A

MUSICAL GRAMMAR,

In Four Parts.

I. NOTATION, III. HARMONY,
II. MELODY, IV. RHYTHM.

By DR. CALLCOTT,
ORGANIST OF COVENT GARDEN CHURCH.

"The better Music is known and understood, the more it will be valued and esteemed." . . . . . SIMPSON.

FOURTH EDITION.

BOSTON:
JAMES LORING, WASHINGTON STREET.
.....
1838.

Standard Musical Works

PUBLISHED BY

JAMES LORING, 132 WASHINGTON STREET, BOSTON.

A TREATISE ON HARMONY, written and composed for the use of the Pupils at the Royal Conservatoire of Music in Paris; by CATEL, Professor of Harmony in that Establishment. From the English Copy, with Additional Notes and Explanations, by L. MASON.

FIRST STEPS TO THOROUGH BASE, in twelve familiar lessons between a teacher and pupil. By a Teacher of Music. Revised from the London Edition.

THOROUGH-BASE PRIMER: containing Explanations and Examples of the Rudiments of Harmony; with Fifty Exercises. By J. F. BURROWES. Second American, Improved from the London Edition.

THE MUSICAL CYCLOPEDIA: or the Principles of Music considered as a Science and an Art; embracing a complete Musical Dictionary, and the Outlines of a Musical Grammar, and of the Theory of Sounds and Laws of Harmony; with Directions for the Practice of Vocal and Instrumental Music, and a Description of Musical Instruments. By WILLIAM S. PORTER. Recommended by Professors Mason and Webb.

AN EASY GUIDE TO VOCAL MUSIC, chiefly with a view to Psalmody. With an Historical Introduction, and Questions on the Lessons. To which is added, a Dictionary of Musical Terms. By JOHN TURNER, Esq. From the last London Edition.

THE

AUTHOR'S PREFACE.

THE design of the following Work is, to compress in a small volume, the leading principles of Practical Music. From the analogy which exists between Music and Language, the Author has presumed to adopt a classification first suggested by the German Theorists, and to entitle the whole a MUSICAL GRAMMAR.

He has endeavored, by Examples selected from the best authors, and intermixed with Musical Characters, to render the instructions more satisfactory than if they were merely verbal; and he only regrets that, in many instances, they could not be made more extensive, without injuring the due proportion of the parts and the portable size of the book.

He is very happy to avail himself of the present opportunity of returning his most grateful acknowledgment for the assistance he has obtained from public and private libraries in England, and for the great attention shown him by persons not more distinguished by rank and birth, than by love of science and of literary pursuits.

The present small volume is submitted by the author to the world with a considerable degree of diffidence; and he hopes that the various professional occupations in which he has been incessantly engaged, will be an excuse for any small inaccuracies which may strike those who are conversant with the subject.

PREFACE

TO THE

SECOND BOSTON EDITION.

In the cultivation of Music, two distinct objects are to be acquired; Science and Taste. Taste is improved by studying the compositions of celebrated Masters, and by endeavoring, both in writing and performing, to adapt the Melody to the subject.

By a due attention to this little volume, it is confidently believed, that the student may obtain all that is necessary to discriminate between false and correct harmony, and to compose conformably to the established rules; an acquisition which certainly must be desirable to the votaries of Music; and what, to every Christian, must be an object of consequence, it will tend to introduce dignity and purity into those native compositions, which are designed for the use of worshipping assemblies.

About twenty years since, several publications made their appearance in the United States, which had a tendency to correct and refine the public taste in the noble Science of Music. No publication, perhaps, has had a more universal influence in this reform, than this Musical Grammar. The general character which it has sustained for correctness among the best judges, and the high estimation in which it continues to be held, has induced the Publisher to present a second Boston edition. He has been careful to preserve its original accuracy, by obtaining a careful revision and examination of the work by a gentleman of this city, eminent for judgment and taste in this Science.

Boston, March, 1830.

CONTENTS.

Part I.

THE NOTATION OF MUSIC.

Part II.

MELODY.

Chap. I. *Of Intervals.*

Chap. III. *Of the Genera.*

Chap. VI. *Of Ancient Signatures.*

Part III.

HARMONY.

Part IV.

RHYTHM.

Chap. I. *Of Accent.*

Chap. II. *Of the Musical Foot.*

Chap. III. *Of the Musical Cæsure.*

Chap. IV. *Of the Phrase.*

Chap. V. *Of the Section.*

Chap. VI. *Of the Period.*

MUSICAL GRAMMAR.

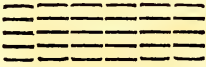
PART I.

THE NOTATION OF MUSIC.

CHAP. I.

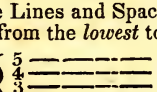
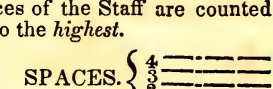
OF THE STAFF.

Art. 1. FIVE lines drawn over each other, form a *Staff*,* or support for the notes of Music; thus,



On these Lines, and *in* the Spaces between them, the heads of the Notes are placed.

2. The Lines and Spaces of the Staff are counted upwards, from the *lowest* to the *highest*.

LINES.  SPACES. 

Every Line, or Space is called a *Degree*;† thus the Staff includes nine Degrees, viz. five Lines, and four Spaces.

* Sir John Hawkins (vol. i. p. 427) writes the word *Stave* for Staff. Dr. Burney, v. ii. p, 87: "The regular *Staff* of four lines was not generally used in the church till the 13th century."

† Christopher Simpson, Compendium of Practical Music, 1678, (3d edit.) p. 2.

3. The Notes of Music consist generally of two parts, a *Head* and a *Stem*.

The Head is either open or close (that is, *white* or *black*:) and must always be placed *on* a Line, or in a Space.

The Stem may turn up or down, without making any difference in the Music.

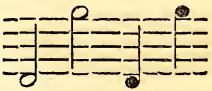
WHITE NOTES.

On lines. In Spaces.

BLACK NOTES.

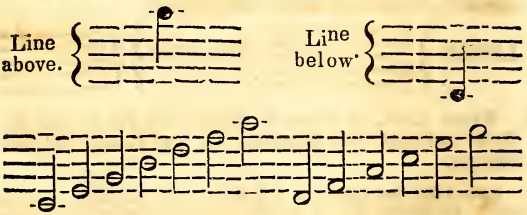
On Lines. In Spaces.

4. When more than nine Notes are wanted, the Spaces above and below the Staff are used, and two more Degrees are gained; thus,



5. If more Notes than these are required, then added Lines* are drawn above or below the Staff, and the Notes are placed on them; thus,

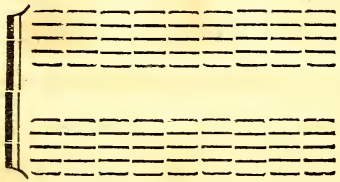
Line above. Line below.



* The added Lines were formerly called *Ledger* or *Leger*, short or light lines. The latter term is adopted by Mr. Holden, in his Essay (1770) art. 56.

Any number of Lines may be added above or below; thus the Degrees of the Staff are increased at pleasure.

6. In Music for Keyed Instruments, when a Staff is wanted for each hand, they are joined together by a *Brace*; the upper Staff for the right hand part, and the lower Staff for the left.



When more than two Staves are joined together by the Brace, they contain Music for different voices, or instruments, to be performed at the same time. This union of Staves is called the *Score*.*

CHAP. II.

OF THE CLEF.

Sect. 1.—of clefs in general.

Art. 7. The Notes of Music are named from the first seven letters of the alphabet,

A, B, C, D, E, F, G.

When the Melody, or Tune, exceeds these seven, the same series of letters must be repeated.

* Dr. B. ii. 440: "The word *Score* probably originated from the *Bar*, which, in its first use, was drawn through all the parts, as it should be still, of a piece of music in partition or *partitura*."

8. A *Clef** is a mark representing a letter, placed at the beginning of the Staff, to determine the names of the Degrees, and is always situated on a line. There are three Clefs:

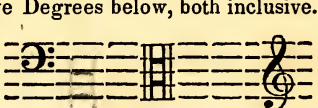
The F. The C. The G.

These are commonly called the *Base*, the *Tenor*, and the *Treble*.

9. The sounds of Music are distinguished by their difference in respect of pitch, and divided into High and Low: the high sounds are placed in a Staff with the G Clef, and called *Treble*; the low sounds are placed in a Staff with the F Clef, and called *Base*.

10. The upper sounds of the Base, and the lower ones of the Treble, are also called *Tenor*, and sometimes placed in a Staff with the C Clef.

11. These three Clefs are five Degrees distant from each other; the C or *Tenor* Clef, being the Note where the Base ends and the Treble begins. The G or *Treble* Clef, is five Degrees above; and the F or *Base*, is five Degrees below, both inclusive.



f g a b c d e f g

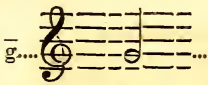
12. All the degrees of the Staff depend upon the Clef; and consequently take their names from that Line on which the Clef is placed. It must always be remembered, that these Clefs are representatives of the letters, f, c, and g.†

* Sir J. H. writes *Cliff*, i. 431: iii. 51, 89; iv. 162.—Dr. B. ii. 90. "*Clefs* were originally nothing more than the letters of the alphabet, placed opposite to notes of the same name."

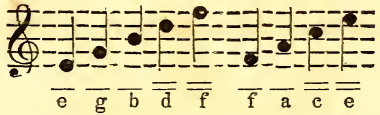
† The utility of Clefs, in respect of human voices, is explained by Dr. B. ii. 457. See also Malcolm, p. 332; and Holden, art. 54.

Sect. II.—Of the *G* or treble clef.

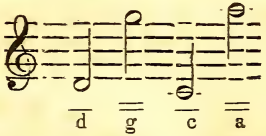
13. The G Clef* must turn on the second Line of the Staff; all the Notes on that Line are called $\overline{g}$; the other Degrees take their names from that, as the Clef Line.



The nine Degrees of the Treble Staff are,



14. The Degrees above and below the Staff are,



The other added Degrees are reckoned from these, whether above or below.

Sect. III.—Of the *F* or base clef.

15. The F Clef† must be placed on the fourth Line of the Staff, so that the two dots are in the third

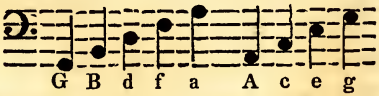
* The G Clef is a compound character of the letters G and S, for the syllable Sol. In old Music, the two letters, g and s, are sometimes seen distinctly marked. Turner's Essay (1724, p. 34;) Dr. Pepusch, Treatise on Harmony 1731; Rameau, Treatise (1752.) Sir J. H. iii. 105. ascribes the earliest use of our present character to Lampadius (1537) ii. 408; iii. 54.

† The F Clef is a compound character, formed originally of three

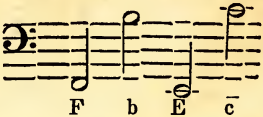
and fourth Spaces; all the Notes on that Line are called f; the other Degrees take their names from that, as the Clef Line.

f....  ....On the Clef Line.

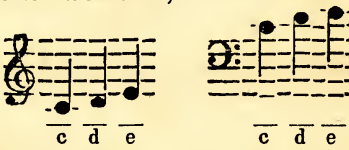
The nine Degrees of the Base Staff are,



16. The Degrees above and below the Staff, are,



17. The Note C, on the added Line* below the Treble, and on that above the Base, are exactly the same sound; thus the lower Notes of the Treble may be expressed in the Base,

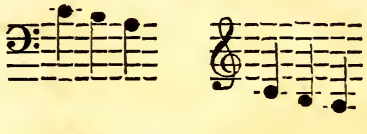


Notes, one placed on the Line, and two others in the adjoining Spaces; thus,

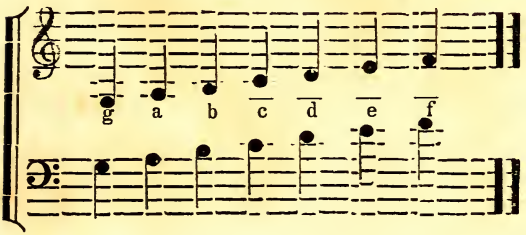
The C Clef was distinguished from the F, by having only the two Notes in the Spaces; and these Clefs were adopted in the Gregorian, while colored lines were used for the more ancient Ambrosian Chant. Franchinus Gafurius, *Practica*, lib. i. cap. 3, fol. 4, b. edit. 1496 and 1502.

* When the added lines between the Treble and Base frequently occur, it is usual in old Music to find the C Clefs in both upper and lower Staves. See Scarlatti's Lessons, ii. 12.

and the higher Notes of the Base may be expressed in the Treble,

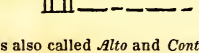


18. The same Notes may be thus written in both the F and G Clefs,



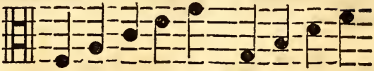
Sect. IV.—Of the Counter Tenor Clef, or *C* on the third line.

19. When the C Clef is placed so that the two cross strokes enclose the middle Line, it is called the *Counter Tenor*,* or Viola Clef.



* This is also called *Alto* and *Contralto*. It borrows the two lower lines of the Treble for its upper Degrees, and the two upper lines of the Base for its lower Degrees. The middle line is the added one between the Treble and Base. This Clef is used in Handel's 400 Songs, ii. No. 130: "O fairest of Ten Thousand;" iii. No. 192: "See the conquering Hero comes;" v. No. 379: "Hide me from day's garish eye."

The nine Degrees of the Viola Staff are,



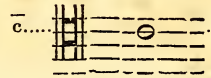
f a c e g g b d f

These correspond with the Notes in the Treble and Base Clefs, given in the Example of Art. 18.

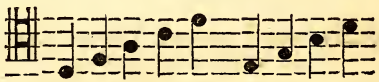
20. The *Counter Tenor* Clef is used for the high voices of men in Vocal Music, and for the *Viola* or Tenor Violin in Instrumental Pieces.

Sect. V.—Of the Tenor Clef, or *C* on the fourth line.

21. When the C Clef is placed so that the two cross strokes enclose the fourth Line, it is called the *Tenor* Clef.*



The nine Degrees of the Tenor Staff are,



d f a c e e g b d

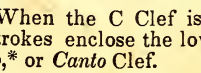
These Notes are five Degrees above those in the Base Clef, Art. 15.

22. The *Tenor* Clef is used for the middle voices of men, and for the Violincello or Base Violin, in Instrumental Music, when the passage ascends above the Base Staff.

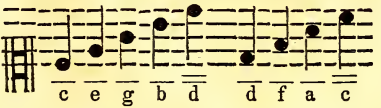
* The Tenor Clef borrows the lowest line of the Treble for its upper Degree, and the three highest lines of the Base for its lower Degrees. The fourth line is the added one between the Treble and Base. Examples of this Clef may be found in Handel's Songs, i. No. 49: "How blest the Maid;" No. 57: "But oh, sad Virgin;" ii. No. 148: "What passion cannot."

Sect. VI.—Of the Soprano Clef, or *C* on the first line.

23. When the C Clef is placed so that the two cross strokes enclose the lowest Line, it is called the *Soprano*,* or *Canto* Clef.



The nine Degrees of the Soprano Staff are,

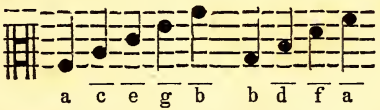


These Notes are three Degrees below those in the Treble Clef, Art. 13.

24. The *Soprano* Clef is used for the voices of females and children. In Italy and Germany, no other Clef is in general use for the Harpsichord; the G Clef being reserved for the Violin, Flute, &c.

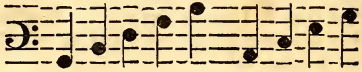
Sect. VII.—Of the Mezzo Soprano, the Baritono, and high Treble Clefs.

25. In old Vocal Music, the C Clef is placed on the second Line, and called the *Mezzo Soprano*.

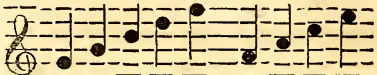


* The Soprano Clef borrows the four lowest lines of the Treble for its upper Degrees; and the first line is the added one between the Treble and Base. These three C Clefs, the Soprano, Alto, Tenor, with the Base F Clef, form the four regular Clefs of Choral Counterpoint. See Dr. Boyce's Cathedral Music, 3 vols. 1760; and new edition 1788. This Clef is also used in Handel's Songs, iii. No. 176; "Hark he strikes the golden lyre;" and in his thirteen Italian Duetts.

26. In old Church Music, the F Clef is placed on the third Line, and called the *Baritono.*



27. In old French Music, the G Clef is placed on the first Line, and called the *High Treble.**



CHAP. III.

OF THE NOTES.

Sect. I.—Of notes in general.

Art. 28. The Notes of Music represent sounds, with their difference of pitch, and their duration in time.† These two qualities are called the *Tune* and *Time* of Notes.

29. When to any series of the seven letters the eighth is added, the whole number is termed an *Octave*;‡ and the word is frequently used to express the two extreme Notes of the series, the first and the eighth.

* These three Clefs are inserted here, chiefly to show how entirely the other Degrees depend on the Clef Line, and to impress on the mind, that the Clefs themselves are the letters C, F, and G. Examples of these two first Clefs are found in Padre Martini, Saggio di Contrappunto, 1774. The last G Clef is used by Bethizy (Exposition de la Musique, 1764,) in some of the plates at the end of his work.

† Our present Notation was considerably improved (if not invented) by Guido of Arezzo, and Franco of Cologne. Sir J. H. i. 422; ii. 17, 140, 217, 237. Dr. B ii. 35, 134, 152, 443.

‡ The seven letters were formerly called *Septenaries;* but as they are incomplete and imperfect in their melody or tune without the eighth, they are now termed *Octaves.* Butler's Principles (1636,) p. 13.

30. That series of the seven letters which begins and ends with C, ascending or descending, is most satisfactory to the ear.

c d e f g a b $\bar{c}$

31. On keyed instruments, these Notes are performed by striking the long keys, whose names are known by their situation with respect to the short keys, which are generally black.

32. The black keys are placed in alternate divisions of *two* and *three*, throughout the key-board; and, as the long key between the *two* short ones is always D,* the other six letters may be readily found from *that;* E being the next long key towards the right hand; C the next towards the left, &c. &c.

33. The C† nearest the middle of the instrument, is the *Tenor* Clef Note; the next G towards the right, is the *Treble* Clef Note; and the nearest F towards the left, is the *Base* Clef Note.

34. To distinguish the different Notes of the same letter from each other, the Germans have adopted a literal Notation, called their *Tablature,*‡ which from its ingenuity and utility, deserves to be more universally known than it is at present.

35. The lowest series of seven Notes, which includes both the divisions of short keys in the key-board (beginning with the *two,*) is called by the Germans the *great Octave,*‖ being expressed by capital letters;§ thus,

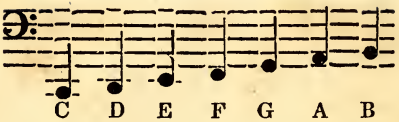
* The keys which enclose the divisions of two short ones, are C D E; and the remaining four, F G A B, have the other division of three short ones between them.

† The number of Keys varies on different instruments; but the C nearest to the middle is always the Tenor Clef Note.

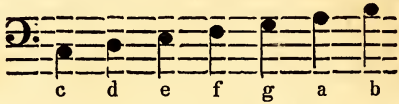
‡ The German Tablature was invented in the 16th century; a specimen of it may be seen in the tract entitled Monochordum Andreæ Reinhardi, Lipsiæ, 1604 (z, 23,) in the Saville Collection, Oxford. Dr. B. ii. 121.

‖ On some old instruments, (particularly Organs,) the lowest Note on the left hand is the great C; but, in general, Harpsichords, &c. extend downwards to F F. The six octave Grand Piano Fortes reach to C C below, and as far as C, four times marked in the Treble, on the right. It has been observed, p. 24, that these Octaves are in reality only Septenaries.

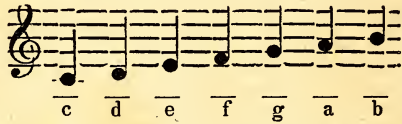
§ In our old scales, the letters below the Base A were made double, and those above the Treble Staff termed *in alt;* but the Septenaries were then reckoned from A, not from C; and the limits of Base Tenor, and Treble, not accurately defined.



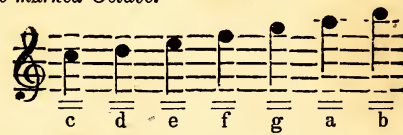
36. The next series of seven Notes is called the *small Octave*, expressed with small letters; thus,



37. The next series commences with the C Clef Note, including the G Clef; and being expressed by a small stroke over each letter, is called the *once-marked Octave.*



38. The last series in general use is called the *twice-marked Octave.*



39. The few Notes below the great Octave are marked with double capitals, and called *Contra Tones.* Those above the Treble form another series, called the *thrice-marked Octave.**

* If these Notes were arranged by Septenaries from G, on the first line of the Base, then the appellations of Base, Tenor and Treble, might be more appropriate; the Base Septenary would end with the F Clef; the Tenor C Clef would be the middle note of its own series; and the Treble would begin with its own G Clef. This is the Gammut given by *Butler*, p. 13, 17. The more ancient Scales formed their Septenaries from A, and the Gammut at G was added below. *Glareanus* Dodecachordon (1547,) lib. i. cap. 2, p. 3.

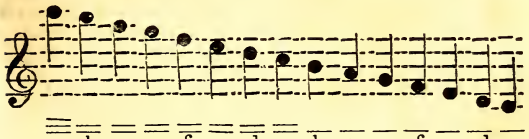
40. Any musical example, in which all the Notes are of equal length, may be expressed by this Tablature, without the assistance of the Staff or of the Clef. According to this Notation, we may observe,

The F Clef Note is the small f.

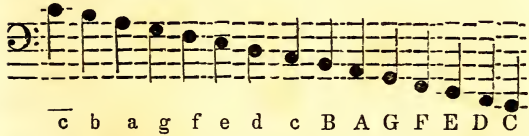
The C Clef Note is the once-marked $\overline{c}$.

The G Clef Note is the once-marked $\overline{g}$.

41. The descending series of these Octaves is expressed in Notes, thus in the Treble,



and thus in the Base,



42. In vocal Music these Notes are sung with the syllables introduced about the year 1022, by *Guido*, a Monk of Arezzo, in Tuscany: UT, RE, MI, FA, SOL, LA.;* called by his followers the *Hexachord.*

The French retain the original six, with the addition of SI for the seventh.†

UT, RE, MI, FA, SOL, LA, SI, UT.

c d e f g a b $\overline{c}$

43. The Italians, for the sake of a softer pronunciation, have changed the UT into DO.

* A particular account of Guido may be found in Sir J. H. i. 422; Dr. B. ii. 72; M. La Borde (Essai 1780,) iii. 345.

† The addition of the Syllable Si was introduced by Le Maire. Sir J. H. i. 435; Dr. B. ii. 98.

DO, RE, MI, FA, SOL, LA, SI, DO.*

44. This general scale of notes was formerly called the *Gammut*,† from which the Greek letter *Gamma*, placed on the lowest line of the Base Staff, or great G of the German Tablature.

Sect. II.—Of the Tune of Notes.

45. The Tune of Notes depends upon their relation to each other, and upon the distances between them. The intervals between the Degrees of the Scale are unequal ;‡ and, as some are nearly twice the distance of others, the words *Tone* and *Semitone*, are employed to express them.

46. Those Notes which on the key-board are not separated by a short key, are said to be distant from each other *one Semitone* ;§ those which have a short key inserted between them, are distant *two Semitones*, or *one Tone*. Thus, the distances between B C and between E F, are Semitones ; and those between C D, D E, F G, G A, and A B, are Tones ;—therefore every series of the eight regular Sounds, or of the Octave, contains five Tones, and two Semitones.

47. The greatest care must be taken not to misunderstand the words *Note* and *Tone*.‖ A *Note* is the

* The change of Ut to Do, is mentioned by Sir J. H. v. 197 ; Dr. B. ii. 93.

† This succession of syllables invented by *Guido*, was also applicable to the two other Notes, F and G (which form our Clefs,) and their following sounds. Hence arises the word *Gammut*, or Gamma Ut, it being the Ut, or first sound of the G Hexachord, denoted by the Greek letter F. Dr. B. ii. 87 ; Butler, p. 17 ; Ornithoparcus (Dowland's Translation, 1609, p. 10.)

The celebrated Prussian Chapel-master, C. H. Graun, employed the following syllables—*da*, *me*, *ni*, *po*, *tu*, *la*, *be*, which are adopted by Hiller, in his Anweisung zum Gesange (2d edit. 1798 ;) not like those of Guido, to ascertain the intervals of the Scale, but merely to accustom the vocal student to sing upon all the vowels, intermixed with the principal consonants.

‡ Holden, art. 7 ; Malcolm, p. 229 (of Degrees,) chap. viii. § 2.

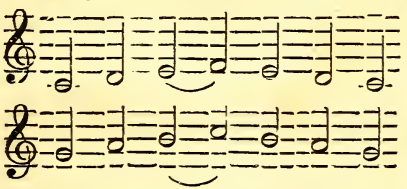
§ An exception to this rule is found in those organs which have what is called short Octaves, and in which the two lower Keys are tuned to G G and C C, although close together like B C.

‖ Even the accurate and learned Butler uses these terms in a vague manner, (p. 22.) He first says : "From Mi to Fa, and from La to Pha, is but half a tone ; between any other two Notes there is a whole tone." Then he adds : "But in singing, how to tune each *Note* and *half Note* to his fellow, cannot be declared by precept."

Sound which is heard, or the mark which represents it on the Staff; but a *Tone* is the distance between *two Notes*, which are called by the names of two adjoining letters, and separated by one single key of the instrument. Thus, the distance from A to B is a Tone; and therefore A is a tone lower than B, and B a tone higher than A.

48. The same observation must be applied to the Semitones, which are sometimes called, though improperly, *half Notes*. The distance from B to C is a Semitone; therefore B is a Semitone lower than C, and C is a Semitone higher than B.

49. By comparing the sounds C D E F with the following sounds G A B C, we find that the distances of both these *fourths** consist exactly of two Tones and a Semitone; therefore any Tune formed by one, will be exactly similar to that of the other.



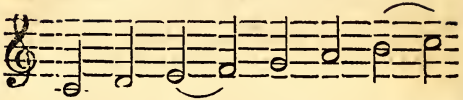
50. These two fourths, taken in succession, form a Scale, of which the chief sound being C, is from thence called the *Key Note*.† The descending series of this Scale corresponds with the common tune of eight bells.

* The ancient term for the fourth was *Tetrachord*: and since the theory of *Rameau* has been known, the old ideas on the subject have been, with some variation, revived. Most of the modern writers (particularly Holden) have thought it necessary to consider the Octave as composed of two fourths, which are disjoined or separated by a tone. As a Practical Introduction to Musical Science, this arrangement may be considered as correct; although theory does not allow the perfect mathematical equality of the fourths, in respect to the places of the Tones which compose them.

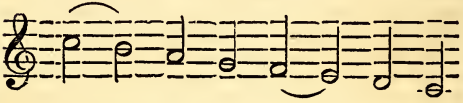
† The term *Key* is used by Dr. Pepusch, in the sense of Church Tone, or Ecclesiastical Mode. In this species of Music, the chief Melody, or Plain Chant, was confined to the natural sounds of the Scale. Treatise on Harmony (1731,) p. 65; Sir J. H. i. 360. A particular account of the eight Tones of *Italy*, and the twelve Modes of *Germany*, may be found in Mr. Kollman's Essay on Musical Harmony (1796,) chap. xviii. p. 124; also in Sir J. H. ii. 410—440.

Scale of C.

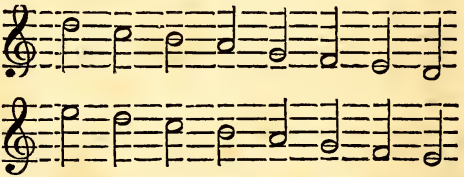
Ascending.



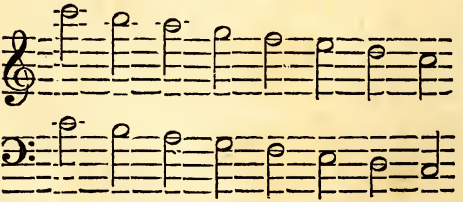
Descending.



51. The effect of these Notes to the ear, depends upon the position of the Semitones. This may be easily perceived by playing eight Notes, from d, or e, or any other part of the Scale, which will not produce the same melody.



52. But if the same letters, in any Octave higher or lower, are taken, the same Tune will be heard.



In this series, the two Semitones of the Octave are

found between the third and fourth, and between the seventh and eighth, of the ascending Scale.*

53. This series of sounds, which is performed on the Organ, &c. with the long keys, is called the *Natural Scale*, to distinguish it from that which employs the short keys intermixed with the others, called the *Chromatic* or Artificial.†

54. In the Vocal Scale of the Solfeggio, the place of the Semitone is ascertained by the syllables *mi fa* and *si do;* between all the others is the distance of a Tone.‡

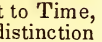
55. As the whole doctrine of Melody, or the Tune of Notes, must depend on a right conception of the two Semitones, and their places in the Scale, great attention should be paid to this part of the subject by every Musical Student.

Sect. III.—Of the Time of Notes.

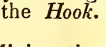
56. The duration of a Note, with respect to Time, is known by its particular form; and the distinction between Notes in this respect, is shewn by making them *white* or *black*, and by the *Stem* and the *Hook*. (See Art. 3.)

The three principal Notes are, the *Minim*, the *Crotchet*, and the *Quaver*.§

57. The *Minim* is a white Note with a Stem made thus, and is as long as two Crotchets, or four Quavers.



58. The *Crotchet* is a black Note with a Stem, made thus, and is as long as two Quavers.



* The reason why the Semitones fall in these places, and in no other, may be found in the theoretical writers, Dr. Holder (1731,) p. 112; Malcolm, p. 229; Mr. Holden, p. 16, art. 43; Maxwell, Essay on Tune (1781,) p. 5.

† Malcolm calls this the Semitonic Scale, p. 291; and the short keys Artificial Notes, p. 292. Its more usual name, Chromatic, will be explained hereafter. Antoniotto (1760) terms the Minor Mode Artificial, p. 35.

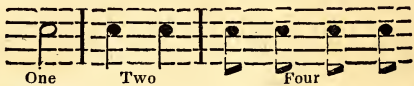
‡ The word Tone will be used throughout this Grammar in this sense, and no other; although it is applied also to the quality of sound in a voice or instrument. Thus it is said, "A fine *Tone* is produced from the Violincello," &c.

§ Butler, p. 27, 28, has given a long account of the origin of these

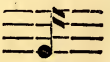
59. The *Quaver* is a black Note with a Stem, and a Hook, made thus,

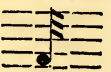
and may be divided into two Semiquavers or four Demisemiquavers.

60. The proportions of these three principal Notes to each other, are therefore as under,

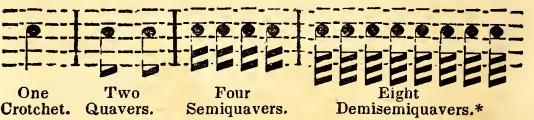


61. When the Quaver is divided into smaller portions, the two following Notes are employed:

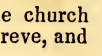
The *Semiquaver*, which is made like the Quaver, but with two Hooks,
being half the length of the Quaver:


and the *Demisemiqvaver*, which has three Hooks,
being one quarter the length of the Quaver.


Their proportions to the Crotchet are,



62. In slow Music, especially that in the church style, two longer Notes are used; the Semibreve, and the Breve.

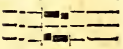
The *Semibreve*† is a round white Note,

without a Stem,
and is as long as two Minims, or four Crotchets.

Notes, from Gafurius, Glareanus, and Listenius. See also Sir J. H. ii. 146; Dr. B. ii. 167; Malcolm, p. 388; Holden, art. 63.

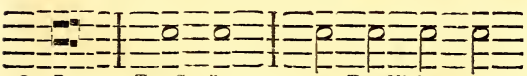
* The Demisemiquaver also is divided in modern Music, and the Notes marked with four Hooks: these may be called half Demisemiquavers; and those which have five Hooks, quarter Demisemiquavers. Playford, Introduction (14th edit. 1700,) p. 8, calls the first of these a *Demiquaver;* which term is also used by some other writers. See Holden, art. 64.

† The Breve and Semibreve are in daily use for our Choir Service. See Boyce's Cathedral Music.

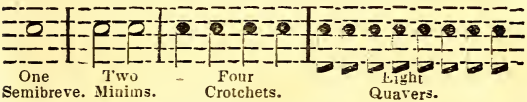
The *Breve* is a square white Note, and is as long as two Semibreves, four Minims, or eight Crotchets.



The proportions of the three white Notes are,

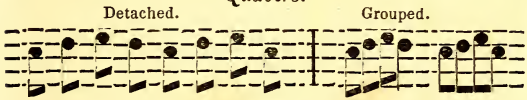


63. The proportion of our modern Notes, both white and black, is, therefore,

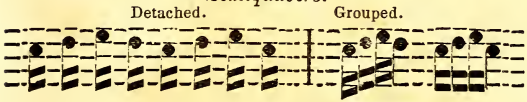


64. Those Notes which are made with Hooks, may be grouped* together by two, three, or four, &c.

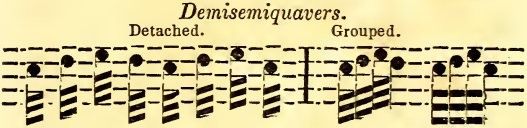
Quavers.



Semiquavers.



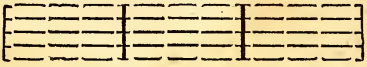
Demisemiquavers.



* The term *Groppo* or Group, is commonly limited to those passages of four Notes in which the first and third are on the same Degree, and the second with the fourth are a Degree higher and lower. Koch's Lexicon, art. *Groppo*, die Walze. Playford, (p. 20,) calls these Hooks, when joined together, *Tyes*: a term which, he also remarks (p. 19,) is used for what we now denominate a *Slur*. As the word *Tye* is also applicable to the *Ligature* or *Bind*, the term *Group* has been preferred by the Author.

This method is not only convenient in writing, but assists the eye in ascertaining the proportion of the Notes, and is of particular use in Vocal Music, to distinguish the Notes which are to be sung to each syllable.

65. Every Musical Piece is divided into equal portions of time called *Measures*. These are ascertained by straight lines, called *Bars*, drawn down the Staff. All the Notes, therefore, contained between two Bars, constitute one Measure.*



66. Every Measure must contain a certain number of Notes, according to the Time marked at the beginning of the Movement. Thus, in Common Time, each Measure includes a Semibreve, or its value in Minims, Crotchets, or Quavers, intermixed as the Melody requires. The exact length of the Measure is known by regularly dividing the Time into equal portions, whether the Notes themselves are long or short; as every Measure must be precisely equal in time, during the continuance of the Movement.

67. There are two chief species of Time,† *Common* or equal—and *Triple* or unequal time. In the first, we count two, four, or eight, in every measure; in the last, we count three or six.

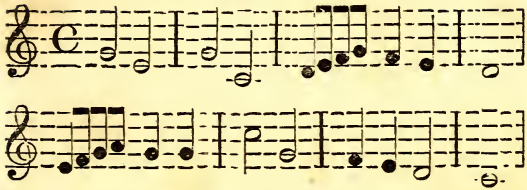
68. I. Common or equal Time, contains one Semibreve, two Minims, for Crotchets, eight Quavers, or their value, in every Measure. This Time is known by a Semicircle‡ placed at the beginning of the Staff after the Clef, thus:

* In common language, the word Bar is used improperly for Measure. Dr. Burney (article *Bar*, Dr. Rees' Cyclopædia) accurately limits the signification of the term as above. Dr. B. ii. 191. The parts of the Measure are called *Times*, by Mr. Kollmann, Essay on Harmony (1796,) p. 73.

† The Germans adopt a third species of Time, containing four equal parts in a Measure; which will be noticed hereafter, in treating of Rhythm.

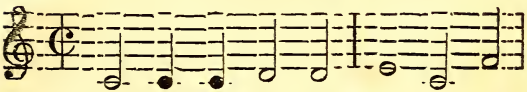
‡ The old doctrines of *Time*, *Mode*, and *Prolation*, may be found in Morley, Ravenscroft, and Butler. See an account of them, and of the original signification of this mark, in Dr. B. ii. 183, 454; Sir J. H. ii. 155.

(Handel: *See the conquering.*)



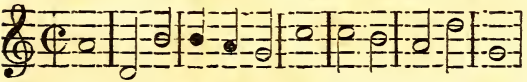
69. The barred Semicircle is used to denote a quicker Movement, and is called *Alla Breve;* because it was formerly written with one Breve in a Measure, thus:

(Orlando Gibbons, Dr. Boyce, V. II. 59: *O clap your hands.*)



This is now more commonly written with one Semibreve in a measure, by dividing those of the Alla Breve into halves.

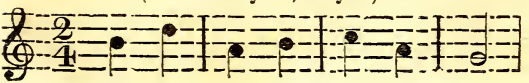
(Handel, *Saul*, Dr. Arnold's edition of Handel's Works, No. 112, p. 36: *Our fainting courage.*)



70. All other Measures are marked by figures, placed one over the other at the commencement of the Staff.

The figure 2 above the figure 4, indicates two Crotchets, or one Minim, in each Measure; and is called *half Time*, being the division of the Semibreve.

(German Hymn, Pleyel.)



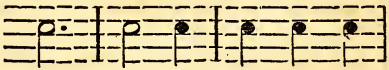
71. The most usual Measures expressed by figures placed at the beginning of the Staff, are the following:*

$$\begin{array}{|c|c|c|c|c|c|c|c|c|c|c|c|}\hline 3 & 3 & 3 & 6 & 6 & 9 & 9 & 12 \\ 2 & 4 & 8 & 4 & 8 & 8 & 16 & 8 \\ \hline\end{array}$$

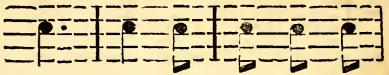
Of these Figures, the upper one shows how many parts are contained in the Measure; and the lower one represents a word, shewing how many of these Notes constitutes a Semibreve. 2, signifies *Minims;* 4, *Crotchets;* 8, *Quavers;* &c.; as in the following Table:

3 Three	3 Three	3 Three
2 *Minims*	4 *Crotchets*	8 *Quavers*
6 Six	6 Six	9 Nine
4 *Crotchets*	8 *Quavers*	16 *Semiquavers*
	12 Twelve	
	8 *Quavers*	

72. When it is necessary to lengthen a Note by half its value, a *dot*† is placed after it. Thus, a dotted Minim is as long as a Minim and a Crotchet, or as three Crotchets.



A dotted Crotchet is as long as a Crotchet and a Quaver, or as three Quavers.‡



73. II. TRIPLE, or unequal Time.

* Grassineau's Dictionary (1740,) p. 292, article TRIPLE, contains a long dissertation, translated from *Brossard*, on the ancient method of marking these Measures.

† The dot is also used for other purposes, viz. to mark those Notes which are to be played distinctly; as also to show the place of repetition, &c. as will be explained hereafter.

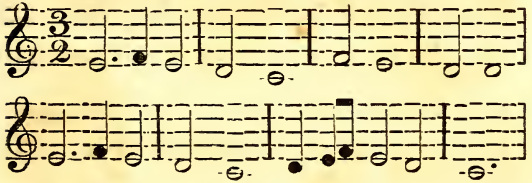
‡ All the notes of Music may also have a double dot after them, which makes them longer by three-fourths. Thus a Minim twice dotted, is equal to three Crotchets and a half, or to seven Quavers, &c.

Of this Time there are three different species in use; namely,

1. Three *Minims*,
2. Three *Crotchets*, } in a Measure.*
3. Three *Quavers*,

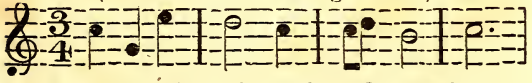
(1.) One dotted *Semibreve*, or three *Minims*, in every Measure; thus,

(Handel's Italian Songs, No. 64: *Verdi Prati—Alcina.*)



(2.) One dotted *Minim*, or three *Crotchets*, in every Measure.

(H. S. I. No. 66: *Fell rage—Saul.*)



(3.) One dotted *Crotchet*, or three *Quavers*, in every Measure.

(H. S. II. 128: *No, let the guilty tremble—Saul.*)

74. When two Measures of three Crotchets, or of three Quavers, are united in one, by the omission of a Bar, the Time is called *Compound Common; Common*, because every Measure is equally divided; and *Compound*, because each half is a single Measure of Triple.

III. Compound Common Time has three species, in general use:

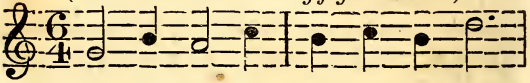
* These three species are very similar, particularly if the two last are performed slowly; the accents of all three being alike.

1. Six *Crotchets*,
2. Six *Quavers*,
3. Twelve *Quavers*,

} in every Measure.

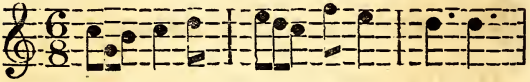
(1.) *Six Crotchets*, or two Measures, of three Crotchets each, joined in one.

(H. S. II. No. 124: *Every joy—Solomon.*)



(2.) *Six Quavers*, or two Measures, of three Quavers each, joined in one.

(H. S. IV. 287: *Sound an alarm—Judas Macabæus.*)

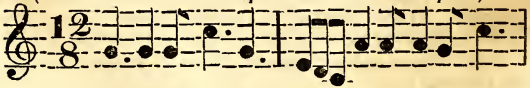


75. When two Measures of six Quavers are further united into one, they form a *double Compound* of twelve Quavers in each Measure, and are equal to four Measures of three Quavers. The omission of the Bars makes some difference in the appearance of the Music, and influences the counting, according to the degree of quickness in which the piece is performed. But, in other respects, the division of the Measure has no power of altering the real nature of the Time or Tune; nor can the Auditor perceive whether the Triple Time performed be expressed by the figures

$$\frac{12}{8} \quad \frac{6}{8} \text{ or } \frac{3}{8}$$

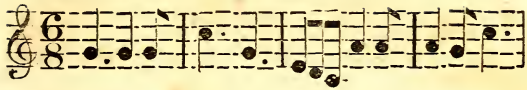
(3.) *Twelve Quavers*, or one Measure of twice six Quavers, or four times three Quavers.

(H. S. I. No. 54: *The peasant tastes—Joseph.**)

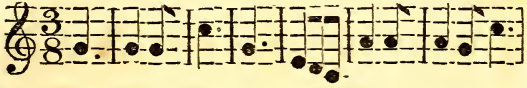


* See also the Pastoral Symphony in the Messiah, and the last Movement in Corelli's 8th Concerto.

The same Melody in six Quavers:



The same Melody in three Quavers:



It may perhaps be useful to those who do not perfectly understand the value of the Notes, to separate this *double Compound* into *single Compound* and into *simple Triple;* and also to turn three Quaver Time into six and twelve Quavers, by striking out the intermediate Bars which separate the Measures.

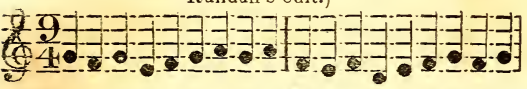
76. IV. Compound Triple Time.

Compound Triple Time is formed by dividing the Measures of simple Triple into nine parts, and by dotting the *Measure Note** of the original Time. Of this there are three species:

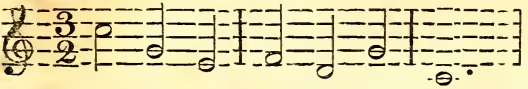
1. *Three* Minims divided into *nine* Crotchets.
2. *Three* Crotchets divided into *nine* Quavers.
3. *Three* Quavers divided into *nine* Semiquavers.

(1.) Nine *Crotchets*, or three Minim Time, divided into Triplets.

(Handel's Italian Duett, No. 5, p. 31: *Va Speme*—Randall's edit.)



The commencement of this Movement, and its other Measures, are simple Triple; thus,

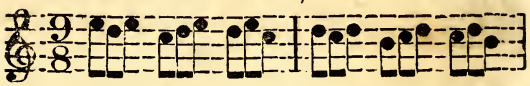


* By *Measure Note*, is meant that which measures the Time in the lower of the two figures, Art. 71.

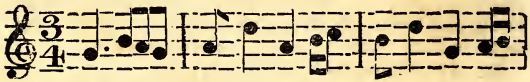
By thus changing the Notation, the advantage is gained of presenting the simple Measures clear to the eye, without the incumbrance of a dot to each Minim.*

(2.) *Nine Quavers*, or three Crotchet Time divided into Triplets.

(H. S. IV. No. 319: *Consider fond shepherd—Acis and Galatea.*)

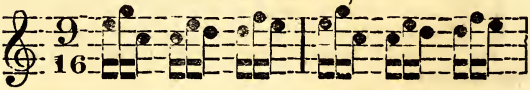


The commencement of this Song, and the other parts, are in simple Triple:* thus,

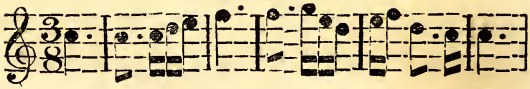


(3.) *Nine Semiquavers*, or three Quaver Time, divided into Triplets.

(H. S. II. No. 156: *Hush, ye pretty warbling choir—Acis and Galatea.*)



The vocal part of this Song is in simple Triple; thus,

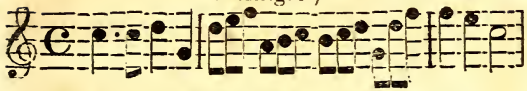


77. From these two species of Compound Time (Common and Triple) arise various kinds of mixt Measures, which are in some parts equally, and in others unequally divided.†

* Malcolm, p. 401.

† Gio. Bat. Doni. remarks, that our *Morley* placed in different *parts*, two Notes against three, and three against four, in the same Measure or Battuta (Annotationi sopra il Compendio. Roma. 1640, p. 57.) See Dr. Burney (art. *Battuta*, Dr. Rees' Cyclopædia.)

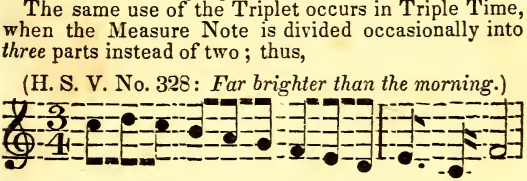
(H. S. IV. No. 315: *I'll to the well trod stage—L'Allegro.*)



The Triplets* of Common Time, which are here found in the place of each Crotchet of the Measure, have sometimes the figure 3 placed over them; but are generally known by being *grouped* together, and then form one of the single parts of the whole Measure.

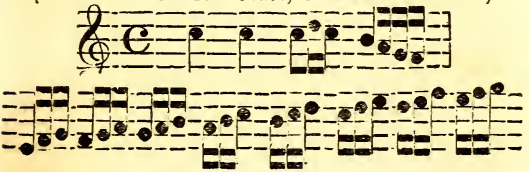
The same use of the Triplet occurs in Triple Time, when the Measure Note is divided occasionally into *three* parts instead of two; thus,

(H. S. V. No. 328: *Far brighter than the morning.*)



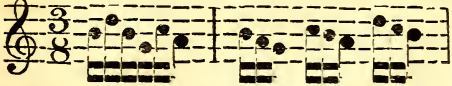
In slow Common Time, when the Quaver is the *Measure Note*, and is divided into *three* Semiquavers, instead of *two*, then the Time is really 24 Semiquavers.†

(H. S. III. No. 240: *Cease, O Judah—Deborah.*)



A similar passage of Semiquavers is found in the Triple of Quavers.

(H. S. I. No. 14: *The enemy said—Israel in Egypt.*)



* Kollmann, Essay on Harm. p. 75 (chap. xi. § 11.)
† Holden, p. 20, art. 27.

When the Measure itself is compound, as *Six Quavers*, then the Triple Subdivision is $\frac{18}{16}$. Of this, an example may be seen in H. S. III. No. 181: *The raptured soul—Theodora.*

The same number of Triplets* (viz. six) is also found in the simple Triple of *three Crotchets*, and in the Compound Triple of *six Qvavers*. An example of $\frac{18}{16}$ as derived from $\frac{3}{4}$, may be found in Dr. Haydn's 2d Sonata, Op. 17, p. 10; and another of $\frac{18}{16}$ as derived from $\frac{6}{8}$, in the same author's 3d Sonata, Op. 13, p. 16.

78. There is also a species of Time, called *Quintuple*, which contains five Crotchets in a Bar; but it is very seldom used.

Tartini considered this Quintuple proportion as unfit for Melody, and impossible to be executed. Time has shown, that neither of these judgments was well founded.†

Sect. IV.—Of the Accent of Notes.

79. The Bars of Music are not only useful for dividing the Movement into equal Measures, but also for showing the Notes upon which the *Accent* is to be laid.

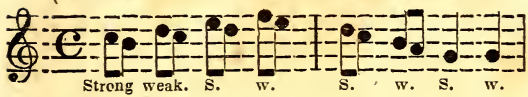
The Measures of Common Time are divided into four parts; of these, the first and third are accented; the second and fourth unaccented. In the course of this Work, the accented will be termed *strong* parts, and the unaccented, *weak* parts of the Measure.‡

* The Germans, in imitation of these (which they term Trioles,) place sometimes 5, 7, &c. small Notes in the Time of 4, 6, &c. of the same denomination, and term them Quintoles, Septimoles, &c. Koch's Lexicon (1802,) art. *Triole*, &c.

† Tartini, Trattato (1754,) p. 114. Dr. B. i. 82. Mr. Reeves' Gypsey Glee: "O who has seen," contains a last Movement in five Crotchet Time—"Come stain your cheek"—which produces a very good effect.

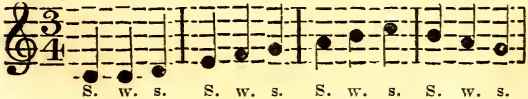
‡ See Rousseau, Dictionnaire (1768,) art. *Temps*; Sultzer's Theorie.

(H. S. II. No. 119: *Praise the Lord—Esther.*



80. The Measures of Triple Time consist of three parts; the first *strong*, the two others *weak;* although the last part is rather *strong* in comparison of the middle part.*

(H. S. III. No. 233: *Up the dreadful steep—Jephtha.*)



81. In *slow Common Time* the Accents are more frequent; but they are found in the same proportion on the first, third, fifth, and seventh Quavers, which are the *strong* parts, while the second, fourth, sixth, and eighth, are the *weak* parts.

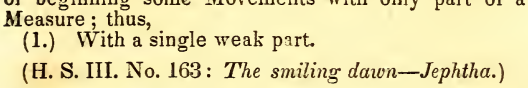
In *three Crotchet Time*, when divided into Quavers, the first, third, and fifth Quavers are *strong;* the second, fourth, and sixth, *weak.*

In *six Quaver Time*, the first and fourth Quavers are *strong;* the others *weak.*†

82. From the nature of Accent arises the necessity of beginning some Movements with only part of a Measure; thus,

(1.) With a single weak part.

(H. S. III. No. 163: *The smiling dawn—Jephtha.*)



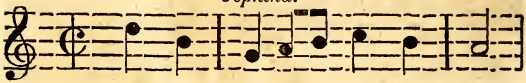
The author has translated the *Temps fort et foible* of the French writers rather than the *Tempo buono e cattivo*, of the Italians, or the *Gute und Schlechte Tactzeit* of the Germans. See Koch's Lexicon (1802,) art. *Tact.*

* Dr. Burney (art. *Accent*, Dr. Rees' Cyclopædia.)

† An example of the same Melody in these two different Measures, may be found in Dr. Arnold's Lessons, Op. XII. Lesson 2, p. 4.

(2.) With a half Measure.

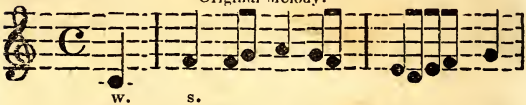
(H. S. III. No. 162: *Welcome as the cheerful day—Jephtha.*



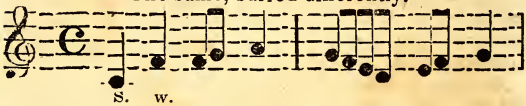
The following Melody, barred in two different ways, produces two opposite effects, the Accent falling upon different Notes.

Scotch Air—*Corn Riggs.*

Original Melody.



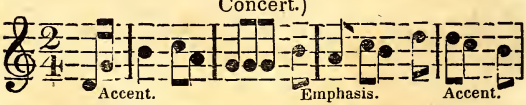
The same, barred differently.



83. When the Composer intends that the *weak* parts of the Measure should be made of more importance than the *strong* parts, such deviation from the regular Accent, in this Work, will be termed *Emphasis.*

In passages like the following, the Quavers are often grouped together according to the *Emphasis*, and not (as in general) according to the Accent.

(Haydn's Symphony, No. III. performed at Salomon's Concert.)



In the two first measures of this Example, the Quavers are grouped according to the *Accent;* in the third according to the *Emphasis,** contrary to the Accent;

* The Germans divide Accent into two principal species—Grammatical and Rhetorical: the first is here termed *Accent*, the last, *Emphasis.*

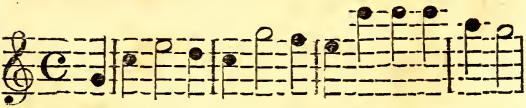
and in the fourth, the Accent again resumes its importance.

The Italian words, *Rinforzando Sforzato*,* or their contractions, *Rinf. Rf. Sforz. Sf.* are often used to mark the *Emphasis*, and sometimes are placed over accented Notes.

As every species of Measure may be subdivided by Accents, according to the degree of quickness in which it is performed; so also the weak parts of every Measure may be occasionally made emphatic at the pleasure of the Composer.

84. To this species of effect may be referred all *syncopated* or *driving*† Notes which begin on the *weak*, and end on the *strong* part of the Measure.

(Vanhall's Overture in C—periodical, No. 42.)



In this Example, the Emphasis is on the syncopated *Minims*, which begin on the second, and end on the third part of the Measure.

(H. S. I. No. 6: *How vain is man—Judas Maccabæus.*)

In this example, the Emphasis is on the syncopated *Crotchets*, which begin on the second and sixth (or the *weak*,) and end on the third and seventh (or the *strong*) parts of the Measure.

* The difference between *Rinf.* and *Sforz.* is explained by Mr. Shield (Introduction to Harmony, 1800,) p. 88.

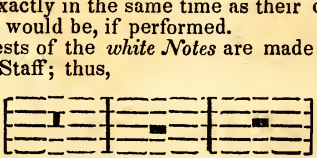
† Morley (edit. 1597,) p. 90 (edit. 1771,) p. 100. Butler, p. 64. Simpson, p. 19. Pepusch, p. 57. Rameau, p. 112. Holden, p. 34, art. 98. Kollmann, Essay on Harmony, p. 96 (chap. xiii. § 21.) Dr. B. i. 103.

CHAP. IV.

OF THE RESTS.

Art. 85. When, in the course of a movement, silence is required for one or more parts of a Measure, that silence is denoted by a *Rest*, or *Rests*, which are counted exactly in the same time as their corresponding Notes would be, if performed.

The Rests of the *white Notes* are made in the middle of the Staff; thus,

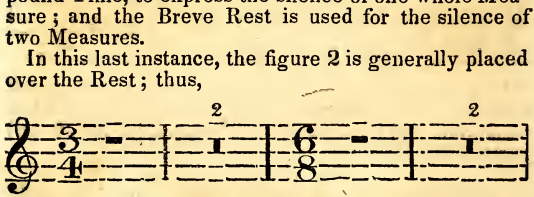


Rest of the Breve. Semibreve. Minim.

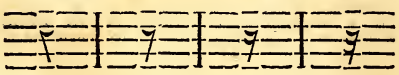
(1.) The *Breve Rest* extends from Line to Line.
(2.) The *Semibreve Rest* is made below the Line.
(3.) The *Minim Rest* is made above the Line.*

The Semibreve Rest is also used in Triple and Compound Time, to express the silence of one whole Measure; and the Breve Rest is used for the silence of two Measures.

In this last instance, the figure 2 is generally placed over the Rest; thus,



86. The Rests of the *black Notes* are made thus,



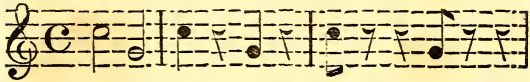
* The Rest of four Semibreves, or two Breves, passes through two Spaces. This is only used in the single parts of Instrumental Pieces. Rousseau, art. *Baton.*

(1.) The *Crotchet Rest* turns to the right.
(2.) The *Quaver Rest* turns to the left.
(3.) The *Semiquaver Rest* turns to the left, and has two marks.
(4.) The *Demisemiquaver Rest* has three marks, and turns to the left also.

As the *Rests* are inserted in the Measures, to fill up the Time when no Sounds are to be heard, the Performer should, of course, pay particular attention to the termination of the Notes which precede them.

In playing Keyed Instruments, the Rests are often much neglected; and, unless the Player *carefully* raises the finger from the Key (but not too far) at the exact commencement of the Rest, the intended effect is destroyed.

An instance of the great attention necessary to be paid to these signs, is shown in the following Example, where the variety of *these* three Measures wholly depends on the Rests, the Music being exactly the same in every other respect of *Tune*, *Time*, and *Accent*.*



* The Author is induced to insert here, in addition to these remarks on the observance of Rests, the excellent ideas of C. P. Em. Bach (Versuch. edit. 1787, p. 85, Vom Vortrage,) upon the true method of playing Keyed Instruments.

An abridgement of his system is thus attempted in a few lines.

"To form a *clear*, *pleasing*, and *expressive* Performer, three things are requisite:

"1. *To play correctly*, by covering every Note with the finger before it is struck (when possible,) so that, in the most difficult passages the motion of the hands may be scarcely perceived, (p. 13.)

"2. *To make the Instrument sing*, by taking one finger off the Key at the instant the other strikes the following Note; and by never playing the Notes short or detached, except when expressly marked. (p. 88.)

"3. *To play with expression*, by forcing the finger down upon the Key (already covered and lightly touched,) according to the Accent or Emphasis." (p. 93.)

On this subject see also Clementi's Introduction, p. 15, Dussek's Instructions, p. 8. Hullmandel's Principles, p. 19.

CHAP. V.

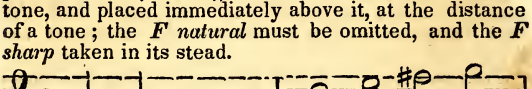
OF THE SHARPS, FLATS, &c.

Art. 87. In explaining the tune of Notes (Art. 45,) the two different intervals of *Tone* and *Semitone* have been noticed. Every Tone in the Natural Scale, is divided into two Semitones, by an intermediate Sound. This Sound is produced, upon Keyed Instruments, by striking the short Key inserted between two long ones, which are consequently Tones to each other.

Sect. I.—Of the Sharps.

88. When the short Key is to be played, instead of the natural Note below it (on the left,) then the same letter is used, with the additional term *sharp*.*

89. Thus, to make another *fourth* similar to the upper one of C (Art. 50,) with two Tones and a Semitone, and placed immediately above it, at the distance of a tone; the *F natural* must be omitted, and the *F sharp* taken in its stead.

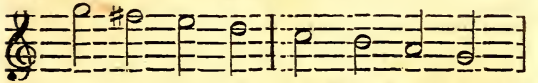


The character placed before F is called a *Sharp*.†

* The character now used for the Sharp, was originally designed to represent, by its four cross lines, the four Commas of the Chromatic Semitone. Such is the signification of the mark given by *Bontempi* (1695,) p. 205, from the Recanetum of *Vanneo* (Roma. 1533;) but *Marcheto* de Padua, who first employed it (1274,) does not mention this circumstance. See *Gerbert*, Scriptores Ecclesiastici (1784,) iii. 73, 89. Dr. B. ii. 163, 351. Sir J. H. i. 78.

† The Germans consider this character as an alteration of the letter B, and call it a Cross (Kreuz,) or *latticed* B (Gegittertes Be, B cancellatum,) *Adlung* (Hiller's edit. 1783,) p. 251. Sir J. H. iv. 163. They also add the syllable IS to the names of those letters of the Scale which are sharpened. Thus Fis, Cis, Gis, Dis, Ais, Eis, and His, signify F, C, G, D, A, E, and B Sharp.

90. These two *Fourths* united, form a new Scale, of which G is the Key Note, exactly similar to C, but five degrees higher. Its descending series proves, by the Melody, that the Tones and Semitones are between the same Degrees of the Scale.



91. As the Scale of G is made complete by this alteration of the F alone, F is reckoned the *first Sharp.* For a similar reason (that of forming a new fourth above the upper one of G Scale,) C is termed the *second Sharp.** Thus the series of Sharps ascends by fifths; which, in respect of the Letters, is the same as descending by fourths.

F	C	G	D	A
1	2	3	4	5

These sharps are performed, on Keyed Instruments, with the five short Keys above; that is, on the right hand of the long ones: the division of two† consists of C sharp and D sharp; the remaining three are F sharp, G sharp, and A sharp.

92. But since there are no short Keys between E and F, nor between B and C, which are only Semitones to each other (Art. 46, 48,) *F natural* is employed to express *E sharp*, and *C natural* to express *B sharp.* When these Notes, E and B, become sharpened, their own long Keys are never used; and, by their introduction, the series of Sharps is extended to all the seven Notes.

F	C	G	D	A	E	B
1	2	3	4	5	6	7

Sect. II.—Of the Flats.

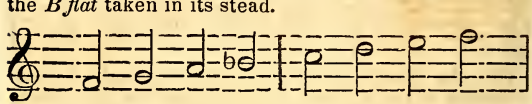
93. When the short Key is to be played, instead of

* The French use the term *Diese*, derived from the Greek word *Diesis*, and annex it to the syllables of Guido. Thus, *Fa-diese* signifies F sharp: *Ut-diese*, C sharp, &c.

† See Art. 39.

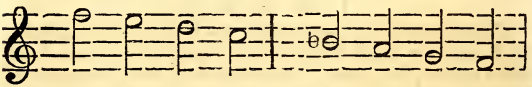
the natural Note above it (on the right,) then the same letter is used, with the additional term *flat.**

Thus, to make another *fourth*, similar to the lower one of C (Art. 50,) with a Semitone and two Tones, placed also below it, (extending to the left,) at the distance of a Tone, the *B natural* must be omitted, and the *B flat* taken in its stead.



The character placed before B is called a *Flat.*

94. These two *fourths* united, form a new Scale, of which F is the Key Note; exactly similar to C, but five Degrees lower. Its descending series proves, by the Melody, that the Tones and Semitones are between the same Degrees of the Scale.



95. As the Scale of F is made complete by this alteration of B alone, B is reckoned the *first Flat.*† For a similar reason (that of forming a new fourth below the lower one of the F Scale,) E is termed the *second Flat.* Thus the series of Flats ascends by fourths, which, in respect to the letters, is the same as descending by fifths.

* The mark now used for the Flat, was originally the letter B, introduced to avoid the *Tritone* or *sharp Fourth*, between F and B natural. By the ancient writers (Guido, &c.) it was termed B-*molle*; that is, the *soft*, or (according to some) the *moveable* B. See *Gerbert* (De Cantu, 1774, ii. 72.)

Walther's Lexicon (1732) contains a long article, and an extract, from Simon de Quercu (1509) on the subject. Before the literal Notation of the middle ages, and its present appellation, B flat was employed as the *Trite* or third sound (descending,) of the Synemmenon or conjunct Tetrachord of the Greek Scale.

† This character was formerly of such importance, that it is enumerated by *Gafurius* among the Clefs (see the Note, p. 18,) and was accounted the Clef of the F Hexachord, as the other two clefs, now called Tenor and Base, were of the G and C Hexachords. These letters were selected from the seven, to show the places of the three Semitones, in the three different Scales of *Guido* termed *naturale durum*, and *molle*; and, being the highest sounds of the two which formed each Semitone, were always sung with the syllable *Fa.*

B E A D G
1 2 3 4 5

These Flats are performed, on Keyed Instruments, with the five short Keys below; that is, on the left of the long ones: the division of two consists of E flat and D flat; and the other three are B flat, A flat, and G flat. For the reason given (Art. 92,) concerning the Sharps, *B natural* is employed to express *C flat*, and *E natural* is employed to express *F flat*. Thus the whole series of seven Flats is completed.

B E A D G C F*
1 2 3 4 5 6 7

This series is exactly the reverse of that given of the Sharps (Art. 92.)

It must be recollected, that every one of the short Keys has two different letters for its name, according to the natural Note for which it is employed.

Thus the middle Key of the three short ones is equally used as the third Sharp in the place of G natural below it, and as the third Flat in the place of A natural above it.

96. When any number of Sharps or Flats are placed after the Clef, at the beginning of the Staff, they affect all the Notes of the same letter in every Octave throughout the Movement, and are termed the *Signature.*

Those which occur in the course of the Movement, in addition to the others, are termed *accidental*,† to distinguish them from those of the Signature, which are *essential* to the Scale of the original Key Note.

The *accidental* Flats and Sharps only affect the Notes which they immediately precede, and those of the same letter which follow them in the same Mea-

* The Germans add the syllable *es* to the names of the letters which are flat (except B,) which retains its original signification; and their series, B, Es, As, Des, Ges, Ces, and Fes, correspond to the Scale given above. See also Dr. B. ii. 73, 392, upon the subject of B flat.

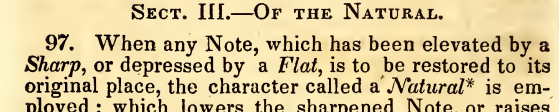
The French use the term *bemol* from the Latin, and annex it to the Vocal Syllable; thus *Si bemol* is B flat; *Mi bemol*, E flat, &c.

† Naumberger (of Reading, Berkshire,) in his translation of Turk's Klavier Schule (1804,) p. 4, translates the German term, Versetzungzeichen, *Marks of Transposition*. Kollmann, Essay on Harmony, p. 8, calls them *Accidentals*. See also Malcolm, p. 365. Holden, p. 21, art. 57.

sure; but, if one Measure ends, and the next begins, with the same Note, the accidental Character which alters the first Note, is understood to affect the second.

Sect. III.—Of the Natural.

97. When any Note, which has been elevated by a *Sharp*, or depressed by a *Flat*, is to be restored to its original place, the character called a *Natural** is employed; which lowers the sharpened Note, or raises the flattened Note; thus,



The *Natural*, although a very ancient character, was not used by Morley, Simpson, or Playford. They always employed the *Flat* to take away the *Sharp*, and the *Sharp* to take away the *Flat*, in the same manner as we now use the Natural.†

Hence are found, in old Music, the Sharp before B, and the Flat before F; not, as now, to represent B Sharp and F Flat, but merely to take away a preceding Flat or Sharp.

The Natural, although evidently an *accidental* Character, and a more general expression for the two others (the Sharp and the Flat,) is sometimes placed *essentially* at the beginning of a Strain, when a former part of the same Movement has had a Sharp or Flat in

* Gafurius (Practica, fol. 2,) asserts that the character of the Natural, or B Quadrum (*i. e.* Quadratum,) is formed of two Greek *Gammas* joined invertedly (*conversim conjuncta*;) but it is generally described as a Gothic or *square* B, made in that form to distinguish it from the *round* B, which expressed the Flat.

The ancient printers, not having a proper type cast to represent this character, used the small h; a specimen of which may be seen in the Dialogo of Vincentio Galilei (1581,) p. 4. *Adlung* (edit. 1783,) p. 196, attributes the German method of using the letter H, instead of B natural, to the same cause. See Kollmann, Essay on Composition (1799,) p. 52. Sir J. H. v. 254.

† The German Scale of the natural Notes is A, H, C, D, E, F, G; not A, B, C, &c.; the B is always reserved to express B flat.

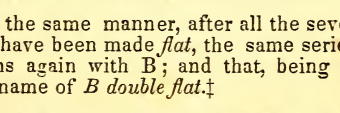
The French call the Natural *Bequarre*, (Rousseau.)

its Signature. (See Steibelt's Sonatas, Op. 37, Turkish Rondo, p. 10.) According to its power, therefore, of raising or lowering any Note of the Scale, the *Natural* must be always considered as representing a *Sharp* or a *Flat.**

Sect. IV.—Of the Double Sharp.

98. After all the Notes of Music have been made *sharp*, the same series of letters begins again, and F, being the first, takes the name of *F double Sharp.*†

It is performed, on Keyed Instruments, by striking the long Key G natural; which is not, however, to be reckoned *then* as a Tone from F natural, being placed on the same degree as F (Art. 47,) and also consisting of two Chromatic (or Minor) Semitones.



Sect. V.—Of the Double Flat.

99. In the same manner, after all the seven Notes of Music have been made *flat*, the same series of letters begins again with B; and that, being the first, takes the name of *B double flat.*‡

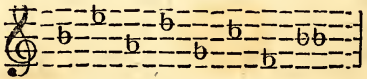
* In Handel's Song of *Pious Orgies*, *Judas Maccabæus* (No. 1.) the Natural is frequently employed; and, in one particular Measure, sharpens the *Treble*, and flattens the *Base*. More concerning these characters may be found in Butler, p. 21; Simpson, p. 5; and Holden, p. 16, art. 43. Turner (p. 51.) calls the Natural a Mark of Restoration.

† The Double Sharp is sometimes marked with a single cross thus, +, which, according to Vanneo (see the Note, p. 54,) originally represented the two Commas of the Quarter-tone, or enharmonic Diesis, and which properly represents the distance between the F double Sharp and the G natural.

Keeble (Harmonics, 1784,) p. 106, censures Kircher and Zarlino for the improper use of this character. See Kircher, *Musargia*, (1650,) i. 145, 659. Zarlino (1589,) i. 363. Salinas (1577,) p. 121. Padre Martini, *Storia* (1757,) i. 97, 108. Lemme Rossi (1666,) p. 45. Sir J. H. i. 110.

‡ The Germans have sometimes employed a large B, as the char-

It is performed by striking the long Key A natural two Chromatic Semitones lower. It is worthy of notice, that, as the first Sharp is the lowest, and the first Flat the highest of the three short Keys which are near each other; so the first Double Sharp and the first Double Flat (the only two in general use) are played with the two long Keys which are enclosed by F sharp and B flat.



100. As these two Characters, viz. the Double Sharp and the Double Flat, seldom occur, the mode of restoring the single Sharp, or Flat, after the use of the double Character, varies with different authors.* Some use a single Sharp or Flat; some employ a natural, or else unite the single Sharp or Flat with the Natural;† thus, ♮ ♯, ♮ ♭; and others again leave the passage to the ear and judgment of the performer, who ought they suppose, if able to play in seven Sharps, to know how to restore the altered Note to its proper situation, without any particular Mark.

acter of the Double Flat. The difficulties arising from this mark are stated by *Turk* (Klavier Schule, 1789,) p. 50. Dussek, in his Introduction p. 36, unites the two B's with a kind of hook, similar to the grouping of Quavers (Art. 64, p. 35.) The German names for the Double Sharps, are Fisfis, Ciscis, &c.; and for the Double Flats, Bebe, Eses, Asas, Desdes, &c. Adlung, p. 254.

* Even in respect of the Double Sharp, instances are found in Handel, where it is not distinguished by any particular mark, but where only a common single Sharp is placed against F, already sharp in the Signature. See H. S. i. No. 9: *Fly from the threatening*.

† Some of the writers in Germany are (as Turk, p. 52, observes,) precipitate in their judgments, and therefore frequently erroneous. G. F. Wolfe (1783) p. 22. Lohlein (1765,) p. 11. Tubel (1767,) p. 9. Merbach (1782,) p. 13.

CHAP. VI.

OF GRACES, CHARACTERS, MARKS OF EXPRESSION, AND ABBREVIATIONS.

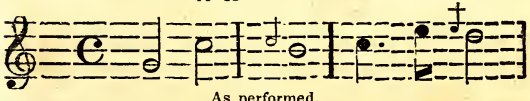
Sect. I.—Of Graces.

Art. 101. As the German authors, C. P. Emanuel Bach, and G. D. Turk, have treated at large on the subject of Musical *Graces (Manieren,*)* a short sketch of their doctrines will here be given.

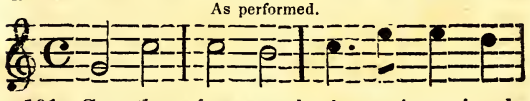
102. The principal Graces of Melody are, the Appoggiatura, the Shake, the Turn, and the Beat; with the Mordent, Beat, Slide, and Spring, peculiar to the Germans. The chief ornaments of Harmony are, the Arpeggio, Tremando, &c.†

103. I. The *Appoggiatura*‡ *(Vorschlag)* is a small Note placed before a large one of longer duration, from which it generally borrows half the value, and always occurs on the *strong* part of the Measure.

The Appoggiatura as written.



As performed.

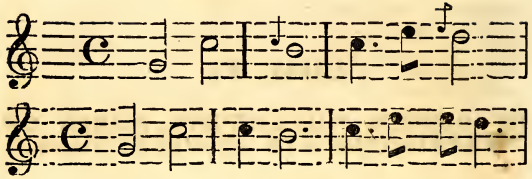


104. Sometimes, however, the Appoggiatura is only one quarter of the Note it precedes, as in the following Example; thus,

* Bach, p. 45. Turk, p. 207.

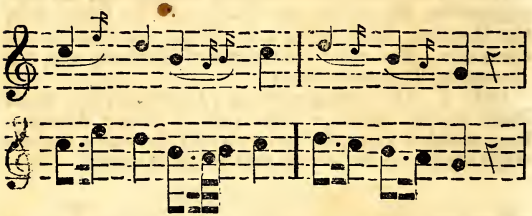
† The old English Graces, published by Simpson (Division Viol, 1667,) as defined by Dr. Colman, are divided into two classes,—the *smooth* and the *shaked* Graces. In the first class are the Beat, Backfall, double Backfall, Elevation, Springer, and Cadent; in the second are the shaked Backfall, close Shake, shaked Beat, shaked Elevation, shaked Cadent, and double Relish. See also Playford, p. 100.

‡ Dr. Burney, art. *Appoggiatura.* Dr. Rees' Cyclopædia.



105. When a small Note follows a larger one, and depends upon that for its time, the name of *After-Note (Nachschlag*)* will be used in this Work, to distinguish it from the Appoggiatura.

This Grace always occurs on the weak part of the Measure.

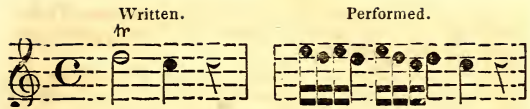


106. The Germans divide these Notes, which do not constitute the *essential*, but the *ornamental* parts of Melody, into two classes. I. *Passing* Notes *(Durchgehende* Noten;) and II. *Changing* Notes (*Wechselnde* Noten;) but the Appoggiatura, when it is a suspension of the large Note before it, as in the Example just adduced (Art. 103,) does not belong to either class. These will be explained in the Third Part of this Work, upon Harmony.

107. II. The *Shake*† *(Triller)* consists of a quick alternate repetition of the Note above, with that over which the mark is placed; and commonly ends with a turn from the Note below. It is usually defined thus:

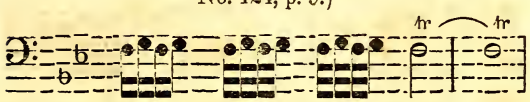
* The German word *Nachschlag*, is also used to express the turn of the Shake.

† Bach. p. 51. Turk, p. 252. Sir J. H. iv. 469. Dr. B. iii. 528, 616. Clementi, p. 11. Dussek, p. 6. Hullmandel, p. 27.



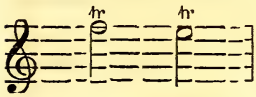
In this Example, the *upper Note* is accented: there are, however, instances in which the Composer seems to have designed that the *lower Note*, or that over which the Shake is placed, should be accented; thus,

(Handel's second Organ Concertos, Dr. Arnold's edit. No. 124, p. 9.)

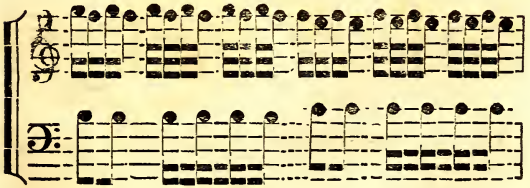


The principal or written Note of the Shake (over which the Character is placed,) is called by the Germans the *Haupt-ton;* and the secondary or superior Note, the *Hulfston.*

108. The following method of practising the Vocal Shake, has been communicated to the Author of the present Work by his friend Mr. Greatorex, to whom it was given at Rome, in the year 1786, by *Santarelli*, Chapel-Master to the Pope.



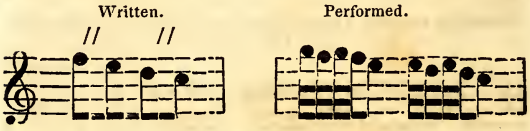
Performed in practice thus:



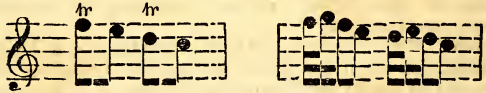
109. A series of continued Shakes, on Notes rising

or falling by Degress, is called by the Germans ***Triller Kette***, and by the Italians *Catena di Trilli*, both signifying a *chain of Shakes.*

110. The *Passing Shake* (Præll Triller)* is expressed in Germany by a particular character; and its definition varies with different Masters, and in different passages. The explanation of Dr. Arnold (Op. XII. p. 38) is therefore given here, with the mark he adopted for it.

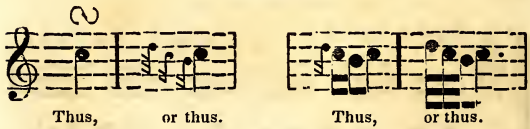


The *Mordente* of the Italian School is used in similar passages, and performed thus:



Some remarks on the various methods of performing these Graces, are given by Clementi (Introduction,) p. 11.

111. III. The *Turn* (Doppelschlag)* employs the Note above and that below, in the following manner:

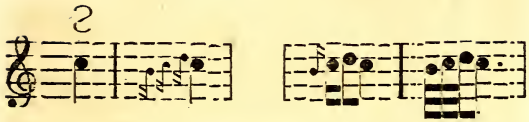


112. The *Inverted Turn* begins from the Note below.

* Turk, p. 272. † Bach, p. 61.

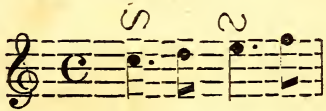
(Dr. Arnold, Op. XII. p. 38.)

Written. Performed.

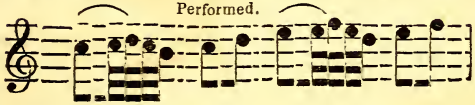


The Turn on the dotted Note is in frequent use.

Written.

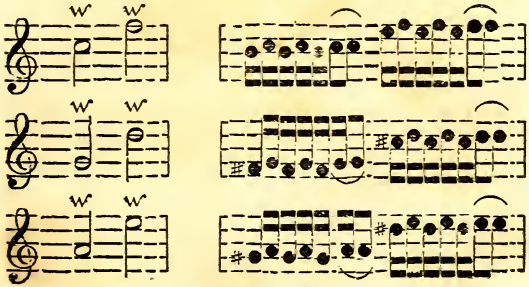


Performed.



113. IV. The *Beat** is the reverse of the Shake (but without the turn,) and made generally at the distance of the Semitone below; therefore all the Natural Notes, excepting C and F, require the Note below them to be accidentally sharpened for the Beat.

Written. Performed.

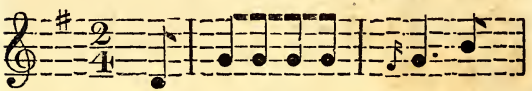


* Battement. Turk, p. 281.

The Beat upon B natural, however, is seldom made with A sharp, on account of the great harshness arising from the vicinity of the Semitone B C.

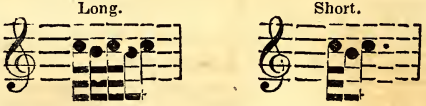
In some cases of regular ascent, it is recommended not to make the Beat with the Semitone, unless particularly marked. (See *Clementi*, p. 11.)

114. In the *Half Beat (Zusammenschlag,)* the inferior Note is struck only once, and at the same time with the principal Note, but is immediately quitted. This is frequently used upon the Organ, and particularly in the Base.* It may be written by a small Note, like a short Appoggiatura, and is very similar to the *Acciaccatura*† of the Italians.



115. In the Third Part of this Work, upon Harmony, will be shown how the Diatonic Suspensions and Transitions arise from the *Appogiatura* and the *After Note;* while the Chromatic Licenses are derived from the *Acciacatura* or *Half Beat.* These Graces are therefore of very great theoretical importance.

116. V. The German *Mordent*‡ *(Beisser)* is a species of Beat, commencing with the Note itself, and is either *long* or *short;* thus,

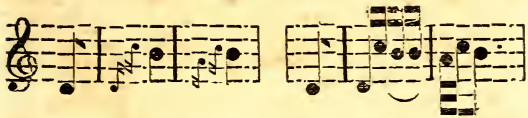


This differs considerably from the *Mordente* before described, (Art. 110,) being made with the next Degree below. That of the Italian School always employs the next Degree above.

* Kollmann, Essay on Composition, p. 98, terms it a *Base-Grace*, and shows how it is employed to strengthen the parts, and to supply the want of Pedals.

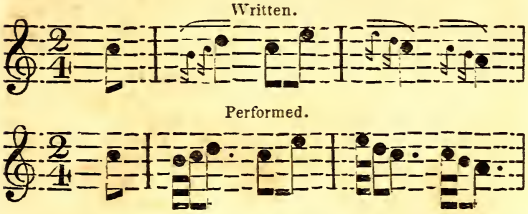
† Burney, art. *Acciaccatura.* Dr. Rees' Cyclopædia. Gaspamonico Prattico, 1729, edit. 3d, p. 63.
h, 73. Turk, 275.

117. VI. The German *Beat* (Anschlag,)* consists of two small Notes, which form a *Skip*, and descends one Degree upon the principal Note.



In the Translation of Turk (p. 26,) Naumberger calls this Grace a double Appoggiatura.

118. VII. The German *Slide† (Schleiffer)* consists of two small Notes, which move by *Degrees;* thus,



119. VIII. The German *Spring‡ (Schneller)* consists of two small Notes, like the Italian Mordente, but very distinct; thus,

120. All these Graces are liable to the occasional alteration of any of their Notes, by Sharps, Flats, or Naturals; and in that case, the Composer is expected to mark them as they are to be performed.

121. To these Graces of Melody may be added

* Bach, 77. Turk, 241. † Bach, 80. Turk, 245.
‡ Bach, 83. Turk, 251.

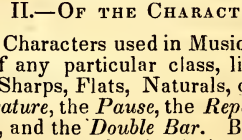
those of Harmony; the *Tremolo (Bebung,)* or reiteration of one Note of the Chord; the *Tremando*, or general shake of the whole Chord; and the *Arpeggio (Brechung,)* or imitation of the Harp, by striking the Notes of the Chord in quick and repeated succession.

122. Clementi (Introduction, p. 9,) has given an explanation of two different characters used for a Chord (or combination of several sounds struck together,) upon Keyed Instruments.

(1.) When a *Waving Line* is placed vertically before the Chord, the Notes are played successively, from the lowest ascending to the highest, and retained down the full time of the Chord.

(2.) When an *Oblique Line* passes through the Chord, it is played as before, with the addition of a Note* where the Oblique Line is placed; but this added Note is not to be kept down.

Written. Played.



Sect. II.—Of the Characters.

123. Those Characters used in Music which do not form a part of any particular class, like the Clefs, Notes, Rests, Sharps, Flats, Naturals, or Graces, are the *Tye* or *Ligature*, the *Pause*, the *Repeat*, the *Direct*, the *Single Bar*, and the *Double Bar*. But, as the Tye is similar in form to the Slur, it will be classed among the Marks of Expression in the next Section.

124. The *Pause*† is placed over a Note to signify

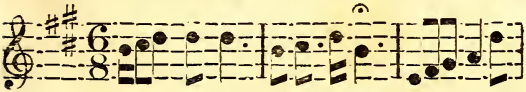
* This added Note is the Acciaccatura before described, Art. 114, and answers to the *Zusammenschlag* of the Germans. Turk, 279.

† Butler, p. 38, calls the Rests *Pauses*, and the Pause a *Close*. The Italian term is *Coronata*, Zaccharia Tevo, 1705, p. 25; and the German, *Fermate*, Petri, Anleitung, 1782, p. 145. Holden, p. 37, calls the Pause a *Hold*.

The Pause, when found on the last Note but one of a Melody, is a sign for the Vocal or Instrumental Performer to introduce such extemporaneous passages, previous to the final Shake, as are generally termed a *Cadenza*.

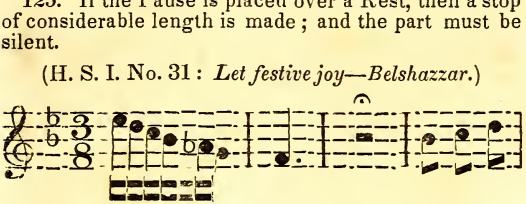
that the regular time of the Movement is to be delayed, and a long continuance of the Sound made on that part of the Measure.

(H. S. II. No. 82: *Bless'd the day—Solomon.*)



125. If the Pause is placed over a Rest, then a stop of considerable length is made; and the part must be silent.

(H. S. I. No. 31: *Let festive joy—Belshazzar.*)



126. The same character is employed for another purpose in those Songs of Handel, Hasse, Vinci, &c. which have a second part, and are marked *Da Capo.**

(H. S. II. No. 157: *As when the dove—Acis and Galatea.*)

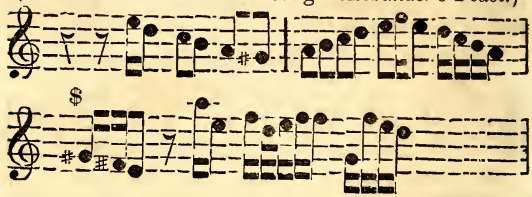
The Pause in this Example, only shows the Note upon which the piece is finally to terminate; but it is not always followed by the Double Bar.

127. The *Repeat*† (𝄋) is a sign employed to show the place to which the Performer must return to repeat the passage. It is usually found in *Rondos* and *Da Capo Airs;* and it marks that place, in the first strain, where the repetition is to commence. This mark is called in Italian, *Segno*, or the *Sign.*

* *Da Capo* are two Italian words, which signify *from the beginning*, and are frequently joined with *al Segno*, which mean, that the Performer is to return, and to commence the Repeat *at the sign.*

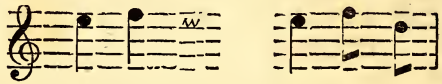
† Mark of Repetition. Morley, p. 74. Simpson, p. 19, Malcolm, p. 411.

(H. S. I. No. 153: *War he sung—Alexander's Feast.*)



128. The *Direct** (𝆮) is a sign employed at the end of the Staff, to show upon what Degree the first Note of the following Staff is placed.

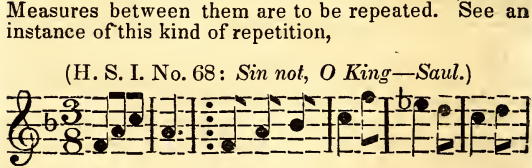
(Rameau, Treatise, p. 168.)



129. The *Single Bar*† has been already mentioned (Art. 65, p. 28,) as dividing the movement into equal portions or Measures. It is considered in Germany as a mark of the *grammatical* Accent; since the first *Time*‡ of every Measure is always a *strong* part, and is distinguished by a particular pressure.

When the inner sides of two Bars are dotted, all the Measures between them are to be repeated. See an instance of this kind of repetition,

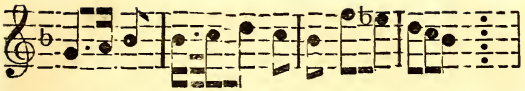
(H. S. I. No. 68: *Sin not, O King—Saul.*)



* The Direct is called by Morley, p. 22, *Index* or Director. Butler, p. 37. Holden, p. 38, art. 113.

† Butler, p. 38, terms the ancient thick single Bar the *imperfect Close*. Simpson, p. 19. Malcolm, p. 411.

‡ The Author is induced to adopt the expression of the ancient authors, and to call the parts of the Measure, *Times*. Art. 65, p. 28. See also Malcolm, p. 399. The particular utility of the term will appear in the Fourth Part of this Work, upon Rhythm.



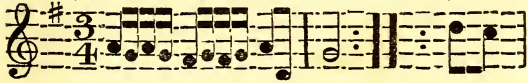
The word *Bis* (twice) is sometimes placed over passages of this kind, whether the Bars are, or are not dotted.

130. The *Double Bar** is placed always at the end of a Movement, and is sometimes used at other parts, to show the *rhetorical* termination of a Strain.

If the Double Bar is dotted on one or both sides, all the Measures on the same side with the Dots are to be repeated from the beginning, or from the antecedent Double Bar.

131. When the *rhetorical* termination of a Strain does not coincide with the *grammatical* Accent, the Double Bar is then totally distinct from the Single Bar, and the Measures are only reckoned between the Single Bars, although the Double Bar may intervene.

(H. S. V. 374: *Above measure—Semele.*)



This Double Bar does not affect the Measure in which it is placed, but the time is kept exactly as if it were not inserted.

132. As it appears, from the preceding observations, that the Double Bar is very different and distinct from the Single Bar, the *grammatical* use of the latter must not be confounded with the *rhetorical* employment of the former.

133. If every piece of Music ended with a complete Measure, and if the necessity of commencing with single *Times* (Art. 82,) did not sometimes exist, the Double Bar might be neglected; but as it is important to mark the termination of those *Strains* which have their last Measures incomplete, this character is

* Ornithoparcus, p. 52, calls this a *Rest General*; considers it as analogous to the other Rests described, Art. 85, p. 40, and places it in the same class of characters.

adopted, and the *Double Bar* bears the same relation to the *Strain* as the *Single Bar* does to the *Measure*.

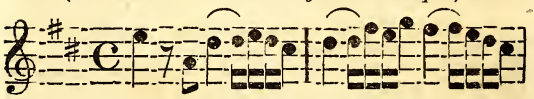
134. Every *Measure* contains a certain number of Notes (Art. 66,) which are terminated by the *Single Bar;* and every *Strain** includes a certain number of Measures, which are terminated by the *Double Bar*.

Sect. III.—Of the Marks of Expression.

135. The chief Marks of Expression are, the *Slur*, and the *Dash* or *Point;* to which may be added the *Tye*, or *Ligature*.

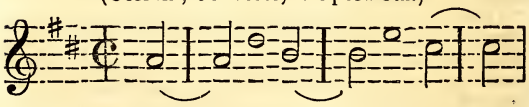
136. The *Tye*† is an arch drawn over two Notes on the *same Degree*, uniting them into one. Upon Keyed Instruments, the first only is struck; but the finger is kept down during the time of both.

(H. S. III. No. 180: *Our fruits—Joseph.*)



137. The Tye is also used to express those syncopated Notes which, in ancient Music, were divided by the Bar.

(Correlli, Concerto, I. Opera 6th.)



138. The *Slur*‡ is a similar arch, drawn over two

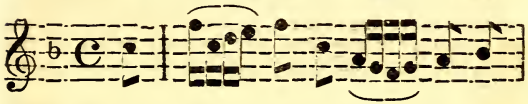
* The rhetorical division of the Strain into *Phrases Sections*, and *Periods*, with the utility of the *Cæsure*, will be explained in the Fourth Part of this Work, upon Rhythm; and, as the Comma, Semicolon, and Full Stop of Elocution, have all their respective analogies in Musical Punctuation, by the Phrase, Section, and Period; so also the Colon is found to resemble that final part of a Movement which is termed the *Coda*.

† See Note, p. 27, of this Work. Holden, p. 38, art. 114.

‡ In the Translation of Turk, p. 26, the term *Slur* is applied to the Grace, Art. 118, called Schleiffer or a Slide.

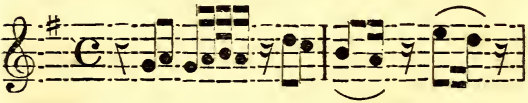
or more Notes, upon *different Degrees,* and signifies that all the Notes are to be played as smoothly and as much united as possible. In Vocal Music, it is placed over or under all the Notes which are to be sung to the same syllable.

(H. S. III. No. 191: *Our limpid streams—Joshua.*)



139. When the Slur is placed only over two Notes, the second is generally made shorter than its proper length. Formerly, this effect was produced by exact Notation.

(H. S. I. No. 1: *Pious Orgies—Judas.*)



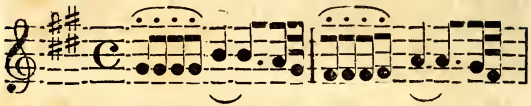
140. The *Dash** is a small stroke, placed over those Notes which are to be performed in a very short and distinct manner.

(H. S. III. No. 182: *Descend, kind pity—Theodora.*)

141. The *Point* is a mark employed by many authors instead of the Dash; but its principal use is to distinguish those Notes from which an intermediate effect, different from the Slur or the Dash, is required, and yet uniting both.

* Holden, p. 39, art. 114.

(H. S. I. No. 61 : *Comfort ye—Messiah.*)



When these passages are performed on Keyed Instruments, the finger is not kept close, as in the *Slur*, nor raised, as in the *Dash*, but dropped gently on the Note, and taken off before the Time is wholly completed.

142. There are other Marks of Expression, which have been lately adopted, to express the effect of certain Italian terms.

(1.) *Crescendo*, or increasing the sound from soft to loud, is marked by an angle, the lines extending to the right.

(2.) *Diminuendo*, or diminishing the sound from loud to soft, by the contrary sign.

The union of both, indicates that the first part of the passage is to be *soft*, the middle loud, and the last *soft* again, as the figure shows.

(3.) *Rinforzando* is denoted by smaller marks of the same kind, < > which are to increase or diminish the Note as marked.

Sect. IV.—Of Abbreviations.

143. When the same Note, or similar passages, are to be repeated, much time is saved to the Composer and Copyist, by the use of Abbreviations.

A single stroke, over or under a Semibreve, or through the Stem of a Minim or Crotchet, divides them into quavers ; a double stroke into Semiquavers ; and a triple stroke into Demisemiquavers ; thus,

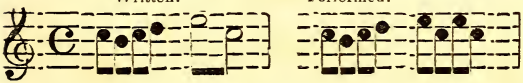
(H. S. I. No. 18: *Let the bright seraphim—Samson.*)

144. These passages, in Italian Music, had formerly the word *Crome*, (Quavers,) or *Semicrome* (Semiquavers,) annexed to them. At present we often use the term *Segue*, to signify that we must perform the following Notes in the manner in which the first are marked.

145. Another kind of Abbreviation is very frequently used in modern Music, viz. grouping the Stems of Minims like those of Quavers, (Art. 64.)

(Pleyel's Duos, Viol. and Violonc. Op. 12, p. 2, Violino.)

Written. Performed.



Several other species of Abbreviation are given in Koch's Lexicon, art. *Abkurzung;* and also in Clementi, p. 8. Shield, p. 124, &c.

PART II.

MELODY.

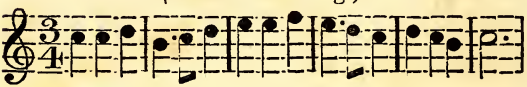
CHAP. I.

OF INTERVALS.

SECT. I.—OF INTERVALS IN GENERAL.

Art. 146. A particular succession of single sounds forms a *Melody** or Tune: as in the following Example:

(God save the King.)

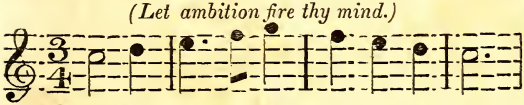


* This simple and popular definition of Melody, only presents an outline of the true idea annexed to the term. In a more extensive sense, Melody implies not only the progression of one single part, but also that general result of the various parts in Harmony which produce the effect of Melody by the proper distribution of their sounds. Prinz seems to have been the first who distinguished between the *Monodic* Style, in which the Melody is confined to one single part, and the *Polyodic* Style, in which the Theme, and its dependent subjects, are distributed among the different parts of the composition. These two epithets, Prinz appears to have taken from Kircher; and this profound and original view of Melody has been very ably developed by Nichelman of Berlin, who clearly proves, that those pieces which are produced by the *Monodic* design of the Composer, are far inferior to the *Polyodic* arrangement of the same ideas. In this last class we may place the Motetts of Palestrina, the Choruses of Handel, and the Symphonies of Haydn. See *Prinz* (Satyrical Composer, Part III. chap. xi. chap. xviii. 1696. *Kircher* (Musurgia.) *Nichelman* (Melodie,) 1755.

147. Melody has, in respect of Tune, two distinct Motions; that of *Degrees*, and that of *Skips*.*

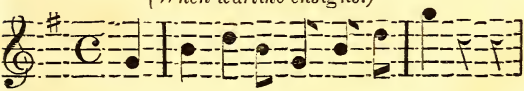
A Melody proceeds by *Degrees*, when it moves to the next Line or Space above or below, as in the following Example:

(Let ambition fire thy mind.)



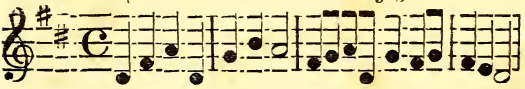
148. A Melody proceeds by *Skips*, when it omits one or more Degrees, as in the following Example:

(When warlike ensigns.)



149. In general, Degrees and Skips are intermixed; as in the Melody of the Easter Hymn.

(Jesus Christ is risen to day.†)



150. The Degrees‡ and Skips of Melody are both called by the general term *Interval;* which is the distance between two Sounds, or their difference in respect of Pitch. Every Interval, therefore, implies two Sounds; one *acute*, the other *grave;* in common language, *high* and *low;* and as, in measuring, it is usual to consider the termination of distance more than the space contained; so, in Music, the Notes which limit

* These expressions in Italian, are *di grado*, and *di salto*.

† Printed by Walsh in 1708, in a Collection of Divine Songs and Hymns, entitled *Lyra Davidica*. The Air is found at page 11, but written in Quavers.

‡ The word *Degree* has been applied to the five Lines and four Spaces of the Staff; but it is necessary to extend its signification further, and to comprehend in it the term *Interval;* since, in the Chromatic Semitone, B flat and B natural are on the same Degree, and yet produce different Sounds, forming thereby a distance or Interval.

the Interval, are both called by the name of the Interval itself. Thus, from the F Clef to the C Clef, is contained the Interval of a fifth, both terms inclusive; and C is said to be a fifth above F, and F a fifth below C.

Sect. II.—Of the Names of Intervals.*

151. The names of Intervals are derived from the number of Degrees which are contained between the two Sounds; both extremes being reckoned inclusively. Thus the Interval of a Second consists of two Degrees; and as these may be distant from each other, either by *one Tone*, or by *one Semitone*, there are consequently two kinds of Seconds, viz. a Major Second or Tone, and a Minor Second or Semitone.

152. The Natural Scale of Music, which, proceeding by Degrees, includes both Tones and Semitones, is called *Diatonic*; a word compounded of *Dia* and *Tonic*, from the Greek *Dia* through, and *Tonos* a Tone; because the greater number of Intervals in the Scale, viz. five out of seven, are Tones.

153. The Diatonic Scale includes all the different Intervals† formed by the Natural Notes, and also all

* The inaccuracies, which sometimes occur in very respectable Authors, concerning Intervals, arise from adopting the terms of common language without sufficient precaution. See Kollmann's Thorough Bass (1801,) Shield. For example, the distance from one place to another may be *two miles*, as the Interval from the Note C to the Note D is formed of *two Semitones*; and as, when we arrive at either place, we say this is (the end of) two miles; so at D we say this is (from C) a Tone; and at C, this is (from D) a Tone; yet the two Sounds only form the Interval of *two Semitones*.

† It may not be improper to remark, that a considerable difficulty arises from the distribution of Intervals upon Keyed Instruments, and that the Student does not readily perceive how an Interval is to be found between two Keys, as B and C, or E and F, which are close together. The method of stopping the Violin, or the Frets on the Guitar and Lute, shows the nature of Intervals much more clearly. For instance, the third string of the Violin is tuned to the *once-marked D* (Art. 37;) but when shortened by one ninth of the space between the Nut and the Bridge, will sound E, a Tone higher; one-sixteenth of the remaining length being further taken, the sound F, a Semitone higher, is heard. A just idea of Intervals is hereby obtained; and, as the latter is nearly half the magnitude of the former, the Interval from D to E is called a Tone, and from E to F a Semitone, being real Spaces taken upon the length of the string.

those which are produced in transposing the Natural Scale, higher or lower, by the employment of Sharps and Flats. Those Intervals which exceed the limits of the Octave, as the ninth, tenth, eleventh, &c. being only replicates of the second, third, fourth, &c. are omitted here, but will be particularly noticed in treating of Harmony.

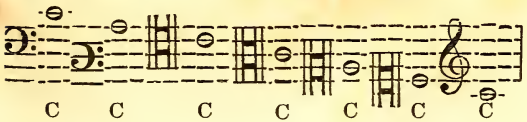
Those Intervals which are less than the Diatonic Semitone, as from F to F sharp, &c. will be distributed, with all other Intervals derived from them, into proper classes in the third Chapter of this Part, upon the Genera.

Sect. III.—Of the Fourteen Diatonic Intervals.

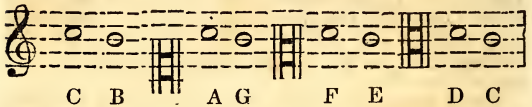
154. As the Intervals take their names from the number of included Degrees, so also their species are ascertained by the epithets, Major and Minor, given them, according to the number of Tones or Semitones contained inclusively between their extremes. If the Intervals were all equal in the Scale, eight Degrees would form only seven Intervals; but, as there are two different distances of Semitone and Tone, for which the Notation by the Staff alone does not provide, there are consequently fourteen Diatonic Intervals. These are distinguished by the term Major or Minor, greater or lesser, and, in some few cases, sharp or flat.

155. 1. The *Unison*, or the same identical sound, although it cannot properly be reckoned an Interval, is always considered as such, when employed in Harmony: it is therefore inserted here among the Intervals of Melody. The present opportunity may be taken of improving the Student in the practice of the seven Clefs, and showing their practical utility.

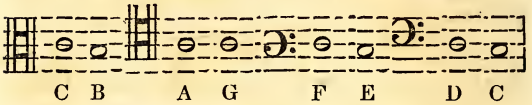
Example of the Unison, or the same Sound being the *once-marked* C (Art. 37,) in all the Clefs.



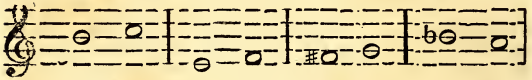
Example of the Descending Scale of the *once-marked Octave* in the G and C Clefs.



Descending Scale of the *small Octave* (Art. 36,) in the C and F Clefs.



156. II. The *Minor Second* is formed by two Sounds, at the distance of a Diatonic Semitone, as B C and E F. C is a Minor Second higher than B, and B a Minor Second lower than C. The same is true with respect to E and F. This Interval is sometimes called the *Flat Second;* and the term is useful in Harmony. It is found also in the other Scales, between F sharp and G, B flat and A, &c. as in the following Example:

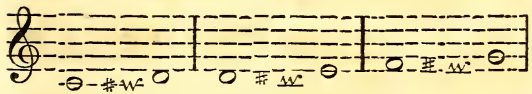


All these are Diatonic Semitones, and form Minor or Flat Seconds.*

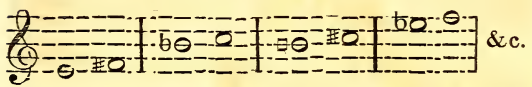
157. III. The *Major Second* or Tone, although composed of two Semitones, does not consist of two equal parts. This is evident from the Notation itself; for, if the Tone from F to G be divided by the Sound

* From this statement, the nature of Melody, when Sharps and Flats are employed, may be readily perceived; for, after a *Sharp*, the part *rises*, and after a *Flat* the part *falls*. Thus also E and B have the effect of *Sharps*, and the Melody in general ascends to F and C; on the contrary, F and C have the effect of *Flats*, and the Melody in general descends to E and B. The importance of these remarks cannot be justly appreciated till the transposition of the Natural Scale into two Sharps and into two Flats, and also the use of the Semitone in Harmony, is understood.

F sharp, then the Intervals between *F sharp* and *G*, or the Diatonic Semitone, will not be the same as that from *F* to *F sharp*, or the Chromatic Semitone. The former changes one Degree, the latter remains on the same Degree; and hence the former is, according to the theory of Zarlino, Rameau, and Pepusch, something larger than the latter. The Tones and other Intervals of the Natural Scale are, in this Work, separated into Semitones, &c. by the character called a *Direct*.

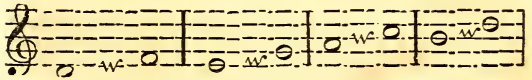


The other Tones introduced by transposition, are,

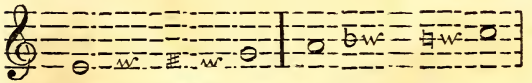


&c.

158. IV. The *Minor Third* is composed of three Degrees, and contains a Tone and a Diatonic Semitone between the two extremes; thus,

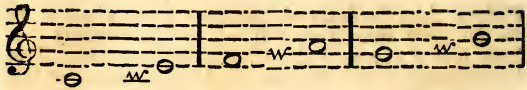


It is also divisible into three Semitones, two Diatonic and one Chromatic; thus,

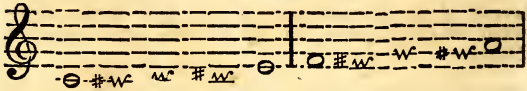


159. V. The *Major Third** is composed of three Degrees, and contains two Tones between the extremes; thus,

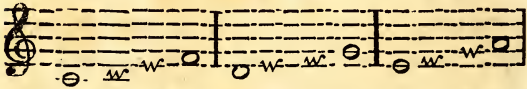
* The Major and Minor Thirds were formerly called *Sharp* and *Flat*-Thirds. These equivocal terms were justly rejected by Dr. Boyce (in his Cathedral Music,) and changed to *greater* and *lesser*.



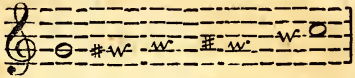
It is also divisible into *four* Semitones, two Diatonic and two Chromatic; thus,



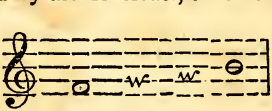
160. VI. The *Perfect Fourth* is composed of four Degrees, and contains two Tones and a Semitone between the extremes; thus,



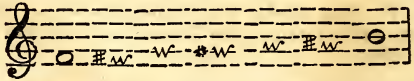
It is also divisible into *five* Semitones, three Diatonic and two Chromatic; thus,



161. VII. The *Sharp* Fourth* is composed of four Degrees, and contains three Tones between the extremes, called by the Ancients, on that account, *Tritone.*



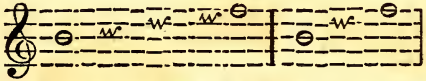
It is also divisible into *six* Semitones, three Diatonic and three Chromatic; thus,



* The reason why the terms, *Perfect* and *Sharp*, are used to the Fourths, while *Major* and *Minor* are applied to the Seconds and Thirds, will appear in the next Chapter, upon Concords and Discords.

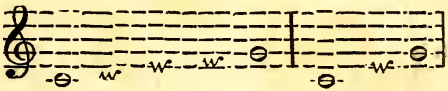
162. These seven Intervals (the Unison included,) may be considered, in a *practical* point of view, as *primary;* since, if they are rightly understood, all the remaining seven are easily known, being only compounded of these. Thus, the *Fifth* is formed by uniting two of the Thirds; the *Sixth*, by the Fourth and Third; the *Seventh*, by the Fifth and Third; and the *Octave* by the Fourth and Fifth. Compared with the Unison, Second, Third, and Fourth, as *primary;* the Fifth, Sixth, Seventh, and Eighth, are *secondary*. This arrangement, however useful in the analysis of Melody, is imperfect with respect to Harmony, and the *theoretical* classification of the Diatonic Intervals. The true series comprehends the Unison, Octave, Fifth, Fourth, Thirds, Sixths, Seconds, and Sevenths, in the mathematical division of a musical string.

163. VIII. The *Flat Fifth* is composed of five Degrees, and contains two Tones and two Semitones, (not three Tones:) it may be divided into two Minor Thirds.



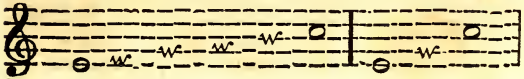
It is also (like the Sharp Fourth or Tri-tone) divisible into *six* Semitones; and when joined with that Interval, completes the Octave.

164. IX. The *Perfect Fifth* is composed of five Degrees, and contains three Tones and one Semitone; it may be divided into a Major and a Minor Third.



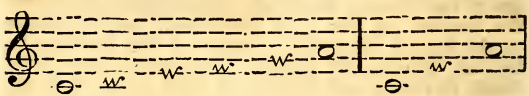
It is also divisible into *seven* Semitones; and, when joined with the Fourth, completes the Octave.

165. X. The *Minor Sixth* is composed of six Degrees, and contains three Tones and two Semitones; it may be divided into a Minor Third and a Fourth.



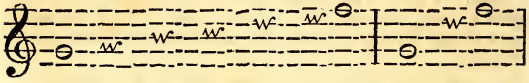
It is also divisible into *eight* Semitones; and, when joined with the Major Third, completes the Octave.

166. XI. The *Major Sixth* is composed of six Degrees, and contains four Tones and one Semitone: it may be divided into a Major Third and a Fourth.



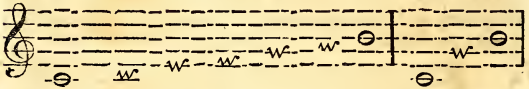
It is also divisible into *nine* Semitones; and, when joined with the Minor Third, completes the Octave.

167. XII. The *Minor Seventh** is composed of seven Degrees, and contains four Tones and two Semitones; it may be divided into a Fifth and a Minor Third.



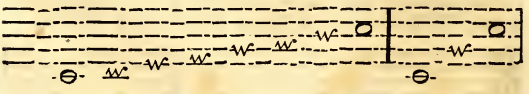
It is also divisible into *ten* Semitones; and, when joined with the Major second, or Tone, completes the Octave.

168. XIII. The *Major Seventh* is composed of seven Degrees, and contains five Tones and one Semitone; and may be divided into a Fifth and a Major Third.



It is also divisible into *eleven* Semitones; and, when joined with the Minor Second, or Semitone, completes the Octave.

169. XIV. The *Octave* is composed of eight Degrees, and contains five Tones and two Semitones: it may be divided into a Fifth and a Fourth.



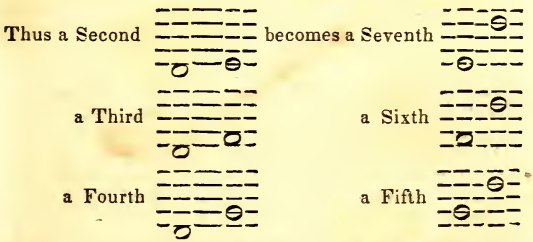
* This Interval is also composed of two perfect Fourths.

It is also divisible into *twelve* Semitones, and may be considered as the replicate of the Unison.

As the Octave consists of thirteen sounds, and therefore has only *twelve* Intervals, it must be recollected, that the *fourteen* Diatonic Intervals, just described, are obtained by reckoning the Unison as one of them, and by distinguishing between the *Sharp Fourth* and *Flat Fifth*; both which are, upon Keyed Instruments, performed with the same keys. The seven Notes of the Scale form seven different species of Octave, according to the places of the two Natural Semitones; and from these species, divided each into two parts, by the Fifth or by the Fourth, arise the eight Tones of Italy, and the twelve Modes of Germany.*

Sect. IV.—Inversion of Intervals.

170. When the lower Note of any Interval is placed an Octave higher, or the higher Note an Octave lower, the change thereby produced is called *Inversion*.



171. The different Intervals (seven,) reckoned from each of the seven Natural Notes, form the following Series:

Five Major and *two* Minor *Seconds*.
Three Major and *four* Minor *Thirds*.
Six perfect and *one* Sharp *Fourth*.

To these may be added their Inversions:

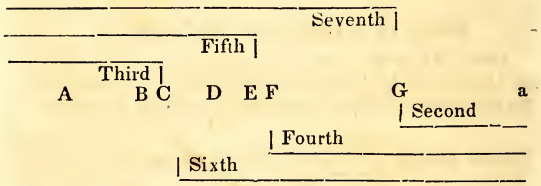
* See the Note, of Art. 49, of this Work.

Two Major and *five* Minor *Sevenths.*
Four Major and *three* Minor *Sixths.*
Six Perfect and *one* Flat *Fifth.*

172. All the Major* Intervals become *Minor*, by inversion, and all the Minor Intervals become *Major;* the *Sharp* Fourth becomes the *Flat* Fifth, and the Unison inverted becomes the Octave.

173. The Major Seventh of the Key, from its resemblance to the Tritone (its higher Note being one of the two Sounds which form the Sharp Fourth,) is sometimes called the Sharp Seventh.

174. Rameau terms the Intervals of the *Third*, *Fifth*, and *Seventh*, fundamental; and derives the others, viz. the *Second*, *Fourth*, and *Sixth*, by inversion, reckoning them downward, from the Octave of the former, according to the following Scheme:



175. All these Intervals are found in the *Diatonic* or *Natural* Scale; and, when this Scale is transposed to any other pitch, higher or lower, by the use of Sharps or Flats, these Intervals remain the same, as will be more fully seen hereafter. The remaining Intervals, which are commonly intermixed with these in the general tables given by Authors, and which belong only to the Chromatic and Enharmonic Scales, are omittted here, but will be inserted in the third Chapter of this Part, on the *Genera.*

176. Of all the Diatonic Intervals, the two *Thirds*,†

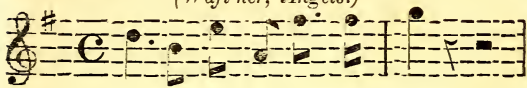
* The epithets, *Sharp* and *Flat*, were always used, instead of *Major* and *Minor*, by the old writers, Simpson, Playford, and also Pepusch. See Art. 159.

† See Rameau, and Simpson. It may be observed, that the alteration of the Thirds, by sharpening the upper Note of the Minor, or flattening that of the Major, does not change their Diatonic nature.

Major and Minor, are by far the most important, and ought to be very perfectly understood; since upon them depends the nature of the Scale or Mode; and the Thirds give their own epithets to the whole series of the seven Notes, the Scale itself being called Major, when the Third is *greater*, and Minor when the Third is *lesser*.

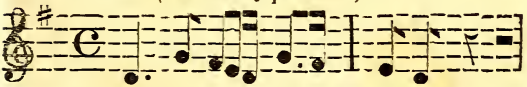
177. There is another distinction, in respect of Melodies formed of Diatonic Intervals, which, although in some measure obsolete, is yet useful for the Student to understand. Those Melodies which have their principal Notes contained between the Key-note and its Octave, are termed *authentic*, *direct*, or *principal*, as in the following Example:

(Waft her, Angels.)



178. Those Melodies, on the contrary, which have their principal Notes contained between the Fifth of the Key and its Octave (or twelfth,) are termed *plagal*, *oblique*, or *collateral*, as in the following Example:

(Streams of pleasure.)



By these two divisions of the Octave, *authentic* and *plagal*, are formed the arrangements of the eight Italian Tones, and Twelve German modes before mentioned.

CHAP. II.

OF CONSONANT AND DISSONANT INTERVALS.

Art. 179. Although the terms *Consonant* and *Dissonant* are chiefly used in Harmony, yet they are applicable, in a great measure, to the classing of Intervals in Melody.

180. The Diatonic Intervals are therefore divided into Consonant and Dissonant. Those which are most agreeable to the ear, as, the Octave, Fifth, Fourth, both the Thirds, and both the Sixths, are called *Consonant;* those which, when compared with the others, are less agreeable to the ear, as both the Seconds, both the Seventh, with the Sharp Fourths, are called *Dissonant.*

The term *Dissonant* is thought, by some Authors,* inapplicable to the *Degrees* of Melody which seem more natural to the human voice than the *Skips.* This, however, is a prejudice, which a further consideration of Harmony will remove.

181. The foregoing arrangement shows the propriety of distinguishing the species of Seconds, Thirds, Sixths, and Sevenths, by the epithets *Major* and *Minor,* according to the number of Semitones included between the extremes; while the appellation of *Perfect* is reserved for the Fourth and Fifth, with the terms *Sharp* and *Flat,* when altered a Semitone higher or lower.

182. The Thirds and Sixths, whether Major or Minor, are *always consonant;* the Seconds and Sevenths *always dissonant;* but the Fourth and Fifth are *consonant* only when perfect; when sharp or flat, they are *dissonant.* The alteration of these two last Intervals, therefore, places them in different classes; and, although the terms Major and Minor have sometimes been applied to the Fourth and Fifth, in the present Work those terms will not be used.

* Principes Elémentaires de Musique, du Conservatoire.

183. The Consonant Intervals are subdivided into perfect and imperfect. The Unison (or Prime,) the Octave, Fifth, and Fourth, are called *perfect*, because they are immutable, never changing from Major to Minor, (or on the contrary,) but becoming dissonant whenever altered by a Sharp, Flat, or Natural.

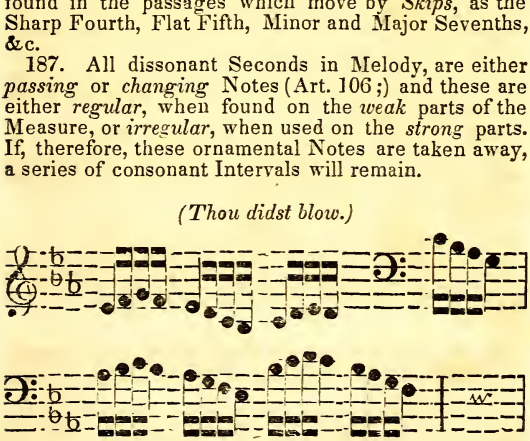
184. The Thirds and Sixths are called *imperfect*, because they are liable to change from Major to Minor (or the contrary,) still remaining consonant.

185. The Seconds, Sevenths, Sharp Fourth, Flat Fifth, with all the Chromatic and Enharmonic Intervals, are dissonant.

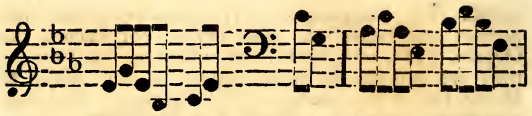
186. According to this classification, every passage of Melody which moves by *Degrees*, consists of dissonant Intervals; but, as every other Note is, in general, a transient sound, placed between two consonant Notes, these Seconds have not that harshness which is found in the passages which move by *Skips*, as the Sharp Fourth, Flat Fifth, Minor and Major Sevenths, &c.

187. All dissonant Seconds in Melody, are either *passing* or *changing* Notes (Art. 106;) and these are either *regular*, when found on the *weak* parts of the Measure, or *irregular*, when used on the *strong* parts. If, therefore, these ornamental Notes are taken away, a series of consonant Intervals will remain.

(Thou didst blow.)



The foregoing Melody may be reduced to Consonant Intervals, by taking away the alternate Semiquavers, where regular, and omitting two when irregular; it will then appear thus:

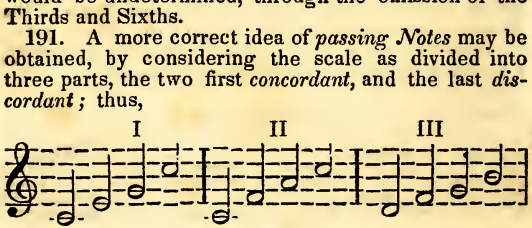


188. The concordant series of Thirds and Sixths, from the varied succession of Major and Minor Intervals, is extremely pleasing to the ear; and most passages of Degrees (like that of the preceding Example,) are reducible into *Thirds*, intermixed with *Fourths*, by taking away the passing and changing Notes.

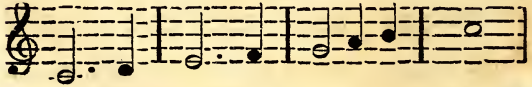
189. A great part of every Duet is composed of Thirds or Sixths; and these Intervals, with the occasional introduction of Fourths and Fifths, allow a double Melody to continue throughout a Movement.

190. A successive series of perfect Fifths is not to be found in Melody, and hence is forbidden in Harmony. In *Melody*, they would exceed the limits of our regular Scale, as well as the compass of the voice; and, in *Harmony*, they would produce new and unconnected Scales, of which the species, Major or Minor, would be undetermined, through the omission of the Thirds and Sixths.

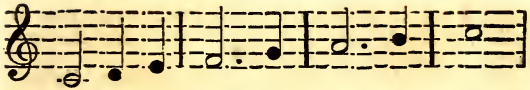
191. A more correct idea of *passing Notes* may be obtained, by considering the scale as divided into three parts, the two first *concordant*, and the last *discordant*; thus,



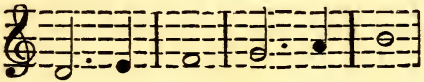
In the first part, or the *Tonic* Division, the passing Notes are, the 2d, 4th, 6th, and 7th of the Scale; thus,



In the second part, or the *Subdominant* Division, the passing Notes are the 2d, 3d, 5th, and 7th; thus,



In the third part, or the *Dominant* Division, the 3d and 6th are the only passing Notes; thus,



CHAP. III.

OF THE GENERA.

Sect. I.—Of the three kinds of melody.

Art. 192. That Scale of Music which proceeds chiefly by Tones called *Diatonic*, has been explained (Art. 152,) and constitutes the principal part of every piece of Music.

193. When all the artificial Sounds are inserted between the natural Sounds, a Scale is formed of *Semitones* alone, and called *Chromatic*.

194. When a Scale yet smaller in its Intervals is formed, which contains in some places *Quarter-Tones*, it is called *Enharmonic*.

195. These three Scales, the Diatonic, the Chromatic, and the Enharmonic, form the three *Genera* or kinds of Melody now in use; and, although the terms are borrowed from the Greek authors, yet the modern ideas annexed to them are considerably different from their ancient signification.

196. The origin of the term *Diatonic* Genus has been explained. The *Chromatic* takes its name from the Greek word *Chroma*, *color*, because the interspersed Semitones give an ornamental effect to the Dia-

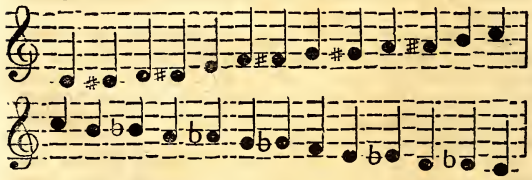
tonic or simple Melody; and the *Enharmonic* was so called, from its supposed excellence, being *En-harmonic*, that is, *extremely musical.*

197. The two last Genera (Chromatic and Enharmonic) are never used *alone*, but always intermixed with the Diatonic. Hence it has been asserted, that all the Genera, except the Diatonic, are irretrievably lost. That they are lost to us, in the precise sense of the ancient descriptions, is undoubtedly true; but we still retain the term *Chromatic*, in a signification extremely analogous to its primitive meaning, and it seems proper also to retain the terms *Diatonic* and *Enharmonic.*

198. The French Theorists* mention two other compound Genera, the *Diatonic-enharmonic*, and the *Chromatic-enharmonic;* the first containing a succession of two Diatonic Semitones, and the last a succession of two Chromatic Semitones. These terms and classifications are more curious than useful, since, according to Dr. Pepusch, the Diatonic-enharmonic is the same as the Toniœum Chromatic of the ancients; and the two subsequent Minor Semitones are found in the soft Chromatic of the Grecian system.†

Sect. II.—Of the Chromatic Scale and its Intervals.

199. The Chromatic Scale generally ascends by Sharps, and descends by Flats, as in the following Example:



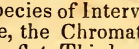
* M. D'Alembert, Elemens de Musique, 1762, Part I. Chap. xx. xxi. p. 112. M. Bethizy, Exposition, &c. 1764.

† See Dr. Pepusch's Letter to De Moivre, in the Philosophical Transactions, 1746, No. 481.

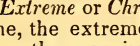
200. From this Scale several Intervals, not yet described, arise, which are all discordant, and are chiefly used in Melody, although they appear sometimes, by *license*, in harmonical combinations.

201. The Chromatic Scale consists of thirteen Sounds, which contain twelve Intervals between them. Seven of these have been already described, among the Diatonic Intervals;* the remaining five form another species of Intervals, called *Extreme* or *Chromatic*. Of these, the Chromatic Semitone, the extreme sharp Second, flat Third, and flat Fourth, are simple or primitive; the extreme sharp Fifth, sharp Sixth, flat Seventh, and flat Eighth, are compound or derivative.

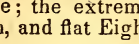
Chromatic Semitone.



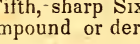
Extreme Sharp Fifth.



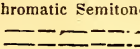
Extreme Sharp Second.



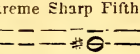
Extreme Sharp Sixth.



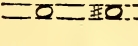
Extreme Flat Third.



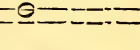
Extreme Flat Seventh.



Extreme Flat Fourth.



Extreme Flat Eighth.

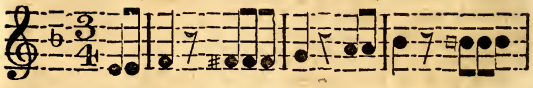


202. I. The *Chromatic Semitone* is the distance or interval between any Note, and that same Note elevated by a Sharp, or depressed by a Flat.

Example of the Chromatic Semitone ascending:

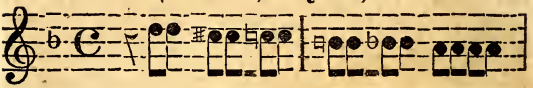
* Padre Martini (Saggio di Contrappunto, 1774,) has enumerated another Interval, the extreme sharp Third, with its inversion; this will be noticed hereafter.

(Sweet bird that shunn'st.)



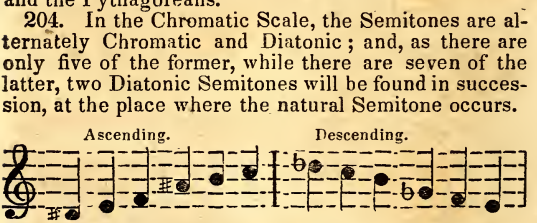
Example of the Chromatic Semitone descending:

(Turn not, O Queen.)



203. This Semitone was termed by the Pythagoreans, *Apotome*,* and the Diatonic Semitone was termed *Limma*. They contended, that the Apotome, or distance from B flat to B natural, was larger than the Limma, or distance from A to B flat. It is now, however, demonstrated, by the experiments of Mersenne, &c. &c. that the theory of Zarlino and Salinas is true; namely, that the Interval from A to B flat, is the Major Semitone, and that from B flat to B natural, is the Minor Semitone, contrary to the Nomenclature of Boethius and the Pythagoreans.

204. In the Chromatic Scale, the Semitones are alternately Chromatic and Diatonic; and, as there are only five of the former, while there are seven of the latter, two Diatonic Semitones will be found in succession, at the place where the natural Semitone occurs.

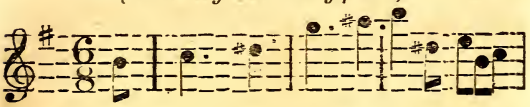


205. From this important Interval (the Chromatic Semitone) arise all the other Chromatic Intervals: they are all Diatonic Distances, increased or diminished by this Interval; and hence they all take the additional Chromatic Epithet of *Extreme*.

* Sir J. H. i. 73. The term Apotome was also used by Salomon de Caus (Institution Harmonique, 1614,) and thence inserted by D'Alembert and Rousseau in the French Encyclopædia. He terms the present Enharmonic Diesis *Apotome Major*, and the present Minor Comma, *Apotome Minor*.

206. II. The *extreme sharp Second* consists of a Tone and a Chromatic Semitone, being composed of *two* Degrees. Upon Keyed Instruments, this is the same as the Minor Third; which, however, consists of a Tone and a Diatonic Semitone, and therefore contains *three* Degrees.

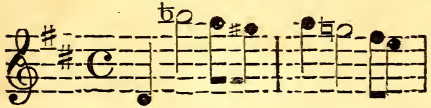
(To vanity and earthly pride.)



207. III. The *extreme flat Third* consists of two Diatonic Semitones, being composed of *three* Degrees: and is the Minor Third, diminished by the Chromatic Semitone. Upon Keyed Instruments, this is the same as the Tone which contains only *two* Degrees.

This Interval being very harsh for Vocal Music, the intermediate Sound is generally inserted, as in the following Example:

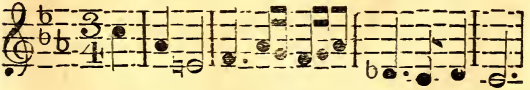
(Prophetic raptures.)



In this passage the A, between B flat and G sharp, is only a transient or passing Note.

208. IV. The *extreme flat Fourth* consists of a Tone and two Diatonic Semitones, being composed of *four* Degrees; and is the perfect Fourth, diminished by the Chromatic Semitone. Upon Keyed Instruments, this is the same as the Major Third, which contains only *three* Degrees.

(O mirror of our fickle state.)

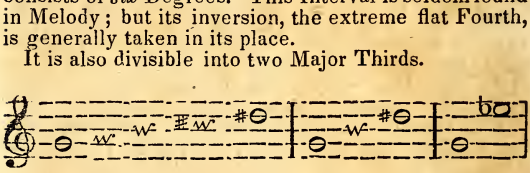


The E natural here, is taken instead of E flat.

209. These three last Intervals, viz.
The extreme sharp Second,
The extreme flat Third, and
The extreme flat Fourth,
When inverted, becomes the following:
The extreme flat Seventh,
The extreme sharp Sixth,
The extreme sharp Fifth.

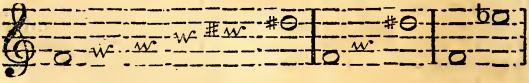
210. V. The *extreme sharp Fifth* is the perfect Fifth, increased by the Chromatic Semitone, and consists of four Tones,* forming *five* Degrees. On Keyed Instruments it is the same as the Minor Sixth, which consists of *six* Degrees. This Interval is seldom found in Melody; but its inversion, the extreme flat Fourth, is generally taken in its place.

It is also divisible into two Major Thirds.



211. VI. The *extreme sharp Sixth* is the Major Sixth, increased by the Chromatic Semitone, and consists of five Tones,† forming *six* degrees. On Keyed Instruments it is the Minor Seventh, which consists of *seven* Degrees.

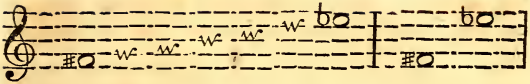
It is also divisible into a Major Third and sharp Fourth.‡



212. VII. The *extreme flat Seventh* is the Minor Seventh, diminished by the Chromatic Semitone, and consists of four Tones and two Diatonic Semitones, forming *seven* Degrees. On Keyed Instruments it is the Major Sixth, which only consists of *six* Degrees.

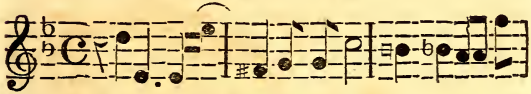
It is also divisible into three Minor thirds.

* Called also *Tetratonon.*
† Called also *Pentatonon.* ‡ Shield.

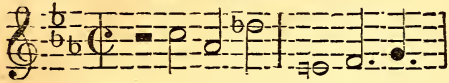


Examples of this Interval in Melody are not uncommon.

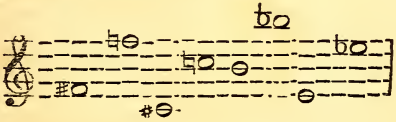
(They loathed to drink.)



(And with his stripes.)



213. VIII. The *extreme flat Eighth* is the Octave, diminished by the Chromatic Semitone; it is never used in Melody, but is sometimes found in transient passages of Harmony.



SECT. III.—OF THE ENHARMONIC SCALE AND ITS INTERVAL, THE QUARTER-TONE.

214. When a series is formed by uniting the ascending with the descending Scale of the Chromatic Genus, a new *kind* of Music arises, by the use of the Interval formed between the sharpened Note and the Flat of the next succeeding Note above. This Scale is called *Enharmonic*, and contains Intervals smaller than the Semitone; which, although not exactly half

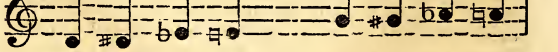
the Semitone, are, however, from their near approach to that quantity, called the *Diesis** that is, the *Division,*) or *Quarter-tone.*

215. To form this Interval, it is necessary that, of any two Notes which are distant by the Tone, the highest should be depressed, and the lowest elevated, by the Chromatic Semitone. Thus, from G to A is a Tone. Now, if G sharp be taken instead of G, and A flat instead of A, the difference between these extremes of the two Chromatic Semitones, G sharp and A flat, will form the *Enharmonic Diesis*, or *Quarter-tone.*

216. To understand this, it must be observed, that the Interval of a Tone, in the theory of Harmonics, is not always the same. *That* Tone which is between the Fourth and Fifth of the Scale,† is supposed to be divided into *nine* small parts, termed *Commas;* while *that* which is between the Fifth and Sixth of the Major Scale, is divided only into *eight Commas.* The Diatonic Semitone consists of five Commas, and the Chromatic Semitone of three, or four, according to the magnitude of the Tone.

217. The two Chromatic Semitones, therefore, being taken from the Minor Tone (of eight Commas,) leave a residue of two Commas for the Diesis or Quarter-tone: hence on the Temple Organ, and on some other Instruments, the Tones from G to A, and from D to E (which are naturally Minor, or of eight Commas,) are divided into three parts, by two distinct Keys, one for G sharp, another for A flat; also one for D sharp, and another for E flat. But upon Keyed Instruments, in general, the Temperament, or method of tuning, is such, that the single short key between the two longer keys serves for both purposes, that between G and A being tuned higher than G sharp, and lower than A flat.

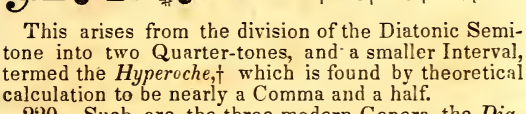
218. The Enharmonic Scale divides each Tone into two Chromatic Semitones and the Quarter-tone; thus,



* This was also called *Apotome* Major by Salomon de Caus. See before, Art. 203, of this Work. Sir J. H. i. 110; iii. 142, 155. Dr B. i. 29; iii. 530.

† The *Diazeuctic* Tone of the ancient system.

219. In some examples of the Enharmonic Scale,* the Intervals, F flat and E sharp, as also C flat and B sharp, are inserted; but they do not belong to that Scale. This distance, as Dr. Pepusch observes, is smaller than the Quarter-tone.

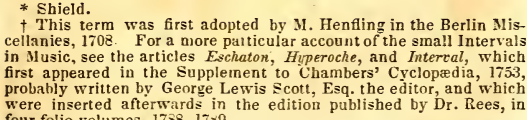


This arises from the division of the Diatonic Semitone into two Quarter-tones, and a smaller Interval, termed the *Hyperoche*,† which is found by theoretical calculation to be nearly a Comma and a half.

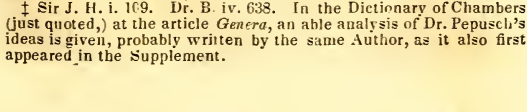
220. Such are the three modern Genera, the *Diatonic*, *Chromatic*, and *Enharmonic:* they are (as before observed, Art. 195,) derived from the ancient Grecian Scales, but are used in a manner extremely different.

Dr. Pepusch,‡ in defining the six Genera of Aristoxenus, namely, two Diatonics, three Chromatics, and one Enharmonic, observes, *that* the Syntone or intense Diatonic, is in general use; *that* enharmonic passages are sometimes found; and *that* two of the Chromatics might be brought into practice; for instance,

The Sesquialter Chromatic; thus,



And the Tonicæum Chromatic; thus,



* Shield.

† This term was first adopted by M. Henfling in the Berlin Miscellanies, 1708. For a more particular account of the small Intervals in Music, see the articles *Eschaton*, *Hyperoche*, and *Interval*, which first appeared in the Supplement to Chambers' Cyclopædia, 1753, probably written by George Lewis Scott, Esq. the editor, and which were inserted afterwards in the edition published by Dr. Rees, in four folio volumes, 1788, 1789.

‡ Sir J. H. i. 169. Dr. B. iv. 638. In the Dictionary of Chambers (just quoted,) at the article *Genera*, an able analysis of Dr. Pepusch's ideas is given, probably written by the same Author, as it also first appeared in the Supplement.

But, he adds, *that* the soft Diatonic, and the soft Chromatic, are not to be found in any modern production.

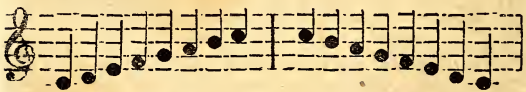
CHAP. IV.

OF KEYS OR SCALES, AND OF THEIR TWO MODES, MAJOR AND MINOR.

Sect. I.—Of Keys or Scales.

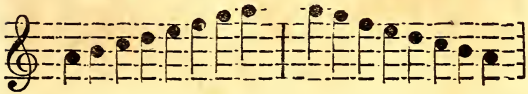
Art. 221. A Diatonic Scale, of which the Notes bear certain relations to *one* principal Note from which they are all, in some respects, derived, and upon which they all depend, is termed a *Key;* and the principal Note is called the *Key Note,* or *Tonic.*

222. Every Scale in which the two Diatonic Semitones are found between the *third* and *fourth* Degrees, and between the *seventh* and *eighth* Degrees, ascending from the Tonic, is termed the *Major Mode* of that Key: because the Interval between the Tonic and its Third (or Mediant,) consists of two Tones; that is, of the greater Third. The only series of this mode among the natural Notes, is that which commences with C; and hence this Key must be taken as an example of all the Major Scales.



223. Every Scale in which the two Diatonic Semitones are found between the *second* and *third* Degrees, and between the *fifth* and *sixth* Degrees, as ascending from the Tonic, is termed the *Minor Mode* of that Key; because the Interval between the Tonic and its Third (or Mediant,) consists only of one Tone and one Semi-

tone, that is, of the lesser Third. The only series of this mode among the Natural Notes, is that which commences with A; and hence this Key may be taken as an example of all the Minor Scales.*

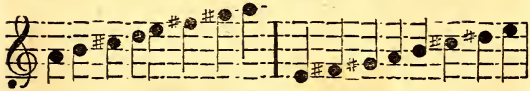


Sect. II.—Of the Major Scales with Sharps.

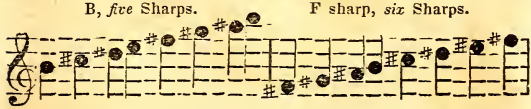
224. In the First Part of this Work (Art. 89,) it has been shown how the introduction of Sharps changes the pitch of the Tone, without altering the relative Intervals of the Scale. All the other Major Keys with Sharps are constructed in the same manner, viz. by sharpening the Fourth of the former Key, to make a new sharp Seventh, or *leading Note*, to the following Scale; thus,

G, *one* Sharp. D, *two* Sharps.

A, *three* Sharps. E, *four* Sharps.



B, *five* Sharps. F sharp, *six* Sharps.



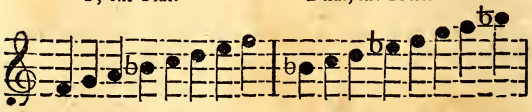
* The necessary variation of the ascending Scale, in the Minor Mode, from the descending Scale, will be explained hereafter. Malcolm, p. 265. Pepusch, p. 20. Holden (Part I. Chap. ix. p. i.) art. 257, p. 90. Sir J. H. i. 163, has entered minutely into the subject of our two modern Scales, with their Transpositions; and their extensions to three Flats and four Sharps, are noticed also by him, iii. 144.

225. In this last Scale, the *sixth Sharp* E is, on Keyed Instruments, performed by means of F natural; but it cannot be called by that name, nor situated on the same Degree; for, in that case, only six letters would be used instead of seven; and, between D sharp and F natural, the Chromatic Interval of the extreme flat Third would be found, which does not belong to the Diatonic Series.

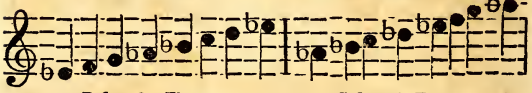
Sect. III.—Of the Major Scales with Flats.

226. It has been also shown (Art. 93,) that the introduction of a new flat takes place on the Seventh of the original Key, which then becomes the Subdominant or Fourth of the next Scale: hence are formed all the following Scales with Flats:

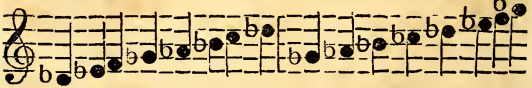
F, *one* Flat. B flat, *two* Flats.



E flat, *three* Flats. A flat, *four* Flats.



D flat, *five* Flats. G flat, *six* Flats.

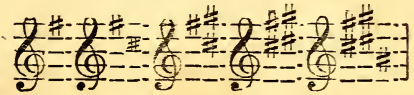


227. In this last Scale, the *sixth Flat* C is, on Keyed Instruments, performed by means of B natural; but it cannot be called by that name, since, between B natural and the next Degree in the Scale (which is D flat,) the Chromatic Interval of the extreme flat Third would be found, which does not belong to the Diatonic Series.

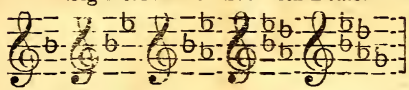
Sect. IV.—Of the Signature.

228. When the whole number of Sharps and Flats are placed at the Clef, instead of being occasionally inserted before each Note as they occur, such collection of Sharps, or of Flats, is termed the *Signature*, (Art. 96.)

Signature of Scales with *Sharps*.



Signature of Scales with *Flats*.



229. Two examples of the Signature extended to the first *double Sharp* and to the first *double Flat*, may be seen, Art. 98, 99.

230. The Scale of *F sharp* with six Sharps, being the same on Keyed Instruments as that of *G flat* with six Flats, all the Signatures beyond six may be expressed by a smaller number, by changing the name of the Tonic.

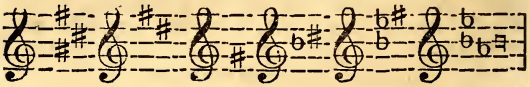
Thus C sharp with seven Sharps, is the same as D flat with five Flats; and C flat with seven Flats, is the same as B with five Sharps, &c. &c. &c.

Sect. V.—Of the Minor Scale or Mode.

231. The Minor Scale not only differs from the Major, as before observed (Art. 223,) in the place of its Semitones, but also in the variation of its Scale, of which the ascending series differs from the descending one.

232. The Minor Mode requires, that whenever the Seventh of the Scale (which is naturally a Tone be-

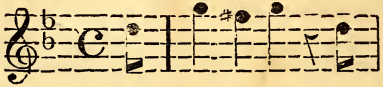
low it) ascends to the Eighth, it should become sharp, as the proper leading Note or sharp Seventh to the Tonic. Now, the insertion of this *essential* Note in the Signature, would appear irregular, as in the following Examples:*



It is therefore always omitted in the Signature, and placed *accidentally* before the Seventh which it is to elevate, whenever the Melody requires its use.

233. That this leading Note or sharp Seventh is *essential* to the Key, although not to its Signature, may be proved by performing the subsequent Melody, omitting the sharp F.

(Our fears are now.)

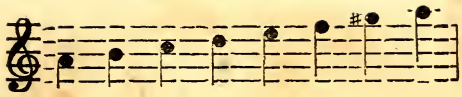


In which instance, the harshness produced by F natural, if taken instead of F sharp, is extremely perceptible.

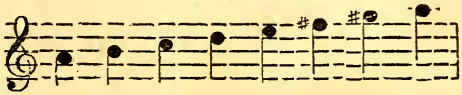
234. As the Signature, therefore, does not decide the Key or scale of the Movement, a careful observation must be made, whether any accidental Sharps or Naturals occur in the first Phrase or Section. If any such are found, the Tonic is on the next Degree above them; but, if none are used, then the Signature itself determines the Major Tonic, which is always the Note above the last Sharp, or the fourth Note below the last Flat.

235. The accidental Sharp used in the Minor Mode, raises the Minor Seventh of the Scale a Chromatic Semitone: hence the Minor Scale may be said to belong to the Chromatic Genus; and its true *essential* Scale is thus formed:

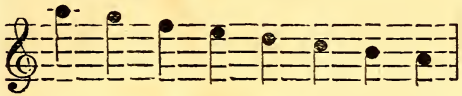
* If this irregularity were adopted in the three first Examples, the essential leading Note would appear as if it were inserted by mistake one Degree too high.



236. In this series is found the harsh Chromatic Interval of the extreme sharp Second (between F natural and G sharp;) to avoid which, the Sixth is made *sharp*, to accommodate the Seventh: thus the *accidental* Scale of the Minor is formed with two Notes altered from the Signature.



237. But, in the descending Scale, the essential leading Note is depressed, to accommodate the Sixth; thus the *natural* Scale of the Signature remains unaltered.

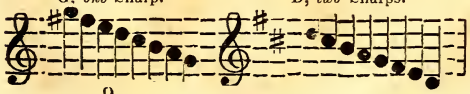


SECT. VI.—OF THE RELATIVE MINOR SCALES.

238. The Minor Scale whose Tonic is found on the sixth Note ascending of that Major Scale which has the same Signature, is termed the *Relative Minor*, because its Signature is similar to that of the other.

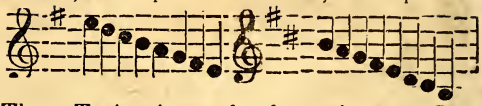
Major.

G, *one* Sharp. D, *two* Sharps.



Relative Minor.

E, *one* Sharp. B, *two* Sharps.

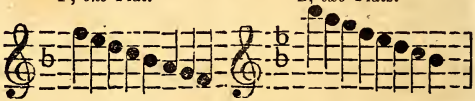


These Tonics, it may be observed, are *one* Degree below the last Sharp of the Signature.

239. In the Signature with Flats, the Relative Minor (or Sixth of the Key) is always on the third Degree above the last Flat; thus,

Major.

F, *one* Flat. B, *two* Flats.



Relative Minor.

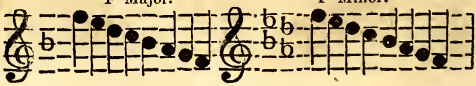
D, *one* Flat. G, *two* Flats.

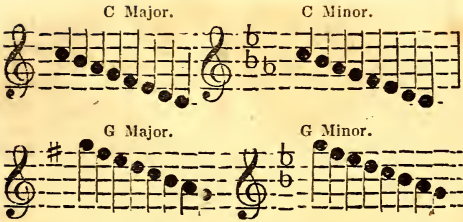
Sect. VII.—Of the Tonic Minor Scales.

240. Every Major Scale, when its Third and Sixth are depressed by the Chromatic Semitone, becomes a Minor Scale, on the same Key Note, and will be called, in this Work, the *Tonic Minor*.

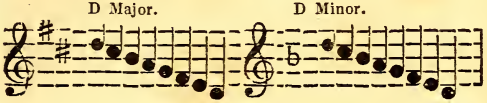
241. But, as the Signature requires that the essential sharp Seventh should not be inserted at the Clef, the *Tonic Minor* must have in its Signature another Flat, making in all three Flats more, or three Sharps less, than the Major Scale of the same Key Note; thus,

F Major. F Minor.

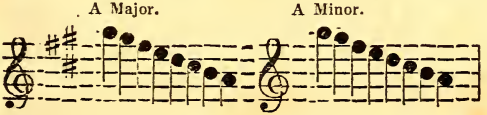




In the last Example, the F ♯, E ♮, and B ♮, are *all* to be considered as Sharps, when contrasted with the F ♮, E ♭, and B ♭, of the Minor Scale.



In this Example, the C ♮, F ♮, and B ♭, of the Minor Scale, are *all* to be considered as Flats, when contrasted with the C ♯, F ♯, and B ♮, of the Major Scale.



In this Example, the G ♮, F ♮, and C ♮, of the Minor, are *all* to be considered as Flats, when contrasted with G ♯, F ♯, and C ♯, of the Major Scale.

Sect. VIII.—Of Transposition, &c.

242. That change which arises from the performance of the same Melody in a higher or lower pitch, is called *Transposition.*

243. Every Melody in a Major Scale, may be transposed into any other Major Scale, by altering the Signature according to the pitch of the new Tonic. The same alteration may take place in every Minor Melody. When, however, any tune is performed in the Relative, or in the Tonic *Minor*, which tune was originally *Major*, such change is not called Transposition, but *Variation*.

244. When, in the course of a Melody, the Tonic is changed, and the original Scale altered, by the introduction of a new Sharp or Flat, such change is called *Modulation*. This will be further explained in treating of Harmony.

245. Every Scale has two others immediately connected with it; one on the Fifth *above*, which adds a new Sharp to the Signature; the other on the Fifth *below* (or Fourth above,) which adds a new Flat to the Signature. These two Scales will in this work, be called *Attendant Keys;* an epithet given them by Dr. Boyce, in his Manuscripts.

246. As every Major Key has a Relative Minor, and as this Relative Minor has its two Attendant Keys, hence arise, from every Signature, *six Scales*,* nearly connected with each other; three with *Major Thirds*, and three with *Minor Thirds*.

247. Of these, *two* are *principal*, viz. the Major and Minor of the Signature itself; and *four* are *subordinate*, viz. the Attendant Keys, both of the Major and of the Minor: these require another Sharp or Flat, to complete their Scales, when a Modulation occurs.

248. Thus, in the Major Scale of C, its *Attendant Scales* are G (its Fifth) with one Sharp, and F (its Fourth) with one Flat; to which are annexed the Relative Minor A, and its two *Attendant* Scales, viz. E Minor with one Sharp, and D Minor with one Flat.

249. The same arrangement takes place in every Key; and it is necessary to observe, that when the Minor Key is first taken, the Major Key of the same Signature is called the *Relative Major*, and is found on the Minor Third above the original Minor Key-note.

* Mr. Keeble (Harmonics, 1784) describes these Scales, and terms them *auxiliary*. Padre Martini has given a Table of them.

CHAP. V.

OF THE QUALITIES OF THE NOTES WHICH COMPOSE THE SCALE.

Sect. I.—Of the Tonic, Dominant, &c.

Art. 250. Every one of the seven Notes which form the Scale of any Key, Major or Minor, has an effect peculiar to itself: from this effect they derive particular names, which are these.

251. I. The *Tonic*, or Key-note, before described, (Art. 221,) is that chief sound upon which all regular Melodies depend, and with which they all terminate.* All its Octaves, above or below, are called by the same name.

252. II. The *Dominant*, or Fifth above the Key-note, is that sound which, from its immediate connexion with the Tonic, is said to *govern it;* that is, to require the Tonic to be heard after it, at the final perfect cadence in the Base.

253. III. The *Subdominant*, or Fifth below the Key-note, is also a species of governing Note, as it requires the Tonic to be heard after it in the Plagal Cadence. It is the Fourth in the regular ascending Scale of seven Notes, and is a Tone below the Dominant; but the term arises from its relation to the Tonic, as the Fifth below.

254. These three principal Sounds, the *Tonic*, *Dominant*, and *Subdominant*, are the radical parts of every Scale; of the Minor, as well as of the Major. All Melodies whatever are derived from these Sounds, and are wholly dependent upon them.

255. IV. The *leading Note*, or sharp Seventh of the Scale, is called, in Germany, the Subsemitone of the Mode. This is always the Major Third above the

* This only relates to the chief Melody, or to its Base; the internal parts of Harmony, as will be hereafter shown, conclude upon the Mediant or Dominant.

Dominant, and therefore, in the Minor Scales, requires an accidental Sharp or Natural whenever it occurs.

256. V. The *Mediant*, or middle Note between the Tonic and Dominant *ascending*, varies according to the Mode; being the greater Third in the Major Scale, and the lesser Third in the Minor Scale.

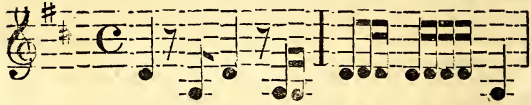
257. VI. The *Submediant*,* or middle Note between the Tonic and Subdominant *descending*, varies also according to the Mode, being the greater Sixth in the Major Scale, and the lesser Sixth in the Minor Scale.

258. VII. The *Supertonic*,† or Second above the Key-note, has seldom been distinguished in England by this or any other appellation. In theory it is considered as a *variable* Sound, being a Comma higher in the Major Scale than when the Mode changes to the relative Minor.‡

259. The effect of the principal Notes above mentioned may be impressed on the mind by the following short phrases.

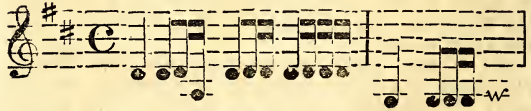
I. *Tonic* and *Dominant.*

(We praise thee, O God.§)



II. *Tonic* and *Subdominant.*

(Break his bands of sleep asunder.‖)



* The Submediant in the Major Mode, is the relative *Minor* Key-note; and the Mediant in the Minor Mode, is the relative *Major* Key-note.

† This is a translation of the French term *Sutonique*; and it may be observed, than in the descending Rule of the Octave, the Sixth of the Key might be called *Superdominant* (*Sudominante*,) from its analogy to this note. Bethizy, p. 15.

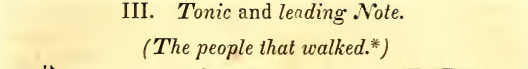
‡ This alteration is explained by Mr. Maxwell, in the Essay on Tune, and by Rousseau, in his Dictionary, art. *Diacommatique.*

§ Dettingen Te Deum, 1743, No. 17.

‖ Alexander's Feast, 1736, No. 66.

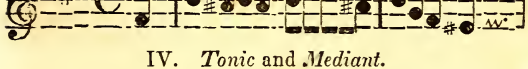
III. *Tonic* and *leading Note.*

(The people that walked.)*



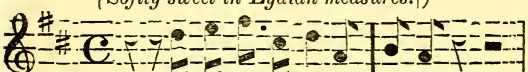
IV. *Tonic* and *Mediant.*

(Softly sweet in Lydian measures.†)



V. *Tonic* and *Submediant.*

(In the battle Fame pursuing.‡)



260. The Signature of two Sharps has been chosen for these Examples, that the effect of the same Tonic (and of its relative Minor in the Third Example from the Messiah) may be perceived in performing them all.§

Sect. II.—Of the Characteristic Notes of the Scale.

261. The leading Note and the Subdominant are the two characteristic Sounds, by one of which every Scale, whether Major or Minor, is known, and its Tonic immediately ascertained.

* Messiah, No. 9. H. S. iv. No. 301.
† Alexander's Feast, No. 66. H. S. ii. No. 154.
‡ Deborah, 1733. No. 144. H. S. i. No. 70.
§ The further utility of these denominations will appear hereafter. In Harmony, especially, the terms *Tonic*, *Dominant*, *Subdominant*, and *leading Note*, will frequently occur; the two former, as the principal and governing Notes; the two latter, as the characteristic Notes of the Key. (See Art. 191.)

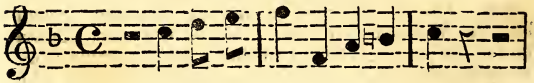
262. Thus, in sharp Signatures, the *leading Note* is a species of Index, which points invariably to the next Degree above, as its Major Tonic: this is always the *last Sharp* in the Major Mode.

263. In flat Signatures, the *Subdominant* is also a species of Index, which points to the fourth Degree below, as its Major Tonic: this is always the *last Flat* in the Major Mode.

264. In the Minor Modes whose Signatures have less than four Sharps or four Flats, the Subdominant, being always one of the natural Notes, is not apparently a characteristic of the Key; and therefore, in those Modes, the *leading Note* is the only certain Index from which the Key-note is to be found.

265. The great importance of these two Notes appears evident, when, in occasional Modulation, the new Key is required to be found by their assistance. In all flat Signatures (F Major, B flat Major, E flat Major, &c.) the *leading Note* is a *Natural;* and this is the sharp Seventh of the Key, as in the following Example:

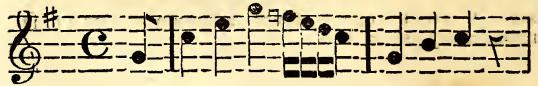
(See the tall palm.)*



Here the Natural B is the *leading Note* of the new Key C.

266. In the sharp Signatures, on the contrary, the *Subdominant* is distinguished by a *Natural,* and requires, in Modulation, the alteration of the Sharp in the Signature.

(When warlike ensigns.†)



Here the Natural F is the *Subdominant* of the new Key C.

* Solomon, 1749, No. 90. H. S. iv. No. 294.
† Art. 148.

267. Hence it appears, that whenever the characteristic Note of the new Key is marked by a *Natural*, that Natural always has the effect of a *Sharp* or of a *Flat;* of a Sharp, when it is a *leading Note;* of a Flat, when it is a *Subdominant.**

CHAP. VI.

OF ANCIENT SIGNATURES.

Sect. I.—Of Ancient Signatures in General.

Art. 268. In the Music of Corelli, Geminiani, Handel, &c. the general rules of finding the Tonic, either in the Major Mode, by the characteristic Notes of the Signature, or in the Minor Mode, by the leading Note accidentally inserted, are not always sufficient.

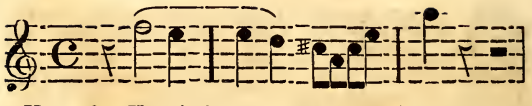
269. When, instead of the complete series of Sharps or Flats of the Signature, the last Sharp or Flat is suppressed, and inserted accidentally when requisite (like the leading Note of the Minor Mode,) such deviation from the usual method of Notation, will, in this Work, be termed the *Ancient Signature.*

270. Thus, in the seventh and twelfth Sonatas (or Violin Solos,) of Corelli, Opera quinta, the Signatures† appear to be either C Major, or A, its relative Minor; but the Accidental Notes, C sharp and B flat, show that the real Key is D Minor, and that the B flat, which is used in the modern Signature, is omitted at the Clef.

271. Examples of the ancient Signature of D Minor, may also be found in the third and fifth Concertos of Geminiani, Opera seconda, and in the fourth Concerto of Opera terza. For instance, the first Movement of his third Concerto begins thus:

* See the remarks in Art. 97, in Note.

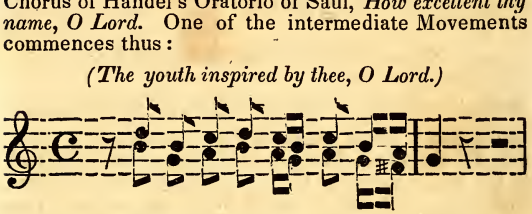
† Although the term *Signature* is defined, Art. 228, to be the number of Sharps or Flats at the Clef, yet the word will be also applied to the two natural Keys of C Major and A Minor.



Here the Key is known to be *D*, by the accidental C sharp, and to be also *D Minor*, by the natural F, which remains unaltered, as in the Signature.

272. The same ancient method of Notation is sometimes found in the Key of G Major, where the Sharp of the leading Note F, is inserted accidentally when requisite; as in the following Example from the first Chorus of Handel's Oratorio of Saul, *How excellent thy name, O Lord.* One of the intermediate Movements commences thus:

(The youth inspired by thee, O Lord.)



Here the Key is known to be *G* by the Sharp before the F, which is used in the second Treble as a Third below the A; and the B natural of the Clef shows it to be *G Major.*

Sect. II.—Of Ancient Sharp Signatures.

273. The ancient Signature of *one Sharp*, is applicable to the Keys of D Major and B Minor; but the sharp Signatures of this ancient method are never found in the Minor Mode; for, as the Second (or Supertonic) of the Key would then require an accidental Sharp, the irregularity before mentioned (Art. 232,) would perpetually recur.

274. In the Solos of Corelli (Opera quinta,) however, several instances occur of the ancient sharp Signature in the Major Mode; viz. the sixth and ninth Sonatas in *two Sharps* are in the Key of A Major; and the *G sharp* is accidentally inserted.

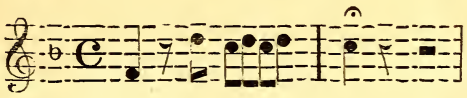
275. The eleventh Sonata of the same work bears the Signature of *three Sharps*, and is in the Key of E Major,* the *D sharp* being inserted accidentally.

276. The ancient Signature of *four Sharps* is found in Handel's beautiful air, *Rendi il sereno al ciglio*, from the Opera *Sosarmes*.† This is in B Major, with the Sharp to its leading Note *A*, occasionally inserted.

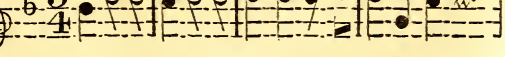
Sect. III.—Of ancient Flat Signatures.

277. The objection to the sharp Signatures (Art. 273,) does not apply to the Flat, since the Second of their Minor Modes is not affected by the Flat. For this reason, and from the variable nature of the Sixth or Submediant in the Minor Scale (Art. 236,) the ancient flat Signatures are very frequently found.

278. I. The Signature of *one Flat* belongs to B flat Major and G Minor. The following Example, in the opening of Corelli's fifth Concerto (Opera sesta,) is in B flat Major.‡



279. The eighth Concerto of Corelli opens with this Signature in G Minor, as in the following Example :§



* Handel's Duett, in the Oratorio of Athalia, (*Joys in gentle train appearing*,) is also in this Key, and has this Signature.

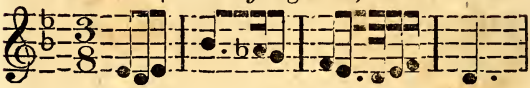
† Introduced by Dr. Arnold, 1786, in the Oratorio of Redemption, to the words, *Lord, Remember David.*

‡ This will be mentioned hereafter, as a very striking instance of the use and effect of Harmony in deciding the Key and Mode, independent of the Signature.

§ This also depends upon Harmony for the decision of its Key and Mode. The Melody, as it here stands, might be equally in B flat Major or G Minor; but the F sharp, which accompanies the C in the second Measure, decides the Key.

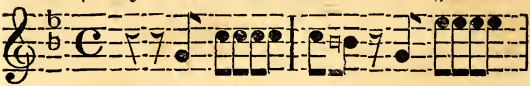
280. II. The Signature of *two Flats* belongs to E flat Major.

(Cease thy anguish.)*



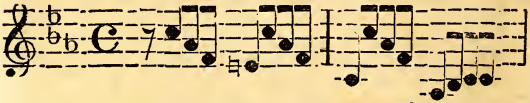
281. The Signature of its relative Minor Mode C, is very common.

(The flocks shall leave the mountains.†)



282. III. The Signature of *three Flats*, is unusual in the Major Mode of A Flat, but extremely frequent in the Minor of F. Handel, indeed, has seldom (if ever) used the modern Signature in this Mode.

(Ye sons of Israel.‡)



283. In this Example, the *E natural*, is the leading Note, and points to the Key-note F: of which A flat is the lesser Third, and decides the Mode.

* Athalia, 1733, No. 3. H. S. ii. No. 98.
† Acis and Galatea, 1720, No. 30. H. S. iv. No. 320.
‡ Samson, 1742, No. 53. H. S. i. No. 19.

PART III.

HARMONY.

CHAP. I.

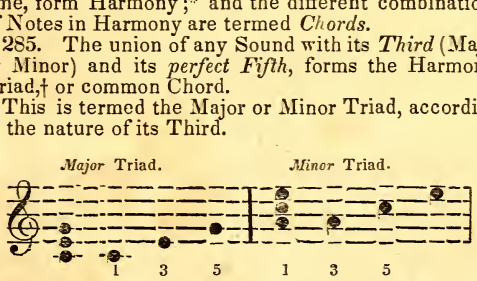
OF THE TRIAD.

Sect. I.—Of the Consonant and Dissonant Triads.

Art. 284. Two or more Melodies, heard at the same time, form Harmony;* and the different combinations of Notes in Harmony are termed *Chords.*

285. The union of any Sound with its *Third* (Major or Minor) and its *perfect Fifth*, forms the Harmonic Triad,† or common Chord.

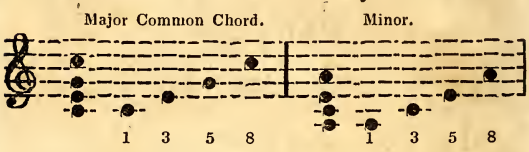
This is termed the Major or Minor Triad, according to the nature of its Third.



* Dr. B. i. 136. Harmony was formerly (according to Tinctor—see Dr. B. ii. 458) synonymous with Melody, and the term *Counterpoint* was applied to what we call Harmony. This term is derived from the ancient *Points* or Notes, which were placed *counter* or opposite to each other on the Staff. The Examples in this Third Part will be given in Counterpoint; that is, heads of Notes, without their Stems, will be used.

† *Triad*, in Music, signifies three different Sounds combined together, at the distance of a Third and a Fifth from the lowest.

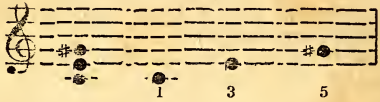
286. When the Octave of the lowest Note is added four Sounds are heard in the Harmony.



287. There are also, besides these two Consonant Triads, two Dissonant Triads ;* one Diatonic, the other Chromatic.

I. The *Diatonic* Dissonant Triad, or diminished Triad of the Germans (B, D, F,) consists of two Minor Thirds.

II. The *Chromatic* Dissonant Triad, or superfluous Triad of the Chromatic Scale (C, E, G sharp,) consists of two Major Thirds.

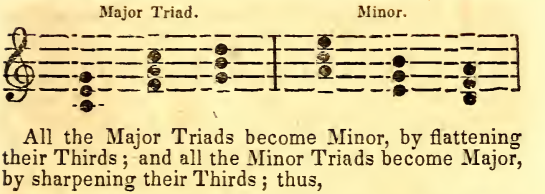


The Consonant Triads are formed of the two dissimilar Thirds, Major and Minor, united; the Dissonant Triads are formed of two similar Thirds, both Minor or both Major.

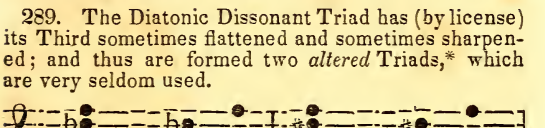
288. In the Natural Diatonic Scale (Art. 50,) there are six Consonant Triads ;† three Major and three Minor.

* Marpurg (Handbuch, 1755,) adopted this classification, which Kirnberger rejected. Kollmann follows the system of this last ingenious writer, and considers the diminished Triad as a *consonant* Harmony. The Author of this Work prefers the arrangement of Marpurg, which seems most agreeable to the theoretical doctrine of Harmonics.

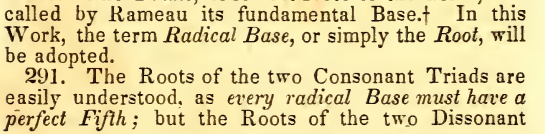
† From these Triads are derived the six Scales before-mentioned,



All the Major Triads become Minor, by flattening their Thirds; and all the Minor Triads become Major, by sharpening their Thirds; thus,



289. The Diatonic Dissonant Triad has (by license) its Third sometimes flattened and sometimes sharpened; and thus are formed two *altered* Triads,* which are very seldom used.



These altered Triads consist of a Major and an extreme flat Third, and are consequently both Chromatic.

290. The *Prime*, or lowest Note of the Triad, was called by Rameau its fundamental Base.† In this Work, the term *Radical Base*, or simply the *Root*, will be adopted.

291. The Roots of the two Consonant Triads are easily understood, as *every radical Base must have a perfect Fifth;* but the Roots of the two Dissonant

Art. 247. The primary and secondary Scales of Mr. Keeble, are reckoned in the Major Mode, 1st, 4th, and 5th C, F, G, 2d 3d, and 6th D, E, A, ascending, and are inverted in the Minor Mode.

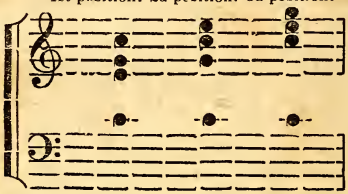
* See Heck (Thorough Base.) The German Authors term these Triads *anomalous*. See also Kollmann (Essay on Harmony, 1796.)

† The Root being placed one or two Octaves below the Chord of the Accompaniment, makes no difference in its derivation; the radical Base depending always on the three combined Sounds of the Triad, whether in *close* or *dispersed* Harmony. For an account of Rameau and his system, see Dr. B iv. 609. Sir J. H. v. 384. See also a very satisfactory account of the discoveries of Galileo Galilei, by Dr. Burney, art. *Base fundamental*, in Dr. Rees' Cyclopædia, lately published.

Triads (Art. 287,) and of the two altered Triads (Art. 289,) cannot be explained till the nature of Discords is known.

292. When the three Sounds of the Triad are taken as an accompaniment, and the Root remains in the Base, the Chord assumes three different positions.

1st position. 2d position. 3d position.



The first position is that of 3d, 5th, and 8th.
The second, of 5th, 8th, and 3d.
The third, of 8th, 3d, and 5th.

It must be observed, that the second position, in reality, consists of the *Fifth*, *Eighth*, and *Tenth*, and the third position, of the *Eighth*, *Tenth*, and *Twelfth*, of the Root; but, as the Tenth and Twelfth are Octaves of the Third and Fifth, and as they are represented by the same letters, they are also called by the names of *Third* and *Fifth*, whatever may be their distances above the Root.

Sect. II.—Inversions of the Triad.

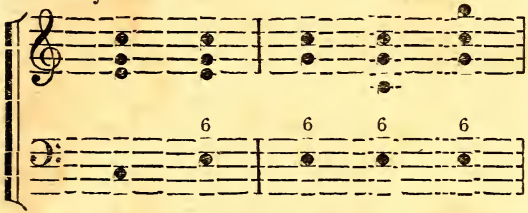
293. When the lowest Note, instead of being the *Root*, is the *Third* or the *Fifth* of the Triad, such change is termed *Inversion*.*

294. The Inversions of the Triad differ from its Positions; as the former relate to the whole Harmony, including the Base, and the latter to the Accompani-

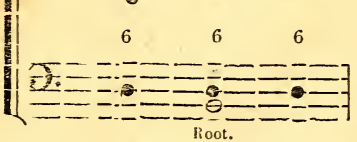
* Dr. Pepusch calls the two Inversions *supposed Bases*, and terms the Chord of the Sixth the *uncommon* Chord; not because it is unusual or improper, but in contradistinction to the *common* Chord, or that of which the lowest Note is a *fundamental Base*.

ment alone, independent of the Base. Hence every Triad has *three* Positions, but only *two* Inversions; for, when the Root is in the Base, the Chord is called *Direct*, whatever may be the Positions of the Accompaniment.

295. I. The Chord of the *Sixth*, is the first Inversion of the Triad, when the Base Note becomes the Third of the Harmony, instead of the Root. This Chord, in the figures of Thorough Base, is expressed by a 6: to which also belongs the Third of the lowest Note (or Fifth of the Root:) and in the practice of Counterpoint, the Octave of the lowest Note is either omitted, or, if four parts are requisite, the Sixth or the Third may be doubled.



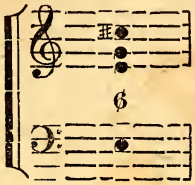
296. The same arrangement takes place in the Minor Triad,* and its first Inversion; in the first Inversion of the Diatonic Triad, B, D, F, however, the Sixth is never doubled, but the Octave preferred, when four parts are requisite.



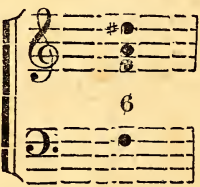
Root.

* An ingenious Theorist *Pizzati* (Scienza de' Suoni, 1782,) reckons the Minor Triad *dissonant*, because it does not produce the third Sound of Tartini, &c. On the contrary, Kirnberger (1774) asserts, that the diminished Triad is *consonant*, because it is used in Harmonical Progression, like the other two Triads.

297. A stroke through the figure *six*, thus 6, elevates the Sixth Note from the Base, a Chromatic Semitone; and, when used on a Minor Sixth, makes it the first Inversion of the Dissonant Triad; thus,



When the same mark occurs on a Major Sixth, it makes it the first Inversion of the altered Triad (Art. 289,) thus,



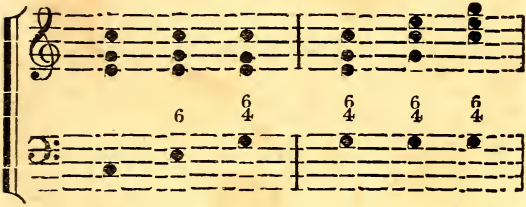
These two Chords, which are of great importance, will be hereafter distinguished by the names of the *sharp Sixth* and of the *extreme sharp Sixth;* the first always accompanied by a Minor, and the second by a Major Third.

298. II. The Chord of the *Fourth* and *Sixth*,* is the second Inversion of the Triad, when the Base Note is the Fifth of the Harmony, instead of the Root. It is expressed, in Thorough Base, by a 4 under a 6, and in four parts, the three positions† of the Triad are used

* Kirnberger considers this Harmony, when suspended, as dissonant (see Mr. Kollmann's Essay on Harmony;) but Marpurg has, in the Appendix to his Essay on Temperament (1776) shown that the classification of his opponent is not well founded, and that the theory is not strictly true.

† Mr. Shield has given the *Positions*, without distinguishing them by this name; the *Inversions* are described by him under the Titles of first and second *Derivatives*.

as its Accompaniment (Art. 292,) without any regard (as in the Chord of the Sixth,) to the omission of one Note, or the doubling of another (Art. 295.)



SECT. III.—OF THE DIRECT AND CONTRARY MOTIONS, AND THE RULES FOR THEIR USE IN HARMONY.

299. Before the Harmonical succession of Triads can be rightly understood, it is necessary to explain the different Motions of the parts which constitute Harmony. Two of these are essential, viz. the *direct* Motion and the *contrary* Motion.

300. In the *direct Motion*, the parts move the same way, ascending or descending.

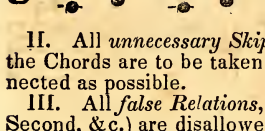
301. In the *contrary Motion*, one part rises, while the other falls.

302. By the knowledge of these two Motions, the power of avoiding many harmonical irregularities may

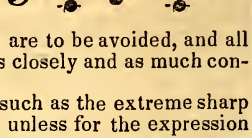
be obtained, and the following rules* of Harmony correctly observed.

I. All *consecutive Octaves* and *Fifths* must be avoided in the direct Motion.

Octaves and Fifths by the direct Motion.



The same avoided by the contrary Motion.



II. All *unnecessary Skips* are to be avoided, and all the Chords are to be taken as closely and as much connected as possible.

III. All *false Relations*, (such as the extreme sharp Second, &c.) are disallowed, unless for the expression of some particular effect.

IV. All *irregular Motions* of the parts in Harmony are to be avoided. Every Major or sharp Interval ought to ascend, and every Minor or flat Interval ought to descend; that is to say, the *part* in which those Intervals are found in combination, is to *rise* after the *Sharp*, and to *fall* after the *Flat*. This rule, however, is always subordinate to that of avoiding Octaves or Fifths,† and is not regarded when the Melody is to produce an effect opposite to the rule. The internal parts of Harmony, however, are to be regulated by these observations.

Sect. IV.—Of Harmonical Progression.

303. The term *Progression*‡ will be used, in this Work, in contradistinction to the term *Modulation*,§

* The *ten* Rules of Pietro Aron (1523, Dr. B. iii. 155) were afterwards extended to *twelve*. See Cerone (El Melopeo, 1613,) and Lorente (El Porque, 1673.)

† Nicolas Burtius (Musices Opusculum, 1487,) the Guidonian adversary of Bartholomew Ramis, was a Pythagorean follower of Boethius, and admitted no Consonances but Octaves, Fifths, and Fourths. He calls the Thirds and Sixths allowable Dissonances (*dissonantiæ compassibiles*,) and has given (fol. e, 5) five Precepts of Counterpoint, which will ever be classical, particularly that of avoiding Fifths and Octaves in succession.

‡ Tonführung, Koch's Anleitung, iii. 139.

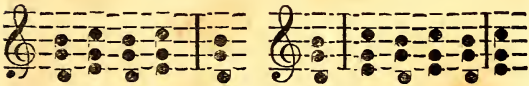
§ Tonausweichung. Koch's Anleitung, ii. 169.

to signify that succesion of Triads or perfect Chords, which, by being confined to the Scale of the original Key, only admits the Tonic and its two attendant Harmonies, occasionally interspersed with the relative Tonic and the two Harmonies attending on that Scale; whether the original Mode be Major or Minor.

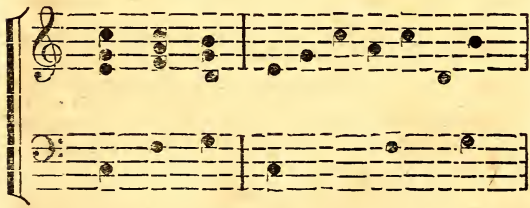
Although a change into the relative Scale implies a partial Modulation, yet in all cases, where the new Scale remains undecided,* by the omission of the *leading Note*, and the original Tonic still continues a predominant Sound, the term Progression will be retained.

304. As the Scale consists of *seven* different Notes, it is evident that *two* Triads, which only contain *five* Notes (one Note being common to both,) cannot decide the Key. Hence the following Examples, although perfectly similar in Notes, appear, by means of the Accent, to be in two different Keys, and are therefore equivocal.

In the Key of G. In the Key of C.



305. If, however, three different Chords are taken, the Key may be decided: this is performed by the Progression† of Tonic, Subdominant, and Dominant.

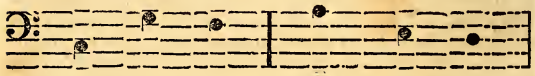


* Particularly in Sequences, as will be explained hereafter.

† The following excellent observation of Dr. Pepusch, cannot be too often, or too strongly impressed upon the mind of the Student, viz. ALL MELODIES HAVE THE PERFECT CONCORDS OF THE KEY THEY ARE IN FOR THEIR FUNDAMENTAL BASES.

306. Thus, in the Tonic Harmony, } of the
are found the 3d and the 5th, } Root of
In the Subdominant, the 4th and 6th, } the
And in the Dominant, the 2d and 7th } Scale.*

307. The Major Mode, with its relative Minor, and the four attendant Harmonies, may be thus arranged:



308. The Minor Mode, with its relative Major, and the four attendant Harmonies, may be thus arranged:

309. The relative attendant Harmonies are very seldom used, particularly the relative Subdominant, or Second of the Major Mode (as D in C Major;) but, in modern Music, this Harmony more frequently occurs, and will be further explained hereafter.†

310. The motions of the radical Bases or Roots of these Chords, are reducible to *six*, divided into three classes.

I. The Dominant‡ Motion, or ascent of the 4th or 5th.

II. The Mediant Motion, or ascent of the 3d or 6th.

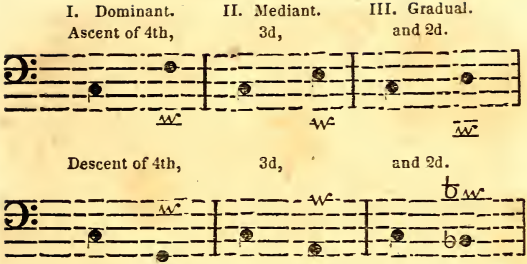
III. The Gradual Motion, or ascent of the 2d or 7th.

These may, of course, be inverted, and become the same descending; as the *Directs* towards the remoter distances show in the Example.

* This arrangement is like that before given (Art. 191,) where the Chords are shown detached in Minims.

† Dr. Pepusch, although he expressly allows the Harmonies of A, and of E, in C Major, makes no mention of D.

‡ The Dominant Motion is the foundation of the perfect and imperfect Cadences, as the Gradual Motion is of the false and mixt Cadences: these will be explained in the Fourth Chapter of this Part.



311. Of these Motions, the *Dominant* and the *Mediant* are regular, having a Sound common to both Chords; but the *Gradual* is irregular, as the Chords have no connexion with each other.

312. When the *Melody* moves regularly, by Degrees ascending or descending, the following Progressions* in the Base are often employed.

I. Dominant Motions by FOURTHS.

Rising *Fourths* and falling *Fifths*.

Descending Melody.

Rising *Fifths* and falling *Fourths*.

Ascending Melody.

II. Mediant Motion by THIRDS.

Rising *Thirds* and falling *Fourths*.

Descending Melody.

Rising *Fourths* and falling *Thirds*.

Ascending Melody.

* See Koch's Lexicon, art. Dreyklang, i. 491.

III. Gradual Motion by Seconds.

Rising *Seconds* and falling *Thirds*.

Ascending Melody.

Rising *Seconds* and falling *Fourths*.

Descending Melody.

CHAP. II.

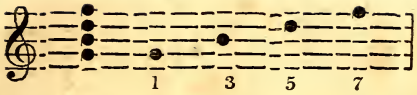
OF THE DOMINANT SEVENTH, ITS INVERSIONS, RESOLUTION, AND OF MODULATION.

Sect. I.—Of the Dominant Seventh.

313. When a Minor Seventh is joined to the Major Triad, a Chord of four different Sounds is formed, and, as this only occurs when the Fifth of the Key is the Base Note, the Harmony is called the *Dominant* Seventh.*

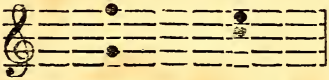
* The Dominant before mentioned (Art. 252,) derives its name from the ancient Church Tones, in which it was the *Fifth* in the Authentic, and the *Octave* in the Plagal Scales, but always a Fifth above the final or modern Tonic. Mersenne, in his learned work, entitled, Traite de l'Harmonie Universelle, first published in 8vo. under the assumed name of Le Sieur de Sermes (Paris, 1627,) has given the following explication of the term:

"Il faut remarquer que le Pseaume est dit se chanter en *fa*, en *la*, &c. non qu'il n'ait que cette seule note; mais parce qu'elle est plus souvent repetee que les autres; de la vient qu' on l'appelle *Dominante*, car elle s'entend plus souvent que les autres, et gouverne le ton."



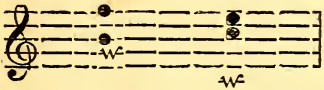
The Note which forms the Discord in this Harmony, is the Subdominant or Fourth of the Scale; and being a Minor Interval, requires the part in which it is heard, to descend one Degree.

314. In the Major Mode, this descent is a Semitone, as in the following Example:



In the Minor Mode, the E becomes flat, and the descent is consequently that of a Tone.

315. The Major Third of the Dominant, which is also the Sharp Seventh or leading Note of the Scale, must ascend. Thus, in the Major Scale, the two characteristic Notes are united, and form, between themselves, the Interval of the flat Fifth, of which the Root is the Dominant: thus,

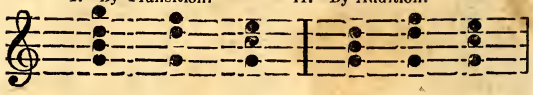


316. In all regular progression, the Dominant Seventh requires the Triad of the Tonic to succeed it; and hence its Base-note is called, by Rameau, the governing Note or Dominant of the Key.

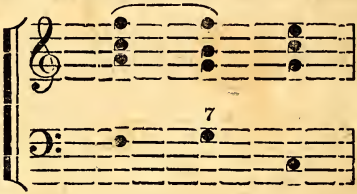
317. The Dominant Seventh is used, like all other Discords, either by *Transition*, *Addition*, or *Suspension*;* and must in all cases be *resolved*, that is, taken away, by the descent of the part in which it is found. As a *passing* or *added* Note, it is employed without *preparation;* thus,

* Every Discord of Suspension must be prepared, struck, and resolved; hence arise the three terms *Preparation*, *Percussion*, and *Resolution*, described by Padre Martini, Saggio di Contrappunto.

I. By Transition. II. By Addition.



318. But, as a *suspended* Note, it must be *prepared*, that is, heard in the preceding Harmony; thus,



In this instance, the F prepares the Seventh in the *first* Harmony; is heard as a Discord in the *second*, and resolves, by descending to E, in the *third*.

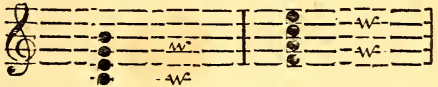
319. There are several other Sevenths, used in Harmony, upon the different Triads of the Scale, (whether Consonant or Dissonant,) in both Modes. These sevenths,* although not exactly Chords of the Dominant, are nevertheless used in its place, to avoid Modulation; as will be hereafter explained in the fifth Chapter of this Part, on Sequences. They also preserve a uniform motion in the progression of their Roots, (Art. 312,) and, at the same time, produce a Melody, descending by Degrees, in the original Key —These are,

320. I. *The Minor Sevenths with Minor Thirds*, on the Triads of A, D, and E, which belong to A Minor.†

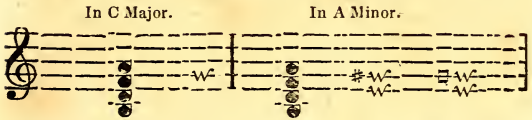
* M. Framery (Encyclopedie Methodique, art. *Dominante*,) controverts the Nomenclature of Rameau, Bethizy, &c. in which the Sevenths are called *simple Dominants*, and the principal one *Tonic Dominant*; and shows that the term ought to be confined to the Fifth of the Key: this arrangement is followed in the present Work.

† The first inversion of this Chord, taken on the Subdominant of the Major Key, is in the system of Rameau a fundamental Chord with the added Sixth. It will be shown hereafter, that the Root depends upon the Key or Scale, and that the Seventh, D, F, A, C, has D for its root in A Minor, and F for its Root in C Major.

321. II. *The Major Sevenths with Major Thirds*, on the Triads of C and F, which belong to C Major. These are often found in passages of Transition, as the Directs show in the following Examples:

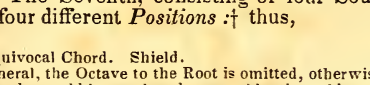


322. III. *The Minor Seventh with the Flat Fifth*, upon B.



This belongs either to C Major, or to A Minor, according to its Resolution, as shown by the Directs. If, however, the Dominant on E should require G natural instead of G sharp (as shown by the last Directs,) the Chord becomes part of a Sequence, and the Minor Mode of A changes.

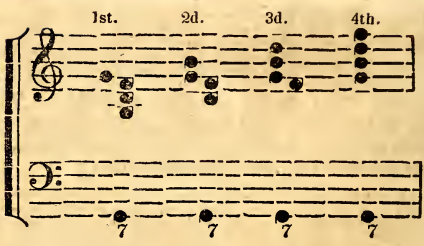
323. IV. *The extreme Flat Seventh*,* upon G sharp in A Minor, formed of three Minor Thirds.



324. The Seventh, consisting of four Sounds, admits of four different *Positions* :† thus,

* Or equivocal Chord. Shield.

† In general, the Octave to the Root is omitted, otherwise a Chord of *five* Sounds would be employed; a combination seldom necessary. Pasquali (Thorough Base,) has uniformly given the Chord of the *Seventh* full, with four Notes in the Accompaniment; but this appears irregular, as three Notes are generally sufficient. At a final Cadence, indeed, the Dominant may be taken thus, D, F, G, B, but then the following Tonic ought to consist of C, E, G, C.



The first position is that of 3d, 5th, 7th, and 8th.
The second, of 5th, 7th, 8th, and 3d.
The third, of 7th, 8th, 3d, and 5th.
The fourth, of 8th, 3d, 5th, and 7th.

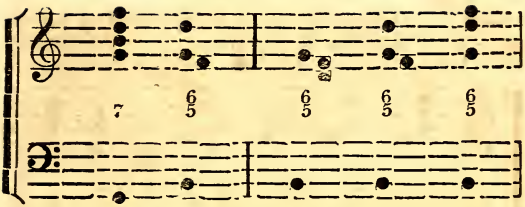
These positions, like those of the Triad (Art. 292,) contain the *Tenth*, *Twelfth*, and *Fourteenth* of the Root, when the *Third*, *Fifth*, and *Seventh*, are taken above the Octove.

Sect. II.—Of the Inversions of the Dominant Seventh.

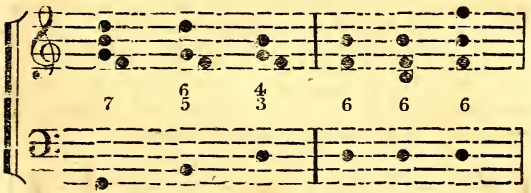
325. This Harmony which consists of *four* different Sounds, has consequently, *three* Inversions, besides its direct form of 3d, 5th, and 7th, just described.

326. I. The Chord of the *Fifth* and *Sixth*, is the *first* Inversion of the Dominant Seventh, when the lowest Note becomes the *Third* of the Root. In Thorough Base, it is expressed by a 5* under a 6 (to which the *Third* is understood,) and, in practice, the Octave of the Base Note is omitted.

* It is often usual to omit the six, and to express this Chord by a five singly, with the stroke through it, thus, $\not{5}$ like the sharp $\not{6}$ (Art. 297;) and, as his always implies the flat Fifth (Art. 163,) the Sixth and the Third are consequently understood. This Inversion is employed in the Hailstone Chorus (*Israel in Egypt*,) and finishes the Sequence of Sixths, to the words, "ran along upon the ground."



327. II. The Chord of the *Third* and *Fourth* is the *second* Inversion of this Harmony, when the lowest Note becomes the *Fifth* of the Root. It ought, according to its derivation, to be expressed by a 3 under a 4 (to which the Sixth is understood;) but, as the *Fourth** (or proper Root of the Harmony) is not pleasing to the ear, it is usually omitted. Thus, the Chord appears as a simple Sixth, and also as the first Inversion of the Diatonic Dissonant Triad, D, F, B.

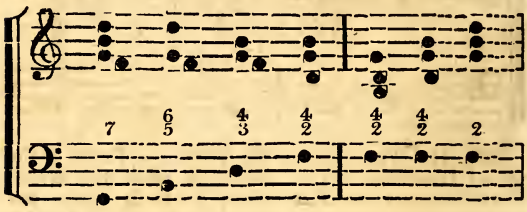


328. III. The Chord of the *Second* and *Fourth*† is the *third* Inversion of this Harmony, when the lowest Note becomes the Discord, and the Triad commences

* Mattheson (Orch. i. 1713,) rejects the Fourth from among the Concords, and asserts its dissonant nature. Handel, Corelli, &c. have uniformly omitted it in this Harmony. The theory of the one, and the practice of the others, seem to be, in this instance, justified, by the want of Melody in the intermediate part, when the Fourth is inserted. In modern Music, however, this Inversion is used complete with considerable success, when the Tonic Base both precedes and follows it. See an admirable instance in the Opera of Motezuma, by Sacchini, at the Chorus, "*Nell'orror.*"

† As the *third* Inversion of the Dominant produces a very great effect, the compositions of the best Masters afford frequent examples of its utility. In the last Chorus of the Messiah (*Amen,*) before the final pause, this Inversion of the Dominant Harmony of A. upon the Base Note G, is a remarkable instance of the sublimity of Handel.

on the next Degree above. It is expressed by a 2 under a 4 (to which the 6th is understood,) sometimes by a 2 alone.

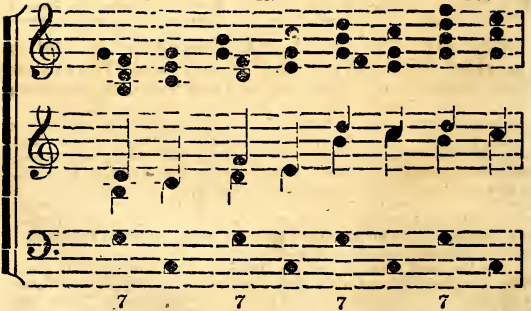


Sect. III.—Of the Resolution of the Dominant Seventh.

329. The descent of the part in which the Dominant Seventh is found, is called its *Resolution;* and, as before observed, (Art. 314,) that descent is either a Tone or a Semitone, according to the Mode.

330. This Resolution of the Seventh, occasions two apparent irregularities,* viz.

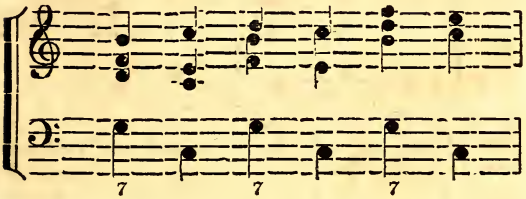
I. The *four* Sounds of the Dominant, followed by the *three* of the Triad; in which the last Harmony is weakened by two parts becoming *Unison*†.



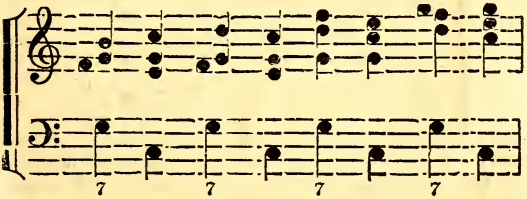
* See the remarks on Pasquali, in the Note.

† The Unison parts are placed in the middle Staff, with Stems turning both ways.

II. The omission of the Fifth in the Tonic Triad, when the antecedent Dominant is taken without the Octave to the Base ; thus,



331. When, however, instead of the Octave, the Fifth or Third of the Dominant itself is omitted, the subsequent Triad can be taken complete ; thus,



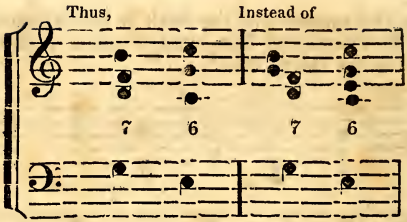
In all these Examples, the Minor Seventh (or Subdominant of the Scale) descends ; and the Major Third of the Dominant (or leading Note of the Scale) ascends.* (See Art. 315.)

332. Two instances also occur, when this general rule of resolving the Seventh by the descent of the Melody, is apparently neglected.

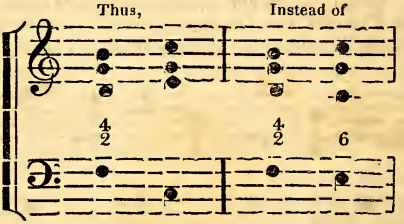
I. When, by license, the base itself takes the Resolution ;†

* Rousseau, art. *Sauver*—Koch and Sulzer, art. *Auflosung*, have written long and useful articles on this subject. See also Shield.

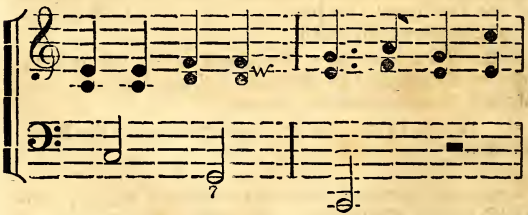
† Kolimann, Essay on Harmony. Holden.



II. When, after the third Inversion (Art. 328,) the Base, instead of descending a Semitone, descends a Fourth to the Tonic, and another part takes the Resolution;

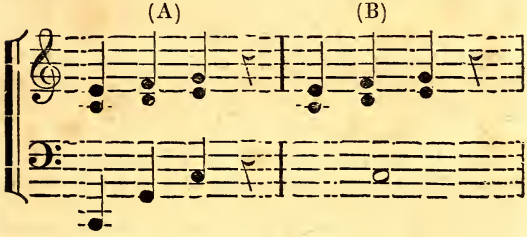


333. A more unusual license is taken in the following Example, from what are called Haydn's Sonatas, Op. 40,* where the Base descends to the Root by the *contrary* motion, and the Seventh is resolved by the intermediate part, as shown by the Direct.



* The two first of these *three* Sonatas were composed by Pleyel, and only the last in G by Haydn.

334. The same Base, in respect of the letters, but in the *direct* motion (which may be found in some attempts at Composition,) is decidedly false and ungrammatical (as at A ;) although the very same Melody, on the Tonic Base continued (as at B,) is frequently and very properly employed.

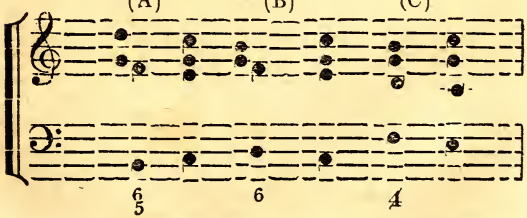


335. Not only the *Positions* of the Dominant Sevenths may be changed, but the *Inversions* also may succeed each other, previous to its Resolution. Great care, however, must be taken, in the arrangement of the parts, to prevent transgressing the rules given, (Art. 302.)

336. I. The *first* Inversisn, or Chord of the *Fifth* and *Sixth*, resolves by the Base ascending a Semitone, as in the following Example (as at A.)

II. The *second*, or Chord of *Third* and *Fourth*, resolves by the Base descending a Tone (as at B ;) and,

III. The *third*, or Chord of *Second* and *Fourth*, resolves by the Base descending a Semitone (as at C.)



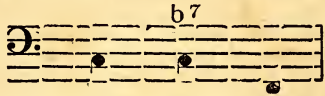
337. The other Sevenths (Art. 319,) when used in Sequences, have similar Inversions; and the same method of Resolution is generally applicable to them all.

Sect. IV.—Of Modulation.

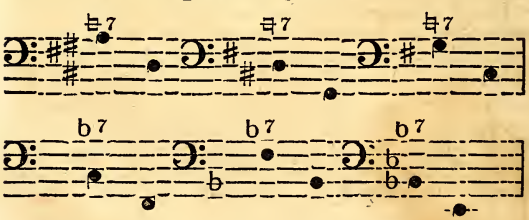
338. As all changes of Key are known decidedly by the use of the Dominant Seventh, the different Modulations from both Scales will be now explained.

Modulation from the Major Scale.

339. I. To the Scale of its *Subdominant.* The *principal,* and most simple change of Key, is that which, by adding a Minor Seventh to the Tonic, makes it a new Dominant; and hence the Subdominant becomes a new Tonic; thus,

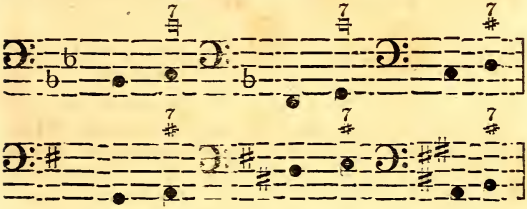


340. This Modulation being continued, forms a circle of descending *Fifths* (or ascending Fourths,) of which the following series is part:



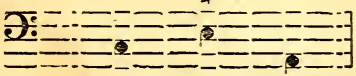
341. II. To the Scale of its *Dominant.* The *second* change is that which, by retaining the Octave of the Tonic itself, as a Seventh, and by making the Base ascend a Tone in gradation, descends from the Supertonic to the original Dominant; thus,

342. This Modulation being continued, forms a circle of descending Fifths (or ascending Fourths,) of which the following series is part:

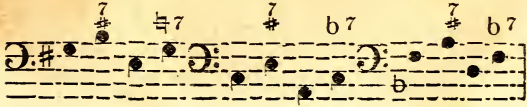


343. These two Modulations are in continual use; the last, or Dominant change, in the former part of a Movement; and the first, or Subdominant change, towards the conclusion, to restore the original Tonic. The Subdominant Modulation only requires *two* Roots, but that of the Dominant requires *three*.

344. III. To the Scale of the *Submediant* or Relative Minor. The *third* change is that in which the Base rises from the Tonic to the Mediant; and, making that a new *Dominant*, by the addition of the Seventh, descends to the Relative Minor Tonic.



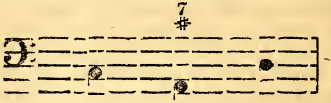
345. A similar Modulation being continued, forms a circle of Keys, in which the Major and Relative Minor succeed each other alternately, and of which the following series is part:



This Modulation requires *four* Roots, previous to the alteration of its Signature; but the sudden addition of the Seventh (especially after the Minor Tonic,) is rather harsh and unexpected.

346. IV. To the Scale of the *Mediant*, or Relative Minor of the Dominant. The *fourth* change is that which, through a previous Modulation into the Dominant, makes the original Mediant a Tonic; thus,

347. V. To the Scale of the *Supertonic*, or Relative Minor of the Subdominant. The *fifth* change is that which, by making the Submediant a Dominant, forms a new Scale on the Supertonic; thus,



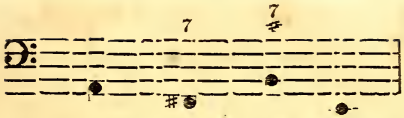
348. This change, although apparently simple, is in reality very remote, as before observed, Art. 309, and will be hereafter more particularly considered.

Modulation from the Minor Scale.

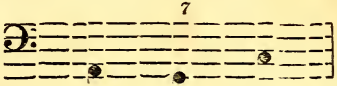
349. I. To the Scale of its Subdominant. The *principal* change, like that in the Major Mode (Art. 339,) is made by adding a Seventh to the Tonic, and sharpening its Third, to form a new Dominant; thus,

350. II. To the Scale of its Dominant. The *second* change requires an additional Harmony (borrowed from the Sequence of Sevenths*) to alter its Signature, previous to the use of the new Dominant; thus,

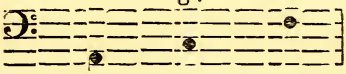
* This will be more fully explained hereafter.



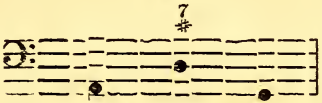
351. III. To the Scale of its *Mediant* or Relative Major. The *third* change is made by the reversed Gradation,* or the descent of a Tone; thus,



352. IV. To the Scale of its *Submediant.* The *fourth* change adds a Seventh to the Mediant, as in the Minor Modulation before given, Art. 345.



353. V. To the Scale of its *Seventh.* The *fifth* change, which is very unusual, is made from the original Subdominant with a Major Third; thus,



354. Although no Modulation is complete without the use of the Dominant Harmony, which contains always *one*, and in the Major Mode *both*, of the characteristic Notes of the New Scale, (see Articles 261, and 315;) yet the order in which this Harmony is given in the foregoing Examples, is not in all cases necessary to be observed.

355. Modulations are continually formed from one Scale to another, by means of Tonic Harmonies alone; but, in those instances, it is proper to introduce the new Dominant as soon as possible, to decide the Key;

* Shield. Diatonic Succession of Chords. Holden. Rameau.

otherwise, the equivocal effect before adduced, (Art. 304,) would frequently occur.

356. The limits of the present Work will not allow a more extensive consideration of this important branch of Harmony. The changes here given are the foundation of all regular Modulation; and, in the Chapter of *Licenses*, a more ample explanation of irregular Modulation will be found.

CHAP. III.

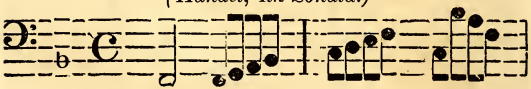
OF DISCORDS.

Art. 357. Discords are used in Harmony, either by Transition, Suspension, Syncopation,* or Addition.

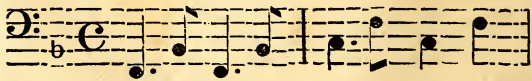
Sect. I.—Discords of Transition.

358. Any Note which passes by one Degree between the other Notes of the Triad, forms a Discord of Transition; and, if found on the weak part of the Measure, is termed a passing Note.

(Handel, 4th Sonata.)



The following radical Base shows which are the Discords of regular Transition, and which are Concords, in the preceding Example.

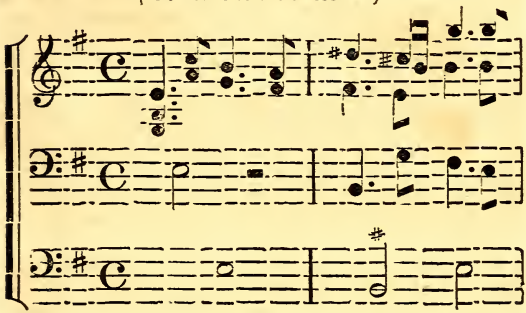


* The Discords of *Suspension* and *Syncopation* must be regularly prepared, struck, and resolved (Art. 318;) but those of *Transition* and *Addition* require, as their names imply, no preparation.

359. The Notes of irregular Transition are found on the strong parts of the Measure, and are called by the Germans, *Changing Notes*, (Art. 106.)

In the following Example, a particular instance of irregular Transition occurs.

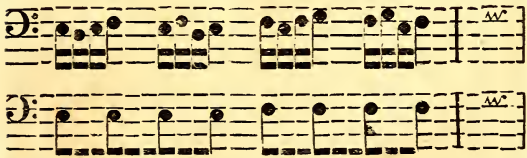
(Overture to the Messiah.)



The last Note but one (viz. the F sharp) is here taken as a Discord by irregular Transition, which the radical Base placed below demonstrates.

360. The Notes of regular and irregular Transition are intermixed in the following passage.

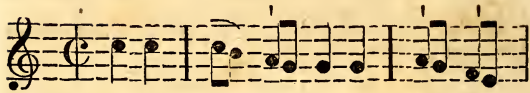
(Thus saith the Lord.)*



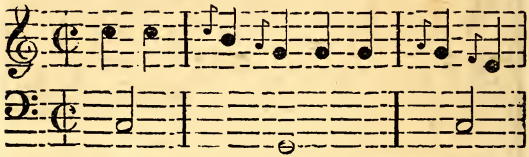
361. In Modern Music, all the Discords of Transition may be reduced to Appoggiaturas or After-notes (Art. 105.) Thus, the Quavers in the following Phrase may be turned into Crotchets preceded by Appoggiaturas.

* Messiah, Dr. A. No. 6.

(Pleyel's Sonata 1, to the Queen.)
Rondo.

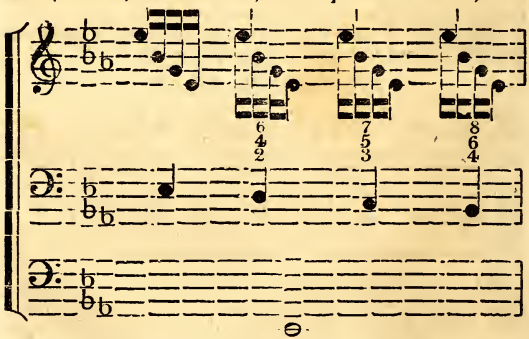


362. The reduction of this Phrase shows the real Notes of the Harmony, and explains the nature of irregular Transition,* in which Appoggiaturas are always employed.



363. When the Notes of Transition are prolonged, they appear as integral parts of the Harmony, and are sometimes marked† with the figures of Thorough Base; thus,

(Corelli, Concerto 8th, Dr. Pepusch's edition.)



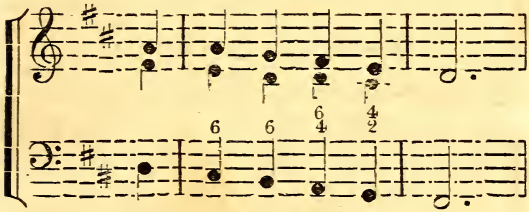
* Morley observes concerning Passing Notes, that "it is impossible to ascend or descend in continual Deduction without a Discord;" but he seems to condemn those which are now termed Discords of irregular Transition. See some excellent remarks on these Discords in Dr. Burney, ii. 462.

† A stroke also drawn over the Notes, instead of the figures, is

These two intermediate Notes between the Tonic and the Dominant descending, are Discords of regular and irregular Transition. They are explained by an After-note and an Appoggiatura, as in the following Example;

364. The same Base Passage (a Semitone lower in D Major) is employed by Handel; in which the Notes are not transient but each bears its own proper Harmony, according to the reversed Gradation from the Dominant.*

(Hallelujah—Messiah.)

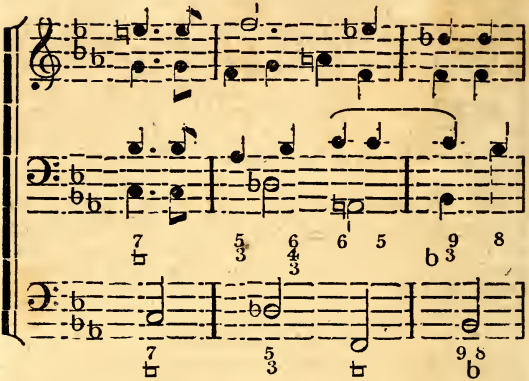


365. In passages of double Transition, particularly when regular, the slow time of the Note does not affect the Harmony of the Root, as in the second Measure of the following Example:

used as a mark, to show the continuance of the first Harmony. Emanuel Bach (Versuch, 2d Part,) has proposed several methods of distinguishing the Notes of irregular Transition from those of the Harmony. He prefers the oblique stroke; a specimen of which may be seen in Heck. Mr. Kollmann (Essay on Harmony,) has explained the two kinds of Transition in the class of *Accidental* Chords.

* The Hypodiatonic Cadence of Mercadier de Belesta (1776;) a progression which will ever remain *classical*, notwithstanding the objection of M. La Borde, and his remarks upon M. Levans, iii. 646, 654. (See also Lampe's Thorough Base (1737.)

(He was bruised—Messiah.)



366. In this passage, the Harmony of D flat is succeeded by that of F, and the transient Fourth and Sixth are unnoticed in the radical Base.

Sect. II.—Discords of Suspension.*

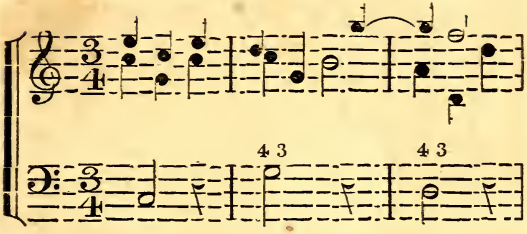
I. *Of the Fourth.*†

367. The *Fourth*, accompanied with the Fifth and Eighth, is an Appoggiatura, continued in the place of the *Third*, on the strong part of the Measure. It is generally prepared, and is resolved by descending one Degree.

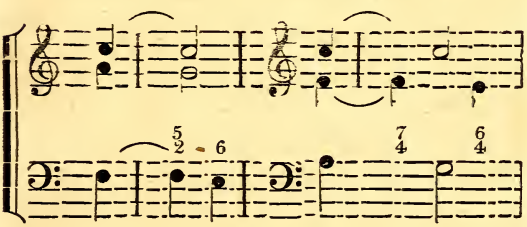
* While *Rameau*, in France (1722,) was confusing his System with a false Theory of these Discords, *Fux*, at Vienna (1725,) explained them in a few words, as simple Retardations of the following Note: "Notas ligatas haud aliud esse, quam Notæ sequentis Retardationem."

† This Chord, under the title of eleventh *Heteroclite*, (that is, used only in part, or in an imperfect state,) makes a conspicuous figure in the Theory of Rameau.

(Corelli, Concerto 10.)



368. It has two Inversions, viz. the *Second* and *Fifth*, which suspends the Sixth (Art. 295,) and the *Fourth* and *Seventh*, which suspends the Fourth and Sixth, (Art. 298,) the two Inversions of the Triad.

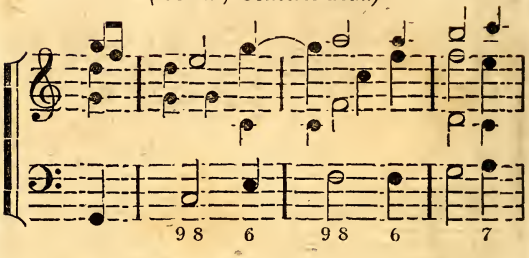


II. *Of the Ninth.*

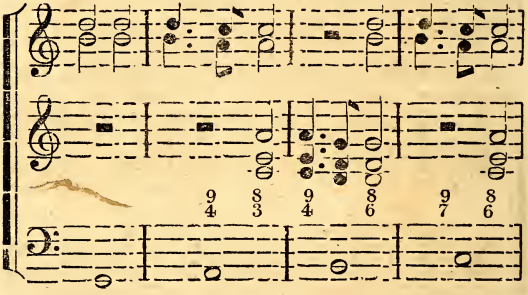
369. The *Ninth*, accompanied with the Third and Fifth, is an Appoggiatura, continued in the place of the Eighth. It is, like the Fourth, generally prepared, and always resolved.*

* The intermixture of the Discords of Suspension with those of Transition, is beautifully exemplified in the opening of Pergolesi's Stabat Mater. (See Mr. Shield.)

(Corelli, Concerto 10th.)



370. The double Suspensions of the *Fourth* and *Ninth*, and of the *Seventh* and *Ninth*, frequently occur. An early example is found in Carrissimi.*



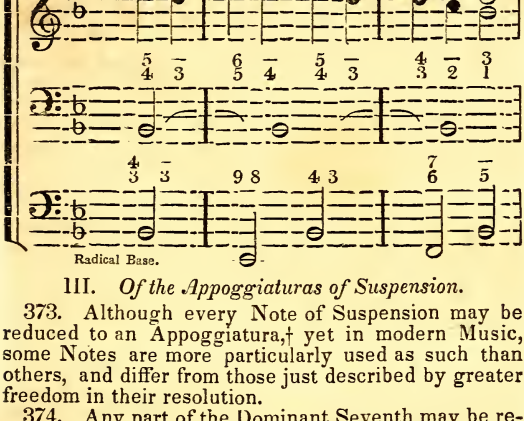
371. The Chord of the Ninth has two Inversions; one figured with a *Seventh*, followed by its Resolution the Sixth, on the Third of the Root; the other figured as *Fifth* and *Sixth*, on the Fifth of the Root.

372. The following Tonic Pedal or Organ-point, is a very important study for the Chords of Suspension.†

* See his "Plorate filiæ Israel," printed in Kircher, i. 604. This passage is also used by Corelli, and by Handel, in Samson, "Hear Jacob's God," &c. Dr. B. iv. 146. Sir J. H. iv. 92. La B. iv. 460. (See also Rameau.)

† The Abbe Roze (see La Borde, tom. iii. p. 476) shows clearly that these passages form a species of *Supposition*, in which the Hold ing Note is not considered in the Radical Base, art. 9.

(O the pleasure of the plains.)*



III. *Of the Appoggiaturas of Suspension.*

373. Although every Note of Suspension may be reduced to an Appoggiatura,† yet in modern Music, some Notes are more particularly used as such than others, and differ from those just described by greater freedom in their resolution.

374. Any part of the Dominant Seventh may be retained on the Tonic Base, and afterward proceed according to its proper motion, (Art. 331.)

375. The Ninth also *may* resolve by ascending into the Tenth, and the sharp Seventh (or leading Note) *must* resolve by ascending into the Eighth.

376. In this ascending Resolution of the Dominant Seventh, the figure of the suspended *Ninth* often becomes a *Second*;‡ thus,

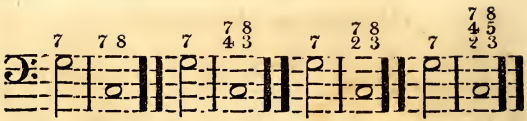
* Acis and Galatea. Dr. A. No. 28. See a similar passage in the celebrated air of Vinci—"Vo solcando un mar crudele." The remarks of Tartini are also important.

† The opinion of Emanuel Bach is very decisive on this subject; he even agrees with Fux, &c. that all Ligatures and Dissonances may be reduced to Appoggiaturas.

"Man kann alle Bindungen and Dissonantien auf diese Vorschlage zuruck-fuhren."—*Versuch*, p. 45.

This is, however, extending the term somewhat too far, as the essential Sevenths of Kirnberger, which are used in the Sequence of descending Fifths (Art. 383,) cannot be considered as Appoggiaturas (*Verschlage*,) although they are bound by the Ligature (*Bindung*.)

‡ In Modern Music, the whole Harmony of the Dominant is often retained in the place of the Tonic, and the radical Base Note of the Tonic itself suspended till the latter part of the Measure. This will be further explained in treating of the Cæsure.

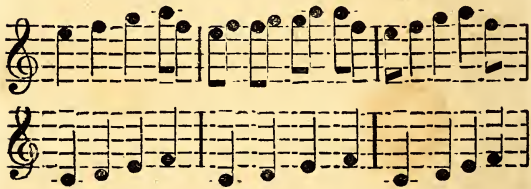


377. In Diatonic Sequences, as will be shown hereafter, every Note of the Scale may bear single or double Suspensions.

All these Notes are nothing more than the retardation or retention of a Sound, longer than the duration of its own Root, upon a new radical Base.*

IV. *Of Anticipation*,† *&c.*

378. When a Note is diminished by half its value, and the following Degree employed to fill up its time upon the former Base, such change is termed *Anticipation.* These anticipated Notes are considered wholly as relating to Melody, and are not noticed by the figures of Thorough Base.



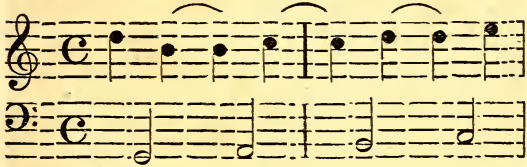
379. In the foregoing example, taken from the Lexicon of Koch‡ (article *Vorausnahme,*) the first Measure (A) contains the simple Notes; the second (B) shows the Anticipation in Quavers; and the third (C) repeats the same Anticipation in syncopated Notes.

* That peculiar effect which is produced from an internal Melody by the employment of Suspension, has been well described by Rousseau, art. *Unity of Melody.* In this valuable article, while he wishes to exalt his favorite branch of Music, *Melody*, at the expense of Harmony, he actually proves the superiority of the latter, and praises those beautiful effects which, without Harmony, could not exist.

† The term *Anticipation* is used in a different sense by Heck.

‡ Anticipations are considered by Koch as After-notes, which may be tied on to the chief Note of the following Melody.

380. The *Postpositions* of Dr. Pepusch,* are in reality nothing more than irregular Suspensions, being the reverse of the Anticipations, and used in the following manner:

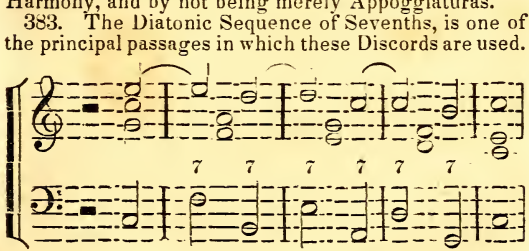


381. Many other Chords of Suspension may be formed, by combining all the preceding in different ways. Hence arise the Second and Third,† the Sixth and Ninth, &c.; which may be found in Kirnberger, Kollmann, Shield, &c.

Sect. III.—Discords of Syncopation.

382. The Discords of *Syncopation*,‡ only differ from those of Suspension§ by constituting part of the radical Harmony, and by not being merely Appoggiaturas.

383. The Diatonic Sequence of Sevenths, is one of the principal passages in which these Discords are used.



* Treatise on Harmony, 1731. "*Postposition*, or Retardation of Harmony, is the putting a Discord upon the accented part of the Bar, followed by a Concord on the next unaccented part, but not prepared and resolved according to the rules for Discords." Example 130, 131, 132.

† This Chord, which arises from a Suspension of the Base, is described by Emanuel Bach, Heck, and Shield.

‡ The term *Syncope* or *Syncopation*, signifies the division or *cutting through* a Note by a Bar, or Accent expressed or understood.

§ The term *Suspension* is used in its most extensive sense in a

384. The German Authors, previous to the writings of Kirnberger (1774,) seem to have classed the Discords of Suspension with those of Syncopation;* but his arrangement of Chords, into *essential* and *accidental*, establishes that difference between them which is adopted in this Work.

Sect. IV.—Discords of Addition.

385. When any Discord which has *not* been heard in the preceding Harmony, is united to the perfect Triad, it is termed in this Work a Discord of *Addition*.†

386. The Discords of Addition are the *Seventh*, the *Ninth*, both on the Dominant; and the *Sixth* on the Subdominant; these are particularly useful in distinguishing those two Harmonies from that of the Tonic.

I. *Of the added Seventh.*

387. The whole Second Chapter of this Part, relates to the Dominant Seventh, particularly Art. 317, where the difference between the *added* and the *transient* Seventh is shown. The third Section, treats of its Resolution; which term is equally applied to the descent of the Seventh, whether used by Transition, Suspension, Syncopation, or Addition.

II. *Of the added Sixth.*

388. As the Dominant Harmony is distinguished from that of the Tonic by its added *Seventh*, so the Subdominant is distinguished from the Tonic, and from the Dominant by its *added* Sixth.‡

former article (Art. 317,) for the purpose of showing the difference between prepared and unprepared Discords.

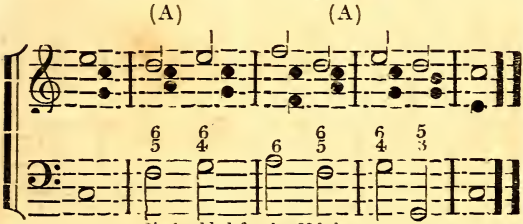
* Heck places them together; and Heck was well versed in the Musical Literature of Germany.

† The Discords of *Addition*, although implied in the writings of Morley, Simpson, Pepusch, &c. were not fully established until Mr. Holden's Essay appeared in 1770. The term Addition is now adopted in France by M. Langle (1801,) but in a less extensive sense.

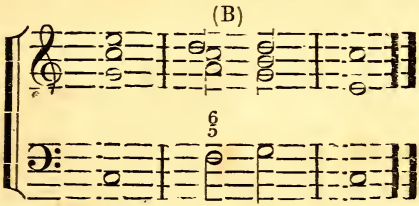
‡ Theorists are divided in their opinions concerning the Root of this Chord; but a great majority of Authors are in favor of its derivation from the Second or Supertonic of the Key. (See Shield, &c.)

Rameau seems to have been the first who classed it as a theoretical Chord; but Morley gives a specimen of its practical use, and even allows it in *Counterpoint* where *Concords* are chiefly employed. Holden follows D'Alembert and Serre, and inclines to the doctrine of Double Fundamentals. Marpurg and Kirnberger unite in rejecting this Chord as an addition, and both censure Rameau.

389. Whenever the Melody of a single part (as at A,) or the Harmony of the whole (as at B,) requires it, the Subdominant may have its own Sixth (or Supertonic of the Scale) added to its Triad.

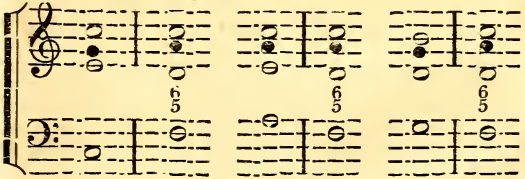


Sixth added for the *Melody*.



Sixth added for the *Harmony*.

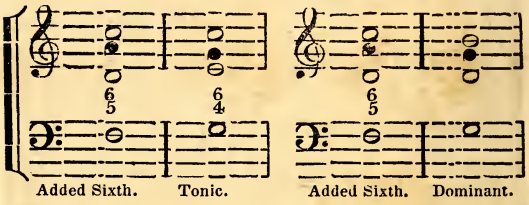
390. The *Fifth* and *Sixth* on the Subdominant may be prepared by the Tonic, by the Submediant, or by the Dominant,* as radical Bases; thus,



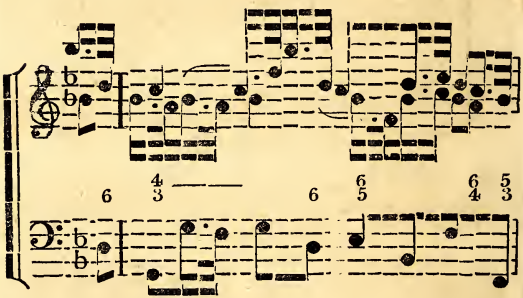
By the *Tonic*. By the *Submediant*. By the *Dominant*.

* The preparation of the added Sixth by the Dominant, is found in the final Cadence of Steffani's Motet, Qui diligit.

391. This Discord may resolve two ways, viz. into the Tonic (on its second Inversion,) or into the Dominant Harmony.*

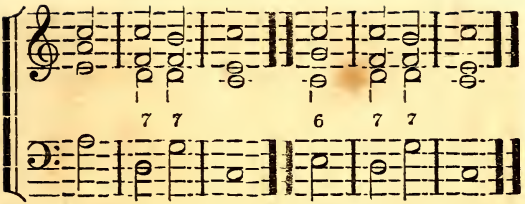


392. The Inversions of this Harmony are seldom used; one instance, however, occurs in Handel's Overture to Esther.

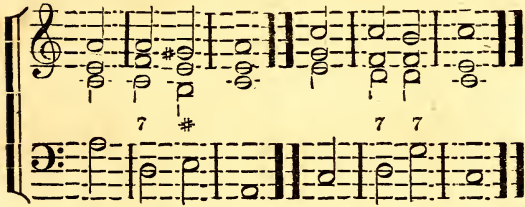


393. When this Harmony appears in the form of a Seventh on the Supertonic, it frequently constitutes part of the Diatonic Sequence of Sevenths, and, as such, may be accounted *radical*, like the diminished Triad of Kirnberger.

* Rameau has resolved it also into the Tonic Base, as an irregular Cadence. See also Playford, (1700.)



394. Rameau* estimates the Root of the Harmony by its Resolution, calling it D when followed by G, and F when followed by C. Heck† considers it as a compound of both the Harmonies of D and of F. Dr. Boyce (in his MSS.) and with him the Anthor of this Work, thinks, that the Root is decided by the Scale of the Key in which it is found; thus,



D in A Minor. F in C Major.

395. Koch, in his Lexicon, (art. Verbindungs Accord,) has placed *his accidental*‡ Harmonies in a different point of view. He considers them as *connecting* Chords, and seems to agree with Kirnberger,§ who as-

* Rousseau, Art. *Double Emploi.*

† Heck says, "The ascending Fourth of the Scale bears its own natural Harmony with an additional Sixth, in order to prepare the succeeding Fifth, and is thus compounded of two Common Chords, that of D and F."

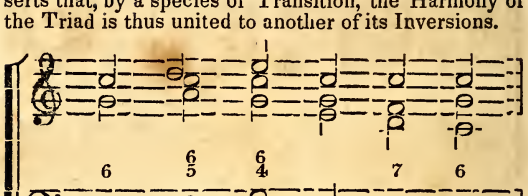
‡ Koch terms the three Harmonies of the Key *essential*, and the three relatives *accidental.* (See before, Art. 305.)

§ See Kirnberger (die wahren Grundsatze.)

Heck thinks that the Seventh used by Transition (as in this passage) does not resolve at all.

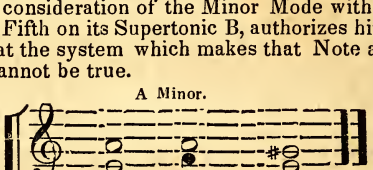
Keeble also has accounted for this Seventh in a similar manner, under the name of *Extension.*

serts that, by a species of Transition, the Harmony of the Triad is thus united to another of its Inversions.



In these Examples, the middle Harmony is said to *pass*, or to be wholly *transient*.

396. Which of these opinions is nearest the truth, the Author does not at present presume to decide; but the consideration of the Minor Mode with the imperfect Fifth on its Supertonic B, authorizes him to assert, that the system which makes that Note a radical Base, cannot be true.

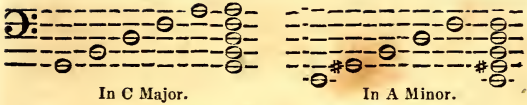


III. *Of the added Ninth.**

397. When to the Chord of the Dominant Seventh, the *Ninth* is also joined, a Chord of five Sounds is formed. It rises from the Root by regular Thirds,† in the following manner:

* M. Langle (Nouvelle Methode pour chiffrer les Accords, Paris, 1801,) has completely overthrown the doctrine of Rameau concerning *Supposition*, and the absurdity of imagining Sounds *under* a fundamental Base.

† The construction of all Chords by uniting Thirds, was a favorite notion of Rameau's: it has had some success; but the simplicity of Kirnberger's system of Suspension has evinced its fallacy, particularly in the Chords of the Fourth and Ninth. Marpurg extended it beyond the Chord of the *Eleventh* to that of the *Thirteenth*; but it will not be easy to find examples to justify any addition after the *Ninth*.

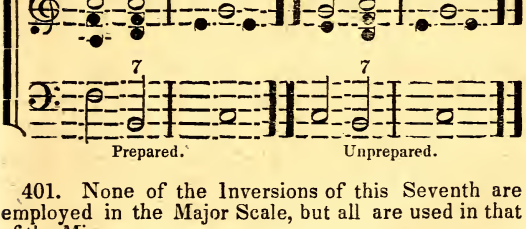


In C Major. In A Minor.

398. This Harmony being generally used in four parts, the radical Base is commonly omitted; for the leading Note is always sufficiently powerful to guide the ear to its proper Root. In this form, the two Chords have been already described, Art. 322, and 323.

399. The added Ninth* of the Dominant is really the Submediant of the Scale, or Sixth from the Tonic; it is consequently Major in the Major Mode, and Minor in the Minor Mode. Thus, although there is but one *added Seventh*, there are two *added Ninths*.

400. The omission of the Root forms a Chord of the Seventh (Art. 322,) on the Leading Note, which may be known from the other Sevenths (either of the Sequence or of Suspension) by its resolution into the Tonic. It may sometimes be prepared, but is generally used without preparation.

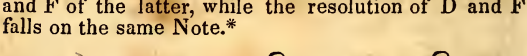


Prepared. Unprepared.

401. None of the Inversions of this Seventh are employed in the Major Scale, but all are used in that of the Minor.

* Mr. Kollmann (Essay on Harmony,) terms this Ninth a *Suspension* of the original fundamental Note. Such is also the System of Kirnberger; but the Nomenclature is defective, since the above Harmony is used generally without preparation, and in some instances actually rises from the Dominant by thirds. See Handel's Chorus in Israel in Egypt—"*The people shall hear,*" at the words, "*till thy people pass over.*"—See also the opening of Haydn's celebrated Overture in D, composed for Bach and Abel's Concerts; where, upon a Dominant Pedal Base, the Fourth is suspended, and the Ninth added.

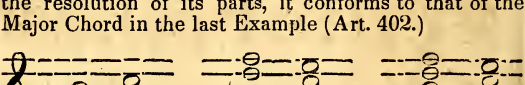
402. This Chord has been considered as a combination of the Dominant and Subdominant Harmonies, since it contains the B and D of the former, and the A and F of the latter, while the resolution of D and F falls on the same Note.*



Dominant. Subdominant. Union of both.

403. It is observable, that the above combination of Sounds includes every Note of the Scale, excepting the three Notes of the Triad on the Tonic, and that it also decides the Mode of the Scale, since the Sixth or Submediant is part of the Chord of the Subdominant, which is Major or Minor, according to the Key (Art. 399.)

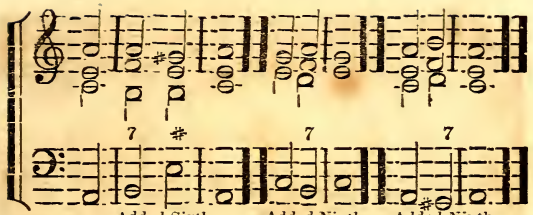
404. The same Chord in the Minor Mode, consists of three Minor Thirds;† and its extreme Notes are the sharp Seventh and Minor Sixth of the Scale. It is of such importance in modern Music, that it is termed the diminished Seventh (Art. 323,) or Equivocal Chord. In the resolution of its parts, it conforms to that of the Major Chord in the last Example (Art. 402.)



405. This Harmony has a great advantage over the former (Art. 402,) since it decides the Key; for the Harmony of B with a Seventh, may be in A Minor or in C Major.

* This explanation of the Chord corresponds with the system of M. Bemetzrieder, whose *Calls* (Appels) are precisely the four Sounds of this Harmony. Lecons de Clavecin, Paris, 1771. Translation by Bernard, 1778. The union of these two Harmonies, G and F, is a system far more plausible than the combination of D, and F in the added Sixth (Art. 394.)

† Rameau, terms this Harmony a *borrowed* Chord, because the Dominant "lends her Fundamental to the sixth Note of Minor Keys." This explanation is very obscure, although it is finally reducible to the theory of Kirnberger. (See Art. 399.)



Added Sixth. Radical Base D. | Added Ninth. Radical Base G. | Added Ninth. Radical Base E.

But the Seventh of G sharp can only be found in the Key of A Minor.*

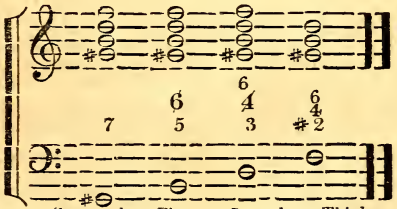
406. The radical Base of this Chord may be found in extreme Modulations by two methods.

I. By the Major Third below the last Sharp.

II. By the Semitone below the last Flat.

When Naturals occur, the observations concerning them (Art. 97,) must be strictly regarded.

407. This Chord is not only considered as a *direct* Harmony, but all its three Inversions are occasionally employed.

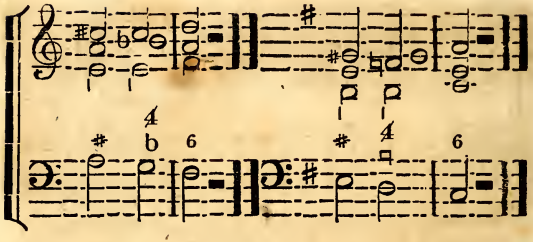


Supposed Radical. | First Inversion. | Second Inversion. | Third Inversion.

408. In those Keys where the Clef does not agree with the Modulation, the second Inversion† requires a Flat or Natural under the sharp Fourth.

* See the Note in the preceding page.

† The effect of this Harmony is truly sublime in Handel's Deborah. See the first Chorus, "immortal Lord," at the words, "whose anger, when it awful glows."



409. These two Chords of the added Ninth have been termed Chords of Major and of Minor *Substitution*;* since they are considered as derived from the Dominant Seventh, by substituting the *Ninth* in the place of the *Eighth*.

They are also styled Chords of *borrowed* Harmony; since the Seventh and Ninth are supposed to be derived or borrowed from the Subdominant.†

410. All these Chords are liable to have any of their Sounds suspended on the following Tonic Harmony; and hence arise many figured Bases, too numerous to be inserted within the limits of the present Work.

* The Abbe Roussier (Traite des Accords, 1764,) seems to employ the terms *Substitution* and borrowed Harmony (*Emprunt*) as Synonymes. Neither term is found, as an article in the Dictionary of Rousseau. (See Holden.)

The principle of Supposition, from which Rameau has deduced these Chords, by placing Sounds below the Fundamental, is now (except in Pedal Harmonies) deservedly forgotten.

† Mrs. Gunn (Introduction to Music. 1803,) has given this explanation of *borrowed Harmony*, which differs from the original idea of Rameau, although it is not inapplicable to the combination. (See Art. 402.)

CHAP. IV.

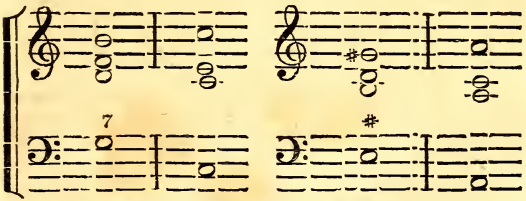
OF CADENCES.

Art. 411. A Cadence* in Harmony consists of *two* distinct Chords (the last of which is generally accented,) and is used to terminate the Sections and Periods of Musical Rhythm.

Sect. I.—Of Radical Cadences.

412. When the Bases of both Chords are the Roots of their respective Triads, the Cadence is termed *Radical;* and, of these radical Cadences, there are four in general use, the Perfect, Imperfect, False, and Mixt;† to these may be added the *Plagal* or Church Cadence, which is only a variation of the Imperfect; and the *Authentic*, which is only the ancient term for the Perfect.

413. I. The *Perfect* Cadence‡ consists of the Dominant Harmony, followed by that of the Tonic; thus,



In C Major. In A Minor.

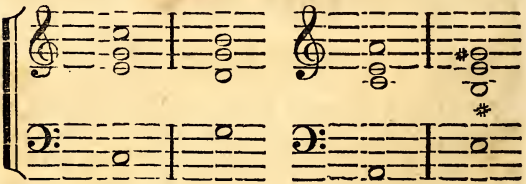
The first or leading Harmony is always Major.

* The term *Cadence* was formerly applied to the final Melody of a Musical Close. See Morley, and Butler. The Germans adopted the Latin word *Clausula* in the same sense. See Walther's Lexicon, 1732.

† See the origin of the Cadences before explained, Art. 310.

‡ See Rameau, of the perfect Cadence.

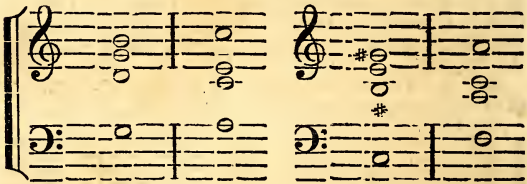
414. II. The *Imperfect* Cadence* consists of the Tonic, followed by the Dominant without its added Seventh, and is the former Cadence reversed.



In C Major. In A Minor.

The second or final Harmony is always Major.

415. III. The *False* Cadence† consists of the Dominant, followed by the Submediant (in Diatonic Gradation) taken in the place of the Tonic. In the Major Mode, this Cadence forms the Interval of a Tone; in the Minor Mode, only a Semitone; and it is used instead of the perfect Cadence, from which it is derived.



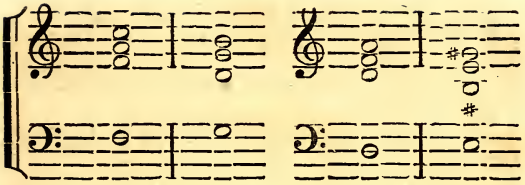
In C Major. In A Minor.

416. IV. The *Mixt* Cadence‡ is the Direct Gradation of the Subdominant to the Dominant, and is used instead of the imperfect Cadence, from which it is derived.

* This is termed by Rameau the *irregular* Cadence, and he wishes extremely to have the Sixth added to the leading Chord. This fancied improvement has been, with great propriety, rejected by subsequent Theorists. See Kirnberger, Die Kunst; and Kollmann, Essay on Harmony.

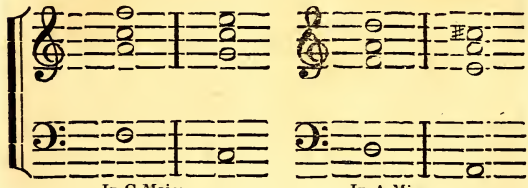
† The false or flying Cadence is placed by Rameau among the Licenses.

‡ Tartini. Rameau has also mentioned another Cadence, which he terms interrupted (*interrompue.*) from the Dominant to the Mediant. (Code de la Musique, 1760.)—Of this progression at a Rhythmic Close there are few, if any, practical examples.



In C Major. In A Minor.

417. The *Plagal* Cadence* only differs from the *Imperfect* as to its place in the Scale, being the progression of the Subdominant to the Tonic. This is used as a final Cadence in Church Music, particularly in the Hallelujah Chorus, Messiah, and in the Coronation Anthem, Zadock the Priest.



In C Major. In A Minor.

The final Chord of this is always Major.†

418. The *Authentic* Cadence is the same as the *Perfect* (Art. 413,) and is only so termed in contradistinction to the Plagal. (See Art. 177.)

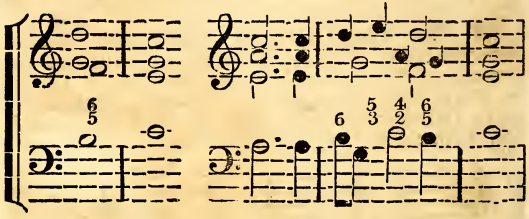
* This is the *Cadanza Aritmetica* of Tartini. For the etymology of the terms *Plagal* and *Authentic*, see Dr. Burney, ii. 13. See also the Rev. Mr. Jones of Nayland's Treatise (1784;) and the Cadence he alludes to in Dr. B. ii. 484.

† Hence arises the necessity of varying the *Third* of the last Harmony in the Minor Mode, and of changing it to the Major Third. Dr. B. iii. 114. See also the observations of Mr. Shield. Formerly it was usual to terminate every piece of Music with the Major Third, whatever might be the Cadence. (See Padre Martini, Saggio I.)

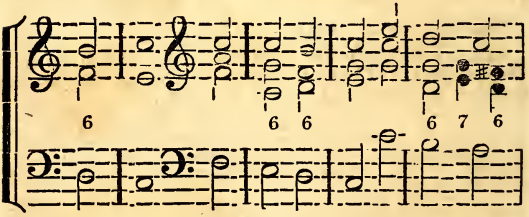
Sect. II.—Of Medial Cadences.

419. When the leading Harmony of any Cadence is not radical, but inverted, the Cadence is, in this Work, termed *Medial*, and is used to express an incomplete Close.

420. I. Cadence of the *Leading Note.* This is the first Inversion of the Dominant, and is used instead of the perfect Cadence.*

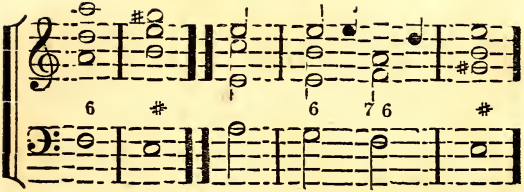


421. II. Cadence of the *Sharp Sixth.* This is the second Inversion of the Dominant, and is sometimes used as a final Cadence on the Tonic, as in *Non Nobis Dominie;* but more generally on the Sixth of the descending Scale, when it commonly bears a suspended Seventh.

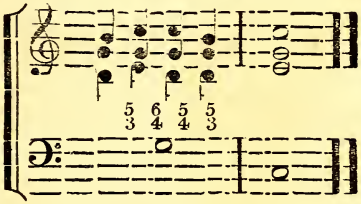


422. III. Cadence of the *Major* or *Minor Sixth.* This is the first Inversion of the mixt Cadence, and is chiefly used in the Minor Mode. It is also liable to the antecedent Suspension of the Seventh.

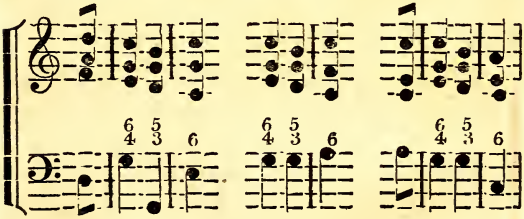
* See Examples of all these Cadences in Handel's Judas Maccabæus, "We worship God."



423. These Cadences may also become *protracted*, by using other Harmonies on the Dominant. Thus is formed what Dr. Pepusch calls the Grand Cadence.*



424. To these may be added those *deceptive* Cadences, which, by varying the final Chord, avoid the final Close.



* Godfrey Keller (1731,) calls the 5th and 4th Cadence, common; the 6th and 4th Cadence bears its own name; and that given in the Example above, is called the Great Cadence. (See Dr. Pepusch.)

CHAP. V.

OF SEQUENCES.

Art. 425. Any similar succession of Chords in the same Scale, ascending or descending diatonically, is, in this Work, termed a *Sequence.**

426. All Sequences are particularly distinguished by the irregularity of making the Leading Note a temporary Root, to avoid Modulation out of the original Scale.

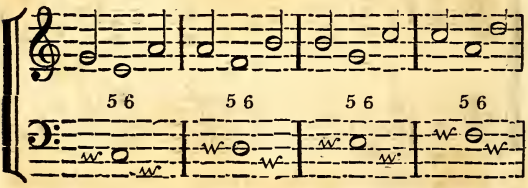
I. *Of Dominant Sequences.*

427. The principal descending Sequence is that of *Sevenths*;† an example of which has been already given (Art. 383,) derived from the progression of rising *Fourths* and falling *Fifths* in the Dominant Motion (Art. 312.)

II. *Of Mediant Sequences.*

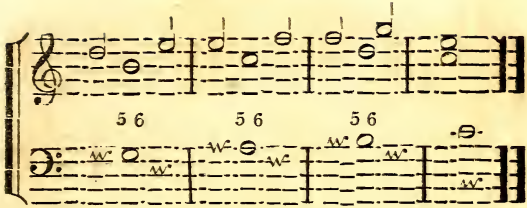
428. The principal ascending Sequence is that known by a 5 followed by a 6, on a gradual Progression of the Diatonic Scale. It is derived from the Mediant Progression (Art. 312.)

In this, and the following Examples, the Directs show the Radical Base.



* The great distinction between a Sequence and a Modulation, consists in the Scale or Key remaining unaltered in the Sequence, and being changed in the Modulation. (See Art. 303.)

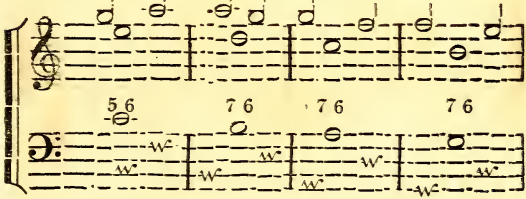
† Dr. Burney calls it a *chain* of Sevenths. The term *Sequence* was probably first employed by Pasquali. It is found in Rameau, in the more extensive sense of Progression.



This Sequence, like that of Sevenths, admits of the Leading Note, as a temporary Root;* and it seems to have been for the sake of elucidating these passages, that Kirnberger and Kollmann have admitted the diminished Triad among the consonant Harmonies.

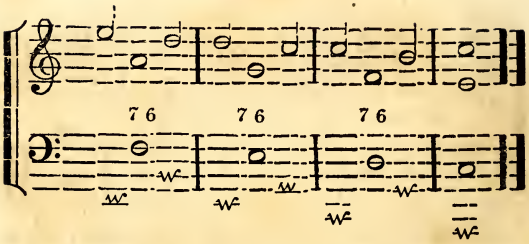
III. *Of Inverted Sequences.*

429. The principal inverted Sequences are those derived from the Sequence of Sevenths;† and of these, the most usual is that of a 7, followed by a 6 on the gradual descending Progression of the Scale.

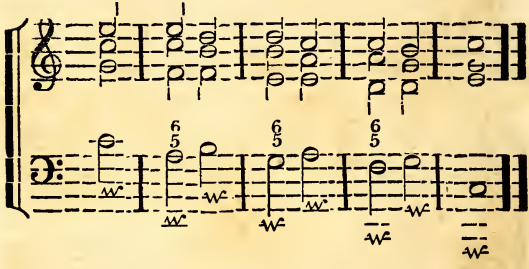


* Nothing but the rhythmical arrangement of the passage, which divides every Semibreve into two Roots, permits this departure from the first principles of Harmony, viz. that every radical Base must bear a perfect Fifth (Art. 291,) and that all Melodies belong to the three Chords of the Key (Art. 305.) These two Rules are liable to no exceptions, except what arise from the nature of the *Sequences* and the *Licenses*. Dr. Boyce, in his Air of "Softly rise," has used this Sequence with great effect. Shield.

† This may be considered as a simple Sequence of Sixths, with Suspensions of the Sevenths; and, in like manner, the ascending Sequence of Fifth and Sixth may be explained by Anticipation. (See Art. 378.) In Mr. Kollmann's Essay, the Sequences are thus explained.



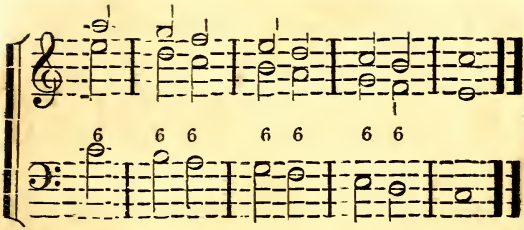
430. It is not unusual in the first Inversion of the Sequence of Sevenths (that of the Fifth and Sixth) to leave every other Harmony as a simple Triad, in the following manner:



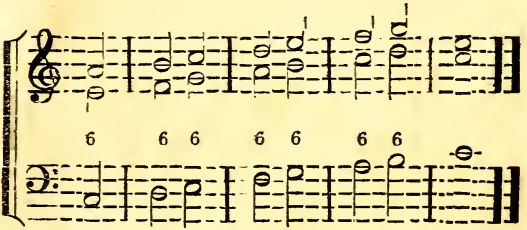
IV. *Of Simple Sequences.*

431. A descending Scale may also be accompanied by a simple Sequence of Sixths alone. The *Theory* of this Progression is involved in some difficulty;* but the uniform *Practice* of Authors, both ancient and modern, has established its use.

* Rameau observes of this Sequence, that Zarlino expressly forbids it, (Institu. Harmoniche, edit. 1573;) but its high antiquity, and its great effect in Modern Music, renders it *classical*, notwithstanding the defect of the false Harmony on D, derived from the imperfect Triad of B (Art. 287.)

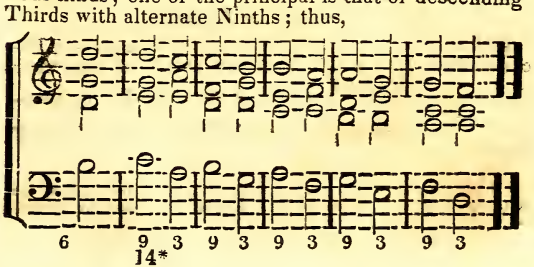


432. The same series may take place ascending; and the effect is nearly that of the Medial Sequence of 5 and 6, as the preceding series of the descending Scale resembles the inverted Sequence of 7 and 6.

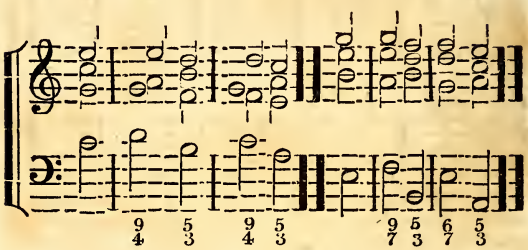


V. *Of Compound Sequences.*

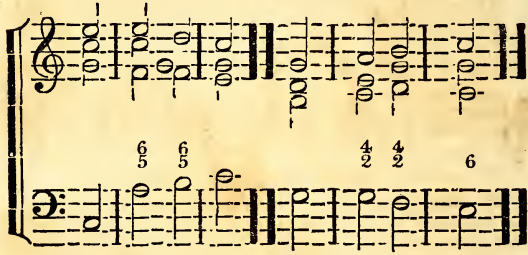
433. Compound Sequences are those which, by employing the Chords of Suspension, change their Harmonies on the alternate Base. Of these there are various kinds; one of the principal is that of descending Thirds with alternate Ninths; thus,



434. These Sequences also may be doubly compounded, and then bear double Suspensions.



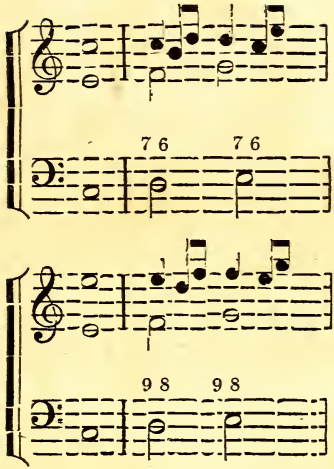
435. To these may be added the partial Sequences of two similar Harmonies, frequently found in Handel, &c.; thus,



VI. *Of Irregular Sequences.*

436. It is not unsual to find an ascending Scale accompanied with 7 and 6, with 9 and 8, or with their Compounds $\frac{9}{7}$ and $\frac{8}{6}$, which form *irregular* Sequences.* These Chords belong regularly to a descending Series.

* Lampe, gives an example of these Sequences, in which, by the contrary motion, the necessity of dividing the last Harmony is avoided.



In these Sequences, the unaccented Harmony must be divided in half, after the Resolution of the Discord, to prepare the following one, as in the antecedent Example; the 7th is then prepared by the 8th, and the 9th by the 10th.*

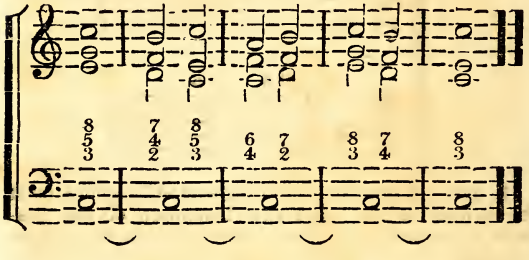
* That the present Classification cannot comprehend all the Sequences which have been or can be invented, is sufficiently obvious. (See Shield.)

CHAP. VI.

OF LICENCES.

Sect. I.—Of Pedal Harmonies.

Art. 437. When the Dominant Harmony is taken unprepared upon the Tonic Base as a holding Note, whether preceded by the Tonic or by the Subdominant Harmony, the passage is termed a *Tonic Pedal* or Organ Point.



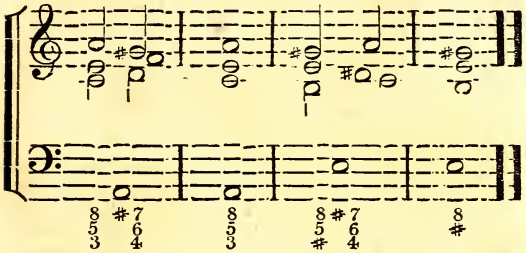
In the Chord of $\frac{7}{4}_{2}$ the Dominant Note itself is generally omitted, for reasons before given (Art. 327;) and the Chord appears (independent of the holding Base,) like that of the sharp Sixth on the Supertonic.

438. When also any Chords, or Sequences, are taken upon the Dominant Base, as a holding Note, a similar passage is formed; and the Base then also becomes a *Dominant Pedal* Note or Organ Point.

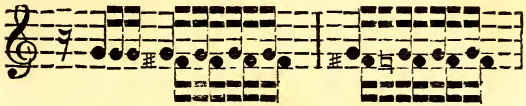
439. Not only the simple Dominant, but its compound derivative, the added Ninth, (Art. 397,) may be taken on a Tonic Pedal. Hence arises the Chord of the *Sixth* and *Seventh*, or the *Thirteenth* of Marpurg.*

* Marpurg's arrangement of Chords, into the Consonant Triads, Dissonant Triads, and Sevenths, in the *first* class, and into the Ninth, Eleventh, and Thirteenth, in the *second* class, is clearly explained by Turk (*General Base*, 1791.)

This is used in the Minor Mode on the Tonic, and sometimes, by extreme License, on the Dominant.



440. Not only these, but any other Chords, whether of Suspension, Sequence, &c. may be taken on the Tonic, or the Dominant, as a Pedal Base; and some instances occur, in which these Sounds may be retained in a superior part, as in the following Example from Mozart, Op. 11.

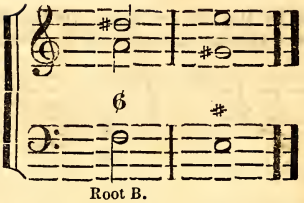


Sect. II.—Of the Extreme Sharp Sixth.

441. When, upon the first inversion of the mixt Cadence (Art. 422,) the Sixth of the Submediant (or fourth of the Scale) is accidentally sharpened, the Chord of the *extreme sharp Sixth** is formed.

This Harmony, when accompanied simply by the Third, has been termed the *Italian Sixth.*

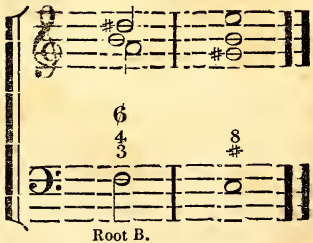
* See Art. 297. Rousseau asserts, that this Harmony is never inverted. Framery, (Art. *Accord,*) has shown, from a Passione of Paisiello, that its inversion may be used; and we have an example in Weldon's Anthem, "Hear my crying." Dr. Boyce, Cath. Music.



By this alteration of the Fourth, the Species of Cadence is changed, from the first Inversion of the *Mixt* to the second Inversion of the *Perfect*, (Art. 421;) and it is considered as a License, because the Root bears a flat Fifth, while at the same time the Third continues Major.

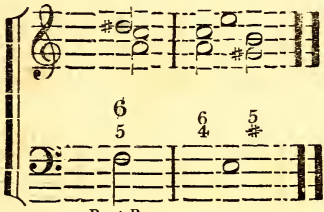
The radical Base, therefore, of the extreme sharp Sixth, is the Supertonic of the Key; and its Fifth is allowed to be defective, that the original Minor Mode may not be totally destroyed.

442. When to the simple combination of the Italian Sixth the Root itself is annexed, a Chord of *Third*, *Fourth*, and *Sixth* is formed; and, as this Harmony is only found in the Theory of Rameau, it may be properly termed the *French Sixth.*



443. A Harmony still more remote, but extremely powerful, is formed upon this Chord, by inserting the added Ninth on the Root, as a supposed Dominant to the real one.

This occurs with great effect in the writings of Graun, &c.* and therefore may be called the *German Sixth.*



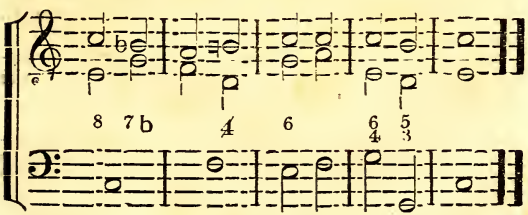
Root B.

It requires, however, a continuation of its Third and Fifth on the Dominant Base (as a new Fourth and Sixth,) to prevent the consecutive Fifths.

Sect. III.—Of Partial Modulation.

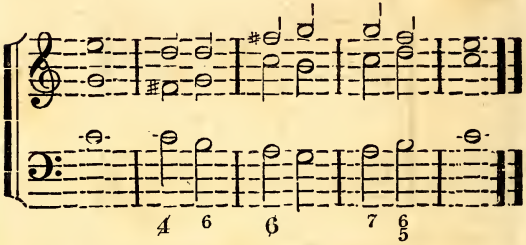
444. Whenever the Dominant and Tonic of a new Key are employed without the Subdominant Harmony, such change constitutes a *partial Modulation.*

445. One change of this kind arises when the Seventh of the Major Mode is flattened, and the Modulation returns again through the Leading Note to the Tonic; thus,



* See the example in Shield. The Music of France, Italy, and Germany, cannot be illustrated in a smaller compass than by the use of these three Chords. The feebleness of the French Sixth, com-

446. Another change towards the Dominant is also frequently used; thus,



Many other changes occur, to the relative Minor (or Submediant,) to the Mediant, to the Supertonic, &c. some of which are peculiar to the Music of the last forty years.

Sect. IV.—Of the Rule of the Octave.

447. It may appear singular to class this celebrated Progression among Musical Licenses;* but, as the descending Scale equally includes a partial Modulation, and rejects the original Subdominant Harmony, so essential to the constituent parts of the Key (Art. 305,) the propriety of the classification appears obvious to the Author or this Work.

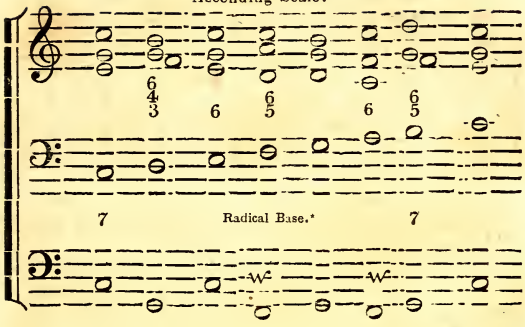
448. When a Diatonic Scale in the Base is accompanied with Harmony according to this *Rule*, the Roots, and their Inversions,† are thus intermixed:

pared with the elegance of the Italian, and the strength of the German, leaves no doubt of their superior excellence. The admirable genius of Graun knew when to employ Italian sweetness, and when to change it for German force.

* Rousseau ascribes the invention of this *Rule* to de Laire, 1710. See his Art. *Regle de l' Octave.*

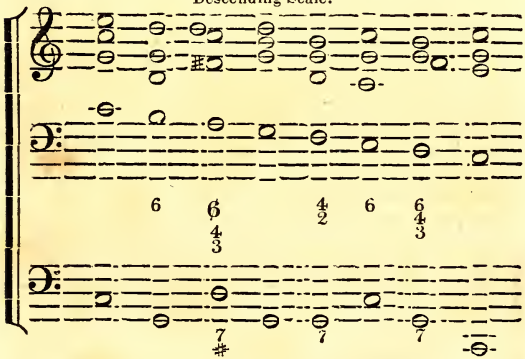
† In the Minor Mode, when the accidental Scale is employed, the Sixth must be sharpened.

Ascending Scale.



449. The descending Scale makes a partial Modulation into the Dominant, like that given in Art. 446.

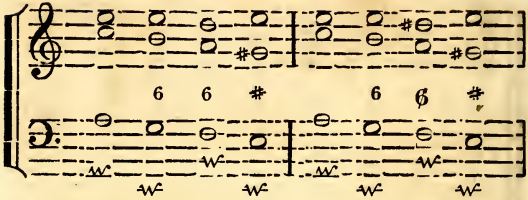
Descending Scale.



450. In the Minor Mode, the Inversion of the mixt Cadence takes place, which, in modern Music, is generally varied by the Italian Sixth.

* The Directs placed over F, on the Supertonic, show the fundamental Bases of the French Theorists. The Hyperdiatonic Cadence of Mercadier de Belesta, coincides with the under Notes.

The Directs mark the Roots of the Chords.



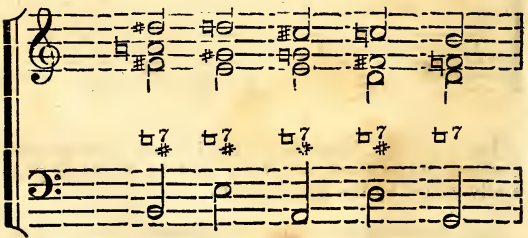
The remainder of the Scale coincides with that of the Major Mode.

451. Although this Scale is given in the above form by most of the Theoretical Writers, yet, in practical Music, such is the prevalence of partial Modulations, varied Sequences, &c. that the Rule is not often found complete.*

Sect. V.—Of Chromatic Modulation.

452. When the Chromatic Semitones are introduced between the Notes of the Diatonic Scale, *Chromatic Modulation* is formed, in which the Key is continually, although partially changing.

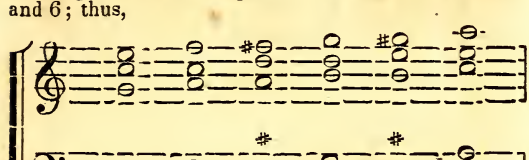
453. As the Diatonic Sequence of Sevenths is used to avoid Modulation, so a Chromatic Sequence of Sevenths consists of Dominants alone, and the Scale changes at every Chord; thus,



* See a striking instance in the Scales of Emanuel Bach, given by

This Sequence forms a descending Chromatic Scale.

454. In a similar manner may be formed an ascending Chromatic Sequence, derived from that of 5 and 6; thus,

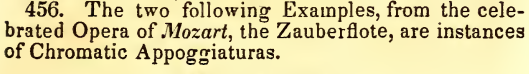


This also makes a partial change at every other Harmony.

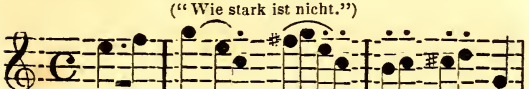
455. In Modern Music, a species of Chromatic *Transition* is employed, in which the Semitones occur, not as parts of the radical Harmony, but as Appoggiaturas, After-notes, or Acciaccaturas.*

456. The two following Examples, from the celebrated Opera of *Mozart*, the Zauberflote, are instances of Chromatic Appoggiaturas.

("Wie stark ist nicht.")



("Schnelle Fusse.")



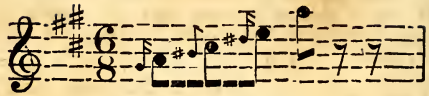
457. The *Acciaccatura* or Half Beat, is also used with great effect in a Terzett, from the same piece.†

Mr. Shield. Geminiani also (Art. of Accomp. Op. 11,) very strongly objects to these Rules, because "they are uncertain and precarious." The Example before adduced (Art. 363,) shows that the descending Scale may be extremely varied, and that it may employ an Inversion of the Subdominant Harmony with great effect.

* Geminiani (Treatise on Good Taste, 1749,) asserts that the *Acciaccature* had been then in use above an hundred years.

† The Half Beat may also, in some few instances, be found on the Semitone above, taken as a Flat. See Clementi, Op. 2, Sonata Ima, first Movement.

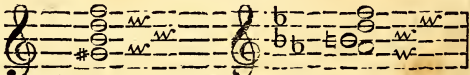
("Seyd uns zum zweytenmal.")



Sect. VI.—Of Enharmonic Modulation.

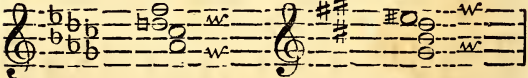
458. The last and most difficult branch of Harmony, is that which arises from the sudden change of Key made by the Enharmonic Diesis (Art. 214.)

459. When any one of the Sounds of the equivocal Chord (Art. 323,) is called by a new name, and placed on a new Degree,* the Root, Scale, and Signature, all change at once.



Root E, Key A Minor. Root G, Key C Minor.

460. As this Harmony† consists of four Sounds, each of which may be altered by the Diesis, the two following Modulations arise from the same Chord.

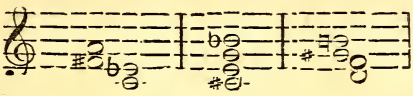


Root B flat, Key E flat Minor. Root C sharp, Key F sharp Minor.

* Although the temperament of Keyed Instruments authorizes the expressions here used, yet it must be understood that, in other Instruments, the difference between G sharp and A flat can be made, and is in theory always to be considered as a real Interval.

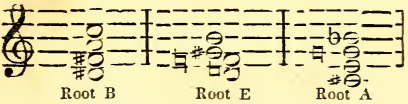
† The Harmony of the *extreme flat Seventh* has attracted the notice of all the Theorists who have written on the subject of Chords in modern times; and its complete discussion would fill an ample treatise. The well known Air by Handel, in Samson, "Return, O God of hosts;" the "Alma del gran Pompeo," in Giulio Cesare, (see Dr. Burney, Commemoration of Handel;) "Vouchsafe, O Lord," in the Dettingen Te Deum, &c. are all passages which might justify a particular Analysis, and which the Author hopes, on a future occasion, to lay before the public. (See also Shield.)

461. As the Chromatic Octave upon Keyed Instruments consists of twelve different Sounds (exclusive of the Diatonic Eighth or Replicate of the first,) there are but three different Chords, in respect of the Keys themselves, on the Key-board. These, in their simplest forms, are the added Ninths of D, A, and E, Dominants of their respective Minors.



Each of these Chords, by the use of the Diesis, may change into three other Harmonies; and thus an immediate step to any one of the twelve Minor Modes may be gained.*

462. These Chords may also, under certain limitations, succeed each other chromatically, descending or ascending.



(Descending.)

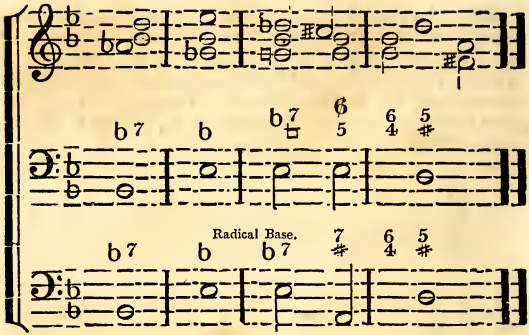
Part of the ascending Series is the same inverted, as before given, Art. 461.

463. The last and most unusual species of Enharmonic Modulation,† is that which changes the Dominant Seventh into the German Sixth.‡ A remarkable instance occurs in Handel's Solomon, at the Chorus, *Draw the tear from hopeless love;* thus,

* Mr. Corfe, of Salisbury, in his *Thorough Base simplified*, a work lately published, has given a Table of these Chords, as used in the twelve Minor Keys, &c.

† Rousseau, Art. *Enharmonique*, does not mention this Modulation; although it is extremely worthy of notice, being formed upon a Chord so apparently perfect as the Dominant Seventh.

‡ Art. 443.



to express the words, *full of death and wild despair.*

PART IV.

RHYTHM.

CHAP. I.

OF ACCENT.

SECT. I.—OF SIMPLE MEASURES.

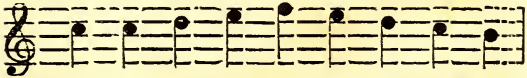
Art. 464. The disposition of Melody or Harmony, in respect of Time or Measure, is termed Rhythm.

465. Those branches of Rhythm which are necessary to be considered in the present Work, are,

1. Accent.
2. The Musical Foot.
3. The Musical Cæsure.
4. The Phrase.
5. The Section.
6. The Period.

466. *Accent* has been already described (Art. 80,) as part of Notation; but it must be now examined more accurately, since upon this peculiar arrangement of Sound, all Rhythm depends.

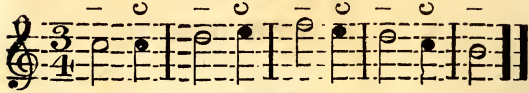
467. The necessity of dividing the Notes of Music into equal portions of Time called *Measures* (Art. 65,) may be shown, by considering the subsequent series of Notes.



468. The above cannot be performed, as Melody, without making certain points of division, on which a

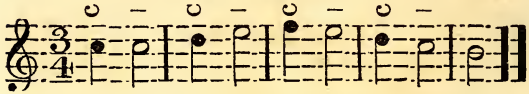
pressure must be laid. It may, for instance, be accented two ways in equal Time; thus,

Trochaic Rhythm.

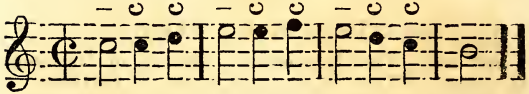


Or thus,

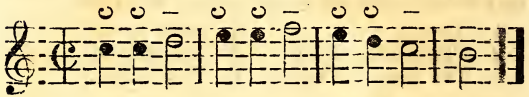
Iambic Rhythm.



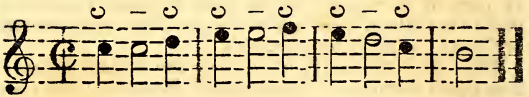
I. Dactylic Rhythm.



II. Anapæstic Rhythm.

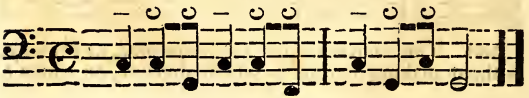


III. Amphibrachic Rhythm.

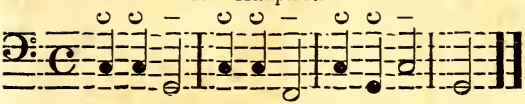


469. These passages are also distinguished by the different Harmonies they bear in each variation of Rhythm.

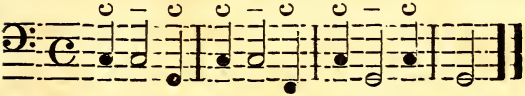
I. Dactylic.



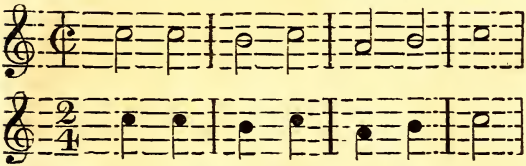
II. Anapæstic.



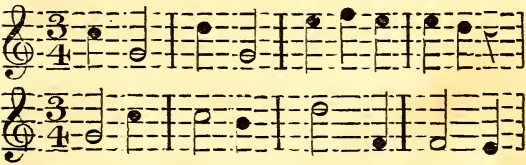
III. Amphibrachic.



470. The simple Measures of equal Time consist of two *Parts*, and are subdivided into four *Times;* the *Parts* are Minims in common Time, and Crotchets in two Crotchet Time; and the *Times* are Crotchets in common Time, and Quavers in two Crotchet Time.*



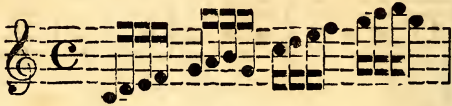
471. The simple Measures of unequal Time also consist of two Parts, one double the length of the other; but the Times are only three; hence arises a varied expression, according to the value of the Notes in quantity.



472. In the further division of simple Measure, the Accents are known by the Groups, which are regulated

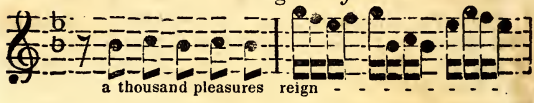
* Koch terms a Part, *Tacttheil*, and a Time, *Tactglieder*.

by the *Times* of the Measure, as before noticed (Art. 80;) thus,



473. In Triple Measure, the same arrangement of Groups is in general use; thus,

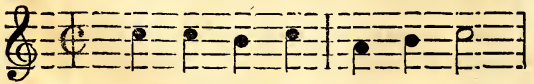
H. S. vol. ii. No. 92: "*Daughter of Gods*"—*Hercules.*



474. These inferior Accents, which belong to the *Times* of the Measure, do not, by any means, destroy that great and predominant Accent that belongs to the first Note which follows the Bar, and which is accompanied by the *Thesis*,* or depression of the hand in beating Time. The *Arsis*,† or elevation of the hand, always follows on the weak part of the Measure. (See Art. 81.)

Sect. II.—Of Compound Measures.

475. The Accents of compound Measures are exactly similar to those of simple Measures, which are only their halves, and which differ chiefly in their Notation, and their appearance to the eye.



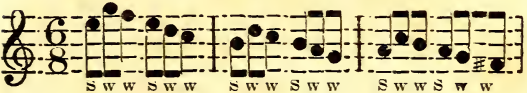
* The *Niederschlag* of the Germans.
† The *Aufschlag* of the Germans.

476. The Germans and also the French* consider the Measure of four Crotchets as a species different, not only from that of three, but even from that of two Crotchets (Art. 67:) a distinction which arises from the nature of Accent, and which is thought of importance by those Authors. It is considered by some† of them as a simple Measure; but it really seems merely to differ from that of two Crotchets, by the omission of the alternate Bar.

477. In compound Time, the difference between six Crotchet and three Minim Measure, or between six Quaver and three Crotchet Measure, (both of which contain an equal portion of Time between the Bars,) is only known by the Accent. The Groups, indeed, regulate the Accent to the eye, and show the compound Time of six Quaver Measure by their equal division.

478. Thus, in the Example before-mentioned (Art. 81,) the simple Measures contains the Quavers grouped by Sixes, which have one strong Accent on the first, and two inferior ones on the third and fifth Notes; thus,

479. In compound Time, the Accents are as under:



480. The compound Triples of nine Crotchets, or nine Quavers, take their Accents from the simple Measures, as before, (Art. 76.)

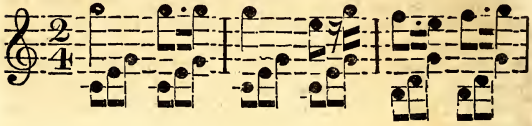
* Principes de Musique du Conservatoire.

† Kollmann, Essay on Harmony.

Sect. III.—Of Mixed Measures.

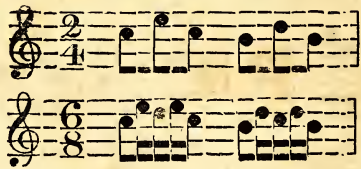
481. The mixt Measures before described (Art. 78,) take their Accents from their Measure-notes; and the Groups decide the alteration made in the Time marked at the Clef.

482. Thus, in the Air, "Whither my love," (La Rachellina of Paisiello,) although the Melody is written in two Crotchets, the Accompaniment is in six Quavers;* thus,



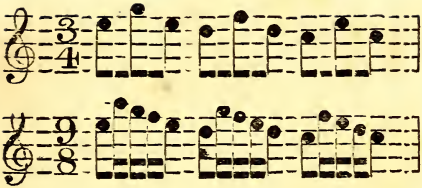
483. If, however, any variation in the subordinate parts of these mixed Measures should be requisite, they must be changed to their relative Compounds; thus, $\frac{2}{4}$ will become $\frac{6}{8}$, $\frac{3}{4}$ will become $\frac{9}{8}$; and common Time will beome $\frac{12}{8}$.

484. The following passages from Koch will show the necessity of using the compound, instead of the mixt Measure, in *two Crotchet* Time.



485. The same variation takes place when the compound is taken, instead of the mixt, in three Crotchet Time.

* There is some doubt whether this Melody should be played as written, or as if it were compound; that is, one dotted Crotchet, one Crotchet, and one Quaver, in the first Measure.



486. In a similar manner, Handel uses the compound *twelve* Quavers for the Accompaniment of "*Mirth admit me of thy crew*," in G (L'Allegro,) while the vocal part, and the Base, are written in simple common Time.

Sect. IV.—Of Emphasis.

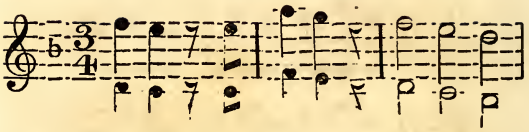
487. The particular sense in which the term *Emphasis* is employed in the present Work, has been explained (Art. 83,) with appropriate Examples.

488. The Emphasis is distinguished from the Accent (as before observed) by its occuring on the weak parts of the Measure; by the different grouping of the Quavers, Semiquavers, &c.; and by the emphatic marks of *Rf*, &c. (Art. 142,) placed over the Notes.

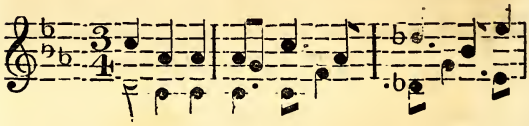
489. In performing on the Piano Forte, a great difference seems to exist between them; since Accent always requires *pressure* immediately after the Note is struck, and Emphasis requires *force* at the very time of striking the Note. Thus, Accent may be used in the most *Piano* passages; but Emphasis always supposes a certain degree of *Forte*.

490. To the same species of effect which is derived from Emphasis, may be referred the *Tempo d'Imbroglio (della Confusione)* of modern Music, in which the Music, although written in one kind of Measure, is really performed in another.

491. Among the simplest instances of this nature, is that change of Time used by Corelli, Handel, &c. which forms one single Measure, of three Minims, from two Measures of three Crotchets each, as in the following example from the Passione of Graun:



492. A more singular Example may be found in the final Chorus of the Pilgrim, by Hasse; in which the Time, though apparently three Crotchets, produces the effect of two Crotchets in a Measure.*



493. In the last Movement of Haydn's Instrumental Passione, Op. 45, generally known by the name of *the seven last words*, several passages occur, in which, as in the preceding Example, the Time changes from *three* to *two Crotchets*. In the final Section, the Time changes to *four Crotchets*, &c. As that Movement is termed *il Terremoto*, or *the Earthquake*, this confusion is particularly appropriate.

* A very beautiful passage of this nature may be found in the terzette, "*Conrade the Good.*" See Shield, at the words, "*Melting strains, ease his pains.*" This elegant and scientific composition is the production of Sarti, and was originally set to a part of a Miserere in the Russian language.

CHAP. II.

OF THE MUSICAL FOOT.

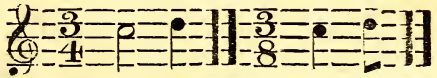
Sect. I.—Of Simple Feet.

Art. 494. A small portion of Melody, with one principal Accent, including the value of a Measure, is termed in this work a *Musical Foot.*

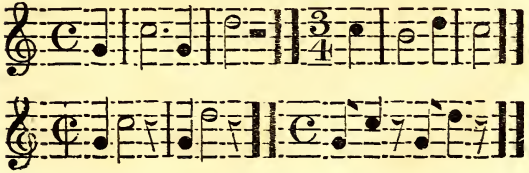
The knowledge of this Rhythmic subdivision of Melody is of great importance in practical Music; as the Singer must not take breath, nor the Performer on Keyed Instruments separate the Notes, in the middle of a Foot.

495. It has been usual with some Authors to apply the names of the ancient poetical Feet to corresponding musical passages; but the difference between ancient and modern Quantity and Accent, leaves a doubt concerning the propriety of using the terms of Grecian Rhythm.

496. An English *Trochee*, as *Actŏr*, *hāteful*, &c. may be represented in Musical Notation several ways, as in the following Example:

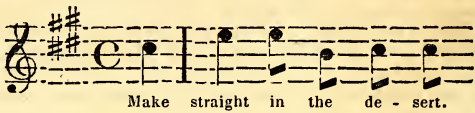


497. An English *Iambus*, as *Rējĕct*, *ŏbsĕrve*, may be represented by the opposite Rhythm.

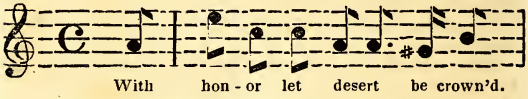


498. The other two dissyllabic Feet of the ancients, viz. the *Spondee*, both syllables long, as *pāle mōon*, and the *Pyrrhic*, both short, as *lĕvĕl*, may, in respect of the Measure (which is guided by the Accent) be always considered as Trochaic in the English language, with some small occasional change in the value of the Notes.*

499. The difference between the two dissyllabic Feet is well exemplified by the word *Desert*, which, when set to Music as a Trochee (*dēsĕrt*,†) signifies *a lonely place*. Thus, in the Messiah, "*Comfort ye my people.*"



500. The same word, set to Music as an Iambus (*dēsērt,*) signifies *merit*. Thus, in Judas Maccabæus.



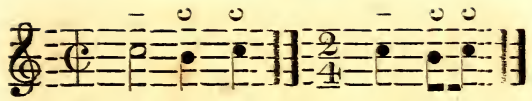
The effect of these Feet, in respect of deciding the Key by means of the Accent, has been before exemplified, Art. 304. Another instance of Harmony and Rhythm being united to determine the Key, in contradistinction to the Signature, may be seen, Art. 278.

501. The English Feet of three syllables may be divided into three classes, answering to the *Dactyl*, the *Anapæst*, and the *Amphibrach* of the ancients.

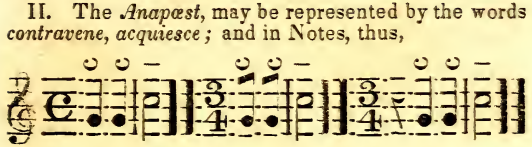
I. The *Dactyl*, may be represented by the words *laborer, possible;* and in Notes, thus,

* See Examples of this variation in the Cadences of the Glee, "*Sigh no more, ladies,*" by R. J. S. Stevens, and the Madrigal, "*Since first I saw your face,*" by Ford.

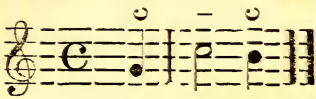
† The liberty of marking the accentual difference of Poetical Feet by the signs of Quantity, is taken by Koch, Art. *Metrum*, &c.



II. The *Anapæst*, may be represented by the words *contravene, acquiesce;* and in Notes, thus,



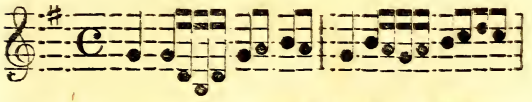
III. The *Amphibrach* may be represented by the words *delightful, domestic;* and in Notes, thus,



Sect. II.—Of Compound Feet.

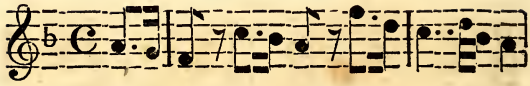
502. As a Musical Foot is equal in value to a Measure,* although it differs in Accent, on account of the place of the Bar; so in the compound Measures the Feet are double, and may be resolved into two by dividing the Measure. (See Art. 75.)

503. The following Trochaic Example from Haydn, Op. 40, Sonata 3, might be resolved into single Feet of two Crotchets in a Measure.

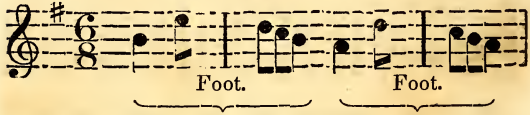


504. The same may occur in the Iambic Measure, as in the following Example from Haydn's first Symphony (Salomon's Concerts.)

* Kollmann, Essay on Harmony, mentions the similarity of the Bar (Measure) in Music to the Foot in Poetry, but does not show their accentual difference.

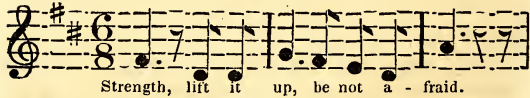


505. An Example of the compound Foot in six Quaver Time divided by the Bar, is found in Haydn, Symphony 3d. (Salomon's Concerts.)

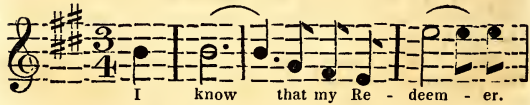


506. The difference between compound and simple Feet may be further exemplified by the following extracts from the Messiah, in addition to the remarks given in the preceding page.

(" O thou that tellest.")



(" I know that my Redeemer.")



The second Measure of both Examples is divided in the same manner; but the Accent, and consequently the Feet, are entirely different.

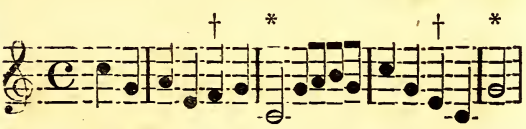
CHAP. III.

OF THE MUSICAL CÆSURE.

Art. 507. The term *Cæsure* is used in this Work in the signification annexed to it by Koch, as the Rhythmic Termination of any passage which consists of more than one Musical Foot. In other words, the Cæsure is the last Accent of a Phrase, Section, or Period, and is distinguished in all the simple Measures by the place of the Bar.

508. The utility of this distinction will appear, by considering the two methods in which the Music might be composed to the lines,

"Conquest is not to bestow,
In the spear or in the bow."
Dr. Arne's Judith.



If these Measures were not divided as they are, the Cæsure, which now is properly placed on a strong part *, would fall on the weak part †, contrary to the nature of Accent.

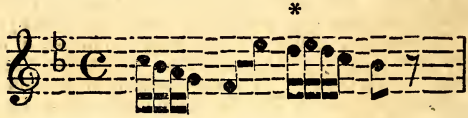
509. The Cœsure,* in ancient Music, most frequently occurs in the middle of the compound Measure, and thus appears to a modern view irregular and incorrect.

510. The exceptions to the Musical Cæsure falling upon the last syllable of the line in Poetry, are few, but very important.

* The term *Cæsura* was used by Prinz (Sat. Comp. P. I.) in two senses; the first of which corresponds with that here given. See Dr. Burney, Art. *Cæsura*. Rees' Cyclopædia, vol. v. P. II.

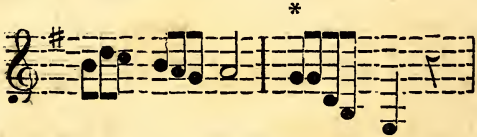
511. From the nature of Harmony, it sometimes occurs that the three last syllables may belong to a Melody derived from the same Chord; in that case, the Cæsure is thrown back, as in the following Example:

"So shall the lute and harp awake,
And sprightly voice sweet descant run."
Handel's Judas Maccabæus.

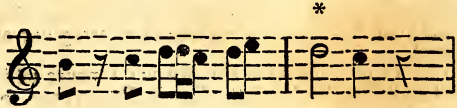


Here the Cæsure falls on the third Crotchet to the syllables *descant run*, instead of being placed on the last syllable *run*.

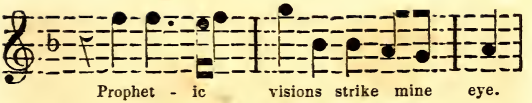
512. It appears that the Cæsure, or Rhythmic Termination, is not always the *last* Note of the passage. The Melody is often prolonged after the Cæsure, by varying the Tonic Harmony; thus,



513. The whole Chord of the Dominant is also often retained (see Art. 376,) upon the Cæsure; as in the following Example from Mozart's Duett in C, Op. 14.

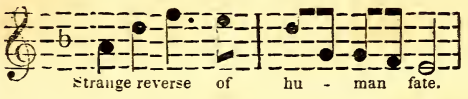


514. The Air by Handel in the Occasional Oratorio, of which the subject is here given, will be found an excellent study for the correct position of the Cæsure.

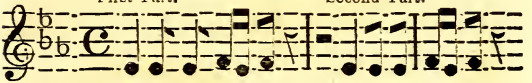


515. In the following instance, Handel has not been so careful, since the Cæsure comes in the wrong place, and the Bars are consequently erroneous. It should begin, like the Example, Art. 508, with the half Measure.

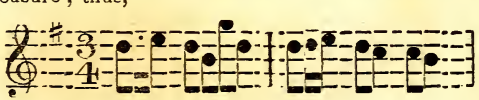
(H. S. I. No. 47 ; *Alexander Balus.*)



516. In the old arrangement of compound common Time, it was usual to change the place of the Cæsure; sometimes forming the Cadence at the beginning of a Measure, and afterwards repeating the same Cæsure in the middle of a Measure. The Airs of Pergolesi, Jomelli, &c. are remarkable for this rhythmic variation. See a particular instance in the admirable Song by Hasse, *Pallido il Sole.**



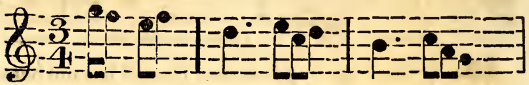
517. In the National Dance Tune called Polonoise or Polacca, a considerable exception to the Rule of the Cæsure occurs, as it falls there on the weak part of a Measure ; thus,



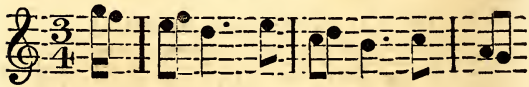
518. An instance also of equivocal Cæsure might

* Delizie dell' Opere, tom. ii. Dr. B. iv. 378, 548. Sir J. H. v. 325, 419.

occur in the Common Melody of *Sally in our Alley,** which is properly barred thus:



519. This might be barred differently, for the sake of throwing the Cæsure on the last syllable of the second line, contrary to the Accent of all the other Feet.



CHAP IV.

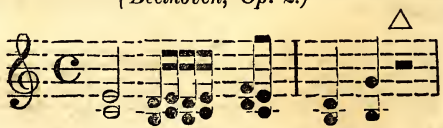
OF THE PHRASE.

Sect. I.—Of the Regular Phrase.

Art. 520. A Phrase *(Einschnitt)* is a short Melody, which contains no perfect nor satisfactory Musical idea.

521. The Phrase is generally formed of two Musical Feet in simple Time, and therefore contains the value of two Measures: thus,

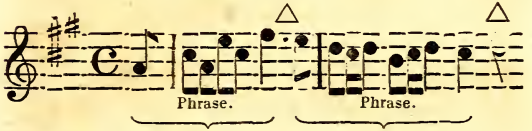
(Beethoven, Op. 2.)



* This Air was composed by Harry Carey, and begins, *Of all the girls that are so smart.* See Sir J. H. v. 194. Dr. B. iv. 300, 652. The style of Melody which distinguishes this Tune, has been often imitated with considerable success.

522. In compound Time of the older Writers, a Phrase sometimes consists of a single Measure; thus,

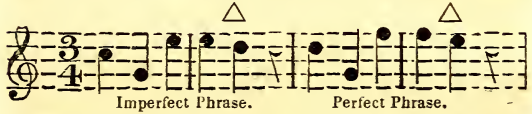
("O had I Jubal's lyre.")



523. Koch has used the mark of a Triangle (△) to express the Phrase, and places it over the final Note.* In Musical Punctuation, this sign seems analogous to that of the Comma (,) in language.

524. Riepel, of Ratisbon, in 1754,† has analyzed the rhythmical arrangement of Musical thoughts, with great success.

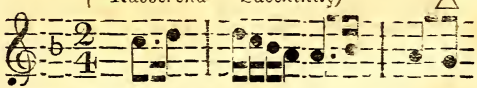
525. He divides Musical Phrases into two species—*Perfect*, when concluded by the Tonic Harmony; and *Imperfect*, when concluded by the Dominant.



526. In the works of Kirnberger, the term *Cœsure* seems equivalent to the term *Phrase;* and the rejection of the word *Einschnitt* is, as Koch observes, a defect in the theory of that able Contrapuntist.‡

527. The Phrase is subject to all the varieties of Accent that distinguish the Feet of which it is formed; and the two Measures of the regular Phrase should always be complete.

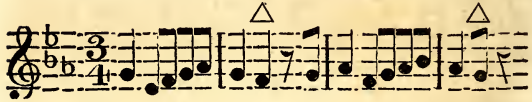
("Rasserena"—Sacchini.§)



* Anleitung (1787,) vol. ii.
† De Rhythmopœia, Tactordnung.
‡ Koch's Lexicon, Art. *Absatz*
§ Corri's Select Collection, vol. i.

528. When the same Phrase is repeated *per tonos*, that is, a Note higher or lower, a slight variation may occur.

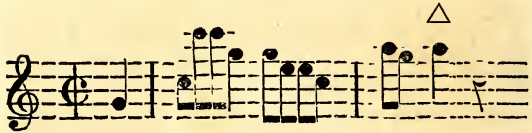
(Non vi turbate—Gluck.)



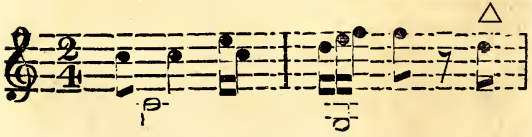
529. The too frequent repetition of the same passage in various Keys, particularly on the Chromatic Modulation (Art. 454,) ascending, as found in Corelli, Dr. Green, &c. is termed by the Italians, *Rosalia.* See Koch, Art. *Transposition.*

530. Koch makes three remarks upon the harmonical construction of the Phrase, which apply to what has been already observed from Riepel.

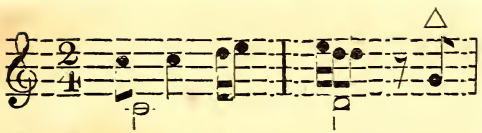
First, That the Phrase frequently terminates with the Subdominant Harmony.



Secondly, That, as the Phrase is an incomplete passage, the Cæsure may be made on a Discord, particularly the Dominant Seventh.



Thirdly, That the Cæsure may also take place on the Inversion of a Chord.



531. Rousseau (Art. *Phrase*) has defined the term in a more extensive sense, very similar to that applied to the word *Section* in the following Chapter. He distinguishes between Phrases in Melody, and Phrases in Harmony. These last seem to correspond with the Dominant, and Mediant Sequences. See Art. 427.

532. Heck, in his Musical Library, describes the Phrase, Section, and Period, under the terms Section, Period, and Paragraph, and considers the term Section as synonymous with Rhythmus.*

533. Holden also, uses the term *Phrase* in a general sense, and appears to include all rhythmic varieties in its definition.

534. The Rev. Mr. Jones, of Nayland, calls the Phrases *Clauses;* and considers two similar Phrases following and depending on each other, as *antecedent* and *consequent;* upon which succession he makes some very just and useful remarks, referring to Corelli's 8th Concerto at the close of the Adagio, Handel's Air in the Overture to Berenice, &c.

Sect. II.—Of the Irregular Phrase.

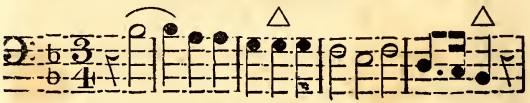
535. Whenever, by repeating one of the Feet, or by any other variation of the Melody, three Measures are employed instead of two, the Phrase is termed *extended* or *irregular.*

(Kreusser, Op. xi. *Waltz the* 2*d.)*

* The *Compound Rhythm* of Kollmann, Essay on Harmony, and the term *Rhythmus* in Shield, seems to correspond with Phrase or Section.

536. A beautiful Example of two extended Phrases, the latter of which contains a Measure of double Time (Art. 491,) is found in Handel.

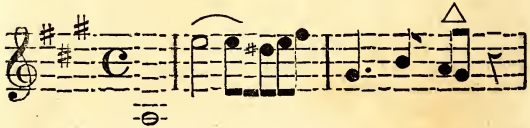
("He was brought as a lamb.")*



537. The contracted Section resembles the extended Phrase, in the number of its Measures, both consisting of three Feet; but the Phrase is always an imperfect Melody, whereas the Section always terminates with a Cadence.

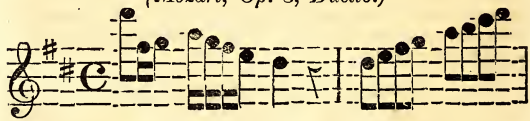
538. A Phrase is often extended by continuing the Harmony of its first Measure, as in the following Example:

(Clementi, Op. 2, Sonata 4.)



539. A Phrase also becomes irregular, when a Measure foreign to its subject is introduced by way of prelude; thus,

(Mozart, Op. 3, Duetto.)



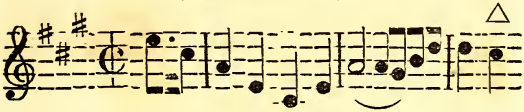
540. In some passages, the variation of the Cæsure Note, by an Appoggiatura, or by other means, will give to a contracted Section the effect of an extended Phrase.

541. The following example from Haydn's Creation

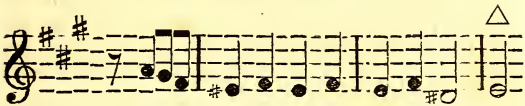
* Redemption.

is of that nature, and is therefore equivocal; as its Melody indicates an extended Phrase, and its Harmony a contracted Section.

(*"Now vanish."*)



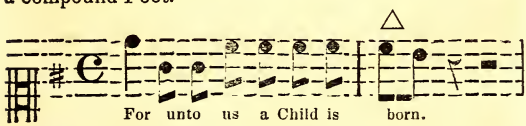
542. The next passage is, however, more complete, and really terminates the Section.



Hence appears the propriety of terming the first an extended Phrase.

543. In Choral Music of the Ancient School, the contracted Phrase seems to be, in many cases, equivalent with the compound Foot. See an instance before adduced, in "*The flocks shall leave*," Art. 281.

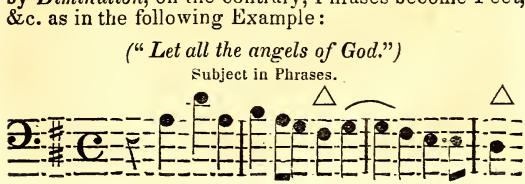
544. Thus also, in the sublime Chorus, "*For unto us a Child is born*," the first Phrase is little more than a compound Foot.



545. In Fugues by *Augmentation*, Feet become Phrases, Phrases become Sections, &c. In Fugues by *Diminution*, on the contrary, Phrases become Feet, &c. as in the following Example:

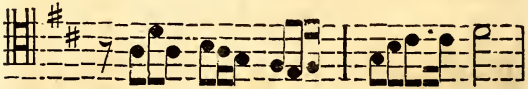
(*"Let all the angels of God."*)

Subject in Phrases.



546. The Answer by *Diminution* changes Crotchets into Quavers, Quavers into Semiquavers, &c.

Answer in Feet.

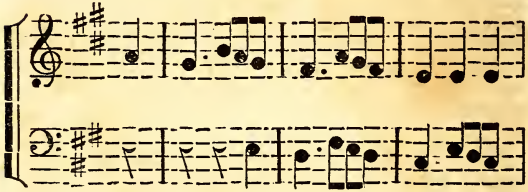


Sect. III.—Of Interwoven Phrases.

547. In Figurative Counterpoint, anciently termed *Descant*, where Imitations, Fugues, and Canons are employed, the Phrases, as they occur, are interwoven in the different parts.

Thus, the extended Phrase to the words, "*shall be revealed,*" is interwoven in the various parts.

("*And the glory of the Lord*"—*Messiah.*)

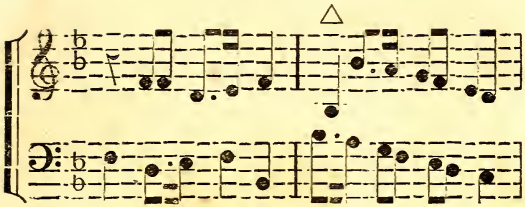


548. The union of Phrases towards the end of a Fugue, &c. is sometimes even closer than a Foot, being at a distance of a Crotchet only. Many examples of this style may be found in the Madrigals of Wilbye, Weelks, &c. In Italy, this is called *Lo Stretto Della Fuga*,* the knot of the Fugue.

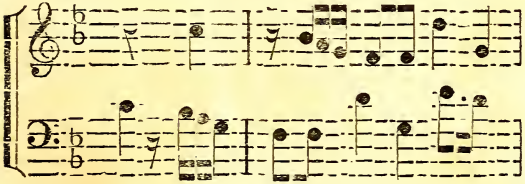
549. The Accent of the words, however, will not always permit *them* to agree with so close a union of the Music, as the alteration in the following Example will show:

* P. Martini, Saggio, tom. ii.

(" *Ye sons of Israel.*"*)



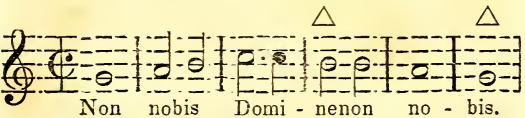
550. A similar passage is introduced with great effect, at the end of "*The flocks shall leave,*" where the Violins re-echo the same Notes (in the Octave above) as are sung in the preceding *Time*, to the words, "*Die, presumptuous Acis.*"



551. In those pieces of Music termed *Canons*, in which the same Melody is continually heard in the different parts, the Phrases are, of course, united throughout the whole composition.

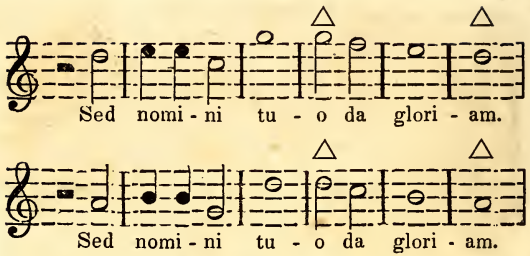
Of this kind of Music, the finest specimen now extant is the celebrated *Non Nobis Domine*,† by Bird; which will ever remain a lasting ornament to the taste and science of the country in which it was produced.

The Phrases of this Canon are as follow:



* Joshua. Redemption.

† See before, Art. 421, and La Borde, tom. ii. Dr. B. in a Note.



CHAP. V.

OF THE SECTION.

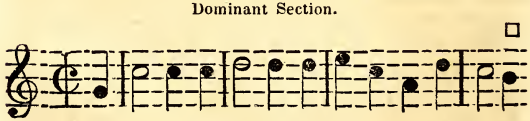
Sect. I.—Of the Regular Section.

Art. 552. A Section *(Absatz)* is a portion of Melody, formed by two regular Phrases, the last of which is terminated by a Cadence.

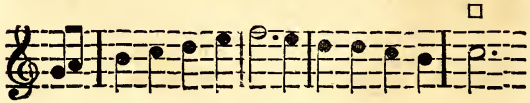
553. The Section takes the name of Tonic, or of Dominant, according to its final Harmony; as in the two following Examples from Haydn's Creation.

(" The heavens are telling.")

Dominant Section.



Tonic Section.



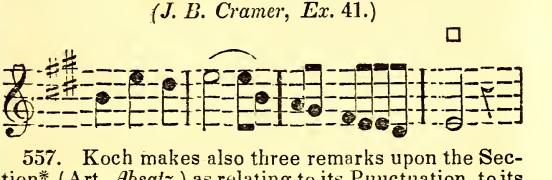
554. In Music of the older School, the Section often consists of two Measures only, as in the Example, "*O had I Jubal's lyre*," Art. 522.

555. Koch has also adopted the mark of a Square (□) to express the Section, and places it like the Triangle of the Phrase, over the final Note. This Sign seems analogous to that of the Semicolon (;) in language.

556. In the Arioso, or Legato style of Music, it is usual to find Sections which are not subdivided into Phrases, as in the following Example.

(*J. B. Cramer, Ex.* 41.)

□



557. Koch makes also three remarks upon the Section* (Art. *Absatz*,) as relating to its Punctuation, to its Rhythm, and to its Harmony.

First, Its conclusion, or the form and harmonical disposition of the Cadence, termed by Koch, its *interpunctual* nature. Upon this depends the classification into Tonic, Dominant, or even Subdominant Sections, the variation of Cæsure Note, &c.

Secondly, Its extent in the number of Measures and in the similarity of Feet (see Koch, Art. *Metrum*,) termed its *rhythmical* nature. By this the regular Section, or Rhythm† (*Vierer*) of four Measures, is distinguished from the irregular Section, whether extended or contracted, &c.

Thirdly, The extent and variation of its component Harmonies; or the degree of its perfection as to being dependent or independent of the adjoining Sections, termed its *logical* nature.‡

* Prinz, in 1696, used the Latin term *Sectio*, as signifying a part of Melody terminated with a formal Cadence. "*Sectio* ist ein Theil der Melodey, so sich endet mit einer *Clausula Formali*." Sat. Comp. P. I. chap. viii.

† See before, Art. 532.

‡ Turk (Klavierschule,) has entered fully into the doctrine of Rhythm, and has invented a mark (similar to that of our passing Shake, see Art. 110,) which he places over the final Note of a Foot, Phrase, Section, or Period, to detach them from each other.

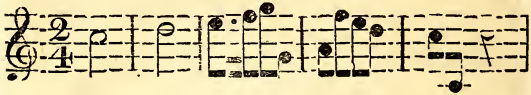
Sect. II.—Of the Irregular Section.

558. Irregular Sections are of two classes, *contracted* of less than four feet, and *extended* of more than four Feet.

I. The contracted Section differs from the extended Phrase by its terminating with a Cadence, as before observed (Art. 534,) and generally consists of three Feet.

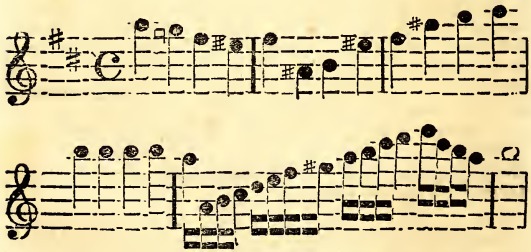
II. The extended Section may consist of five, six, seven, or more Feet; and the Sections are distinguished from each other by the similarity of Time or Modulation in their respective Feet.

III. The extended Section of five Feet* is formed by various methods. The following Example from Koch augments the two first Notes of the regular Section.



559. The Section of six Feet consists either of two extended Phrases of three Feet each; thus,

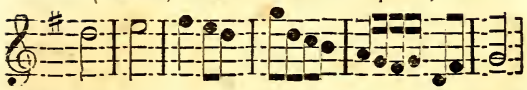
(Mozart, Duett, Op. 3.)



Or of three regular Phrases of two Feet each; thus,

* See two Examples of this kind in Shield.

(Avison, Book iv. *Concerto* iv. *p.* 31.*)*



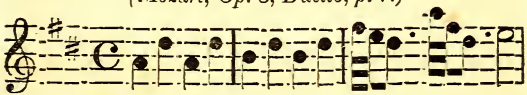
560. The limits of the present Work will not admit any further Examples of more extensive Sections.

SECT. III.—OF THE INTERWOVEN SECTION.

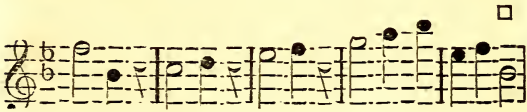
561. When the regular Section is so united to the following one, that upon the Cæsure Note of the first the second commences, the Section is not only contracted, but *interwoven.*

562. Thus the following Section, which is regular in a former part of the page, is *interwoven* in this Example.

(Mozart, Op. 3, *Duetto, p.* 7.*)*



563. When the subject of a Fugue constitutes a Section, the Answers are interwoven at the Cæsure of the Melody. Thus, in the Overture to Esther,



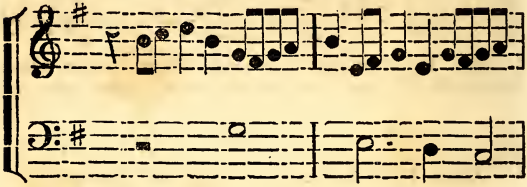
The second Section commences in the middle of the fifth Measure, on the Cæsure Note.

564. In the ancient style of Music, great effects are produced by interweaving Phrases, Sections, &c.; and also by intermixing subjects of different Rhythms.

Thus, in the final Chorus of Steffani's Motett, the original plain Song,* "*Qui Diligit,*" is introduced with

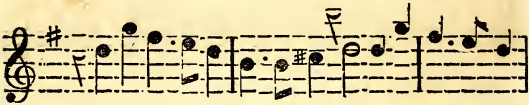
* The *Canto Fermo* of the Italians, or *Choral* of the Germans.

unexpected effect in the Base, while the other parts are singing the Descant, "*Frangere Telum.*"*



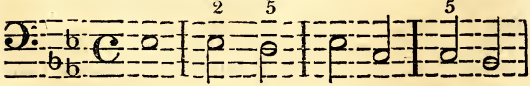
In the Choruses of Handel, these effects continually occur. A remarkable instance may be seen in that of "*Wretched lovers*" (in Acis and Galatea,) at the words, "*Behold the monster, Polypheme.*"

565. In compound Time, the interwoven Sections commence at the half Measure, and consist of only a Measure and a half. The following Example is taken from the Duett in the same Motett of Steffani, *Qui Diligit.*



566. From this union of the parts arises the custom before-mentioned (Art. 515,) of placing the Cæsure in the middle, instead of the beginning of the Measure.

567. It is also usual to protract the Harmonies of an interwoven Section, so that it shall appear regular in the number of Measures. Such is the following Section, in the last Chorus of Graun's Passione.†

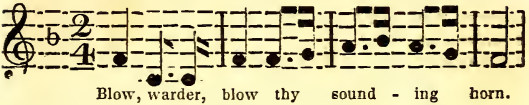


* The "*Qui diligit,*" of the Abbate Steffani is at present unpublished; but it would be a useful study for *Fugue*, &c. if printed with annotations.

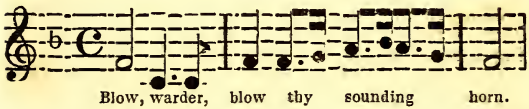
† *Der Tod Jesu*, or the Death of Our Saviour. See Hiller's edition (1785.)

568. In this instance, the prolongation of the Tonic Harmony in the *first* Measure, makes the Section appear regular, although it is really interwoven.

569. In Vocal Music, the Harmony of a Section is also protracted for the sake of expressing the words, as in the Glee of the "*Red Cross Knight*," by the Author of this Work; the first Section of which, if regular, would have been expressed thus,



But to give greater effect to the words, "*Blow, warder, blow*," the two first Notes are augmented to Minims; and the Section, as written in common Time, appears contracted, although it is really extended:* thus,



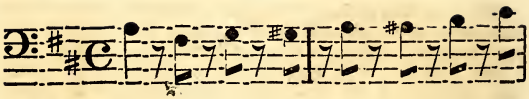
Sect. IV.—Of the Codetta.

570. A short Phrase, or any other passage, which does not constitute part of a regular Section, but serves to connect one Section or Period to another, is termed in this Work a *Codetta*.

The term is used by Sabbatini, the successor to Vallotti at Padua, in his *Trattato sopra le Fughe*, in a more limited sense.

571. In the Duett of Mozart, referred to (Art. 559,) the following Phrase unites the Minor Period to the original Theme.

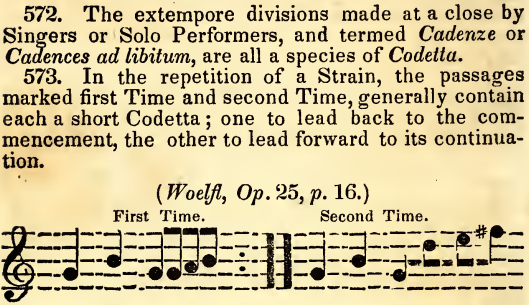
* This Section is consequently similar to that exemplified before, Art. 558, being really five Measures of two Crotchet Time.



572. The extempore divisions made at a close by Singers or Solo Performers, and termed *Cadenze* or *Cadences ad libitum*, are all a species of *Codetta*.

573. In the repetition of a Strain, the passages marked first Time and second Time, generally contain each a short Codetta; one to lead back to the commencement, the other to lead forward to its continuation.

(*Woelfl, Op.* 25, *p.* 16.)



574. In this example, the short *Attacco** of each Time is not, as in general, a separate Codetta, but very ingeniously makes part of the original subject.

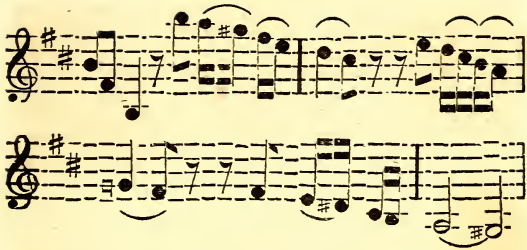
575. In the Da Capo Airs of Handel, &c. (Art. 126,) a Codetta is generally inserted, to lead back to the Theme. Thus, in "*O the pleasure of the plains.*"

576. The most successful Composer in this style is Graun, who, in his celebrated Te Deum,† has used the Codetta at the end of several Movements, to unite them to the next.

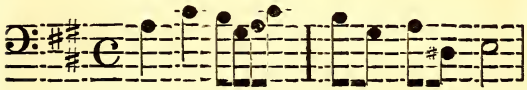
Thus, after the final Cadence of the Air, "*Tu ad liberandum,*" the following Codetta is inserted in different Modulation.

* Padre Martini, Saggio, tom. ii. Dr. Burney (Art. *Attacco*, Dr. Rees' Cyclopædia,) defines it, "a kind of short Subject or Point, not restricted to all the laws of regular Fugue," &c.

† Several of the best Movements from this excellent Composition, are now printed in the Selection of Sacred Music publishing at Birchall's, by the Rev. Mr. La Trobe.



With what great effect this passage leads into the following Theme, the adjoined Example will demonstrate.



CHAP. VI.

OF THE PERIOD.

Sect. I.—Of the Tonic Period.

Art. 577. A Period consists of one or more Sections, occasionally interspersed with independent Feet, Phrases, or Codettas.

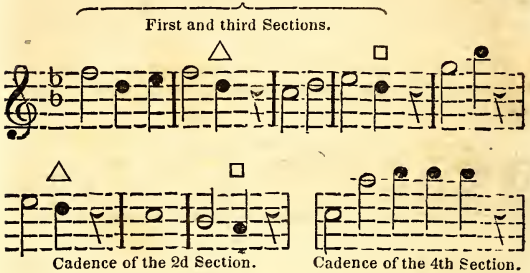
Thus, the Air of *God save the King* (Art. 146,) consists of two Periods; the first Period contains one extended Section (Art. 559,) and the last, two regular Sections.

578. When one or more Periods are terminated by a double Bar (Art. 130,) they are termed *Strains*.

579. The Period always ends with a radical Cadence, like the Section (some few instances excepted, Art. 424,) and answers to the full stop (.) in language.

580. Those Periods which terminate with the perfect Cadence, are, from their last Harmony, termed Tonic Periods.

581. The following Example of a Tonic Period, is taken from the third Sonata of Pleyel, dedicated to the Queen.



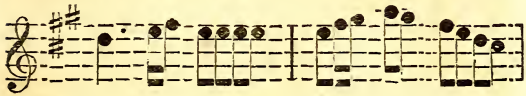
This whole Period consists of four regular Sections, and is distributed into eight regular Phrases.

The third Section is a repetition of the first by the Violin, while the Piano Forte takes the Accompaniment. The fourth Section is similar to the second in respect of its leading Phrase, but differs in the final Phrase, by terminating with the perfect Cadence.

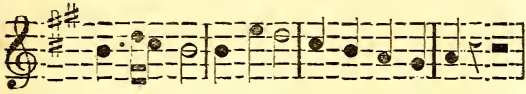
582. In the Example above given, all the transient Notes are omitted, and none but the chief Sounds of the Harmony retained. (See Art. 187.)

583. As the Sonatas of Kozeluch are particularly distinguished by the regularity and clearness of their Rhythm, another instance of a Tonic Period may be taken from his Opera 21, Sonata 2, in A Major.

584. The second Section consists of one regular Phrase repeated; thus,



585. The third Section (with the omission of the passing Notes) concludes the Period; thus,

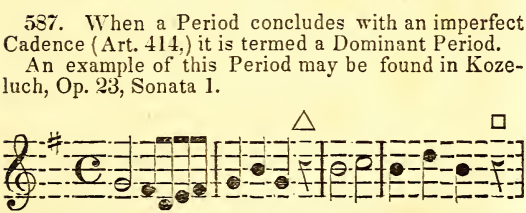


586. Many more Examples might be given from the works of the Bachs, Vanhall, Haydn, Mozart, &c. since the variety of Periods, in respect of their component parts, is as great in Music as in any other language.

Sect. II.—Of the Dominant Period.

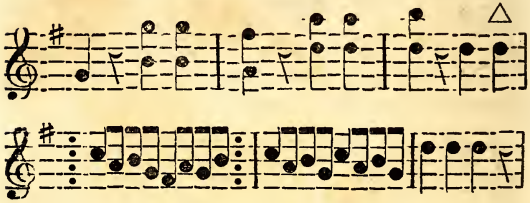
587. When a Period concludes with an imperfect Cadence (Art. 414.) it is termed a Dominant Period.

An example of this Period may be found in Kozeluch, Op. 23, Sonata 1.



588. The second Section, being interwoven with the third, is contracted, and consists of three Measures only. (See Art. 562.)

589. The third Section is formed of two extended Phrases with one Measure repeated, and concludes on the Dominant; thus,



590. It is to be understood, that the terms *Tonic* and *Dominant*, relate only to the nature of the Cadence, not to the Modulation of the Period.

591. It not unfrequently happens that a Period, after modulating from the original Tonic to its own Dominant, may terminate with an imperfect, or even with a mixt Cadence, in the new Key.

592. The final Chord, in this case, will be the Supertonic of the original Scale, made a new Dominant.*

593. As the knowledge of Feet and Phrases is very important, to prevent the bad Delivery *(Vortrag)* of vocal or instrumental pieces; so also the distinction of Sections and Periods, gives the Performer an opportunity of lengthening or contracting his performance at pleasure.

594. The following hints may be useful, till a more extensive Analysis of Rhythm can be given.

I. Every Section and Period may be repeated, provided the Codetta (if any) leads back to the original Note.

II. Every repetition of a Section or Period may be omitted, due care being taken to play the last Codetta (if any) instead of the first.

III. Those Sections and Periods which contain

* An instance of this termination of a Period, may be seen in the popular Sonatas of Clementi. Op. 22. The first Period of the first Sonata concludes on the original Supertonic E, with the Major Third as a Dominant to the new Key A Major, as a Modulation from D Major.

Solos for the Violin, Flute, &c. when not practised with the Accompaniment, should be omitted;* and the two sets of Sonatas by Kozeluch, Op. 21 and 23, will admit of these omissions with great propriety.

IV. In all omissions of Periods, great attention must be paid, to make the harmonical conclusion of one Period agree with the harmonical commencement of the next, and to join the passages by their attendant Keys.

V. The difficult Modulations at the opening of the second strain of a Sonata, may be sometimes omitted, for the sake of gaining time; but every person who wishes to excel in Science or Execution, will practise those passages much oftener than any other in the Movement.

Sect. III.—Of the Interwoven Period.

595. As the Periods of modern Music are distinguished by the accuracy of their phraseology (being for the most part *regular*;) so those of the old School are generally *interwoven*, and the Cæsure Note of one Period becomes the first Note of the next.

The Fugues of Sebastian Bach are highly celebrated throughout Europe, for union of Periods and closeness of Harmony.

596. The first Fugue of his twenty-four pieces,† entitled *Das wohltemperirte Klavier*, is formed on the following subject.

* Particularly where the Violin Melody is not inserted in small notes, or in a separate line. When they are inserted, the passages may be sometimes introduced on Keyed Instruments with good effect.

† First set of Fugues in all the twenty-four Keys, Major and Minor.

The *first* Period terminates in G Major, on the middle of the tenth Measure.

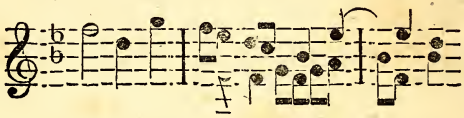
The *second* in A Minor, on the beginning of the fourteenth Measure.

The *third* in D Minor, on the middle of the nineteenth Measure.

The *fourth* in G Major, on the middle of the twenty-first.

The *fifth* in C Major, on the beginning of the twenty-fourth; whence the *sixth* and last four Measures conclude on the Tonic Pedal.*

597. The third Fugue by Handel (Op. 3,) of two subjects in B flat Major, contains a greater number of interwoven Periods.



The *first* Dominant Period of two contracted Sections ends on the Cæsure Note of the seventh Measure.

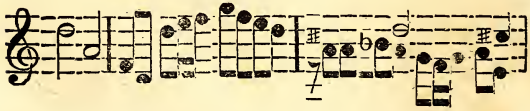
The *second* on the fifteenth Measure.

The *third* on the middle of the thirty-first.

The *fourth* on the middle of the thirty fifth.

The *fifth* (a Tonic Period in D Minor) on the Cœsure Note of the forty-fourth, &c.

598. Another instance of a Fugue on two subjects, much longer than this of Handel, is that by Domenico Scarlatti, vol. ii. on the following Theme.



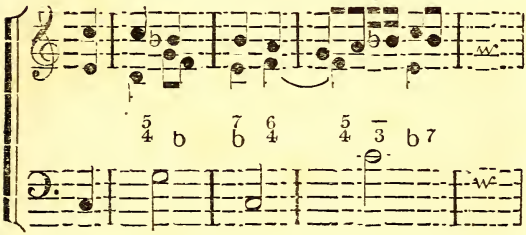
* The Tonic Pedal of this Fugue is really a Coda. See a copy printed by Mr. Dietterhofer, in the third Set of his Fugues, by Messrs. Goulding and Co.

599. All the Fugues in Handel's Choruses, in his Overtures, in his Lessons, in his Violin Sonatas or Trios, in the Symphonies to the Chandos Anthems, &c. are master-pieces of learning and effect.

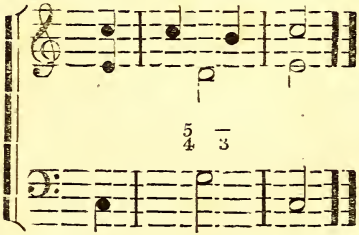
600. Among all the various methods of interweaving the Periods of the Fugue, none has more effect than that of making the Tonic Harmony of the final Cadence a new Dominant.

This may be performed *diatonically*,* by flattening the Third of the leading Chord (Art. 424,) or *chromatically*, by the Modulation given in Art. 553.

Diatonically.

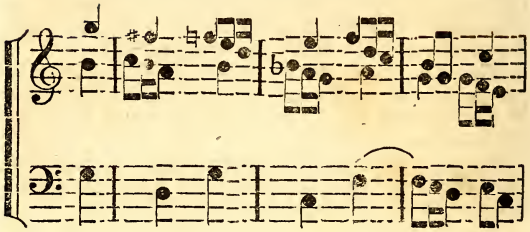


Instead of



* This is the *Clausula Ficta* of the older School, in opposition to the *Clausula Formalis*, or perfect Cadence. See Fux (*Gradus ad Parnassum.*)

The same effected chromatically.

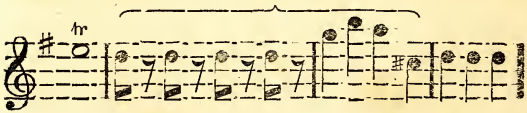


Sect. IV.—Of the Coda.

601. The concluding passage of many Movements, when it occurs after a protracted perfect Cadence (Art. 423,) is termed the *Coda*,* or final Period.

602. The length of the Coda may be various; in some pieces it contains several Sections, in others merely a single Phrase.

603. The following short Coda from Haydn, Op. 40, will serve as an Example:



In this passage, the two first Measures of the Coda might be omitted, without injuring the Harmony.

604. When the Coda consists wholly of the Tonic Harmony, the open or right Pedal of the Grand Piano Forte, which raises the Dampers, may be employed with good effect.

605. Instances occur in Kozeluch, Op. 40, Sonata 1, in F Major, and in Op. 41, Sonata 1, in B flat Major, where he uses the term *Aperto* (open) for this purpose.

606. In foreign printing, the abbreviation C. S. *con*

* In Modern Music, the Coda is generally preceded by a long shake on one of the notes of the Dominant Harmony.

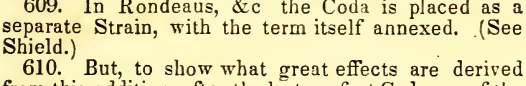
Sordini, with Dampers (or Mutes,) S. S. *cenza Sordini*, without Dampers, are used for the same purpose. (See Woelfls Sonatas, Op. 27, Paris Edition.)

607. In ancient Music, the Coda generally occurs on the Tonic Pedal; and in Minor Movements it is used as leading to the Plagal Cadence (Art. 417.)

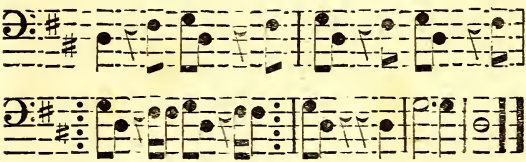
608. There is a style of Coda peculiar to Italian Bravura Airs.* (See the conclusion of the Chorus in Haydn's Creation, *The heavens are telling.*)

609. In Rondeaus, &c the Coda is placed as a separate Strain, with the term itself annexed. (See Shield.)

610. But, to show what great effects are derived from this addition, after the last perfect Cadence of the Movements has been heard, the Hallelujah Chorus of Handel's Messiah may be adduced. The last Section before the Coda, closes the Period with the perfect or authenic Cadence (Art. 418;) thus,



This is followed by a Coda on the Chords of Subdominant and Tonic, concluding with the Plagal Cadence.



Such were the simple, but sublime Notes, which occurred to the genius of this truly great Composer; and the Chorus in which they occur, will ever remain a striking memorial of the immortal talents of *Handel.*

* The Harmonies of this Coda are five, the Tonic, Submediant, Subdominant, Dominant, and Tonic. The Subdominant generally bears its added Sixth.

APPENDIX.

CURIOSITIES OF MUSIC.

MUSICAL MIMICRY.

It is related of a gentleman who resided in London some years ago, that he possessed such extraordinary musical talents, that he could play upon two violins at one time, and imitate the French horn, clarionet, organ, and trumpets, in so astonishing a manner, as to make them appear a whole band, with the sound of different people singing at the same time. The pieces of music which he played were principally from Handel's oratorios. His imitative faculty was not confined to musical instruments. He could imitate a carpenter sawing and planing wood, the mail coach horn, a clap of thunder, a fly buzzing about a window, a flock of sheep with dogs after them, a sky-rocket going off, the tearing of a piece of cloth, the bagpipes, and the hurdy-gurdy. He generally finished his performance with the representation of beating a dog out of the room, which was accounted the most difficult, and, at the same time, the most natural imitation of all.

MUSICAL INSTRUMENT INVENTORS.

1. The first upright harpsichord was made by Shudi, about the year 1770.
2. The first horizontal grand piano-forte was made by Bacchus, in 1777.
3. The first organized piano-forte was made at the manufactory of Longman and Broderip, now Clementi, Collard, and Co.
4. The first upright grand piano-forte was made by Robert Stoddart, in 1780.
5. The first cabinet piano-forte was made by Southwell, in 1790.

MUSICAL AND PHILOSOPHICAL EXPERIMENT.

Among the numerous, pleasing, and ingenious philosophical experiments publicly exhibited by Mr. Charles, at the Theatre of Magic in Liverpool, in the autumn of 1824, was the following:—The exhibitor, presenting to the company a musical tablet, containing twenty-four different tunes, requested any lady or gentleman to privately select one of them, and to mark it with a bodkin. The book, or tablet, was then closed, without having been seen by Mr. Charles. It was then placed near the stage, on a music-stand, which communicated with another stand stationed in the orchestra above, at the very extremity of the scene, at least thirty yards from the former. On this other stand was fixed, a musical tablet, corresponding with that below. The connexion between the two tablets was made by means of twenty-four stationary wires. The musicians were then directed to keep their eyes fixed upon the tablet near the orchestra, until, at Mr. Charles's signal, an electrical shock passed from the lower to the upper tablet, illuminating the tune which had been secretly selected. The musicians, at this strange signal, forthwith proceeded to play this illuminated tune, to the great astonishment of the audience.

DOUBLE FLUTES AND FLAGEOLETS.

The attention that has been paid by German genius to the cultivation of instrumental music, has not only gradually given to the manufacture of musical instruments a degree of importance, which, till the beginning of the nineteenth century, they never attained; but has excited among their various fabricators an increased ambition, to carry their several excellencies as near to perfection as possible. In a variety of instances, this desirable end has been obtained, to an extent that reflects so much credit on the talents and industry of the musical artizans of Germany and England, as to merit particular notice in a work of this kind. Among the improvements in inflatile instruments, the novelties produced in the flute and flageolet, by Bainbridge, are as remarkable as useful. To

these instruments, his ingenuity has imparted a new and improved character; the capability he has given them, to simultaneously produce *double notes*, by which property a single performer is enabled to execute a duett, is an important advance in mechanics. The contrivance consists of the collateral and close conjunction of two flutes, or flageolets, furnished near their upper ends with a horizontal, projecting mouthpiece, which, by communicating with, and conveying the breath through, both the tubes, renders them conjunctly vocal, and consequently empowers the performer to execute two parts at once. While the weight and magnitude of these two-fold instruments, do not exceed those of a full-sized German flute, they require no more breath than does a common flute or flageolet; and, while from the disposition of the apertures or keys, they may be used as easily by a small as by a large hand, the tone it produces is mellifluous and expressive. These instruments are fingered both for solos and duetts; and either of them may, in an instant, be converted into a solo instrument.

THE SWISS HORNS.

Formerly it was a custom among the herdsmen of Switzerland to watch the setting sun. When he had already left the vallies, and was visible only on the tops of the snow-capt mountains, the inhabitants of the cottages which were in the most elevated situations, would seize their horns, and turning towards their neighbors next beneath them, sing out through the instruments the words "Praise the Lord." The sounds were then taken up in the same manner by those to whom they were addressed, and again by those beneath the latter, and thus were repeated downwards from Alp to Alp; and the name of the Lord was re-echoed and proclaimed in song till the music reached the vallies below. A deep and solemn silence then ensued, until the last trace of the splendid luminary disappeared; when the herdsmen on the mountain-tops sung out "Good night;" which was repeated by those beneath, as the other words had been, till every one had withdrawn to his resting place.

KULIBIN'S CHAUNTING WATCH.

In the time of Katharine the Second, lived a Russian peasant of the name of Kulibin, who had the ingenuity to project a bridge to be thrown over the Neva. It was roofed over, and towered 168 feet above the water, the road not being carried over the arch, but suspended in the middle below it. The rustic inventor received a pension from the Empress, and was encouraged to follow the bent of his genius. Kulibin was musical as well as mechanical, and had the ingenuity to invent what he called a *Chaunting Watch*. This little machine was about the size of an egg; within it was represented the tomb of our Saviour, with the stone at the entrance, and the sentinels on duty. A spring being pressed, the stone would suddenly be removed; the sentinels would then fall down, the angels appear, the women enter the sepulchre, and the same chaunt be regularly and accurately performed which is sung on Easter Eve. This watch, deemed so curious at the time of its invention, was deposited in the Academy of Sciences at Petersburg; and is supposed to have first suggested the idea of the present musical time-pieces.

SELF-ACTING PIANO-FORTE.

When the self-acting organs were invented, the musical public gave great credit to the contrivance, and afterwards took honorable notice of the improvements devised by the ingenious and persevering firm of Clementi, Collard, and Company. But the attention which their creative labors, as displayed in various instrumental constructions, drew to their manufactory, has been greatly increased by their very novel invention of a self-acting piano forte. This curious instrument, furnished with a horizontal cylinder, similar to that of a barrel-organ, and put into motion by a steel spring, performs without external force or manual operation, the most intricate and difficult compositions; and, by comprising in its mechanism two complete instruments, each independent of the other, it admits, while the operation of the self-actuated instrument is proceeding within, of a distinct accompaniment on the

keys without, which occupy the usual place in front, and may be played on at pleasure, with or without the self-acting part of the machine.

This first instrument of its kind, when the spring is fully wound up, will act for more than half an hour, and may be again prepared for performance in half a minute; and, if required, stopped in an instant, while in full action. The time in which it executes any movement, may be accelerated or retarded, at pleasure: and while, by the delicacy and perfection of the mechanism, the *piano* and the *forte* passages are given with correctness and effect, the *fortzandi* and *diminuandi* are produced, by the slightest motion of the hand applied to a sliding ball at the side of the instrument. When we consider the state of the piano-forte as originally constructed,—its thin, wiry, jangling tone, inaffective weakness, and other numerous imperfections, and witness the complicated beauties and powers of this self-acting instrument, we must be both delighted and surprised,—and almost be persuaded, that to ingenuity, science, and industry, no excellence in musical mechanism is unattainable.

VELOCITY OF SOUND.

From a series of experiments on the velocity of sound, by different philosophers, especially by Dr. Gregory, the following deductions have been made:—

1. That sound moves uniformly, at least, in a horizontal direction, or a direction that does not greatly deviate from a horizontal line.

2. That the difference in the intensity of a sound makes no appreciable difference in the rate at which it travels.

3. That the difference of the instrument from which musical or other sounds are emitted, makes no difference in the velocity.

4. That wind greatly affects sound in intensity, and that its velocity is also affected by wind.

5. That when the direction of the wind concurs with that of the sound, the sum of their respective velocities gives the apparent velocity of sound; when the direction of the wind opposes that of the sound, the difference of the separate velocities must be taken.

6. That in the case of echoes, the velocity of the reflected sound is the same as that of the direct sound.
7. That distances may frequently be measured by means of echoes.
8. That an augmentation of temperature occasions an augmentation of velocity of sound, and *vice versa.*

THE CADIZ FANDANGO.

The Fandango, the action and accompanying music of which somewhat resembles our country dance, and the tunes to which it is performed, is a spontaneous production of the Spanish Peninsula. Its difference from what might be called the English fandango, chiefly consists in the voluptuous style of some of its movements and attitudes, which are so perfectly in unison with the character of Spanish women, especially those of Cadiz, whose ancient skill in this species of personal display, the gallant Martial has not neglected to extol. In this dance, while the eye is fascinated with the most graceful and seductive motions, the ear is delighted by a lively and brilliant melody. The female, by virtue of her own spirit-stirring agility, is animated to the vivacity of a Bacchante; and she alternately approaches to, and retires from her partner, as if to enamour and reject, invite and repel him. Music is much cultivated by the ladies of Cadiz; but it is the simple style of composition to which they are partial; and though (influenced by the taste of other countries) they sometimes affect to be pleased with Italian and German music, they universally prefer the melodies of their own national songs and dances, especially the airs to which their own favorite fandango is performed.

THE HOG-ORGAN.

Louis the Eleventh, whose *maitre de musique* was the Abbe Debaigne, disposed one day to be pleasant, told the Abbe, that he should, above all things, like to hear a concert of hogs; not, at the same time, believing that the realization of such a treat was possible. The Abbe, however, determined to be as facetious as his Majesty, collected a great number of the swine

species of various ages, and confining them in a large box-like inclosure, with holes of communication on one side, he, on that side, placed a table, furnished with a certain number of keys, similar to those of a harpsichord, but armed, at the ends which went through the holes, with long needles, and so arranged, that, when he pressed down the left hand keys, the old hogs grunted, and when he touched those on the right, the young pigs squeaked; and, by the charming mixture of their high and low notes, produced a "concord of sweet sounds," or an hog-organ. Bouchet, who narrates this story, adds, that when the King was invited to hear the Abbe's newly-invented concert, he was highly diverted, laughed heartily, and gave him much credit for his contrivance.

JOHN WESLEY AND SACRED MUSIC.

John Wesley entertained some curious and distinguished ideas, as well in regard of music proper for the conventicle, as respecting the purity of religious principle. One day, happening to hear a sailor singing in the street, it struck him that the melody the tar was pouring forth to the passengers would, above all others, suit the words of some of his own hymns, and greatly delight his followers. Knowing enough of music to be able to commit to paper any tune that he chanced to hear, he wrote down the notes on the spot, introduced the air in his tabernacle, and always declared that it was the most solemn and appropriate of all the tunes that his congregation sung.