is not indispensable in the closing cadence proper, it strengthens it and creates a more pronounced feeling of a complete close.

§ 65. *The chord of the Diminished Seventh* is the principal means for getting quickly and easily from one key into *any* other. It can enter freely anywhere without preparation of the *seventh*. It allows of many a resolution and progression into minor and major and, by the enharmonic change of one or more or all of its tones, it can incline even towards the most remote keys. No. 365 shows the facility with which it can be introduced. Here the chords of the Diminished Seventh on the seventh degree of *c* minor, *f* minor and *b♭* minor, respectively, are brought into immediate connection with the Tonic Triad of *C* major.

365.

C: I *c*: vii⁰₇ *C*: I *f*: vii⁰₇ *C*: I *b♭*: vii⁰₇

But each of these three chords of the Diminished Seventh can be allotted to four different minor scales by enharmonically changing the denomination of the intervals.

366.

c: vii⁰₇ *a*: vii⁰₇ *f*[♯]: vii⁰₇ *d*[♯]: vii⁰₇ *e*[♭]: vii⁰₇

367. 

368. 

Now, since each of these fundamental positions or inversions of the chords of the Diminished Seventh may be resolved into the Tonic Triad of the *minor key* to which it belongs, as well as into the *major key* of the same degree, and also into keys of other degrees, at pleasure, and — as is evident from Ex. 365 — since each chord of the Diminished Seventh may follow a triad, three forms of the chord of the Diminished Seventh give the cue to all major and minor keys. In looking at a few of the possible resolutions of the chord of the Diminished Seventh on the seventh degree in *c minor*, it immediately is evident, what pliable means for modulation we have in those chords of the Diminished Seventh.

369. 

With enharmonic change.

C : II E \flat : I C : II E \flat : I C : II E \flat : III' d : i g : V d : i g : V $_7$

d : i g : i d : i B \flat : I d : i E \flat : V $_7$ d : i c : V $_7$

The pupil has already become acquainted with a large number of other means for modulation, in the more independent resolutions of the chords of the Seventh. All these means will find their employment in practice; but the beginner must be careful not to introduce the modulation too suddenly. In free composition bold modulations may occasionally produce an extraordinary effect, intended by the author. But if a modulation outside of the frame of a larger form of art, is intended to be made, (perhaps as a short mediating interlude between two pieces of music in different keys) direct means of modulation, that have rough effect, must be avoided, and the new key be gradually introduced. The smoother and the more gradual a modulation between two remote keys is made, the better will it prove to be. A short example will suffice to make this clear to the pupil.

The keys of *C* major and *c* minor have the chord of the Dominant Seventh in common. If, in connection with the Tonic Triad, we were to effect the modulation from *C* major to *c* minor by means of that chord only (which forms the principal cadence in *c* minor), the hearer would scarcely get the impression of a modulation to *c* minor; e. g.

371.

C : I C and c : V $_7$ c : i

The modulation under No. 372 will be much more satisfactory because, starting from *C* major, it introduces chords which have closer

relations to *c* minor, and which tend to make us forget the *C* major key that preceded.

372.

C : I $b7$: vii^0_7 *B \flat* : I *a \flat* : vii^0_7 *A \flat* : I *c* : ii^0_7 i V_7 i

Ex. 372 shows suspensions in the second and third bars. Suspensions are always well adapted to establish a closer connection of chords. The employment of suspensions in modulations is therefore especially recommended. In Ex. 372 the connection of the triads of *C*, *B \flat* and *A \flat* would appear less pliant without suspensions than with them.

373.

Finally, we see, in Ex. 372 and 373, the modulation to *c* minor ended by a complete closing cadence. This is necessary in order to establish the foreign key and definitely end the modulation.

CHAPTER XXII.

The Closing Cadence*).

§ 67. The necessary closing formulas for the ending of a musical period are exceedingly simple. There are indeed only two, of which the first, the **Authentic Cadence** or **Close**, is by far the most frequently used, because it creates the feeling of a complete close in a greater degree than the Second, the **Plagal Close**, which is much less used compare § 18). The authentic cadence is formed by the succession of the

*) This, and the following chapters, consist partly of extracts from essays, and partly of revised essays, which were published by the author in the "Musikalisches Wochenblatt" (Leipzig 1875) under the pseudonym of L. Luebenau.

Dominant chord (whether the Triad or chord of the Seventh) and the Tonic Triad, in such a manner that the Dominant chord falls on the *arsis* (unaccented part) of the measure, and the Tonic Triad on the *thesis* (accented part). This cadence is essentially strengthened by the preparation of the Dominant chord. It is most naturally prepared by the chord on the second degree, which stands in the same cadencing relation to that of the fifth degree, as the latter does to the chord on the first degree. In general it is immaterial whether the preparatory chord of the second degree is a Triad or a chord of the Seventh; but in case the chord of the Seventh of the second degree is used, it, in turn, must be prepared. The triad, and even the chord of the Seventh, of the fourth degree can occasionally be used as a chord of preparation. Such a more developed closing formula, when introduced by the chords of the mentioned degrees, often also by the insertion of the Tonic Triad as chord of the Sixth and Fourth, and occasionally as chord of the Sixth, before the Dominant chord, is called the Closing (Authentic) Cadence.

Although this very simple succession of chords is immutable and firmly settled, still the imagination of the great masters has varied it in many ways. The wish for a new, peculiar, and striking way of expression has led to the endeavour to remodel and shape the closing cadence differently. Since the closing chords of the fifth and the first degrees are unchangeable, these attempts had, of course, to be confined to the chords of the second or fourth degree. However, the attempts to represent the chord of the second or fourth degree in other forms have been successful in so many ways, that we are frequently inclined to regard the chord preceding the Dominant chord, or the chord of the Sixth and Fourth of the Tonic Triad, as one remote and perfectly foreign to the dominating key. But we shall here prove that this is not the case, and that, as strangely as the sound may affect us, we nevertheless have to do with the chord on the second or the fourth degree of the principal key, with accidental chromatic alteration of one or more of its intervals, and not with chords on other degrees, and in other keys.

For this purpose we will now show the closing cadence formed with the unaltered chords of the second and fourth degrees.

Closing cadence formed with the triads of the second and fifth degrees.

374.

C: II V I II V I II I V I

6 6 4 6 -

II I V I II I V I

6 6 - 6 etc.

II I V I II I V I

Closing cadence formed with the triads of the fourth and fifth degrees.

375.

6 6 4 6 4

C: IV v I IV V I IV I V I

IV I V I etc.

Closing cadence formed with the chords of the Seventh on the second and fifth degrees.

376.

7 7 6 5 7 4 3 7

C: II₇ V₇ I II₇ V₇ I II₇ V₇ I

2 6 5 7 6 4 7 6 5 7

II₇ V₇ I II₇ I V₇ I II₇ I V₇ I

378.

en harm. $B\flat: V_7$ en harm. $B\flat: I$

$C: II$ II I V I

en harm. $g: VII^0_7$ $\delta\flat: VII^0_7$ en harm. $g: III'$ en harm. $d: III'$

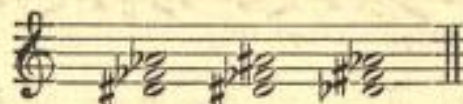
en harm. $a: VII^0_7$ en harm. $A: I$

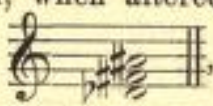
en harm. $A: V_7$ $D\flat: I$ en harm. $D\flat: V_7$

The musical score consists of five systems, each with a treble and bass staff. The first system (labeled 378) shows a progression from $B\flat: V_7$ to $B\flat: I$ with enharmonic markings. The second system shows a sequence of chords: $g: VII^0_7$, $\delta\flat: VII^0_7$, $g: III'$, and $d: III'$, with enharmonic markings above. The third system shows $a: VII^0_7$ and $A: I$ with enharmonic markings. The fourth system shows $A: V_7$, $D\flat: I$, and $D\flat: V_7$ with enharmonic markings. The notation includes various accidentals (sharps, flats, naturals) and figured bass notation (e.g., V_7 , III' , VII^0_7).



We by no means recommend the use of all these closing formations, and we would still less maintain that all chromatic alterations of the intervals of the triad of the second degree are suited to the formation of a cadence. Therefore we have omitted some altered formations, such as:



But if, when altered, such chords assume a form such as, for instance: , which sounds like the chord of the Sixth and Fourth of the $F\sharp$ major triad, the progression into the chord of the Dominant Seventh of C major can easily be effected.



In all these progressions of the triad of the second degree its fundamental tone D (no matter if it appears as natural or as chromatically altered tone) makes the cadencing step from D to G , when it is in the Bass. Therefore it can be clearly seen that the progression is based upon the natural laws of chord-connection, even when the sound at times appears strange and surprising. Whether, and to what extent the given formations are applicable in practice, depends upon their preparation and introduction.

§ 69. It is well known that a chord-connection is more firmly and surely effected by a chord of the Seventh, on account of its necessary resolution, than by the triad one the same degree; because the progression of the latter which, in most cases, is an independent chord, is not nearly as much restricted as that of a chord of the Seventh, which,

in many cases indeed, must have quite a definite progression. For this reason the chord of the Seventh on the second degree is especially adapted to the introduction of the closing cadence much) better than the triad of the same degree), the more so because its natural cadencing resolution compels it to resolve into the Dominant chord, and also because it can easily progress into the position of chord of the Sixth, and chord of the Sixth and Fourth of the Tonic Triad. We here show the chord of the Seventh on the second degree in its natural, and in variously altered formations, and add, for the sake of a better understanding, some closing cadences which are introduced by it.

380.

enharm.

enharm.

The enharmonic change, as well as the progression to the cadence in *C* major is supposed to be known to the pupil and therefore is not given here or in other formations.

enarm.

enarm. enarm.

enarm. enarm. enarm.

enharm. enharm. enharm.

enharm. enharm. enharm.

All the possible chromatic alterations of the chord *D F A C* are not here represented. That would lead us too far, much further than is necessary to our present purpose. Some of the given chromatic changes of this chord sound hard, others sound strange. But the pupil must remember that, if the unaltered chord of the Dominant Seventh on the second degree must be prepared on account of its dissonance, the preparation is by far more necessary when one or more of its intervals are chromatically altered. Therefore, it should always be suitably prepared, and it is left to the ingenuity of the composer how to effect this in the best manner possible. Moreover, it should be observed, how much the hardness of many chord-formations is softened by the use of the suspension; e. g.

381.

We may here pass over the chromatic changes of the triad of the fourth degree. It is obvious that the tones of this chord are contained in the three upper tones of the chord of the Seventh on the second

degree. We will only allude to the chord known as the chord of the Augmented Sixth, which is often used in forming the closing cadence. (See following.)

382.

C: IV IV V₇ I

§ 70. The chromatic alteration of the several tones of the chord of the Seventh of the fourth degree results, with few exceptions, in effects of sound which we have already met with, although with different notation, in treating of the chord of the Seventh of the second degree. Other formations, for instance such as:

383.

IV₇ V₇ I

we pass by as useless, superfluous experiments.

The chromatic changing of the tones of these chords will, however, produce an abundance of new forms suitable to cadencing formations. We give a few of them as examples.

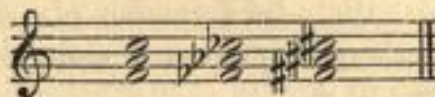
384.

C: IV₇

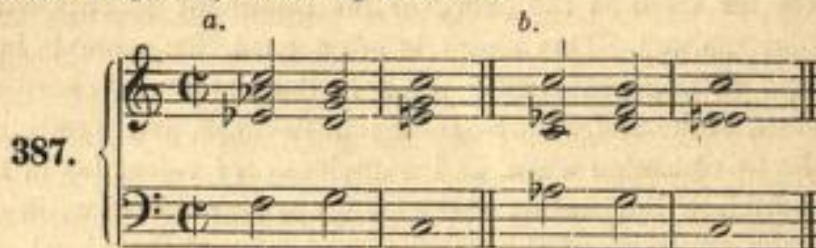
Such formations of a cadence as the following :



can also be traced back to the chromatically altered triad of the fourth degree.



Also the frequently occurring cadence :



can be traced back to the chord of the Seventh of the fourth degree with lowered *third*, *A*, and *seventh*, *E*, (in the second example the *fifth* is omitted). Such formations can also serve as a bridge of modulation from one foreign key to another; under certain circumstances the closing cadence can alone form a sufficient modulation.

With this chapter closes the doctrine of chords and their connection. What we say in the last chapters of this book, contains practical counsel for the disciple of art, and will help him to a clear knowledge of the real and pure character of the art of music. May the pupil heed what they contain; for, eventually, a highly and artistically cultivated ear, and a true, pure knowledge of art will be his best teachers.

CHAPTER XXIII.

How to Listen to Music.

Everyone who hears music experiences from it an immediate impression, and is further affected by its recollection. In general, the capacity of retaining the sensation that music created, corresponds to the capacity of listening with musical understanding, and the greater