Rev.d Edward Orlebar Smith.

A

New Musical Grammar:

OR, THE

Harmonical Spectator.

CONTAINING

All the useful *Theoretical*, *Practical*, and *Technical* Parts of

MUSICK.

Being a New and Correct

INTRODUCTION

TO

All the *Rudiments*, *Terms*, and *Characters*,

AND

Composition in all its Branches.

WITH

Several *Scales* for Musical *Instruments*;

AND

Philosophical Demonstrations,

ON

The Nature of Sound.

Laid down in so concise and easy a Method, as to be understood by the meanest Practitioner, whether *Vocal* or *Instrumental*, by Way of *Question* and *Answer*. With variety of *Cuts* correctly engraved.

By WILLIAM TANSUR: *Musico Theorico*.
Author of The *Universal Harmony*, &c.

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THE PREFACE.

To all *Lovers* of *Muſick*.

'MUSICK, the *Subject* of this *Diſ-*
'*courſe*, is a *Science* of *Sound*; or
'an *Art* that Teaches how to bring
'all *Sounds* to the *Ear*, whether *Grave* or
'*Acute*; and conſiſts of three Parts, i. e.
'*Tune*, *Time*, and *Concord*.

'And as this *Art* was known in the *earlieſt*
'Times, ſo it ought now to have the *Su-*
'*periority* of all others, as it is the moſt curious
'and ſublime; whether we conſider it either in
'its *Theory*, its *Practical*, or in its *Mechanick-*
'*Parts*.

'The *Theoretick*, or *Mathematick-Part*, is
'the *Grammar*, or *Natural Ground-Work*; and
'greatly Employs the Thought, to find out
'all the *Ratios* and *Porportions* of *Sounds*, in all
'their curious Branches. This lies very deep in
'*Natural-Philoſophy*, and requires great Re-
'ſerch to unfold it, before ſuch *Sounds* can be
'model'd, to make *Harmony* compleat.

'The *Practical-Part*, is the well Diſpoſing
'of

'of *Sounds*, which *compose* and *contrive* them 'into so many curious and pleasing Varieties; 'this proceeding from well taken *Concords*, and 'intervening *Discords*, &c. in a regular Com-'position.

'The *Mechanic*, or *Active-Part*, is that 'which readily *performs*, and gives a Production 'of such *Sounds* to the *Ear* and Understanding; 'either from the soft Modulation of a natural '*Voice*, or from the curious Dexterity of *Hand*, 'on an Artificial *Instrument*.

'Many Years have I laboured in this *Divine* 'Science, under the Denomination of a *Master* 'of *Musick*, and have been acknowledged as 'such by my *Pupils*; when, alas! I knew, and 'acknowledged at the same Time, that I 'fell a great Way short of it.

'Any *Person* that is qualified for such a 'Title, must not only be a *Grammarian*, but also 'a Master of *Letters* and *Languages*, in order to 'unfold what is lock'd up in the Closets of the 'Learned.—He must be an *Arithmetitian*, and 'able to explain *Numbers*, and even the Myste-'ries of *Algebra*; and also a *Geometrician*, to 'civince in great Variety, the Original of *In-'tervals*, *Consonant*, and *Disonant*; by the Me-'chanical *Division* of a *Monochord*.—He must 'be a *Poet*, to conform his Thoughts and *Words* 'to the Laws of precise Numbers; and Distin-'guish the Euphony of *Vowels* and *Syllables*, &c. '—He must be a *Mechanick*, in order to know 'the exquisite *Structure* of all *Instruments*, 'whether *Wind*, *stringed*, or *Pulsatile*. A *Met-'talist*, to explore or find out the different Con-'temperations

'temperations of *Grave* and *Acute* Toned *Metals*, for casting *Bells* for *Chimes*, &c. — He 'must be an *Anatomist*, to shew the Manner, and 'Organs of the Sense of *Hearing*.—An *Harmonian*, to lay down the Demonstrative *Rules* for '*Composing*, &c. and he must be so far a *Magician*, as to excite Wonder, by bringing into 'Practice all the admirable *Secrets* of *Musick*: 'Such as *Sympathies*, and *Antipathies* between '*Concords* and *Discords*; Together with the 'Artifice of *Tubes*, for the strengthening and 'continuing of weak *Remote Sounds*, and me'lorating those that are Strong, &c—But stop 'here, What a Field of *Learning* must I pass 'thro' to be justly called *Master of Musick?*— 'A *Title*, that no one could ever justly claim, 'yet attain to.

'But let us be content, since God from this '*Gift* of *Musick*, hath enabled us to *sing* his '*Praise* whilst on *Earth*, for our Godly *Solace* 'and *Comfort*, by which we may imitate the 'very *Angels* in Heaven.

'And as this *Art* is the *Gift of God*, how 'much ought we to endeavour to the right '*Knowledge* of it? But what shall I do more to 'promote it, then what I have done in this 'small *BOOK* of *Instructions?*

'As I have wrote at my own *Peril*, so 'I leave all to judge at their own *Pleasure*; not 'having the Vanity to think I am without '*Error*, nor yet so weak, as to assert it: neither 'do I imagine it will escape the Penetration of 'the *Critic's* Eye: *But let him that never Err'd, cast the first Stone.*

'As

'As to the WORK it is *short*, *familiar*, and '*Inſtructive*; and contains all the *Practical* and 'uſeful *Theoretical Grounds* of *Muſick*; which 'will be of general *Uſe*, ſo long as there are 'any to Practice it: in which many *Scales* are 'inſerted, to oblige ſome particular Perſons, 'who greatly importuned me to *publiſh* this '*Work*.

'And tho' this ſmall *Treatiſe* is intended to 'ſet this *Divine* ART in a more clear Light than 'it has been heretofore, and to end many *Con-* 'troverſies that have been undetermined; yet I 'know, it will not pleaſe all, but if it will 'pleaſe my *Pupils* then I have my End; being 'well aſſur'd that none will ſpurn againſt it, but 'thoſe who have been guilt of ſuch *Miſtakes* as 'are within hinted at: But if what I have here 'endeavour'd doth not agree with the Dictates 'of ſome Perſon's Judgment, I hope they will 'Pardon my Honeſt well-meaning Intentions; 'having through the Whole endeavour'd by 'Matter of Fact, to inform and Inſtruct the 'Minds, rather than endeavour to pleaſe the 'Ear, by Flowers of *Rhetoric*.

'I therefore recommend this WORK to all 'Perſons, both *High* and *Low*, *Rich* and *Poor*, 'one with another; hoping it may have a *candid* 'Reception, and be an *Aſſiſtant* even to All; to 'the furtherance of *Muſick*, and the *Glory* of 'God; which will be a great Pleaſure, and give 'the greateſt Satisfaction, to their moſt Harmo- 'nious, and humble Servant,

June 24. A. D. 1746. WILLIAM TANSUR.

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ERRATA.

Page 98 line 20, for *not*, *the* Mi, read *not*; *if the* Mi—p. 100. line 33, for *Remainder*, read *Reminder*.—p. 104 ſet the two Bs on the line. and make the 3, 10.—p. 106. for *Tenes*, read *Tones*.—p. 110. for *Reſourſe*, read *Recourſe*.

Poetical Encomium,

On the several Pieces published by Mr. *William Tansur:* But more especially on his two Last, *viz.* His *Universal Harmony*, and this, his *New Musical Grammar*,

" OF all the various ARTS by Man design'd,
" To vie with Nature, and *improve* the Mind;
" Thy Labours TANSUR! merit greatest Praise,
" And claims the Tribute of my Friendly *Lays*:
" For what *Invention* since the World began,
" To ripen MUSICK in the Breast of Man,
" Can stand in Competition with thy *Plan*?

" By thy *Instructions*, we are taught to raise
" Our Minds, to SING our dear *Redeemer's Praises*;
" Thy *Harmony*, the godly *Swains* invite,
" To make thy *Godly* SONGS their sole Delight.
" Tho' ORPHEUS once the mute *Creation* drew,
" Thy *Notes* attract the *Mute*, and *Speaking* too.

Leicester,
June 10. 1746.

A *New*

A

New Musical Grammar:

OR, THE

Harmonical Spectator.

By *WILLIAM TANSUR.*

CHAP. I.

Of the GAMUT, or *Scale* of *Musick*: And of the *Semitones* contain'd in an *Octave*: And of *Cliffs*.

(*Scholar* and Master.)

Scholar. AS *MUSICK* is esteem'd in this our Age, as well as in all others past, as a *divine* and *mysterious* ART or *Science*, I would gladly become a *Proficient* therein, never desiring a better *Tutor* than you alone; would you but take upon yourself so great a Trouble.

Master. I am well pleased with your Choice, by Reason, it is the very Marrow of all other *Sciences* whatsoever, when *Divinely* applied;

and the very best Method in spending of vacant Hours on this Side the Grave: By which we imitate a *Heaven on Earth*, and have a true Relish of those harmonious *Sonets* that are perform'd by Angels: Therefore, as you chuse me as a *Tutor* in that delightful ART, I shall assist you all I am able, to make you a good *Proficient*, and lead you regularly on, thro' the whole SCIENCE of *Musick*, the easiest way I can invent.

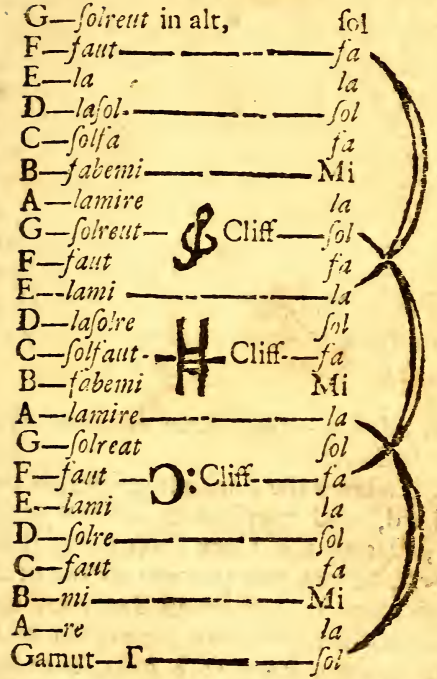
Scholar. *Sir, I thank you most heartily, and am ready to begin directly; and desire you'll tell me the very first* Rule.

Master. The *first* is the GAMUT, or *Scale* of *Musick*, a Table or Lesson so called, which teacheth you the first *Rudiments* of Song, when perfectly learnt and understood; and without which you never can attain either its *Theory* or *Practice*.

Scholar. *Who first invented this* Scale, *and why is it called* GAMUT?

Master. As to its first *Inventor*, it is hard to prove, it being attributed to several *Grecians* in past Ages; all of which vary as to *Form* and *Method*: But, the *present Scale*, is said to be invented about 700 Years ago, by *Guido Aretinus*, a *Monk* of *Tuscany*, who added more Lines to it, to make 5; and plac'd this *Greek* Letter Γ *Gamma*, or G, at the *Root* of the *Scale*; which shew'd that he had it from the *Greeks*, and to perpetuate his Memory it begun with the *first Letter* of his *Name*, shewing thereby that he was the *Improver* of it; The *Scale* is as follows: The

The *Gamut*, or *Scale* of *Muſick*.



Scholar. *What is the End, and Office of the* Scale *of* Muſick ?

Maſter. By the *Gamut*, or *Scale* of *Muſick*, we diſtinguiſh all *Sounds* or *Tones*, whether *Grave* or *Acute* ; for which Reaſon it muſt perfectly be learnt by Heart.

Scholar. *In what Method muſt I proceed* ; *muſt thoſe* hard Names *always be uſed before the Syllables*, as ſol, la, mi, &c.

Master. Those *Names* or *Words* which you call *hard*, are very easy to what they were in the old *Greek Scales*; for then, they were ten times harder, and more perplexing: and as these now used, appear somewhat difficult to learn by heart, it will be more useful to reduce them into *shorter Terms*, according to the 7 *Letters* of the *Alphabet*: as *G—sol*, *A—la*, *B—mi*, &c. which *Abreviations* are sufficient for the understanding of any *Lesson* of *Musick* whatsoever; by reason, those difficult *Terms* are only set to show their *Antiquity*, and not to express the several *Degrees* of *Sound*.

Scholar. *Must the whole* Scale *be learnt altogether, or in Parts?*

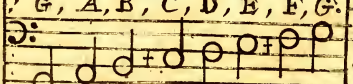
Master. To learn the *Scale* altogether, is too tedious, hard, and perplexing for any *young Beginner*; *One* of the three Parts being sufficient at *first*, before you proceed to the other two: Beginning at the lowest *Letter* G, and so *ascending* to G above, and then down to G again; imitating a *Ring* of 8 *Bells*, both forward and backward in a *regular Diatonick-Order*, as follows:

The

The Diatonick, or Practical Scale of Musick, on the five lines.

Bass.

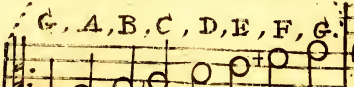
G, A, B, C, D, E, F, G.



Sol, la, mi, fa, sol, la, fa, sol.

Counter-Tenor.

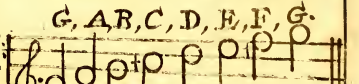
G, A, B, C, D, E, F, G.



Sol, la, mi, fa, sol, la, fa, sol.

Tenor, or Treble.

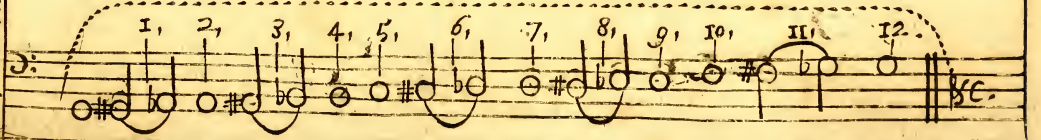
G, A, B, C, D, E, F, G.



Sol, la, mi, fa, sol, la, fa, sol.

(N.B. This mark + sheweth the Places of the Semitones.

The Chromatick, or Semitonick-Scale of Musick; shewing what Semitones are contain'd in an Octave.



Observe also, that,

What Note *soe'er you please to name,*
An Eighth *to that is just the same.*

And also that,

Above mi, *twice sing* fa, sol, la:
Below mi, *twice sing* la, sol, fa.

And then *mi* comes in again.

Scholar. *Why have we in the* Scale *of* Musick, *twice* sol, *twice* la, *and twice* la, *and but once* mi?

Master. By reason *mi* is the *Master-Note*, and guides all the other *Notes*, both above and below it; and when the *mi* is *transpos'd*, all other *Notes* are transpos'd with it; still lying in their *Natural-Order* according to the *Diatonick-Scale*, &c.

Scholar. *Why hath* C *three different* Terms *in the old* Scale *of* Musick, *as* C-saut, C-sol-faut, *and* C-solfa, *&c.?*

Master. I suppose, such *Differences* are only set to distinguish the *three* several *Systems* or *Parts* of the *Scale*; as *Bass*, *Tenor*, and *Treble*; all being in effect as one and the same, and *Octaves* or *Eighths* to each other.

Scholar. *Why is the* Scale *of* Musick *distinguished* two ways; *that is, by Way of* Letters, *and by way of* Sal-fa?

Master. Every *Composition* of *Musick* is understood from the *Letters*, if it be ever so artfully disguis'd by *Transposition*; which *Letters* are mostly used for *instrumental* Performance: nevertheless, tho' the Syllables, *sol, la, mi, fa*, &c. are appropriated to *Vocal-Musick*, yet I think it not amiss for young Beginners to *call*

their *Notes* as well by one, as by the other; it being most instructive to the *Art* of *Musick*.

Scholar. *Altho' I have now learnt the* Gamut, *perfectly by heart, and can say it very readily, pray tell me, what use will it be to me, in learning a Piece of* Musick?

Master. O grand Stupidity! would you learn a *Table*, and not know the *use* of it? the getting it by heart avails nothing, unless you remember the *Lines* and *Spaces*, and call them by the *Names* given in the *Scale*: which *Sounds* (or *Notes*) must be call'd by such *Names* as are given to that *Line* or *Space*; always observing, that every eighth *Note* (together with its *Degree* of *Sound*) bears the same *Name* as it was before, as I before hinted.

Scholar. *Suppose I should meet with more* Lines *than* 5, *how must they be called?*

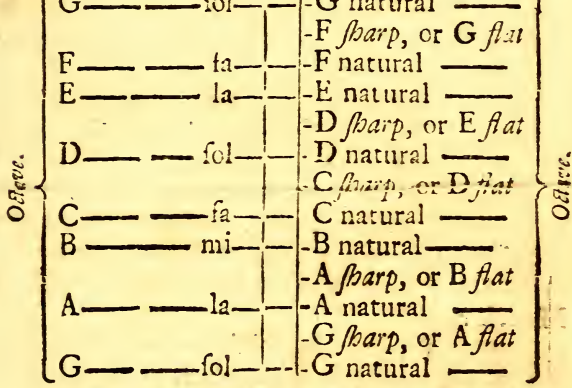
Master. Such *Lines* are called *Supernumery*, or *Ledger-Lines*; all above *G* in the *Treble* are called *Notes in Alt*; and all *Notes* below *Gamut* in the *Bass*, are called *Doubles*; as, *Alamire in alt*, *Double-Elami*, &c.

Scholar. *Are all* Sounds *regular one from another*, ascending *and* descending?

Master. No, when you *ascend*, or *descend* from *mi* to *fa*, or from *la* to *fa*, you are to rise, or fall but *half a Tone*, all the rest in the *Octave* being *whole-Tones*; suppose a *whole-Tone* be an Inch, the *semi* or *half-Tone* is but half an Inch; which is a *Mathematical Demonstration*, according to the following *Scale*:

The

The Practical, Scale *of* Musick, *Diatonick* and *Semitonick*.



Scholar. *By this* Table *or* Scale, *I nearly understand the* Regular-Order *of the* Tones; *But pray what is meant by the Words* Diatonick, *and* Semitonick?

Master. The Word *Diatonick*, is, an Epithet, or Name given to the *Scale* of *Musick*, when it moves by *Tones*, and *Semitones*, as the plain and natural *Scale* of *Musick*. The Word *Semi*, signifies the *Half*, or when a *whole Tone* is divided into two Parts; which *Natural Notes* are either raised or falled half a *Tone* from their *Natural-Order*, by adding a *Flat* or a *Sharp* before the *Note*: And as this *Scale* takes 12 *Semitones* to compleat the *Octave*, it is call'd the *Semitonick*, or *Chromatick Scale*; which being used to the *Diatonick*, enables us to express all the practical Degrees of *Harmony*. (See the *Plate*, Page 6.)

§ 2 *Of* Cliffs.

Scholar. *WHAT is a* Cliff, *and its* Use; *or what is meant by the Word* Cliff?

Master. A *Cliff*, in *Musick*, is a Character placed at the Beginning of the 5 Lines of a Piece of Musick, in order to denote what Part of Musick it is; and what relation each *Part* beareth with another. It is called a *Cliff*, from *Clavis*, in *Latin*; and signifies, *To open*, or as a *Key to let into*, &c. which openeth to us the the *Names* of every *Tone* in *Musick*, &c.

Scholar. *How many* Cliffs *are now used in* Musick?

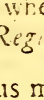
Master. If you look back into the *Scale* of *Musick*, you'll find *three* in Number, all of different Forms, each being appropriated to the *three* several *Systems*, or *Parts* thereof; and are called the *F-Cliff*, the *C-Cliff*, and the *G-Cliff*.

Scholar *What is the* Form, *and* Use *of the* F-Cliff?

Master. The *F-Cliff* is generally set on the second Line from the Top, and proper for the *Bass*, and gives to its *Place* the *Name* F, and when *sung*, is call'd *fa*; all other *Tones* lying in *Regular-Order* both above and below it; and thus made: 

Scholar. *What is the* Use, *and* Form *of the* C-Cliff?

Ma. The

Maſter. The *C-Cliff* is moveable, and may be ſet on any one of the 5 Lines, and gives to its *Place* the *Name* C, and when *ſung* call'd *fa*; guiding all other *Tones* in *Regular-Order* both above and below it, and thus made: 

This *Cliff*, in the *ancient Muſick*, was moſtly uſed to the *Tenor*, but now moſtly applied to *Counter*, or *Inner-Parts*, when above Three.

Scholar. *Why was the* C-Clift *ſo much uſed formerly, and ſo little in uſe now?*

Maſter. By reaſon it was moveable and uncertain, and difficult for every Practitioner; by being ſet on any *Line* the Compoſer pleaſed, to keep his *Notes* in the *Compaſs* of *five Lines*; for in thoſe Days they changed the *Cliff*, to change the *Key*; But our *Keys* are *regulated* by ſhifting the *Mi* (or *Maſter-Note*) by the help of *Flats*, or *Sharps*, and therefore we have no neceſſity to change the *Cliff*; but rather uſe the *G-Cliff* for the *Tenor*, by reaſon it is of more certainty to the Performer; for in thoſe Times I imagine, that *ſhifting* the *Mi* by *Sharps* was not invented, neither was any *Tranſpoſition* by them, ſo nicely underſtood as it is at this preſent time.

Scholar. *What is the* Uſe, *and* Form *of the* G-Clift?

Maſter. The *G Cliff* is uſually ſet on 2*d Line* from the Bottom, and now moſtly uſed to the *Treble*, or *Tenor*; (or may be uſed to any *Upper-Part* whatſoever) and gives to its *Place* the *Name* G, and when *ſung*, called *ſol*; and

guideth all other *Notes* in *Regular-Order*, both above and below it; and thus made: 𝄞 See the *Cliffs* in the *Scale. Page* 3.

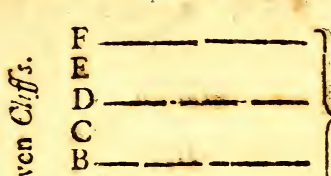
Scholar. *Cannot a Tune be as well* prick'd *down without a* Cliff, *as with?*

Master. No, by no means at all, for if there was no *Cliff*, you could neither distinguish one *Part* from another, nor give a *Name* to any *Note*: But, put at the beginning, a proper *Cliff*, and that *Cliff* will give a *Name* to that *Line* whereon it stands; and then you, with ease, may find a *Name* for all other *Notes* both above and below it. —— To *prick* down *Musick without a Cliff*, is a thing too much practised in our Kingdom at this time, to the great Ruin and Confusion of many a good *Composition*, by many conceited Coxcombs, who lead others in the dark, being blindfold themselves with Conceit and Ignorance; and scorn to be contradicted from their own Way. Thus, they lead others into *Error*, and instead of *ornamenting* a *Church* with Psalmody, they put the whole *Congregation* into Confusion; and instead of rendering *Divine Musick Angelical*, they make it contemptable enough; to the great Grief of such as know the *Excellency* thereof.

Scholar. *Were there ever any more* Cliffs *used than the* three *you before-mentioned?*

Master. Yes, I have read, that some ancient Writers used to sign 7 *Cliffs* at the beginning of their *Musick*, according to the 7 Letters of the Alphabet;

Alphabet; and called *every Letter a Cliff*, thus:



N. B. That in those Days they used but four Lines.

But this being too perplexing, as well as cumbersome, they afterwards used only 3 *Signatures* instead of 3 *Letters* to express the *Natural Tone* of the 3 *Cliffs* as are now used.

Mr. *Kelper* took great Pains, to shew that the *Signatures* of the 3 *Cliffs* were nothing but Corruptions of the *Letters* they represented; and that they made the Practice of *Musick* much more difficult and perplexing: whereby Mr. *Salmon* proposed to reduce all *Parts* of *Musick* to *one Cliff*. But this was look'd on, by some, as mearly whimsical; and tho' I may be counted singular, I cannot omit giving my Opinion concerning our *present Cliffs*, knowing how inconvenient it is to every Practitioner to be daily perplex'd with the moving of them, sometimes on one *Line*, and then again on another; not only so, but I think it would be more easie to ever Practicioner, did our *Cliffs* represent such *Letters* as they are assigned for; which I would have thus:

For the { G *Cliff*—*Gs*:— / C *Cliff*—*Cf*:— / F *Cliff*—*Fs*:— }

By

By this *New Cliff Method* (as I call it) there appears to our View, *First*, the *Letter* itself; and *secondly*, an Abrevation of the natural *vocal Syllable*; which together, gives a clearer Idea to the *Performer*; and all Musick would be in a far clearer Light, if such *Cliffs* were assign'd always to one fix'd *Line*; for every *Move* of *Cliff*, still causes a new Thought, and too many Thoughts clog the Memory.—— From what has been said, it appears, That

The Gamut-Scale *must well be learnt by heart,*
Both Line, *and* Space, *and* Cliff *of ev'ry Part:*
To Tune *aright, must be your chiefest Care,*
Mi fa, *and* la fa, *natural* Half-Tones *are.*

CHAP. II.

Of Notes, *and their* Names, *and* Reſts; *and of other* Characters *uſed in* Muſick, &c.

Scholar. SIR, *you having, in the former* Chapter, *given me a true Light to the Underſtanding of the* Gamut, *and ſhewed me therein the ſeveral* Degrees *of* Sound: *and alſo the* Uſe *of* Cliffs: *I now deſire your farther Aſſiſtance; how long, or how ſhort Spaces of* Time *ſuch* Sounds are to be held?

Maſter. The *Continuance* of *Sound* is expreſs'd by ſeveral *Characters* call'd *Notes*; each having a different *Name* and *Shape*. A *Ceſſation* or leaving off of ſounding, is expreſs'd by various Characters call'd *Reſts*, or *Notes of Silence*; which Marks import, that you muſt *reſt*, or *ceaſe* from ſinging, or playing, juſt as long as you are ſounding any of the reſpective *Notes*, &c. when theſe *Characters* are perfectly underſtood, then you will be able to know, what is call'd *Time and Meaſure.*

Scholar. *You ſeem to hint, that* Notes *and their* Reſts, *are but a late Invention: Pray tell me*

me who invented them, and when; and how each Note *and* Reſt *is made, and what* length *of* Time *each* Note *contains?*

Maſter. Before the *Year* 1330, the ſeveral *Degrees* of *Sound* were all expreſs'd of *an equal Length* of *Time*; when *Johannes de Muris Dr. of Paris*, invented different *Figures*, called *Notes* and *Reſts*, and gave them the following Names:

1. The *Semibreve*, is in Form like the Letter O, and ſounded ſo long as you may tell 1, 2, 3, 4, by the *Pulſes* of the Pendulum of a large *Houſe Clock*; and is call'd the *Meaſure-Note*, becauſe it meaſureth all the other; and its *Reſt*, denotes to keep *ſilence* the ſame ſpace of *Time*.

2. The *Minim*, is but half the length of a *Semibreve*, having a Tail to it.

3. The *Cretchet*, is but half the length of a *Minim*, having a black Head.

4. The *Quaver*, is but half the length of a *Crotchet*, having the Tail turned up like a Hook.

5. The *Semiquaver*, is but half the length of a *Quaver*, having its Tail turned up with a double Stroke.

6. The *Demiſemiquaver*, is but the half of a *Quaver*, having its Tail turn'd up with a trible Stroke.

Theſe *ſix Notes*, and their *Reſts* belonging, are now generally uſed; but the better to explain each *Note*, *Reſt*, and *proportion* of *Time*, obſerve, and learn the following *Scale*.

A *Scale*

A Scale of Notes, and Rests: and their Proportions.

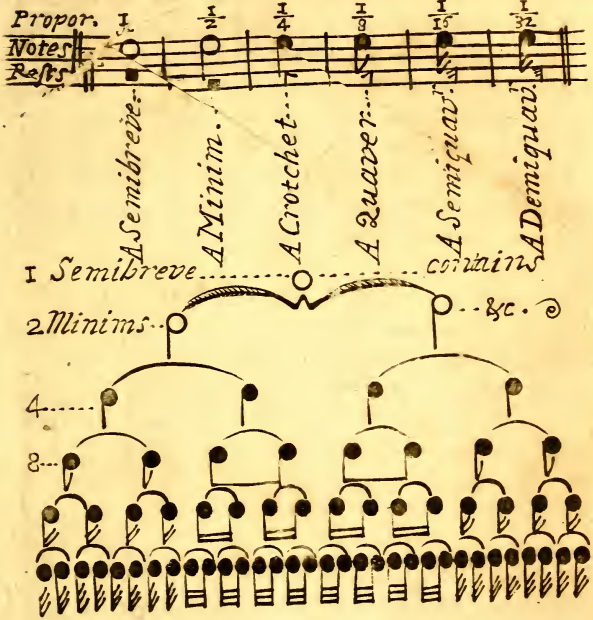


Table of Characters.

A Flat — b	A Repeat —
A Sharp — #	A Bar —
A Slur —	A Double-Bar —
A Point — •	A Natural — ♮
A Director —	A Shake — tr
A Divider —	A Close —

By this *Scale*, you see, that one *Semibreve* contains two *Minims*, two *Minims* contain four *Crotchets*; four *Cretchets* contain eight *Quavers*; eight *Quavers* contain sixteen *Semiquavers*; and sixteen *Semiquavers* contain thirty-two *Demisemiquavers* So that in a Mathematical Sense, if the *Semibreve* be one Bar of Time, the *Minim* is one 2d; the *Crotchet* one 4th; the *Quaver* one 8th; the *Semiquaver* one 16th; and the *Demisemiquaver* one 32d. &c.

Scholar. *Were no more* Notes *used formerly than those* six Sorts *before-mentioned?*

Master. Yes, when *Notes* were first invented, they used *three* other *sorts* of *Notes*, i.e. a *Breve*, a *Long*, and a *Large*.

1. The *Breve*, was a large square *Note*, and as long as two *Semibreves*; and its *Rest* was drawn by a broad Stroke over a whole Space, from Line to Line.

2. The *Long*, was a large square *Note*, as long as two *Breves*, with a Tail on one Side; and its *Rest* was drawn a-cross two Spaces.

3. A *Large*, was a larger square *Note*, with a Tail on each Side of it, and was as long as two *Longs*; and its *Rest* was as two *Longs Rests*, &c But as these *Notes* are seldom used but in *old Musick*, I shall omit a *Scale*; the *Large* being too long for any *Voice* or *Instrument*, except the *Organ*: So that the *Semibreve*, which is now our *longest Note*, was formerly their *shortest*.

§ 2. Of other *Characters* used in *Musick*.

Scholar. *ON Page 17, you gave me a View of 12 different* Characters *used in* Musick; *But if you don't shew their Use, as well as their* Shape, *I am still in the dark.*

Master. I must confess your Demands are much to the Purpose, for to know a *Character*, and not know how to *use* it, is of little or no Service; therefore I shall discourse of them separately, as they stand on the *Plate* before-mention'd, Page 17.

A *Flat* (or rather a *Feint*) is used to sink any *Note* it is set before, *half a Tone lower*. Suppose a Note should rise a *whole-Tone*, and I place a *Flat* before it, it must then rise but *half a Tone*; the same as from *mi* to *fa*, or from *la* to *fa*. &c. In like manner, all *Flats* that are placed at the *beginning* of the *five Lines*, serve to *flat* or *sink* all such *Notes* as shall fall on that *Line* or *Space* thro' the whole Stanza or Lines, except any *Note* be contradicted by an accidental *Natural*, or *Sharp*. *Flats* are also used to regulate the *mi* in *Transposition* of *Keys*.

A *Sharp*, is contrary in nature to a *Flat*, and is used to *raise* or *sharpen* any *Note* it is set before *half a Tone higher*. Suppose a *Note* should fall a *whole-Tone*, and I place a *Sharp* before it, then it must fall but *half a Tone*: the same as from *mi* to *fa*, or from *fa* to *la*. &c. Observe that all *Sharps* that are fixed at the *beginning*

ginning of the five *Lines*, serve to *sharpen* or *raise* all such *Notes* that happen on that Line or Space thro' the Strain or Stanza; which *Sharps* (as well as *Flats*) serve to regulate the *Tones* to the *Diatonick-Order*, when the *Key* is transpos'd, &c.

A *Slur*, or *Bow*, is drawn under, or over the Heads of any Number of *Notes*, when they are sung but to *one Syllable*. Oftentimes you'll meet with *Notes* tied together with Strokes drawn thro' the *Tails*, which are done for more ease to the Sight. If they have single *Strokes*, they are *Quavers*; if double *Strokes*, they are *Semi-quavers*; and if trible *Strokes*, they are *Demi-semi-quavers*, &c.

A *Point*, or *Point of Addition*, is a little *Dot*, always placed on the *right side* of any *Note*, to denote that it must be held half as long again as it was before. When this *Point* is added to a *Semibreve*, it must then be held as long as 3 *Minims*; so of *Crotchets*, *Quavers*, &c.

N. B. That sometimes you will meet with a *Point* at the beginning of a *Bar*, which belongs to the last *Note* in the foregoing *Bar*, which *Notes* are called *Syncopation*, or *Driving Notes*.

A *Director*, is always placed after the *last Note* of any *Stanza* or *Line* of *Musick*, at the *end* of the *five Lines*, in order, to direct the Practitioner to the *Place* of the *first Note* on the following *Line*. By some this *Character* is called *Index*.

A *Divider*

A *Divider*, is placed betwixt the several Columns of *Musick*, when *two*, *three*, *four*, or more *Parts* move together; in order to *divide* the *Score* of the *Composition*, that the Sight may not be perplex'd with a multitude of *Lines* together; which *Character* shows, what *Parts* belong to one another, and *move* together, and which do not, &c.

A *Repeat*, denotes a *Repetition*, or that such a *Strain* of the *Composition* must be *repeated* over again from the *Note* this *Character* is set over, under, or after. Either of these *Terms* signify the same, viz. *Repetatur*, *Replica*, *Replicato*, *Represa*, *Reditta*, *Riditta*, *Encore*. (Ital.)

N. B. This *Character* is likewise used in *Cannons*, in order to direct the Performer that the following *Parts* or *Fuges* are to fall in at such *Notes* it is placed over, &c.

A *Bar*, is a streight Stroke drawn perpendicular athwart the five Lines, and *divides the Time* of the *Composition* according to the *Measure-Note* of the Movement.

A *double Bar* is used to divide the several *Strains* of *Musick*: and if it be *dotted* on each side thus :||: it then denotes a *Repetition* or, that such a *Part*, or *Strain* is to be *repeated*. It also signifies a *Pause* or to *Rest* so long a *Time* as the *Measure-Note* contains. These *Bars* are mostly used in *Church-Musick*, in order to give time between the Lines, that the Congregation may not be confus'd by too quick a Movement, that

that the whole Church may ſtop together between the ſeveral Lines of the Pſalms, &c.

A *Natural*, is uſually ſet before any *Note*, in the *middle* of a *Compoſition*, that was made either *flat or ſharp* on that *Line* or *Space*, at the beginning of the *five Lines*; in order to take away that *flat* or *ſharp* Quality occaſioned to ſuch *Notes* by the *Flats* or *Sharps* ſo placed; cauſing ſuch *Notes* to be ſung or play'd in their *Natural primitive Sound*. Hence it is to be noted, that every *Letter* in the *Scale* of *Muſick* hath three ſeveral Terms or Denominations, according to the Sound given, i. e. *Natural*, *Flat*, and *Sharp*; the *Natural* being a Medium between the other two Extreams.—— See the Plates, Pages 6 and 7.

A *Shake*, or *Trillo*, is the principle *Grace* uſed in Muſick, and ſo ornamental to a Compoſition, when uſed in proper Places, that it is the very Life and Spirit of *Harmony*; ſo that nothing elſe is expected after it, when it is well performed, ending right, and in a regular *Key*. This is, to ſhake, tremble, or warble your *Voice*, or *Inſtrument* on ſuch Notes it is ſet over, very quick and diſtinctly, the diſtance of a *whole Tone*, as *mi la, mi la, mi la*, &c.—— Firſt learn to do it ſlow, and then quicker, and with a little Practice you will get it to Perfection. It may be uſed on all deſcending *prick'd Notes*, on all deſcending *ſharp'd Notes* (if they are not too ſhort) and on alſo on all deſcending *Semitones*, and always on the *Note* before a Cloſe.

A *Cloſe*,

A *Close*, or *Conclusion*, is three, four, five, or more *Bars* drawn across the *five Lines*, after the *last Note* of a Piece of *Musick*, in a conical Form, each diminishing in length, 'till it ends in a Point towards the left; which signifies a Conclusion of the Composition, or a closing up of all Parts in the principle *Key*, &c.

The whole in Verse.

The Semibreve, *our* Measure-Note *we call,*
Good Reason why, for it includeth all
The lesser Notes; *as I before have told,*
On Page seventeen, you may the same behold.

A Flat, or Feint, *doth press a* Note *down low'r,*
Just half a Tone, *to what it was before:*
And what if so? if Tune *should then require,*
A Natural *will raise't a* half Tone *high'r.*
If Natural-Notes *should be too flat and dull,*
A Sharp *will raise your* Notes *more high and full*
By half a Tone, *than what they were before;*
Which if too high, a Natural *will bring low'r,*
And rectify both Flat, *and* Sharp, *in score.*

A Slur, *doth many* Notes *together join;*
A Point, *it addeth half as much more Time:*
A Repeat, *causeth Parts to move again,*
And Double-Bars, *they do divide each Strain.*
A Single-Bar, *it doth divide the Time;*
And a Direct, *guides to the following Line:*
A Rest *craves* Silence, *be it short or long;*
The Trill, *or* Shake, *doth ornament the Song.*

As the Divider *keep the Score in Bounds,*
Ev'n so the Close *includes the latest Sounds.*

CHAP.

CHAP. III.

Of Time *in general, and all its* Moods: *and how to* beat *any of them.*

Maſter. THIS *Part* of *Muſick* is called *Time*, and is as neceſſary to be underſtood as *Tune*, by reaſon, no one can either ſing or Play without the true Notion of it, neither in *Concert*, nor *alone*, to give any delight to a muſical Ear; for by this, every *Note* is truly regulated, ſo as to be neither too *quick*, nor too *ſlow*; but all *Parts* to move in a true Decorum.

Scholar. *Sir, Pleaſe to tell me, how many* Sorts *of* Time *there are?*

Maſter. Of *Time*, there are *Two Sorts*, or *Meaſures*, viz. *Binary-Meaſure*; and *Trenary-Meaſure*: i. e. *Common-Time*; and *Tripla-Time*.

Scholar. *What is meant by the Word* Binary, *why is it ſo called, and how is that* Meaſure *underſtood?*

Maſter. It is called *Binary-Meaſure* (otherwiſe *Common-Time*) from its *Riſe* being *equal* to its *Fall*; i e. of the Hand, or Foot, in *beating Time*; which regular Motions are called *Time and Meaſure*: Being a juſt Repreſentation of the regular *Motions* of a *Pendulum*; 4 of which Pulſes is the length of a *Semibreve*; 2 the length of a *Minim*; and 1 the length of a *Crotchet*; (a *Quaver* being reckon'd in Time as the *Pulſe* or *Beat* of a common *Watch*) ſo that 1 *Pulſe* of a *Clock-Pendulum* is the *Time* of 2 *Quavers*, 4 *Semiquavers*, or 8 *Demiſemiquavers*, &c.

§1 *Of* Common-Time.

Scholar. *How is* Time *and* Meaſure *regulated by the* Motion *of the* Hand, or *Foot*?

Maſter. It is firſt to be noted, That *Common Time*, is *meaſured* by *even Numbers*, as 1, 2, 4, 8, 16, &c. when *one Bar* includes ſuch a Quantity of *Notes* as amount to one *Semibreve*; which is called the *Meaſure-Note*, the *Time Note*, or a *Whole-Time*.

And as the *Semibreve* is held ſo long as you may leaſurely tell 1, 2, 3, 4, you muſt keep your Hand or Foot *down* while you tell in thought 1, 2: and *up* while you ſay 3, 4;

you

you having *once down*, and *once up* in every *Bar*: But in doing this, your Thoughts muſt guide the *Motion*, and not the *Motion* drive the Thoughts into Hurry and Confuſion: This being the moſt curious *Branch* of *Muſick*, &c.

If your *Muſick* conſiſts of two *Minims* in a *Bar*, then, you *ſound* one whilſt you tell 1, 2, *down*; and the other while you ſay 3, 4, *up*. If *four Crotchets* in a *Bar*, then 2 *down*, and 2 *up*. If *eight Quavers in a Bar*, then you beat 4 *down*, and 4 *up*, &c. each *Bar* containing *two Beats*, and each *Beat two Motions* or *Pulſes*, &c.

Some there are, who make 4 *Beats* to every *Bar*, i. e. one to each *Crotchet*, 2 to a *Minim*, and 4 to a *Semibreve*; which Method I rather chuſe than the former (in any *Time* whatſoever) obſerving to have the Hand, or Foot *down* at the firſt *Note* in every *Bar*; and to beat *Reſts* as if they were *Notes*, &c. ſtill in a *Quadruple Proportion*.

Scholar. *How many* Moods *are there in* Common-Time?

Maſter. There are *Three*, viz. 1ſt. The *Adagio Mood*; 2d. The *Largo Mood*; and 3d. The *Allegro Mood*

1ſt. The *Adagio Mood*, denotes a very *ſlow Movement*, and is marked thus: C.

2d. The *Largo Mood*, is half as quick again as the *Adagio Mood*, mark'd thus: ¢.

3d. The *Allegro-Mood*, is half as quick again as the *Largo Mood*, and as quick again as the *Adagio-Mood*, and is thus marked: 𝄴.

So that a *Minium* in *Allegro*, is but a *Crotchet* in the *Adagio*, &c.

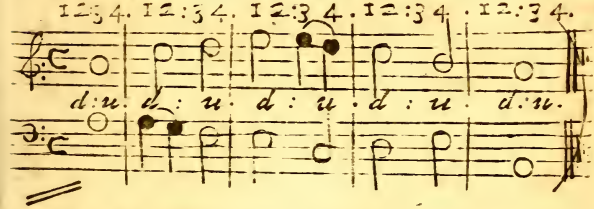
Sometimes, in this *Mood*, you have but *two Crotchets* in a *Bar* marked thus: $\frac{2}{4}$, being perform'd as 2 diminiſhed *Minims*: which, I think, are the moſt proper *Notes* for this *Mood*, by reaſon it is as quick again as *Adagio*, and ought to conſiſt of *Crotchets* in their primitive length, and not of *Minims* half diminiſhed, &c.

But the better to explain what I have ſaid, I will ſet you an Example of *Notes*, with *Figures* over them, directing how to count the *Time*; and *Letters*, (*u* for *up*, and *d* for *down*,) how to *beat* it; being

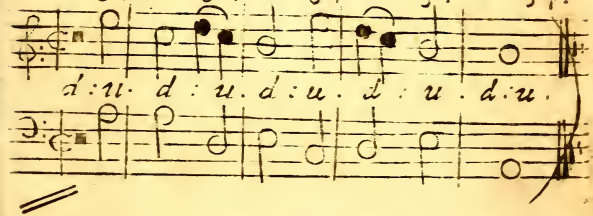
A Table

A Table of Common-Time Moods.

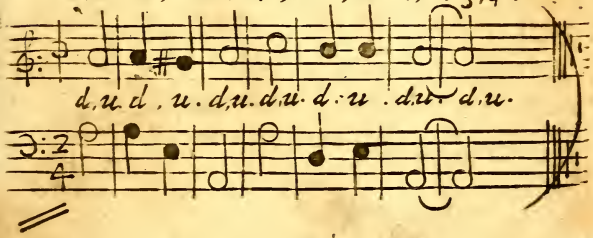
1. Adagio Mood: Very Slow.



2. Largo Mood: A little Quicker.



3. Allegro Mood: Very Quick.



(S 2. of

§ 2 *Of* Tripla-Time.

Scholar. *Sir, As you have given me a clear Deſcription of what you call* Binary-Meaſure, *or* Common-Time, *both in Words and examplary* Notes; *I now deſire, you'll relate to me the Nature of* Trenary-Meaſure, *and why it is ſo called?*

Maſter. Trenary-Meaſure, Tripla-Meaſure, or *Tripla-Time,* is ſo called, from its *Fall* being double to its *Riſe*; i. e. *beating* as many more *down* as *up*.

Scholar. *In what Numbers does* Common-Time *conſiſt, how is the* Movement *regulated, and how is it* beat?

Maſter. Tripla-Time, moves by *Threes*; as 3 *Minims*, 3 *Crotchets*, or 3 *Quavers* in a *Bar*, to be juſt as *long again down* as *up*.

Scholar. *How many* Moods *have we in* Tripla Time?

Maſter. The *Moods* that we now uſe in *Tripla-Time*, are *Nine* in Number; of which obſerve the following *Table*:

A Table *of* Tripla-Time Moods: *Binary*, and *Trenary*.

Vocal Moods.			Inſtrumental Moods					
3/2	3/4	3/8	6/4	6/8	9/4	9/8	12/4	12/8
3 *Minims* in a Bar, 2 down, and 1 up.	3 *Crotchets* in a Bar, 2 down, and 1 up.	3 *Quavers* in a Bar, 2 down, and 1 up.	6 *Crotchets* in a Bar, 3 down, and 3 up	6 *Quavers* in a Bar, 3 down, and 3 up.	9 *Crotchets* in a Bar, 6 down, and 3 up.	9 *Quavers* in a Bar, 6 down, and 3 up	12 *Crotchets* in a Bar, 6 down, and 6 up.	12 *Quavers* in a Bar, 6 down, and 6 up.

By this *Table* you ſee the *Mood*, or *Mark*, for every Degree of *Time*, and alſo how to *bar*, and *beat* any of them; which *Table* will be of general Uſe to every Practitioner.

Scholar.

Scholar. *Why are* Tripla-Time Moods *mark'd with two* Figures *at the beginning of the* five Lines, *and the* under Figures *always* 2, 4, 8, &c?

Master. It is to be noted, that all *Sorts* of *Time* are deducted from *Common-Time*, for which Reason the *lower Figures* have recourse thereunto, in order to denote what kind of *Notes* the *Triples* doth consist of. *Ex. gr.* suppose the *Mood* be marked thus: $\frac{3}{2}$, then the 2, underneath imports that the *Triple* must consist of *Minims*: and as 2 *Minims* make one *Bar* in *Common Time*, the 3 over the 2, directs that you must sing 3 *Minims* (in *Tripla-Time*) to 2 in *Common Time*: So the 4 hath regard to *Crotchets*, and the 8 to *Quavers*, &c.

Scholar. *Sir, If you would explain each of the nine* Moods *before-mentioned separate, you will then set the whole in a far clearer* Light.

Master. That will be almost *Tautology*; nevertheless, to gratify your Curiosity, nothing shall be concealed relating to this *Science*, that I am able to impart, either to you, or any other of my Fellow-Creatures; which, I know, is as bad as Gravel to the Teeth of such as teach *Musick*, and keep their *Pupils* in the Dark, for their own private Gain.

1. The *first*, and generally the *slowest* Mood in *Tripla-Time*, is *Sesquialtera Proportion*; being a *Triple*-Measure of 3 *Notes* to 2, such like *Notes* in *Common-Time*; and performed in the same Time; which is half as quick again, or *one-third quicker* than *Common-Time*, in every *Bar*: *Two* to be performed *down*, and *one up*, mark'd thus: $\frac{3}{2}$

This Mood is mostly used in *Church* and other grave *Musick*, and generally performed slower than the *Rule*, by reason of the solemnity of the *Words*, to which such *Musick* is adapted, *&c.*

2 The

2. The second sort of *Time* is vulgarly (or rather ignorantly) call'd, *Three to Four*; but I say, *Three from Four*; each *Bar* containing 3 primitive *Crotchets* (or *Crotchets* of their own *proper length*, being neither *augmented* nor *diminished* in Duration of *Time*) *two* of which to be perform'd *down*, and *one up*; mark'd thus: $-\frac{3}{4}-$

☞ This *Mood* of *Time*, has been to many a great Stumbling-Block, by having a *false Term*, almost by every *Author*; either from Ignorance, or from not being willing to impart to others what they knew themselves; or from their not caring to appear in print to be counted singular.

Suppose, according to their *Term*, it be call'd *Three to Four*, then it imports *one fourth slower* than *Common-Time*, because I must perform but three *Crotchets* in *Tripla-Time*, in the *Time* of *four* in *Common-Time*.

But if I say *Three from Four*, then I am *one fourth quicker* than *Common Time*; by reason I have but 3 *Crotchets* in a *Bar*, and in *Common-Time* there are 4.

This is my real Opinion concerning this *Mood*, tho' I have formerly been misled by adhering to the *false Term* before-mention'd; knowing that when the *Greater Number* is *over* the *less*, then the length of the *Notes* are lessened in Proportion to the lower *Figure*: That

the *upper Number* may be perform'd in the same time as those of the *lower Number*: But when the *lower Figure* is greater than the *upper*, then the *Time* of the *Notes* is not diminished, but still perform'd to their primitive length subtractively, &c.

3. The *third* sort of *Time*, is *Three from Eight*, each *Bar* containing three *Quavers*, 2 *down*, and 1 *up*, mark'd thus: $\frac{3}{8}$- being as quick again as $\frac{3}{4}$-.

4. The next Species, is *Sextuple* (or *Binary-Tripla-Time*, by reason the *Fall* is *equal* to the *Rise*:) and call'd *Six to Four*; each *Bar* containing six *Crotches*; 3 *down*, and 3 *up*, mark'd thus: $\frac{6}{4}$, being as quick again as $\frac{3}{8}$: the Figure of 3 being changed to a Figure of 6.

5. The second sort of *Sextuple* is *Binary-Tripla*, and call'd *Six to Eight*; each *Bar* containing six *Quavers*, 3 *down*, and 3 *up*; marked thus: $\frac{6}{8}$-, being as quick again as $\frac{6}{4}$.

6. The

6 The next Species is a *Compound-Triple* in *Trinary-Measure*, call'd *Nine to Four*, each *Bar* containing nine *Crotchets*, 6 *down* and 3 *up*, marked thus: $\frac{9}{4}$, being half as quick again as $\frac{6}{4}$.

7. The second sort of *Compound-Triple*, in *Trenary-Measure*, is call'd *Nine to Eight*; each *Bar* including nine *Quavers*, 6 *down*, and 3 *up*, mark'd thus: $\frac{9}{8}$, being as quick again as $\frac{9}{4}$.

8. The third sort of *Sextuple* is *Binary-Tripla*, and call'd *Twelve to Four*; each *Bar* including twelve *Crotchets*, 6 *down*, and 6 *up*, mark'd thus: $\frac{12}{4}$, being as quick again as $\frac{6}{4}$.

9. The third sort of *Sextuple*, is also *Binary-Measure*, and call'd *Twelve to Eight*; each *Bar* containing twelve *Quavers*, 6 *down*, and 6 *up*, mark'd thus: $\frac{12}{8}$.

These are all the various *Moods*, both *Binary* and *Trenary*, that are now generally used in *Musick*, whether *Vocal*, or *Instrumental*: Though many more were used formerly, which we count as needless, as they are perplexing; by reason, the *Nine modern Moods*, that I first mentioned, are sufficient to gratify and please the

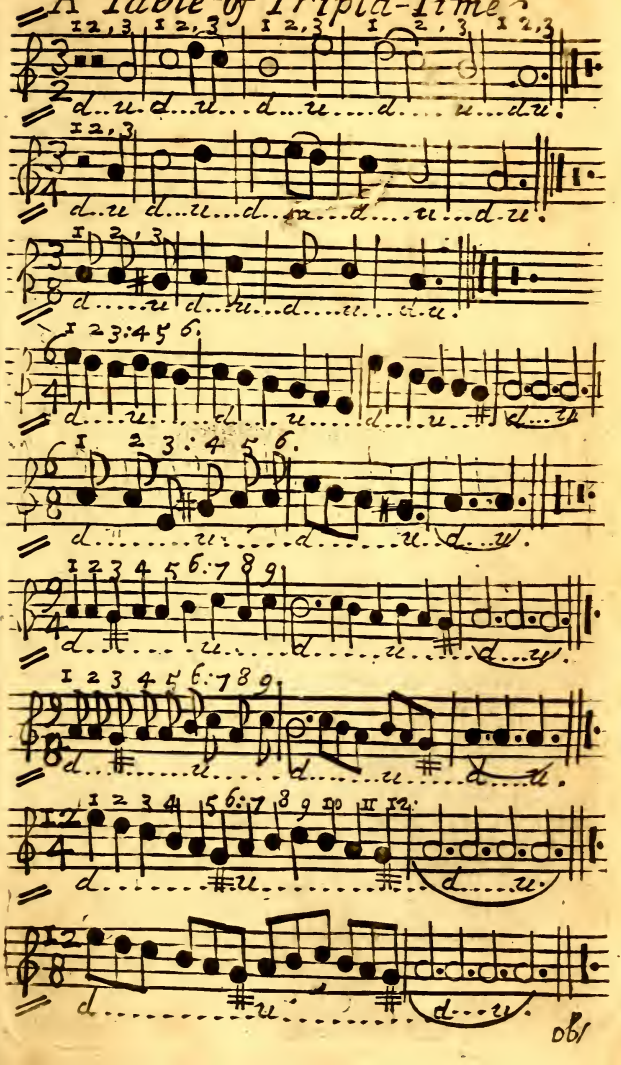
the Ear with all the Variety of *Movements* that can be imagined, or desired.

Scholar. *Sir, I return you a thousand hearty Thanks for your* curious, *and* instructive Favours, *hoping the World will be as grateful in Returns, as I shall by Endeavours, who am in Duty and Gratitude bound to do.*

Master. I give you Thanks for your Complement, but the better to explain what I have said, I will give you *an Explanation* of *Notes*, with *Figures*, shewing how to *count* the *Time*, and *Letters*, (*d* for *down*, and *u* for *up*) directing how to *beat* the *Time* of each *Mood*, as follows:

A Table

A Table of Tripla-Time.



obl

Obſerve, That both in *Common-Time*, and alſo in *Tripla-Time*, that your Hand or Foot be *down* at the *firſt Note* in every *Bar*; and that all *odd Notes* before a *Bar* be perform'd with the Hand or Foot *up*: Alſo, that *Reſts* muſt be conſider'd, and *beat*, as if they were *Notes*, &c.

Sometimes, you'll meet with a *Double-Bar*, drawn between two *Notes*, when the *Time* is not perfect on either Side of it; both *Notes* making but *one Bar of Time*; but this moſtly happens in *Church-Muſick*, to divide the *Lines* of the *Verſe*, &c. A *Bar* of Time being given between them.

Obſerve alſo, that you often meet with 3 *Quavers* join'd with a 3 over them, or perhaps over the firſt *three*; which *three* are to be perform'd in the *Time* of *one Crotchet*.

Scholar. *Were there no more* Moods *formerly uſed than thoſe I before mentioned?*

Maſter. If we look back into the *old Muſick*, we ſhall find *Moods* innumerable; nay, I may without Error ſay, paſt finding out; nor do I believe they themſelves could ever perform what they pretended to write down. (Nevertheleſs, it will not be amiſs to give you a ſmall Glimpſe of ſome *Moods* that I have ſeen in ſome *antient Authors*; which were as follows:

Antient Triples.

2	3	5	5	6	6	6	9	9	9	12	12	12	&c.
1	16	2	7	1	2	16	1	2	16	1	2	16	

But these I have only inserted by Way of *Parenthesis*, which I shall here close, and go on with Things of greater Importance.)

Scholar. *What Difference is there in the* Time *of a* Minim *in* $\frac{3}{2}$, *and a* Crotchet *in* $\frac{3}{4}$?

Master. To answer this *Question*, Three Things are to be considered, *viz.* 1st. Whether your *Triples* are compared with *Adagio-Mood*; 2d. Or the *Largo-Mood*; Or 3d. with the *Allegro-Mood*: These being of *Common-Time*.

1. Suppose, $\frac{3}{2}$, with 3 *Minims* in a *Bar*, is consider'd and compar'd with the *Adagio* with 2 *Minims*; then your *Trenary* is *one third quicker* in every *Bar* than *Binary-Adagio*; by reason you perform 3 *Minims* in $\frac{3}{2}$, in the the same Time as you do 2 in the *Adagio*; each of which 3 *Minims* being diminished in proportion, *one third* of their primitive *Adagio-length*: And as in $\frac{3}{4}$, you have 3 primitive or *Adagio-Crotchets* in a *Bar*, each *Crotchet* is half as long as one *Adagio-Minim*; so that when both *Moods* are in this *Case* consider'd, $\frac{3}{4}$, is just as *quick again* as $\frac{3}{2}$, &c.

2. If your *Triples* are compared with the *Largo*

Largo in *Binary*, which is half as quick again as *Adagio*, (for a *Largo-Minim* is but as a *prickt Crotchet* to a *Minim* of *Adagio)* then a *Largo-Minim*, and a *Minim* in $\frac{3}{4}$, are of an equal Length; and a *Crotchet* in $\frac{3}{4}$, is just the half, &c.

3. But, if you compare your *Triples* with the *Allegro-Mood* in *Common Time*, (which is half as quick again as *Largo*, and as quick again as *Adagio)* then it is reasonable, that every *Member*, or *Note* of your *Triples*, must proportionaly be as quick again as they were when compared with the *Adagio*, &c. &c.

Scholar. *Sir, I thank you heartily, but pray tell me how I shall know what* Mood *of* Common Time *the* Moods *of* Tripla-Time *are compared unto, else I may perhaps sing too* quick, *or too* slow.

Master. You reason very right, but that *Secret*, (as well as many others) I never yet saw explain'd by any *Author*, nor yet what is contain'd in the *Three* foregoing Paragraphs, having been misled myself, by false *Terms* and *Moods* in my Minority: Nevertheless, I will give you my Opinion about it, should I be counted ever so singular for so doing.

I think, (with Submission to better Judgment) that all *Triples* may be compared with

any of the *three Binary Moods*, whether the *Adagio*, *Largo* or *Allegro*, and vary in Velocity accordingly; but ſtill to move in ſuch a *Degree* of *Quickneſs* as beſt becomes the main *Subject* of the *Words*, or *Paſſion* intended: Having obſerved that all Perſons differ in *Time*, one from another, tho' taught by one and the ſame *Maſter*; and cannot *perform* ſo well *together*, as if they had been regularly train'd up, and practiſed one with another.——A Perſon may be ſaid to *ſing* or *play Good Time*, and yet, perhaps *quicker* or *ſlower* than another; by reaſon he makes a true Diſtinction of *Notes* and *Reſts*; and gives each its *proper Length*, if he performs ever ſo *quick* or *ſlow*: But it is beſt to keep in a *Medium*, between the two *Extremes*.

Better would it be, if our *Tripla-Time-Moods* had the *Common-Time-Moods* always aſſigned juſt before them thus: C $\frac{3}{2}$, &c. or at leaſt, the Terms *Adagio*, *Largo*, or *Allegro*, ſet over the *Cliff*, at the Beginning of a Piece of *Muſick* or when the *Time* differs; for then, you might at one View, know what Sort of *Binary Movement* your *Trenary* is compared unto; and how *quick*, or *ſlow* the Movement was intended by the *Author*. This I ſay, would make *Time* very eaſy to every Practitioner, and take away many Obſcurities that have heretofore confounded the Ignorant; for when Things are *falſly compared together*, the Abſurdity thereof darkneth the Underſtanding. § 3. *The*

§ 3. *The* Doctrine *of* Pendulums *applied to* Musick

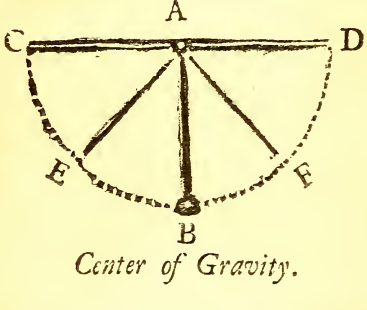
Scholar. *SIR, In Pages 16 and 25, you told me, that the length of* Notes *were to be underſtood by the* Pulſes *or* Beats *of a* Pendulum, *I ſhould now be glad, if you would inform me a little farther concerning that Inſtrument: Imagining within myſelf, that it will be of great Uſe to me, in keeping* Time.

Maſter. In *Mechanicks*, the Obſervations made on *Pendulums*, is one of the niceſt Pieces of *Art* that late Times have diſcovered, (being firſt obſerved from the *Oſcillancy* or *Oſcillation*, or the waving or toſſing of the Body to and fro, as practiſed by Children on Planks laid acroſs Pieces of Timber, weighing each other *up* and *down*) the *Motion* or *Vibration* of *Pendulums*, backwards and forwards, aſcertaining the *Number* of *Beats* at any determinate *length*, and the exact Quantity of *Time* that is ſpent in that *Motion*; from which, thoſe excellent *Machines* called *Clocks* and *Clock-Work* are made and regulated; for it is found by Experience that a *Pendulum*, whoſe length from the *Point* of Suſpenſion to the *Center* of the Ball, is 39 Inches and 2 tenths of an Inch, *Vibrates* or *Beats*, *Seconds*, or 60 times in one Minute; and for the Certainty and Excellency thereof, it is called *The Royal Standard:* for it is demon-

strated, that all *lengths* of *Pendulums* are to one another, as the *Squares* of the *Times* of the several *Oscillations*.

Scholar. *Pray tell me, who first discovered to us the* Doctrine *and* Use *of* Pendulums; *and how they are made?*

Master. I am told by *Des Cartes*, *Kercher*, *Moreley*, *Bacon*, *Digby*, *Malcolm*, *Holder*, Sir *Isaac Newton*, Mr. *Derham*, *Martin*, and several others, too tedious to mention, that *Pendulums*, were first observed, and brought in use by the ingenious *Galileo*; which may be made thus:



EXPLANATION.

First, Take a *Wire* or *String*, of any Length you please, and fasten a *Weight* or *Plummet* at one End; then make a Hole or Noose at the other End, and hang it on a Nail, Point or Center; and it will hang *perpendicular*, as from A

to

to B. — Then draw up the *Ball* or *Plumet* (ſo high from *the Center of Gravity*, as the *Length* between *the Point of Suſpenſion* and the *Center* of the *Ball)* towards the Point of the *Semicircle* C. and let it fall, and it will oſcilate or ſwing towards D; and then come back again towards C. and move both *Courſe* and *Recourſe*, i. e. forwards and backwards 'till it reſts *perpendicular* at the *Center* of *Reſt* or *Gravity*, B: Its *Point of Suſpenſion* being A.

Here you are to obſerve, that, tho' the *Plummet* ranges a greater Compaſs between C and D, than it does between E and F, yet it always moves in *Equal Spaces of Time* both forwards and backwards, till it reſts on its *Center* B: for the wider Compaſs it ranges, it moves more ſwift, and in the very ſame *Time* as when its Range is ſhorter; for the larger the Body is, the more ſlow in proportion it moves.

N. B. That whenſoever I ſpeak of *Oſcillations*, or *Vibrations*, I mean the *Courſe* and *Recourſe* of the *Plummet* from Side to Side, being the Extremity of its Range; and not the *Center* B, by which it paſſeth.

Scholar. *Sir, of what Length muſt I make a* Pendulum, *in order to* beat *the true* Time *of the ſeveral* Notes *of* Muſick; *as the* Semibreve, *the* Minim, *the* Crotchet, &c.

Maſter. In *Page* 25, I told you that *Four Pulſes* of the *Pendulum* was the length of the *Semibreve, two* the *Minim*, and *four* the *Crotchet*, &c. I

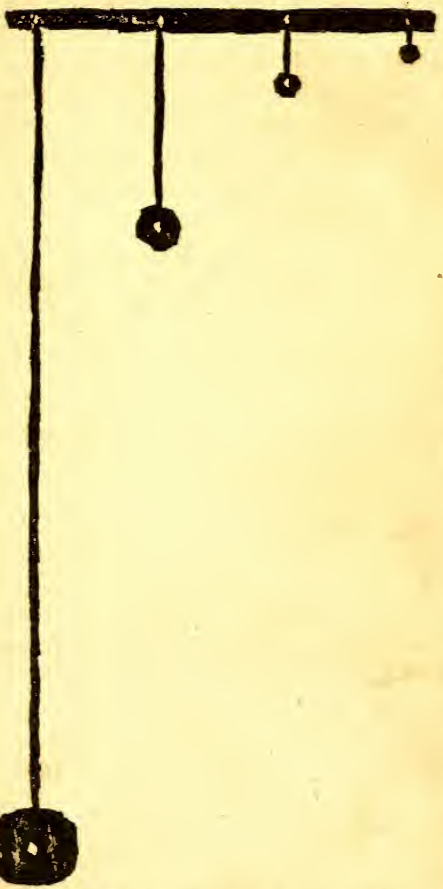
&c. I then suppose the *Pendulum* to be about 30 Inches long, which *Pulses* are said to be almost the 60th part of a *Minute*, or nearly the Space between the *beat* of the *Pulse* and *Heart*; the Systole or Contraction answering to the Elevation or lifting *up* of the Hand, and its Diastole or Dilation, to the letting it *down*, &c. The like being understood of the *Pendulum* both *Course*, and *Recourse*, in such a certain Space of *Time*.

Now, I say, suppose a 30 Inch *Pendulum* should vibrate as the length of a *Crotchet*, then will one of 120 Inches be required to *beat one Minim*; and one of 7 Inches and a half to the *Time* of *one Quaver*; and 480 Inches to compleat the *Time* of one *Semibreve*, &c. Always observing, that a *Double length* of *Time*, requires a *Pendulum four times as long*; and a *half* of *Time* but *one fourth so long*: This being the true *Proportion* by which all *Pendulums* are regulated: But, that you may the better understand this *Doctrine* of *Pendulums*, and apply them to the several *Characters* of *Musick*, in order to shew the true and exact *Duration* and *Length* of *Notes*, observe them in their *proportional Length* of Inches, as follows:

Semibreve.

Semibreve. *Mimim.* *Crotchet.* *Quaver.*

480 120 30 $7\frac{1}{2}$



Had you theſe 4 *Plummets* compleatly fixed, ſo as to *move freely* without any Obſtacle, and

and in *proportion* both in *Length*, *Weight*, and *Bigness*, according to the *Scale* before-mention'd; and could you possibly put all in *motion* together with one touch (as before taught) what a sweet Agreement would there be in their *Vibrations*, could you hear, as well as see them; each meeting or uniting in their Courses according as they are in *porportion* one to another: The *Minim* being as 2 is to 1, to the *Semibreve*, beating *twice to once* of the *Semibreve*; the *Crotchet*, *twice to once* of the *Minim*; and the *Quaver*, *twice to once* of the *Crotchet*, &c. —And from this very *Doctrine*, is comprehended *Concord* and *Discord*, from the *Uniformity*, or *Deformity*, of the uniting of the *Vibrations* of the several *Tones sounding together* at one and the same time, &c. (But more of this by and by.)

In this manner many Secrets may be discovered by this noble *Instrument*, the *Pendulum*; viz. To know how long time a Stone is falling from any high Place to the Ground, or, how long *Sound* is passing from one Place to another; and many more, too tedious to mention: But as this does not concern this *Science* any farther than what is before hinted, I shall here conclude this *Chapter*.

What

What long hath been conceal'd as hidden Treasure,
Thou here mayst see, *and* read *it at thy leasure;*
These Rules *will be of general Use to all,*
And shew what we do Time and Measure *call.*

I value not what carping Criticks say,
Nor gilded Dons, that I should here display
The naked Truth; let Dogs bark on in vain,
I've broke the Teeth of that imposing Strain.

Our Musick-men, *have long been kept in Slavery,*
Ev'n in the Dark, by their false Teacher's *Knavery:*
A shocking Aspect! when we're taught by Fools,
Who know not ev'n the least of Musick-Rules.

Ev'n some there are, who argue and contend,
And do find Fault with what they cannot mend:
Such Fools, if silent, might for wise Men pass,
But by the Braying, all Men know the Ass.

Nay, some I've known, who oft have made a Choice
On any One, that had a pleasing Voice,
Tho' void of Skill; such puny Curs will bark,
But always leave their Pupils *in the Dark.*

But far from this: — Such as do take Delight
In Musick's Art, *and fain would know aright*
The nicest Rules, *and all that doth belong,*
May here find Aid, *to* Tune *and* Time *their Song.*

CHAP

CHAP. IV.

Of Tuning *the* Voice; *and of* Accents: *Of* Intonation, *and of the* Use *of the* Pitch-Pipe.

Scholar. *SIR, Having made myself a tolerable good* Timist, *by the* Rules *of your last Chapter, I still want farther Assistance in* Tuning *my* Voice; *and hope you will be as ready to instruct me in that, as you have been in the very first* Principles: *But you know, Sir, my* Voice *is very indifferent.*

Master. Though your *Voice* may be rough and shatter'd, yet Practice, perhaps, may make it better; for most People general do those Things best they are most accustom'd to; but, in *Vocal Musick*, a *good Ear*, is better than a fine *Voice*, and a *bad Ear*.

Scholar. *Why have some Persons a* good Ear, *and Voice agreeable; and others a* bad Ear, &c. *and sound contrary to others almost in every* Degree *of* Sound, *unless they hit on a* Sound *by chance; and why do some others, not love* Musick?

Master. This is the most sublime *Question* that can be ask'd in *Musick*; and better becomes an accute *Anatomist* to *answer*, than any *practical Musician* whatsoever; nevertheless, I will give my Opinion about it; hoping all will excuse my not being greatly acquainted with the *Terms* of their *Art*. I am

I am inform'd by the Learned (and particularly Dr. *Willis)* that there is a certain *Nerve* in the *Brain*, which ſome Perſons *have*, and ſome *have not*; and that ſuch *Nerves* are compos'd of ſmall *Fibres*, ſuch as the *Nerves* of the *Ear* are compos'd of, &c.—Now, if theſe *Fibres* are *imperfect*, why may there not be a *Deficiency* in ſome Perſons in the *Auditory-Nerve*? which *Nerve* conveyeth *Sound* from the *Tympanum* to the *Underſtanding*; which *Nerves* are put in Motion by the leaſt *Vibration* of *Air*.
—And as it is ſaid, that this *Muſical-Nerve* hath a *Conformity* with, and commandeth the *Voice* to expreſs any *Tone* tranſmitted to it from the *Vibrations* of the *Air*'s ſtriking againſt it; well may they, who are endowed with this *Nerve*, be ſaid to *have* a *good Ear*; and they that *have it not*, be ſaid to have a *bad Ear*: and ſome to have a greater diſlike to *Muſick* than others, &c. But this very rarely happens; for the *Italian* Proverb is, "*God loves not him, whom he hath not made to love* Muſick."

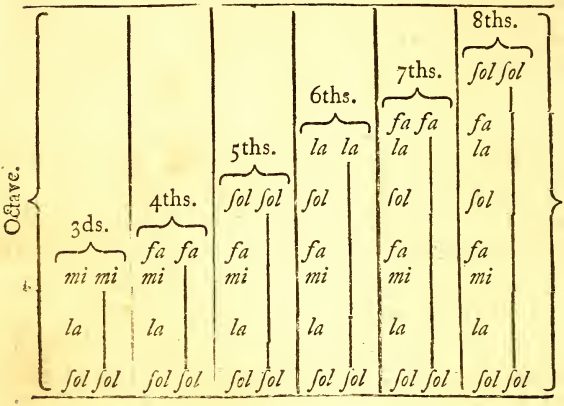
But to give you *Directions* for *Tuning*, *firſt* look back on *page 6*, and regularly *aſcend* and *deſcend* the *Eight Notes* according to the *Diatonick-Order* of the *Scale*; and then 3ds, 4ths, 5ths, 6ths, 7ths and 8ths; *(proving* the true Diſtance by the interpoſing *Degrees)* and then *deſcend* again; always having true Regard to the *two Natural Semitones*, or to *ſing* every *Fa flat* or *ſaint)* according to the following RULES:

RULE

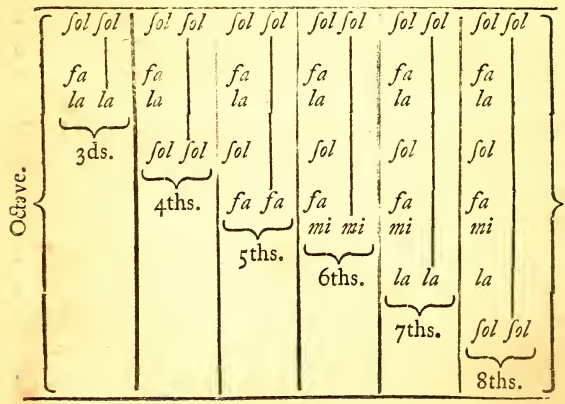
RULE I.

A Scale *of* Muſick, *for* Tuning *the* Voice.

Aſcending Intervals.



Deſcending Intervals.



Then

Then, if you pleaſe, *ſing* the ſame *Sounds* again by *Letters*, which will be a means to make you thoroughly acquainted with the *Gamut*; remembering always their *Places* on the 5 *Lines*. &c. and then ſound the ſeveral *Intervals without proving* by *Degrees*, 'till you can do the whole perfectly, both by way of *ſol-fa*, and by way of *Letters*.

This RULE *well* Tun'd, *and* Learnt *by Heart*,
Will teach you ev'ry Sound, *and* Part.

RULE II.

Two Sounds in one Tone.

Octave.

1—G G *ſol ſol*—G G *ſol ſol*—1

2—F F *fa fa*—F F *fa fa*—2
3—E E *la la*—E E *la la*—3

4—D D *ſol ſol*—D D *ſol ſol*—4

5—C C *fa fa*—C C *fa fa*—5
6—B B *mi mi*—B B *mi mi*—6

7—A A *la la*—A A *la la*—7

8—G G *ſol ſol*—G G *ſol ſol*—8

Treble, or *Counter*, or *Tenor*, or *Baſs*.

By this Method you may ſound as many *Notes* on *one Tone*, as you pleaſe, &c. But next

next proceed to some *plain Tune*, which will be as easy as any *Example* that can be given, &c. always observing to *tune* your *Voice* as often in the *Flat-Key*, as you do in the *Sharp-Key*: But of this you'll know more when you come to *Transposition*.

This Rule *directs how many* Notes *(or one) May still continue in the self same* Tone.

Thus much for *Tuning* the *Voice*.

---

§ 2 *Of the* Accents *in* Musick.

Scholar. SIR, *Pray what is meant by the Word* Accent?

Master. In common Speech, the Word *Accent*, signifies the *Tone* of the *Voice*; of which the *Grammarians* have sundry Sorts, mark'd by various Dashes over the Vowels; signifying a more *high* or *low*, *longer*, or *shorter Tone* of the *Voice*; or a more *pressing Emphasis*, or *Tone*, on such Syllables or Words, as are more to be taken Notice of than any other; in order to *strike* such *Vowels*, *Words*, *Syllables*, or *Sentences* more *pressing* to the *Audience*; according as the *Passion* and *Subject* requires, &c. — So in *Musick*

An *Accent* is a sort of *wavering* or *quavering* of the *Voice*, or *Instrument* on certain *Notes* with a *stronger*, or *weaker Tone* than the rest, &c. to express the *Passion* thereof: which renders

ders *Muſick*, (eſpecial *Vocal*) ſo very agreeable to the Ear; it being chiefly intended to *move* and *affect*; and on this the very *Soul and Spirit of Muſick* depends; by reaſon it touches and cauſes Emotions in the Mind, either of *Love*, *Sorrow*, *Pitty*, or any other *Paſſion* whatſoever, &c. — And this is what is called the *Accented*, and *Unaccented Parts of the Meaſure*; which the *Italians* call *Tempo-Buono*, or *Time-Good*: and *Tempo-Cattivo*, or *Time*, or *Meaſure-Bad*: that is to ſay, the *good*, and *bad* Parts of the Meaſure.

Scholar. *In what* Parts *of a* Bar *of* Time *is the* Accented Part *of the* Meaſure?

Maſter. in *Common-Time*, the *firſt Notes* of the *beginning* of a *Bar*, and the *firſt Notes* of the *laſt half* of the *Bar* is the *Accented Part*; that is, the 1ſt and 3d *Crotchet* of every *Bar*; the reſt being the *Unaccented Parts*: But, in *Tripla-Time* (where *Notes* go by *three* and *three*) the *firſt* of the three is the *Accented Part*, and the reſt the *Unaccented*.

The *Accented Parts* ſhould be always as *full* of *Harmony* as poſſible, and as void of *Diſcords* as may be, in order to render the *Compoſition* the more *affecting*: But the *Unaccented Parts* may conſiſt of *Diſcords* and the like, without any great Offence to the Ear, &c. This being a *Part* of *Muſick* that few, or no *Authors* have very rarely mention'd; although it is the whole *Ornament* and *Spirit* of every *Compoſition*, eſpecially when any Perſon performs alone.

In Common-Time, *remember well by Heart,*
The Firſt *and* Third *is the* Accented Part:
And if your Muſick Tripla-Time *ſhould be,*
Your Accent *is the* firſt *of ev'ry three.*

§ 3. *Of* Intonation; *and of the* Use *of the* Pitch-Pipe, *and its* Original.

Scholar. *SIR, Pray tell me what is meant by the Word* Intonation?

Master. Intonation, properly signifies, the giving of the *Pitch*, *Tone*, or *Key* of the *Composition*, &c. which is generally done by an *Instrument*, or *Tone* of the *Voice*, by the head Performer, in order that the rest of the *Singers* may set their *Voices* in that *Order* before they begin the *Composition*; for which a *Pitch-Pipe* is of excellent Use.

Scholar. *How shall I know the* right Sound *of any* Key, *so as to sound it neither* too high, *nor* too low?

Master. If you would *Key* a *Composition* of various *Parts* for any *Quire* or Company of *Singers*, and have not a *Pitch-Pipe*, nor any *Instrument* depending, *First*, take a View thro' the whole *Composition*, and try if you can *sound* the *highest Notes* of the *upper Parts* above the *Key-Note*, and also the *lowest Notes* of the *Bass-Bellow*; which if you can do without squeaking or grumbling, and all other *Voices* perform *clear* and *smooth*; then may your *Song* be said to be pitch'd in a *Proper Key*; for it is a general Maxim among *Musicians*, That, "*A Tune well Key'd, is half sung*:" But oh! how intolerable is some *Psalmody* perform'd in many Places, for want of Judgment in this Point! whose *Leaders* are so stupidly conceited, as not to use a *Pitch-Pipe!* for it is daily found by Experience

Experience, that *Psalmody* is very rarely well perform'd without it, unless by mere blind Chance; and on the contrary very compleat, where they always make use of it.

Scholar. *Many there are, that refuse the use of a* Pitch-Pipe, *and say, it is nothing but a late whimsical Invention: Pray tell me how long this* Instrument *has been in Vogue?*

Master. If you would cast your Eye into the Writings of *primitive Authors*, you'll find, that *Anastasius*, *Pope Leo*, and St. *Hilary* (Bishop of *Poitiers*, who is said to be the very first that composed *Hymns* to be sung in *Churches*; and was followed by St. *Ambrose*,) and several others, erected several *Musick-Schools*, called *Schola-Cantorum*; and that such *Tunes* as were antiently sung, were called *Chants*; as, the *Ambrosian Chant*, the *Gregorian-Chant*, &c. from the *Authors* who composed them; which *Tunes* were sung in *Unison* by the whole Congregation; and that some of which might the better *begin*, and keep up the *Key* or *Tone* (which they call *Tonos*, in *Greek*; *Tonus* in *Latin*; or *Tone*, in *English*) they thought it convenient, to have a *Bell*, or a large *Organ-Pipe*, whereon a Person for that Purpose used to sound the *Tone* of the *Key* to the Congregation, always *beginning*, and *ending* the *Tune*; and often sounding in the *Middle*, if it was thought fit; in order to keep up the *Quire* to the true and *Regular Pitch*; which *Key* or *Tone* is a certain Determinate, Dominant, and *principal Degree* of

of *Sound*, which regulates every *Tone*, proportioned to the *Voices*. The *Practice* of this, was greatly recommended by the learned *Benedictines*, in a Treatise wrote by them, in the Year 1673; who also charged the *Organist* often to *sound* the *Key* in many Places, to keep the *Tone* thereof always in the Peoples Memory: which Mr. *Bossard* says, is the very best Method that ever appear'd in the Practice of *Divine-Musick*.

Thus, you see that a *Pitch-Pipe*, in Likeness, is a very *Ancient Instrument*, and greatly approved of by the *Learned*; tho' it has been but little in Vogue with us, 'till within these 20 Years; for I remember I went several Miles to see the first I heard talk'd of: which *Instrument* is greatly improved to what it was in former Days; and is of *singular* Use in all Kinds of Musick, i. e. for setting of many unfix'd *Instruments* in Tune, as well as in *Vocal-Musick*; we having it now so as to carry in a *Pocket*, and on whose *Register* or *Stop*, is mark'd the several *Letters* of the *Scale* of *Musick*; which *Tones*, either *Flat*, *Sharp*, or *Natural*, being given by drawing the *Register*, which enlarges the *Tube*, or *Cavity* so as to contain such a Quantity of *Air*, as will produce any *Degree* of *Sound*, whether *Grave* or *Accute*, &c. But I shall say more of *Air*, when I come to treat of *The Nature of Sound*.

Scholar.

Scholar. *Must the Register always be set to the Letter of the Key of the* Composition ?

Master. It is generally set thereabouts, but it may be varied half a *Tone* higher, or lower, if it better suits the *Voices*; by reason, every *Author* setteth his *Musick* on what *Key* he pleases; tho' some too high or too low, without regarding whether it best suits the *Voices* or not.

But it was always my *Method first* to sound my *Musick* on such *Keys* as best suited the *Compass* of all *Voices*, both above and below; and then, if I found the *Parts* would move *smoother*, half a *Tone* higher, or lower than the Letter of the *Key*, I then set a *Direction* over the *Composition*, in order to direct the *Quire* how to set the *Register* of the *Pipe* accordingly: But our *new Consort-Pitch* is more fitter for *Vocal Performance* than the *old Consort Pitch*, which is half a *Tone* lower. See my *Universal Harmony*: Containing the whole *Book* of *Psalms* all new Set, in *Four Parts*, with variety of *New Anthems*. &c. Price bound 4*s*. 6 *d*. *Octavo*.

This Instrument *some Teachers do refuse,*
And laugh at Things, they know not how to use:
So self-conceited Fools deem all Things vain
That others do; which they cannot attain.

Such Paper-Skulls, much better had been mute,
Unless they were more able to dispute,
And speak with Judgment:—*But, alas! we find,*
Those Tongues *ran most, whose* Brains *lie most behind.*

CHAP V.

The Scale *of* Musick *for several* Instruments; *with compendious* Instructions thereunto.

§ 1. *Of the* Organ, *and its* Antiquity.

Scholar. *SIR, Having often heard of the grand* Structure *and* Tone *of an* Organ, I *now desire you would give me a short* Description *of it; and also of its* Antiquity.

Master. The *Organ*, is the largest, and most *Harmonious* Wind *Instrument* of any other; it being a *Collection*, or *Imitation* of all other *Instruments* whatsoever, such as *Trumpets*, *Hautboys*, *Flutes*, *Cornets*, &c. and differs as to *Largeness*, *Tone*, and *Ornament*, according to the *Art* of the *Builder*, and *Charge* laid out upon it.

The *Organ* is said to be a very *ancient Invention*, even almost as ancient as *Adam*, as is recorded in *Gen.* iv. 27. where *Jubal* the 6th is said to be "*The Father of all such as handled* "*the* (Harp) *or* Organ": Yet it is agreed that it was little used 'till the *Eighth Century*; and seems to be borrowed from the *Greeks*.

Ctesbes

Ctesbes of *Alexandria*, in the *Reign* af *Ptolemy Evergetes*, about the 3782d. Year of the World, (or 166 Years before *Christ*, being about 1912 Years ago) is said to be the very first that *invented* such *Organs* that play'd by compressing the *Air* with *Water*; which is still practised in many Places; which were greatly improved by *Archimedes*, and *Vitruvius*: *Vitruvius* describing an *Hydraulick-Organ*, in his 10th Book of Architecture, or an *Organ* thatplay'd by *Water*: The Emperor *Julian* had an *Epigram* in Praise of it. There are several *Hydraulick-Organs* in *Italy*, in the *Grotoes* of their *Vineyards*, &c.

St. *Jerome* mentions an *Organ* that had 12 Pair of Bellows, which might, with ease, be heard 1000 Paces, or one Mile; and another at *Jerusalem*, which might be heard from thence to *the Mount of Olives*.

I am inform'd, that there is a large and beautiful *Medallion* (or a *Medal* of a very large Size) erected by the *Valentinians*, in the Cabinet of *Queen Christina*; and that on the Back-side thereof, is a fine *Hydraulick-Organ*, with two Figures, representing two Men, one on the right Side, and the other on the left, seeming to pump the Water that plays it; and to listen to the *Sound* of it: It having only *Eight Pipes*, erected on a round *Pedestal*, with this Inscription: PLACEA SPETRI.

There is also an *Organ* in the Cathedral of *Ulm*, in *Germany*, that is 93th Feet high, and 28 broad; the largest *Pipe* being 13 Inches *Diameter*; and has 16 Pair of *Bellows*.—*The above Account I have copied from many curious and credible Writers.*

Scholar. *I return you Thanks for this* Historical Account *of the* Organ; *but now desire you'll say something concerning its* Structure.

Master. As to the *Structure*, that is best described by such as build them; nevertheless, I will give you the best Account I am able, which I acquired by being conversant with many *Organ-Builders* in *London*, and also by *reading* such *Authors* as wrote entirely on this Subject, *&c.* which is as follows:

Description of the Organ.

Our *Modern Organ* is greatly improved to those in former Ages, consisting of a *Buffet*, containing various *Rows* of *Pipes*: The *Size* of an *Organ* being always from the *length* of the *largest Pipe*; whether it be of 32 Feet, 16 Feet, 8 Feet, 4 Feet, or of 2 Feet, &c. And the *Quality* of *Sound* depends on the *Width* and *Length* of the *Tube* or *Pipe*, *Tongue* and *Reed*, &c. whether the *Tone* be more or less *Grave*, or *Acute*.

Our *Church-Organ* hath *Two Parts*, viz. The *Main-Body*, or *Great-Organ*; and the *Positive-Organ*,

Organ, or *Little-Organ*; which is generally placed before the *Great-Organ*.

When an *Organ* has but *one Body*, it has but *one Set* of *Keys*; but when it has a *Posive-Organ*, then it has two or three; and some *large Organs* have four, or five Sets of *Keys*; and some large *Pipes* have *Pedals*, which are put down by the the *Feet* to lift up the several *Keys*, *Stops*, or *Touches* thereof.

The several *Keys* of an *Organ* are generally divided into *four Octaves*, (or four times Eight) the *first Octave* taking 13 *Pipes*, or *Keys*, to compleat the 12 *Semitones* of the *Octave* (and also the *last Octave*) but the *inner Octaves* take not so many, by reason, that *Pipe* or *Key* which *endeth* one *Octave*, *beginneth* the next, &c. which *four Octaves* are termed thus:

First Octave. - - - - - - - 1.
Middle Octave. - - - - 2.
First Sub-Octave. - - - - 3.
Second Sub-Octave. - - - 4.

N. B. That the Word *Sub*, is a *Latin* Word, and signifies *Below*.

Each of these *Four Octaves* is divided into 12 *Stops* or *Frets*, 7 of which *Keys* being *Black*, which give the *Natural-Tones*, and 5 *White*, for the *Artificial Flats*, or *Sharps*; so that the whole contains 48 *Stops*: But some *Harpsicords*,

and *Spinnets* have the *Natural-Keys White*; and the *Artificial* ones *Black*; and some *Organ-Builders* have added a *Third Sub-Octave*, or *Pedals* of two or three *Octaves* lower; so the Number of *Stops* or *Octaves* on an *Organ* are as the *Builders* or *Organist* pleases, &c.

Our *Organ-Builders*, or *Harpsichord-Makers* have a *Scale* or *Diapason*, whereby they *regulate* the *Lengths*, *Thickness*, *Tension*, &c. Having a large C at the End of a *Line*, and by looking into the *Table* or *Scale* for such a C, they find that the *Line* so mark'd, is the *Measure* of the *Pipe* or *Chord* destin'd to *sound* the *ut*, or *C*, of the *lower Octave*; but if a small *c*, it is the 2*d* *Octave*; if $\overset{c}{c}$, the 3*d* *Octave*; and if $\overset{c}{\overset{c}{c}}$ it is the *Sound* of the 4*th* *Octave*, &c. and from this *Scale*, *Rule*, or *Diapason*, our *Musical Instrument-Masters* adjust the *Pipes* of their *Organs*, cut the *Holes* in their *Flutes*, *Hautboys*, &c. in a due *Proportion*; in order to perform any *Tone*, or *Semitone*, &c.

N. B. That if a *Square* be divided into 8 *Parallelograms*, the *Points* wherein a *Diagonal Line* intersects all the *Parallelograms* will express all the *practical-Intervals* in *Musick*: and on this *Principal* is the *Diapason* founded.

To *play* on an *Organ*, is, to press down the several *Keys* or *Stops* with the *Fingers*, (or if *Pedals*,

Pedals, with the *Feet)* in order to open the ſeveral *Valves* or *Plugs*, which correſpond lengthwiſe with as many *Holes* as there are *Rows* of *Pipes* on the *Sound-Board*; the *Holes* of each *Row* being *opened* and *ſhut* by a *Regiſter* or *Ruler*, pierced with 48 *Holes*; and by drawing the *Regiſter*, the *Holes* of one *Row* are all *opened*; becauſe the *Holes* therein correſpond with thoſe of the *Sound-Board*; ſo by *opening* a *Valve*, the *Wind* brought into the *Sound-Board*, (by ſeveral Pair of *Bellows*) finds a Paſſage into the *Pipes*; which correſponds to the *open Holes* of the *Sound-Board*: But by puſhing the *Regiſter*, the 48 *Holes* thereof, (not anſwering to any of thoſe of the *Sound-Board*, that *Row* of *Pipes* anſwering to the puſhed *Regiſter)* are *ſhut*, &c.

Hence it is, that by *drawing* ſeveral *Regiſters*, various *Rows* of *Pipes* are *opened*; or ſeveral *Rows* together, if the ſame *Regiſter* correſponds thereunto; from which the *Pipes* become either *Simple*, or *Compound*.—*Simple*, is when *one Row* anſwers to *one Regiſter*; and *Compound*, is when *one Regiſter* anſwers to *ſeveral Rows*: Hence the *Organiſts* ſay, that *A Row is Compound*, when ſeveral *Pipes ſound* or *play* together, by only preſſing down *one Key* or *Stop*; according as the *Holes* and *Regiſter* have Communication with each other, &c. But of theſe *Keys*, I will give you a *Scale* by and by, &c.

Of *Organ-Pipes*, there are *two* Sorts, *viz.* one Sort, whose Mouths are like *Flutes*; and the other Sort with *Reeds*. The *first*, are termed *Pipes of Mutation*, and consist of a *Foot*, which is a hollow Cone, which receives the *Wind* that is to give the *Sound*; and to this *Foot* is fastened the *Body* of the *Pipe*; between which *Foot* and *Body* is a Partition, which hath a little long narrow *Arperture* or *Opening*, to let out the *Wind*: and over which *Arperture* is the Mouth, whose upper *Lip* being cut level, *cuts* the *Wind* as it comes out; which *Cutter* gives the *Sound*, by the *Wind* striking against it.

Some *Pipes* are made of *Pewter*, and some of *Lead* mixed with a 12th Part of *Tin*, which are always open at their Extremities; their *Diameter* being very *small*, and the *Tone* very *shrill*; but those of *Lead* mixed with coarser *Metal*, are more large: the short *Pipes* being *open*, and the *long* ones quite *stopt*; and the *middle-siz'd Pipes* are a little *stopt*, having a little *Ear* on each Side of the *Mouth*, to draw closer or farther off, in order to *raise*, or *lower* the *Sound*, &c. So the finer the Metal, the smaller the Pipe.

The *Wooden Pipes* are generally made square, and *stoped* at their Extremities with a *Valve* or *Tampion* of Leather; the *Tone* of the *Wood Pipes* being very *soft*, as also they that are made of *Lead*; the *longest Pipes* giving the *gravest Sound*, and those more *short*, are more *Acute*; so that both their *Lengths* and *Widths*, are proportioned

proportioned according to the *Ratios* of their *Sounds*; which are adjusted and regulated by their *Rule* and *Diapason*, as I before hinted; and those *Pipes* that are *shut*, have the same *Length* as they that are *open*; but the *Pedal-Tubes*, or *Pipes*, that are play'd by the Feet, are generally *open*, if they are made of *Wood*, or of *Lead*; and the *longest Pipe* of a good *Church-Organ* is commonly 16 Feet long, and in some very *large Organs*, 32; all the other *Pipes* being *lessened* in proportion to the *largest*, or *Grand Pipe*, &c.

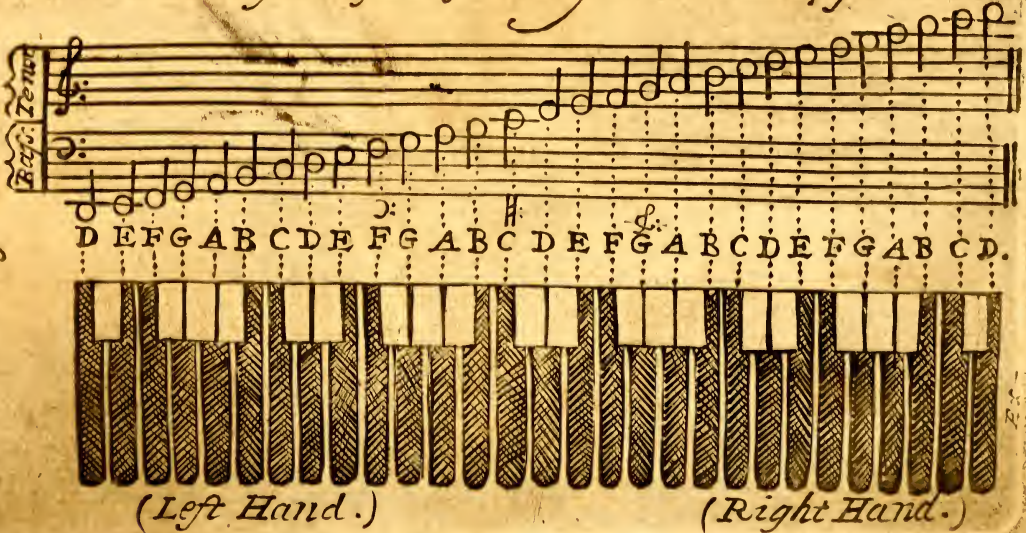
Such *Pipes* as are called *Reed-Pipes*, consist of a *Foot*, which conveys the *Wind* into the *Shallot* or *Reed*, which is a hollow half-Cylinder, and fitted at the *Extremity* thereof into a kind of *Mould* by a wooden *Tampion*; the *Shallot* or *Reed* being covered with a thin Bit of *Copper* fitted at it's *Extremity* into the *Mould* by the same Wooden *Tampion*; it's other *Extremity* being so at Liberty, that the *Air* entering the *Shallot* or *Reed*; so that, that Part of the *Tongue* may have more Liberty, by making it longer; and the *longer* it is, the *more Grave* is the *Sound*; The *Mould*, which serves to fix the *Shallot* or *Reed*, the *Tongue*, and the *Tampion*, &c. serves also to stop the *Foot* of the *Pipe*, obliging the *Wind* entirely to pass thro' the *Reed*; into which *Mould* is soldered that *Part* called the *Tube*, whose inward *opening* is a Continuation of the *Reed*; the Form of this *Tube* being different, according as the *Pipes* are in different Rows, &c. &c. &c.

Instructions for the Organ.

Having thus *describ'd* that most curious and *harmonious Structure*, the ORGAN, so far as my Ability will admit, from both *seeing*, *reading*, and *conversing* with such as *build*, and *perform* on that noble *Instrument*; and also by *consulting* such as have wrote on the same: I shall in the next Place, refer you to the following *Plate*, which is *The Scale of Musick*, on the several Keys of the *Organ*, &c. whether *Natural*, *Flat*, or *Sharp*; whereby you may know, and perform any *Degree* of *Sound*; and also many *Parts* together, &c.

The

The Scale of Musick for Organ, or Harpsichord, &c.



Explanation of the Scale.

In this *Scale*, the *Natural*, or *Proper-Keys* are *Black*, all 8*ths* or *Octaves* being the very ſame in effect as was before; and the two *Natural-Semitones*, (being from B to C, and from E to F,) are placed on the *Black Keys* in their *Regular-Order*: But the *Semitones* are *White*, and placed between the *Whole-Tones*; one of which ſerving for either *Flat*, or *Sharp*; A-*Sharp*, being ſtruck on the ſame *Key* as B-*Flat*, and ſo of all the reſt.

The *Keys* of an *Harpſichord* or *Spinnet*, lie in the very ſame Order as thoſe of an *Organ*, which *Keys* move the *Jacks*, which ſtrike the *Strings*; this being the moſt curious and harmonious *Inſtrument* of the ſtringed Kind.

In *Fingering*, obſerve, That on the *Right Hand*, the *Thumb* is called the firſt *Finger*, &c. and on the *Left Hand*, the *Little Finger* is called the firſt; and that thoſe *Fingers* as are to *Aſcend*, on both *Hands*, are the 3*d* and 4*th Fingers*; and thoſe to *Deſcend* are the 3*d* and 2*d*; and ſo on to the 5*th* of either *Hand*, &c.

To *play* well on the *Organ*, *Harpſichord*, or *Spinnet*, is learnt from a diligent Practice, and by being thoroughly well acquainted with the *Gamut*, *Time*, and all other *Characters* belonging to *Muſick*; and ſo well acquainted with *Concord*, and *Diſcord*, as to ſee through the whole

whole *Composition*, in order to strike all the *Parts* together; for which *Instruments*, all *Musick* in *Parts* ought to be set in *Score*; that is, all *Parts* one under another, and *Bar* against *Bar*.

Of the Thorough-Bass.

The greatest Performance on these kind of *Instruments*, is the *Thorough-Bass*, it having *Figures* placed either over, or under the *Notes* thereof, in order to direct the Performer to strike in such *Cords*, *Notes*, or *Parts* from the *Ground* or *Bass*; such as 2*ds*, 3*ds*, 4*ths*, 5*ths*, 6*ths*, 7*ths*, or 8*ths*, &c. For which Reason the Performer ought to be well verst in the *Rules* of *Composition*, &c.

It is to be observed, that where single *Flats*, are only mark'd, that those *Flats* or *Sharps* denote that you are to play *Flat* or *Sharp Thirds*; and that where nothing is mark'd, then *Common-Concords* are to be *play'd*, &c.— Also where 4*ths*, 7*ths*, &c. which are *Discords*, are only mark'd, they are only set to introduce other *Common-Concords* to follow; that is, such as lie next, or the neareſt *Interval* to follow, as the *Rules* of *Composition* will admit.

And altho' many *Authors* do only mark their 3*ds* with single *Flats*, or *Sharps*; and also 4*ths*, 6*ths*, 7*ths*, &c. and omit the *Figuring* of the *Common Concords*, (which are 5*ths*, 8*ths*, 12*ths*, 15*ths*); yet it would be more ready for every young

young *Beginner* to have them *figured* over or under the *Notes*; which might probably prevent many Miſtakes.

Obſerve, that neither *Two-Fifths*, nor *Two-Eights* are to be *play'd* together, neither *Riſing* nor *Falling*; (as well as not in *Compoſition*) therefore the beſt Way to avoid them, (or any other *Conſecution* of *Perfects* of the ſame Kind) is, to move your *Fingers* contrary one from another, as much as poſſible; and in ſo doing, you will certainly avoid many Errors that you otherwiſe might run into.

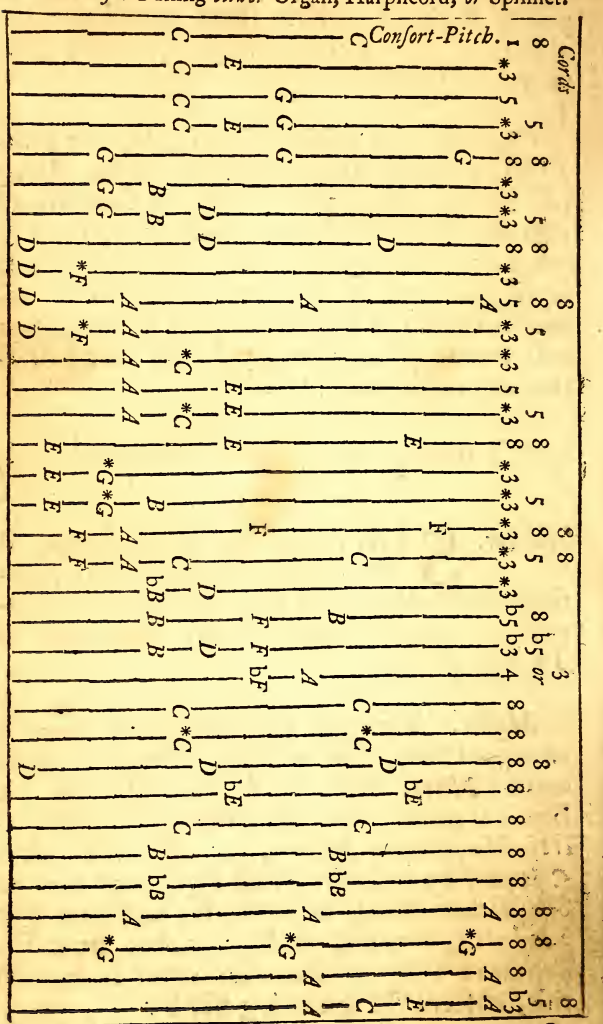
Of Tuning *the* Organ, Harpſichord, *or* Spinnet.

Scholar. *SIR, I thank you for this* Hiſtorical *Account of the* Organ, Deſcription, *and* Inſtruction: *But now deſire you'll favour me with a little farther* Inſtruction *on* Tuning *of them.*

Maſter. The *part* of *Tuning* only depends on a *good Ear*, and is very difficult on ſome certain *Notes*, ſuch as *E-flat*, *D-ſharp*, &c. But it is general the uſual Way of *Organ-Builders*, *Harpſichord-Makers*, &c. Firſt, to *Tune C-ſolfaut* by a *Conſort-Pitch-Pipe*; and then an *8th* either above or below it; and after that *3ds*, *5ths*, &c. and all *Degrees* that are in the *Syſtem* of *Octave*. But the better to explain this, obſerve the following *Table*:

A TABLE

A TABLE *for* Tuning *either* Organ, Harpsicord, *or* Spinnet.



Obſerve, to *Tune* all *Sharp-Thirds*, as ſharp as the Ear will admit; and alſo all 5ths *Bearing*; that is as *flat* as poſſible: which will render your *Muſick* the more Grand and Harmonious: And often, by way of Tryal, touch *Uniſon*, *Third*, *Fifth*, and *Eighth* altogether; and alſo *Uniſon*, *Fourth*, and *Sixth*: And laſtly, if every *Octave* of your *Keys*, both *Proper-Notes*, and *Semitones*, ſound *perfect Eighths* to each other, then you may conclude, that your *Inſtrument* is in perfect *Tune*, &c.

A Table *of all the* Intervals *contained in the* Syſtem *of* Diapaſon *or* Octave; *with the Number of* Semitones *in each* Interval; *according to the* Names *of the ſeveral* Keys *of an* Organ, &c.

Intervals Names.	Number of *Semitones.*
A *Diapaſon, Octave,* or *Eighth*	12
A *Semidiapaſon, Sept.-Major,* or A *Greater Seventh*	11
A *Sept-Minor,* or *Leſſer Seventh*	10
A *Hexachord-Major,* or *Greater Sixth*	9
A *Hexachord-Minor,* or *Leſſer Sixth*	8
A *Diapente,* or *Perfect Fifth*	7
A *Semidiapente,* or *Minor Fifth*; A *Tritone,* or *Greater Fourth*	6
A *Diateſſaron,* or *Perfect Fourth*	5
A *Ditone,* or *Major Third*	4
A *Semiditone,* or *Minor Third*	3
A *Tone,* or *Major Second*	2
A *Semitone,* or *Minor Second*	1
A *Uniſon,* or *One Sound*	—

Contains — Semitones.

Obſerve

Observe, That the Particle *Semi*, in *Semidiapason*, *Semidiapente*, *Semiditone*, &c. in the *Table* before, does not mean the *Half* of such an *Interval*; but signifies, that it wants a *Semitone* of its Perfection: The *Semidiapason* and *Greater Seventh*, being both but one *Interval*; and include each the same Number of *Semitones*; in like manner is the *Greater Fourth*, or *Imperfect* or *Minor-Fifth*.

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§. 2. *Of the* Violin, &c.

THE *Violin*, is the gayest, and most sprightly of all other *Instruments*; and is above all others the fittest for *Dancing*: and may be handled so by the *Violist*, or *Performer*, as to cause the *Notes* thereon to be either *cheerful* or *soft*; or *Forte*, or *Piano*, that is strong, or as an Eccho, &c. which depends on the artful Management and Dexterity of handling it, both in moving the *Bow*, and Fingering of the *Strings*, &c.

This curious and unfix'd *Instrument*, consists of *Three Parts*, viz. The *Neck*, the *Table*, and the *Sound-Board*; it having *four Strings* fasten'd to the two Extreams, with four *Screws* in the *Nutt* or *Head*, in order to raise, or to lower the *Tension* of the *Strings* to any *Degree* or *Pitch* whatsoever; or according to any fixed *Instrument* that performs or plays along with it.

Of

Of these kind of *Instruments*, there are many Sorts, all of which differ as to Size, and some in way of *Tuning*; tho' all struck with a *Bow* or *Fiddle-stick*, made of stiff Hair dress'd with *Rosin*, which grating against the *Strings*, puts them into a vibrating *Motion*; which gives the *Tone* higher or lower, as regulated by touching them with the *Fingers*.

The *Viol di Gambo*, or *Leg-Viol*, (so called from its being held between the *Legs*) is what we call our *Bass-Viol*, having *six Strings*, called, 1st The *Treble*; 2d *Small-Mean*; 3d *Great-Mean*; 4th *Counter-Tenor*; 5th *Tenor*, or *Gammut-String*; and the 6th The *Bass-String*; being *tuned* thus: The 1st D—. 2d A—. 3d E—. 4th C—. 5th G—. and the 6th is double D D—.

In former Days they used to have whole Chests full of these *Kinds* of *Instruments*, which they called *Setts*; such as *Trebles*, *Counters*, *Tenors*, *Basses*, and *Double-Basses*, all of which were mounted with *6 Strings*, as *Viola-Tenor*, A *Tenor-Viola*,— *Viola-Basso*, A *Bass-Viol*, &c. &c. But as these Kinds of *Bass Instruments*, are now partly laid aside, I shall say no more about them; but go on with what I designed, *viz.* with

Directions *for the* Violin

The *Treble-Violin*, is strung with *four Gut-Strings*, on which may be play'd any *Part*, either Treble, Counter, Tenor, or Bass; but it generally performs the highest Parts of *Concerts* on Occasion. The

The *four Strings* are *Tuned Fifths* to each other, *viz.* The *Treble* or 1st *String*, is E.— The 2d or *Small-Mean*, is A. — The 3d or *Great-Mean*, is D.— And the 4th or *Bass-String*, is G.— Each being 5 *Notes* distant from one another; on which 4 Strings is performed these *Notes*, whether *Natural*, *Flat*, or *Sharp*, viz.

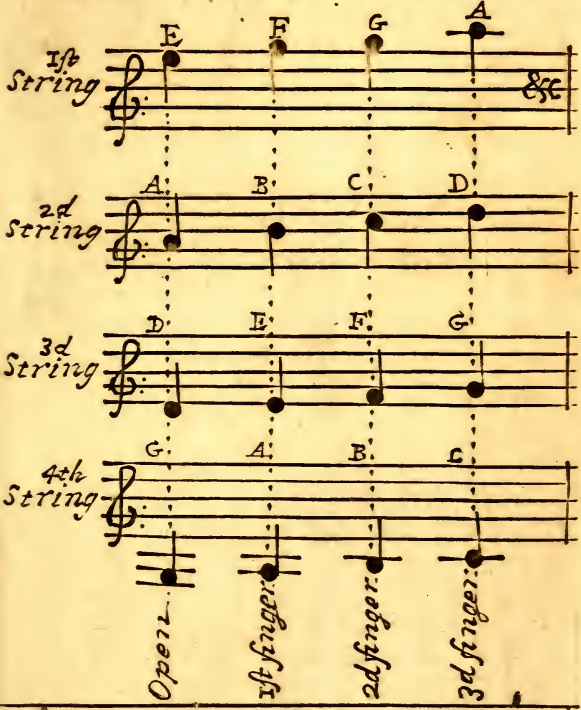
The Gamut *on the* four Strings.

Nutt.									*Bridge.*
	First String—	E.	F.	G.	A.	B.	C.	&c.	
	Second String—	A.	B.	C.	D.				
	Third String—	D.	E.	F.	G.				
	Fourth String—	G.	A.	B.	C.				
		Open Hand-	1st Finger-	2d Finger-	3d Finger-	little Finger-			

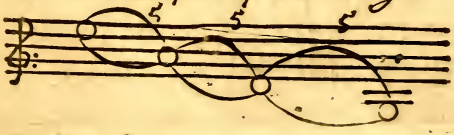
Thus, you see what *Notes* are play'd with each *Finger*, on all the 4 *Strings*; but when any *Note* is play'd *flat*, you must lengthen the *String* by sliding the *Finger half a Tone lower* towards the *Nut*, than the *Natural-Note*; and so on the contrary, you must shorten the *String* by sliding it *half a Tone higher* towards the *Bridge*; to *sharp* a *Note*. But the better to *explain* what I have said, I will set you *an Example by Notes*; being

The Scale

The Scale of Musick on the four Strings of the Violin.



Example of Tuning.



First, Observe to have the *Strings* of your *Violin* in perfect *Tune*, so as to sound the *Tones* before mentioned; for unless they are *Tun'd regular*, no one can can play thereon, be he ever so dexterous; and also to *play* every *Lesson* or *Tune*, very *slow* at *first*; for a diligent Practice will bring your Hand to a more swift Motion: *Psalm-Tunes* being the best for young Beginners.

For the Nicety of *Fingering*, observe, that whenever you *skip* a *Fret* or *Stop*, there to leave a *Finger*, for a *Stop* is but *half a Tone* or *Note*; for from B to C. and E to F. are but *half Notes*; and all the rest are *whole Ones*; and to leave a *Finger* is necessary, to be in Readiness when any *half Tone* shall happen, either by *Flats* or *Sharps*.

In *Bowing*, observe to play any *even Number* of *Tied Notes* by striking the *Bow up*; such as 2, 4, 6, 8, &c. and to play any *odd Number* of *Notes tied* together, with the *Bow drawn down*: I mean, to begin such *Even* or *Odd* Numbers *tied together*, with the *first up*, or *down*, &c. and also to learn the use of all *Moods*, *Flats*, *Sharps*, and other *Characters* contained in this *Book*; belonging to *practical Musick*, &c.

§ 3 Of the *Flute.*

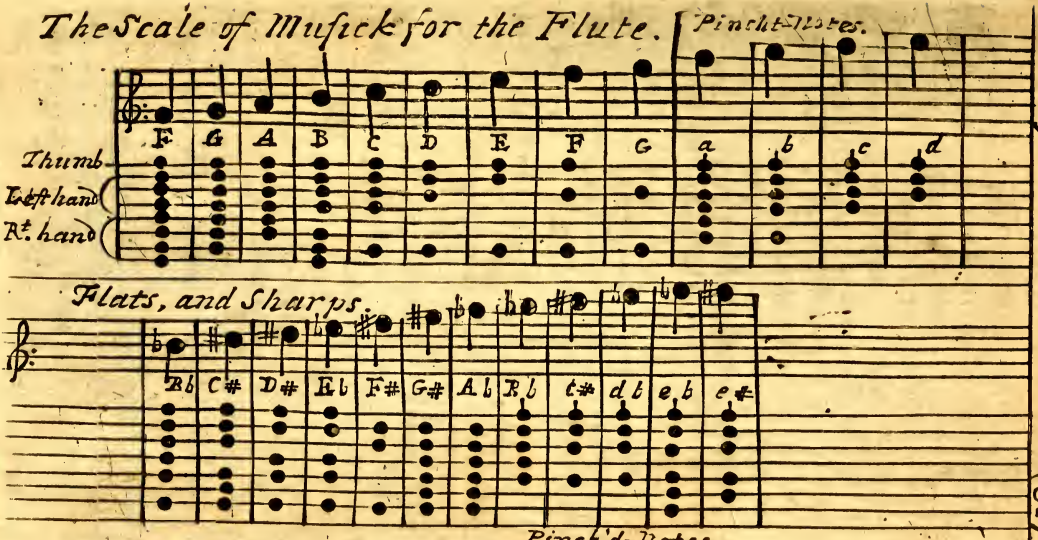
THE *Flute*, is a *Pipe Instrument* of *Musick*, and blown by the Mouth; having *Eight Holes*, *seven* on the *Top*, for the *Fingers*; and *one* underneath for the *Thumb* of the *Right Hand*; which *Tones* are changed by *stopping* and *opening* the *Holes*; placing your 3 first *Fingers* of your *Left Hand* uppermost towards your Mouth; and the 4 *Fingers* of your *Right Hand* towards the Bottom, and blowing at the same time, you'll have a Production of these *Sounds*:

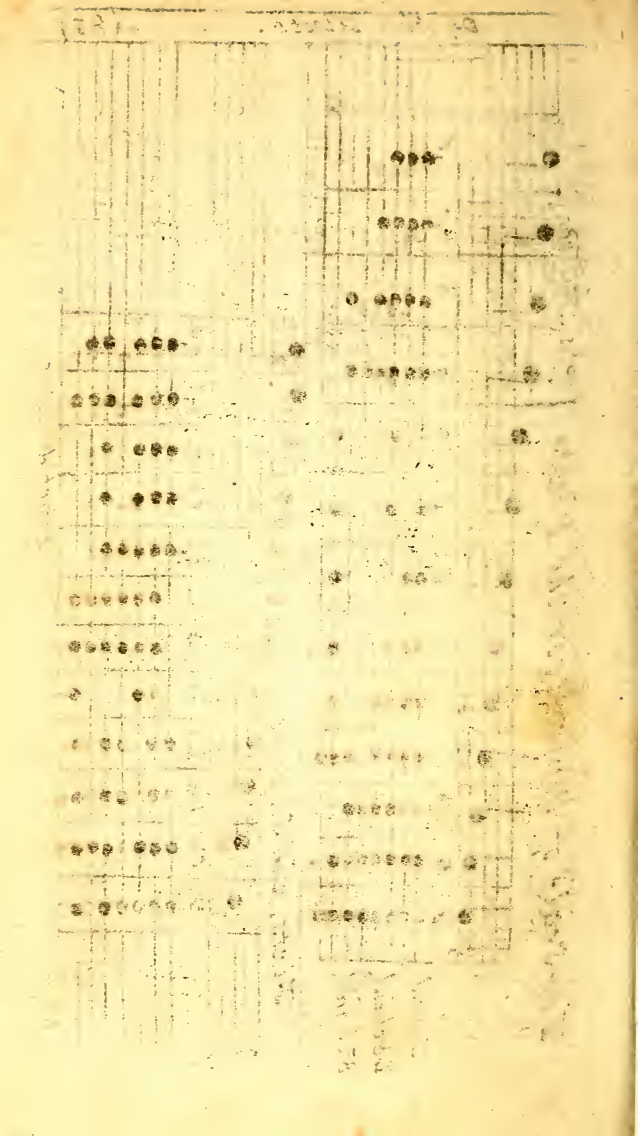
The Gamut *on the* Flute.

F—All *Holes* stopt close, and blow gently.
G—Take *up* the *little Finger* of your *Right Hand.*
A—Take *up* the 3d *Finger* of your *Right Hand.*
B—*Up* the *first*, *down* the 3d and 4th of your *Rt. Hand.*
C—*Up* the 2d and 4th of your *Right Hana.*
D—*Up the* 3d of the *Left Hand.*
E—*Up* the 2d of the *Left Hand.*
F—*Up* the 1st, and *down* the 2d of the *Left Hand.*
G—Take *off* the *Thumb* of the *Left Hand.*
A—Place the *End* of your *Thumb* in the *Hole* to half cover it, and with the 1st, 2d, and 3d *Fingers* of your *Left Hand stop* the 3 upper *Holes*, and the 1st and 2d *Fingers* of the *Right Hand* on their proper *Holes*, and blow hard.—This is the *first Pitch'd-Note*, and you must keep your *Thumb End* in the *Hole* to these ensuing; viz.
B—*Up* the 1st *Finger* of your *Right Hand.*
C—*Up* the 2d *Finger* of your *Right Hand.*
D—*Up* the 3d *Finger* of your *Right Hand.*

Four *Pinch'd-Notes.*

The Scale


The Scale of Musick for the Flute.
Pinch'd-Notes.
F G A B C D E F G a b c d
Thumb
Left hand
Rt. hand
Flats, and Sharps.
B♭ C♯ D♯ E♭ F♯ G♯ A♭ B♭ c♯ d♭ e♭ e♯
Pinch'd-Notes.



By this *Scale*, you see how every *Hole* is *stopt*, and *opened*, in order to make any *Degree* in the *Scale* of *Musick*. Now it lies on your Part to put in Practice all the *Terms* and *Characters* belonging to *Musick*, in order to make you a good Proficient; always observing that the *lowest Note* on the *Flute* is F; and that what *Keys* are not in the *Compass*, must be *transposed higher* or *lower* to bring them into the *Bounds* of the *Flute*; which *Part* of *Transposition* you'll better understand when you've read the next *Chapter*.

Of *Flutes* there are many Sorts, as a *Consort-Flute*; a *Third-Flute*; a *Fifth*, and a *Sixth*, and *Octave-Flute*; yet all may be play'd by the foregoing *Rules*.

Scholar. *Why was this* Instrument *called* Flute?

Master. The *Latins* anciently called these kind of Wind *Instruments*, *Tibia*, and *Fistula*, which signified a *Pipe*, being their ancient and principal Wind *Instruments*; but how they were constituted and *play'd* on, 'tis not known. *Borrel* derives it from *Flutta*, that is, a *Lamprey*, call'd *Fluitando* in *Fluviis*, by reason the *Flute* is long, with *Holes* along it, like that sort of *Fish*.

The ancient *Flutes* or *Fistulas*, were first made of *Reeds*, and afterwards of *Wood*, and some of *Metal*, but how they were *blown* it does not appear.

Some

Some of the *first Flutes* had but very *few Holes*, and some had *none* at all; some were only *single Pipes*, and others were many *Pipes* join'd together.

We read, that *Pan*'s *Syringa* consisted of *seven Reeds* bound together Side by Side, having *no Holes* in any of them; yet they were all of *seven different Sounds* or *Tones*; which some will say were *tun'd* according to the *seven Letters* of our *Diatonick-Scale*, the *Octave* not being then found out.

Our *German-Flute*, is quite different from our *Common-Flute*, its End being stopt up with a *Tampion* or *Plug*, having a *Hole* about 2 or 3 Inches distant from the *End*, under which the lower *Lip* is applied, in order to *blow* it:—It is usually about 18 Inches long, and thicker towards the *Mouth-Hole*, than at the *lower End*; having *Holes* for the *Fingers*, as well as one for the *Mouth*; the lower *Hole* being *opened* by the *little Finger*'s pressing on the *Silver* or *Brass Key*, like those of the *Hautboy*, or *Bassoon*, &c.—The *Bass-Flutes* are double, or quadruple its Length and Thickness; but those kind of *Instruments* are partly laid aside, and converted into *Bassoons*, &c.

Thus, I the ORGAN *fully have display'd*
In all its Parts, *and how each* Part *is made:*
The Gamut-Scale, *I've fix'd on ev'ry* Key,
But, Diligence *must* Teach *thee how to* play.
The Violin's Notes, *I've mention'd, and the* Flute,
But, for the rest, at present I'll be mute.

CHAP.

CHAP. V.

Of the ſeveral Keys *in* Muſick, Natural, *and* Artificial: *and of* Tranſpoſition.

§ 1. *Of the* Two Natural Keys.

Scholar. SIR, *What is a* Key, *and what is meant by the Word* Key?

Maſter. A *Key* (in *Muſick*) is a certain Principal and *Dominant Tone*, which regulates every *Tone* elſe to a certain *Degree* or *Pitch* of *Acuteneſs* or *Gravity*; occaſioning every *Member* of the whole *Compoſition* to move in a true Decorum; and without which, every *minute Part* of the *Scale* would be nothing but *Confuſion*: For as every *Branch* of a *Sermon* depends on the TEXT given, even ſo every *Member* or *Note* of a *Compoſition* depends on this *Dominant Tone*, called the *Key*.

On this *Key* or *Tone* (I ſay) depends the *Air* and *Judgment* of the whole *Song* or *Compoſition*; and this is the PRINCIPAL TONE that *governs* all the reſt; and from which *Sound*, every *Diſtance*, above or below it, may be *Tunably* regulated, ſo long as this *Key*, *Tone*, or *Sound* is kept in Memory:—But when once the *Sound* of your *Key* is loſt, and confuſedly put out of Mind, then the Whole becomes nothing

thing but a Piece of noisy Jargon and Confusion. Like, as (in *Geometry*) the *Bounds* of a *Circle* depend on its *Point* or *Center*, even so (in *Musick*) does very *Member* of a *Composition* depend on its *Proper-Tone* or *Key*.

Scholar. *Sir, I thank you for this curious* Definition; *but pray tell me which is the* Key-Note.

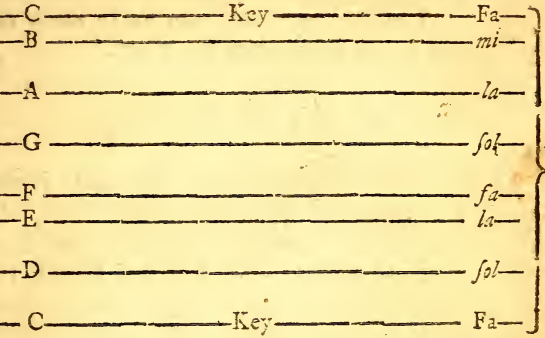
Master. The *Key-Note*, is the *last Note* of the *Bass* (which is the *Foundation* of all other *Parts*, be they ever so many;) all *Octaves* or *Eighths*, in the *upper Parts*, being counted the same in effect, &c. This *Key-Note* ending the *Song*, like a *Period* at the End of a *Sentence*; for when the *Sense* of a *Sentence* is *full*, nothing else is expected after it, &c.

Scholar. *How many* Keys *are there in* Musick?

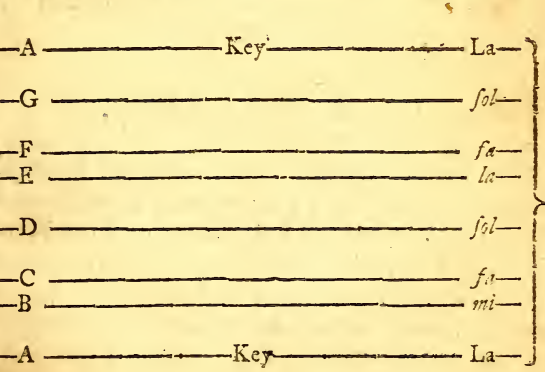
Master. There are but *Two*, which are call'd *Natural* or *Primitive-Keys*, viz. *C faut*, the *Natural-sharp* and chearful *Key*; and *A re*, the *Natural-Flat* and melancholly *Key*: So that no *Tune* can be prick'd down on any other *Key* whatsoever, but on these *Two*, without the placing of either *Flats*, or *Sharps* at the Beginning of the *Five Lines*, in order to change the *mi*, and regulate the *Natural-semitones* to the self-same *Order*: making all *Artificial-Keys* the same in effect as the *Two Natural-Ones*; the Nature of which you may see in the following *Table*:

An Example

An Example *of the* Natural-Order *of the* Natural-Sharp-Key. C,



An Example *of the* Natural-Order *of* A, *the* Natural-Flat-Key.



By these two *Examples*, you see the *Places* of the two *Natural-Semitones* in every *Octave*, either in the *Sharp-Key*, or in the *Flat-Key*.

Scholar. *Although you have given me these Examples of the* two *several* Keys *you before mentioned, I am still to seek in the true Understanding of 'em; not having so much* Skill *as to know the* Difference *of one Key; from the other.*

Of C *the* Sharp-Key.

Master. The *Difference* of the *two Natural-Keys* are known from the *First* third, the sixth, and the seventh *above* the *Key-Note:* —— Suppose your *Key* be C, as the *first Example*, count the Number of *Semitones* in the *First* 3d, *above* the *Key-Note*, saying, C, D, E; or *Fa, sol, la*; which is a *Major* or *Sharp-Third*, containing *Four Semitones*; and also the *Major* 6th of *Nine Semitones*; and the *Major* 7th, of *Eleven* Semitones.

Of A *the* Flat-Key.

But if your Key is A, as the *Second Example*, then is your *First* 3d *above* your *Key-Note*, A, B, C; or *La, mi, fa*; a *Minor* or *Flat-Third*, of but *Three Semitones*; and also the *Minor* 6th, of *Eight Semitones*; and the *Minor* 7th, of but *Ten Semitones above* the *Key-Note:* But the *Octave* is always the same again, in any *Key* whatsoever: You being *half* a *Tone* higher in the very *First* 3d of the *Sharp-Key*, than you are in the *Flat-Key*; and, this is the very Reason, one *Key* is called *sharp* and chearful;

and

and the other *flat*, soft, and mournful: The one being proper for solid and *grave* Subjects, and the other for Subjects more *chearful*, merry and sprightly.

(See the *Table* of *Semitones*, page 73.)

§ 2 *Of* Transposition, *of* the M I.

Scholar. *SIR I thank you for your* Diffinition *of the* two Natural-Keys; *but now desire you'll inform me how to* Transpose, *remove, or change them into any other* Artificial-Keys,

M I Transposed *by* Flats.

Master. To *Transpose*, or remove a Piece of *Musick* from off one *Key*, and to set it on another, *First*, you are to consider, that M I is the *Master Note*, and governeth all other *Notes* in *Regular-Order*, both *above*, and *below* it, and cometh but once in every *Octave*; your Natural *Sharp Key-Note* being the very next Degree *above* it, and your Natural *Flat Key-Note* the next Tone *below* it. -- and

Secondly, That the *Quality* of the M I-*Note*, is always *sharp* and chearful, and may be made *Flat*, by placing a *Flat* thereon, at the Beginning of the five Lines, which *Flat* changes the Place of *Mi* to the Quality of *la*: Then, if *la* be there fixed, *Mi* must of Necessity be Transposed four Notes higher (or five lower) to E, that the *natural Semitones* may be kept in Regular *Diatonick-Order*: This being called the *First Remove* by a Flat.

The *Second Remove* by *Flats*, is, to place another *Flat* on E (that is, on *Mi* by one *Flat*) and then A must be *Mi*, a 4th above, or a 5th below the Place where on it stood before: Then you have both B and E Flat.

The *Third Remove* by *Flats*, is to *flat* A, and then D is *mi*; you then having B, E, and A *flat*; and by this Method, you may by *Flats* artificially *Transpose* the *Mi* to any of the other *six Letters* in the *Scale* of *Musick*, 'till you hunt it home again to its primative Place: Observing, That,

From the last Flat, *on Line or Space,*
Four Notes above, *the* M I *hath Place.*

M I Transposed *by* Sharps.

To change *Mi* into *la* by *Sharps* on the five Lines, your *first Sharp* must be on F, and the *Mi* will be on F also: Your *Mi* being always with the *last Sharp*.

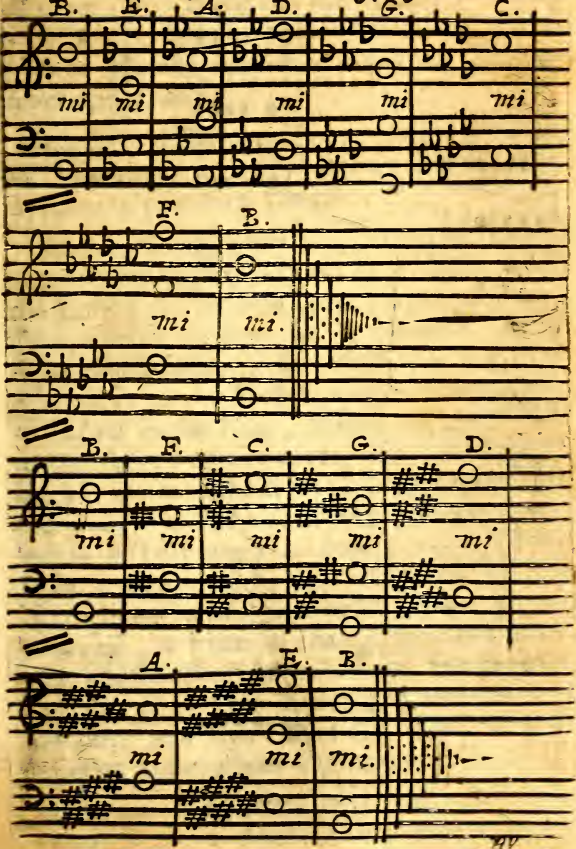
The *second Remove* by *Sharps*, is, to place a second *Sharp* on C, a 5th *above*, or a 4th below the Place of *Mi*, and then will C be *Mi*; you having both F, and C *Sharp*.

The *Third Remove* by *Sharps*, is, to place a *Sharp* on G, and G will be *Mi* also; you then having F, C and G *Sharp*, and by this Method, you may artfully by *Sharps* place the *Mi* on any of the other *six Letters*, or the Scale, 'till you chase it home to its first primative Seat, &c. —Observing that,

When that by Sharps *the* Mi-Note *doth remove,*
Last Sharp, and *Mi,* are both *five Notes above.*

A

A Table of Mi-Transposition.



By this *Table*, you see the *Place* of the *Mi*, on all the *seven Letters* of the *Scale*, both by *Flats*, and *Sharps*; which *Mi-Note* Transposeth all other *Notes* in *Regular-Order* both *above* and *below* it, the same as they were in the *ancient Scale* of *Musick*; only they stand on Different *Lines* and *Spaces*.

Scholar. *Why was* Transposition *of the* Mi &c. *invented*; *or*, *why may not* Mi *be always kept in its* primitive Place?

Master. *Transposition* was contrived to bring every Composition, as near as possible, within the Limits of the *five Lines*; by reason many *Tunes* cannot be kept in such bounds, nor yet to be practicable, neither by *Voices*, nor by *Instruments*: —— For, suppose a *Sharp-Key*, in *C-sol-faut* in the *Tenor*, should rise eight Notes to the *Octave* or *Key above*, how could they be prick'd down without two *Ledger-Lines* above the *five*; or, how could any *Voice* perform it, unless I Transpos'd it *lower*? —— Then, if I set a *Sharp* on F, and place my *Key* four Notes lower on G, and prick down all other *Notes* of the Piece in their regular distance, *above* and *below* it, it will stand better in the Compass of the five *Lines*, and more easie for the *Voice*, and Eye: And this is the very Reason that *Transposition* was invented.

Scholar. *Many there are, who object against the* last Remove *of your* Table *by* Sharps (*where* E *is* sharp'd, *and becomes* Mi;) *and say, That*

Remove *is farther than the* Rule *will bear, and that there is no* Places *for the* two Semitones, *by reason* fa *should not be* sharp'd.

Master. I was once so ignorant myself, and even so confident as to assert it, by the ill Example of others; but since, by *Study* I know better, let me ask those who object this *Remove,* these two *Questions, viz.* 1st. *What Difference is there between* E Natural *and* F Natural? To which must be answered, *Half a Tone:* — and 2dly, *What Difference is there between* E Sharp, *and* F sharp? To which again must be answered, *Half a Tone*: which *Questions,* I think are sufficient to prove the *RULE,* to be as good even to the last, as it was at the first setting out.

§ 3 *Of* Transposition *of* Keys.

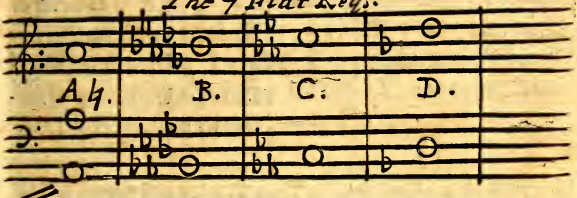
Scholar. *SIR, I return you hearty Thanks for your curious* Remarks *and* Instructions, *by which I understand the true Nature of the* Two original Keys, *whether* Sharp *or* Flat; *and also the* Transposition *of the* Mi-Note, *so as to make them* Artificial: *I now beg the Favour of* an Example *of the whole together by* Notes.

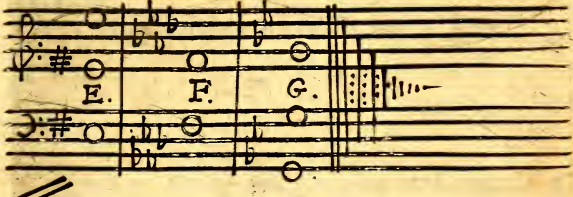
Master. Your demands are much to the Purpose. Therefore I shall grant your Desire, and shew them both *Flat,* and *Sharp,* as follows.

Example

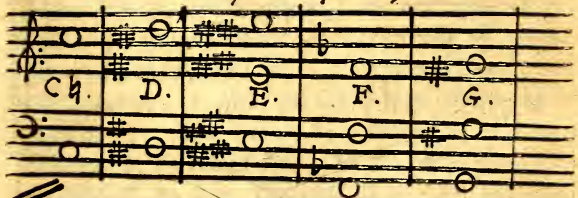
Example of all the 14 Keys.

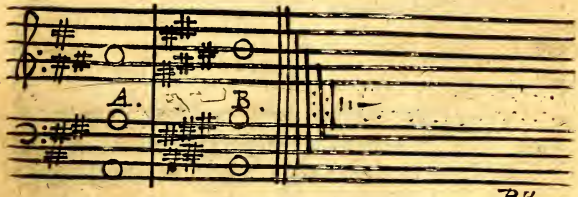
The 7 Flat Keys.





The 7 Sharp Keys.





Example of all the 24 Keys.

By these two *Examples* you see how every *Artificial-Key* is Founded, according to the *two* original *Natural-Keys*; which when rightly *sol-fa'd* according to the *Transposition* of the *Mi*, will be the very same in Effect, though the *Key* be higher, or lower. —— For,

Tho' Fourteen Keys *I've written here in View,*
Those, in Effect, are but the same as Two.

Scholar. *Being one Evening in Company with some* Psalmodists, *who were Busy in looking over* New Pieces *of* Musick; *one amongst the rest, pull'd out a* new Book, wherein *the Word* Anonimous *adorn'd the head of many Pages, on one particularly, I saw an* old Tune *strangely disguis'd, its* Key *being* G, *with* no Flats, *nor* Sharps *at the Beginning*; *but the* half-Tones *were reconciled to the* Natural-Key *by* accidental Flats *and it Ended* sol. ——

This Author *they extol'd very much, and render'd him really very famous; pray give me your Opinion about that* Piece *of* Musick.

Master No Man, that has any Judgment in *Musick*, will ever agree that such a *Lesson* can be right; by Reason the *last Note* is neither conformable to the *Natural-Flat-Key*, nor yet to the *Natural-Sharp-Key*, it *ending* neither in *La*, nor yet in *Fa*.

Therefore, it is either ignorantly done for want of Judgment, or else only to puzzle the *Practitioner*: For every *Key* ought to be founded by *Transposition*, according to one of the *Two Natural* Ones.

"*Sum melior audio increpatio sapiens;*
"*Quam ut audio canticum stolidus.*
"It is better to hear the Rebuke of the Wise;
"Than for a Man to hear the Song of Fools."

Ecc. vii. 5.

Scholar. *Some* Tunes *I have also seen, in several* Parts, *wherein* the Mi *in one Part is* Transposed by *Flats*, and in other Parts, *by* Sharps; *pray tell me, if that be right or not, the* Mi *in each* Part *be on one and the same Letter.*

Master.

Master. That I have often seen done for Curiosity Sake, only to *disguise* the Piece, and puzzle the Performer; and tho' such Parts may be perform'd by *Voices*; by reason, *Voices* are conformable to *one Pitch*, yet, it will not do for *Instruments*; —— For Instance, Suppose your *Key* is E, with a *sharp-Third*, and your *Mi* is on D in the *Bass*, by *Sharps*; and also on D, in the *Tenor* or *Upper-Part* by *Flats*; Then is the *Key-Note* of your *Tenor* or *Upper-Part*, a *Semitone* lower, than the *Key-Note* of your *Bass*; tho they both End on one *Letter*: By reason, E in the *Tenor* or *Upper-Part*, must be play' *Flat*, and E in the *Bass* is play'd natural. —— You'll find an *Example* for this, set for a President, in a *Tune* of mine to *Psalm* 21, in my *Universal Harmony*; which will not do for *Instruments*, unless all *Parts* are *Transposed* one way, as I before hinted.

Objections *against* sol-faing.

Scholar. *I am told by many* old Singers, *and also by many* Instrumental-Men, *That you give me and all your* Scholars *else, a deal of unnecessary trouble, in obliging me to* sol-fa *every* Note, *according to the* Transposition *of the* Mi; *and they also tell me, That I need not call every short minute* Note, *in the* Natural-Keys; *but only call all* Ty'd *or* slur'd-Notes, *by the Name of the first* Note; *pray give me your Oppinion about that.*

Master. I know that all *old Singers* hate to hear others perform what they never could attain to; and *Fidlers* what they never learnt: But let me assure such old *vocal Practitioners*, that they were bred up in the dark, and will ever remain so, so long as they harbour that conceited Opinion; For can any *Tone* move so smooth by a *false Name*, as with its *Natural Name?* No, this turns the *Scale* of *Musick* Topsy Turvey, and confounds the very *First Rudiments:* besides, when any Person thoroughly knows the *Natural-Order* of the *Scale*, how easy is it to keep the regular *Course* of *Notes* according to it, altho' they stand on contrary *Lines* and *Spaces*; by which Method, every Person learns every *Piece* of *Musick Note by Note*, and by the very same *Names* as if they were always set in the *Natural-Key*.

As to *Instrumental-Men*, I have often heard them say, their *Lesson* was F *sharp*, or B *flat*, &c. meaning that such *Letters* were *flatted* or *sharp'd* at the *Beginning* of the five *Lines*; and that they always observ'd to *play* such *Letters flat* or *sharp*, &c. and that it was enough for them to Observe; and therefore, they thought any other Method useless, without having any Regard to either *Key* or 3d; nor even so much Judgment as to know one *Key* from another. — Thus for want of a true Knowledge of *Keys*, *Sol-faing*, and *Transposition*, &c. Conceit leads them into Error; not regarding the *First Rudiments* of *Musick viz. Sol-faing*; which is *The CHIEF REMINDER of the First Principles of Song*

Tones

Tones *moſt to be Regarded.*

Scholar. *Sir, are there any* Remarkable Tones *in the* Scale *of* Muſick, *more to be regarded than others, whereby I may keep my* Voice *in the* Air *of the* Key, *when the* ſol-faing *of which is made difficult by* Tranſpoſition *?*

Maſter. Yes, there are ſome particular *Notes;* which being well regarded, ſerve in a great Meaſure as a *Guide* to keep in *Tune* on all the reſt, *viz.* The *PRINCIPAL TONES* are the *Key-Note,* and the *Mi,* which cauſes it to be either *Flat* or *Sharp,* &c. — Some there are who have only regard to the *Mi*; but as that comes but once in an *Octave,* I think it requires not ſo much Atrention as *Fa,* which comes twice in an *Octave,* which *Tones* muſt always be ſunk or *Feinted,* whenſoever you hit upon them, or elſe you immediately looſe the *Air* of your *Compoſition*; for *fa* is to be regarded in your *Flat-Third,* to keep you in the *Air* of the *Flat-Key :* and in like Manner muſt you regard *la* of the *Sharp-Third,* which keeps you in the *Air* of the *Sharp-Key* alſo; for which reaſon, ſuch *Tones* ought always to be kept in Memory.

Firſt, have in Mind your proper-Key,
And Mi, *that doth all* Notes *elſe ſway :*
And well regard your Sharp-Third's La,
And not forget your Flat-Third's Fa.
Mind well your Sixths, *and (I preſume,)*
You'll always keep both Air, *and Tune.*

CHAP. VII.

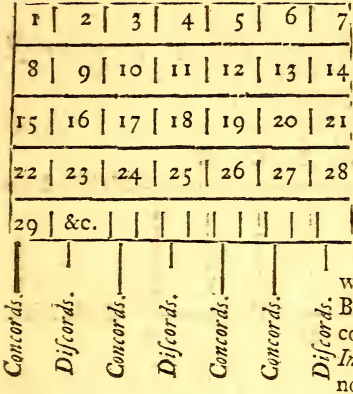
Of the several Intervals, Concords, *and* Discords: *and how to* compare *one* Part *of* Musick *with another.*

Scholar. WHAT *Distances or* Intervals, *are called* Concords, *and what are* Discords; *and why are they so called?*

Master. Concords are such *Intervals* as are *Tuneable* and *agreeable* to each other; that is, when *two* (or more) different *Tones* sound together, so as to be *Harmonious*, and Delightful to the Ear, &c. such as the *Unison*, 3ds, 5ths, 6ths and their *Octaves, perfect*, and *imperfect*. *Discords*, are such *Intervals* as are *untuneable*, jarring, and *Disagreeable*, such as a 2d, 4ths, 7ths, and their *Octaves*, &c. both of which are either *Simple* or *Compound*.

A TABLE

A TABLE *of all the* Intervals *in* Muſick.



A *Simple Interval*, is without Parts or Diviſions. But A *Compound Interval*, conſiſts of ſeveral Leſſer *Intervals*. The *Uniſon* is not an *Interval*, becauſe it is but *one ſound*.

What Cord *ſo'e'er you pleaſe to name,*
An Eight *to that, is deem'd the ſame.*

To *compair* ſeveral *Parts* of *Muſick* together ſo as to know the *Interval*, whether *Concord*, or *Diſcord*; you muſt firſt take the *Letter* whereon any *Note* ſtands in any one *Part*, and *compair* it to the *Letter* of the *Note* againſt it in another *Part*; and count the *Diſtance* from one to the other, according to the *Scale* of *Muſick*; by which you may know how many *Degrees* a *Note* in one *Part*, is different from any *Note* in another Part; and what *Interval* it is, whether *Concord* or *Diſcord*; and alſo what *Nuuuber* of *Semitones* each *Interval* contains; and whether the

the *Cord* be *Major*, or *Minor*, or *Perfect*, or *Imperfect*, &c. often having recourse to the *Table*, on Page 73.

Example of Two Parts *compared together.*

If you take the *Letters* of this *Example* and prick them down in *Notes* on the five *Lines*, in their *proper Places*, in *Two Parts*; you'll then see how many *Parts* may be compared together.

When Parts *together you* compare,
Consult how many Half-Tones *are*
In ev'ry Cord: *which will Expreſs,*
To you the Greater, *and the* Leſs.

CHAP.

CHAP VIII.

Of Theory *in General: or,* A Philoſophical Demonſtration *of* The Nature of Sound; *and of the* Racios *and* Proportion of *Practical* Intervals, &c.

Scholar. WHAT *is* Sound?

Maſter. Sound, is the Reverbation, or Modulation of *Air*, being the *Object* of Muſick.

Scholar. *What is* Air?

Maſter. Air is that *Fluid* or *Element*, in which we move, breath and conſiſt, compoſed of ſmall Springy Particles, which give way to the leaſt Impreſſion made on them; which Particles move freely one among another; for which Reaſon, it is known to be a *Fluid*; and every Force that preſſeth upon *Air*, preſſeth at the ſame Time, in all manner of Directions: —And as the Preſſure increaſeth, ſo does its Denſity; as is evident, of *Air* forced into a Bladder, for the more it is forced, the more denſe it is; and as it decreaſes, it expands itſelf again, in all manner of Directions. — The force that preſſeth common *Air*, is the Weight of the *Atmoſphere*

moſphere (that is, the *Clouds*, *Rain*, &c.) and the Spring of the *Air* is equal thereunto; by Reaſon they always Ballance each other, and produce equal Effects, &c. &c.

Scholar. *You ſay that* Air *is the* Object of Sound, *pray tell me the* Generative Part *thereof?*

Maſter. The *Generative Part* of *Sound*, is that which produceth *Sound*, and bringeth it forth; and that is *Motion*, *by Colliſſion*; or a Body's ſtriking againſt the *Air*, which cauſeth *Sound*; and this *Sound* is more *grave*, or *acute*, according to the Force and Magnitude of the Body that ſtrikes againſt it; this being that which conſtitutes different *Tones*, &c.

Scholar. *What is the* Support, *and* Continuation *of* Sound?

Maſter. All *Sound* is ſupported and carried diſtant by the *Medium* or *Air*, which is called, *The Sphere of Activity*, *The Element of Sound*; or *The Element of Muſick*; and ſo far as the *Medium* paſſeth, ſo far paſſeth the *Motion* with it; and when the *Motion* ceaſeth, then muſt the *Sound* ceaſe alſo. —— But if it meets with any Hinderance in the Way which it paſſeth, it ſtrikes and ſhakes at every Obſticle it meets, making *Ecchoes* and *Sounds* according to the Nature of the Obſticle: But if it meets with no Hinderance as it paſſeth, then it paſſeth into the *Sphere* of the *Air* or *Medium*, according to the Force of the *Sonorous-Body* or *Sounding-Body*.

Body; (which Body is the *Center*) moving in a certain Degree of *Velocity* or Quickneſs; and from this very *Principle* all *Tones* are deduced.

And as all *Sounds* move in a *trembeling* or *vibrating Motion*, the *Difference* of *Tone* appears to be no other than the Different Volocity or Quickneſs of the *Vibrations* of the *Sounding-Body*; it being proved, that the ſmall Vibrations or Tremblings of any *Cord* or *String*, are all perform'd in *equal Times*; and that the *Tone* of the *Sound* (which continues for ſome Time after the Stroke is given) is the very ſame from firſt to laſt; whoſe Vibrations are ſupported by the *Air* or *Medium*.

From this very *Principle*, ariſes what we call *Concords*; which are nothing elſe but the frequent *uniting* of the *Vibrations* of two *Sounding Bodies*, and of the *undulating Motions* of the *Air* occaſioned thereby; and that *Diſcords* are the reſult of the leſs frequent *Unitings* of the Vibrations, &c.

Scholar. *How many Ways is* Sound *to be conſidered?*

Maſter. *Sound*, with regard to *Muſick* is to be to conſidered *two Ways*, viz. *Simple*, and *Compound*. —— A *Simple Sound*, is the Effect of a ſingle Vibration, or of ſo many Vibrations as are neceſſary to excite in us the Idea of *Sound*; that is, the Product of one *Voice*, or of one *Inſtrument*,

strument, &c. —— A *Compound Sound*, consists of *several Sounds* proceeding from *several* distinct *Instruments* or *Voices*, all uniting in the same individual Time, and Measure of Duration; that is, all striking on the *Ear* together, be their Differences as they will.

And as the several *Degrees* of *Tune* are Proportional to the *Number* of the *Vibrations*, even so are the *Vibrations equal* or *unequal*, *swift* or more *slow*, according to the Nature and Constitution of the *sonorous Bodies*: The Vibration or Tremblings of such *Bodies* being by which all *Sounds* do proceed, and arrive from a certain *Pitch* or *Tension*, either *grave* or *acute*; according to the *Greatness*, and *Tension* of the *sounding Body*.

From what has been said, it appears, that the whole *Theory of Musick* proceeds from the Vibrations, Oscillations or Tremblings of the *Sonorous-Bodies*, and also the *Proportion* of *Sound*; for what Bodies or Sounds are more *Acute*, the more *Swift* are their Vibrations; and those more *Grave*, their Vibrations are more *Slow*, &c. Therefore the *First Principal*, by which the Nature of *Harmonical Sounds* was found out, was by the *Measure* and *Proportion* of the *Vibrations* of the *Sonorous-Body*; each *Note* of *Tune* being made by a certain Measure of the Velocity of the *Vibrations*: I mean, That such a certain Measure of *Courses* and *Recourses* doth in such a certain Space of Time, constitute or appoint such

such a certain determinate *Tune*; and that the *Continuance* of *Sound*, even unto the last, dependeth only on the *Equality* of the *Time* of its *Vibrations*; as may be observed by a *Wire*-String after it is struck; which was first observ'd by *Pythagorus*, &c. and this is what brings *Harmony* under *Mathematical Proportions*. — See *The Doctrine of Pendulums*, p. 41.

Scholar. *Sir, I return you Thanks for your* Diffinitions *of* Air *and* Sound, &c. *but now desire you'll say something concerning the* Proportion of Sound.

Master In the *last Chapter*, I gave you a TABLE all *Concords* and *Discords*; and on *p.* 73, I shew'd you what *Number* of *Semitones* each *Interval* included: But to find out their *Proportions*, you must first find out their *Numbers*, and then examine the Cause, why some are *pleasant*, and others *unpleasant*, of which the *Ear* is the umpire.

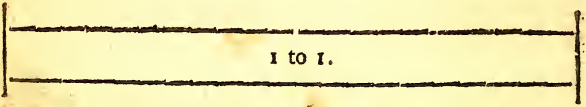
Proportion *of* Concords, &c.

First take two *Musical Strings*, of an equal Length, and stretch them to an equal *Tension* or *Tightness*, and then strike them both toge her, and they will *vibrate* in *equal Times*, both *Course* and *Recourse*, in the Nature of a *Pendulum* till they rest: for when *two Strings* are in exact *unison* to each other, one will *vibrate* to the other tho' untouch'd: Or if you lay a Straw

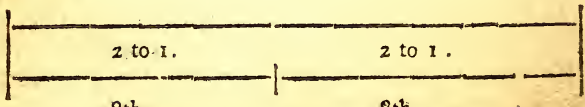
on

on one and ſtrike the other, if it be in *uniſon* to it, it will vibrate and ſhake the Straw off, and alſo ſound the *Tone* of the other String. — And becauſe theſe two *ſound* ſo perfect to each other, they are call'd *Uniſon*; the *Racios* of their *vibrations* being even both *Courſe* and *Reſourſe*, and called 1 to 1, becauſe each Motion, or Particle of Sound ſtrike on the *Ear* both together.

UNISON.



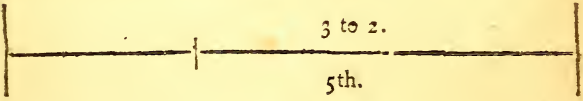
8th. The next *Concord*, is the *Eight* (being the next *Racio* or *Proportion* in whole Numbers, which is found by Doubling or taking but one half of the String, by dividing it into *Two Parts*, and Placeing a *Bridge* in the Middle: This will produce an *Eighth* to the *whole String*, whoſe *Racio* is called *Dupla*, or *Double-Proportion* to its *Octave*, by reaſon each Half of the *String* vibrates *two Courſes* in the ſame Time as the whole String does *one*, it being *Racio* or Proportion as 2 to 1.



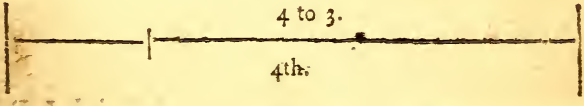
All

All other *Proportions* are found by dividing the *Octave* into the other *mean Rations* that are included in it, &c.

Fifth. The next *Concord* is the *Fifth*, which is found by dividing the *Chord* into *Three Parts*, and placing a *Bridge* to take of one third; then will the two thirds of the *Chord* produce a *Fifth* to the Whole; and vibrate *Three Courses*, to *Two* in *Dupla-Proportion*, and *unite* every third *Course*; which *Racio* is called *Sesquialteria-Proportion*, or 3 to 2.



Fourth. The next *Cord* is the *Fourth*, being found by dividing the *Line* into Four equal Parts; and by stoping off one fourth with a Bridge: Then will the three fourths of the Line, produce a *Fourth* to the whole Line; and unite every fourth *Course* of its *Vibration*. This is called *Quadruple-Proportion*, whose *Racio* is 4 to 3; by reason it vibrates *four Courses*, in the Time of *Three* in *Sesquialteria*.



Third'ly. Then take another *uniting String*, and divide that Part as was stopt off to make the *Fifth*,

Fifth, in two equal Parts, and it will give the *Greater-Third* to the open Spring, and its Motions will unite every *fifth Course*: Its *Racio* is 5 to 4, by reason it vibrates *five Courses* in the same Time as *Four* in the *Racio* before it.—By this you may easily conceive the *Lesser* or *minor Third*, whose *Racio* is 6 to 5, its *Courses* uniting every *sixth Course* of its vibrations; i. e. *Six Courses* in the Time of *Five* of the *Greater Third's* Motions.

N. B. That all *Racios* that are within the Number Six, are *Concords*, &c.

Sixth. The *Major Sixth* is within the Number of *Concording Racios*, and in *Racio* 5 to 3; and vibrates five *Courses* in the Time of three, meeting every 5th *Course* of its vibrations.—And altho' the *minor Sixth* is not within the Number Six, yet it is a far better *Cord*, by reason, when joyned with the *Octave*, and *Fourth* from the *Unison*, it hath the *lesser Third* to one, and the *greater Third* to the other; their Motions uniting accordingly, whose *Racio* is 8 to 5, and the Complement of 6 to 5, to the *Octave* or *Eighth*, &c.

A TABLE

A TABLE *of all the* Intervals *contained in the* Syſtem *of* Diapaſon *or* Octave; *with the Number of* Semitones *in each* Interval; *and their* Ratios; *being* The whole Syſtem of Harmony.

Semitones.	*Intervals* Names.	*Ratios.*
—12	A *Diapaſon, Octave,* or *Eighth* —	2 to 1
—11	A *Semidiapaſon, Sept.-Major,* or A *Greater Seventh*	15 to 8
—10	A *Sept-Minor,* or *Leſſer Seventh* —	9 to 5
—9	A *Hexachord-Major,* or *Greater Sixth*	5 to 3
—8	A *Hexachord-Minor,* or *Leſſer Sixth*	8 to 5
—7	A *Diapente,* or *Perfect Fifth*	3 to 2
—6	A *Semidiapente,* or *Minor Fifth* / A *Tritone,* or *Greater Fourth*	45 to 32
—5	A *Diateſſaron,* or *Perfect Fourth* —	4 to 3
—4	A *Ditone,* or *Major Third*	5 to 4
—3	A *Semiditone,* or *Minor Third*	6 to 5
—2	A *Tone,* or *Major Second*	9 to 8
—1	A *Semitone,* or *Minor Second*	10 to 9
—	A *Uniſon,* or *One Sound*	1 to 1

(*See the* N. B. *on Page* 62.)

Hence it is, that the *Vibrations* of a *Chord* or *Muſical-String* truely repreſents the *Motions* of a *Pendulum*, as I before hinted. Now, if you take a *Wire*, or *Muſical-String*, and fix one End on a *Center*, and hang a Weight at the other End to hang as a *Pendulum*, and when it hangeth ſtill, gently ſtrike the *String* with a bit of *Wire*, ſo as not to move the Weight, the *String* will

will *Tremble* or *Vibrate* in *equal* Spaces of *Time*, in the very Nature of a *Double-Pendulum* so long as it *Sounds*; extending itself widest in the Middle, according to the *Figure*: A B

Here you have both a *Musical-String* and a *Pendulum*, all in one; whose *Vibrations* constitute both *Time*, and *Proportion* of *Sound*: And this is the very PRINCIPAL, and Reason that *Musick* comes under *Mathematical Proportions*, both in *Time* and *Tune*, &c.—Thus by a larger *Weight* you may make your *Tone* more *acute*, which will make the *Vibrations* more *swift* accordingly; and so on to what *Tension* you please.

Thus have I laid down all the most useful and *Natural Grounds*, *Ratios*, and *Proportions* of *Harmony*, which proceeds only from the *Vibrations* of the *Courses*, and *Motions* of the *Sonorious-Bodies*; which *Motions* determine both *Time* and *Tune*; and also render each *Sound* more or less *Pleasant*, according to the frequent *uniting* of their *Courses* as they fall on the *Ear* together; from which we distinguish both *Concord*, and *Discord*, *Concord* being nothing but the frequent *Motions* falling on the *Ear*, at the same Time, and *Discord* is when they seldom or never meet whose

whoſe *Ratios* are innumerable, by reaſon of their *croſs Motions*, &c.

As to other Matters that are partly uſeleſs in *Practical Muſick*, I ſhall herein omit; leaving that to the *Criticks* and *Hair-Splitters* of our Age to determine; and ſo conclude this *Chapter*.

Thus, by Diviſion of a Line,
We Meaſure SOUND, *as well as* Time:
Whoſe trembling Motions *we do ſum,*
Like as thoſe of the Pendulum.

For by Experience it is found,
That Motion *is the* Source *of* Sound;
Not without Air: — *(it doth appear)*
For Air *conveys it to the Ear.*

Air, *like a circling Wave i'th' Ocean*
Expands itſelf at every Motion;
But when that Force *is ſpent,* Air *then*
Returns itſelf to reſt *again.*

Concord *is form'd, it doth appear,*
When various Sounds *meet on the* Ear:
But when they in croſs Motions *move,*
Your Sound *does then* Diſcordant *prove.*

Now what is uſeful I've expreſt: —
Let Study then compleat the reſt.

CHAP. IX.

Of Practical-Musick *in General: containing the* RULES *of* Composition, *according to the most Authentick* Authors, &c.

§ 1. *The* Allowed Passages *of* Concords, &c.

RULE I.

WHEN the *Notes* of one *Part* standeth still on *one Sound*, and the *Notes* of another *Part moves* to various *Sounds*; the *Moving-Part* may move to any *Sound* that maketh *Concord* to the *Standing-Part*. Thus: —

N. B. That whensoever any *single Cord* is named, its *Eighths* or *Octaves* are also meant.

RULE. II.

When the *Notes* of *Two*, or more *Parts stand* you may take as many *Concords* of *one Sorts*, as you please. Thus: ———

RULE. III.

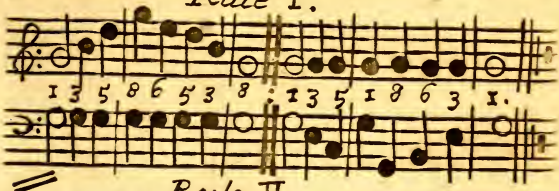
You may not take *Two Fifths*, nor *Two Eighths together*, neither *Rising* nor *Falling*, unless one be the *Minor*, and the other the *Major* Fifth, as Thus: ———

RULE IV.

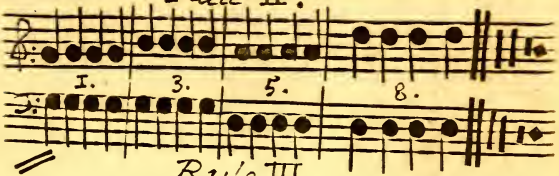
You may take *Two* or more *Major Sixths*, or *Sixths* of different Kinds together either *rising* or *falling*, either by *Degrees*, or *Leaps* Thus: ———

RULE,

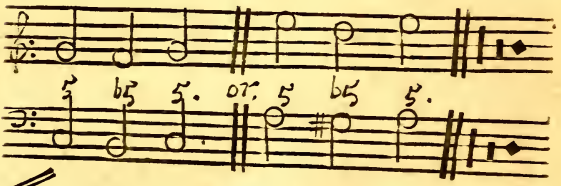
Rule I.



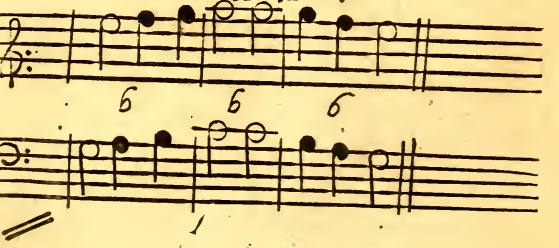
Rule II.



Rule III.



Rule IV.



I told

I told you in RULE III, that *Fifths* and *Eighths*, &c. were not to be taken together, neither *Riſing* nor *Falling*; which may not be done by any means in *Two Parts*, by Reaſon they will cloy the Ear: But two *Fifths*, or two *Eighths* (and no more) may be taken together in *Three*, or more *Parts* (when it cannot be well avoided) rather than ſpoil the *Air*; but then ſuch *Fifths*, or *Eighths* muſt be covered by an *higher Part*, and the *Piece* muſt be never performed in fewer *Parts*, but to have them covered.—The like is to be underſtood of *Fourths*, by reaſon, in *Canon* of *Double-Deſcant*, they will in the *Reply*, become *Fifths*.

RULE. V.

You may uſe as many *Thirds* as you pleaſe, either *Riſing*, or *Falling*; by *Degrees*, or by *Leaps*, if one *Third* be *Minor*, and another the *Major*: But two *Major Thirds* together are not good nor allowable, unleſs it be juſt before a *Cloſe*; or in ſuch Places where it cannot be well avoided.

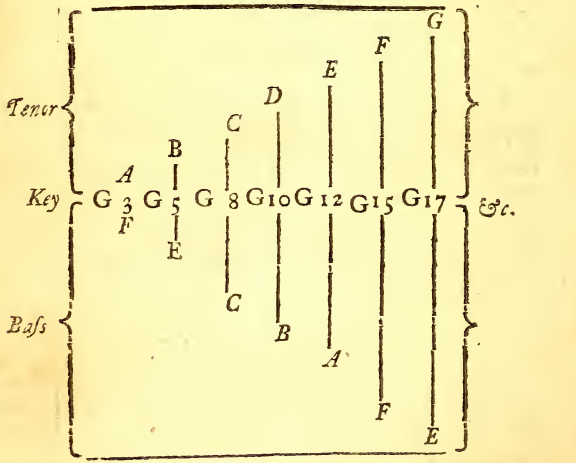
RULE. VI.

When two *Parts* move Gradually by *Contrary-Motion*, (that is, one *Part Aſcending*, and the other *Deſcending*) the *Notes* in one *Part* may be ſo broken or divided, whilſt the other *Part Stands*, ſo as to *Sound* no *Diſcord*, &c. as the *Compoſer* alone pleaſes.

By this RULE, you may pass, by *Contrary-Motions*, from any one *Concord* to another, either by *Degrees*, or by *Leaps*; I mean, when the *Upper-Part-Rises*, and the *Lower-Part-Falls*; —— Or, when the *Lower-Part Rises*, and the *Upper-Part-Falls*.

Suppose, your *Key* is G, and your *Upper-Part-Rises*, and the *Bass-Falls*, &c. Then you may move each *Part* accordingly to this *Scale*, by Way of *Letters*.

Allowed Contrary-Motions.



By this *Scale* you see the various Movements of *Contrary-Motions*, from any *Concord* whatsoever: ——

This

This RULE being meant *backwards*, as well as *forwards*; and to move from any *Concord* elſe, as well as from the *Uniſon*, &c.

§ 2. *The* Uſe *of all* Concords.

The *Uniſon*, is ſo *Conſonant*, and *Perfect* a *Sound*, that if ever ſo many *Sound* together, the Ear cannot Diſtinguiſh them to be but as *one* and the ſame *Sound*; only the *Sound* is more Strong.—It may be uſed at the *Beginning* of *Strains*, and alſo at the *Concluſion*; and as oft in the *Middle* of a *Compoſition* as the Compoſer alone thinketh fit.

The *Third*, is a *Concord* that yieldeth great Variety to the Ear, and is properly called, an *Imperfect Concord*.—— It may be uſed in any *Part* of a *Compoſition*, to render *Perfect Cords* more *Sweet*, when they follow it, *&c.*

The *Fifth*, is a very ſweet, pleaſant, and *Perfect Concord*: *Two* of which are *Not allowed* to be taken together, neither *Riſing* nor *Falling*, (unleſs cover'd by *another Part*) by reaſon they cloy the Ear.——It may be uſed in any *Part*, or *Place* of a *Compoſition*, and moſtly to *follow* other *diſagreeable Intervals*, that are not ſo much affecting.

The *Sixth*, is an *Imperfect Concord*, and is more like a *Discord*, in Quality, than any other *Concord* whatsoever; and is Compounded of a *Third* and *Fourth*; for which Reason, it ought to be carefully used. —— *Sixes* of different Kinds may be taken *together*, either *Rising* or *Falling*, either by *Degrees* or by *Leaps*; or be mixed with other *Perfect Concords* in any *Part* of a *Piece* of *Musick*; but never to *Begin*, nor yet to *End* with. —— In *Four Parts*, the *Sixth* may take the Place of the *Fifth*, on all *sharp'd Notes*; or otherwise when the *Fifth* is omited. The *Sixth* is of singular Use to render other following *Perfect Cords* more sweet and melting; and may be properly called a *Middle Concord*, &c.

Of the *Eighth*, or *Diapason*.

The *Eighth*, is the *First* and *Principal* of all *Concords*; not only because its Sound is *Perfect* and *Pleasing*, but that it is *The Whole System of Harmony*, and containeth all other Lesser *Intervals*; and that all other *Intervals* agree with it, if they do not agree with each other; and being added to itself, it still produces *Concords*. —— It may be used in any *Part* of a *Piece* of *Musick*, either to *begin* with, or elsewhere in the *Middle*, being mixed with *Imperfects*, &c. but no *Cord* so proper to *conclude* with: and may properly be called, *The Period of Harmony*.

RULE

RULE. VII.

☞ You may paſs from an *Eight* to a *Fifth*, or from a *Fifth* to an *Eighth*, when the *Upper-Part* either *Riſes* or *Falls* but *one Degree* (and not otherwiſe.) Thus:

Example *allowed.*

Tenor	—	G	A	——	A	G.
		8	5		5	8
Baſs	—	G	D	——	D	G.

Thus have I ſhewed all the *Allowed Paſſages* of all *Concords* included in the *Diapaſon*; ſo that what ever *Double*, or *Triple Concords* are *above*, or *below* it, are only a Repetition of the *ſingle Cords* over again; by Reaſon, every *Eighth* or *Octave* is counted the very ſame, *&c.*

§ 3. *Of* Paſſages *Not allowed.*

You may not Paſs from a
- 1 to a 1
- 1 to a 3d
- 3d to a 1
- 3d to a 5th
- 5th to a 3d
- 5th to a 8th
- 8th to a 5th
- 6th to a 5th

} If the *Upper*, and *Under-Parts* both *Riſe*, or *Fall* by *Leaps*.

You may not Paſs from a
- 6th to a 8th
- 8th to a 6th

} If the *Upper-Part Riſes* or *Falls* by *Leaps*, and the *Under-Part Riſes*, or *Falls* the ſame way by *Degrees*.

Nor from an 8th to an 8th—by *Degrees*, nor by *Leaps*.

§ 4. *Of* Consecution, *by* Transition.

A *Consecution*, is when *Cords* of the *same* kind follow one another; — which are generated by *Transition*. i. e. by *moving* by *Degrees* from one *Note* to the other, to molifie the Harshness of a *Leap*; for every *Dissallowance* doth end either in the *Fifth*, or in the *Eighth*; according to the following *Example*. ———

By this *Example* you see that *Transition*, or *breaking* of *Notes* begets a *Consecution* of *Perfects* of one Kind, by both *Parts* moving one way.

Hence it is, that if the *Upper-Part* moves but by one *Degree*, and the *Bass* by Leaps, that no *Dissallowance* can happen; (only as the *Passage* from the 6th to the 8th) unless it be set on Purpose, &c.

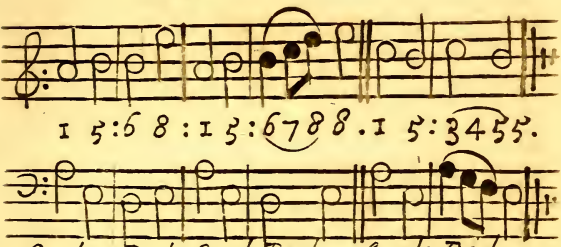
From this, it appears, That *Degrees* are the propereſt *Movements* for the *Upper-Parts*, and *Leaps* for the *Bass*: But if you make a Disorder in your *Movements*, then will that *Disorder* soon generate a *Consecution*: But that which is *Natural*, cannot be displeasing, and this, I think is sufficient to shew what we call *Inharmonical*, and how such *Passages* may be avoided.

§ 5. *Of* Taking Discords.

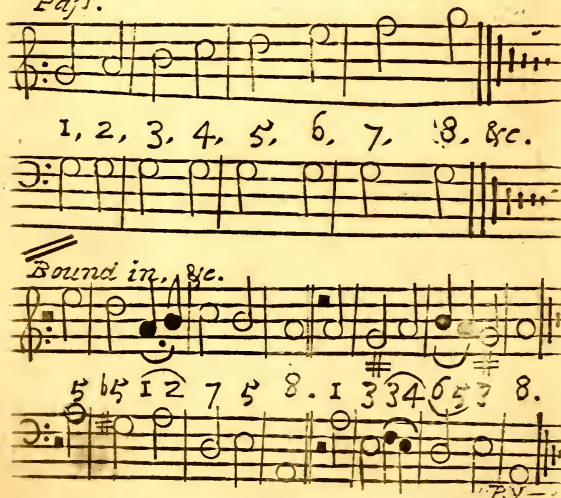
When *Discords* are concern'd as well as *Concords*, then is the *Descant* called *Figurate*. *Discords* are admitted into *Composition* two Ways, *viz.* by way of *Pass*, and by way of *Binding*; according to this *Example*. ———

Example

Example of Tranſition.



Example of taking Diſcords.



By

By this *Example*, you see how *Discords* are taken by *Pass*, i. e. when *Parts* make a gradual *Transition* from one *Concord* to another; which may be *allowed* in any *Transition* whatsoever, if the *first Note* be a *Concord*, and the *last* does not produce a *Consecution* of *Perfects*, &c. which *Example* may be considered backwards, as well as forwards, &c.

To take *Discords* by way of *Binding*, is when *Discords* are on purpose placed between the *Concords*; in order to render the following *Concords* more graceful. And as the *Ear* is the Umpire of all *Sounds*, it can best give *Directions* where to place them, and by observing other *Compositions*, &c. For as *Vinegar*, *Salt*, *Pepper*, &c. give a *Relish* to *Meat*, even so do *Discords* unto *Concords*, and render the *Concords* more sweet and Delightful: which, when artfully taken and applied, produce the best *Musick*.

In former Days, the 4th was call'd a *Concord*, but now it is reckon'd a *Discord*; but I rather think it ought to be termed *Imperfect*, especially if it be the *Major* 4th; by reason, it has the same Number of *Semitones* as the *Minor* 5th; no *Cord* having a more graceful Charm, when regularly placed.—The 2d and 7th, &c. are very *Inharmonical*, and are best tolerated in many Places, when covered by an *higher Part*.

§ 6. *Of* Descant, *and* Compesition.

The Original of *Composition*, is called, *Counterpoint*, or *Plain-Descant*, which is, when *Concords* are only employed, *Note* against *Note*.—*Figurate-Descant*, is when *Discords* are admitted,

and us'd as well as *Concords*, either by *Transition* or *Pass*, or by way of *Binding*; which is the *Ornamental Part of Musick*.

Whensoever you begin a *Composition*, First, consult your *Subject*, whether it be *Grave* or *Cheerful*, and adapt your *Notes* accordingly to express it; and not be like some *Psalmodists*, who set *cheerful Tunes* to *grave Words*, for that is quite contrary to Nature.

If your *Words* seem *Heavenly*, let your *Notes Ascend*; and if *Earthly*, *Descend*, &c. as much as your *Rules* will admit; making no particular *Pause* or *Rest*, till your *Words* come to a *Period*: But a *Sob*, *Sigh*, as *Hark! Oh!* &c. may be express'd by a *short Rest*; and Measure your *Time* according to the *Sense* of your *Words*, and *Length* of your *Syllables*, &c.

§ 7. Composition *of* Two Parts.

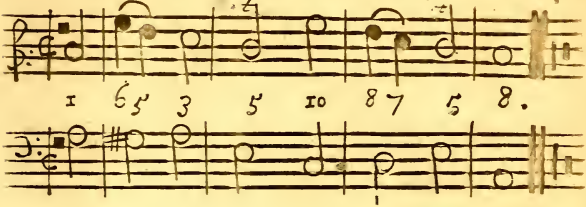
First, consult your *Key*, and make your *Leading Part* as much agreeable to the *Subject* as possible; and then set your *Bass* to it according to the *Rules* before-mentioned; both moving as *smooth* as possible, in the *Bounds* of a *Voice*, or *Instrument*; according to the following *Example*.

§ 8. *Of* Closes

Whensoever you make a *Close*, your *Bass* must either *Rise* a 4th or *Fall* a 5th: (or you may *Close* to make an *Eighth* by falling your *Bass-Note* but one *Degree*.) See the following *Examples*. ——

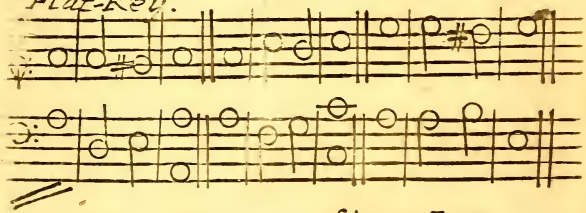
Example

— Example of Two Parts.

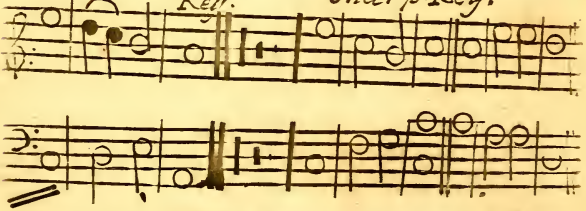


Places for Cloſes.

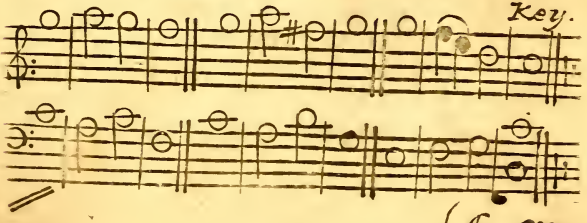
Flat-Key.



Key. Sharp-Key.



Key.



§ 9. Compoſition *of* Three Parts.

If you would ſet a *Second Treble*, or *Cantus*, *Medius*, or *Counter*, to any *Piece* of *Muſick*, that was before in *Two Parts*, to make *Three Parts*; let it begin from the *Baſs* on ſome different *Cord* from the *Tenor*, and ſo on to other *Cords*, on every *Note* (if poſſible) through the whole *Compoſition*, avoiding *Diſſallowances* between your *Upper-Parts*, as well as between them and your *Baſs*; obſerving to keep your *Inner-Part* in as true bounds as you can, that it may not be too *high* and ſtrong, ſo as to ſpoil the *Air* of your *Tenor* or *Leading-Part*.

Two *Fifths*, or two *Eighths* (and not more) may be taken together in *Three Parts*, if they be between the *Middle Part* and the *Baſs*, and be *covered* by an *higher Part*, rather than ſpoil the *Air* of the *Compoſition*; but take care, that you do not make a *Conſecution* of *Perfects* from the *Baſs* unleſs *covered*; which often will happen, and your *Eye* cannot ſoon diſcern it, when your *Tenor* makes a *Fifth*, or an *Eighth* (it being then the *higheſt Part*) and the other *Part* immeditely ſupplies the Office of an *higher Part*, and ſo makes a *Conſecution* of the ſame kind.—

Suppoſe

Suppose the *Tenor* and *Bass* be D D, an 8th, and your *Tenor falls*, and your *Bass rises* to E, and your *Medius rises* to E, to be the *higher Part*, then is there a *Consecution* of 8ths; i. e. D D, the *Tenor* and *Bass*, and E E, the *Medius* and *Bass*; an Error that I have formerly ran into, (tho' not seen by a thousand tolerable Judges,) nor is it so readily to be seen in the *Score*, as it is heard.

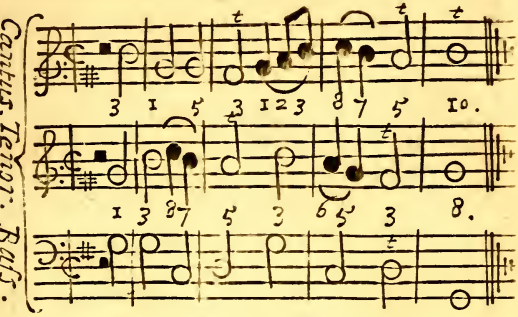
As for other *Inharmonical Disallowances*, they are easier tolerated in *Three Parts*, than in *Two*, when *covered* by the *highest Part*. An *Example* of *Three Parts* you have as follows.——

§ 10. Composition *of* Four Parts.

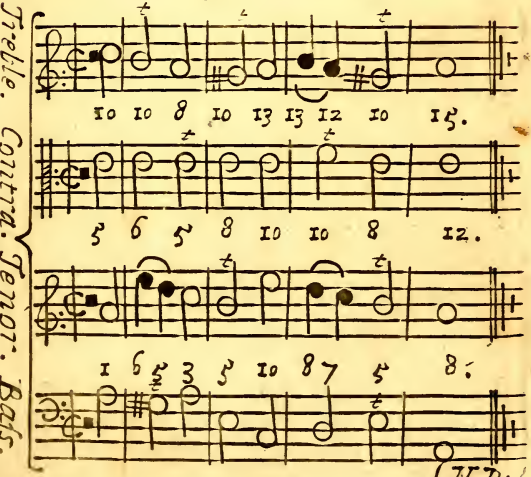
To make a *Four Part Composition*, your three *Upper-Parts* must, each of them, take a Different *Cord* from the *Ground* or *Bass*; that is, if one *Part* be a *Unison* or *Eighth*, the other two *Parts* must be a *Third*, and *Fifth*; and so on: observing always, that each *Part* has a different *Cord* from the *Bass*; unless where it cannot be well avoided, rather than spoil the *Air*.

Example

Example of Three Parts.



Example of Four Parts.



N. B. That *accidental Sharps* are more uſed in *Flat-Keys*, than in *Sharp-Keys*, in order to make the *Thirds, Sixths*, &c. the *Greater Thirds* and *Sixes*; to render the *Harmony* more cheerful and ſprightly.

Obſerve, That neither *Fifths* nor *Eighths* are not to be taken together in *Four Parts*, (eſpecially between the *Tenor* and *Baſs*) unleſs it be from the *Counter-Tenor*, and then they muſt be covered by an *higher Part*.

As for *Diſallowances*, *Diſcords*, and the like, they are eaſier tolerated in *Four Parts*, than in *Three*, or in *Two Parts*; by reaſon, the more *Parts* there are, the Leſſer will a ſmall *Diſallowance* be heard.

And although a Compoſition conſiſts of never ſo many *Parts*, there can be but three ſeveral *Concords* joyned at once from the *Ground* or *Baſs Note*; that is, the *Uniſon* or *Eighth*, the *Third*, and the *Fifth*, or *Sixth*; by reaſon the *Sixth* takes the Place of the *Fifth*, when the *Fifth* is left out; unleſs it be at a *Cloſe* where a *Diſcord* is placed, between the *Inner-Parts*, and the *Fifth* and *Sixth* taken together, and the *Eighth* entirely left out; which is a very curious *Cloſe*.

Obſerve, That in a *ſharp Key*, an *Eighth* is ſeldom made on the *ſharp Note* next under the *Key*; nor yet on the *ſharp Note*, a 3d above the *Key*, nor on any *accidental ſharp'd-Notes* in the *Baſs*;

Bass; by reason, they are disagreeable to the Ear; but a *Sixth* generally is used in the *Eighth*'s Place on all *sharp'd Notes*; and, in *Four Parts*, the *Minor Fifth*, and the *Sixth*, go together in such Places, *&c.*

§ 11. Composition *of* 5, 6, *and* 7 Parts.

To make a *Five Part* Composition, you must add another *Octave* to some one of the *Concords*, of the *Four Parts*; by reason *one* of the *Concords* must be doubled.

If you would have *Six Parts*, then must you add another *Octave* to another of the *Concords*; and then will *Two* of your *Concords* be doubled; and you will have a *Composition* of *Six* Musical *Parts*.

To compose *Seven Parts*, all your *Three Concords* must be doubled: But that *Concord* must not be doubled that makes a *Binding Cadence*, or stands single; therefore it must of necessity be Trebled, *&c.* —— And altho' the *Parts* do often meet in *Unison* (as can't be well avoided) yet they must remain so as short a Time as possible.—And the surest way to avoid *Consecutions*, is to place the *Notes* of *one Part*, *above*, or *below* the *Notes* of another *Part*, to move various Ways, i. e. that is one *Part* upwards, and the other downwards, *&c.*

§ 12. Composition *of* Eight Parts.

Choral-Musick, consists of *Eight Parts*, sung *Alternately*, or by *Turns*, by *Two* opposite Quiers;

Quires; or by *Two Sets* of *Inſtruments*.—This *Compoſition* conſiſts of *Two Baſes*, and *Three Upper-Parts* builded on each *Baſs*. Firſt one *Quire* performs one of the *Four Parts*, and then the other *Quire* anſwers again with the other *Four*; and Laſtly, both *Quires* Repeat all the *Eighth Parts* together in *Full Chorus*; at which time the *Upper-Baſs*, ſupplies the Office of an *Upper-Part*; and the *Seven Upper-Parts* are then founded on *One* entire *Baſs*.

And as this muſt be ſo artfully compoſed, as each *Baſs* muſt be a *true Baſs* to its own *Three Upper-Parts*; ſo muſt the *Lower-Baſs* be a *true Baſs* to all the *Seven Upper-Parts*, when all perform together in *Full Chorus*.

As to the *Agreement* of the *Two Baſes* between themſelves, they muſt be as *Uniſon*, *Eighth*, *Sixth*, or *Third*; never above one *Fifth*, becauſe the *Upper-Baſs* will be a *Fourth* to that *Upper-Part*, as is an *Eighth* to the *Lower-Baſs*; for the *Muſick* of one *Quire* muſt not depend on the *Baſs* of another; tho' all make one entire *Harmony*, when all joyn together.

Mark well, That in ſuch *Places* where the *Baſes* are *Thirds* to each other, if you throw off the *Lower-Baſs*, the *Eighth*'s that were in the *Upper-Parts* to the *Lower-Baſs*, will become *Sixes*; And where the *Baſes* are *Sixths* to each other, and you take away the *Lower-Baſs*, thoſe *Upper-Parts* that were *Sixes* to the *Lower-Baſs*, will

will become *Eighths* to the Higher; and where the *Bases* are *Unison*, or *Eighths* to each other, the *Cords* of the *Upper-Parts*, will be the same Distance to each other.—And tho' *Thirds* are *allowable* between the *Two Bases*, yet if they move successfully, the whizzing of the *Lower-Notes* will offend the *Ear*, &c.

Of this curious Sort of *Composition*, I made a *Piece* to a *Gloria Patri*, some time ago, as desired by a *Gentleman* of *Exeter*, in *Devonshire*; where it is compleatly perform'd; which I design to *print* very shortly, for the *Use* of my *Scholars*.——Hence it appears, That

If you Erect a thousand Parts, *or more,*
They in Effect, are but the same as Four.

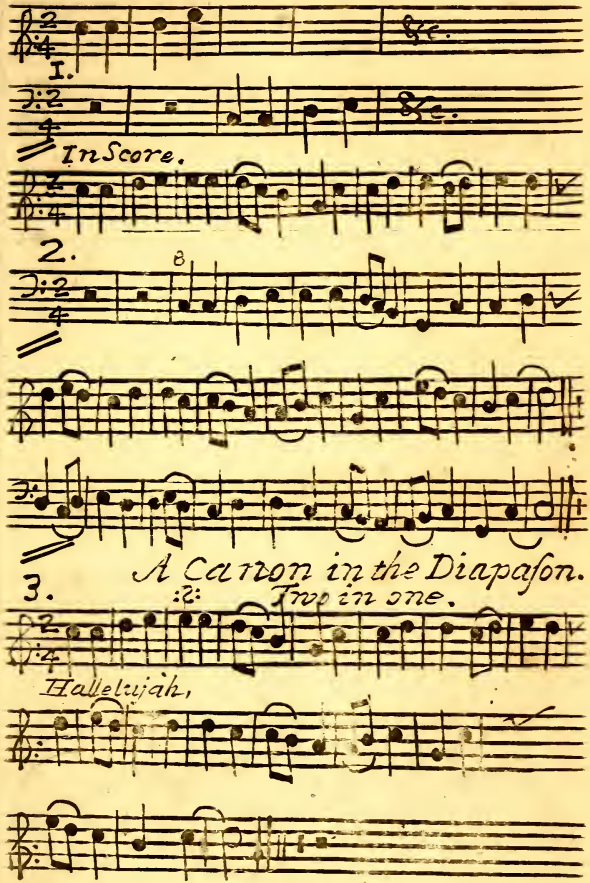
CHAP. X.

Of Canon *in General, and how to* compose *any of them.*

TO *compose* a *Canon*, you must first prick down your *Fuge* (or such a Quantity of *Notes*, as you would have to *lead* your *Point*) in *one Part*; and then carry the same *Notes* forwards, and prick them down in another *Part*, either in the *Unison*, 3d, 4th, 5th, or 8th, &c. *above*, or *below* the *Leading-Part*.

Example

Example of Fuge.



Then fill up your vacant *Bars* with such Notes as conform to the LAWS of *Harmony*.

By this *First Example*, you see how a *Fuge* is formed; this being in the 8th, *below*, and called a *single-Fuge*: and by this Method, you may compose any *Canon* whatsoever, and of any *Degree above* or *below* the *Leading*-*Part*; either in *Two*, *Three*, or *Four*-*Parts*, &c.

The *second Example*, shews how the Whole stands in *Score*; and the *Third Example* directs how to prick it down in one *Part*; this Mark :S: Directing at what *Notes* the *following* *Parts* are to fall in at.

A *Canon* is a *perpetual Fuge*, i. e. *Parts* always *flying* one before another; the *following* *Parts* repeating the very same *Notes* (either in *Unison*, or *higher* or *lower*) as the *Leading*-*Part*: and because it is carried on by so strict a *Rule*, it is called *Canon*; which is the superlative, or highest *Degree* of Musical *Composition*.

☞ *N. B.* That the Words *One*, *Two*, &c. being *Part* of the *Titles* of *Canons*; signifies that they are composed of *One*, *Two*, or more *Fuges*; as the *Title* directs, *&c.*

§ 2. Denominations *of* Fuges, *or* Canons.

A *single-Fuge*, or *Immitation*, is when *Parts immitate* one another, as the former *Example*.

A *Double-Fuge*, is when *two* several *Points*, or *Fuges* fall in, one after another.

A *Canon Arsis & Thesis*; or *Arsin & Thesin*, is when a *Point Rises* in one *Part*, and *falls* the same *Notes* again in another.

A *Canon Per Augmentation*, is when the *Notes* of the *Following-Part*, are as long again as the *Notes* of the *Leading-Part*.

A *Canon Diminuiton*, is when the *Notes* of the *Following-Parts*, are as short again as the *Notes* of the *Leading-Part*.

A *Canon* in *Unison*, is when both *Parts* begin on *one Sound*, and *one Part* moves on all the *Concords* of the *Key*, 'till they meet again in *Unison*; sometimes one *Part* holding the *Tone*, and then another, like a *Canon* composed on a *Ground*, &c.

A *Canon-Round*, or *Round-Catch*, is composed; as 2, 3, 4, or more *Parts* in *Score*, and then prick'd down in *one Cliff*, as one entire *Tune* and sung *Round*.—The first *leads* the *First Strain*,

Strain, till the *Mark* directs the *Following*-Parts to fall in, *&c.* and so they go *round* as often as they please.

A *Canon Recte & Retro*, is composed as *two* Parts in *Score*; and the *latter End* of the *Bass* is set next after the *last Note* of the *Upper*-Part, and prick'd backwards; so the first Part is performed *Forwards*, and the latter Part *Backwards*, &c.

A *Canon Double-Descant*, is so composed that the *Replication* or *Answer* of the *Upper*-Part; becomes the *Bass*; and the *Bass* the *Upper*-Part; in which 5ths are to be avoided, because, in *Reply*, they will become 4ths, *&c. &c. &c.*

Thus, I've the RULES *of* Composition *shown,*
And Cords Allow'd, *are clearly here made known:*
Discords *I've mention'd, and what else we call*
Cords Not Allow'd; *and* Inharmonical
Which RULES *observ'd, shews how we* Frame *each* Part,
Whereby we Judge *of this our* sacred *ART.*

You

You may have variety of *Examples* of several *Compositions*, either in *Two*, *Three*, or *Four Musical Parts*, in A WORK of mine, lately Published, *Intitled*,

THE

Universal Harmony:

CONTAINING

The Whole BOOK of *PSALMS* Newly Sett in *Four Parts*, to the very Best *Portions*.

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CHAP.

CHAP. X.

THE

Musical Alphabet:

Explaining all the Technical TERMS *used in* Musick; *as they are derived from the* Greek, Latin, French, Italian, *&c.*

A.

A An Abrevation of *Alamire.*
A Bene Placito. Signifies, *If you please.*
Accent. A warbling Tone.
Accentor. The leading Singer.
Accord. Agreement
Acute. Shrilness of Tone
Adagio. The slowest Movement in Time
Ad Libitum. If you please
Ad Due. or *Doi.* Two Parts.
Affetto, Affetuoso. Tender and Affectionate
Allegretto. Pretty quick
Allegro. The Time quick and lively
Allegro Allegro. More quick than *Allegro*
Allegro ma non Presto. Not too quick
Alto Ripieno. Tenor of the *Grand Chorus*
Alleluiah. *Praise* the LORD
Alternate. Performed by Turns
Alto. The *Counter-Tenor*
Alto Concertante. *Tenor* of the *little Chorus*

Altus Counter Tenor
Andante. Go, or move distinctly.
Anima, or *Animato.* Brisk and lively.
Anthem. A Divine Song in Prose
Aria A short Air, Song, Tune, *&c.*
Arioſa. The Movement of any Musick
Arſis, Rising in one Part and *Theſis.* Falling in another
Aſſai. Not too quick, nor too slow
Aſſay. Try, or prove your Voice, or Instrument.
Atempo giuſto. Perform the Time just and equal

B.

B. Signifies, *Baſs,* or *Baſſo*
Bar. A Stroke that divides the *Time*
Baſs. The *loweſt* and fundamental *Part*
Counter-Baſs. The Second or *Double-Baſs*
Thorough-Baſs. The continual, or figur'd *Baſs*
Baſiſta. One who sings or plays the *Baſs*
Baſſo. The *Vocal-Baſs*
Baſo-Concertante. *Baſs* of the *little Chorus*
Baſſo-Continuo. Continual, or *Thorow-Baſs*
Baſſo-Recitante. *Baſs* moving continually
Baſo-Ripieno. *Baſs* of the *Grand Chorus.*
Battuta. Motion of the *Hand* in beating *Time*
Binary. A *Meaſure* of *Time,* equal *down* and *up*
Bmi. An Abreviation of *Bſabemi*
Bmollare, or *Molle.* Soft and Flat
Breve. A Note, the Length of two Semibreves
Brillante. Brisk, Gay, and Lively.

Buno.

Buono. Good
Burden, The Repeated *Part* at each Verse end

C.

C. An Abreviation of *C-sol-faut*
Cadence. The closing Note
Camera. Chamber-Musick
Canon. A continual Fuge
Cantata. Musick for both Voices and Instruments
Canto. The *Treble,* or highest *Part*
Contofermo. The only subject *Part*
Cantus. The *Treble,* or highest *Part*
Canzone. A Song
Capella. Chapel-Musick
Capo. The Head Instructor.
Capricio. To perform carelessly
Castanets. Wooden Hand-Instruments
Catch. A Canon Sung round
Cattivo. Bad.
Chacone. A Sort of Dance
Chant. To Sing. The old Church-Musick
Chanter. A Singer, *&c.*
Characters, The *Marks* used in *Musick*
Chiave. The Fundamental *Key* or *Tone,* &c. or *Musick* design'd for *Churches.*
Chiudendo. The finishing *Strain,* &c.
Chords. Musical Strings, *&c.*
Choro, or *Chorus.* The full repeated *Parts,* &c.
Chroma, A flourishing Way of Singing, *&c.*
Chromatic. Sounds moving by *Semitones*
Ciacona. A Tune set to a *Ground-Bass*

Clavis. A *Cliff*
Close. A Conclusion of *Parts*
Come Sopra. As above, or over again
Comma. A supposed 9th *Part* of a *Tone*
Common-Time. *Down* and *up* equal
Compieta. A Church *Psalm* or *Hymn*
Compositta. A Composer of Songs, Harmony, &c.
To Compose. To compose Musical Sounds together
Composition. Many *Parts* Musically framed together
Composto. Compounded, or doubled
Con. Signifies, with
Concert, *Consort.* A Piece of Musick in *Parts*
Concertante, *Concerto,* A *Part* moving continually
Concerto-grossi. The *Grand Chorus*
Concinnous. *Intervals*, a little Disagreeable
Concords. Agreeable *Intervals*
Conjoint. *Degrees* lying next one another
Consequent. Imitating *Fuges*
Consonance. *Consonant* Sounds agreeable.
Conspirato. with *Life* and Spirit
Continuato. with equal Strength, and equal Time
Continuoto, *Continuus,* The continual, or *Thorow-Bass.*
Contra, *Contralto.* The *Counter-Tenor*
Counterpoint. Notes, *Bar* against *Bar*
Contra-Tenor. Between *Treble* and *Tenor*
Cords. Tones or Sounds

Crotchet. A *Note*, Half a *Minim*
Cymbal. A *Wire* and *Gut* Instrument: and some are made of solid Pieces of *Brass*, struck with an Iron Rod, *&c.*
Cythra. A string'd **T**riangular Instrument

D.

D. An Abrevation of *D-solre*, *&c.*
Da Capo. End with the *first* Strain
Degree. From one *Note* to the next
Demi. The *Half*
Demiquaver. A Note with a triple **T**ail
Depressio. The *Fall* of the *Hand*
Descant. To run a Division of *Notes*
Plain-Descant. The orderly placing of *Concords*
Figurate-Descant. When *Discords* are used
Double-Descant. The *upper Part* made the under
Diagram. The *Scale* of *Musick*
Diapason. A perfect *Eight.*
Diapente. A perfect *Fifth*
Diatessaron. A *Fourth*
Diatonick-Scale. The Modern *Gamut*
Diesis. A supposed lesser *Semitone*
Diminuition. Diminished
Discords. Disagreeable *Intervals*
Dissonant. Discordant
Ditone. A *greater Third*
Division. A *Running* of *Notes*
Divoto. In a serious devout Manner
Doi. **T**wo
Dolce. Soft, sweet, and agreeable
Drum. A Military Instrument

Duo. *Two Parts*
Dupla. Double
Dux. The *First* that leads a *Fuge*

E.

E. An Abreviation of *Elami*
Ear. The Umpire of Sound
Ecchо. Soft, like an Ecchо
Ecchus. And so if repeated
Ed, or *E.* Signifies, and,
Enharmonick. A supposed Movement by *Quarter-Notes*
Exempli Gratia, or *Ex. Gr.* as for Example

F.

F. An Abreviation of Forte, and of *Ffaut*
Fa. A *Flat Note*, or a *Feint*
Faburden. The Church Tune, or leading Part
F. F. Forte, Forte. Very strong and loud
Feint. A *Semitone*, or *fa*
Fifth. A perfect *Concord*
Figurat. Flourishing
Fin, or *Finale.* The *last Note* of a *Tune*
Flaut. The *Key-Note* of the *Bass*
Flat. A *Character*, so called
Forte, *Fortement*, } Very Strong and Sound
Fortessimo. As strong and loud as possible
Fourth. A Discordant *Interval*
Fret. Places where strings are *Stopt*
Fuga, *Fuge*, } *Parts* flying one before another, &c.
Fundamental. The *Principal Tones*

G. The

G.

G. The *Cliff-Note* of the *Treble* or *Tenor*
Gamut. The *Scale* or *Table* of *Musick*
Grandee. The *Grand Chorus*
Gratioso, Agreeable and Graceful
Grave, Very slow and grave
Gravemennt. As grave as possible
Gravity. Deep and low
Guida. The leading Voice or Instrument

H.

Habitude. The Relation that Sounds bear one to another
Hand. The old *Scale,* or *Table* of *Musick*
Harmony. Agreements of Sounds
Harp. A String'd Instrument
Harpeggio. Sounds to be heard very distinctly
Haut-Contre. The *Counter-Tenor*
Hemiopus, An ancient Wind Instrument
Hemitone. A *Semi,* or *Half Tone*
Hexachord. A *Concord,* call'd a *Sixth*
High. Shrill, loud, acute, *&c.*
Homophonous. Sound in *Unison,* or one Sound
Hymn. A Divine Song in Verse
Hypo, Infra. Bellow
Hypoproslambanomenos. The *lowest* Degree of Sound.

I.

Jar. When Sounds disagree
Imitation. When *Parts* imitate one another
Index. A *Director.*

Inharmonical. A disonant Sound unexpected
Ino. An Hymn, or Spiritual Song
Interval. The distance between two or more Sounds
Ionick. A Mood, Soft Airy, and Melting

K.

Key. The Fundamental *Note* or *Tone*, &c.
Key-Note. The last *Note* of the *Bass*
Keys. The Toutches of Organs, Harpsichords, &c.

L.

La. An Abreviation of *Alamire*
Lamentatone. Lamenting and slow
Languente. Soft and languishing
Largetto. A little slower than *Largo*
Largo. A middle Movement of *Time*
Legato. When *Notes* are tied together
Legerment. Lightly, Gently, and careful
Lente, Lentus, / *Lentemente.* } Very slow and soft
Libero. *Notes untied*, and at liberty
Long. An *old Note*, of four *Semibreves*
Lydian. A Mood, very doleful and slow
Id est. i. e. That is

M.

Madrigals. Short Verses set to Musick
Maestoso, / *Maestuoso.* } With Strength and Grandeur
Major. The Greater

Manichord,

Manichord, *Monochord.* } A one String'd Instrument
Master-Note. The *Key-Note,* and *Mi-Note*
Mean. *Counter-Tenor*
Measure. The *Motion* of the *Hand* or Foot, &c.
Medius. The *Counter* or Middle Part
Melos. A Piece of Melody
Men. Not so much
Mi. The Note *B-fa bemi*
Minim. Half a *Semibreve*
Minor. The Lesser.
Minuet. A quick Dance
Mood. The Movement, *&c.*
Modulation. The expressing of Sounds, &c.
Molle. Flat or *Feint.*
Monstra. A *Director*
Motetto. A Church Composition in various *Parts*
Motion. Time quick or slow
Musick. The whole *Doctrine* of *Sounds,* well disposed, &c.
Musico Theorico. A Person who *Studies* the *Science* of *Musick* in private, and *writes Treatises* and Comments thereon; endeavouring to *explain* in the *dark Passages* of the Antients, as well as to give *Instructions* by Practice.
Mutation. The several Changes of *Tones,* &c.

N.

Natural. Notes not transposed or so mark'd
Necessario. Necessary, or that must be done
Non. Not

Nonupla. Quick Jigg *Time*
Notes. Characters so called, long and short
Nota-Beni. Mark well, or Note well

O.

Obligatio. Signifies, *for*, or on Purpose *for*
Octave. An *Eighth*
Octavina. A small Spinnet
Ode. A Song, Sung to an Instrument
Omnes. All together
Ondeggiare, The slow return of the *Hand*, doubling the Motion
Opera. Song for both Voices and Instruments
Organ. The most Harmonious Wind Instrument
Organo, The *Thorough-Bass*
Overture. Play'd before a Play or *Concert* begins

P.

Piano, or *P.* Soft, like an *Ecchoe.*
P. P. More soft than *Piano*
P. P. P. Pianissimo. As soft as possible, but just heard
Para. Near, or next of all
Part. A particular Portion, in its proper *Cliff*
Passepied. A very brisk Air, &c. very lively
Passionato. Passionately, tender, and effecting
Pastoral. A soft Air, sung like Shepherds, &c.
Pathetica. Pathetically, moving, and effecting
Pavin. A grave *Spanish* Dance
Pause. A *Rest*, or to keep *Silence*
Pedals Feet-Organs
Per. By

Phrygian-mood.

Phrygian-mood. War like Musick
Pieno. Full
Pietoso. Soft and pitiful, and compassionate
Pique. Each Note to be heard distinctly
Piu. A little *more.*
Poco. A little *less*
Point. Any Number of *Notes*, or a Mark so called
Prelude. An Interlude, &c.
Pressa. A *Repeat*, or a Mark where a *Canon* begins
Presto. Quick
Presto, Presto. } Very quick.
Prestissimo. }
Primo, or 1o. The *First.*
Prolation Shaking the Voice
Pronto. Quick, without loss of *Time*
Proportion. The relation of Sounds, *Time*, &c.
Prosalmbanomenos. A *loud Sound* added
Psalm. A Divine Song, &c.
Psalmody. The Art of singing *Psalms*, or the Place
Psalmodist. A Teacher, or Singer of Psalms, &c.

Q.

Quardo. B made natural by that Character
Quadruple. Four Fold
Quarto. Four Parts
Quaver. A Note, being half a *Crotchet*
Quavering. Shaking
Quinta A *Fifth*

R.

Re. The ancient Vocal Name for G or *sol*

Recitativo.

Recitativo. } To sing in a *Tone* like *chanting*, &c. pronouncing the *grave*
Recit, or *Reo.* } *Parts*, &c.
Register The *Stop* of an *Organ*, or *Pitch-Pipe*
Rehersal. The repeating, or learning of *Musick*
Repeat.——:S: This *Character* is so called
Repetition. A Repeating the same again
Repetatur. }
Replica. }
Replicato. } Let it be repeated.
Represa. }
Resonance. A Resounding or Sounding again
Responsary-Song. A Composition, sung by Turns
Rest. To keep *Silence*, A Character so called
Ribattuta. To give one Note many strikings
Ricercata. An *Air* play'd Extempore
Riditta. }
Reditta. } A Part repeated at the *End*, &c.
Riga-Line. The *Lines* whereon Notes are fixed
Rigadoon. A gay pleasant *Dance*
Ripiano, or *Ripieno.* Signifies, *Full*
Risvigliato. A lively *Strain* following a dull one
Ritornello. The End of a Tune repeated, &c.
Rondeau. A Tune *ending* with the *first Strain*
Round. A *Cannon* sung *round*, or *Round-Catch*
Roundeley. A *Strain* to the End of every *Verse*

S.

Solo, or *S.* Signifies *alone*, or Parts so moving are called, *Solos.*
Sackbut. A Trumpet Instrument, play'd by drawing a *Register*
Salve. An *Anthem*

Sarabrand. A *Dance* like a Minuet
Scale. A *Rule* or *Table*, &c.
Sciolto. Notes *untied*; and at *Liberty*
Score. *Parts* one under another, *Bar* against *Bar*
Second. No *Note* between, or the 60th Part of a *Minuet*
Secund. The *Second*
Semi. The *Half*
Semibreve. A *Note* containing two *Minims*
Semitonick. A *Scale* moving by *Semitones*
Senza. Without
Seranade. Musick play'd in the *Streets*, &c.
Seventh. A Discording *Interval*
Sharp. A raising *Character*, or more *Shrill*
Sicilian. A slow Sord of *Dance*
Simple. Single
Simphonia. } Notes *agreeable* to the Composition
Symphony. }
Singing. The Musical Action of the *Voice*
Si Piace. If you please
Sixth. A concording *Interval*
Smorzato. Bear a light *Bow*, and play soft
Soave, or *Soavemente.* } Sweet and agreeable
Sogetto. The main Subject, as *Canto fermo*
Sol. A Contraction of *Gamut Gsolreut*, and *Dlasol*
Solfaing. To call *Notes* by their contracted *Names*
Sollecito. Afflicted, mournfully, &c.
Solo. Alone, or for *one Voice*, or *one Instrument*
Sonata, or *Sucnata.* } A *Composition* only for *Instruments*

Sonnet.

Sonnet. Curious *Songs* set to *Musick*
Sono. Signifies *Sound.*
Sopra. Above, or upper
Soprano. The *upper Instruments*, as *Treble, Contra*, &c.
Sospiro. A *Rest*, or to be silent
Sostenuto. Equal and Steady
Sound. The Object of Musick.
Sotto. Below, or below the *Subject*
Spatium The *Spaces* between the five Lines
Spiccato, Each *Note* distinct and seperate
Spirito, or *Spiritoso.* With Life, Spirit, and Vigour
Staccato. Labouring to express the *Passion* of the *Subject*
Staff. The *five Lines* of *Musick*
Stentato. Labouring to Express the Passions of or the Subject
Stretto. Shortened, or *Measure* made very quick
Strumenti. Signifies *Instruments*
Style. The Manner of composing, perform ing, &c
Sub. Signifies *below*
Subito. Quick, or quickly
Svegliato. Brisk, gay, and lively
Supposition. Two *Notes* used in *equal Time*, one being a *Discord;* supposes the other to be a *Condord.*
Supra. Below
Syncopation. Notes *divided* with, and drove through *Bars*, &c.
System. An *Interval*, containing many *lesser* ones

T.

T. often stands for *Tutti*, and for *Trillo. tr.*

Tablatura, *Letters* ſtanding for *Notes*
Tacet. Be ſilent, or *Reſt*
Tardo. Very ſlow, much the ſame as *Largo*
Tattoo. A *Drum Leſſon*, calling to Quarters
Terpermenta. To change *imperfect Cords*, to be as *Perfect*
Tempo. Signifies *Time*
Tenderment. Tenderly, ſoft, and gentley
Tenor. The *firſt Octave* above the *Baſs*; being the ordnary *Pitch* of all *Voices*, or the *Faburden* or *leading Part* of any *Compoſition*
Trecet A *Third*
Treza.
Trezetto. } Three Parts
Trezo:
Teſto. The *Text*, or main *Subject*
Theory. The natural Cauſes, *Grounds*, &c.
Theſis. *A falling* of *Notes*
Third. *A* concording *Interval*.
Thorough-Baſs. The continual, or Figuar'd *Baſs*
Threnody. *A* Funeral *Song*
Time. The affection or *Souud*, long or ſhort
Timoroſo. With Dread, Fear, and Reſpect
Tempogiuſtio. Time equal and harmonious
Toccata. *An Air* play'd to the *Organ* Extempore
Tone. The Property of *Sound*, whether *Grave*, or *Acute*
Tranſpoſition. *A* Removing from one *Key* to another
Tre, Three
Treble. Three Fold, being the 3d *Octave* above the *Baſs*
Tremolo. The *Trillo*, *tr*, or to *ſhake* a *Note*

Trio. Three Parts
Tripla. When *Time* moves by *Threes*
Trisagion. *A* Church *Hymn*, with three *Holies*
Trite. Three, or the *Third*
Tritone. The greater, or major *Third*
Tune. The Property of *Sound*, *Grave*, and *Acute*

V.

Verto. Turn over the *Leaf*
Vibration. The trembling *Motion* of *Sound*, *Strings*, &c.
Vigoroso, or *Vigorosamente.* With Strength and Vigour
Villanella. *A* Peasant-like, *Country Dance*
Visto, or *Vistamente.* Quick, without Loss of Time
Vivace. With Life and Spirit
Vivacessimo. Very quick and lively
Unison. Two or more *Notes* in *one Sound*
Vocal. Musick performed by Voices
Voce sola. *A* single Voice.
Volta. Once, or one Time
Volti si pace. Turn over if you please

Z.

Zimri. *An* ancient Vain-glorious conceited *Musician*, who, because he could not out-do his Master ELA in the *Art* of MUSICK, he murder'd him, that in order he might become more famous.

FINIS.