

The
PRINCIPLES of HARMONY,

Containing

*A Complete & Compendious Illustration
of the*

Theory of Music,

on a

NEW & ORIGINAL PLAN,

In which every Part of that Science from its most

Simple to its highest Branches,

IS

PROGRESSIVELY EXHIBITED,

and so arranged as to render the Whole familiar to the

General Capacity of Students

on the

Piano Forte,

BY

J. R E L F E,

Musician in Ordinary to his Majesty.

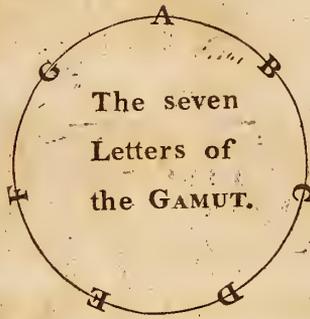
A Course of Exercises in Skeleton, with appropriate Rules and Examples accompanies this Work, to enable Pupils by writing on each Branch of the Science to familiarize the whole, and in order to correct such Errors as may occur a Key is annex'd containing the Exercises in their complete State, by the help of which the Student may detect every fault, and without further Instruction attain a complete knowledge of the Theory of Music.

L O N D O N,

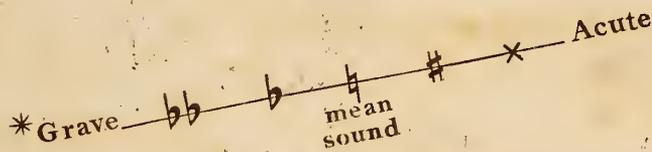
Printed for the Author, Camberwell, Sold by J. Hatchard, 190, Piccadilly, and most other Publishers.

1817.

INTRODUCTORY OBSERVATIONS. 1



In Modern Music five different Characters are occasionally applied to each Letter of the Gamut, by which its precise degree of gravity or acuteness in the Harmonic System is marked.



On the Piano Forte the above Characters are expressed on the following plan.

The ♮ (Natural) is always represented by a white Key.

The # (Sharp) is represented by the next Key to the ♮ ascending.

The ♭ (Flat) is represented by the next Key to the ♮ descending.

The X (Extreme or double Sharp) is represented by the next Key to the # ascending.

The bb (Extreme or double Flat) is represented by the next Key to the ♭ descending.

The twelve Keys in the Octave of the Piano Forte are made sufficient to express the seven Letters of the Gamut in their five different Characters, on the plan exhibited in the following Table, in which each Column shews the different Notes represented by one Key.

represented by one Key.

♮	#	♮	#	♮	♮	#	♮	#	♮	#	♮
#	♮	X	♮	♮	#	♮	X	♮	bb	♮	♮
bb	X	bb	bb	X	bb	X	bb	♮	X	bb	X

It must be observed that these sounds which in a practical view appear to be one and the same, are distinct and unconnected in the Harmonic System, as will hereafter be proved.

* This and other schemes used in the following pages are not intended as Diagrams exhibiting a mathematical proportion of sounds (as it is well known that Keyed Instruments on the present Construction are incapable of expressing sounds on such principle) but as Illustrations best suited to the nature of the Instrument, as well as that of the present work.

ESSAY I.

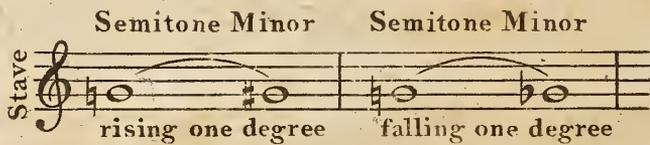
On the TONE and SEMITONE.

The smallest degree of sound the Piano Forte expresses is a Semitone, which is represented by moving from one Key to that immediately following.

EXAMPLE of SEMITONES ascending 

SEMITONES are of two Natures, MAJOR, and MINOR.

A Semitone is said to be **Minor**, when without changing its situation on the staff, it is made to rise or fall one degree on the Instrument, by means of a new Character being prefixed to it.

EXAMPLE 

A Semitone is said to be **Major**, when in rising or falling a degree on the Instrument, it changes its situation on the staff.

EXAMPLE 

EXERCISES ON MAJOR SEMITONES.

Represent the Semitone to the Note given by writing one Note in each Bar agreeable to the following rule.

* **RULE.** ascend one degree on the Instrument, and express such note one Letter higher on the staff, in the manner exemplified in the first three Bars.

LESSON 1. Semitones ascending

Staff 1: B, C, F, G, C, D (with accidentals and slurs)
 Staff 2: Semitone intervals (with accidentals)

+ **LESSON 2.** In which double Characters (x bb) are used to express the Semitone Rule as before

Staff 1: Notes with double characters (x, bb)
 Staff 2: Semitone intervals with double flats (bb)

LESSON 3. Semitones descending

RULE. Descend one degree on the Instrument, and express such note one Letter lower on the staff in the manner exemplified in the first three Bars.

Staff 1: C, B, E, D, B, A (with accidentals and slurs)
 Staff 2: Semitone intervals (with accidentals)

LESSON 4. In which double Characters are used to express the Semitone Rule as before.

Staff 1: Notes with double characters (x, bb)
 Staff 2: Semitone intervals with double flats (bb)

* It is recommended to the Student to write the following Exercises at the Instrument.

+ If the Exercises in which double Characters are introduced are found to perplex the Student they may for the present be passed by.

EXERCISES ON TONES.

The next degree of sound to a Semitone is a Tone.

A Tone is a distance composed of two Semitones.

Example



LESSON I.

Tones ascending

Represent one Tone from the note given agreeable to the following rule

RULE. Ascend two degrees (or Semitones) on the Instrument, and express such note one Letter higher on the Staff, in the manner exemplified in the first three Bars.

LESSON 2.

In which double Characters are used to exprefs the Tone, the Rule as before.



LESSON 3.

Tones descending

RULE. Descend two degrees on the Instrument and exprefs such note one Letter lower on the Stave, in the manner exemplified in the first three Bars.



LESSON 4.

In which double Characters are used to exprefs the Tone, the Rule as before.



END OF FIRST ESSAY.

ESSAY II.

This **Essay** treats on the manner of ascending or descending by a certain order of Tones and Semitones (called the **Diatonic order**) from the given (or **Key**) note to its Octave, by which Order all the Sharps or Flats peculiar to such **Key** note are determined.

The notes contained within the Octave constitute (what is called) the **Scale** of such Octave, which **Scale** takes its name from the **Key** note, with which it begins and ends.

The **Scales** are of two sorts **Major**, and **Minor**, so denominated from the nature of their third, when the third note of the **Scale** is two Tones distant from the **Key** note, the **Scale** is said to be **Major**.

EXAMPLE C Key Major Scale



When the third note of the **Scale** is one Tone and one Semitone distant from the **Key** note, the **Scale** is said to be **Minor**.

EXAMPLE C Key Minor Scale



EXERCISES ON THE MAJOR SCALES.

WRITE the seven ascending notes of each Scale, using such Sharps or Flats as will be found to arise by attending to the Rule given on the next Page.

Place each note on the perpendicular Line drawn down the Page. Express the Semitone by a small black note.

The figures placed over certain parts of the Staff shew the order of the Sharps.

Key Notes.

The SCALE of

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

Intervals: Tone, Tone, Semitone, Tone, Tone, Tone, Semitone

RULE. for discovering the Flats or Sharps belonging to any Key in a MAJOR SCALE.

ASCEND from the given (or Key) note in the following order, Two Tones and one Semitone Three Tones and one Semitone, agreeable to the Example given in the upper and lower Lines of these Pages, the notes must proceed in Alphabetical order.

The figures shew the place and order of the Flats.

The SCALE of

Key	Scale	1	2	3	4	5	6	7
C	C							
F	F							
B ^b	B ^b							
E ^b	E ^b							
A ^b	A ^b							
D ^b	D ^b							
G ^b	G ^b							
C ^b	C ^b							
F ^b	F ^b							

Tone Tone Semitone Tone Tone Tone Semitone

EXERCISES ON THE MINOR SCALES.

WRITE the seven **Descending Notes** of each **Scale**, using such Sharps or Flats as the **Rule** given on the next Page requires.

Place each Note on the perpendicular Line drawn down the Page. Express the Semitone by a small note.

KEY NOTES or #E TONICS

KEYNOTE

Tone Tone Semitone Tone Tone Semitone Tone

The MINOR SCALE of

#A

#D

#G

#C

#F

B

E

A

7th 6th 5th 4th 3rd 2nd

KEYNOTE

The ascending order of these Scales requiring some elucidation connected with Harmonic Principles, cannot conveniently be introduced, till such Principles have been suitably defined.

RULE. for placing the Flats or Sharps of the **MINOR SCALES.**

DESCEND from the Key note (or Tonic) in the following order, Two Tones and one Semitone, Two Tones and one Semitone, one Tone. Reversing the Alphabetical order.

KEY NOTES
or A
TONICS

Tone Tone Semitone Tone Tone Semitone Tone

The MINOR SCALE of

D

G

C

F

\flat B

\flat E

\flat A

\flat D

KEY NOTE 7th 6th 5th 4th 3rd 2nd KEY NOTE

Tone Tone Semitone Tone Tone Semitone Tone

The outward CIRCLE represents the MAJOR SCALES

The inward CIRCLE represents their relative MINOR SCALES





14 FURTHER OBSERVATIONS on the ORIGIN, PROPERTIES and POWERS of the foregoing MAJOR and MINOR SCALES.

These Systems being only simple deductions from natural principles of resonance having their Origin in one Principal Sound or Generator, that of the Tonic, into which they may clearly be resolved (as will be proved in a future part of this work) cannot but furnish a succession of sounds, of the most natural and agreeable order. Each Octave contains within it all the materials for producing those striking and varied effects which are peculiar to the powers of Harmony, and in a judicious management of these materials, rests the whole science of Music. If you exceed the limits of one Octave, you enter on another of the same order, and so on to a third, or fourth, each being only replicates, one of the other. As soon as you alter the prescribed order of the Scale by the introduction of any foreign sound, you remove out of such Scale or Key, to some other, of which the new sound forms a constituent part; herein lays the art of that branch of Music called Modulation.



EXAMPLE.

The first three notes of this Example are in C. Scale Major Mode, but as soon as the bB is introduced the Scale changes to F, of which Scale bB is a constituent part, and this Scale continues till $\natural B$ restores the original Scale of C. The difference between the Major and Minor Scales consists in the varied disposition of their Tones and Semitones, but the striking Characteristic of each is formed by the peculiar nature of their Thirds.

Pieces of Music composed in the Major Mode, in general address the Ear in a Masculine Majestic or Sprightly strain, those of the Minor Mode speak a language Effeminate, Plaintive or Pathetic. Every Major Scale has a correspondent Minor Scale bearing the same characters, a comparative view of which is exhibited on Plate 12. By the interchange of the Major and Minor Third is produced another System of sounds called Chromatic proceeding in the

Order of Semitones.

EX:

Every Octave is composed of twelve Semitones, each of which may be selected by the Composer for the Key of his Piece, and each of these Keys may be regulated by the order of the Major or Minor Mode.

The Order in which the Sharps and Flats are produced in these Scales deserves notice, by carrying the Eye up the last perpendicular line but one (or seventh note) of the Major Scales on Plate 8, the progression of the Sharps beginning on $\#F$ in G Scale and ending on $B\#$ in $C\#$ Scale is seen, in which order such of them as belong to the Key of a Composition are placed at the beginning of the piece

EX:

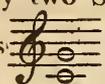
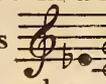
by carrying the Eye down the perpendicular line running through the fourth note of the Major Scales on Plate 9. the progression of Flats beginning on bB in F Scale and ending on bF in bC Scale is seen, in which order such of them as relate to the Key of a Composition are likewise placed at the beginning of the piece.

EX:

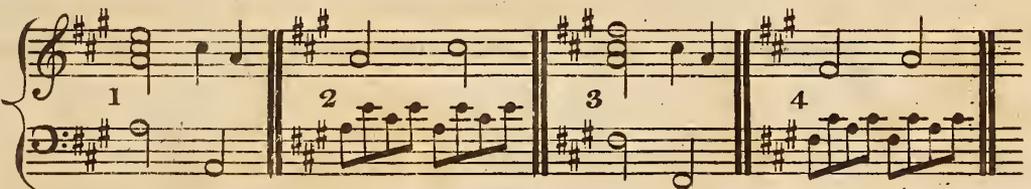
EXPLANATION and use of the CIRCULAR DIAGRAMS on Plate 12 and 13.

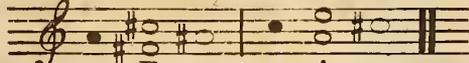
These Schemes are given to enable the Student to determine the **Key** and **Mode** in which any Piece is composed, and are to be used in the following way. First observe the number and situation of the **Sharps** or **Flats** placed at the beginning of the **Composition**, then look for the same in the outward Circle of **Major Scales**, observing the Letter placed over them; next look for the same **Sharps** or **Flats** in the inward circle of **Minor Scales**, regarding in like manner the Letter connected with them; for Example, supposing the **Composition** to have  in the **Major Circle** you find **A** affixed to them, and in the inward or **Minor Circle** **#F**, this proves the **Composition** to be either in the **Key** of **A**, **Major Mode**, or **#F**, **Minor Mode**, but which of these Modes is to be determined by the **Harmonic Circle** in the following manner.

METHOD of determining the Mode by the HARMONIC CIRCLE.

In this Circle consisting of twenty one Letters, each Letter is exhibited combined with its **Major** and **Minor Third** and **Fifth**. the principal Letter and its fifth, being considered as fixed sounds, are represented by two Semibreves in strong Characters, the fifth placed immediately over the Principal, thus  the third being a variable sound of two natures, **Major** and **Minor**. the **Major** is represented by a Semibreve in a faint Character, on the right side, and the **Minor** by a small black note on the left thus  for the purpose of determining the Mode, we must bring the two Letters before spoken of **A**, & **#F**, to this **Circle**, examine the notes combined with each of them, and compare such notes with those employed at the beginning of the **Composition**.

EXAMPLE



Supposing the notes of the **Composition** to be those given in **Example 1**. we there discover the notes employed to be **A**, **#C**, & **E**. with which we are to Compare these notes taken from the **Harmonic Circle**  which comparison proves the

Composition to be in **A Key**, **Major Mode**. The same of **EX: 2**. which contains the same notes disposed in a different order. Again, supposing the notes of the **Composition** to be those given in **EX: 3**. we there discover **#F**, **A**, & **#C**. with which we are to compare the above mentioned notes of the **Harmonic Circle**, we thereby discover that they agree with **#F**, its **Minor 3rd** **A**, and its **5th** **#C**, whereby the **Composition** is proved to be in the **Key** of **#F Minor Mode**. In the same manner the **Key** and **Mode** of any other Regular **Composition** may be discovered.

ESSAY III.

ON HARMONY

Having in the foregoing pages exhibited the **Diatonic** arrangement of the seven notes of the **Major** and **Minor Scales** in a way of Melody, or succession of single sounds, we shall next proceed to shew the principles on which these sounds are combined so as to form **Harmony**.

In entering on this Subject, we shall take occasion to elucidate the first principles of resonance, or Phenomenon of natural **Harmony** before spoken of, as on this Basis is established the whole system of that Theory, which we have to offer.

Music, like all other human arts has advanced progressively to its present degree of improvement: some facts were at first discovered by accident, others were the result of reflection and investigation; these being united and properly disposed of, constituted a body of Science, which while it diffuses that light with which the labors of past ages have illumined it, invites successive ones to give additional lustre to its beams, either by irradiating it with further new and important discoveries, or de-veloping it of that obscurity which has hitherto pervaded the writings of the most ingenious Theorists.

The PRINCIPLES of RESONANCE illustrated.

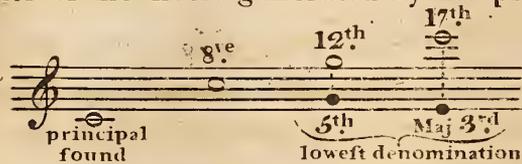
Sound, is that sensation which is produced on the auditive nerve by the vibrations of sonorous bodies, and of which the air is the vehicle.* The string of a musical Instrument being caused to vibrate, in striking the air communicates similar vibrations to that element, which alternately condenses and relaxes, just in the same time as the vibrating string departs and returns in performing its vibrations; the air again communicates the same vibrations to the Ear, and the ear transmits them to the mind.

There are evidently three respects in which sounds admit of variation; from sweet to harsh, from weak to strong, and from grave to acute; The first of these properties depends on the peculiar quality of the Instrument by which the sound is produced, the second on the force of its vibrations, and the third on the degree of velocity with which such vibrations are emitted; But besides these, which are manifest qualities, there is one more important property peculiar to sonorous bodies, which tho' in some degree of an occult nature is sufficiently perceptible by an experienced ear, to be acknowledged among Musicians as exhibiting a phenomenon which Nature directs us to receive as the Basis of all the laws admitted into the system of **Harmony**.

* This is evident from the tremor which sounding bodies when caused to vibrate communicate to distant ones.

By causing the String of a musical Instrument to sound, we not only hear the essential tone of such string, but certain necessary sounds accompanying it, and these in a distinct and regular succession; the first sound it generates is that of its Octave, the next that of the Octave to its 5th or 12th and lastly the double Octave to its Major 3rd or 17th

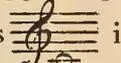
The order of the notes generated by the principal sound



These notes form what we call the **Harmonics** to the principal sound, which when reduced to their lowest denomination stand in the relation of a 3rd, 5th & 8th to such sound, in which relation we shall in general mention them in the succeeding part of this **Essay**.

These **Harmonics** always accompany every principal sound, but the sharper such sound, the less sensible are our Ears of the **Harmonics**. the lowest strings of the **Violin** or **Violincello** are allowed to be the most favorable for this experiment.

Taking this Experiment for our Basis, we shall proceed to shew certain facts immediately dependent thereon; and others deduced from them equally certain, tho' more remote*.

The first principle then, interwoven in this Experiment, is that which proves the relative connexion of sounds, standing in a greater or less degree of affinity, according to the order in which they are generated by the original sound. Supposing  to be the original sound the first sound generated by it in the way of resonance is  its octave; and this octave; is the first and closest connexion that subsists between sounds, It is the first sound that our Organs are impressed with, and led to the imitation of; It is the same as its Generator in every respect but that of acuteness, which property it possesses in an exact double degree, as can be proved by geometrical demonstration: So absolutely does nature demand this exact proportion to subsist in the **Harmony** of the Octave, that whereas in all other **Harmonys** the Ear will endure some variation from that degree of gravity or acuteness necessary to its perfection, the least alteration in this is intolerable; It admits of no other consideration either in itself or its connexions, but that of a representative of its principal or Generator.

+ An 8th is a distance composed of 5 Tones and 2 Semitones

+ A 5th is a distance composed of 3 Tones and 1 Semitone

* Where it necessary to urge any thing further in favor of admitting this as a radical principal, we might do it on the ground of universal experience, which proves the peculiar aptitude our organs have for relishing this order of sounds, which organs communicate a greater or less degree of pleasure to our minds, in proportion as the Harmony which affects them is more or less connected, on the principle herein proposed: These effects we are bound to ascribe to the unspeakable goodness of the Great Creator of nature, who has so regulated all his works both for the corporeal and intellectual enjoyment of man that every object of sense is endowed with qualities peculiarly suited to the gratifying of it, and of properties, which the mind may receive equal pleasure in investigating.

The next found generated by the primitive is that of its 12th or 5th.  The 5th differs materially from the Octave, chiefly with respect to the variety of its **Harmonics** from those of the original as on applying to this found the principles of resonance, it yields two founds not found in the

former **Harmony**  D & B.

Now as we are taught by the natural principles of resonance, that the 5th forms the nearest relation to that of the octave, it is evident that every principal found must have two others immediately connected with it in that relation, the one which forms a 5th to it, and that to which the same principal found forms a 5th or in other words, that found which it generates, and that by which it would be generated on the same principles Ex:  This consideration

therefore naturally leads our enquiry to the produce of the note  which note on having the principles of resonance applied to it, yields besides its octave or representative, C and A

Ex:  Having proceeded thus far, before we take notice of the 17th or 3rd Major, (the last **Harmony**, generated by the principal) we will remark the result of the foregoing in-

vestigation, for which purpose we will bring forward into one point of view, the three principal founds before mentioned, with their **Harmonics**, thus  On examining these **Harmonys**, we shall find contained in them the seven notes of C Scale, besides replicates of

the Principal Sound or **Tonic** and its 5th. Nature dictating thereby, the superiority of these two founds over the rest. These founds being arranged in **Diatonic order** produce a succession of Melody the most natural and agreeable; which succession is called the **Major Scale**.

EX:  From hence we prove that Melody is the offspring of **Harmony** and not **Harmony** of Melody.

The last thing we have to account for in this **Essay** on the principles laid down, is the Origin of the **Minor Scales**, which we shall now attempt to prove in a way of analogy with those of the **Major**, The latter were proved to spring from the natural principles of resonance in a way of

connection with the 5th. These will have for their Basis that of the 3rd the last found generated by the principal note; and as this found is more distant from its Generator than the 5th so is this **Mode** which is established thereon, less natural, and agreeable in its effect.

To elucidate this part of our subject, we must again recur to the natural Phenomenon of resonance first spoken of.  as it was before observed with respect to the 5th that if the principal or primitive found generated this 5th and thereby pointed out the natural connexion subsisting be-

tween founds forming such Interval, that a similar connexion must subsist between such principal found and that note by which it would be generated; if such note were caused to found: Ex:  now

by pursuing a similar method with respect to the 3rd & 5th that is  we shall obtain the desired end. This E and G having C for their common generator to which they stand originally re-

lated as a 12th and 17th are thus brought in connexion, but it is evident that independent of the original found or common generator C, that no connexion can subsist between them on the aforementioned principles of natural resonance; neither of them having the innate property of generating the other: This question then arises. Can we by any modification so apply the

original principles of resonance to either of these founds, that one of them shall generate the other, and that independent of their first common generator ? **We can.** It is evident

that by lowering the original 3rd  one **Semitone**; that is making it  it will produce  as its 17th or **Major third**, which modified note, and its product, will both

Harmonize very agreeably as experience proves with the original found thus  Hence, in a way of analogy by which alone researches of this kind can be conducted, we account for

the origin of the **Minor Mode**, which **Mode** directs that System or **Scale** of founds exhibited on Page 10.

EXERCISES ON THE HARMONIC TRIAD OR PERFECT COMMON CHORD.

This **Combination** is formed by the Intervals of a 3rd, 5th and 8th from the Principal sound or Bass note.

The 8th is an Interval composed of 5 Tones and 2 Semitones.
 The 5th is an Interval composed of 3 Tones and 1 Semitone.

EXAMPLES

The **Major 3rd** is an Interval composed of 2 Tones.
 The **Minor 3rd** is an Interval composed of 1 Tone and 1 Semitone.

The examples show four measures on a single staff. The first measure shows an 8th interval (C to C). The second shows a 5th interval (C to G). The third shows a Major 3rd interval (C to E). The fourth shows a Minor 3rd interval (C to E-flat). Each measure has a note on the staff and a label below it: '8th', '5th', 'Maj 3rd', and 'Min 3rd'.

From these Examples it may be observed, that these **Harmonics** do not change their denomination on being transposed to a distant octave.

This **Combination** is used in 3 different Positions or Inversions.

The examples show three measures on a single staff. The first measure is labeled 'The 1st Position' and shows a triad with the 5th note (G) as the uppermost note. The second measure is labeled 'The 2nd Position' and shows a triad with the 8th note (C) as the uppermost note. The third measure is labeled 'The 3rd Position' and shows a triad with the 3rd note (E) as the uppermost note. Each measure has a label below it: 'The 1st Position', 'The 2nd Position', and 'The 3rd Position'. The text below each measure describes the position: 'is that in which the 5th is uppermost', 'is that in which the 8th is uppermost', and 'is that in which the 3rd is uppermost'.

The **Roots** or **Principal notes** being given in the Bass, the Student is required to write the **Harmony** of the 3rd, 5th and 8th in the Treble.

The upper figures of the Positions in which the **Harmonys** are to be written, are placed over the Treble Stave.

The Sharps and Flats placed under the **Roots**, shew the nature of the Thirds which the **Harmonys** require: by a # is signified a **Major 3rd**, by a b a **Minor 3rd**.

In the first three Bars are given an Example of the manner in which these **Exercises** are to be written.

KEY of C MAJOR.

The exercise is in C major. The first three measures show the roots and harmonies for the first three positions. The roots are written in the bass staff, and the harmonies (3rd, 5th, 8th) are written in the treble staff. The upper figures (8, 5, 3) are placed over the treble staff. The sharps and flats under the roots indicate the nature of the thirds: # for Major 3rd and b for Minor 3rd. The roots are: C (Major 3rd), F (Minor 3rd), and C (Major 3rd).

The remaining measures show the roots and harmonies for the remaining positions. The roots are: G (Major 3rd), D (Major 3rd), A (Major 3rd), E (Major 3rd), B (Minor 3rd), F# (Major 3rd), and C (Major 3rd).

KEY of G MAJOR.

Roots

5 8 3 8 5 8 5 3 5 3

8 5 3 5 8 5 8 3 8 5 8 3 8

KEY of D MAJOR.

Roots

8 3 8 5 3 5 3 5 3 5

8 3 8 5 3 5 3 5 3 5 8 3 8

KEY of A MAJOR.

Roots

8 5 3 5 3 8 5 3 5 3

5 3 5 8 5 3 8 3 8 5 8 3 8

KEY of E MAJOR.

Roots

8 3 8 5 8 3 8 5 3 5

3 5 8 3 5 3 5 3 8 3 8

The first system consists of two staves. The upper staff is a treble clef with a key signature of two sharps (F# and C#). The lower staff is a bass clef with the same key signature. The notes in the bass staff are: C4, D4, E4, F#4, G4, A4, B4, C5. Fingerings are indicated above the notes: 3, 5, 8, 3, 5, 3, 5, 3, 8, 3, 8.

KEY of F MAJOR. 5 3 5 3 5 3 5 8 5 3 5 8

Roots

The second system is titled 'KEY of F MAJOR.' and contains two staves. The upper staff is a treble clef with a key signature of one flat (Bb). The lower staff is a bass clef with the same key signature. The notes in the bass staff are: C4, D4, E4, F4, G4, A4, Bb4, C5. Fingerings are indicated below the notes: 3, 8, 3, 5, 8, 5, 8, 5, 8, 3, 5, 8, 5, 3, 8.

The third system consists of two staves. The upper staff is a treble clef with a key signature of one flat (Bb). The lower staff is a bass clef with the same key signature. The notes in the bass staff are: C4, D4, E4, F4, G4, A4, Bb4, C5.

KEY of Bb MAJOR. 5 8 3 5 8 5 8 5 3 8

Roots

The fourth system is titled 'KEY of Bb MAJOR.' and contains two staves. The upper staff is a treble clef with a key signature of two flats (Bb and Eb). The lower staff is a bass clef with the same key signature. The notes in the bass staff are: C4, D4, E4, F4, G4, Ab4, Bb4, C5. Fingerings are indicated below the notes: 5, 8, 3, 8, 3, 5, 3, 8, 5, 3, 8.

The fifth system consists of two staves. The upper staff is a treble clef with a key signature of two flats (Bb and Eb). The lower staff is a bass clef with the same key signature. The notes in the bass staff are: C4, D4, E4, F4, G4, Ab4, Bb4, C5.

KEY of Eb MAJOR. 8 5 8 3 5 8 5 8

Roots

The sixth system is titled 'KEY of Eb MAJOR.' and contains two staves. The upper staff is a treble clef with a key signature of three flats (Bb, Eb, and Ab). The lower staff is a bass clef with the same key signature. The notes in the bass staff are: C4, D4, E4, F4, G4, Ab4, Bb4, C5. Fingerings are indicated below the notes: 5, 3, 5, 8, 5, 8, 5, 3, 8.

The seventh system consists of two staves. The upper staff is a treble clef with a key signature of three flats (Bb, Eb, and Ab). The lower staff is a bass clef with the same key signature. The notes in the bass staff are: C4, D4, E4, F4, G4, Ab4, Bb4, C5.

A familiar acquaintance with this **Harmony** in its different positions, will be found of great advantage in the **Practical** branch of **Music**; it will especially contribute much, towards enabling the Student to play at sight, as it shews that connexion of sounds which forms the substance of every **Composition**. For the purpose of familiarizing this **Harmony**, a few more **Exercises** are subjoined, in which the former Plan is inverted.

In the following **Exercises**, the Chords being given in the Treble, the Student is desired to apply to each Chord its respective Root in the Bass.

RULE. Apply such Root to each Chord, as its **Harmonics** will stand related to in the distance of a 3rd, 5th & 8th in the manner exemplified in the three first Bars.

KEY of C MAJOR.

Roots

KEY of G MAJOR.

Roots

KEY of D MAJOR.

Roots

KEY of F MAJOR.

KEY of A MINOR.

KEY of E MINOR.

KEY of B MINOR.

Roots

b # b # # #

Detailed description: This block shows the key signature for B minor. It features a treble clef staff with a series of chords and a bass clef staff with a sequence of notes representing the roots of these chords. The root sequence is: B (flat), B (sharp), B (flat), B (sharp), C (sharp), C (sharp).

Detailed description: This block shows the piano accompaniment for B minor, consisting of a grand staff with a treble clef and a bass clef. It contains a sequence of chords corresponding to the root sequence in the previous block.

KEY of D MINOR.

Roots

b # b # # #

Detailed description: This block shows the key signature for D minor. It features a treble clef staff with a series of chords and a bass clef staff with a sequence of notes representing the roots of these chords. The root sequence is: D (flat), D (sharp), D (flat), D (sharp), E (sharp), E (sharp).

Detailed description: This block shows the piano accompaniment for D minor, consisting of a grand staff with a treble clef and a bass clef. It contains a sequence of chords corresponding to the root sequence in the previous block.

KEY of G MINOR.

Roots

b # b # # #

Detailed description: This block shows the key signature for G minor. It features a treble clef staff with a series of chords and a bass clef staff with a sequence of notes representing the roots of these chords. The root sequence is: G (flat), G (sharp), G (flat), G (sharp), A (sharp), A (sharp).

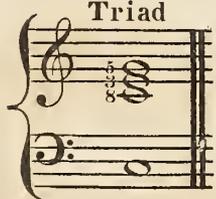
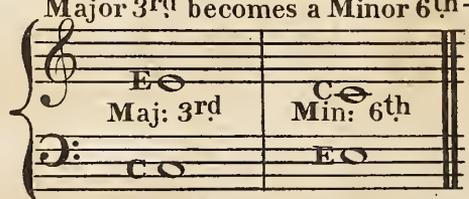
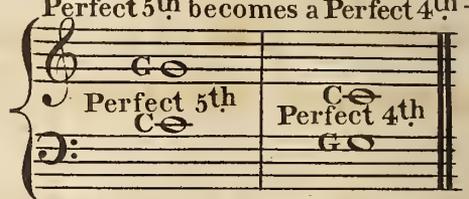
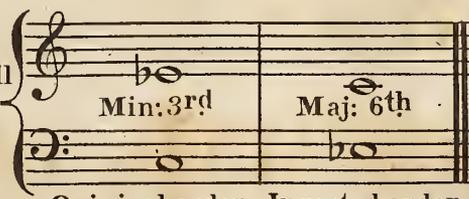
Detailed description: This block shows the piano accompaniment for G minor, consisting of a grand staff with a treble clef and a bass clef. It contains a sequence of chords corresponding to the root sequence in the previous block.

ESSAY IV

INTRODUCTION to that BRANCH of the SCIENCE of MUSIC called THOROUGH BASS.

The sounds employed in the Combination of the **Harmonic Triad**, are **Concords** of two denominations, **Perfect**, and **Imperfect**: Such Concords as admit of no variation in the number of Tones and Semitones of which they are composed, without disgusting the Ear are called **Perfect**, of this description are the 8th and 5th. Concords admitting a Semitone more or less in their Composition, with agreeable effect, are called **Imperfect**, of this latter description is the 3rd which is distinguished by the terms **Major**, and **Minor**, according as the number of Semitones it contains are greater or less. These are the only **Concords** found in the **Harmonic Triad** in its original order, but by an **Inversion** of this order, two more **Concords** are discovered, one **Perfect**, the other **Imperfect**; These **Inversions** are made by putting those notes which in the original state of the Harmony were in the **Treble** into the **Bass**, and the former **Bass** or **Root** into the **Treble**.

EXAMPLES of the different Inversions of the Harmonic Triad.

<p>Harmonic Triad</p> 	<p>The 1st Inversion, by which the Major 3rd becomes a Minor 6th +</p>  <p>Original order. Inverted order.</p>	<p>The 2nd Inversion by which the Perfect 5th becomes a Perfect 4th +</p>  <p>Original order. Inverted order.</p>
	<p>Should the original 3rd be Minor its first Inversion will then be a Major 6th +</p> <p>EXAMPLE</p>  <p>Original order. Inverted order.</p>	

† A Minor 6th is a distance composed of 3 Tones and 2 Semitones
 † A Perfect 4th is a distance composed of 2 Tones and 1 Semitone
 † A Major 6th is a distance composed of 4 Tones and 1 Semitone

EXERCISES on the **Concords** arising from the **Inversion** of the **Harmonic Triad**.

Major 6th

RULE: Ascend 4 Tones and 1 Semitone from the Bass as Exemplified in the first Bar

Minor 6th

RULE: Ascend 3 Tones and 2 Semitones from the Bass.

Perfect 4th

RULE: Ascend 2 Tones and 1 Semitone from the Bass.

In calculating the Tones and Semitones in each of the above Exercises care must be taken to proceed in Alphabetical order

THOROUGH BASS is that branch of the **Science of Music** which enables the performer to add **Harmony** to **Melody**, by means of certain **Signatures** applied to the Bass notes, which denote their particular Character either as **Roots** or **Derivatives** therefrom, and shew the **Accompaniment** they require. The figures placed under the Bass notes of the **1st Example** express the Treble notes of the **2nd Example** of which a further illustration will be afforded in the following pages.

EXAMPLE 1.

EXAMPLE 2.

The **HARMONIC TRIAD** bears three **SIGNATURES**, one on its **ROOT** and two on its **INVERSIONS**.

EXAMPLE

Accompaniment		Another representation		<p>The 1st Column of this Table represents the three founds of the Harmonic Triad and the 2nd Column their respective Signatures when used as Harmonic Basses</p>
Figured or Harmonic Bass		of the figuring of the Harmonic Triad.		
ROOTS				

By these **Examples** it is evident that when a 6 is placed over, or under a Bass note, the first Inversion of the **Harmonic Triad** is thereby represented, and the Accompaniment is that of the third below, and that when the figures 6 4 are applied to the Bass note, the second Inversion of the **Harmonic Triad** is thereby represented, and the Accompaniment is that of the fifth below.

The few following **Exercises** in different **Keys** comprise the substance of the foregoing Observations which if duly attended to will speedily render the Subject familiar.

In these **Exercises** the **Harmonic Bass** being given, the Student is directed first to write under each Bass its respective **Root**, and then to fill up the Accompaniment with the 3rd, 5th and 8th of each **Root**, in the same manner as in the **Exercises** on Page 21.

The notes required to be added in the Accompaniment are to be written immediately under those given.

The nature of the 3rd is to be determined by the **Scale** of that **Key** in which the **Exercise** is written, from which **Scale** no deviation is allowed.

The first three Bars fully illustrate the method which the Student is to pursue.

Accompaniment	
Harmonic or Figured Bass	
ROOTS	

Musical system 1: Treble clef, key signature of one sharp (F#). The system contains 12 measures. The bass staff has notes with fingerings: 5, 4, 5, 3, 6, 4, 5, 6, 4, 6, 5, 3, 6, 4, 5, 3.

Musical system 2: Treble clef, key signature of one sharp (F#). The system contains 12 measures. The bass staff has notes with fingerings: 5, 6, 5, 6, 5, 3, 6, 4, 5, 6, 6, 6, 4, 5, 5.

Musical system 3: Treble clef, key signature of one sharp (F#). The system contains 12 measures. The bass staff has notes with fingerings: 5, 6, 5, 4, 5, 4, 6, 5, 5, 6, 5, 5, 6, 4, 5, 5.

Musical system 4: Treble clef, key signature of one sharp (F#). The system contains 12 measures. The bass staff has notes with fingerings: 5, 4, 6, 5, 5, 4, 6, 5, 6, 4, 5, 6, 4, 5, 5, 5.

Musical system 5: Treble clef, key signature of one sharp (F#). The system contains 12 measures. The bass staff has notes with fingerings: 5, 5, 6, 6, 6, 4, 5, 5, 5, 6, 4, 6, 5, 5, 5, 5.

In the following **EXERCISES** the Student is desired to figure the **HARMONIC BASSES** according to their distance from the **ROOTS**, and fill up the **Accompaniment** as before in the manner exemplified in the first three Bars.

Accompaniment

Harmonic Bass

Roots

The **Harmony of the $b7^{th}$** bears four **Signatures**, different from those of the **Harmonic Triad**: one on its **Root** and three on its **Derivatives**

EXAMPLE

Accompaniment

Harmonic Bass or Derivatives

Roots

1st Inversion 2nd Inversion 3rd Inversion

Another representation of the figuring of the Harmony of the $b7^{th}$

$b7$	4^+
5	6
$\#3$	$b5$
1	$b7^{\#}$

a 3rd below a 5th below a $b7^{th}$ below.

From the Inversions of the **Harmony of the $b7^{th}$** arise three more **Discords**, that of the 2nd composed of one **Tone** as it appears between the $b7^{th}$ and its **Root** on the 3rd Inversion. That of the 4th or Sharp 4th composed of three **Tones** as it appears between the $b7^{th}$ and the original 3rd of the **Harmony** on the same Inversion. and that of the $b5^{th}$ or diminished 5th composed of 2 **Tones** and 2 **Semitones** as it appears between the original Major 3rd and $b7^{th}$ on the first Inversion.

EXERCISES on the **Discords** arising from the **Inversions** of the **Harmony of the $b7^{th}$**

RULE. Ascend one **Tone** from the **Bass**

2^{nds}

RULE. Ascend three **Tones** from the **Bass**

4^{ths}

RULE. Ascend 2 **Tones** and 2 **Semitones** from the **Bass**

$b5^{th}$

EXERCISES ON THE HARMONY

of the $b7^{th}$

These **EXERCISES** are formed on the same plan as those on the **HARMONIC TRIAD**, the Inversions of which Harmony will be easily distinguished from those of the Harmony of the $b7^{th}$ by the difference of their Signatures. The figured Table and the Example given in the first three Bars, will render any further illustration unnecessary. Such Harmonic Basses as have no figures placed over them, are to be treated in the same manner as they would be, were the figures $\frac{5}{3}$ applied to them, the # placed under the $b7^{th}$ denotes the Major 3^{d} which accompanys it.

Accompaniment

Harmonic or figured Bass

Roots

The Harmonic Bases of the following Exercises are to be figured according to the distance in which they stand related to their respective Roots. The Accompaniment is then to be filled up as before, in the manner exemplified in the first three Bars.

Accompaniment

Harmonic Bases

Roots

THE THEORY

OF

MUSIC.

ESSAY VI.

ON MODULATION.

Modulation is that branch of the Science of Music, the rules of which prescribe the method of removing from one Scale to another, as before illustrated in Page 14. it is from this source that the most striking and varied effects of Music arise.

Modulations may be divided into two classes, the Natural, and Abrupt; the former are those which are produced by the regular rules of the Science and affect the Ear with pleasure, the latter arise from irregular successions of Harmony and affect the Ear in a more sudden and unexpected manner. The following Exercises will further illustrate the nature of Modulation.

All Modulations are made by means of the Harmony of $b7 \#$ which Harmony whenever applied determines the Key; this Harmony is therefore denominated by Theorists, the governing or Dominant Harmony, wherever this Harmony appears, the fifth below its Root is the Key note.

The letter D signifies the Dominant. The letter K the Key.

EXAMPLE.

The musical example consists of a single staff with a treble clef and a bass clef. The notes are as follows:

- Measure 1: Treble clef has a whole note G4. Bass clef has a whole note B3. Chord symbol: $b7 \#$.
- Measure 2: Treble clef has a whole note A4. Bass clef has a whole note C4. Chord symbol: 6 $b5 \#$.
- Measure 3: Treble clef has a whole note B4. Bass clef has a whole note D4. Chord symbol: 4+ 2.
- Measure 4: Treble clef has a whole note C5. Bass clef has a whole note E4. Chord symbol: 6 $b5$.
- Measure 5: Treble clef has a whole note D5. Bass clef has a whole note F4. Chord symbol: $b7 \#$.

Below the staff, the letters D and K are placed under the notes, with brackets indicating the relationship:

- Under G4: D
- Under A4: K
- Under B4: D
- Under C5: K
- Under D5: D
- Under E4: K
- Under F4: D
- Under G4: K

EXERCISES ON MODULATION.

The following Exercises exhibit Modulations into all the Keys of the original Scale except the seventh which is not used on account of its having no Dominant in the original Scale.

In these Exercises the Student is desired to write the Roots and fill up the Harmonys in the manner exemplified in the first three Bars, placing the letter D under each Dominant Harmony and the letter K under the Key note.

Harmonys
MAJOR & MINOR

KEYS

Dominants

The first exercise consists of three staves. The top staff is labeled 'Harmonys MAJOR & MINOR' and contains six measures of chords. The middle staff is labeled 'KEYS' and contains six measures of single notes. The bottom staff is labeled 'Dominants' and contains six measures of notes, with the first three measures marked 'leads to' and the last three marked 'D' and 'K'. The notes in the bottom staff are: b7, b7#, b7, b7#, b7, b7#.

The second exercise consists of three staves. The top staff is labeled 'Harmonys MAJOR & MINOR' and contains six measures of chords. The middle staff is labeled 'KEYS' and contains six measures of single notes. The bottom staff is labeled 'Dominants' and contains six measures of notes. The notes in the bottom staff are: 6, 6, b7, 4, 6, 4.

The third exercise consists of three staves. The top staff is labeled 'Harmonys MAJOR & MINOR' and contains six measures of chords. The middle staff is labeled 'KEYS' and contains six measures of single notes. The bottom staff is labeled 'Dominants' and contains six measures of notes, with the first three measures marked 'leads to' and the last three marked 'D' and 'K'. The notes in the bottom staff are: b7, b7#, b7, b7#, b7, b7#.

The fourth exercise consists of three staves. The top staff is labeled 'Harmonys MAJOR & MINOR' and contains six measures of chords. The middle staff is labeled 'KEYS' and contains six measures of single notes. The bottom staff is labeled 'Dominants' and contains six measures of notes. The notes in the bottom staff are: b7, 4, 6, 4, 6, b7.

H
K
D

leads to

b7# b7# b7# b7# b7# b7#

6 b7# 4/2 6 4/2 6 b7# 6 4 6 4 b5 6 4 b7#

H
K
D

leads to

b7# b7# b7# b7# b7# b7#

6 b7# 4/2 6 4/2 6 b7# 6 4 6 4 b5 6 4 b7#

H
K
D

leads to

b7 # b7 # b7 # b7 # b7 # b7 #

Detailed description: This system contains three staves. The top staff (H) is a treble clef with a key signature of three sharps (F#, C#, G#). It contains six measures of music, with the first measure being a whole note chord and the following five measures being whole notes. The middle staff (K) is a bass clef with the same key signature, containing six measures of music with notes and some chordal markings. The bottom staff (D) is a bass clef with the same key signature, containing six measures of music with notes and chordal markings. A vertical bar line is placed after the first measure. Below the bottom staff, there are seven chordal markings: b7 #, b7 #, b7 #, b7 #, b7 #, b7 #, and b7 #.

Detailed description: This system contains three staves. The top staff (H) is a treble clef with a key signature of three sharps. It contains six measures of music with notes. The middle staff (K) is a bass clef with the same key signature, containing six measures of music with notes and chordal markings. The bottom staff (D) is a bass clef with the same key signature, containing six measures of music with notes. A vertical bar line is placed at the end of the system. Below the middle staff, there are seven chordal markings: 6 b7 #, 4+ 2, 6 4+ 2, 6 b7 #, 6 4, 6 4 b5, 6 4 b7 #, and 6 4 b7 #.

H
K
D

adsto

b7 # b7 # b7 # b7 # b7 # b7 #

Detailed description: This system contains three staves. The top staff (H) is a treble clef with a key signature of three sharps. It contains six measures of music, with the first measure being a whole note chord and the following five measures being whole notes. The middle staff (K) is a bass clef with the same key signature, containing six measures of music with notes and chordal markings. The bottom staff (D) is a bass clef with the same key signature, containing six measures of music with notes and chordal markings. A vertical bar line is placed after the first measure. Below the bottom staff, there are seven chordal markings: b7 #, b7 #, b7 #, b7 #, b7 #, b7 #, and b7 #.

Detailed description: This system contains three staves. The top staff (H) is a treble clef with a key signature of three sharps. It contains six measures of music with notes. The middle staff (K) is a bass clef with the same key signature, containing six measures of music with notes and chordal markings. The bottom staff (D) is a bass clef with the same key signature, containing six measures of music with notes. A vertical bar line is placed at the end of the system. Below the middle staff, there are seven chordal markings: 6 b7 #, 4+ 2, 6 4+ 2, 6 b7 #, 6 4, 6 4 b5, 6 4 b7 #, and 6 4 b7 #.

H
K
D

leads to

b7 # b7 # b7 # b7 # b7 # b7 #

b7 4+ 6 4+ 6 b7 6 6 b6 6 b7

H
K
D

leads to

b7 # b7 # b7 # b7 # b7 # b7 #

b7 4+ 6 4+ 6 b7 6 6 b6 6 b7

ESSAY VII.

ON CADENCES.

No musical composition or system of sounds can terminate so as to satisfy the ear, but by an operation of Harmony called **Cadence**, of which there are several sorts, some conclusive or final in their effect, others inconclusive, and requiring subsequent matter, those of the former sort come under our present notice and are denominated **Perfect Cadences**.

The **Perfect Cadence** is comprised in two Harmonys, that of the **Dominant**, immediately followed by the **Harmony of the Key**. The following Examples will illustrate this Harmonic construction in various positions.

Of the above **Examples**, the first and second are more suited for conclusive Cadences than the third and fourth, as their Basses are formed of roots, the third and fourth tho' equally perfect are not so satisfactory to the ear, having derivatives for their Basses and are therefore best suited for the middle Cadences of a composition, The fifth Example exhibits a Cadence broken in Harmonic order. The 6th Example shews the intervals of a Cadence broken in Harmonic order with the intervention of transient notes, which are distinguished by crosses placed over them *

* Transient or passing notes are such as are used for the purpose of linking Harmonic sounds in a diatonic succession, thus the Harmony  may be rendered  without the Harmonic effect being thereby injured.

The MINOR SCALES in their ascending order.

THIS system of sounds being required to end according to the foregoing principles of Cadence occasions a difference to subsist between their ascending and descending order. For the purpose of terminating this ascending system by Cadence the final or Key note must be immediately preceded by some branch of the Dominant Harmony, which seventh sound of the Scale will be found to stand in the relation of a Semitone to the succeeding Key note, and in order to preserve a Diatonic progression in the Scale this 7th sound will require its preceding or sixth of the Scale to stand in the relation of a Major sixth to the Tonic. These two Major sounds (6th and 7th) make the difference between the ascending and descending order of these Scales.*

TONICS

The MINOR SCALES of

The image shows seven musical staves, each representing a different tonic for a minor scale. The staves are labeled with their respective tonic notes: #A, #D, #G, #C, #F, B, and E. Each staff begins with a treble clef and a sharp sign indicating the tonic. The A scale is the only one with notes written on the staff. Below the A scale, intervals are labeled: Tone, Semitone, Tone, Tone, Tone, Tone, Semitone.

* This ascending seventh of the Scale is denominated the Sensible note as it prepares the Ear for the Tonic.

WRITE the seven ascending notes of these Scales in the following order

One Tone and one Semitone, four Tones and one Semitone.

TONICS

A

D

G

C

F

\flat B

\flat E

\flat A

The MINOR SCALES of

Tone

Semitone

Tone

Tone

Tone

Tone \sharp

Tone \sharp

Semitone

The IRREGULAR CADENCE or Close on the DOMINANT.

The next Cadence necessary for our consideration is that which terminates on the Dominant, therefore only suited for middle Closes in a piece, the Harmony of the Dominant in this Close is introduced either by that of the Key, or the second of the Key combined with its Minor 3rd and Minor 7th before this Cadence is further exemplified it will be necessary to illustrate the nature of the last mentioned Harmony and its Signatures.

The Discord of the 7th Major or Minor (as the Key requires) may under certain regulations be applied to every note of the Scale.

The Major 7th is composed of five Tones and one Semitone.

EXAMPLE
of a
Progression
of 7^{ths}

The two first notes of this progression give an Example of the perfect Cadence interrupted by a 7th being applied to the Harmony of the Key, by which its final effect is destroyed the progression of 7^{ths} is then continued through the Scale of C, the roots moving by descending 5^{ths}.

The Signatures
of the
Harmony
of the 7th

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

* To this Signature many Theorists add a 6. thus $\begin{matrix} 6 \\ 4 \\ 3 \end{matrix}$
 † An illustration of this Harmony will be found on Page 50

EXERCISES on the accompaniment of the MAJOR SCALE in its ascending order, in which the Perfect and Irregular Cadences, are further illustrated.

Ascending SCALE of C.

- A The irregular Cadence or close on the Dominant preceded by the Harmony $\frac{7}{b}$.
- B The perfect Cadence on the 1st Inversion of the Harmony of the Dominant.
- C The close on the Dominant preceded by the Harmony of the Key.
- D The perfect Cadence exemplified on its Roots.

The following Exercises are to be written according to the method exemplified above.

The figures placed over the Treble Staff shew the position in which the Harmony is to be placed as before illustrated on Page 20.

Accompaniment

Ascending SCALE of G.

Roots

Apply the SIGNATURES to the HARMONIC BASSES in the same manner as in the forgoing Example, and place the Harmonys in the same position.

D. SCALE

A B C D

This musical score shows the D major scale in bass clef. The treble clef staff is empty. The bass clef staff contains the scale notes: D, E, F#, G, A, B, C, D. The notes are grouped into four measures labeled A, B, C, and D. Measure A contains D, E, F#; measure B contains G, A, B; measure C contains C, D; and measure D contains a single D. Vertical lines separate the measures. The key signature has two sharps (F# and C#).

A. SCALE

A B C D

This musical score shows the A major scale in bass clef. The treble clef staff is empty. The bass clef staff contains the scale notes: A, B, C, D, E, F#, G, A. The notes are grouped into four measures labeled A, B, C, and D. Measure A contains A, B, C; measure B contains D, E, F#; measure C contains G, A; and measure D contains a single A. Vertical lines separate the measures. The key signature has three sharps (F#, C#, and G#).

E. SCALE

A B C D

This musical score shows the E major scale in bass clef. The treble clef staff is empty. The bass clef staff contains the scale notes: E, F#, G, A, B, C, D, E. The notes are grouped into four measures labeled A, B, C, and D. Measure A contains E, F#, G; measure B contains A, B, C; measure C contains D, E; and measure D contains a single E. Vertical lines separate the measures. The key signature has four sharps (F#, C#, G#, and D#).

B. SCALE

A B C D

This musical score shows the B major scale in bass clef. The treble clef staff is empty. The bass clef staff contains the scale notes: B, C, D, E, F#, G, A, B. The notes are grouped into four measures labeled A, B, C, and D. Measure A contains B, C, D; measure B contains E, F#, G; measure C contains A, B; and measure D contains a single B. Vertical lines separate the measures. The key signature has five sharps (F#, C#, G#, D#, and A#).

F. SCALE

Musical notation for the F major scale. The treble clef staff is empty. The bass clef staff contains the scale notes: F, G, A, B, C, D, E, F. The notes are grouped into four measures labeled A, B, C, and D. Measure A contains F, G, A; measure B contains B, C, D; measure C contains E, F; and measure D contains F.

B \flat . SCALE

Musical notation for the B-flat major scale. The treble clef staff is empty. The bass clef staff contains the scale notes: B \flat , C, D, E, F, G, A, B \flat . The notes are grouped into four measures labeled A, B, C, and D. Measure A contains B \flat , C, D; measure B contains E, F, G; measure C contains A, B \flat ; and measure D contains B \flat .

E \flat . SCALE

Musical notation for the E-flat major scale. The treble clef staff is empty. The bass clef staff contains the scale notes: E \flat , F, G, A, B, C, D, E \flat . The notes are grouped into four measures labeled A, B, C, and D. Measure A contains E \flat , F, G; measure B contains A, B, C; measure C contains D, E \flat ; and measure D contains E \flat .

A \flat . SCALE

Musical notation for the A-flat major scale. The treble clef staff is empty. The bass clef staff contains the scale notes: A \flat , B \flat , C, D, E, F, G, A \flat . The notes are grouped into four measures labeled A, B, C, and D. Measure A contains A \flat , B \flat , C; measure B contains D, E, F; measure C contains G, A \flat ; and measure D contains A \flat .

D \flat . SCALE

Musical notation for the D-flat major scale. The treble clef staff is empty. The bass clef staff contains the scale notes: D \flat , E \flat , F, G, A, B, C, D \flat . The notes are grouped into four measures labeled A, B, C, and D. Measure A contains D \flat , E \flat , F; measure B contains G, A, B; measure C contains C, D \flat ; and measure D contains D \flat .

ESSAY VIII.

The DISCORD of the FLAT NINTH (as combined with its Major 3rd and b7th) and its SIGNATURES.

This combination is formed by the addition of a new sound to the Harmony of the Dominant; which sound exceeds the b7th by the distance of a Minor 3rd **EX:**  by this addition the powers of that Harmony are considerably increased, and new Intervals formed by the Inversion of its Harmonics.

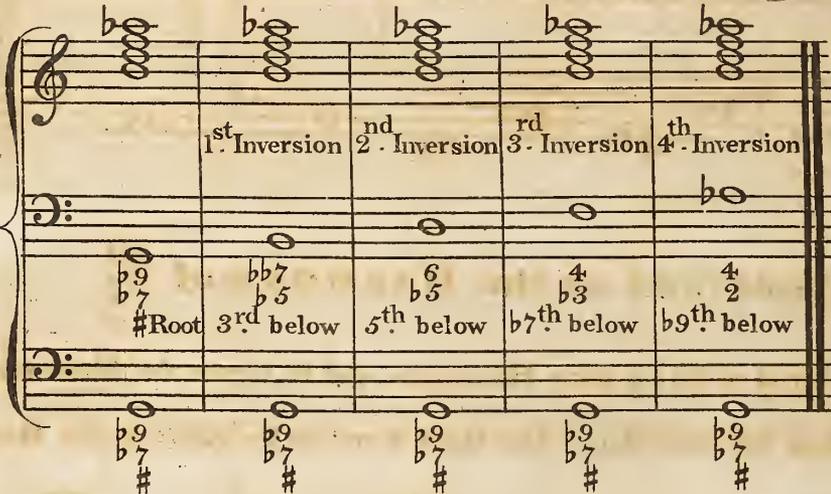
The Harmony of the $\begin{matrix} b9 \\ b7 \\ \# \end{matrix}$ bears five Signatures, one on its Root and four on its Derivatives.

EXAMPLE

Accompaniment

Harmonic Bass or Derivatives

ROOTS



b9	4+
	2
b7	4+
	b3
5	5
	b5
#3	b7
	b5
1	b9
	b7
	#

This Harmony, tho' it properly belongs to the Dominant of Minor Keys is frequently borrowed by that of the Major

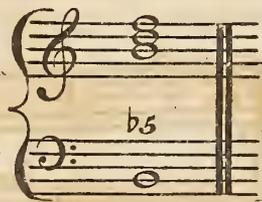
From the Inversion of this Harmony arise two new Discords, the extreme sharp second composed of 1 Tone and 1 Semitone, as it appears on the fourth Inversion, and the diminished or bb7th as it appears on the first Inversion.

ESSAY IX.

On the IMPERFECT TRIAD

We now proceed to the illustration of another sort of Triad, differing from either of those exhibited on Page 20 with respect to the construction of its fifth. The two Harmonic Triads or Perfect Common Chords before explained, differ only from each other in the nature of their thirds in regard to Major or Minor Intervals, the fifth in both Harmonys being of the same nature, Perfect, the Chord is therefore so denominated, by way of distinction from that which comes under our present consideration. This Harmony is formed of a Minor third and diminished fifth, on account of the defective nature of which fifth this Triad is denominated the **Imperfect Triad**; like the former it admits of the occasional addition of a seventh, and of Inversions similar to those before illustrated.

EXAMPLE
of the
Imperfect Triad



The Imperfect Triad
with a seventh added



As this Triad is found to resemble other Harmonys in its Harmonic signatures, as well as in its construction, it is necessary to shew how it may be distinguished from them. It may be observed that in its simple state uncombined with the $b7^{\text{th}}$ it resembles that Harmony which arises from the first Inversion of the $b7^{\#}$ or Dominant Harmony when its root is omitted in the Chord, but is distinguished therefrom by having its place on a different part of the Scale, the Dominant Harmony occupies the fifth of the scale, the Imperfect Triad has its place on the seventh of the Major scale and on the second of the Minor, the Dominant Harmony always requires that of the Key to follow it, which the Imperfect Triad does not but has its succeeding root in general a fourth above or fifth below, in the Minor scale it is generally followed by the Dominant Harmony for which Harmony. it peculiarly prepares the Ear.

EXAMPLE of the
Imperfect Triad
in a Minor Key



EXAMPLE of the
Imperfect Triad
in a Major Key



* The Imperfect Triad may be seen in the progression of sevenths on Page 44 on the 4th note of the Example.

The following Exercises are proposed to enable the Student to distinguish the Harmony of the Imperfect Triad from any other which may resemble it. The Imperfect Triad will be known in these Exercises by being succeeded by the Harmony of the fourth above or fifth below. The Harmonic Bases of these Exercises are to be figured and the roots applied. The Imperfect Triad is to be figured thus *b3*.

EXERCISES in MINOR SCALES in which the IMPERFECT TRIAD is introduced in its simple state.

In the following Exercises the Student is desired to apply the same Signatures as those used in the Harmonic Bass of the 1st Example.

1st Example

8 5 3 5 8 3 8 5 8 5 8

EXERCISES in MAJOR SCALES in which the IMPERFECT TRIAD is introduced combined with its 7th. The sixth note of these Exercises gives an Example of the Harmony b^7 being borrowed by the Dominant of a Major Key. The figures shew $\#$ the distance of the upper notes from their Roots.

The first system of music shows a series of chords and figures. Above the treble clef staff, figures 3, 5, 3, 7, 3, 7, 3, 7, 5, 7, 3, 3, 8, 7, 3, 7, 3 are written. The chords are shown in the treble clef staff, and the bass clef staff shows the corresponding notes. Below the bass clef staff, figures are written: b^7 , 6 , b^7 , b^7 , 7 , 4^+ , b^7 , 6 , 6 , b^7 , 6 , 4 , b^7 , 6 , 4 , b^7 , $\#$.

Apply the same Harmonys as those used in the foregoing Exercise

The second system shows the first major scale (C major) with the chords from the first exercise applied. The treble clef staff is empty, and the bass clef staff shows the notes of the scale: C, D, E, F, G, A, B, C.

The third system shows the second major scale (D major) with the chords from the first exercise applied. The treble clef staff is empty, and the bass clef staff shows the notes of the scale: D, E, F#, G, A, B, C#, D.

The fourth system shows the third major scale (E major) with the chords from the first exercise applied. The treble clef staff is empty, and the bass clef staff shows the notes of the scale: E, F#, G#, A, B, C#, D#, E.

The fifth system shows the fourth major scale (F# major) with the chords from the first exercise applied. The treble clef staff is empty, and the bass clef staff shows the notes of the scale: F#, G#, A#, B, C#, D#, E#, F#.

ESSAY X.

On the application of the Imperfect 5th to the Dominant Harmony.

The Imperfect 5th is sometimes used in the Dominant Harmony instead of the Perfect, from which new Intervals arise.

EXAMPLE

From the Inversions of this Harmony arise two new Discords, that of the extreme flat third composed of two Semitones, and the extreme sharp sixth composed of five Tones.

RULE. ascend 2 Semitones.

bb3^{rds}

RULE. ascend 5 Tones.

+6^{ths}

EXERCISES on the Accompaniment of the **Minor Scale** in its descending order, in which the $\begin{matrix} b7 \\ b5 \\ \# \end{matrix}$ on the Dominant is further illustrated.

The descending Scale of A Minor

E Minor

Apply the same Harmonys as those used in the foregoing Exercise.

Write the descending Scale

B Minor



F# Minor



C# Minor



D Minor



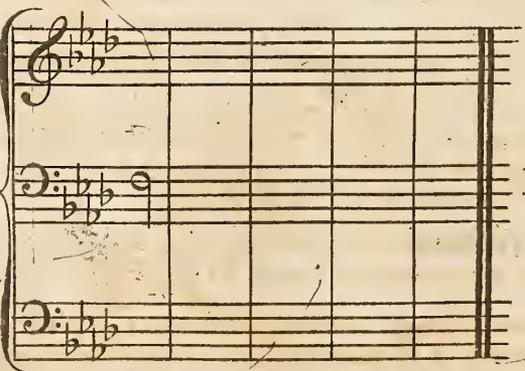
G Minor



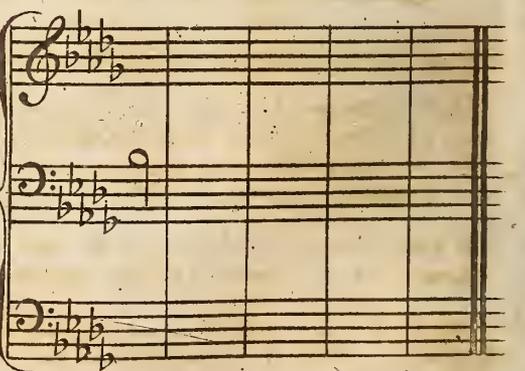
C Minor



F Minor



Bb Minor



ESSAY XI.

On the application of the DOMINANT HARMONY on the TONIC and on the 3rd of the SCALE.

The Harmony of the Dominant is occasionally used on the Tonic, of which the following Examples afford illustrations.

The Dom. Harm^y with its b7th applied on the Tonic

The Dom. Harm^y with its b9th applied on the Tonic

The Inversion of the foregoing Harmony by placing the Tonic over the Chord of the Dom:

In Minor Keys the Dom: Har^y is sometimes applied to the 3rd of the Scale from which arises a new Interval denominated a Superfluous 5th composed of 4 Tones.

EX. 1.

EX. 2.

Example 1 shews the Dom: Har^y with its b7 applied to the 3rd of the Scale

Example 2 shews the Dom: Har^y with its b9 applied to the 3rd of the Scale

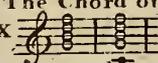
From the Inversion of the above Harmony arises another Interval denominated a diminished 4th composed of 1 Tone and 2 Semitones.

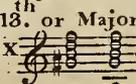
EX. 1.

EX. 2.

Example 1 shews the Inversion of the above Harmony with its b7

Example 2 shews the Inversion of the same Harmony with its b9

A This Harmony is universally denominated the Chord of the 11th. Most Theorists when treating of it have followed the plan first introduced by Mons. RAMEAU of substituting supposed or artificial Bases in the place of radical ones, agreeable to which false principles they thus define the Harmony in question "The Chord of the 11th arises from that of the Dominant by taking a 5th below its Fundamental sound for the Bass. EX. 

B This Harmony is likewise on the same principle defined to be the Chord of the 13th or Major 7th arising from the Harmony of the Dominant by the supposition of a 7th below its fundamental sound EX. 

But as the supposing of a sound to exist below that denominated the fundamental or radical sound is admitting into a system established on mathematical laws, a principle subversive of its foundation, it does not seem requisite to offer any apology for pursuing in this Treatise a different path; as the mode preferred has for its basis, the first and leading principle of all natural resonance, as illustrated on Page 16.

An enumeration of such of the different Intervals contained within the Octave as are used in composition and have been illustrated in the course of this work with a reference to their derivation. The middle Column shews the Signatures, which the Roots belonging to their respective Intervals bear.

INTERVALS	composed of	derived from the Harmony of	its Inversion	composed of
The lowest of these two notes is the Root Minor 2 nd 	1 Semitone	Signatures of the Roots b9 th	The highest of these two notes is the Root Major 7 th 	5 Tones & 1 Sem:
The highest is the Root Major 2 nd 	1 Tone	b7 th	The lowest is the Root b7 th 	4 Tones & 2 Sem:
A Semitone below the under note is the Root +2 nd 	1 Tone & 1 Sem:	b9 b7 #3	A Semitone below the upper note is the Root bb th 	3 Tones & 3 Sem:
A Major third below the under note is the Root bb3 rd 	2 Semitones	b5 #3 1	A Major third below the upper note is the Root +6 th 	5 Tones
b3 rd 	1 Tone & 1 Sem:	b5 #3 1	Major 6 th 	4 Tones & 1 Sem:
#3 rd 	2 Tones	#5 #3 1	Minor 6 th 	3 Tones & 2 Sem:
Diminished 4 th 	1 Tone & 2 Sem:	Dominant Harmony on that of the Key	Superfluous 5 th 	4 Tones
Perfect 4 	2 Tones & 1 Sem:	#5 #3 1	Perfect 5 	3 Tones & 1 Sem:
Superfluous 4 th 	3 Tones	b7 #5 #3	Diminished 5 th 	2 Tones & 2 Sem:

1 Tone above the lowest note is the Root

1 Tone above the upper note is the Root

From the above Table it may be observed, that by Inversion a Major Interval becomes Minor, a Minor becomes Major and a bb becomes x

Of these Intervals it is to be observed that they are distinguished by different Terms suited to express their particular qualities, according to the various degrees of which they are composed; namely, **Perfect** and **Imperfect**, **Major** and **Minor**, **Superfluous** and **Diminished**, these terms are applied in the following manner, the 4th and 5th are denominated **Perfect** when they are found in that degree in which the Diatonic Major and Minor Scales produce them, when they exceed that degree they are denominated **Superfluous**, and when they fall short of it **Diminished**, or (as expressed by some Authors) **Imperfect**. Those Intervals which the Diatonic Major and Minor Scales produce in different degrees namely, the 3rd and 7th with their Inversions the 6th and 2nd are in their greatest degree denominated Major or Sharp, and in their lesser degree Minor or Flat, when these Intervals exceed their Diatonic degree they become + (or extreme sharp) and when they fall short of it bb (or extreme flat.)

The foregoing Intervals are classed under these two general Heads

CONCORDS and DISCORDS

3 ^{rds} Major and Minor	2 ^{nds} of all descriptions
4 ^{ths} Perfect	bb3 ^{rds}
5 ^{ths} Perfect	4 ^{ths}
6 ^{ths} Major and Minor	b4 ^{ths}
8 ^{ths} Absolute *	b5 ^{ths}
	5 ^{ths}
	+6 ^{ths}
	7 ^{ths} of all descriptions
	9 ^{ths} MAJOR and MINOR

The peculiar properties of these two general species of Harmony having been already elucidated on Page 31 renders any further observations thereon unnecessary.

* The reason of applying this Term to the Concord of the 8th may be discover'd on Page 17

EXERCISES on all the different Intervals used in Composition.

Apply to each Interval its respective Signature according to the number of Tones and Semi-tones of which it is composed, agreeable to the Example given in the four first Bars.

To express a Major or superfluous Interval draw a dash through the figure thus 3̄. To express a Minor or diminished Interval place a b before the figure thus b3.

Four staves of musical notation in treble clef, each containing seven bars. The intervals are labeled above the notes as follows:

- Staff 1: 2, 3, 4+, b5, b6, b7, 2
- Staff 2: 3, 4, 5, 6, 7, 8, 9
- Staff 3: 10, 11, 12, 2, 3, 4, 5
- Staff 4: 6, 7, 8, 9, 10, 11, 12

Express the following Intervals in notes;
in the manner of the first three Bars.

Four staves of musical notation in treble clef, each containing seven bars. The intervals are labeled above the notes as follows:

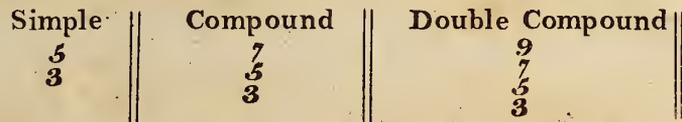
- Staff 1: b5, b7, b3, 4+, x6, 3, 7
- Staff 2: bb3, b6, 2, 5, 3, 6, b2
- Staff 3: b4, bb7, 4, 5, b3, 5, x6
- Staff 4: 7, b5, 6, bb3, 4+, bb7, 2

In the following Exercises the Student is to apply to each Interval the Root from whence such Interval is derived, with its appropriate signature, as illustrated on Page 56 and then express the full Harmony of such Root in the middle line, as exemplified at the beginning of the first Exercise.

When an Interval is common to more than one Root, an additional note is occasionally introduced in the middle line, or the Root required given in the lower, for the purpose of confining the Pupil to the Harmony preferred, and in cases where such guides are not afforded, the Harmony is to be regulated by the following general rules.

- 1 The first Harmony of each Exercise must be that of the Key.
- 2 Each Exercise must conclude with a perfect Cadence.
- 3 Every Dominant Harmony is to be succeeded by the Harmony of the Key unless any one of the notes given differs from such Harmony.
- 4 Simple Harmonys are to be preferred to Compound ones agreeable to the following order.

Progression of Harmonys from Simple to Compound.



5 No Modulation is to be made by the introduction of a sound foreign to the Key established, unless the Intervals given require it.

6 When any foreign sound appears among the Intervals, it requires a Dominant Harmony for its Accompaniment.

7 When the Dominant Harmony is used on the Key note or on the 3rd of the Key such Key note or its 3rd must be written in the Roots and the Dominant placed over it, as exemplified in the second Bar of Page 60.

The figures applied to several Bars of the first four Exercises, shew by which of the above Rules their respective Harmonys are to be regulated.

Intervals	
Full Harmony	
Roots	

60 In these Exercises the Student is recommended, first to write the denomination of each Interval over the Treble notes and then refer to Page 56 for the Roots of the following distances. 2^{nds} *bb*3. 4. *b*5. x6. 7^{ths}

Musical exercise 1: Treble clef with notes and intervals 1, 7, 3, 4, 6, 3, 6, 3, 6, 3, 2, 2. Bass clef with notes.

Musical exercise 2: Treble clef with notes and intervals 1, #2, 3, 6, 2, 2. Bass clef with notes.

Musical exercise 3: Treble clef with notes and interval 7. Bass clef with notes.

Musical exercise 4: Treble clef with notes and intervals. Bass clef with notes.

Musical exercise 5: Treble clef with notes and intervals. Bass clef with notes.

First system of musical notation, featuring a treble clef with a key signature of two flats (B-flat and E-flat) and a bass clef. The treble staff contains a melodic line with various accidentals, including sharps and naturals. The bass staff contains a few notes, including a sharp sign.

Second system of musical notation, featuring a treble clef with a key signature of two flats and a bass clef. The treble staff continues the melodic line with various accidentals. The bass staff contains a few notes, including a sharp sign.

Third system of musical notation, featuring a treble clef with a key signature of one sharp (F-sharp) and a bass clef. The treble staff contains a melodic line with various accidentals, including flats and naturals. The bass staff contains a few notes, including a sharp sign.

Fourth system of musical notation, featuring a treble clef with a key signature of one sharp and a bass clef. The treble staff contains a melodic line with various accidentals, including flats and naturals. The bass staff contains a few notes, including a sharp sign.

Fifth system of musical notation, featuring a treble clef with a key signature of two flats and a bass clef. The treble staff contains a melodic line with various accidentals, including sharps and naturals. The bass staff contains a few notes, including a sharp sign.

The Dominant Harmony with its diminished 5th, as illustrated on Page 53 might have been added to the foregoing, but as it can but seldom be used with good effect, in any other state than that of its 2nd-Inversion, it does not seem suited to be classed with those which are of general application, on which account a distinct representation of this Harmony in its threefold state is here subjoined.

		Double Compound
Simple	Compound	

As from this Harmony in its most usual state of Inversion arises the Interval of a $\times 6^{\text{th}}$ it is therefore by most Theorists denominated the Chord of the $\times 6^{\text{th}}$ whatever sounds appear in Music different from these original Combinations are not to be considered as essential Harmonys; such sounds are denominated Accidental; or Irregular, and arise from these fundamental Chords in a way of Transition, Anticipation or Suspension; of this description are to be considered the two Harmonys illustrated on Page 55 that of the Dominant Harmony on the Tonic and its 3rd. These two Harmonys are there exhibited in their Compound and Double Compound state and exemplified by Transition, being an admissible licence used in passing from one regular Harmony to another, and although they are sounds too harsh for the Ear to dwell on, yet their aid in Music is important, as the desire they excite in the mind for a succeeding Harmony whereon the Ear can rest with satisfaction, gives to such Harmony when heard a consequence far beyond what it would otherwise possess; such indeed is the effect of Discords in general, but particularly of those whose component parts are more than usually extraneous.

Before we proceed to a consideration of those Harmonys which arise in a way of Anticipation or Suspension of the original Chords, it is necessary to render a general knowledge of those already treated of more familiar to the mind of the Student, for which purpose the following Exercises are proposed.

ESSAY XII

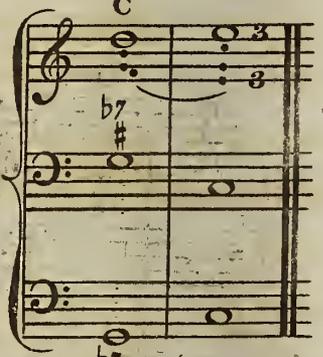
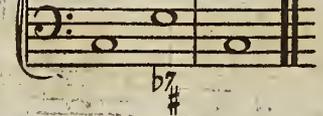
ON ACCOMPANIMENT.

There are laws established in regard to the well regulating of Accompaniment which it is necessary to bring gradually forward under the eye of the Pupil, these chiefly relate to the progression which certain Intervals are required to take, and the consequent necessity of doubling some sounds in a Harmony, and of avoiding the doubling of others. * The Intervals not permitted to be doubled in Accompaniment on account of their predominant effect on the Ear are the sensible note or 3rd of the Dominant Harmony, and Discords in general; the occasional doubling of the Intervals chiefly arises from the progression or resolution of the Discords, most of which are required to descend. It is to the Discord of the b7th alone in this point of view that the attention of the Student is requested in the following Exercises, the other Discords will be more particularly treated of hereafter. The underwritten Examples will afford an illustration of the present subject.

RULE 1. The sensible note must not be doubled. Exemplified at A.

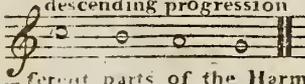
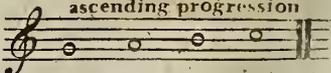
RULE 2. The Discord b7 must not be doubled. Exemplified at B.

RULE 3. The Discord b7 requires a descending progression (or resolution) to the next Harmony C.

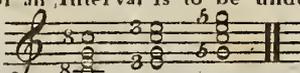
Accompaniment	A	B	C
Harmonic Bass			
Roots			

- A. The 3rd of the Dominant Harmony being used in the Bass is omitted in the Accompaniment.
- B. The b7 on Dominant Harmony being used in the Bass is omitted in the Accompaniment.
- C. The descending resolution of b7, and the consequent doubling of the 3rd in the next Harmony.

* By progression is signified that particular course which sounds take in a Composition

descending progression  ascending progression 

By the doubling of an Interval is to be understood the expressing of the same in two different parts of the Harmony

EXAMPLE. 

The Letters A. B. C. in the following Exercises refer the Student to such one of the foregoing rules as is applicable to the Harmony so distinguished.

As the Dominant Harmony naturally requires the Harmony of the Key to follow it and thereby form a Perfect Cadence, whenever the Dominant Harmony is succeeded by any other than that of the Key, the Cadence is said to be interrupted, this may be done in various ways, some of which will appear in the following Exercises. The 6th Rule given on Page 59 is herein to be attended to that whenever a sound foreign to the Key appears, such sound must be considered as a branch of a Dominant Harmony. Observe, the #F in the 9th Bar of the 1st Exercise is not a foreign sound, but is the 6th belonging to the ascending order of the Minor Scale; this distinction must be made in all similar passages.

When two or more signatures are applied to one Bass it is to be understood that the Harmony of such Bass changes, and therefore requires as many different roots, as there are different Signatures. The following Example will further illustrate this remark.

The musical notation consists of three staves. The top staff is a Treble clef with a key signature of one sharp (F#) and a 3/2 time signature. The middle staff is a Bass clef with a key signature of one sharp (F#) and a 3/2 time signature. The bottom staff is another Bass clef with a key signature of one sharp (F#) and a 3/2 time signature. The notes are as follows: Treble: Bar 1 (G4, A4, B4), Bar 2 (C5, B4, A4), Bar 3 (G4, F#4, E4), Bar 4 (D4, C4, B3), Bar 5 (A3, G3, F3), Bar 6 (E3, D3, C3). Bass: Bar 1 (G2, F2, E2), Bar 2 (D2, C2, B1), Bar 3 (A1, G1, F1), Bar 4 (E1, D1, C1), Bar 5 (B0, A0, G0), Bar 6 (F0, E0, D0). Figured bass: Treble: Bar 1 (6 5 / 4 3), Bar 2 (6 5 / 4 #), Bar 3 (b7 / #), Bar 4 (5 6 / 3 4 5), Bar 5 (b7 / # 6 5 / #), Bar 6 (7 / 4 5 / 2 3). Bass: Bar 3 (b7 / #), Bar 5 (b7 / #).

The Student is required to apply the Roots and Accompaniments in the following Exercises according to their signatures, in the manner illustrated in the first three Bars, and to signify the modulations used, by marking every Dominant Harmony with the Letter D, in the same manner as in the Exercises on Page 36. Harmonys having the Letter T placed over them are not to be considered as Dominants, but as transient Harmonys used by way of licence in passing from one Harmony to another; the nature of these Combinations will be more fully explained hereafter.

Musical notation for the first system, measures 1-8. The system consists of three staves: Treble, Bass, and a lower Bass staff. The key signature has one sharp (F#) and the time signature is 3/2. Chord labels A, B, C, and D are placed above the Treble staff. The lower Bass staff contains figured bass notation: 7/4 2, 6, 6 5 6 4 b7 #, 6 b5, 6 4 2, 6 4 b7 #, #, 6. Measure 8 has a 7 and b7 # below the Bass staff.

Musical notation for the second system, measures 9-16. The system consists of three staves. The key signature has one sharp (F#) and the time signature is 3/2. Chord labels C, A, and C are placed above the Treble staff. The label "9th Bar" is written in the first measure. The Bass staff contains figured bass notation: 6, #, b7 b5, # b7, 6, 6 b5 6, # 6 5, 6 5 6 4 b7 #.

Musical notation for the third system, measures 17-24. The system consists of three staves. The key signature has two sharps (F# and C#) and the time signature is C. Chord labels A and B are placed above the Treble staff. The Bass staff contains figured bass notation: 7/4 2, b7 #, 6, #, b7 #, 4/2 6.

Musical notation for the fourth system, measures 25-32. The system consists of three staves. The key signature has two sharps (F# and C#) and the time signature is C. Chord labels A, B, and T are placed above the Treble staff. The Bass staff contains figured bass notation: 6, b7 #, 6, #, 6 b5, 4/2 6, +6 5, #, 7/4 2.

Treble staff: B B B T
 Bass staff: 4^+ 7 6 $b7$ 4^+ 6 $+6$ 6 7
 Fingering: 2 2 2 $\#$ 2 5 5 4 $\#$

Treble staff: $b7$ $b6$ $b7$ b 7 5 4^+ 6 6 $b7$ 6 $b7$
 Bass staff: 7 7 $b7$ $b6$ $b6$ $b7$ b 7 5 4^+ 6 6 $b7$ 6 $b7$
 Fingering: 2 2 $\#$ 5 4 $\#$ 2 3 2 2 4 $\#$ 4 $b7$ $\#$

Treble staff: A A A
 Bass staff: 7 $b7$ 6 6 $b7$ $bb7$ $b7$ 7 $bb7$ 6 5 6 7 5 $b9$ 5 7 6 6 $b7$
 Fingering: 2 $\#$ 4 4 $\#$ $b5$ $\#$ 2 $b5$ 4 $\#$ $b5$ 2 5 $\#$ $\#$ $\#$ 4 $b7$ $\#$

In order to obtain further opportunity of exercising the foregoing Harmonys the Student may transpose these Exercises into other Keys, the method of doing which forms the Subject of the next Essay.

ESSAY XIII

ON TRANSPOSITION.

Transposition is the art of transferring a piece of Music from its original Key to some other of the same species, and has its use both in Vocal and Instrumental Music, in the former the Accompanist is thereby enabled to accomodate the particular compass or powers of the Singer, by accompanying the Piece in such Key as may be best suited either to display the excellencies, or conceal the defects peculiar to the voice of the Performer. In Instrumental Music it frequently happens that the parts to be performed by particular Instruments such as Trumpets, Horns, Clarinetsts &c. are on account of the peculiar nature of such Instruments, printed in different Keys from the other parts of the Score. To give the general effect of an Instrumental piece on the Piano Forte all the prominent, or leading parts of the Composition must be heard, and when such parts are found in those staves of the Score which are appropriated to the above mentioned Instruments, recourse must be had to the aid of Transposition, for the purpose of reducing all the parts to one Key, of this the few following Bars will afford an Example.

The musical score consists of six staves. The top five staves are for instruments: TRUMPET, HORNS, OBOE, CLARINETTI, and BASSOONS. The bottom staff is for PIANO FORTE. The top five staves are in various keys: Trumpets and Horns in C, Oboes and Clarinets in F, and Bassoons in B-flat. The Piano Forte grand staff is in B-flat, showing the transposition of the other parts into this key.

In the above piece three different Keys appear in the Score the Trumpets and Horns being in C, the Oboes and Clarinets in F, and the Bassoons in bE , all of which are reduced to one Key (that of bE) by means of Transposition for the Piano Forte as is seen in the lower line..

It is to be observed that no piece of Music can be transposed into a Key of a different species from that of its original, without an entire change of Character being produced thereby; therefore by Transposition is only to be understood the transferring of a Piece from one Major Key into another Major Key, or from one Minor Key into another Minor Key, the different order of the Major and Minor Scales preventing the Transposing of a piece from one Species to the other. **Transposition** may be made by two different methods equally simple and easy in their application, First, by observing that every note of the transposed copy, bears the same relation to its Tonic, that its correspondent note in the original bears to the original Tonic. Secondly, By making every succeeding note of the transposed copy stand in the same relation to its preceding note, that such relatives bear to each other in the Original.

First Method.

Original
in G Key

Transposed Copy
in C Key

Second Method.

Original
in G Key

Transposed Copy
in C Key

The figures used in the first Example shew the distance of each note of the Air from the Key note. The Letter K. signifies Key note.

In the second Example the Letter T. signifies that the note over which it is placed is one Tone distant from the preceding note.

The Dot placed over the Letter (thus $\overset{\cdot}{T}$) signifies that the progression is ascending, when placed under the Letter that it is descending.

\flat S signifies Semitone Minor. \natural S Semitone Major.

EXERCISES on TRANSPOSITION.

The Student is required to Transpose the following Air into the different Keys underwritten.

First Method

The figures applied to the several notes shew their relation to the original Tonic which figures being copied into the following Exercises, will be the Pupils guide for proceeding, as illustrated in the Exercise in G Key.

5 3 4 2 3 4 3 K 5 4 4 3 K 2 3 2 K

K 3 5 7 2 5 5 2 5 K 3 5 7 2 5 K 3 5 7 2 5 K

5 3 4 2 3 4 3 K 5 4 4 3 K 2 3 2 K

K 3 5 7 2 5 5 2 5 K 3 5 7 2 5 K 3 5 7 2 5 K

Second Method

The Exercises on this side are to be written according to the second rule, by copying the distance, in which each note stands related to its preceding.

b3 5 b3T5 5 5 5 5b5 5 5T5T T

3b3 5b3 3 4 5 3 4 5 3b3 5b3 4 5 3b3 5b3 4 5 3b3 5b3 4 5

b3 5 b3T5 5 5 5 5b5 5 5T5T T

3b3

The 4 Exercises in the Keys of F, bB, bE, and bA, shew that a Sharp when transposed will in certain Keys be represented by a natural, and a natural by a Flat.

ESSAY XIV.

On the method of ANALYZING a COMPOSITION.

Before we proceed further it seems necessary to afford the Pupil additional means of familiarizing the elementary parts of the Science already communicated, this will be best done by pointing out the method by which the various parts of a Composition however complex or multifarious in their construction, may (if regularly formed) be reduced to their first principles; by which it will appear that all the diversity of effect produced in the several compositions of different Composers, arises only from giving different forms to the same radical Elements of the Science. This Exercise will improve the Students acquaintance with all the original Harmonys however obscured, or varied they may be rendered in their appearance by the art of the Musician, and by an habitual attention to the different methods in which elegant Composers treat them, a degree of Taste may be acquired in the execution of good Music in regard to particular Emphasis of Expression as well as general energy in effect, that cannot fail to interest the minds of hearers in its favor.

It seems necessary, to remark that sounds have the same variety of force and connection in their Harmonic sense that words have in their Grammatical construction, Music is a language, which as much as any other addresses itself to the passions of men tho' all are not equally susceptible of its effects; It, like other languages possesses its essential as well as relative terms, or parts of Speech, and admits of both a Prosaick and Rhythmical construction; this analogy will (as far as useful) be more fully explained hereafter.

The Harmonic or Grammatical construction of the following Exercises is formed of two Terms, Essential sounds, and Copulatives or occasional sounds, the former make a constituent part of some original Harmony, the latter have no part in the Harmony, but are occasionally useful in uniting of those which have, they are in general denominated Transient notes, of which an Example has before been given (see bottom of Page 41) It is to a discrimination of these sounds that the attention of the Student is invited in the following Exercises.

ANALYSIS of COMPOSITION.

Each Bar of the following Airs is formed of one Harmony only, the Root of which the Student is desired to express in the bottom Line. The fifth and seventh Bar of the first Part, and several more in the second Part, give an example of Transient sounds used in turn with Harmonics, these are to be distinguished by crosses in the manner exemplified.

The Harmonic Bases marked thus ♯ are to be figured according to their distance from the Roots. The Harmonys according to Rule 4 Page 59 are to be resolved into their most simple state.

Harmonic
Basses
Roots

The first system of music features three staves. The top staff is a treble clef with a 3/8 time signature, containing a melodic line with eighth and sixteenth notes, and three '+' symbols above the staff. The middle staff is a bass clef with a 3/8 time signature, showing harmonic basses with figured bass notation: 5/3, 5/3, 5/3, 5/3, 5/3, and 6. The bottom staff is a bass clef with a 3/8 time signature, showing the root notes of the chords.

The second system of music features three staves. The top staff is a treble clef with a 3/8 time signature, containing a melodic line with eighth and sixteenth notes. The middle staff is a bass clef with a 3/8 time signature, showing harmonic basses with eighth notes and downward-pointing 'v' symbols. The bottom staff is a bass clef with a 3/8 time signature, showing the root notes.

The third system of music features three staves. The top staff is a treble clef with a 3/8 time signature and a key signature of one sharp (F#), containing a melodic line with eighth and sixteenth notes. The middle staff is a bass clef with a 3/8 time signature and a key signature of one sharp, showing harmonic basses with eighth notes and downward-pointing 'v' symbols. The bottom staff is a bass clef with a 3/8 time signature and a key signature of one sharp, showing the root notes.

The fourth system of music features three staves. The top staff is a treble clef with a 3/8 time signature and a key signature of one sharp (F#), containing a melodic line with eighth and sixteenth notes. The middle staff is a bass clef with a 3/8 time signature and a key signature of one sharp, showing harmonic basses with eighth notes and downward-pointing 'v' symbols. The bottom staff is a bass clef with a 3/8 time signature and a key signature of one sharp, showing the root notes.

The following Examples afford a greater variety of Harmony.

Example 1: A three-staff system in 3/8 time with a key signature of one sharp (F#). The top staff contains a melodic line with eighth and sixteenth notes. The middle staff contains a bass line with eighth notes and rests. The bottom staff contains a bass line with eighth notes and rests. The system concludes with a double bar line.

Example 2: A three-staff system in 3/8 time with a key signature of one sharp (F#). The top staff contains a melodic line with eighth notes and sixteenth notes. The middle staff contains a bass line with eighth notes and rests. The bottom staff contains a bass line with eighth notes and rests. The system concludes with a double bar line.

Example 3: A three-staff system in 3/8 time with a key signature of one sharp (F#). The top staff contains a melodic line with eighth notes and sixteenth notes. The middle staff contains a bass line with eighth notes and rests. The bottom staff contains a bass line with eighth notes and rests. The system concludes with a double bar line.

Example 4: A three-staff system in 2/4 time with a key signature of one flat (Bb). The top staff contains a melodic line with eighth notes and sixteenth notes. The middle staff contains a bass line with eighth notes and rests. The bottom staff contains a bass line with eighth notes and rests. The system concludes with a double bar line.

First system of musical notation, featuring a treble clef staff with a key signature of one flat and a complex melodic line, and a bass clef staff with a key signature of one flat and a rhythmic accompaniment consisting of chords and eighth notes.

Second system of musical notation, marked *Andante*. It features a treble clef staff with a key signature of one flat and a 6/8 time signature, and a bass clef staff with a key signature of one flat and a 6/8 time signature. The tempo is indicated by the word *Andante*.

Third system of musical notation, featuring a treble clef staff with a key signature of one flat and a complex melodic line, and a bass clef staff with a key signature of one flat and a rhythmic accompaniment consisting of chords and eighth notes.

Fourth system of musical notation, featuring a treble clef staff with a key signature of one flat and a complex melodic line, and a bass clef staff with a key signature of one flat and a rhythmic accompaniment consisting of chords and eighth notes.

ESSAY XV.

ON IRREGULAR HARMONYS.

Having fully illustrated all the Regular or Original Harmonys used in Composition, we now proceed to the investigation of those which are deemed Irregular, or Accidental; these as before observed arise from the former in a way of Suspension, Anticipation or Transition.

Suspensions are produced by prolonging the sound of one Harmony, till it forms a part of the next, by doing of which a branch of the second Harmony is retarded, or in the language of Musicians, Suspended. The following Examples will illustrate this operation.

EXAMPLE 1.

This Example shews the Retardation or Suspension of the 8th which is produced in the following manner. The upper note in the second Harmony of the Bar is prolonged so as to form a part in the next Harmony wherein it occupies that place which would otherwise be filled by the 8th. The 8th being thereby retarded till the last part of the Bar, occasions this operation of Harmony to be denominated the suspension of the 8th. The 8th is in this case said to be retarded by the 9th because the note A, which is prolonged from the second Harmony, and occupies the place of the 8th on the third Harmony forms a 9th to the Bass.

EXAMPLE 2.

This Example shews the suspension of another part of the Harmonic Triad, that of the 3rd. The upper note in the second Harmony of this Example is prolonged so as to form a part of the next Harmony, wherein it occupies that place which would otherwise be filled by the 3rd. the 3rd being thereby retarded till the last part of the Bar occasions this operation of Harmony to be denominated the suspension of the 3rd. The 3rd is in this case said to be retarded by the 4th because the note C, which is prolonged from the second Harmony and occupies the place of the 3rd on the following Harmony forms a 4th to the Bass.

EXAMPLE 3

As there are three sounds employed in the Harmonic Triad, it is capable of three suspensions but as the remaining one illustrated in this Example (that of the 5th) exhibits only an Harmonic construction similar to the first Inversion of the Triad it needs no further explanation.

The **Triad** admits of having its 8th and 3rd suspended in a manner different from the foregoing Examples. The former Suspensions are said to be from above, because the Discords which suspend the 8th and 3rd are one degree above the Intervals which they suspend, being the 9th and 4th. These two Intervals are equally capable of suspensions from below, which operations takes place when the Discords which suspend the 8th and 3rd are one degree below the Intervals suspended, as may be seen in the following Examples.

Suspension of the 8 th from below		Suspension of the 3 rd from below		The Harmonic Triad admits likewise of being suspended in the Bass.	
	4 3		5 2		7 4
	7 3		3		5 3

The **Harmonic Triad** admits of **Suspensions** on its **Inversions** as well as on its **Root** which the following **Examples** will illustrate.

Suspension of the 6 th from above on the 1 st Inversion of the Triad being the suspension of the original 8 th .		Suspension of the 3 rd from above on the 1 st Inversion of the Triad being the suspension of the original 5 th .		Suspension of the 8 th from above on the 1 st Inversion of the Triad being the suspension of the original 3 rd .	
	7		4 3		9 8
			4 6		6 9
			3		6 8

The suspension of the 5th from below is not used.

Suspension of the 6 th from below on the 1 st Inversion of the Triad being the suspension of the original 8 th .		Suspension of the 8 th from below on the 1 st Inversion of the Triad being the suspension of the original 3 rd .		The Harmonic Triad likewise admits of a Suspension in the Bass on its 1 st Inversion.	
	6 5		4 7		4 2
	6		8		5 2
					6

EXAMPLES of Suspension in the Triad on its 2nd Inversion.

Sus. ⁿ of 4 th from above	Sus. of 8 th from above	Sus. of 6 th from above	Sus. of 4 th from below	Sus. of 6 th from below	Suspension in the Bass.
					
5 6	9 6	7 4	3 6	5 6	6 4
original 8 th	original 5 th	original 3 rd	original 8 th	original 3 rd	

A GENERAL VIEW of the foregoing SUSPENSIONS of the HARMONIC TRIAD on its ROOT and INVERSIONS.

Suspension of the 3rd
from above.

Harmonic Bass

4 3 9 8 7 6
Roots 1st Inv. 2nd Inv.

Suspension of the 5th
from above.

6 5 4 3 9 8

Suspension of the 8th
from above.

9 8 7 6 5 4

Suspension of the 3rd
from below.

2 3 7 8 5 6

Suspension of the 8th
from below.

7 8 5 6 3 4

Suspension
of the Bass.

2 3 5 2 6 7 6 4

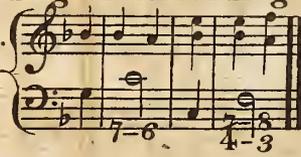
There are many Harmonys in the above Examples which resemble the original ones before treated of, nor can the difference at present be made to appear, as it relates to those laws which regulate the Progression of Roots; when these are explained it will be seen that the Harmonys alluded to cannot be essential ones, as the Progression they would make in such case is disallowed.

ESSAY XVI.

ON THE PREPARATION and RESOLUTION of DISCORDS.

Discords tho' in general from the nature of their construction, too harsh and disagreeable to be heard alone, yet when judiciously connected with **Concords**, are the means of furnishing that variety of effect in **Harmony**, without which it would be insipid and uninteresting.

In order to correct the harshness attending most of these combinations, the laws of **Music** require them in general to undergo an **Harmonic** process so calculated to meliorate their natural crudeness, that instead of disgusting the **Ear** they are thereby rendered harmonious and gratifying. This qualification arises from a double operation of **Harmony**, the 1st termed **Preparation** the 2nd **Resolution**. The preparation of a **Discord** consists, in making the same note which forms the **Discord** in one **Harmony**, stand in the relation of a **Concord** in the **Harmony** immediately preceding it, thus in the following **Example** of the suspension of the 8th by the 9th the note **A** which makes the **Discord** 9 on the second **Harmony**, previously forms the **Concord** of the 3rd on the **Harmony** immediately preceding it,  by this means a closer connection is made between these two **Harmonies** than would otherwise subsist, and the **Discord** thereby so qualified, that when heard, its effect is rich and har-

monious instead of being sudden and harsh.* The **Resolution** of a **Discord** is that operation of **Harmony** which regulates its progression, and requires it to move by a **Diatonic** degree into the following **Harmony**, this degree is either ascending or descending according to the nature of the **Discord**, as seen in the following **Example**.  The rules of **Preparation** and **Resolution** admit of certain exceptions which will be given in their proper place. as well as modifications

There are particular cases in which some of the **Intervals** hitherto treated as **Concords** become **Discords**, and undergo **Preparation** and **Resolution**, whenever it happens that any two **Intervals** or parts of a **Chord** stand in a **Diatonic** relation (that is in the connection of a **Tone** or **Semitone**) whether in its original or inverted state, one of such **Intervals** is always considered and treated as a **Discord**, there are two causes which occasion **Concords** thus to change their denomination and to become **Discords**, **Suspension**, and **Inversion**, which the following **Examples** will illustrate.



In the 1st of these **Examples** the **Interval** 4 being combined with the 5 to which it stands in the relation of a **Tone**, denominated a **Discord**, this 4th arises from **Suspension** and in that respect dif-

fers from the 4th which is formed by the 2nd **Inversion** of the **Triad** as illustrated on **Page** 26. a general rule for deciding the nature of the 4th is, that when it is an **Inversion** of the 5th. it is a **Concord**, but when a 4th. to the **Root** it is a **Discord**. In the 2nd **Ex**: the **Interval** 5 being combined with the 6 becomes a **Discord**; in the 3rd **Ex**: the **Interval** 3 being combined with the 4, is treated as a **Discord**.

* In florid **Composition** this operation of **Harmony** is frequently set aside, and the **Discord** used without preparation, sometimes as an **Apogiatura**, and sometimes as an essential sound, but in the slow and solemn stile it is requisite, nor can the law of **Resolution** be dispensed with in any style without offence to the **Ear**.

EXERCISES on SUSPENSIONS.

The following Examples afford further illustrations of the foregoing Suspensions, in their Original and Inverted state, with their Preparations and Resolutions. The Student is required to apply Signatures to these Harmonies, suited to express all the notes contained therein; a parallel line is to be drawn from the figure which denotes the Preparation, to that which expresses the Suspension, and continued from thence to the Signature of the Resolution.

The figures expressing the other parts of the Harmony are to be placed immediately over the Bass note, and between the Suspension and Resolution in the manner illustrated in the first Exercise.

The Letter P. denotes Preparation. S. Suspension, and R. Resolution.

Suspension of the 3rd from above, on the simple Dominant Harmony, Prepared on the Harmony of the Key.

P S R P S R P S R

Root 1st In. 2nd In.

4 3 4 3 4 3

K D

Fill up the following Exercises in the same manner as the above.

P S R P S R P S R

G.Key.

Root 1st In. 2nd In.

4 3 4 3 4 3

K D

P S R P S R P S R

D.Key.

Root 1st In. 2nd In.

4 3 4 3 4 3

K D

Suspension of the 5th from above on the Dominant Harmony, Prepared on the Harmony of the Key.

C Key **G Key**

3 6̣₃5 3-4-3 3-9-8
8 8 4

Root 1st In. 2nd In.
6 5 6 5 6 5

K D

F Key **Bb Key**

Suspension of the 8 from above on the Key, Prepared on the Dominant.

C Key **G Key**

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

Root 1st In. 2nd In.
9 8

D Key **A Key**

Suspension of the 3rd from below on the Key, Prepared on the Dominant.

C Key

D K

G Key

D Key

A Key

Suspension of the 8th from below on the Key, Prepared on the Dominant.

C Key

7-8 7-8 7-8

G.Minor.

7 8 # 7 8 # 7 8

C.Minor

7 8 # 7 8 # 7 8

F.Minor

7 8 # 7 8 # 7 8

DOUBLE SUSPENSIONS in the TRIAD.

Two parts of the Triad may be suspended on the same principles as the single Suspension, which the following Examples will illustrate.

Suspension of the 3rd and 8th from above on the Key. Prepared on the Dom^t

Musical notation for suspension of the 3rd and 8th from above on the key, prepared on the dominant. The notation shows three measures of a triad in G major (F#). The treble clef contains the notes G, B, D. The bass clef contains the notes G, B, D. The notes are suspended from above. The first measure shows the notes G, B, D with a 4-3 suspension in the treble and a 9-8 suspension in the bass. The second measure shows the notes G, B, D with a 9-8 suspension in the treble and a 7-6 suspension in the bass. The third measure shows the notes G, B, D with a 7-6 suspension in the treble and a 5-4 suspension in the bass. Below the notation are the fingerings: 4-3, 9-8, 4-3, 9-8, 4-3, 9-8.

Sus: of the 5th and 3rd from above.

Musical notation for suspension of the 5th and 3rd from above. The notation shows three measures of a triad in G major (F#). The treble clef contains the notes G, B, D. The bass clef contains the notes G, B, D. The notes are suspended from above. The first measure shows the notes G, B, D with a 6-4 suspension in the treble and a 5-3 suspension in the bass. The second measure shows the notes G, B, D with a 4-3 suspension in the treble and a 9-8 suspension in the bass. The third measure shows the notes G, B, D with a 9-8 suspension in the treble and a 7-6 suspension in the bass. Below the notation are the fingerings: 6-4, 5-3, 4-3, 9-8, 7-6, 6-5, 4-3, 6-5, 4-3, 6-5, 4-3. The notation also includes "1st In:" and "2nd In:" markings.

Suspension of the 3rd from above and the 8th from below.

Musical notation for suspension of the 3rd from above and the 8th from below. The notation shows three measures of a triad in G major (F#). The treble clef contains the notes G, B, D. The bass clef contains the notes G, B, D. The notes are suspended from above and below. The first measure shows the notes G, B, D with a 4-3 suspension in the treble and a 7-5 suspension in the bass. The second measure shows the notes G, B, D with a 9-8 suspension in the treble and a 5-3 suspension in the bass. The third measure shows the notes G, B, D with a 7-6 suspension in the treble and a 3-8 suspension in the bass. Below the notation are the fingerings: 4-3, 7-5, 9-8, 5-3, 7-6, 3-8, 4-3, 7-8, 4-3, 4-3, 7-8, 4-3, 7-8.

Sus: of the 3rd and 8th from below.

Musical notation for suspension of the 3rd and 8th from below. The notation shows three measures of a triad in G major (F#). The treble clef contains the notes G, B, D. The bass clef contains the notes G, B, D. The notes are suspended from below. The first measure shows the notes G, B, D with a 2-3 suspension in the treble and a 7-5 suspension in the bass. The second measure shows the notes G, B, D with a 7-8 suspension in the treble and a 5-3 suspension in the bass. The third measure shows the notes G, B, D with a 5-6 suspension in the treble and a 3-8 suspension in the bass. Below the notation are the fingerings: 2-3, 7-5, 7-8, 5-3, 5-6, 3-8, 2-3, 7-8, 2-3, 7-8, 2-3, 7-8.

1 Suspension in the Treble, and 1 in the Bass.

Musical notation for 1 suspension in the treble and 1 in the bass. The notation shows three measures of a triad in G major (F#). The treble clef contains the notes G, B, D. The bass clef contains the notes G, B, D. The notes are suspended from both above and below. The first measure shows the notes G, B, D with a 7-5 suspension in the treble and a 4-3 suspension in the bass. The second measure shows the notes G, B, D with a 3-7 suspension in the treble and a 5-6 suspension in the bass. The third measure shows the notes G, B, D with a 6-6 suspension in the treble and a 3-7 suspension in the bass. Below the notation are the fingerings: 9-8, 4-3, 6-5, 4-3, 4-3, 6-5, 4-3, 6-5.

EXERCISES on DOUBLE SUSPENSIONS.

The Student is required to fill up the following Exercises according to the manner exemplified.

Double Suspension of the 3rd and 8th from above, in the Triad; Prepared on the Compound Harmony of the Dominant.

E Minor

B Minor

Suspension of the 5th and 3rd from above in the Triad, Prepared on the Harmony of the fourth of the Key.

A Major

Suspension of the 3rd from above and the 8th from below: on the Harmony of the Key,
Prepared on that of the Dominant.

Musical notation for E Minor. The left system shows a treble clef with a triad of E4, G4, B4 and a bass clef with a triad of E3, G3, B3. The right system shows empty staves. Below the first measure of the left system are the numbers 4-3 and 7-8.

E Minor

Suspension of the 3rd and 8th from below on the Key. Prepared on the Dominant.

Musical notation for F Major. The left system shows a treble clef with a triad of F4, A4, C5 and a bass clef with a triad of F3, A3, C4. The right system shows empty staves. Below the first measure of the left system are the numbers 2-3 and 7-8. Below the second and third measures are the numbers 2-3 and 7-8.

F Major

Triple Suspensions are occasionally introduced on the Triad.

Musical notation showing triple suspensions. The left system shows a treble clef with a triad of F4, A4, C5 and a bass clef with a triad of F3, A3, C4. The right system shows empty staves. The first measure shows the triad in both hands. The second measure shows the triad in the treble and a single note in the bass. The third measure shows the triad in the treble and two notes in the bass. The fourth measure shows the triad in the treble and three notes in the bass.

The Student is required to figure the above Example according to the nature of the Suspension.

Various Suspensions in the Harmony of the Dominant.

The Student is required to figure the following Examples according to the nature of the different suspensions.

Suspension in the Bass.

Double Suspensions.

Triple Suspensions.

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

All the above Suspensions may be used in various positions of the Harmony. The triple Suspension cannot be applied on the 1st Inversion of the Dominant without transgressing some one of the Rules of accompaniment.

Suspensions are occasionally used on other Compound Harmonys likewise on Double Compound, but the foregoing Examples will be found sufficient to illustrate the nature of all.

The former Exercises exhibit the suspensions and resolutions on one continued Bass the following Examples shew the suspension and resolution on different Bases.

Nº 1 & 2 shew the Resⁿ on a different part of the same Harmony. Nº 3, 4 & 5 shew the Resⁿ on a different root Nº 6 a Quadruple suspension. Nº 7 & 8 Quadruple Suspensions in which one Interval is suspended in two ways at the same time. Nº 9 & 10 Examples of suspensions prepared on Transient sounds. a more particular explanation of the nature of these two last Examples will be found in the following page.

ESSAY XVII.

ON TRANSITION.

A species of Harmony different from either of those before illustrated arises from the use of such intermediate notes as are introduced between regular Harmonys; these are denominated **Transient**, and are of the same nature as those before exemplified in a way of melody at the bottom of Page 41. when these notes are united with Harmonic combinations they produce **Transient Chords**. Transient sounds are of two descriptions, Regular, and Irregular, when the Transient notes are placed on the first part of the Essential Harmony, the Transition is termed Irregular, when placed on the latter part of the Essential Harmony it is termed Regular, which distinction the following Examples will be found to illustrate.

Examples of Essential Harmonys

The musical examples consist of two rows of notation. The top row shows two pairs of staves (treble and bass clef) with figured bass notation above the treble clef: $5 \ 6 \ 4 \ 6 \ 5$ and $5 \ 3 \ 6 \ 5 \ 6$. To the right of these is a single treble clef staff labeled 'Essential Harmony' with figured bass $6 \ 4 \ 6 \ 5$. The bottom row shows two pairs of staves with figured bass $5 \ 3$ and $5 \ 3$. To the right is a single treble clef staff labeled 'Irregular Transition' with figured bass $6 \ | \ 6 \ | \ 5$.

The above Examples described with passing notes in Regular Transition.

The Character used by most Composers for denoting Irregular Transition is | which is placed over the Transient note (in the manner exemplified above) by which it is signified that such note is to be accompanied with the Harmony of the Essential sound following it. The following Examples illustrate the nature of Transient Chords.

The notation shows a sequence of chords in treble and bass clefs. Above the treble clef are labels: 'un:', 'un: un:', 'un:', 'ac.', and 'un.'. Below the bass clef are labels: 'un' and 'un.'. The chords are connected by vertical bar lines.

When the Transient sound forms a part of an Harmonic combination in the manner of the above Examples, it is considered either as Regular or Irregular according as the part of the Bar which it occupies is either accented, or unaccented, if it lies on the accented part of the Bar the Transition is Irregular, if on the unaccented it is Regular,* which remark will determine the nature of the above Transitions; it is to be noticed that no sound merely Transient, affects the Root of the Harmony on which it is introduced.

* When a parallel line is drawn from one Harmony over several following notes it signifies that they all take the same Accompaniment.

ESSAY XVIII.

ON ANTICIPATION.

Anticipation is an Operation of Harmony seldom used, therefore little need be said in respect of it. It arises by introducing in one Harmony, a part of the succeeding.

The following Examples will for the present sufficiently illustrate its nature.

Example 1



7-6
9-8

Example 2



Essential Harmony

The above Harmony in a way of Anticipation

In the last Bar of Example 1. it is to be observed, that there are two Essential Harmonies in the Treble, but that a branch only of the last is used in the Bass, the striking of which Bass note against the first Treble, and retaining it on the second, forms an act of anticipation with its Resolution.

The 2nd Example exhibits another act of anticipation produced by giving half the time of the first note to the Harmony of the second and proceeding in the same manner through the Passage.

Having now illustrated all the Harmonies used in Composition, both in their Original, Inverted, and Accidental order, the following part of this work will gradually open to the Student the most approved manner of treating them in a way of Accompaniment, previous to which the following remarks may be useful.

Some Authors use an arithmetical series of figures in Thorough Bass, to signify that the sounds thereby expressed are to be played without the addition of any other part of the Harmony, and that the position of the notes is to be that which their correspondent figures describe.

Example



The Imperfect Triad is by some Authors marked $\overset{\circ}{5}$.

ESSAY XIX.

ON THE PROGRESSION OF MELODY.

The Art of Accompaniment consists in a judicious distribution of the several parts of the Harmony, and in so conducting them as to gratify the Ear with an agreeable and well connected melody; the chief guide to which, will be found in the following rules which respect the progression of the upper Intervals. There are three Progressions by which all Harmony is regulated.

SIMILAR, CONTRARY and OBLIQUE.

The Progression is said to be **Similar**, when both parts ascend or descend at the same time.

The Progression is **Contrary**, when one part ascends and the other descends.

The Progression is **Oblique**, when one part is stationary and the other in motion.

Examples of the three different Progressions

Of these Progressions the Contrary is the most general, as it produces more variety than the two others, the Similar progression is limited in its use on account of its causing disagreeable and forbidden successions of sounds, these prohibited successions by similar motion are Perfect 5^{ths} and 8^{ths} the former of which are never admitted in well regulated Compositions, and the latter only when the whole of a passage moves in 8^{ths} for the sake of some particular effect.

Example of forbidden 5^{ths} by Similar motion. The former Example corrected by contrary motion. Ex: of forbidden 8^{ths} by Similar motion. The former Ex: corrected by Contrary motion.

These prohibited successions are at present to be consider'd only in regard to the extreme parts of the Harmony, that is, the proportion which the upper Intervals of the Accompaniment bear to the Harmonic Bass; these upper sounds form the melody, and therefore require the skill of the musician, to be more particularly employed towards furnishing it with all the well regulated variety which is essential to the construction of good Air, each subordinate part requires a due regard to be had towards a just distribution of its sounds, but the attention of the Student will not be invited to these interior Intervals of the Harmony, till the next Essay is proposed.

EXERCISES on false progressions of PERFECT CONCORDS

The first exercise consists of two staves. The upper staff is a treble clef with a melody of eighth notes. The lower staff is a bass clef with a bass line of eighth notes. Above the treble staff, the numbers 5, 5, 3, 8, 8 are written above the first five notes. Below the bass staff, the following harmonic signatures are written: $b7$, $\#$, 6, 4, $b5$, $\#$, $b5$, 6, 5, $b5$, 4, 6, 6, 5, $b7$, $\#$.

The Melody of the above Exercise affords many examples of false progressions, in order to discover which, the Student is required to figure all the upper Intervals of the Harmony according to their distance from the Bass, in the manner exemplified in the first Bar, and then proceed to write an example of the same Harmonys in correct progression, in the Line be-

The second exercise consists of two staves. The upper staff is a treble clef with a melody of eighth notes. The lower staff is a bass clef with a bass line of eighth notes. Above the treble staff, the numbers 8, 5, 3, 8, 5 are written above the first five notes. Below the bass staff, the signature $b7$ is written under the first note.

COMPLETE EXERCISES on THOROUGH BASS.

Most of the following Exercises are extracted from the Compositions of CORELLI, an ancient classical Author, celebrated for the rich variety of his Harmonys, the flowing progression of his Bases and the melodious chasteness of his Air. These Exercises afford various examples of the foregoing Suspensions, as well as every other Harmonic combination.

RULES.

The Roots are to be written in the under Line with their appropriate Signatures. All the Harmonys signified by the Signatures of the Harmonic Bases are to be written in the upper line; such Bases as have no Signatures are Roots.

The upper notes of the Chords should move in Diatonic order as much as possible, except where such order would occasion any disallowed progression in the Melody, in which case a skip may be made to a more distant Interval provided such Interval is not a Discord; a skip may likewise be made after a Cadence, or in order to prepare a Discord; of which the 2nd and 4th Bar of the first Exercise afford examples. see *

Imperfect Concords in the melody are preferable to Perfect, as far as they contribute to agreeable air. All the Discords in these Exercises require a descending progression.

The sensible note (that is the Major 3rd in Dominant Harmony) requires an ascending progression. Notes are occasionally given in the Treble to regulate the progression of the Melody. The numbers placed over particular Harmonys refer the Student to former Pages of this work wherein such Harmonys have been particularly treated on.

Each Exercise must begin with a perfect Concord in the melody. The last Cadence of every Exercise requires the 8th on the Key note to be used in the melody. see the last Bar of 1st Exercise.

EXERCISE III.

6 4 2 5 3 6 6 6 b7 6 7 6 6 7 6+6 6 7 3 6 b5 4 3 6

Adagio.

7 b6 b5 4 3 6 7 4-3 6 b5 4 -3 5 4-3 7 6 5 6 6 b7 # * 6 5 # b7

6 6 4 3 6 5 6 5 6 5 # 5 6 b5 6 6 7 6 6

9-8 b7 # 5 3 6 6 4-3 b 6 9-8 7 5 3 6 5 b 4 #

* The Concords 4 and 5 are always to be written in their perfect degree, unless a superfluous or diminished Character is annexed to them.

The following Exercises afford various Examples of Transition. Regular and Irregular.

All the Bass-notes without signiatures are either Harmonics, or Transient notes, such as have the sign of Irregular Transition over them (|) take the Harmony of the Bass following them, the rest belong to the Harmony immediately preceding.

The Student is directed to place a + over such Bass-notes as move in Regular Transition, in the manner exemplified in the first Bar.

The Letter K denotes a Modulation into a new Key by means of a Dominant Harmony; which Key the Student is to signify, in the manner exemplified in the 5th Bar.

The Discord 7 is frequently used without preparation, of which see an Example at the end of the 6th Bar.

An exception to the general rule of resolution is made by the Discord remaining stationary, and in so doing becoming a Concord to the next Bass; of which see an Example in the 6th Bar; various other Licences are admitted in the resolution of Discords, which will speedily be brought forward.

The production of agreeable Melody is to be the constant aim of the Student, therefore whenever a skip contributes more to variety and good Air, than a strict adherence to Diatonic progression, such skip is performable, provided no disallowed progression is thereby made.

EXERCISE IV.

5 3+6 5 3+6+ 5 3 6 9 6 7 6 6 5 3 5 3 5 6 5 3 6 5 3 6 5^{b7} 3[#]67

Andante K.G. Maj:

6 5 # 5 3 6 b5 5 3 7 4 7 4 3 7 6 6 5 3 6 5 # b7

K

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

K

b5 3 6 b5 5 6 6 5 b7 5 6 5 b7 6 6 b7 5 6 5 b7 4-3 b7

K K

EXERCISE V.

5 3 5 2 6 6 4-3 6 6 7 6 6 7 6 6 b7 # 7 #

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

K K

In strict Compositions not only successions of direct 5^{ths} and 8^{ths} by similar motion are forbid, but likewise such progressions of sounds as would produce them were the intermediate space formed by the extreme Intervals of one part filled up in Diatonic order, 5^{ths} and 8^{ths} if found to exist in such manner are said to be Hidden.

These progressions are most exceptionable when they are formed by the extreme parts of the Harmony.

EXAMPLE of a Progression wherein is contained Hidden 5^{ths}

The Hidden 5^{ths} of the former Example made to appear by filling up the intermediate space between the extreme Intervals.

EXAMPLE of a Progression wherein is contained Hidden 8^{ths}

The Hidden 8^{ths} of the former Examples made to appear by filling up the intermediate space between the extreme Intervals.

Tho' a succession of Perfect 5^{ths} are disallowed by similar Progression, Imperfect 5^{ths} are admissible in succession; an Imperfect 5th may likewise follow a Perfect 5th but a Perfect 5th is not allowed to follow an Imperfect, by similar motion, because were the intermediate space to be filled up two Hidden 5^{ths} would appear which the following Examples will illustrate.

<p>Allowed</p> <p>Perfect. Imp^t.</p>	<p>Disallowed on account of Hidden 5^{ths}</p> <p>Im: Per:</p>	<p>The Hidden 5th of the former Example made to appear.</p>
---	--	--

Even the successive 5^{ths} which are allowed, are better in three or more parts, than in two, only.

When the Harmony consists of more than four parts the progression of the interior parts is not so strictly limited.

Successive 4^{ths} by similar motion are disallowed in two parts, on account of their disagreeable effect, but are not objected to in three, or more parts.

THREE PARTS FALSE RELATIONS The former Example corrected AN EXCEPTION

4 4 4 4 4 # b7 # b7 # b

TWO PARTS
1 4 4 4 4

The image shows four musical examples. The first, 'TWO PARTS', shows two staves with a sequence of four intervals of a fourth. The second, 'THREE PARTS', shows three staves with a similar sequence. The third, 'FALSE RELATIONS', shows two staves where the same note is natural in one part and sharp or flat in another, with a correction below. The fourth, 'AN EXCEPTION', shows two staves with a similar sequence, but with an asterisk marking a specific interval.

FALSE RELATIONS are likewise to be avoided; the disallowance so denominated, arises from making the same note natural in one part of the Harmony, and Sharp or Flat in another part, either together or in immediate succession, as illustrated in the above Example, this restriction only applies to essential Harmony, Transient Intervals of such description being an exception, which see above at *

The PROGRESSION OF INTERVALS is regulated in two ways, first according to the nature of the Intervals themselves, secondly, according to the number of parts of which the Harmony consists. The following Rules shew what Intervals are required to ascend, what to descend, and what are unlimited in their progression.

An Example of the regular Progression of the Intervals contained in Dom^t Harmony Double Compound.

5 } Unlimited.
3 } This Interval must ascend - -

G Root leads to the Harmony of the Key

b9 } This Interval must descend
b7 } This Interval must descend

The image shows musical notation for a dominant harmony. It includes a treble clef staff with notes G, B, D, F, A and a bass clef staff with notes G, B, D, F, A. Brackets on the left indicate that the 5th (B) is unlimited and the 3rd (D) must ascend. Brackets on the right indicate that the b9 (F) and b7 (B) must descend. Below the bass staff, the notes b9 and b7 are written.

By the above Rule not only the original Interval of this Harmony is regulated, but likewise all those which are derived from it by Inversion, as follows.

The 4th } must ascend - -
The x2nd } must ascend - -

The bb7th } must descend - -
The b5th } must descend - -

The image shows two pairs of musical notation. The first pair shows a treble clef staff with notes G, B, D, F and a bass clef staff with notes G, B, D, F. Brackets indicate that the 4th (B) and the x2nd (D) must ascend. The second pair shows a treble clef staff with notes G, B, D, F and a bass clef staff with notes G, B, D, F. Brackets indicate that the bb7th (F) and the b5th (B) must descend.

Should the 5th in the Dom: Harmony, be rendered Imperfect in a way of Transition (which is frequently is, thus) a bb3rd and x6th will be then contained therein.

The bb3 must descend - - The x6th must ascend - -

The image shows two musical examples. The first shows a treble clef staff with notes G, B, D, F and a bass clef staff with notes G, B, D, F. A bracket indicates that the bb3 (D) must descend. The second shows a treble clef staff with notes G, B, D, F and a bass clef staff with notes G, B, D, F. A bracket indicates that the x6th (F) must ascend.

All Discords by Suspension must ascend, or descend, according as the Intervals they suspend are above or below.

Such Intervals as are not found in the above Example may be regulated by the following General Rule. All major sounds should ascend, and minor descend.

LICENCES admitted in the PROGRESSION of HARMONY

Certain Licences are allowed in Composition in regard to the Preparation and Resolution of Discords, which form exceptions to some of the foregoing rules.

LICENCE 1. A Discord may ascend to a branch of its Harmony before it descends for its Resolution.



2. The Discord of one note may be converted into that of another before it Resolves.



3 The Bass may take that note on which the Discord should resolve in the upper part, in which case such Discord is permitted to take an irregular Progression.



4: The General Rule requires Discords to be Prepared, and Resolved in the same part, yet a Discord may sometimes be transferred from one part of the Harmony to another, before it resolves.



5. A Discord may move to various parts of its Harmony before it resolves



6. The Dom^tHar^y is not only permitted to be used in all its various forms without Preparation, but is allowed to stand in the place of a Concord and prepare a succeeding Discord.



7. A Discord may remain stationary and in so doing form a Concord in the next Harmony.



8 For the sake of a Chromatic Progression such Intervals as should descend, are permitted to ascend, and such as should ascend, to descend.



The Discord 7 is in many cases permitted to be used without Preparation.

ON THE DISTRIBUTION OF INTERVALS IN TWO, THREE, FOUR OR MORE PARTS.

It is obvious that when Harmonys are only used in two parts every Harmony is incomplete, when in three parts that Triads may be complete but that Compound Harmonys must be incomplete, but that when in four, or more regular parts every Harmony may not only be complete, but that the Triads must have some one or more of their Intervals doubled, this will be further illustrated by the following Examples.

The figures and the word ROOT placed under the Bass notes of the 1st Example shew what part of the Harmony is omitted. In the 2nd Example are seen two Compound Harmonys in each of which the Root is omitted. In the 3rd Example the figures shew what Intervals are doubled.

To afford the Student further assistance in the well regulating of Harmony in two, three four or more parts, the following directions are subjoined, which point out what parts of a Harmony may be doubled and what omitted when circumstances prevent the use of them in a complete form.

HARMONIC TRIAD	DOMINANT HARMONY	IMPERFECT COMPOUND HARMONY
5 may be doubled	b7 should not be omitted	b7 should not be omitted
3 may be doubled	5 may be doubled	5 may be doubled
Root may be doubled	b3 should neither be omitted nor doubled	b3 (may be doubled (may ascend
	Root may be doubled	Root may be doubled

It is to be observed that such Intervals as claim an absolute Progression must not be doubled, as the so doing would occasion two 8^{ths} and that when a sound unlimited in its progression is doubled, its duplicate must take a different direction.

Transient Intervals must not be doubled.

A further ILLUSTRATION of HARMONIES arising from ANTICIPATION.

Anticipation (as has been already observed on Page 87) arises by introducing on one Harmony a part of the succeeding.

VARIOUS EXAMPLES of ANTICIPATION.

Anticipation of the 3rd & 5th of the Dominant on the Harmony of the Key.

Musical notation showing three measures of a piano accompaniment. The treble clef contains chords with notes G, B, and D. The bass clef contains notes E, G, and B. Chord symbols are written below the treble clef: 7-3, 9-3, and 9-8.

Double Anticipations of the Harmony of the Key on the Dominant.

Musical notation showing three measures of a piano accompaniment. The treble clef contains chords with notes G, B, and D. The bass clef contains notes E, G, and B. Chord symbols are written below the treble clef: 4-3 over 9-8, 9-8 over 7-6, and 7-3 over 9-8.

Triple Anticipations of the Key on the Dominant.

Musical notation showing three measures of a piano accompaniment. The treble clef contains chords with notes G, B, and D. The bass clef contains notes E, G, and B. Chord symbols are written below the treble clef: 9-8 over 6-5 over 4-3, 7-6 over 9-8, and 4-3 over 9-8 over 7-6.

Anticipations in the Bass.

Musical notation showing three measures of a piano accompaniment. The treble clef contains chords with notes G, B, and D. The bass clef contains notes E, G, and B. The measures are labeled 'Single', 'Double', and 'Triple' above the bass clef.

Examples of various Suspensions and Anticipations of Harmony.

Musical notation showing a single measure of a piano accompaniment. The treble clef contains a complex chord with notes G, B, and D. The bass clef contains notes E, G, and B. Chord symbols are written below the treble clef: 7 6, 9-8 over 5-6, 4-3, 4-3, 7 over 4 over 2 over 3, 4-3, b7, 4-3, 6 5 b7, 6 5 over 4 3.

Various Exercises on the Accompaniment of the Major and Minor Scales, in which all the former Harmonies are further exemplified.

These Exercises are to be filled up according to the rules before given in the manner of the 3rd Example on Page 99.

A Diatonic Progression in the melody is to be preferred, tho' a skip may occasionally be made in order to prepare a Discord.

If necessary, the melody may occasionally descend below the 2nd Treble, and the 2nd Treble below the 3rd.

The same note (or Unison) may occasionally be used in two different Parts.

*MELODY.

In this Exercise the Prepⁿ, Suspⁿ, and Resolⁿ may all be written in the melody,

*As in applying the Signatures in these Exercises the Student may sometimes be at a loss how to distinguish the Interval 9 from that of the 2nd it will be necessary in such case to regulate the Signatures in question by the following rule. When this Interval is found in its lowest denomination, (that is in the relation of a Tone or Semitone to the Bass) it is always treated as a 2nd so likewise when it is a Suspension of the 3rd or when it arises from an Inversion of the Compound Dominant Harmony. But when it is a Suspension of the 8 or the extreme Interval of Double Compound Harmony it is treated as a 9, this distinction will be further elucidated by the following Examples.

Sus: of 3rd Inv: of Dom: Sus: of 8.

The Descending Major Scale.

The Ascending Minor Scale.

9 8 $\flat 7$ 6 5 4 3
 9 3 9 8 9 8 4 $\flat 3$

4 6 5 6 7 6 $\sharp 6$ 7 6 $\flat 5$ 9 8

Descending Minor Scales.

$\frac{5}{3}$ 6 5 4 $\frac{5}{2}$ 6 \sharp 6 7 6 5 6 $\flat 5$ 6 4 3
 $\frac{5}{3}$ 2 $\frac{5}{2}$ 7 8 4 3 $\flat 5$ 6 4 3
 $\frac{2}{4}$ 8
 2 3

$\frac{5}{3}$ 4 5 6 7 6 $\flat 7$ 6 7 6 $\frac{7}{5}$ 6 9 8 9 8
 $\frac{5}{3}$ 2 \sharp 4 7 6 $\frac{7}{5}$ 6 $\flat 5$ 6 9 8
 $\frac{2}{4}$ 8
 3

Cromatic.

5 4+ 6 b5 5 6 6 5 4 6 b5 3 2 5 6 7 6 4 3

5/3 4/2 5/2+4

5 6 7 6 5 6 6 bb7 b5 4 3 6 b5 4 3 7 6 4 3 7 8 6 b5 4 3

5/3 8/6 2/4

The following Examples were written by a late eminent classical Composer, by putting of which into distinct and regular parts, the Student may make further improvement.

5 6 7 6 7 6 5 6 7 6 7 6 7 6

5 6 7 6 5 6 5 6 5 6 7 6 7 6

6 6 6 6 6 6 6 6 5 4 b3 5 6 6

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

7 6 5 7 6 5 7 6 5 9 8 7 5 6 6 5

Handwritten text at the top of the page, likely a title or description of the musical piece, which is mostly illegible due to fading and bleed-through.

The first system of musical notation consists of two staves. The upper staff contains a melodic line with various note values and rests. The lower staff contains a bass line with notes and rests. The system concludes with a double bar line and a fermata.

The second system of musical notation consists of two staves. The upper staff contains a melodic line with various note values and rests. The lower staff contains a bass line with notes and rests. The system concludes with a double bar line and a fermata.

The third system of musical notation consists of two staves. The upper staff contains a melodic line with various note values and rests. The lower staff contains a bass line with notes and rests. The system concludes with a double bar line and a fermata.

The fourth system of musical notation consists of two staves. The upper staff contains a melodic line with various note values and rests. The lower staff contains a bass line with notes and rests. The system concludes with a double bar line and a fermata.

The fifth system of musical notation consists of two staves. The upper staff contains a melodic line with various note values and rests. The lower staff contains a bass line with notes and rests. The system concludes with a double bar line and a fermata.