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"Studies serve for delight, for ornament, and ability. * * * There is no stond or impediment in the wit, but may be wrought out by fit studies."—*Lord Bacon.*

J. G. ALBRECHTSBERGER'S

COLLECTED WRITINGS ON

THOROUGH-BASS, HARMONY,
AND
COMPOSITION,

FOR SELF-INSTRUCTION.

WITH MANY EXPLANATORY EXAMPLES, VERBALLY COMMUNICATED TO, AND SYSTEMATICALLY ARRANGED,
ENLARGED, AND EDITED BY HIS PUPIL,

IGNAZ CHEVALIER VON SEYFRIED;

WITH A SHORT GUIDE TO FULL-SCORE PLAYING, AND A DESCRIPTION OF ALL INSTRUMENTS EMPLOYED
UNTIL THE PRESENT TIME.

IN THREE VOLUMES.

VOL. I.

TRANSLATED BY SABILLA NOVELLO, FROM THE ORIGINAL GERMAN, EXPRESSLY FOR NOVELLO'S
LIBRARY FOR THE DIFFUSION OF MUSICAL KNOWLEDGE. THE MUSICAL PORTION
HAS BEEN REVISED BY VINCENT NOVELLO.

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DEDICATION.—To the Right Honorable Count Casimir Esterhazy von Galantha, Imperial Chamberlain, Patron of the Church-Music Society in Pressburg, Member of many Benevolent Societies, &c., &c., this work is respectfully dedicated by THE EDITOR.

PREFACE TO THE SECOND EDITION.

BY IGNAZ, RITTER VON SEYFRIED.

ALTHOUGH the first edition of this book of instruction met with a highly flattering reception, and was entirely sold off some years ago, yet the editor feels it to be his duty to explain fully, if he cannot justify, some few wants which could not fail to exist in it. The first defect observed, was a too apparent diversity of style, which cannot be denied, but which may be naturally and clearly accounted for. The first volume, a thorough-bass school, had to be compiled to a large extent, as only a very small portion of the necessary materials existed; on the other hand the subjects of the latter volumes, "Guide to Composition," &c. &c., had been worked out with the greatest precision by Albrechtsberger himself, who considered the substance of more importance than the words conveying it; therefore his manuscript reached the printer, written in his usual unadorned style, and nearly in the terms of his verbal instructions. On this account, it required no alteration, but only such additions as were rendered necessary by the extraordinary progress made in the instrumental branch of music during the lapse of more than twenty years. In order to meet the wishes expressed on this point, much has been done—not fruitlessly, it is hoped—in this second carefully revised edition. A further reproof was thrown on the order of the rules. Modern theorists place the study of simple and double counterpoint immediately after each other, and then proceed to the fugue. Albrechtsberger, supported by his oracle, Joh. Jos. Fux, was of a different opinion on this point—and not without sufficient reason. Simple counterpoint merely demands a perfectly sure, grammatical correctness of composition. When this has been steadily attained by the knowledge of certain rules, of the restrictions concerning perfect and imperfect chords, and of the almost despotic law which banishes all dissonant chords—then surely it must prove a real intellectual refreshment to the scholar, to throw off the oppressive yoke, to free himself from the narrow shackles of a chorale, and to write in the free style. Imitations of all intervals, in two, three, or more parts, give him the means to continue his ideas thematically, to order them

symmetrically, to place them in a melodious frame-work, and form from them (in musical metaphor) a large or small tone-picture according to rhythm and rule. Once familiar with the inversions—able to produce the same thought in even new shapes and harmonies—to appear manifold, though uniform—in short, capable of expressing much by little means—thus armed and prepared, the pupil may attack simple fugue, which does not require the aid of double counterpoint. By an intimate knowledge of formulas of this kind, he will become fitted for higher development; double fugues, with two, three, and four subjects, based on the secrets of double counterpoint on the 8ve, 10th, and 12th, unveil their mysteries, while the strictest of all fugal combinations, the canon, with its manifold branches, forms, like a keystone, the crown of his theoretical course. A long experience has also determined the editor to retain this system of order; the only change he has allowed himself to make is, that he has placed Inversion immediately after Imitation, as they are closely connected, and, also, he has transplanted from the *third* volume into the *second*, the short rules on five-part composition, as they complete the instructions on harmony, and belong to this part of the work. The Appendix has received considerable, and, it is hoped, not unwelcome additions. May it aid in fulfilling a former prophecy: "we may, perhaps, be able to express ourselves more fully, by studying and remarking the practical results of the separate and combined use of all instruments." Many circumstances tend to retard the fulfilment of this promise; it must be especially remembered that a compiled work of this kind would become too voluminous if it contained the examples which might be taken from the best masters of all ages, to illustrate the dead letter of the rules; while if containing none, it would not attain its proposed object—that of furnishing practical knowledge, and useful, progressive, and exemplified instruction. May this work serve as a finger-post to indicate the honorable goal which may be reached by one more worthy.

IGNAZ, RITTER VON SEYFRIED.

BIOGRAPHICAL MEMOIR.

JOHN GEORGE ALBRECHTSBERGER first saw the light of this world on the 3rd of February, 1736, in Klosterneuburg, a town about two leagues distant from Vienna. In his seventh year, he was already treble-singer in the monastery of regular canons, belonging to the town, where he also attended the schools. Leopold Pittner, the curate of St. Martin's, in the lower town, became fond of the good-natured boy, whose decided inclination for music did not escape his observation; he instructed him in thorough-bass, became his steady patron, and even caused a small organ to be constructed for him; which relic is still preserved in the village of Kahlenbergdörfchen, situated on the Danube, above Nussdorf, near Vienna. Towards this first benefactor, Albrechtsberger continued through life to entertain the warmest gratitude, and endeavoured upon all occasions to instil the same sentiment into the minds of his children. His great love of learning was displayed when a boy, by his carrying his little clavichord with him into bed, where he usually played until he fell asleep, and awoke to find his beloved instrument still with him. On one occasion, it being Easter Sunday, he came to his master to beg for instruction; the latter would not give a lesson on such a holy day, but as the boy persisted in his petition, he obtained permission to practice by himself. Overjoyed by this indulgence, he played so unusually well, that his listening master not only praised him highly but gave him a handful of small coin in his delight at the boy's talent. In order to continue his studies, Albrechtsberger, at a later period, entered the gymnasium of the Benedictine Abbey at Melk, where, having finished his courses of humanity, he filled the post of organist for twelve years. In this abbey it was customary for the choir-boys to perform small operas during the Carnival, and it happened that one of these representations was honored by the presence of his Majesty, the Emperor Joseph. The little George attracted the attention of the Emperor by his peculiarly beautiful treble voice, and his Majesty commanded that the boy should be presented to him, gave him much

praise and a ducat. When, in 1765, the august bride of this monarch, Princess Josepha of Bavaria, travelled through Melk, Albrechtsberger composed an ode, which was sung in the monastery, and received universal applause. He continued to perfect himself as a profound theorist by intense study of the works of Caldara, Fux, Mann, Riepel, Pergolese, Graun, Handel, Benda, Hasse, Bach, and others, kindly lent to him by Robert Kimmerling, the director of the choir. Some years after, the Emperor Joseph again passed through Melk, and attended high mass on the Sunday. Albrechtsberger played the organ, and preluded, as usual after service: his performance so pleased his Majesty, that he desired to speak with him, and proposed that he should become Court-organist, as soon as the post should be vacant. While yet a boy, Albrechtsberger had twice the misfortune to fall into the Danube, through inattention, but was luckily saved both times, by boatmen. At a later period he became organist at Raab, and at Mariataferl; for some years he was music-master to a gentleman in Silesia, and at last was engaged as choir-director by the Carmelite monks, in Vienna. This fortunate change of abode enabled him to realize his long-cherished wish of enjoying instruction from the esteemed Court-organist, Mann. Gassmann, the brothers Haydn, and Reuter, made his acquaintance, and the last conceived a great respect for him, when he heard him transpose at sight, and without mistake, his (Reuter's) mass in G. into G[♯] major, on an organ which had been tuned too low in pitch. In the year 1772, he at length obtained the situation promised him by the Emperor; and when Leopold Hoffmann, chapel-master of St. Stephen's cathedral, died in the year 1792, Albrechtsberger was named as his worthiest successor. From this time may date his real influential sphere of action; his best and self-erected monument is what he produced as composer and teacher; his memory will be gratefully loved by contemporaries, and eternally preserved by posterity. In 1798, he received a diploma as honorary member of the Royal

Swedish Musical Academy, and in 1808, by the distinct command of the Emperor, his new mass (composed on the occasion) was performed at the coronation in Pressburg. A short time previous to his death, he composed a *Te Deum*, intended for performance after the treaty of peace, and the return of our Emperor to the capital; but death frustrated his wishes. A few days before his end, he recommended his wife to preserve this score until some especially solemn occurrence in the Imperial family, when she was, in person, to lay this *Te Deum*, the last work which God had permitted him to finish, at the feet of the Emperor, declaring that, "As a true subject, he wished to do homage to his Majesty, even with his latest work." Could a more remarkable event happen to bless the millions of inhabitants dwelling beneath the mild sceptre of Austria, than the solemn espousals of Francis to Caroline Augusta? On this occasion, when all hearts rejoiced, the widow accomplished the desire of the deceased; one of her daughters presented the bequest to his Majesty, who, in remembrance of the great church-composer, most graciously and affably accepted it, and some weeks after, not only signified his content and gratification to the widow, through the medium of Joseph Eybler, Court chapel-master, but also awarded her an Imperial present. All Albrechtsberger's works bear the stamp of simple grandeur and elevated dignity; they are simple, pious, and religious, as he was himself. The so-called free style of composition never became congenial to him, and he often expressed himself on this point with humble sincerity: "It is no merit of mine that I write good fugues, for no idea ever presents itself that is not fitted for double counterpoint. He married, on the 31st August, 1768, Rosalia Weiss, daughter to the sculptor, Bernhard Weiss, of Eggenburg, born the 30th of August, 1740, and married in the Imperial chapel at Vienna. She bore him fifteen children, nine boys and six girls, of whom eight sons and four daughters are already deceased. In his familiar life, Albrechtsberger was generally serious, but always amiable, affable, and, on proper occasions, even jovial; as a man, husband, and father, the strictest performer of duty. His latter years were troubled by the sad companions of weakened old age; the hour of demise approached on the 7th March, 1809—he died as he had lived, with child-like resignation, and as a good Christian, in his seventy-third year; his earthly remains lie in the same churchyard where his intimate friend and brother-in-art, Mozart, found rest eighteen years before, and where in a few months the great Joseph Haydn, who

warmly appreciated them both, rejoined them, "*Sit illis terra levis.*"

J. G. Albrechtsberger had numerous scholars, many of whom, to use his own words, "caused him true joy."

Among these may be mentioned:—

Ludwig von Beethoven, in Vienna (died 26th March, 1827).

Peter Edler von Decret, in Vienna (died 1830).

Baron von Doblhof, in Vienna (died 1837).

Joseph Eybler, Principal Imperial Chapel-master in Vienna.

Stephen Franz, Member of the Imperial Chapel in Vienna.

Johann Fuss, Composer (died March, 1819, in Pesth).

Johann Gänsbacher, Chapel-master at St. Stephen's, Vienna.

John Nepomuk Hummel, Chapel-master to the Grand duke of Weimar (died 17th October, 1837):

Baron Nic. von Krufft (died 16th April, 1818, in Vienna).

M. J. Leidesdorf, Composer and Pianoforte-teacher in Vienna.

Joseph Preindl, Chapel-master at St. Stephen's (Albrechtsberger's successor to the post), Chapel-master at St. Peter's, and free burgher of Vienna, (died 26th October, 1823, in Vienna).

Ambros. Rieder, Choir-director and Schoolmaster in Berchtoldsdorf, near Vienna.

Ignaz, Chevalier von Seyfried, Chapel-master and Director of the Opera in Vienna.

Fr. Schneider, formerly Organist in the Monastery at Melk.

Joseph Triebensee, Chapel-master of the State Theatre in Prague.

Michael Umlauf, Imperial Chapel-master to the Theatre in Vienna.

Joseph Weigl, Imperial Vice-chapel-master in Vienna.

A list of Albrechtsberger's works, the scores of which are placed in the musical archives of his Excellence the Prince Nicolaus von Esterhazy-Galantha, &c. &c. :—

26 Masses.

43 Graduals.

34 Offertories.

Vespers (in C) de Confessore.

„ (in A) de Confessore.

„ (in Eb) de Apostolis.

„ (in C) de Beata Maria Virgine.

„ (in D) de Beata Maria Virgine.

4 Litanies.

Psalm (in D) Magnificat.

" (in D) Magnificat.

" (in C) Dixit Dominus.

" (in A) de Confessore.

Te Deum (in C).

" (in D).

" (in C) for her Majesty the Empress Theresia.

" (in B \flat).

Veni Sancte (in C).

" " (in D).

6 Motets.

5 Salve Regina.

6 Ave Regina.

5 Regina cœli.

5 Alma Redemptoris.

Tantum ergo (in C).

" " (in C).

18 Hymns.

Alleluja (in C).

Miscellaneous Church-music :—

Chorus de Sancta Theresia (in C).

De profundis " " (in D-m).

Memento " " (in G).

Introitus " " (in F).

" " " (in D-m).

" " " (in F).

Circuitus (in C).

" (in D) de Beata Maria Virgine.

Tenebræ (in C-m).

Responsorium (in F).

6 Oratorios, viz :—

Die Pilgrime auf Golgatha.

Kreuz-Erfindung.

Geburt Christi.

Applausus Musicus.

De Nativitate Jesu.

De Passione Domini.

Aria (in B \flat) de Sancto Nepomuceno." (in E \flat) de Sancto Nepomuceno.

" (in G) de Beata Maria Virgine.

" (in F) de Beata Maria Virgine.

" (in D-m) de Passione Domini.

" (in F-m) de Passione Domini.

" (in G) de Sancto Joanni Nepomuceno.

Duetto (in B \flat) de Sancto Joanni Nepomuceno.Coro (in E \flat) de Sancto Joanni Nepomuceno.

An Operetta (with German text).

17 Violin Quartetts.

9 Violin Quintetts.

2 Violin Sestetts.

Miscellaneous pieces :—

Serenade for 5 voices, with oboe obligato.

Quintett, with flute concertante.

Notturmo for 4 voices, with flute obligato.

" " " oboe obligato.

6 Divertimenti a quattro.

1 Divertimento "

1 " "

Concertino "

28 Divertimenti for 2 violins and violoncello.

Concertos for different instruments :—

Concerto for the harp.

" " organ.

" " trombone.

" " pianoforte.

" " mandora (7 pieces).

Concertini for the harp (4 pieces).

Symphonies :—

Symphony (in F).

" (in D).

" (in D).

" (in C).

A chorus for instruments.

Seventeen masses from the pen of this indefatigable composer are not here mentioned, as some of them were presented to the Emperor, who requested to have them; and some of them, according to the will of the deceased, have become the especial property of the choir to which he devoted the last hours of his artist-life.

A list of J. G. Albrechtsberger's works, which have been published (with an indication of the publisher and the price) :—

in C. M. J. Kr. Publishers.

- Op. 1. Fugen for the Pianoforte . { 4 0 Hummel.
1 45 Cappel.
- " 2. Quatuors en fugues (in D, A,
B \flat , F, C, E \flat) p. 2, Viol., Alt.
et Vclle. 5 0 Hummel.
- " 3. Préludes et une fugue p. l'Org. 3 0 "
- " 4. Fuga (in C) per l'Organo . { 0 30 Cappel.
0 15 Spehr.
- " 5. Fuga : Do, re, mi, per l'Org. 0 30 Cappel.
- " 6. Fughe e Preludj per l'Organo 1 0 "
- " 7. Fugues pour l'Orgue . . . 1 30 Mollo.
- " 8. Fugues pour l'Orgue . . . 0 50 Artaria.
- " 9. Fugues pour l'Orgue . . . 1 20 "
- " 10. Fugen für die Orgel . . . 1 0 Haslinger.
- " 11. Fugen für die Orgel . . . 1 0 Cappel.
- " 12. Prälud. für die Orgel, 1, 2, 3,
Lief. 2 15 Haslinger.

Op. 13. Sextuors (in Eb, G-m, D-m)
 p. 2 Vl., 2 Alt., Vcll. et B. Liv. 1. 2 30 Riedl.
 „ 14. Sextuors (in D, F, C) p. 2 Vl.,
 2 Alt., Vclle. et B. Liv. 2. 2 30 „
 „ 15. Fuga (in C) p. Pianof. a 4 m. 0 30 Artaria.
 „ 16. Fugues pour l'Orgue 1 30 Träg.
 „ 17. Fugen für die Orgel 1 0 Haslinger.
 „ 18. Fugues pour l'Orgue 1 0 Cappi.
 „ 19. Quatuors (in G, Bb, Eb, F, C,
 D-m.) per 2 Violini, Alto et
 Basso 2 30 Artaria.
 „ 20. Fugues pour le Pianoforte 1 0 „
 „ 21. Quatuors (in A, D-m., G, C-m.,
 F, Bb) p. 2 Vl., Alte et Basse 2 30 Riedl.
 Prélude et Fug. pour le Pianof. à 4 m. 0 45 Haslinger.
 Pärliudien to be played with 3 or 4 registers. { 0 54 Peters.
 { 1 30 Weigl.
 Versetten for the Pianoforte 0 45 Cappi.
 Duos, instr. p. Vl. et Vclle. Liv. 1, 2. 2 0 Peters.
 Quintett (in C) p. 3. Vl., Alt. et Vclle. 0 45 Riedl.
 Sonates à 2 Choeurs (in D, G, C) p. 4
 Viol., 2 Alt. et 2 Vcllea. 2 0 „

Generalbass-Schule { 1 0 Peters.
 { 1 12 Artaria.
 { 1 30 Cappi.
 Méthode de l'accomp., trad. de l'Alle-
 mand 8. 3 0 Choron.
 Ausweichungen von C-dur und C-moll
 in die übrigen Tonarten 0 20 Haslinger.
 Inganni (Trugschlüsse). 2. L. d. { 0 45 Peters.
 Ausw. { 0 36 Cappi.
 Unterricht über den Gebrauch der
 vermind. u. überm. Intervalle. { 0 45 Peters.
 3 Lief. d. Ausw. { 0 30 Cappi.
 Kurze Regeln des reinsten Satzes.
 (2 Ausg.) 0 30 Haslinger.
 Anweisung zur Composition 4 30 Breitkopf.
 Méthode élément. de Compo. trad. de
 l'Allem. 5 0 Choron.
 Clavierschule 1 0 Artaria.
 POSTHUMOUS.
 50 Versetten und 8 fugen für die
 Orgel. :—
 1. Abth. Moll-Tonarten 1 30 Haslinger.
 2. Abth. Dur-Tonarten 1 30 „

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ALBRECHTSBERGER'S THOROUGH-BASS AND HARMONY.

THOROUGH-BASS is the fundamental basis of all music, and must be profoundly studied by all those who desire to dedicate themselves to this beautiful art. Without this science, we can admire the excellence of a composition by the physical impression it may cause, but we can never worthily appreciate its intrinsic merit. With innate talent we may produce some not imperfect compositions, but we cannot satisfactorily account for the matter created, nor vouch for blameless immaculacy in regard to grammatical technicality. Thorough-bass teaches us to reduce to its simple, original, natural, and derived chords, every composition,—for whatever instrument it may be written, and however florid the melody, accompaniment, or embellishments: it grants us a view of the unveiled innermost sanctuary,—shews the whole wonderful construction of a work of art in a skeleton shape, stripped of all ornamental garb: by a mere figured bass, enables the initiated to follow correctly a composition of many parts, throughout all its turns and modulations: it is our sure guide and director,—orders and binds ideas,—straightens paths,—chains and unites that which without its aid would be separate and erring. Therefore let us all become intimate with this elemental science, as our great ancestors were, and it will fare well with us!

I.

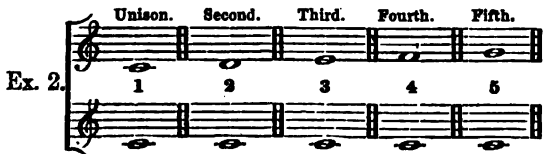
ON INTERVALS.

The distance from one tone to another is called an *interval*; as, from *c* to *c♯*, from *d* to *e*:—

Ex. 1.



The intervals are smaller or larger, according to their relative distance from the fundamental note; therefore the smallest interval is a semitone—*c*, *c♯*, *g*, *g♯*. There are only eight intervals, namely:—



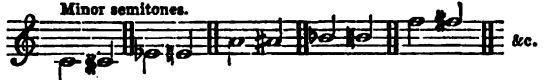
Remark.—The unison is a number, but is not really an interval, as it stands on the same grade as the fundamental note. The tenth, also, may be considered as the third above the octave.

These intervals may be minor, major, diminished, or augmented, according to their position.

The *semitone* may be minor or major; minor when it stands on the same grade with the fundamental note; for example:—

Ex. 3.

Minor semitones.



major when it stands on the next grade; for example:

Ex. 4.

Major semitones.



Remark.—The minor semitone (the minor second) ^{t.}h, not considered an interval, as there is no change of grade between it and the fundamental bass; the major semitone (the major second) is considered the first interval, as it stands on a different grade from the fundamental bass.

Two semitones, one major and one minor, make one whole tone; as, from *c* to *d* is a whole tone; the two semitones are, the minor, *c—c♯*, and the major, *c♯—d*; or the major, *c—d♭*, and the minor, *d♭—d*. This whole tone is called a *second*; for example:—

Ex. 5.



An interval which contains three grades, is called a *third*; for example:—

Ex. 6.



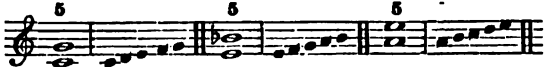
An interval which contains four grades, is called a *fourth*; for example:—

Ex. 7.



An interval which contains five grades, is called a *fifth*; for example:—

Ex. 8.



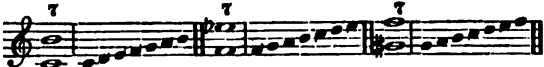
An interval which contains six grades, is called a *sixth*; for example:—

Ex. 9.



An interval which contains seven grades, is called a *seventh*; for example:—

Ex. 10.



An interval which contains eight grades, is called an *octave*; for example:—

Ex. 11.



An interval which contains nine grades, is a second above the octave, and is called a *ninth*; for example:

Ex. 12.

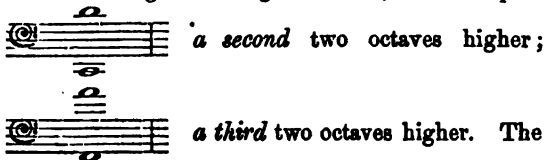


An interval which contains ten grades, is a third above the octave, and is called a *tenth*; for example:

Ex. 13.



In the same manner, follow—*elevenths*, fourths above the octave; *twelfths*, fifths above the octave. Intervals may be placed one or more octaves higher, without losing their original name; for example:



second, fourth, and sixth are exceptions, as they sometimes appear, as will be seen later, in the form of ninths, elevenths, and thirteenth, and therefore must be distinguished from the real seconds, fourths, and sixths.

II.

The *unison* is two-fold—perfect and augmented; for example:—



The *second* is three-fold—minor, major, and augmented; for example:—



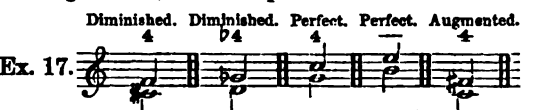
The minor contains a major semitone; the major, a whole tone; the augmented, one whole and one minor semitone.

The *third* is threefold—diminished, minor, and major; for example:—



The diminished contains two major semitones; the minor, one whole tone and one major semitone; the major, two whole tones.

The *fourth* is three-fold—diminished, perfect, and augmented; for example:—



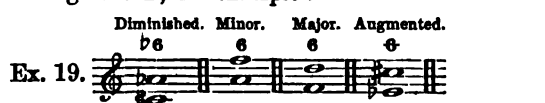
The diminished contains one whole tone and two major semitones; the perfect, or major, two whole tones and one major semitone; the augmented, three whole tones.

The *fifth* is three-fold—diminished, perfect, and augmented; for example:—



The diminished contains two whole tones and two major semitones; the perfect, three whole tones and one major semitone; the augmented, four whole tones.

The *sixth* is four-fold—diminished, minor, major, and augmented; for example:—



The diminished contains two whole tones and three

major semitones; the minor, three whole tones and two major semitones; the major, four whole tones and one major semitone; the augmented, five whole tones.

The seventh is three-fold—diminished, minor, and major; for example:—

Ex. 20.

Diminished. Minor. Major.

Diagram showing three chords on a staff: Diminished (b7), Minor (7), and Major (x7).

The diminished contains three whole tones and three major semitones; the minor, four whole tones and two major semitones; the major, five whole tones and one major semitone.

The octave is generally only two-fold—diminished and perfect; but it is sometimes augmented, and then contains one minor semitone more than the perfect octave; for example:—

Ex. 21.

Diminished. Perfect. Augmented.

Diagram showing three chords on a staff: Diminished (b8), Perfect (8), and Augmented (#8).

The diminished contains four whole tones and three major semitones; the perfect, five whole tones and two major semitones.

The ninth is two-fold—minor and major; for example:—

Minor. Minor. Major.

Diagram showing three chords on a staff: Minor (b9), Minor (b9), and Major (9).

The tenth, which is, in fact, a repetition of the third an octave higher, is threefold—diminished, minor, and major; for example:—

Diminished. Minor. Major.

Diagram showing three chords on a staff: Diminished (bb10), Minor (b10), and Major (10).

III.

There are (with respect to the sound which impresses the ear) two kinds of intervals—the consonant, which produce an agreeable, perfectly soothing effect; the dissonant, which excite a painful and uneasy sensation. The consonants are—the perfect unison, the minor third, the major third, the perfect fifth, the minor sixth, the major sixth, the perfect octave, and the minor and major tenths; for example:

Ex. 24.

Diagram showing intervals on a staff: 1, b3, 3, 5, b6, 6, 8, b10, 10.

All chords which are composed only of these intervals, are called perfect or consonant chords. The dissonants are—the augmented unison (the minor

semitone), the minor second (the major semitone), and all the remaining intervals; for example:

Ex. 25.

Diagram showing dissonant intervals on a staff: #1, b2, 2, #2, b3, #3, 4, 4, 4, b5, #5, b6, #6, b7, 7, b8, #8, b9, 9, bb10.

All chords which are composed of these intervals, are called discords. But a real consonant becomes a dissonant, by being coupled with such an interval, as—the perfect fifth with a sixth; the sixth with a seventh; the perfect octave with a ninth; as may be seen in the following example:—

Ex. 26.

Diagram showing chords on a staff with dissonant intervals: 8 3, 8 3, #.

The consonants are subdivided into perfect and imperfect. The fifth and octave are perfect; both thirds and fifths are imperfect. Therefore it appears that every chord over a fundamental note, composed of three consonants, must be perfect or imperfect. The common chord only is perfect—the third, fifth, and octave, $\begin{smallmatrix} 8 \\ 5 \\ 3 \end{smallmatrix}$, with its two transpositions—the fifth, octave, and third, $\begin{smallmatrix} 8 \\ 3 \\ 5 \end{smallmatrix}$, or tenth; and the octave, third, and sixth, $\begin{smallmatrix} 8 \\ 3 \\ 6 \end{smallmatrix}$; or when a new position is obtained, by omitting one and doubling some other interval—the third, fifth, and third, $\begin{smallmatrix} 8 \\ 5 \\ 3 \end{smallmatrix}$; and fifth, third, and fifth, $\begin{smallmatrix} 5 \\ 3 \\ 5 \end{smallmatrix}$. The imperfect consonant chord is—third, sixth, and octave, $\begin{smallmatrix} 8 \\ 6 \\ 3 \end{smallmatrix}$, with its two transpositions—third, octave, and sixth, $\begin{smallmatrix} 8 \\ 3 \\ 6 \end{smallmatrix}$; and octave, third, and sixth, $\begin{smallmatrix} 8 \\ 3 \\ 6 \end{smallmatrix}$; and the new positions obtained by omission and doubling—third, sixth, and third, $\begin{smallmatrix} 8 \\ 6 \\ 3 \end{smallmatrix}$; and sixth, sixth, and third, $\begin{smallmatrix} 6 \\ 6 \\ 3 \end{smallmatrix}$; for example:—

Perfect consonant chords.

Diagram showing perfect consonant chords on a staff: 8 5 3, or 10, 8 3 6, 8 3 6.

Imperfect consonant chords.

Ex. 28.



When one or more dissonants appear in a chord, it always belongs to the class of dissonants, as—third, fifth, and sixth, $\frac{3}{4}$; fifth, sixth, and octave, $\frac{5}{8}$; second, fourth, and sixth, $\frac{2}{4}$; third, fifth, and seventh, $\frac{3}{4}$; fourth, fifth, and octave, $\frac{4}{8}$; third, fifth, and ninth, $\frac{3}{8}$; third, sixth, and octave, $\frac{3}{8}$; also when the third and sixth are minor, and the octave perfect; when the sixth is major, the third minor, and the octave perfect; when the third and sixth are major, and the octave perfect; for example:—

Ex. 29.



These chords, although according to the rule they would belong to the imperfect consonants, are excepted, as is also the chord of the major third, with the minor, diminished, or augmented sixth; for example:—

Ex. 30.



There are in music five principal kinds of chords, viz.:—1st, common chords; 2nd, chords of the seventh; 3rd, chords of the ninth; 4th, chords of the eleventh; and 5th, chords of the thirteenth. The perfect common chord consists of the third and fifth, to which is added the perfect octave in four-part compositions. The twelve keys may be either major or minor; the first require the major, the second the minor third, as is shewn in the following table:—

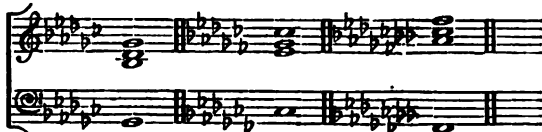
Ex. 31.

Major chords with sharps.



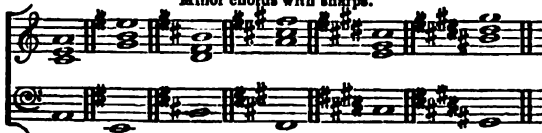
Major chords with flats.

Ex. 32.



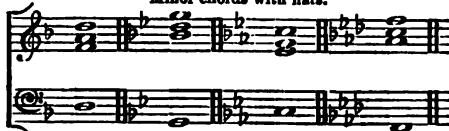
Ex. 33.

Minor chords with sharps.



Minor chords with flats.

Ex. 34.



As remote keys, with many sharps or flats, increase the difficulty of reading and execution, it is well to substitute the keys which stand on the same grade; for instance—D \flat major instead of C \sharp major; A \flat major instead of G \sharp major; B major instead of C \flat major; and so forth.

IV.

The common chord is four-fold—the major, with the major third:—



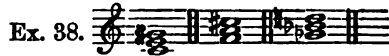
The minor, with the minor third:—



The diminished:—



The augmented:—



Every common chord is capable of two inversions; the first is made by taking the third as the fundamental note, by which the chord of the sixth is produced; for example:—

Ex. 39.



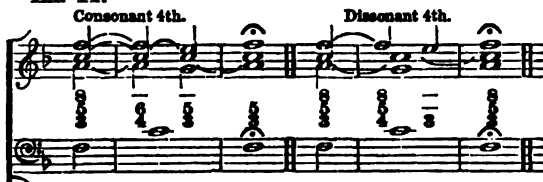
The second is made by taking the fifth as the fundamental note, by which the chord of the six-four is produced; for example:—

Ex. 40.



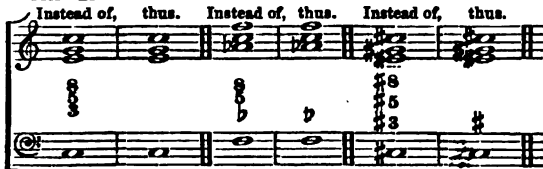
From this it may be seen how, from a perfect consonant chord, may be made an imperfect, or even a dissonant one. When the perfect fourth is used in conjunction with a minor or major sixth, it is usually called the consonant fourth; when with the fifth, the dissonant fourth; for example:—

Ex. 41.



It may be here remarked, that the common chord is never figured, and that the third, fifth, and octave are always to be played with an unfigured bass note; a ♯, b, or ♮ above it, expresses the kind of third, and thereby denotes a minor or a major key; for example:—

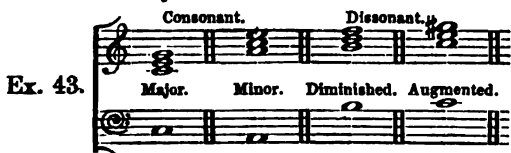
Ex. 42.



The ♯, b, or ♮ always relates to the third; and it must be understood, that whenever this is major, the fifth and octave must be perfect.

V.

Of these four common chords, two are consonant—the minor and major; *c, e, g—a, c, e*: and two are dissonant—the diminished and the augmented; *b, d, f—c, e, g♯*; for example:—

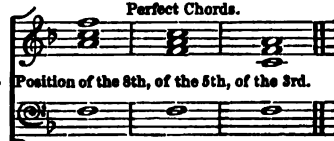


Ex. 43.

It follows, from what has been already said, that every chord, whether perfect, imperfect, or dissonant, may be taken in three different positions: in the position of the octave, when the octave of the fundamental note (the tonic) is highest; in the position of the fifth, when the fifth (dominant) is highest; in the position of the third, when the third is highest; for example:—

Perfect Chords.

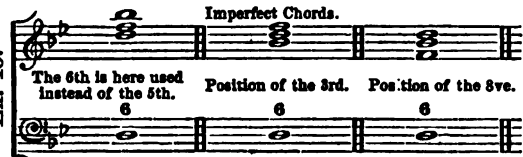
Ex. 44.



In this key, *f* is the tonic, and *c* the dominant; being the fifth above, and the fourth below; for example:—

Imperfect Chords.

Ex. 45.



b is the tonic, *f* the dominant; for example:—



It will be almost superfluous to add, that the terms of "position of the third, fifth, and octave," must not be used with chords, which, according to their peculiarity, are without those intervals; the terms of "first, second, and third positions," must be substituted.

VI.

It has already been said, that all chords of the second, fourth, seventh, and ninth, are dissonants; when these intervals are bound—that is, when the note already heard is not repeated—they are called *prepared*; for example:—

Ex. 47.



VII.

The second principal kind of chord, the chord of the seventh, consists of a third, fifth, and seventh; for example:—



Ex. 48.

The chord of the seventh may be major, minor, or diminished ; for example :—

Ex. 49. 

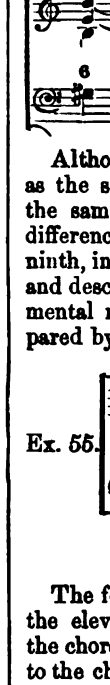
Each of these chords is capable of three inversions—firstly, with the third for the bass ; secondly, with the fifth for the bass ; and thirdly, with the seventh itself for the bass.

Ex. 50. 

In this, the chord of the seventh becomes the chord of the five-six.

Ex. 51. 

In this, it becomes the chord of the third, fourth, and sixth.

Ex. 52. 

In this inversion, the chord of the seventh becomes the chord of the second, fourth, and sixth. The fourth thus formed is considered as a consonant ; but all chords of the seventh, with their inversions, are dissonants.

VIII.

The third principal kind of chords, the chord of the ninth, is formed when a note, a third below the chord of the seventh, is added to it ; for instance, in the chord of the seventh, *g, b, d, f*, add *e* as bass under the *g*, and the chord of the ninth will be produced, consisting of a third, fifth, seventh, and ninth ; for example :—

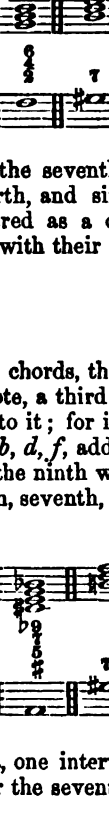
Ex. 53. 

In four-part accompaniment, one interval in this chord is usually omitted, either the seventh, fifth, or third ; for example :—

Ex. 54. Without the 7th. Without the 5th. Without the 3rd.



Although the ninth is played upon the same note as the second, and represents, to a certain degree, the same interval an octave higher, yet a decided difference exists between these intervals ; for the ninth, in real chords of the ninth, is prepared above, and descends ; whereas the second obliges the fundamental note to descend a grade, being already prepared by a bind ; for example :—

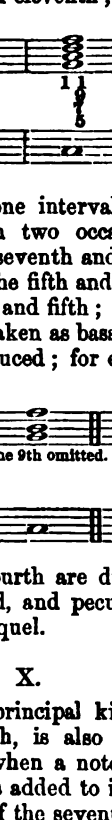
Ex. 55. 

IX.

The fourth principal kind of chord, the chord of the eleventh, is formed when a note, a fifth below the chord of the seventh, is added to it ; for instance, to the chord of *g, b, d, f*, add *c* as bass, and the chord of the eleventh will be produced, consisting of the fifth, seventh, ninth, and eleventh ; for example :—

Ex. 56. 

In accompaniment, one interval of this chord is always omitted,—even two occasionally ; if the omitted notes are the seventh and ninth, the three-note chord containing the fifth and eleventh is called the chord of the fourth and fifth ; should this be inverted, and the fourth taken as bass, the chord of the second and fifth is produced ; for example :—

Ex. 57. 

The eleventh and fourth are different ; they are differently accompanied, and peculiarly treated, as will be shewn in the sequel.

X.

The fifth and last principal kind of chord, the chord of the thirteenth, is also formed from the chord of the seventh, when a note, a seventh below the fundamental note, is added to it ; for instance, to the diminished chord of the seventh, *g♯, b, d, f*, add

as bass the seventh below *g*—*a*, and the chord of the thirteenth is produced, consisting of the seventh, ninth, eleventh, and thirteenth; for example:—

Ex. 58. 

One interval is usually omitted; either the seventh, ninth, or eleventh; for example:—

Ex. 59. 7th omitted. 9th omitted. 11th omitted. 

The chord of the thirteenth, although similar in sound, must be distinguished from the chord of the sixth, from which it differs in its implied intervals and in its resolution.

XI.

The movement of consonant chords is fourfold: direct, when all the parts ascend or descend:—

Ex. 60. 

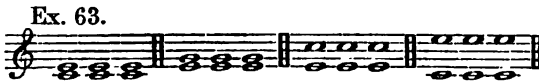
contrary, when one part descends while the other ascends:—

Ex. 61. 


oblique, when one part remains stationary, or is repeated, while the other moves:—

Ex. 62. 

and parallel, when the parts remain on their grade, and are continuously repeated:—

Ex. 63. 

The following rules may here be given. The contrary movement must be used in passing from one perfect consonant chord to another:—

Ex. 64. 

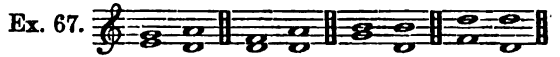
or one part may remain stationary:—

Ex. 65. 

All movements may be used in passing from a perfect to an imperfect consonant chord; for instance, from an octave or fifth to a third or sixth:—

Ex. 66. 

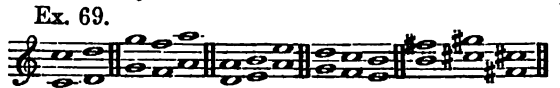
The contrary or oblique movement must be used in passing from an imperfect to a perfect consonant chord:—

Ex. 67. 

All four movements may be used in passing from one imperfect to another imperfect consonant chord:

Ex. 68. 

Two consecutive perfect fifths or octaves must be carefully avoided, as they not only sound thin, but are extremely offensive to the ear:—

Ex. 69. 

In a composition of many parts, however, a succession of octaves may be used, and dispersed through different instruments, partly high and partly low; in this case, they are not considered consecutive octaves, but doubled, trebled, and fourfold unisons, and are by no means objectionable.

XII.

Dissonant chords are used in a threefold manner: first, as passing notes:—

Ex. 70. 

In this example, the tenths, *e c*, and the sixths, *g b*, —*c, e*, are consonant chords, and both *f*'s, *d*, and *b*, regular passing dissonants. Secondly, as changing notes:—

Ex. 71. 

In this example, *f* and *d* are changing notes in the accented division of the bar, and are only suspensions of the following consonants, *e* and *c*. Thirdly, as suspensions:—

Ex. 72. 

In this example, the seventh, *c*, is produced by the change in the bass.

XIII.

When two different notes are played to one chord (either in the lower or higher part), only one of them belongs to the chord. When it is the first note, and it falls on the accented division of the bar, the second note, which forms the after-sound, is called a passing note:—

Ex. 73. 

e and *c* belong to the chord; *d* and *f* are passing notes. When the second note is an interval of the chord, then the first note, although it may fall on the accented division of the bar, does not belong to the chord, and is called a changing note :—

Ex. 74.

e and *c* are part of the chord; *f* and *d* are changing notes. Three points must be attended to, in the employment of dissonants by suspension: first, their preparation; secondly, their percussion; and thirdly, their resolution. The preparation of a dissonant is effected by using it as a consonant in the even part of a bar, before its real percussion :—

Ex. 75.

Their resolution is effected by causing the dissonant interval, after its percussion, to ascend or descend a grade, on to a consonant :—

Ex. 76.

This proves that the real percussion, which is generally prepared, is always a dissonant, but that the preparation and resolution must be consonant. Further, it may be remarked, that in the fourth, seventh, ninth, eleventh, and thirteenth, the highest part of the interval is dissonant and must descend a grade for its resolution :—

Ex. 77.

An exception to this rule is the major seventh, when it is in conjunction with a fourth, minor sixth, ninth, eleventh, or minor thirteenth; which must then ascend one grade :—

Ex. 78.

In the second and augmented fourth, the lowest part of the interval is dissonant, and must, as a rule, descend a grade for its resolution :—

Ex. 79.

In the diminished fifth, the highest part is dissonant, and must descend one grade :—

Ex. 80.

Although certain dissonants—for instance, the minor seventh above the dominant; the diminished fifth, with its inversion; and the augmented fourth—may be used without preparation in free style, yet they must always be regularly resolved. In the free style, one dissonant is often resolved by another; but this license originates from a particular figure, which we shall explain in the sequel.

XIV.

In order to facilitate reading, and a rapid general view, it has become the universal rule not to figure the fundamental bass with all the intervals contained in a chord; therefore it is highly necessary for those who would become good figured-bass players, to know the implied intervals which belong to each figure. When the bass note has no figure, a perfect common chord is always to be played :—

Ex. 81.

A *b*, *♯*, or *♮* indicates that the third is to be diminished, minor, or major. The figure *3*, the second, always implies the fourth and the sixth :—

Ex. 82.

Should a fifth be written above the second, $\frac{5}{2}$, one of these intervals, either the fifth or the second, must be doubled :—

Ex. 83.

Horizontal lines after figures, $\frac{5}{2}$ —, indicate that both the intervals played are to remain on the following fundamental note; for as the bass, as we know, must necessarily descend a half or a whole tone, in order to resolve the second, which then becomes a third, a new figuring is thus avoided. By the resolution of the second into a third, a new chord is produced, which in four-part compositions is accompanied by a fifth and sixth, and so formed into a third, fifth, and sixth, or chord of the third and sixth:—

Ex. 84.

XV.

The diminished third implies the diminished fifth and diminished seventh:—

Ex. 85.

The minor and major third, we already know, imply the fifth and octave, whether the fundamental note be unfigured, or have above it a 3, in order to produce the minor or major chord. Should it happen that many perfect chords follow each other, the player must use contrary movement, as in the direct movement prohibited fifths and octaves would constantly occur:—

Ex. 86.

When many successive thirds are marked above a progressive bass, only the last and first chords are played in four parts; the intermediate ones are accompanied in three parts, and even in two, when the time is quick:—

Ex. 87.

XVI.

The diminished fourth implies the doubled minor sixth:—

Ex. 88.

In this case, the fundamental bass takes the seventh major grade, which is called the leading note. In the above example, $f \sharp$ is the leading note to the scale of G, and $c \sharp$ the leading note to the scale of D.

The perfect fourth implies the perfect fifth and perfect octave; and is, in this form, eminently adapted to the cadence:—

Ex. 89.

If the sixth is to be used instead of the fifth, this must be indicated by figuring:—

Ex. 90.

The augmented fourth implies the major second and the major sixth:—

Ex. 91.

In case the minor third is to be used instead of the second (especially in minor keys), this interval must be indicated by its figure; excepting when the bass moves upwards a minor third, and itself indicates the interval, rendering an especial figuring unnecessary:—

Ex. 92.

XVII.

The diminished fifth, whether prepared or unprepared, implies the minor third and minor sixth; the fundamental note, however, must stand on the fourth or seventh major grade of the scale, and ascend a major semitone to resolve itself upon the fifth or eighth grade:—

Ex. 93.

7th grade. 7th grade. 4th grade.

$F\sharp$ is the seventh major grade of the scale of G major, and leads to the eighth; $g\sharp$ is the leading note to A minor; and $c\sharp$ the fourth major grade of the tonic G, which is resolved by ascending a major semitone into the dominant. When it happens that the fundamental note stands on the second grade of a minor key, or on the seventh of a major key, and moves away from it, the octave may be used instead of the sixth:—

Ex. 94.

A is on the second grade in the key of G minor, but on the seventh in the key of B \flat major; therefore the sixth is omitted throughout, and the octave substituted.

The perfect fifth implies the minor or major third and the perfect octave; and forms, as we already know, the perfect triad:—

Ex. 95.

This interval does not require to be figured, because all unfigured bass notes are accompanied with common chords; but the quality of the third must be indicated, when it requires to be heightened or lowered according to the key.

The augmented fifth, which usually only appears after the perfect fifth as a passing note, always implies the major third and the perfect octave:—

Ex. 96.

The major seventh seldom appears as a suspension of the octave.

XVIII.

The diminished sixth, which occurs rarely, and is always used as a preparation of the imperfect fifth, implies the minor third and diminished seventh:—

Ex. 97.

The minor and major sixth imply the third and the octave, or the third or the sixth may be doubled:—

Ex. 98.

A third or a sixth may be played alone, without doubling:—

Ex. 99.

Care must be taken not to double the major third or major sixth, when it stands on the seventh major grade, and is the leading note; as it would then become the octave of the fundamental note, and produce too sharp an impression on the ear; for example:

Ex. 100.

Ex. 101.

B is the seventh major grade of the key of C, and sounds disagreeably by being doubled. In example 101, the last skip in the highest part, from $a\flat$ to $b\sharp$, is faulty, because the melody is unnatural, and difficult to execute. When many sixths follow each other, it is well to choose the contrary movement in playing them, in order to avoid prohibited fifths and octaves; it adds to the grace of their performance, also, to omit an interval occasionally, and double some other:

Ex. 102.

The augmented fourth implies either a doubled third, or a major third and an augmented fourth, or a perfect fifth with a major third; but this must not be followed by a perfect, but by a chord of the six-four, in order to avoid two perfect consecutive fifths:

Ex. 103.



XIX.

All *sevenths*, when employed as preparations, and resolved by descending, imply the third and fifth; also the third and octave, or a doubled third:—

Ex. 104.



The *major seventh*, which, when a leading note, is resolved by ascending to the octave of the bass, always implies the major second and perfect fourth, even when it occurs without preparation:—

Ex. 105.



XX.

The *diminished octave* is only used in oblique movement, and implies the minor third and minor sixth:—

Ex. 106.



The *perfect octave* belongs to the perfect and imperfect chords, $\frac{8}{8}$, $\frac{9}{8}$, $\frac{10}{8}$, and is also sometimes found with the minor seventh, especially when the bass ascends a whole tone, and thus produces a chord of the seventh:—

Ex. 107.



When many perfect octaves follow each other, they are really heightened unisons, and are played as such, without any accompanying intervals. Such passages are marked by the word "unisons," or by a continuous horizontal line:—

Ex. 108.



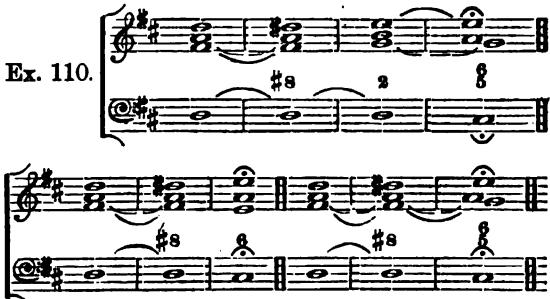
Small short lines signify to the player, that the chord last struck is to remain unchanged, and prolonged:—

Ex. 109.



The *augmented octave*, which is no real interval, can only be considered as a passing note, or preparation to a note on the next grade:—

Ex. 110.



XXI.

The *two ninths*, which, like fourths and sevenths, must be prepared in the highest part, and resolved by descending a whole or half tone, imply a third and fifth. It is advisable, when the bass ascends, to omit the fifth, and double the third, in order to avoid two ugly consecutive perfect fifths:—

Ex. 111.



Although the ninth sounds like a heightened second, we have already become acquainted with the difference by which we may recognise them. Firstly, the second is accompanied by the fourth and sixth, while the ninth is accompanied by the third and fifth.—Secondly, the second (unless a passing note) is always a preparation to the bass; the ninth is always prepared by the accompanying intervals.

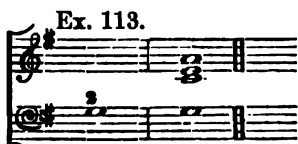
XXII.

In order to attain facility in accompanying a figured bass freely and without fault, the scholar will find it a very useful study to make himself intimately acquainted with the following tables, and vividly to impress on his memory the intervals belonging to each fundamental note, in all keys. An unfigured bass, unless marked by "unisons," or "tasto solo" (which signifies the left hand alone, entirely without accompaniment), implies in all cases a common chord :—

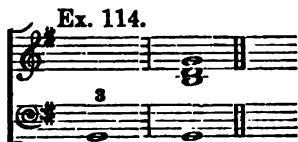
Ex. 112.



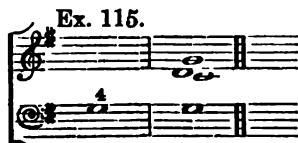
The second implies the fourth and sixth :—



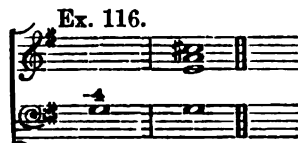
The third implies the fifth and octave :—



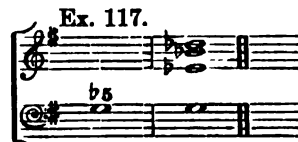
The fourth implies the fifth and octave :—



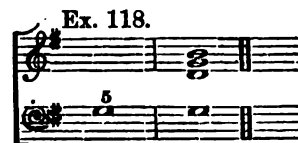
The augmented fourth implies the second and sixth :—



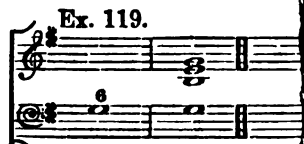
The diminished fifth implies the minor third and the minor sixth :—



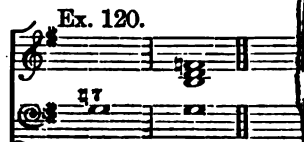
The perfect fifth implies the third and octave :—



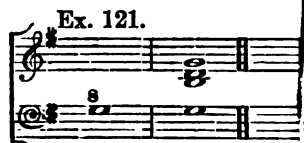
The sixth implies the third and octave :—



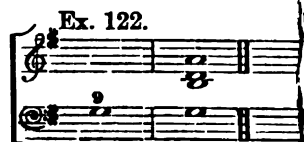
The seventh implies the third and fifth :—



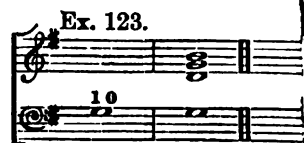
The octave implies the third and fifth :—



The ninth implies the third and fifth :—



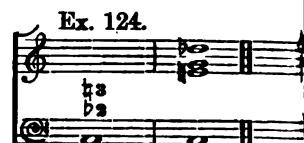
The tenth implies the fifth and octave :—



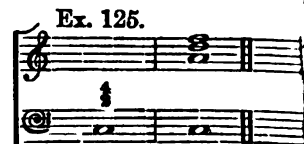
XXIII.

When two figures are placed over a bass note they are accompanied by the following implied intervals :—

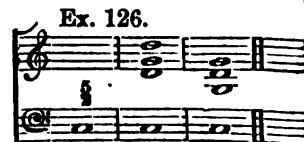
The minor second, with the major third, imply the fifth :—



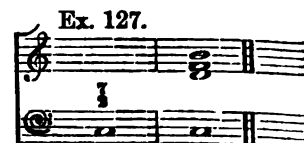
The second, with the fourth, imply the sixth :—



The second, with the fifth, imply one of the same doubled :—



The second, with the major seventh, imply the fourth :—



The third, with the fourth, imply the sixth:—

Ex. 128.

The third, with the fifth, imply the octave, or one interval doubled:—

Ex. 129.

The third, with the sixth, imply the octave, or one interval doubled:—

Ex. 130.

The third, with the seventh, imply the fifth or the octave:—

Ex. 131.

The third, with the octave, imply the fifth:—

Ex. 132.

The third, with the ninth, imply the fifth:—

Ex. 133.

The fourth, with the fifth, imply the octave:—

Ex. 134.

The fourth, with the sixth, imply the octave or the doubled sixth:—

Ex. 135.

The fourth, with the minor seventh, imply the fifth or the octave:—

Ex. 136.

The fourth, with the octave, imply the fifth:—

Ex. 137.

The fourth, with the ninth, imply the fifth:—

Ex. 138.

The fourth, with the tenth, imply the augmented sixth:—

Ex. 139.

The fifth, with the sixth, imply the third or octave:—

Ex. 140.

The fifth, with the seventh, imply the third:—

Ex. 141.

The imperfect fifth, with the octave, imply the minor third:—

Ex. 142.

The fifth, with the tenth, imply the third:—

Ex. 143.

The sixth, with the seventh, imply the second or third:—

Ex. 144.

The sixth, with the octave, imply the third:—

Ex. 145.

The sixth, with the ninth, imply the third:—

Ex. 146.

The seventh, with the octave, imply the third:—

Ex. 147.

The seventh, with the ninth, imply the third:—

Ex. 148.

The octave, with the ninth, imply the fourth:—

Ex. 149.

The octave, with the tenth, imply the fifth:—

Ex. 150.

XXIV.

It is furthermore necessary to become well acquainted with the harmonic triad, and its derivatives—the chord of the sixth, and the chord of the six-four—in all positions and in all keys. In the first position, the octave is highest, the fifth is in the middle, and the third is lowest:—

Ex. 151.

Major Triads.

XXV.

In the second position, the third is highest, the octave is in the middle, and the fifth is lowest:—

Ex. 152.

XXVI.

In the third position, the fifth is highest, the third is in the middle, and the octave is lowest :—

Ex. 153.

XXVII.

Examples of minor triads are similarly given.

1.—In the position of the octave :—

Ex. 154.

XXVIII.

2.—In the position of the third :—

Ex. 155.



XXIX.

3.—In the position of the fifth:—

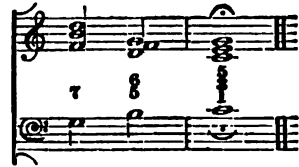
Ex. 156.



XXX.

When many triads follow each other, care must be taken—firstly, that the third, fifth, and octave shall alternately stand on the highest grade; secondly, to use oblique and contrary movement, in order to avoid the error of consecutive fifths and octaves; thirdly, to keep the chords as near as possible to each other, and to avoid distant skips; fourthly, to substitute the unison for the octave, when the parts, and therefore the hands, come immediately together; for example:—

Ex. 157.



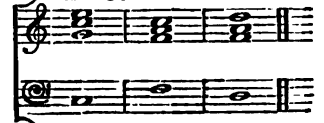
Consecutive fifths and octaves, produced by direct movement:—

Ex. 158.



Improved by the use of contrary movement:—

Ex. 159.



Faulty, because of the distant skips:—

Ex. 160.



Exercises on various triads:—

Ex. 161.



or:

Position of the octave.

XXXI.

In the following examples, in addition to minor and major triads, will be found the minor diminished triad on the second grade—*b, d, f*. In order to ascertain its place, the scholar must analyse the scale, and the quality of the fifths belonging to it. Every chord which contains a diminished fifth, is a minor diminished triad, and stands on the seventh major grade—for instance, on *b* in the scale of C major; also on the second grade of minor scales—for instance, on *b*, in the scale of A minor; also on the major sixth and major seventh in all minor scales—for instance, on *f#* and *g#*, in the key of A minor. We have already said, that the diminished fifth, as a real dissonant, must always be resolved by descending. Exceptions will be given further on.

Position of the fifth.

Ex. 162.

Position of the third.

XXXII.

In order to avoid, in direct movement, the fifths and octaves, prohibited on account of the disagreeable effect they produce on the ear, it is necessary sometimes to double some interval; and a player from figured bass must endeavour to be able at one glance to recognize what is required by the progression of the fundamental part. Consonant intervals may be doubled. Firstly, the minor and major third, when the latter does not stand on the seventh major grade of the tonic, where it is the leading note; for ex. :—

Ex. 163.

B is the seventh major note of the scale of *C*, and must therefore not be doubled, as it already impresses the ear more strongly than the other tones, being the leading note. If the fifth *d* is added in five-part composition, the defect is improved. Secondly, the minor and major sixth, which, however, must not be the leading note; for example :—

Ex. 164.

Neither sixth, being leading note to *C*, may be doubled. Thirdly, the perfect fifth. Fourthly, the perfect octave; but only when the bass regularly ends on a perfect chord after a major seventh; for example :—

Ex. 165.

The following dissonant intervals may be doubled. Firstly, the major second when accompanied by the fifth; for example :—

Ex. 166.

Secondly, the perfect fourth in consonant chords of the six-four; for example :—

Ex. 167.

Thirdly, the perfect fifth accompanied by the second; for example :—

Ex. 168.

XXXIII.

Every skip to an augmented interval is unmelodious, and therefore defective; for instance—to the augmented second, from *f* to *g*♯; to the augmented fourth, from *c* to *f*♯; to the augmented fifth, from *c* to *g*♯ :—

Augmented 2nd. Augmented 4th. Augmented 5th.

Ex. 169.

It is infinitely preferable to use the inversions of these intervals—that is, the same notes, but in a different position; for instance—the diminished seventh instead of the augmented second; the diminished fifth instead of the augmented fourth; the diminished fourth instead of the augmented fifth :—

Diminished 7th. Diminished 5th. Diminished 4th.

Ex. 170.

XXXIV.

In the following exercise, the doubled third or sixth is quite necessary, as, without them, two octaves would follow in direct movement :—

Ex. 171. Position of the third.

Position of the octave.

or:

Position of the fifth.

XXXV.

When a bass part ascends or descends eight equal grades, it is usual to meet with it slightly figured, or quite unfigured. On account of its direct progression, it requires an accompaniment in contrary movement; therefore the student must diligently practise this formula in all major and minor keys, and in its three positions, as the knowledge of it is highly necessary for preluding.

Ascending scale in major keys:—

Position of the octave.

Ex. 172.

Position of the third.

Position of the fifth.

Ascending scale in minor keys:—

Position of the octave.

Musical notation showing an ascending scale in a minor key with chords. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

Position of the third.

Musical notation showing an ascending scale in a minor key with chords. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

Position of the fifth.

Musical notation showing an ascending scale in a minor key with chords. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

Descending scale in major keys:—

Position of the octave.

Musical notation showing a descending scale in a major key with chords. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C5, B4, A4, G4, F4, E4, D4, C4.

Position of the third.

Musical notation showing a descending scale in a major key with chords. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C5, B4, A4, G4, F4, E4, D4, C4.

Position of the fifth.

Musical notation showing a descending scale in a major key with chords. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C5, B4, A4, G4, F4, E4, D4, C4.

Descending scale in minor keys:—

Position of the octave.

Musical notation showing a descending scale in a minor key with chords. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C5, B4, A4, G4, F4, E4, D4, C4.

Position of the third.

Musical notation showing a descending scale in a minor key with chords. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C5, B4, A4, G4, F4, E4, D4, C4.

Position of the fifth.

Musical notation showing an ascending scale in a minor key with chords. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

XXXVI.

When the fundamental part slowly ascends or descends, the accompaniment is more graceful and varied if two chords are introduced over each note, these being suspended dissonants resolved into harmonious consonants; for example:—

Ex. 173.

Musical notation for Example 173. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

Musical notation for Example 173, second system. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

Musical notation for Example 173, third system. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

Although we have said that the lowest interval in the augmented fourth must be resolved by descending, yet this rule only applies to the fourth which is placed next the bass; when it is placed in the inner part, it forms an exception; for example:—

Ex. 174.

Musical notation for Example 174. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

In this example, the augmented fourth, $f\sharp-c$, is not resolved into the sixth, $g-b$, but by ascending to the fourth, $g-d$:—

Ex. 175.

Musical notation for Example 175, first system. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

Musical notation for Example 175, second system. The bass line has notes with figured bass symbols: 6, 6, 6, 6, 6, 6, 6, 6. The treble line has chords with notes: C4, E4, G4, A4, B4, C5, D5, E5.

In accompanying the major sixth, we may substitute for the octave or doubled third, a fourth; and this interval is even preferable, as it is the octave of the note to which the major sixth forms a major third, but to which the minor third only forms a seventh, and should therefore not be doubled, according to strict rule, although innumerable examples by the best composers sanction this exception:

Ex. 176.

When many sixths follow each other above an uninterrupted ascending or descending bass, they may be played in three parts, with only the third:—

Ex. 177.

or the third, sixth, and octave may be alternately doubled, to obtain a full four-part accompaniment:—

Ex. 178.

But the first method is preferable, as in four-parts hidden fifths and octaves are produced, and although occurring in the inner part, are prohibited in strict composition. These successions of three-six belong to the passages which most easily induce the fault of consecutive fifths and octaves; because although the figures placed over the fundamental bass indicate the intervals of the chord, yet they do not decide the precise position of the octave where the chord is to be played; for instance, violins execute the following figures:—

Ex. 179.

the organist, meantime, finds nothing in his part more than the figure 6, which indicates that he is to play chords of 6. Unacquainted with the distance at which the instruments accompany, and obedient to the rule of keeping chords as near as possible to each other, he chooses the middle position:—

Ex. 180.

and, without his dreaming of such a thing, the following ear-splitting fifths and octaves crash out into existence:—

Ex. 181.

XXXVII.

The case just shown, leads us to speak especially of the *six hazardous progressions*, which must be carefully avoided, in order not to fall into similar errors. These hazardous progressions occur—firstly, when the second is the lowest interval of the accompaniment, and is consequently next the bass; for example:—

Ex. 182.

Another position must be taken, or an interval omitted; for example:—

Ex. 183.

If one of the fifths be *perfect*, and the other *imperfect*, this progression may be used in free style; but it is always more advisable to change the position of the latter chord in such a manner, that the second must descend; for example:—

Ex. 184.

Secondly, when the augmented fourth forms the innermost of the accompanying intervals; for ex.:—

Ex. 185.

This bad position may be avoided, either by omitting the second, or by descending from the first chord to the chord of the augmented fourth; for ex.:

Ex. 186.

Ex. 187.

Thirdly, when a chord of the sixth follows a common chord, or *vice-versa*, over a progressing bass; the only manner of avoiding the harshness thus produced, which not even contrary movement can mollify, is to omit the third interval—that is, the octave of the fundamental note; for example:—

Ex. 187.

Should the sixth be followed by a triad containing a dissonant diminished fifth, then in every case the accompanying intervals must ascend in contrary movement to the bass; for example:—

Ex. 188.

An equally objectionable case, is when the sixth follows the fifth, because two perfect fifths are produced in the upper part; the sixths therefore must be doubled, or the interval taken in another position; for example:—

Ex. 189.

Instead of. Better thus.

An imperfect fifth may not proceed to a perfect fifth, either in ascending or descending, $c - b$ even when the imperfect fifth forms a chord of the sixth by the position of the fundamental note; therefore, an interval must be omitted, or a different position chosen; for example:—

Ex. 190.

Instead of. Better thus.

Fourthly, when many sixths follow each other in direct movement, by which, sometimes consecutive fifths, and sometimes consecutive octaves to the bass, are produced; for example:—

Ex. 191.

This bad position may be remedied by contrary movement, or proper doubling; for example:—

Ex. 192.

Fifthly, when sevenths occur, accompanied by the third and fifth, and are resolved on a perfect triad;

which produces a prohibited succession of fifths; for example:—

Ex. 193.



Therefore, the position must be changed, the contrary movement used, or, sometimes, an interval doubled; for example:—



Or the intervals may be divided into the two hands; for example:—



But in this manner, hidden fifths must be guarded against; for example:—



g — *f*♯
c♯ — *b*♯, here it would be better to double the third, and to make *c*♯ ascend to *d*♯; thus:—



To obtain contrary movement, it is not allowable to resolve the leading note by descending:—

Ex. 198.



as *c*♯ is the seventh major tone of *D*, and in this character always requires to be resolved by ascending one grade, for example:—

Ex. 199.



Sixthly, when either of the ninths lie in the upper or inner part, and a chord of the five-six, with the diminished fifth, is produced by a rise of one third in the bass, by which two perfect fifths follow each other; for example:—



This error, which is likely to occur principally in the position of the fifth, may be avoided—firstly, by omitting an interval, and doubling another consonant one; for instance, in minor keys, the perfect fifth is omitted and the minor third doubled; in major keys, the fifth may be retained, but the third in the following chord of the five-six must be doubled, and the sixth played afterwards; or this chord must be divided, and the fifth introduced after the sixth:—



Secondly, by playing such a succession of ninths in three parts only, in the same manner as successions of sevenths, prepared fourths, and seconds ; for ex :

Ex. 202.

Should the player desire to use four-part accompaniment, then, thirdly, contrary movement is the surest method, and cannot be too highly recommended in most cases :—

Ex. 203.

XXXVIII.

We will now treat of the chord of the seventh, and its appropriate progressions. In examining the following example, we shall perceive, firstly, that in the second chord the fifth *a* is omitted, and the octave of the fundamental note substituted, in order to avoid consecutive fifths, viz. : $\begin{matrix} g-a \\ c-d \end{matrix}$. Secondly, that in the second chord, the seventh *c* has been prepared by appearing as octave in the first chord, and is resolved, in the third chord, on *b*, the third of the fundamental note, *g* ; while the *f*, which formed the third, becomes the seventh of the present bass, *g*. Thirdly, that the third *c* in the fifth chord appears as the seventh in the sixth chord, and by changing to *b*, becomes the fifth of the chord of *E* minor, in which, however, the third *g* is doubled and the octave *e* is omitted, to prevent an imperfect fifth following a perfect fifth in direct movement, $\begin{matrix} c-b \\ f\sharp-e \end{matrix}$:

Ex. 204.

The scholar must transpose the following exercise into all keys, according to the above example :—

Ex. 205.

XXXIX.

Whoever is sufficiently acquainted with these progressions of the seventh, also knows the treatment of its derivatives ; as the fifth in the chord of the five-six, the third in the chord of the three-four-six, the second in the chord of the two-four-six (when it is placed next the bass), must all be treated in a similar manner, as will be clearly seen in the following examples. We will first change these two sevenths :—

Ex. 206.

By altering the position of the intervals of the first chord of the seventh (reckoning among them the omitted fifth, *a*), $\begin{matrix} c \\ f \\ d \end{matrix}$ we create the chord of the three-five-six:—

Ex. 207.

The former minor third, *f*, is now taken as fundamental note, above which *a* forms a third, *c* a fifth, and *d* a sixth. The following chord is also naturally produced from it:—the original seventh, *f*, remains as bass; *g* becomes the second; *b* the fourth; and *d* the sixth. The bass returns one grade to *e*, and requires a chord of the three-six as a half-cadence, instead of the former perfect cadence:—

Ex. 208.

We will now convert the second chord of the seventh into a chord of the three-four-six:—

Ex. 209.

In order to do this, we must, in the first chord of the seventh, omit the fifth *a*, and the octave *d*, and double the third. While the seventh *c* descends, according to rule, upon *b*, the bass remains upon the former fifth, *d*, and the other intervals change their positions: the seventh, *f*, becomes the third; the fundamental note, *g*, the fourth; the third, *b*, the sixth; the bass rises a whole tone, and again requires a sixth:—

Ex. 210.

We will now convert the first chord of the seventh into a chord of the second:—

Ex. 211.

The seventh, *c*, which is placed above, becomes a prepared second in the bass; the fundamental note, *d*, becomes the real contiguous second to it; the third, *f*, becomes the fourth; and the fifth, *a*, the sixth. The suspended bass, *c*, true to its nature, descends one grade to *b*, and draws after it, in parallel motion, the sixth, *a*, on to *g*; while the other intervals change their names, but nevertheless occupy the same position; thus, the fourth, *f*, becomes the fifth; and the second, *d*, becomes the third—whereby the full chord of the three-five-six is created, which is resolved on the perfect tonic, as a complete termination:—

Ex. 212.

We have already shewn that the chord of the ninth proceeds from the chord of the seventh, as it is created by adding a third below the fundamental note; for instance, place under the intervals of the

chord of the seventh, f , d , b , the third below, e , b , and g , the chord of the ninth is produced:—

Ex. 213.

As this ninth is really only the seventh of the original chord, it is to be treated in the same manner. The f , which formed the seventh to the original bass, g , becomes the ninth when e is taken as the fundamental note; and the former fifth, d , becomes the seventh. But as the chord of the ninth is not always used in five parts, and as the fifth or seventh may be omitted at pleasure, thus:—

Ex. 214.

it will be very useful to practise the following exercise in all keys, and in both manners:—

Ex. 215.

The chord of the eleventh, which is produced by adding a fifth below to the chord of the seventh,

$f-f$
 $d-d$
 thus, $b-b$
 $g-g$
 e

Ex. 216.

requires the same treatment, and may be played in four parts, by omitting the fifth or ninth; for ex. :—

Ex. 217.

The following example will serve as an exercise on the different positions. It is to be remarked that in figuring, the number 4 is used instead of 11, as the eleventh is merely a fourth an octave higher:—

Ex. 218.

The 5th omitted. The 9th omitted.

In the following example, the ninth placed above the fundamental note may be resolved either by ascending to the tenth, or descending to the octave. When the seventh is omitted, the harmony of the eleventh is usually and best prepared by the chord of the seventh, of which it is a derivative by inversion; for example:—

Ex. 219.

In order to shew the origin of the harmony of the eleventh as clearly as possible, we will again take the chord of the seventh as a model, $\begin{matrix} c \\ d \end{matrix}$ f:—

Ex. 220.

Change the fundamental note to the fifth below, g :—

Ex. 221.

and we shall produce the incomplete chord of the eleventh, either with the ninth omitted, or with the seventh and ninth omitted, in which latter case, the octave of the bass must be doubled. This incomplete chord of the eleventh is generally called the chord of the four-five:—

Ex. 222. Ex. 223.

Exercise on the first manner:—

Ex. 224.

With the 9th omitted.

Original chord: With the 9th omitted.

Exercise on the second manner:—

Ex. 225.

With the seventh and ninth omitted, and the octave doubled.

The chord of the thirteenth also proceeds from the chord of the seventh, and therefore requires the

same treatment. We have said that it is produced by adding a seventh below the bass; for instance,

add to $\begin{matrix} f \\ d \\ b \\ \text{♯} \end{matrix}$ the fundamental note, *a*, viz. : $\begin{matrix} f \\ d \\ b \\ a \end{matrix}$

Ex. 226.



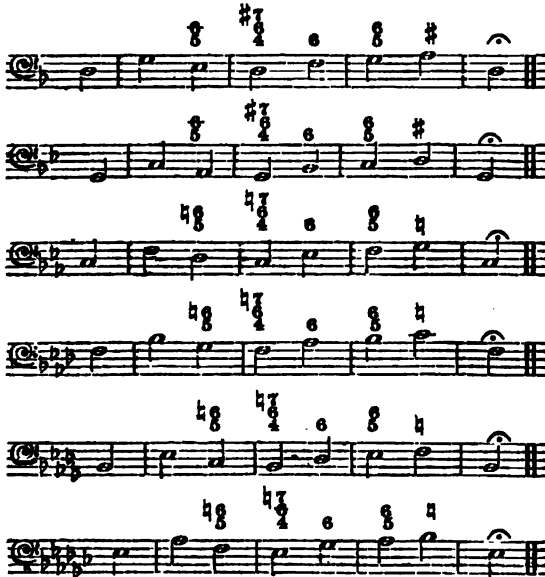
and the seventh, *f*, will become the thirteenth (or sixth above the octave); the fifth, *d*, will become the eleventh (or fourth above); the third, *b*, will become the ninth; and the former fundamental note, $\text{♯}a$, will become the seventh, or leading note: the eleventh, *d*, must be resolved by descending; but the ninth, *b*, may be resolved by descending or ascending. As the chord of the thirteenth is sometimes reduced by omitting the seventh or the ninth, it is usually prepared by the harmony of the seventh, from which it is derived, that the intervals may be present, and capable of being used as suspensions; for example:—

Ex. 227.



Exercise:—

Ex. 228.



XL.

The correct figuring of a bass is so important a point, that we shall treat of it now in detail. The signs which are placed above fundamental notes, to denote the appropriate intervals of each chord, are—firstly, the numbers from 1 to 9 (that is, from the unison to the ninth); for the intervals requiring two figures, the eleventh and thirteenth are marked an octave lower, as fourth and fifth, to facilitate quick reading. Secondly, the signs ♯ , *x*, *b*, ♯♯ , and ♯ , sharp, double sharp, flat, double flat, and natural, which are used to raise and lower intervals, or reduce them to the original grade indicated by the key. Thirdly, successive short lines, — — — which indicate the repetition of one and the same interval.

XLI.

The advantages and principal qualities of a full-figured bass, are, *ease* and *correctness*. It will be *easy*, if marked with as few figures as possible, because many figures weary the eye unnecessarily, and confuse the general view; besides which, they are useless, as all those who have studied thorough-bass properly, will know every interval implied by one or more figures, according to given rules. It will be *correct*, if the different and characteristic chords are marked by such sufficient and clear signs, as shall render it impossible for the initiated to mistake one harmony for another.

XLII.

If a chord cannot be sufficiently indicated by one figure, two or more must be used; these are usually placed perpendicularly above each other, and over the fundamental note, but sometimes beneath it when room is wanting:—

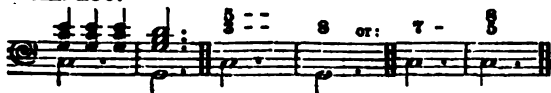


Ex. 229.

XLIII.

If chords are to be repeatedly struck above one bass note, proper signs must be used to indicate the same:—

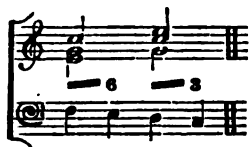
Ex. 230.



XLIV.

If a harmony is to be struck on a changing note, this must be indicated by a transverse ascending line, and the figure is placed above the real fundamental note of the chord:—

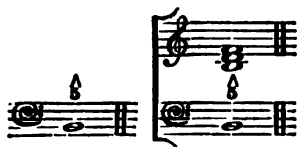
Ex. 231.



XLV.

The common chord requires no figure, or merely a single figure, 8, 5, or 3; the major third is indicated by a ♯, the minor third by a ♭ or ♮, according to the modulations made by the fundamental harmony to foreign and unrelated keys. The diminished triad is often marked in the manner of Telemann, thus:—

Ex. 232.



This sign is called the Telemann curve.

XLVI.

The chord of the second is sufficiently indicated by the figure 2.

XLVII.

The single figure 6 requires the third, with a doubling of one of these intervals, or the octave added as a fourth part.

The chord of the fourth and sixth is indicated by

"	"	fourth and fifth	"	4
"	"	fifth and sixth	"	6
"	"	fifth and second	"	5
"	"	ninth, with the third or fifth	"	9
"	"	ninth, with the seventh	"	9
"	"	third and fourth	"	3
"	"	thirteenth on the fundamental bass	"	13
"	"	seventh, with the fourth	"	7
"	"	ninth, with the fourth	"	9

XLVIII.

When all the parts progress in unison, the bass alone is played, or may be doubled in the right hand to produce *forte*. The word *tasto*, or *tasto solo*, indicates that the note is to be held on, and only to be again struck when it begins to weaken or to cease.

XLIX.

In case the position of the right hand has become too high or too low, and the player should desire to change it to a more appropriate situation, he can only do so in consonant harmonies.

L.

Although it is a general rule to accompany in four parts, yet many cases present themselves, in which an accompaniment in three, or even two parts, produces an infinitely better effect. But judgment on this point can only be gained by mature experience; therefore the student must keep strictly to the rule, and diligently practise in four parts.

LI.

An accompaniment is in four parts, although only three different notes appear, when an unison is substituted for the octave, in confined space, or when an interval is doubled according to the rules of progression.

LII.

It is hardly necessary to remind the student, that those who would devote themselves to the study of thorough-bass, must have acquired the knowledge and habitual practice of playing in all keys.

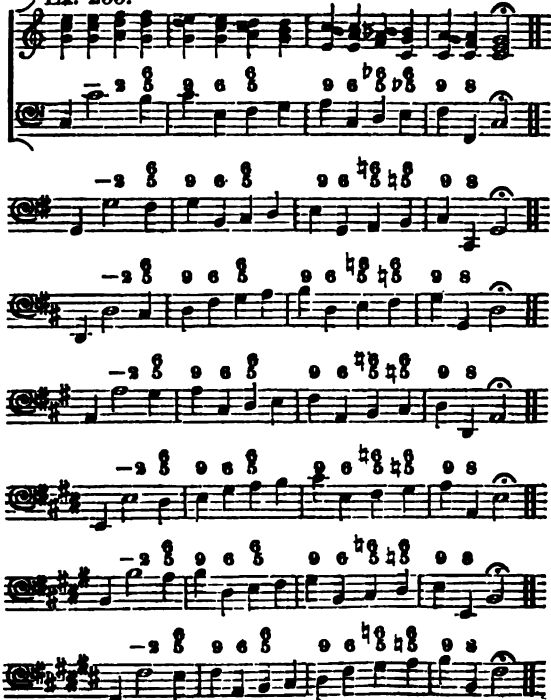
LIII.

All consonants may be doubled; but no dissonants, as they sound disagreeably, and produce consecutive octaves in their resolutions.

LIV.

At every principal division of a bar, a chord must be struck; according to this rule, four chords are to be struck in a bar of common time:—

Ex. 233.



LV.

Two chords are to be struck in every bar containing two divisions, viz. :—in bars of *alla breve*, or two minims; of two crotchets; of six crotchets; and of six quavers—when, in quick time, these are accented by two beats; for example :—

Ex. 234.

Allegro.

Vivace.

LVI.

Three chords are to be played in every bar containing three divisions, viz. :—in bars of three quavers; of three crotchets; of three minims; and of nine quavers—when the movement is slow; for example :—

Ex. 235.

LVII.

These rules remain unchanged, even when the figured bass is divided into many small parts, or is interrupted by passing notes. Whether the bass proceed in quavers, pass through the harmony, or roll on in semi-quavers or even shorter notes, the chords must always be struck on the real division of the bar, unless especial figuring indicate the contrary; for instance, four, in a bar of common time :—

Ex. 236.

three, in a bar of triple time :—

Ex. 237.

and so forth.

Where a bar in triple time is to be played in quick movement, two chords are sufficient—one on the first and last crotchet or quaver; for example:—

Ex. 238. *Con bris.*

With triplets, a single chord is to be played on the first note; for example:—

Ex. 239. *Andante.*

LVIII.

We have already learned that every dissonant must be resolved into a consonant, but it is nowise necessary that the resolution should follow immediately; it may be prolonged or suspended by remaining on its grade, and be changed into a new interval before being resolved according to its rule:—

Ex. 240.

In this example, *e*, which is the fourth above the bass, *g*, in the third chord ($\frac{9}{4}$), becomes a fifth, when the bass descends to *f*, and thus its regular resolution

into the consonant third, *b*, of the perfect chord, $\frac{9}{4}$

is postponed from the fourth to the fifth chord. Another manner of prolonging dissonants is by transposition of the harmony, that is, by introducing the same chord in another position of the intervals, and thus changing a dissonant original chord into an inversion, or an inversion into an original chord:—

Ex. 241. No. 1. No. 2. No. 3.

In No. 1, the original chord of the seventh, *f, d, b, g*, is changed to its derivative, the chord of the fifth and sixth, before it is regularly resolved into the common chord of *C* major. In No. 2, the chord of the fifth and sixth is changed to its original position, the chord of the seventh. In No. 3, the chord of

the second, $\frac{9}{4}$ is changed to its derivative, the chord of the third and fourth, $\frac{9}{4}$

LIX.

In free style, an unprepared dissonant may be used in two cases. Firstly, when one dissonant is resolved into another; for instance, a ninth or a seventh:—

Ex. 242.

In this example, the ninth is always resolved into the seventh, which, in its turn, is resolved into the imperfect fifth. In order to perceive clearly this

process, we must imagine a passing consonant between the two dissonants; for example:—

Ex. 243.

The imaginary octave, *g*, forms to the ear the transition of the ninth to the seventh, or a seventh which is resolved into an augmented fourth:—

Ex. 244.

In this example, the imaginary sixth, *b*, forms the consonant link between the seventh and fourth:—

Ex. 245.

Secondly, when a dissonant is taken immediately after a consonant chord. This usually occurs in cadences with the seventh; for instance, from C major with the seventh, to A minor—from F to D minor:—

Ex. 246.

With the derived and inverted chords of the fifth and sixth, the third and fourth, and the chord of the second; for instance, from C to A minor, from F to D minor, with the chord of the fifth and sixth:—

Ex. 247.

or, the same progression with the third and fourth:—

Ex. 248.

and from the consonant sixth above *c*, through the chord of the second to the same interval above *c*, *a*, and *f*:—

Ex. 249.

With the minor seventh in major keys, or the diminished seventh in minor keys, which is placed on the seventh major grade; and with its derivative chords; for example:—

Ex. 250.

With the minor chord of the seventh, placed on the second major note in minor keys; for instance, *f* in A minor:—

Ex. 251.

With the minor chord of the ninth, over a bass placed on the dominant of a minor key; for

instance: $\begin{matrix} f \\ d \\ b \\ a \end{matrix}$

Ex. 252.

And with the major chord of the ninth, over a bass placed on the dominant of a major key; for

instance: $\begin{matrix} a \\ f \\ d \\ b \\ g \end{matrix}$

Ex. 253.

LX.

Although all these dissonant chords may be introduced without preparation, yet they must be resolved according to rule. The use of unprepared dissonants proceeds from a figure, called *anticipation*, from its causing an interval to appear before it is expected, while the ear supplies the intermediate links. For instance, in the following example of sevenths, let us add in imagination the omitted crotchets which are underlined, and all dissonants will become consonants; these latter belong to the order of regular transitions. The apparently unprepared introduction is thus not only justified, but entirely obviated:—

Ex. 254.

LXI.

Above we used the words, "the interval is placed upon;" and we will now speak detailedly of the term. Many chords have their appropriate place, or natural position, and this is always reckoned from the fundamental note of every minor and major key. The seventh always has its place on the dominant (or fifth grade) of the real key, viz., on *g* in C major, and on *e* in A minor:—

Ex. 255.

Its derivative by inversion, the chord of the fifth and sixth, has its place on the seventh grade, viz., on *b* in C major, and on *g* in A minor:—

Ex. 256.

Its derivative by inversion, the chord of the second (unless it be again inverted), has its place on the fourth grade, viz., on *f* in C major, and on *d* in A minor:—

Ex. 257.

Or on the second inversion.

On the seventh grade is also produced from the chord of the fifth and sixth, a chord of the seventh, with the minor diminished triad; for instance, on *b* in C major:—

Ex. 258.

In minor keys, a diminished chord of the seventh is produced, which has its place; for instance, on *g* in A minor:—

Ex. 259.

And lastly, the chord of the augmented second, which always has its place on the sixth grade of all minor keys; for instance, on *f* in A minor:—

Ex. 260.

The augmented sixth has its place on the same grade, in minor keys:—

Ex. 261.

The chord of the eleventh, consisting of a fifth, seventh, ninth, and eleventh (or fourth above), always has its place on the tonic or fundamental note; for example:—

Ex. 262.

The chord of the thirteenth, which, besides this interval (or sixth above), consists of a seventh, ninth, and eleventh, has its place, without exception, on the tonic of every minor key; for example:—

Ex. 263.

With the seventh omitted. With the ninth omitted.

LXII.

In recapitulation of all the rules given, the following examples of all the intervals should be diligently practised, in all positions and in all keys. The student will find this the surest method of becoming a ready and practical player from figured bass.

Common chords in major keys:—

Ex. 264.

In contrary movement.

Ex. 265.

In this exercise, we must observe,—firstly, that when the fundamental bass ascends a fifth, as in the concluding chords, *f* and *c*, the accompaniment must be made in contrary movement; secondly, when a progression is made in contrary movement, the position of the octave is preferable, as both others, especially the position of the third, frequently produce hidden fifths, which distress a fine ear:—

Ex. 266.

Common chords in minor keys:—

Ex. 267.

In this exercise, we must observe,—firstly, that contrary movement must be used in this progression, as the direct movement would produce hidden fifths and octaves, and a skip to an augmented second would occur in the two penultimate chords. Secondly, on this account, the position of the third is preferable to the others:—

Ex. 268.

Chords of the minor second :—

Ex. 269.

Position of the third.

Position of the fifth. Position of the octave.

1st Remark.—If, in the second chord, the major third, *g♯*, is taken instead of the minor third, *g*, the second must ascend ; for example :—

Ex. 270.

Without sixths.

which, however, could not be used in a four-part accompaniment, as either two perfect fifths would be produced by ascending :—

Ex. 271.

or an unmelodious skip to an augmented second would be produced by descending :—

Ex. 272.

2nd Remark.—This progression always begins on the tonic, and ends on the dominant :—

Ex. 273.

Chords of the major second :—

Ex. 274.

Position of the fifth. Position of the third.

Position of the octave.

Chords of the augmented second :—

Position of the third. Position of the fifth.

Ex. 275.

Position of the octave.

Chords of the prepared fourth, in major keys :—

Ex. 276.

Position of the fifth. Position of the octave.

Position of the third.

Chords of the prepared fourth, in minor keys :—

Ex. 277.

Position of the octave. Position of the third. Position of the fifth.

3rd Remark.—The third or the sixth must always be doubled in the chords of the sixth which here occur, otherwise consecutive fifths, $\frac{a-b}{a-c}$:—

Ex. 278.

or consecutive octaves with the bass, $\frac{f-g}{f-g}$ will be produced :—

Ex. 279.

4th Remark.—If the augmented sixth is used, the third must be doubled, and the positions of the octave and fifth are to be used, but never the position of the third, to avoid committing the above error :—

Ex. 280.

Chords of the augmented fourth, with the second and sixth :—

Ex. 281.

Position of the 3rd. Position of the 5th. Position of the 6th.

Musical notation for Ex. 281. It consists of four systems of two staves each (treble and bass clef). The first system is labeled 'Position of the 3rd', 'Position of the 5th', and 'Position of the 6th'. The second system is labeled 'Position of the 3rd' and 'Position of the 6th'. The third system is labeled 'Position of the 3rd' and 'Position of the 6th'. The fourth system is labeled 'Position of the 3rd' and 'Position of the 6th'. Each system shows a sequence of chords with figured bass notation below the notes.

Chords of the augmented fourth, with the minor third and major sixth :—

Ex. 282.

Position of the fifth.

Position of the third.

Musical notation for Ex. 282. It consists of two systems of two staves each. The first system is labeled 'Position of the fifth' and 'Position of the third'. The second system is labeled 'Position of the fifth' and 'Position of the third'. Each system shows a sequence of chords with figured bass notation below the notes.

Position of the octave.

Musical notation for Ex. 282. It consists of four systems of two staves each. The first system is labeled 'Position of the octave'. The second system is labeled 'Position of the octave'. The third system is labeled 'Position of the octave'. The fourth system is labeled 'Position of the octave'. Each system shows a sequence of chords with figured bass notation below the notes.

Remark.—In a succession of many sixths, contrary movement must be principally used, an interval sometimes omitted, and the third or sixth doubled, when this last is not placed on the seventh major grade; occasionally, the fourth is substituted for the octave as a fourth interval;

for instance, instead, $\begin{matrix} b-b \\ f-g \\ d-f \\ d-d \end{matrix}$:—

Chords of the sixth :—

Ex. 283.

Musical notation for Ex. 283. It consists of four systems of two staves each. Each system shows a sequence of chords with figured bass notation below the notes.

Chords of the prepared diminished seventh :—

Ex. 284.

Position of the octave.

Position of the third.

Musical notation for Ex. 284. It consists of three systems of two staves each. The first system is labeled 'Position of the octave' and 'Position of the third'. The second system is labeled 'Position of the fifth'. The third system is labeled 'Position of the fifth'. Each system shows a sequence of chords with figured bass notation below the notes.

Chords of the minor seventh, with the third and octave, or with the doubled third :—

Ex. 285.

Position of the 5th. Position of the 5ve. Position of the 3rd.

Remark.—When the fundamental part ascends a whole tone to the prepared seventh, the fifth must be omitted; should it descend a half or a whole tone, the octave is omitted, or the sixth itself is doubled in the preparatory chord of the sixth; for example :—

Chords of the major seventh, which take a doubled third instead of the fifth or octave, with an ascending bass :—

Ex. 288.

Position of the 3rd. Position of the 5th. Position of the 5ve.

Chords of the minor seventh, with the third and fifth :—

Ex. 286.

In a succession of sevenths above a bass moving in alternate fourths and fifths, the first seventh is ac-

complicated with the third and octave, and the second with the third and fifth; or vice-versa:—

Ex. 289.

When these sevenths appear in conjunction with prepared fourths, the fifth and octave are alternately added as complementary intervals:—

Ex. 290.

Inversions:—

Ex. 291.

Chords of the prepared minor ninth, which always begin on the sub-dominant, in a perfect triad, which forms the preparation of the dominant; and end on the tonic:—

Ex. 292.

Position of the fifth.

Position of the octave.

Position of the third.

Chords of the prepared major ninth:—

Ex. 293.

Remark.—In a rolling bass, one chord is played to an equal run in a bar of even measure :—

Ex. 294.

With an unequal run, a chord is played on each division of the bar :—

Ex. 295.

because, in the first case, the fundamental harmony of C major remains unchanged, but in the second, is altered at each division; for instance, C major—F major; A minor—E major. In bars of uneven measure, one chord is played to equal or unequal runs :—

Ex. 296.

Also, when the bass rolls through a perfect harmony :—

Ex. 297.

Also, when imperfect or dissonant passing notes occur :—

Ex. 298.

But, when the fundamental part modulates to different keys, every note which is not a passing one should be properly figured, and accompanied with its particular chord; for example :—

Ex. 299.

LXIII.

The following and concluding exercises may serve as models for the student, who may compose similar ones for himself in all keys. He will sooner attain his ultimate goal, if he refuse the aid of the written accompanying chords, and follow the simple figured bass, which will be, in all cases, his surest guide.

LXIV.

Exercise on chords of the prepared second :—

Ex. 300.

LXV.

Exercise on progressions of chords of the third, which are generally unfigured :—

Ex. 301.

LXVI.

Exercise in three parts, on chords of the prepared fourth, wherein the fifth must never remain, but must move to the octave; the last is an exception, as it leads to the conclusion, while the other octaves are preparations of the fourth :—

Ex. 302.

LXVII.

Exercise in four parts, on chords of the prepared fourth :—

Ex. 303.

LXVIII.

Exercise on chords of the unprepared fourth and sixth :—

Ex. 304.

LXIX.

Exercise on chords of the prepared fourth and sixth :—

Ex. 305.

LXX.

When these chords resolve into the harmony of the diminished fifth—which, by its nature, already requires the minor sixth—the sixth must be doubled instead of the octave :—

LXXI.

Exercise on chords of the fifth and sixth :—

Ex. 307.

LXXII.

Exercise on chords of the sixth :—

Ex. 308.

LXXIII.

Exercise on chords of the prepared seventh :—

Ex. 309.

LXXIV.

Exercise on chords of the transient second :—

Ex. 310.

LXXV.

Exercise on chords of the prepared second and fifth :—

Ex. 311.

LXXVI.

Exercise on chords of the second, fourth and fifth :—

Ex. 312.

LXXVII.

Exercise on chords of the passing seventh :—

Ex. 313.

LXXVIII.

Exercise on chords of the ninth :—

Ex. 314.

LXXIX.

Exercise on chords of the fourth and ninth :-

Ex. 315.

LXXX.

Exercise on chords of the sixth and ninth :-

Ex. 316.

LXXXI.

Exercise on chords of the seventh and ninth :-

Ex. 317.

LXXXII.

Exercise in three parts, on various chords :-

Ex. 318.

Moderato.

LXXXIII.

Exercise, in four parts, on various chords.

Remark.—When figures are not placed immediately above a note, the chord indicated must be played between that and the following note :—

Ex. 319. *Andante.*

LXXXIV.

When a composition in three or four parts consists only of perfect and imperfect concords, and contains no consonant fourth, it is said to be written in pure harmony. This consonant fourth has its place from the fifth to the octave in perfect, and from the third to the sixth in imperfect consonant chords; for instance :—

Ex. 320.

This *g* is the fifth of the bass :

And the *c* in the upper part is its octave :—

Therefore the middle fifth forms the consonant fourth to the octave :—

And so forth in different positions : for example :—

Ex. 321.

Also in this imperfect chord of the sixth :—

Ex. 322.

This *b* is the third of the bass :

and *e* is its sixth :—

Therefore between the third and the sixth stands the consonant fourth :—

Ex. 323.

Although these intervals are undoubtedly consonant, as far as their relative distance to the bass is concerned, yet, as we have shewn, their mutual position is such as to form fourths to each other, which impress a fine ear as dissonants, and therefore are not allowed in pure composition. In order to avoid this error, it is best to take the chords in a position where the interval cannot form a fourth to any other, but

shall always appear in the quality of fifth above the unison or octave of the bass ; for example :—

Ex. 324.

In this method of procedure, we must observe,—
 Firstly, that the third must occasionally be doubled, in order to avoid consecutive fifths, although in many-part composition hidden fifths are allowed. When the third is doubled, the octave may lie in the upper or inner part ; for, as the fifth is omitted, a consonant fourth cannot possibly be produced :—

Ex. 325.

Secondly, that, to avoid consecutive octaves and unisons, the fifth must occasionally be doubled :—

Ex. 326.

Thirdly, that thirds may be doubled with the fifth, in three-part—

Ex. 327.

as well as in four-part composition :—

Ex. 328.

Of course these thirds must never be leading notes. A composition, however, which only contains perfect chords, without doubled thirds, is always the most pure and clear ; for the sake of variety, the third and the octave may alternate with the third and the fifth,—but the doubled unison, or octave above, is only fitted for the final cadence, as this two-part harmony would sound too thin in the middle :—

Ex. 329.

As this method is very restricted, license is given to use imperfect chords (chords of the sixth) among consonants ; but care must be taken to change the consonant fourth into a fifth, in the following manner :

Ex. 330.

or: or: or:

As, in pure harmony, the consonant fourth, the chord of the fourth and sixth, and all other dissonant intervals are excluded, it results that only the perfect major and minor chords, and the chord of the sixth, $\begin{matrix} 8 & 8 & 8 & 8 \\ 5 & 5 & 6 & 6 \end{matrix}$, remain for our use ; in order to avoid $\begin{matrix} \sharp 3 & \sharp 3 & \flat 3 & \flat 3 \end{matrix}$ forming the consonant fourth, in the first case, the octave—and in the second case, the sixth—must never lie in the upper part. In chords of the sixth, we must not only guard against diminished and augmented sixths, but also against,—Firstly, those in which the third is major, but the sixth minor ; for example :—

Ex. 331.

because in them is contained either a diminished fourth—

Ex. 332.

or an augmented fifth :—

Ex. 333.

Secondly, those in which the third is minor, and the sixth major; for example:—

Ex. 334.



because they contain either an augmented fourth—

Ex. 335.



or an imperfect fifth:—

Ex. 336.



Example of pure composition, consisting entirely of perfect consonant chords:—

MISERERE.

Ex. 337.

By ALBRECHTSBERGER.

Mi-se-re-re me-i De-us: se-cundum
 Mi-se-re-re me-i De-us: se-cundum
 Mi-se-re-re me-i De-us: se-cundum
 Mi-se-re-re me-i De-us: se-cundum

magnam mi-se-ri-cor-di-am tu - - - am.
 magnam mi-se-ri-cor-di-am tu - - - am.
 magnam mi-se-ri-cor-di-am tu - - - am.
 magnam mi-se-ri-cor-di-am tu - - - am.

Example of pure composition, consisting of perfect and imperfect chords:—

Ex. 338.

By the same.

Amplius la-va me ab i - ni-qui-ta-te me - a.
 Amplius la-va me ab i - ni-qui-ta-te me - a.
 Amplius la-va me ab i - ni-qui-ta-te me - a.
 Amplius la-va me ab i - ni-qui-ta-te me - a.

et a pec-ca-to me - o me-o munda me.
 et a pec-ca-to me - o me-o munda me.
 et a pec-ca-to me - o me-o munda me.
 et a pec-ca-to me - o me-o munda me.

HYMN (without the consonant fourth.)

Ex. 339.

Andante. *By the same.*

Lauda Sion salva-to - rem, lauda ducem et pasto -
 Lauda Sion salva-to - rem, lauda ducem et pasto -
 Lauda Sion salva-to - rem, lauda ducem et pasto -
 Lauda Sion salva-to - rem, lauda ducem et pasto -

- rem, in hym-nis et can - ti - cis:
 - rem, in hym-nis et can - ti - cis: Quantum
 - rem, in hym-nis et can - ti - cis:
 - rem, in hym-nis et can - ti - cis:

Quan-tum po-tes, tantum au-de, qui - a major om - ni
 po - tes, tantum au - de, qui - a ma-jor om - ni
 Quan - tum po-tes, tantum au - de, qui - a ma-jor om - ni
 Quantum po-tes, tantum au-de,

lau-de, qui - a major om - ni lau-de, nec lau-da - -
 lau-de, qui - a ma-jor om - ni lau-de, nec lau-
 lau-de, qui - a ma-jor om - ni lau-de, nec lau-
 qui - a ma-jor om - ni lau-de,

- re suf - fi - cis, nec lau - da - re suf - fi - cis.
 - da - re suf - fi - cis, lau - da - re suf - fi - cis.
 - da - re suf - fi - cis, lau - da - re suf - fi - cis.
 nec lau - da - re, lau - da - re suf - fi - cis.

LXXXV.

Great care and caution are necessary to compose in the pure style, with none but consonant chords; while a certainty obtainable only by practice and experience, is equally necessary to the proper use and introduction of dissonant, diminished, and augmented intervals. To promote this end, we will again treat of these important intervals, and add much matter worthy of attention.

LXXXVI.

The diminished third, which only occurs in minor keys, has its place on the augmented fourth of the fundamental note; for instance, on $c\sharp$ in G minor, and on $a\sharp$ in E minor:—

Ex. 340. Ex. 341.

This diminished third must always be prepared in the preceding chord—is resolved by descending—is distinguished from the minor third by being marked with the Telemann's curve—and is accompanied with the imperfect fifth and diminished seventh; as shewn in the following example:—

Ex. 342.

It may be also considered as the substitute for the minor third in the chord of the diminished seventh, and is often found in this character, as sounding less harsh; thus:—

Ex. 343.

LXXXVII.

The diminished fourth, which is naturally only the prepared third of the chord of the fifth and sixth, or chord of the diminished seventh, has its place on the seventh major tone, or leading note, of all minor keys; as:—

Ex. 344. on $f\sharp$

Ex. 345. on $d\sharp$

and is, in all cases, treated in the same manner as the diminished third; like the latter, it must be prepared in the preceding chord, and is resolved by descending; for example:—

Ex. 346.

LXXXVIII.

The diminished or imperfect fifth has its place on the seventh major grade, in major and minor keys. It is accompanied by the minor third and sixth—may be used with or without preparation; but in the latter case, must be resolved by descending; for example:—

Ex. 347.

LXXXIX.

The minor fifth has its place on the seventh major grade, in major keys, and is accompanied by the minor third and perfect octave. In minor keys, it

has its place on the second major grade; always presuming that the bass moves in skips, and that the harmony is in four parts. This diminished triad is usually indicated by the "Telemann's curve," and as this fifth is considered an imperfect consonant, preparation and resolution are unnecessary; for example:—

Ex. 348.

Example 348 shows a diminished triad in four parts. The top staff is in treble clef with a key signature of one sharp (F#). The bottom staff is in bass clef. The triad consists of F#, A, and C. The notes are written in a way that illustrates the 'Telemann's curve' and the resolution of the imperfect fifth.

XO.

The diminished sixth has its place on the augmented fourth, and only occurs in minor keys; for example:—

Ex. 349.

Example 349 shows a diminished sixth interval in a minor key. The notes are G and E-flat, with a sharp sign above the E-flat note.

It is met with in the chord of the diminished seventh, where it appears as a suspension of the imperfect fifth, and must be prepared and resolved by descending:—

Ex. 350.

Example 350 shows a diminished seventh chord with a suspended fifth. The notes are G, B-flat, D-flat, and F. The fifth (D-flat) is suspended and then resolved downwards.

As the imperfect fifth may be suspended by the diminished sixth, so also the diminished seventh may be suspended at the same time, by the diminished octave; for example:—

Ex. 351.

Example 351 shows a diminished seventh chord with a suspended fifth and a diminished octave. The notes are G, B-flat, D-flat, and F, with an additional G note an octave below the F.

XCI.

The diminished seventh, which can only be used in minor keys, has its place either on the augmented fourth, or on the seventh major grade, or leading note; for example:—

Ex. 352.

Example 352 shows a diminished seventh chord in a minor key. The notes are G, B-flat, D-flat, and F.

It may be used with or without preparation; in the first case, it is usually accompanied by the minor third and imperfect fifth; it must always be resolved by descending:—

Ex. 353.

Example 353 shows a diminished seventh chord with preparation and resolution. The notes are G, B-flat, D-flat, and F. The chord is prepared and then resolved by descending.

XOII.

The diminished octave, which is (as may be seen from the above) a suspension of the seventh which immediately follows it, has its place on the augmented fourth, both in major and minor keys; it is accompanied by the third and fifth, and must be prepared and resolved by descending; for example:—

Ex. 354.

Example 354 shows a diminished octave interval. The notes are G and G-flat, with a sharp sign above the G-flat note.

Example 354 shows a diminished octave interval with preparation and resolution. The notes are G, B-flat, D-flat, and F, with an additional G note an octave below the F.

XOIII.

The augmented unison may be considered, to a certain degree, as a regular passing note. It has its place on the unison, or tonic, in all keys—is accompanied by the third and fifth, or by the fourth and sixth—and is resolved by ascending; for example:—

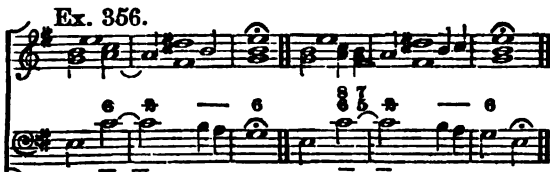
Ex. 355.

Example 355 shows an augmented unison interval. The notes are G and G-sharp.



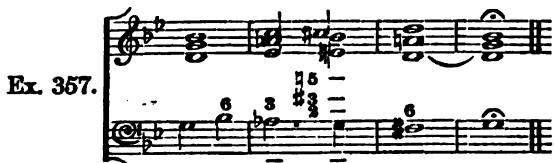
XOIV.

The augmented second has its place on the minor sixth, in minor keys; it is prepared in the fundamental part, and is resolved by descending; this dissonant interval is accompanied by the augmented fourth and major sixth:—



XOV.

The augmented third has its place on the minor second, in all minor keys; accompanied by the major second and augmented fifth, it is an anticipated chord, which changes into the third, augmented fourth, and sixth; for example:—



XOVI.

The augmented fourth has its place on the perfect fourth of every major or minor key, when in conjunction with the second or minor third and the major sixth; it may be used without preparation, or as a passing note, and must always be resolved by ascending; for example:—



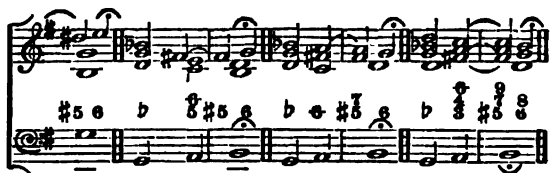
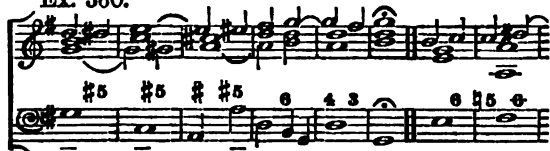
When, however, this interval occurs in minor keys, in conjunction with the fifth and octave, or as a suspension, with the augmented second and major sixth, it has its place on the minor sixth; for example:—



XOVII.

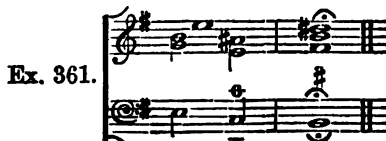
The augmented fifth has its place on all major triads, in major keys, and on the minor third only in minor keys, when it is accompanied by the third and octave. Both as a prepared or passing note, it is resolved by ascending. When it is found in conjunction with other dissonants, the accompanying intervals must, of course, be changed:—

Ex. 360.



XOVIII.

The augmented sixth has its place on the minor sixth of minor keys, and is always resolved by ascending. Its original chord is the doubly diminished triad. This interval is accompanied either by the doubled major third; for example:—



or by the major third and augmented fourth, which latter, however, must be already prepared as a fifth; for example :—

Ex. 362.

or (when a chord of the fourth and sixth follows it) by the major third and perfect fifth, in major keys; for example :—

Ex. 363.

XCIX.

Although every composition has a principal key, in which it begins, and must regularly end, yet it would be wearisome and monotonous were it to remain always in the same key. "Variety is pleasing!" is an ancient and true proverb; therefore, when a phrase has been worked out in the principal key long enough for the ear to distinguish the tonic and recognise it firmly, the laws of variety require a change to other keys, and this is called "*Modulation.*" Modulation is the art of connecting near or distant keys, by an apt, easy, naturally flowing, or occasionally by an unexpected and surprising succession of chords. From every key there are five simple modulations to relative keys; for instance :—

- From C major to G major (the dominant).
 C " E minor (the third above).
 C " A minor (the sixth above).
 C " D minor (the second above).
 C " F major (the fourth above).

Which return to the key from which they started, viz., C major :—

Ex. 364.

The same applies to minor keys; for instance :—

- From A minor to C major (the minor third above).
 A " E minor (the dominant).
 A " G major (the minor seventh above).
 A " D minor (the fourth above).
 A " F major (the sixth above).

And from thence home again :—

Ex. 365.

The most natural method of modulating to another and relative key (say the dominant) is to use the chord of the minor seventh belonging to that key, or one of its inversions; for example :—

From C major to G major.

Ex. 366.

The harmony in this example remains in the original key—C major—during six chords; in the seventh, it changes to the dominant, G major, through the

chord of the augmented fourth and second, $f^{\sharp} \frac{a}{c}$, which is an inversion of the chord of the minor seventh, $f^{\flat} \frac{c}{d}$:

Or, from A minor to E minor.

Ex. 367.

In this example, also, the modulation occurs in the seventh chord by the harmony of the fourth and second, $f^{\flat} \frac{d}{b}$, which is an inversion of the chord of the seventh, $f^{\sharp} \frac{a}{c}$, which leads to the key of E minor.

CI.

Another leading chord is the imperfect fifth with the sixth; for instance, from C major to A minor:—

Ex. 368.

The modulation begins with the sixth chord, $\overset{d}{\underset{a}{\underset{f\#}{\text{C}}}}$: a deceptive cadence here occurs, for the ear expects a cadence of G major; but the following chord of the fifth and sixth, $\overset{b}{\underset{e}{\underset{f\#}{\text{C}}}}$, satisfies all doubt, and leads unexpectedly to A minor:—

Or: from A minor to C major.

Ex. 369.

The sixth chord $\overset{f}{\underset{a}{\underset{b}{\text{C}}}}$ prepares the following chord of the fifth and sixth, $\overset{d}{\underset{e}{\underset{b}{\text{C}}}}$ and this leads most naturally to the harmony of C major:—

Or: from C major to F major.

Ex. 370

Another leading chord is the major sixth with the minor third; for example:—

From A minor to D minor.

Ex. 371.

Or: from C major to E minor.

Ex. 372.

Or: from A minor to F major.

Ex. 373.

Or: from C major to D minor.

Ex. 374.

Or: from A minor to G major.

Ex. 375.

In the eighth chord of this example, the chord of the fifth and sixth already hints at the direction of the modulation; but the sixth in the eleventh chord really and decidedly indicates G major.

CII.

The diminished seventh is very well adapted for modulation into all keys, by the means of some intermediate chords; for example:—

From C major, to D major or minor.

Ex. 376.

to E major or minor.

Ex. 377.

Ex. 378. to F major or minor.

Ex. 379. to G major or minor.

Ex. 380. to A major or minor.

Ex. 381. to B major or minor.

Ex. 382. to B flat major or minor.

Ex. 383. to A flat major or minor.

Ex. 384. to F sharp major or minor.

Ex. 385. to E flat major or minor.

Ex. 386. to C sharp major or minor.

III.

This chord, which is called enharmonic, is capable of four transformations, by means of which we can modulate to all keys—for instance, with the diminished seventh, imperfect fifth, and minor third; for example:—

Ex. 387. 1st.

IV.

With the major sixth, diminished fifth, and minor third; for example:—

Ex. 388.

OV.

With the major sixth, augmented fourth, and minor third; for example:—

Ex. 389.

OVI.

With the augmented second, augmented fourth, and major sixth; for example:—

Ex. 390.

OVII.

By skilful management, it is possible to modulate from one and the same perfect triad into all keys; for example:—

From the perfect triad of C major, to D flat major.

Ex. 391.

Ex. 392. to D major.

Ex. 393. to E flat major.

Ex. 394. to E major.

Ex. 395. to F major.

Ex. 396. to F sharp major.

Ex. 397. to G major.

Ex. 398. to A flat major.

Ex. 399. to A major.

Ex. 400. to B flat major.

Ex. 401. to B major.

Ex. 402. to C sharp minor.

Ex. 403. to D minor.

Ex. 404. to E flat minor.

Ex. 405. to E minor.

Ex. 406. to F minor.

Ex. 407. to F sharp minor.

Ex. 408. to G minor.

Ex. 409. to G sharp minor.

Ex. 410. to A minor.

Ex. 411. to B flat minor.

Ex. 412. to B minor.

Ex. 413. to C minor.

In like manner, from C minor to C sharp minor.
Ex. 414.

Ex. 415. to D minor.

Ex. 416. to E flat minor.

Ex. 417. to E minor.

Ex. 418. to F minor.

Ex. 419. to F sharp minor.

Ex. 420. to G minor.

to A flat minor.

Ex. 422. to A minor.

Ex. 423. to B flat minor.

Ex. 424. to B minor.

Ex. 425. to C major.

to D flat major.

Ex. 426.

Ex. 427. to D major.

Ex. 428. to E flat major.

Ex. 429. to E major.

Ex. 430. to F major.

Ex. 431. to G flat major.

Ex. 432. to G major.

Ex. 433. to A flat major.

Ex. 434. to A major.

Ex. 435. to B flat major.

Ex. 436. to B major.

The student is earnestly recommended to transpose these examples into all keys, in different positions.

OVIII.

It now only remains for us to speak of cadences, by which compositions, or divisions of them, are really or apparently concluded. *Cadences* are four-fold—perfect, imperfect, interrupted, and deceptive. *The perfect cadence*, which concludes a composition with perfect satisfaction to the ear, returns from the dominant in the fundamental part, to the tonic; for example:—

Ex. 437.

The imperfect or half cadence moves from the tonic, or from the sub-dominant, to the dominant; for example:—

Ex. 438.

Also, in minor keys, from the sixth to the dominant; for example:—

Ex. 439.

The interrupted cadence occurs when, after proper preparation for a *perfect* chord, the expected conclusion is replaced by another chord, which changes the progression of the harmony; for example:—

Ex. 440.

The deceptive cadence is, to a certain degree, an interrupted one; but includes many amplifications. When a composition, consisting of a well ordered

succession of regularly-connected chords, concludes in a foreign key, the hearer is surprised, disturbed, and deceived in his pre-conceived ideas; hence these cadences are called "*Inganni*."

To those who are proficient masters in the art of modulation, it will be easy to create these deceptive cadences in an endless variety of shape; for it is possible to modulate from every interval, as through a labyrinth, to every key; for example:—

OIX.

Through the chord of the minor second.

Ex. 441. From D minor to B flat major.

Or: from D minor to E flat major.

Ex. 442.

Or: from A major to F major.

Ex. 443.

OX.

Through the chord of the major second.

Ex. 444. From C major to E minor.

Or: from C major to F major.

Ex. 445.

Or: from C major to A minor.

Ex. 446.

Or: from C major to D minor.

Ex. 447.

CXI.

Through the chord of the augmented second:—

From C major to G major.

Ex. 448.

Or: from C major to A minor.

Ex. 449.

From C major to B minor.

Ex. 450.

Ex. 451. Or: from C major to D minor.

Or: from C major to F sharp minor.

Ex. 452.

CXII.

Through the minor triad:—

From C minor to B flat major.

Ex. 453.

Or: from C minor to F minor.

Ex. 454.

Or: from C minor to A flat major.

Ex. 455.

Or: from C minor to D minor.

Ex. 456.

Or: from C minor to A minor.

Ex. 457.

Or: from C minor to G minor.

Ex. 458.

Or: from C minor to E flat major

Ex. 259.

Ex. 460. Or: from C minor to E minor.

CXIII.

Through the major triad:—

Ex. 461. From C major to B flat major.

Ex. 462. Or: from C major to F major.

Ex. 463. Or: from C major to G minor.

Ex. 464. Or: from C major to A major.

Ex. 465. Or: from C major to B minor.

Ex. 466. Or: from C major to G major.

Ex. 467. Or: from C major to D major or minor.

Ex. 468. Or: from C major to E major or minor.

Ex. 469. Or: from C major to F sharp minor.

Or: from C major to C sharp minor.

Ex. 470.

OXIV.

Through the chord of the perfect fourth, with the fifth:—

From D minor to B flat major.

Ex. 271.

Or: from D minor to D major.

Ex. 472.

Or: from C major to A major.

Ex. 473.

OXV.

Through the chord of the augmented fourth, with the major second:—

From C major to D minor.

Ex. 474.

Ex. 475. Or: from C major to A minor.

Ex. 476. Or: from C major to C minor.

Or: from C major to E minor or major.

Ex. 477.

Or: from C major to A major.

Ex. 478.

Or: from C major to G major or minor.

Ex. 479.

CXVI.

Through the chord of the augmented fourth, with the minor third:—

From E minor to A minor.

Ex. 480.

Ex. 481. Or: from E minor to B flat major.

Or: from A minor to E major or minor.

Ex. 482.

Ex. 483. Or: from E minor to G major.

Ex. 484. Or: from E minor to C major.

Or: from E minor to C sharp minor.

Ex. 485.

CXVII.

Through the chord of the diminished fifth, with the minor third and sixth:—

Ex. 486. From C major to C minor.

Ex. 487. Or: from D minor to A minor.

Or: from D minor to G minor or major.
Ex. 488.

Ex. 489. Or: from D minor to F major.

Or: from D minor to D major.

Ex. 491. Or: from C major to A minor.

Ex. 492. Or: from C major to D minor.

Ex. 493. Or: from F major to D minor

Ex. 494. Or: from D minor to C major.

OXVIII.

Through the chord of the third, fourth and sixth:—

Ex. 495. From C major to A minor.

Ex. 496. Or: from C major to F major.

Ex. 497. Or: from C major to A major.

Ex. 498. Or: from C major to F minor.

Ex. 499. Or: from C major to A flat major.

Or: from C major to G sharp minor.

Or: from C major to F sharp minor.

Or: from C major to E flat major.

Ex. 502.

Or: from C major to B flat minor or major.

Ex. 503.

Or: from C major to D minor or major.

Ex. 504.

CXIX.

Through the chord of the augmented sixth:—

Ex. 505. From A minor to B major.

Or: from A minor to C major.

Ex. 506.

Ex. 507. Or: from A minor to D minor.

Ex. 508. Or: from A minor to E minor.

CXX.

Through the chord of the diminished seventh:—

Ex. 509. From D minor to G minor.

Ex. 510. Or: from D minor to F major.

Ex. 511. Or: from D minor to G minor or major.

Ex. 512. Or: from D minor to F minor.

Ex. 513. Or: from D minor to A flat major.

Ex. 514. Or: from D minor to D major.

Ex. 515. Or: from D minor to B minor.

Ex. 516. Or: from C major to D minor.

Ex. 517. Or: from C major to F sharp minor.

CXXI.

Through the chord of the dominant seventh:—
From C major to F major.

Ex. 518.

Ex. 519. Or: from C major to F minor.

Ex. 520. Or: from C major to C minor.

Ex. 521. Or: from C major to B flat major

Ex. 522. Or: from C major to E minor.

Ex. 523. Or: from C major to D minor.

CXXII.

Through the chord of the major seventh:—
From C major to D minor.

Ex. 524.

Or: from C major to C minor.

Ex. 525.

Or: from C major to F minor or major.

Ex. 526.

Ex. 527.

CXXIII.

Through both chords of the ninth:—
From C major to E minor.

Ex. 527.

Ex. 528. From C major to C minor.

Ex. 528. From C major to C minor.

Or: from F major to C major.

Ex. 529.

Or: from D minor to D major.

Ex. 530.

Or: from F major to D minor.

Ex. 531.

Or: from A minor to D minor.

Ex. 532.

Or: from A minor to C major.

Ex. 533.

CXXIV.

Example of a succession of deceptive cadences, through various chords:—

Ex. 534.

Ex. 535.

CXXXV.

It is by no means necessary that the left hand should play only the fundamental notes, while the right hand supplies the intervals necessary to the full harmony; on the contrary, a pleasant variety is gained, when the intervals are taken by both hands, always maintaining the distance required by their rules. This mode of playing is called *divided accompaniment*. Every perfect triad, with the doubled octave, may have six different positions, with reference to the bass. The three first positions, which are used in *close harmony*, are known to us as having the fifth, or the octave, or the third on the upper grade:—

1. 2. 3.

Ex. 536.

The other positions are used in *dispersed harmony*, and may be taken in the following manner:—

Ex. 537. 1.

Fifth.
Octave.

Third.
Bass.

Ex. 538. 2.

Octave.
Third.

Fifth.
Bass.

Ex. 539. 3.

Third.
Fifth.

Octave.
Bass.

The derivatives of these perfect harmonies—the chords sixth, fourth and sixth, seventh, third and fourth, fifth and sixth, and second—are equally capable of six positions; for example:—

Chords of the sixth.

Ex. 540.

In close harmony.

In dispersed harmony.

Chords of the fourth and sixth.

Ex. 541.

In close harmony.

In dispersed harmony.

Chords of the seventh.

Ex. 542.

In close harmony.

In dispersed harmony.

Chords of the third and fourth.

Ex. 543.

In close harmony.

In dispersed harmony.

Chords of the fifth and sixth.

Ex. 544.

In close harmony.

In dispersed harmony.

Chords of the second.

Ex. 545.

In close harmony.

In dispersed harmony.

Divided accompaniment employs these dispersed intervals; an exercise on these positions, will conclude our examples. The following phrase, according to its figured bass, would be played thus:—

Ex. 546.

but should dispersed harmony and divided accompaniment be used, then the intervals would be placed in the following manner:—

In the first position.

Ex. 547.

In the second position.

Ex. 548.

First system of musical notation on the left page, featuring a treble clef and a bass clef. The treble staff contains a melodic line with eighth and sixteenth notes, while the bass staff contains a figured bass line with numerical figures and some accidentals.

Second system of musical notation on the left page, continuing the melodic and figured bass lines from the first system.

Third system of musical notation on the left page, including a small 'x' mark above a note in the bass staff.

Fourth system of musical notation on the left page.

Fifth system of musical notation on the left page.

Sixth system of musical notation on the left page.

Seventh system of musical notation on the left page.

In the third position.

Ex. 549.

First system of musical notation on the right page, starting with the instruction 'In the third position.' and the example number 'Ex. 549.' It shows a treble and bass staff with a melodic line and figured bass.

Second system of musical notation on the right page.

Third system of musical notation on the right page.

Fourth system of musical notation on the right page.

Fifth system of musical notation on the right page.

Sixth system of musical notation on the right page.

Seventh system of musical notation on the right page.

The image displays a musical score for Thorough-Bass and Harmony, page 76. It consists of five systems of music. Each system is divided into two parts: a vocal line (top staff) and a basso continuo line (bottom staff). The key signature is one sharp (F#) and the time signature is 3/4. The first system includes a small 'x' above the second measure of the vocal line. The second system includes a sharp sign (#) above the fifth measure of the vocal line. The third system includes a sharp sign (#) above the fifth measure of the vocal line. The fourth system includes a sharp sign (#) above the fifth measure of the vocal line. The fifth system includes a sharp sign (#) above the fifth measure of the vocal line. The music is written in a style characteristic of 17th-century Baroque lute tablature, with rhythmic values indicated by numbers above the notes.

END OF FIRST VOLUME.