Short and fundamental INSTRUCTIONS 3556.

for learning

Thorough Bals

Wherein the whole hystem is laid open and thereby many new & important Discoveries made, by means of which a Person may soon attain to a compleat Understanding both of the Theory & Practice of Thorough Bals

For greater plainness digested into if Form of

Question and Answer

John Jasper Heck?

To the Reader.

I here present you with a short Treatise in which the whole System of Thorough Bass is open'd after a quite new and particular method and the shortest and most certain way shewn to the fundamental Knowledge thereof both as to Theory and Practice.

Various is the use of Thorough Bass and consists not only in Learning to play after figured Bass Notes but in attaining to a fundamental: Knowledge of the Ground and Principles of Music.

All true Music is nothing more than a proper and well regulated. Variation of the Trias Harmonica and out of this natural Har—mony arises not only the Artificial and full Harmony but also the Melody. For Instance what is the true Ground and Reason of the natural Diatonic Scale C d E f G a b c . Answ: the perfect Common Cord (Trias Harmonica) C.E.G. the other Notes being to be considered in Relation to these as upper and lower Fifths, and stand in Harmonic proportion to them as 2 to 3 and 3 to 4.

- . g. b. d.
 - C. E. G.
 - f. a. c.

I hope this may suffice to convince any one of the Necessity of a fundamental Knowledge of Natural Harmony before any right Progress can be made in full Harmony and Melody and therefore it will be superfluous to say a great deal in Recomendation of the Excellent use and Significancy of Thorough Bass to a Person that

has any Thoughts of Learning an Instrument fundamentally.

But how comes it that many who have a good Inclination, Capacity and Liking thereto do nevertheless stop short and content themselves with only Learning to play after the Notes: I don't ima. gine it proceeds from their not being sensible of the Utility and needfulness of it, but as is commonly the Case are directly dis_ couragd at the first Sight of a Heap of scatterd Figures which dazzle the Eyes and a multitude of Rules which hurthen the Memory, so that the Learning of Thorough Bass seems if not impossible yet extremely difficult. But according to the Directions of this method such will find it not only possible but easy, the Chief intent of this publication being to make it intelligible to the meanest Capacity to which End I have explain'd all the Rules herein established by way of Question and Answer and shewn the Cause they spring from and likewise the Ground and place in the Scale to which each Chord naturally belongs which is a great Help in Learning Thorough Bass but nevertheless whether with delign or through Ignorance by most Teachers pass'd over in Silence.



Quest: What is the Nature and Use of the Thorough Bass.

Answ: It is a Harmony which supports and accompanys the Instrument and Voice in a Concert or Piece of Musick which require
an axact Consonance with one another, by means of which the Ear
is perfectly delighted, It may likewise be call'd an abridgement of
Musical Compositions.

Qu: What is the Visible and invisible Part of it!

Ans The Visible is the Figuring over the fundamental Notes; the Invisible is the Sound produc'd on an Instrument by means of the Notes and Figures. Now as it is taken for granted that a Person who learns the Thorough Bass is beforehand well acquainted with the Notes and Keys, I shall only describe the usual Figures.

2.3.4.5.6.7.8.9.

By these Figures the Intervals are signified, and are either made lower or higher by means of the following marks. D. #. 4. The # mark raises and the falls the Sound about half a Tone, but the other his us'd to reinstate either of the # or b into its Natural Place.

MB. Instead of this mark # this following method of Figurian ring (for brevitys sake) is also used 4.5. or.

Qu: What is an Interval in Musick!

An: An Interval is a Space between two different Sounds which form a proportion one to the other, the lower End is always the fundamental Note.

How are we to find out an Interval?

An: By Counting the Tone signified by the Figuring from the Bass Note upwards in its natural Progression and then strike them tagether. For Instance a Fisth to C. is G.

C. d. c. f. g. Fundam: Note. 2. 3. 4. 5.

How may one attain to an easy and fundamental Knowledge of the Thorough Bals.

An: When each Chord, he the Figuring as it will, is become fo natural as to be known and understood at Sight according to the Threefold Sound which it contains, call'd Trias Harmonica (i.9) the Common Chard 5

The whole Thorough Basa and all true Musick consists as shall be Gewn hereafter, only of simple Chords that is and all the Figuring we meet with over a Note, shews only which Common Chord it is, and what one has to take out of it. But the Discords are to be conder'd as Transitions or Anticipations or Retardations.

Un: What then belongs to Learning the Thorough Bafe ?

In: Three Things. First to get acquainted with all the Chords according to their threefold Nature and Situation as in the follow. ": Frample, the Bass moving only by Fisths.





This Example contains only such Chords as have a Sharp Third, Viz. Per. fect Chords. But one might in the same manner make Trial with such with require a Flat Third Vizt the less perfect Chords, as likewise with the Defective; The Quality of this last Chord we shall speak more hereafter.

Qu: What is the Ground and Foundation of this?

An: Trias Harmonica which is, as before mention'd othe Ground of all true Composition and of all Musick in General. *

> How many Sorts are there? Qu:

Four Ist Trias Perfecta

Trias Minus Perfecta

Trias Deficiens

4th Trias Manca



Q7/: What is Trias Perfecta?

Ans It is properly what we call in Musick Sharp Key, and is on this account nam'd Perfect, because it has a Sharp Third and Perfect Fifth. In the Course of the Diatonic Scale this Chord is to be met with Three Times. Viz. on the Key Note the Fourth and Fifth:

> Key Note C. E. G. 4th F.A.C. 5th G.B.D. of the Key

. W. Hence we see how indispensibly necessary it is in Learning the Thorough Bass to be well grounded in the Knowledge and Exercise of the Common Chord and the different kinds thereof.

The What is Trias Minus Persecta Compos'd of?

in Music Flat Key. In the natural Scale it is likewise to be met with Three Times Vize in the Second, Third and Sixth.

Que What is Trias Deficiens?

An: It is a kind of Common Cord consisting of a Flat Third and imperfect Fifth. This Chord is but once to be met within the Compass of the Octave, Vizt in the Seventh of the Greater Mood. (*)

4B. D. F.

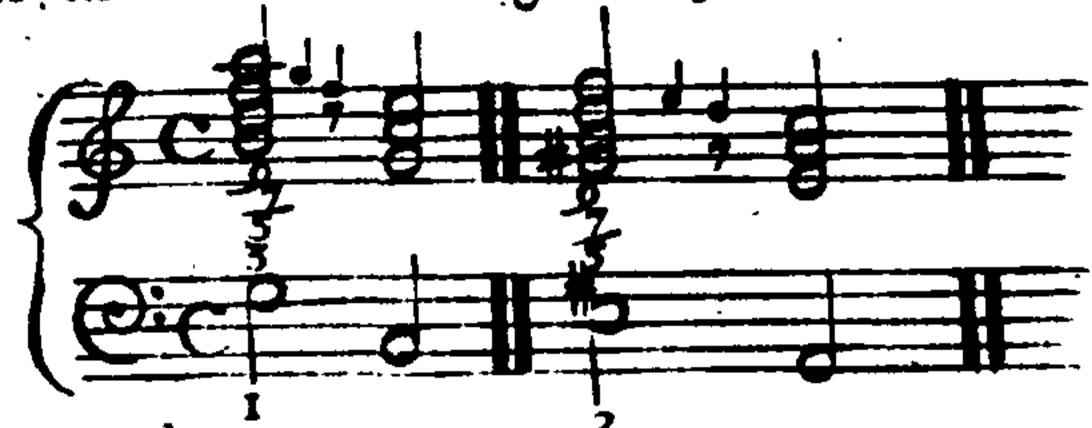
Que Lastly What does Truas Manca contain?

An: A Sharp Third and an imperfect Fifth. This Trias does not occur in simple Chords, but bears the following Form in those that are inverted.



(*) Many Teachers of the Thorough Bass pass over this Chord in silence which arises from their uncertainty whether the imperfect 5th is to be reckon'd a mong the Concords or not. I shall therefore just make a Remark in what Cases it is to be considered as a Concord or Discord. When the imperfect 5th in Conjuntion with the 3d and 8th is met with in the Seventh of the Greater, and in the Second of the Lesser Mood, Such a Chord is not only Concord, but also a Trias. But when it happens to be join'd with a Tin this manner it becomes a Discord, and farther the Original of the Trias deficiens must always be a Distonic Note whereas that of the Chord 3 may have both either a Chromatic or Distonic Note.

Note. that the 7th and 9th may be us'd with each Chord, which forms a 5th to the next following Note, with or without the Octave



No i. F. the 7th is a Transition out of the Octave into the Third, A is y Sharp Ninth as a Retardation from the Octave for the Ninth is always to be so consider'd.

N? 2. D. is here the 7th to E. (as the Chord of the 5th to the fol _ lowing Note A:) and F. is the flat Ninth.

Qu: What belongs in the Second Place to Learning the Thorough Bass?

In: The Ambitus the Musical Scale or Moods (all which is one and the same) through all the 24 Keys.

Que How many Sorts of Moods are there?

An: Two: the Greater and Lesser, that is, the Sharp and Flat Key.

Qu: What belongs to the Ambitus;

An: A Sharp Second, Sharp Third, perfect Fourth, perfect Fifth,
Sharp Sixth and Sharp Seventh.



To make this plainer to young Beginners, The Scale may be likewife meafur'd in the following manner, Namely. One passes from the Unison through two whole Degrees one half, then three whole and one half into the Octave. By whole Degrees and half are to be understood whole and half Tones. Qu: What is the Ambitus in a Flat Key?

... In: A flat Third, flat 5th and flat 7th The Rest is the same



NB. As every Key has its Semitone without which one cannot modulate, therefore in ascending the other and the are ne cessarily made Sharp; but the Ambitus to the Flat Keys is regulated according to its descending Course.



Qu: What is the Ground of the whole Ambitus whether in Sharp or Flat Keys:

In: The Harmonious Threefold Sound (Trias Harmonica) yet so as that the Rest of the Intervals have their just Proportion to the Trias, as 2 to 3.or 3 to 4. That is that every Chord if its Sound is compleat and good, must bear a Proportion to the other, therefore a following Chord must always contain one or more parts of that which went before it.

Qu: Are there no useful Directions to be observed by which the Improvement of the Ambitus might be rendered easiers

An: Yes. Two principal ones.

One is, that one must be acquainted with the Intervals as well as to their Constitution upon the Instrument as also in the plan of the Notes. The other is, That one takes good Notice of the Figuring and what Cords (Triades) they refer to.

An: 1st That a Second in the Plan of the Notes is the next Note a bove the Key Note, but upon an Instrument: when it is to be a Sharp 2d it consists of two half Tones, when a Flat 2d of one half Tone.

The extream 2d is, when a greater 2d has a mark of In—
tension over it. Upon the Instrument it is in appearence the
same Interval as the Lesser 3d Yet there is this Difference.
That the first of these consists of one whole Tone and a Less
er half, but the other of one whole and greater half Tone.
The Cord of the extream 2d is to be met with upon the descending oth and 3d of a Flat Key, and is in its nature the
Fifth Chord of the Flat Key with its Seventh.



That a Third in the Plan of the Notes is that Space or Line according as the Note stands above that of the Key Note, and on the Instrument, when a Sharp 3 consists of two whole Tones, when a Flat 3 of one whole Tone and a half.

3 dly That a perfect Fourth (*) in the Plan of Notes is the next Note

(*) The Interval of the 4th is reckon'd by many to be in it self a Discord, which is nevertheless a mistake. The 4th is an inverted 5th Now if for Instance C.G. is a Concord, consequently G.C. must be so too (the not quite so perfect.) In some Cases it is granted to be a Discord, but not only the 4th but also the 5th 3d and 5th accidentally are rendered Discords. Therefore the sollowing Rule is to be observed, When the 4th is accompany d with the 5th and 5th such a Chord is to be reckon'd as a Concord.

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above the Line or Space of the 3d that upon the Instrument it is half a Tone greater than the Sharp 3d and a whole Tone greater than the Flat.

The extream Fourth is found in the Ambitus or Scale upon the descending 4th of the Key and is a whole Tone greater than the Sharp 3d

The Lesser Fourth which is accompany'd with the oth occurs upon the Semitone of the Ambitus in the Flat Key and is an Inverted Extream Fifth. In Notes stands thus.



That one learns to know the perfect 5th in the Plan of the Notes by supposing the Bass Note to stand in the Tenor Cliff, or as being on the 2d Line or Space above the Bass Note, and that upon an Instrument it is compounded of a Sharp and Flat Third.

The Imperfect Fifth contains a perfect Fourth and a greater Semitone. In the Diatonic Scale it is always to be found upon the 7th of the Sharp Key and 2d of the Flat.

The Extream Fifth 5 is to be found upon the Third in the Flat Key, In order to find its Chord the eatier, it must be observed that when the Bass moves the foregoing Chord must be held out and then strike what belongs to the Third of the Key (See in the next following Example I) But when the Bass lyes still one strikes with the right hand what belongs to the following Note 2. Some Authors use it in a moving Bass likewise only as a mere Accent for the Sixth directly following 3) and then the Chord is treated in a re-

gular manner only not forgetting the Accent before the



Not only this Chord, but likewise that of the Lesser 4th 4 and the Flat Sixth with the Sharp Third are grounded upon the Fifth Cord of a Flat. Key.



That the Sixth according to the Plan of the Notes is the Space or Line below the Bass Note, that when a Sharp oth it is a whole Tone more than the perfect 5th and when a Lesser oth half a Tone.

The Extream Sixth occurs upon the descending oth of a Flat Key and is grounded on the Trias Manca.



The Chord of the Flat Sixth and Sharp Third occurs on the Fifth of the Flat Keys and is the same with the Extream Sharp Fifth as to its Origin.

they That the 7th is one Note below the Bass Note and that upon an Instrument when it is Sharp, but half a Tone below, but when Flat a whole Tone.

The Extream Flat 7th is to be found upon the Extream 4th and ascending 7th of the Flat Keys.



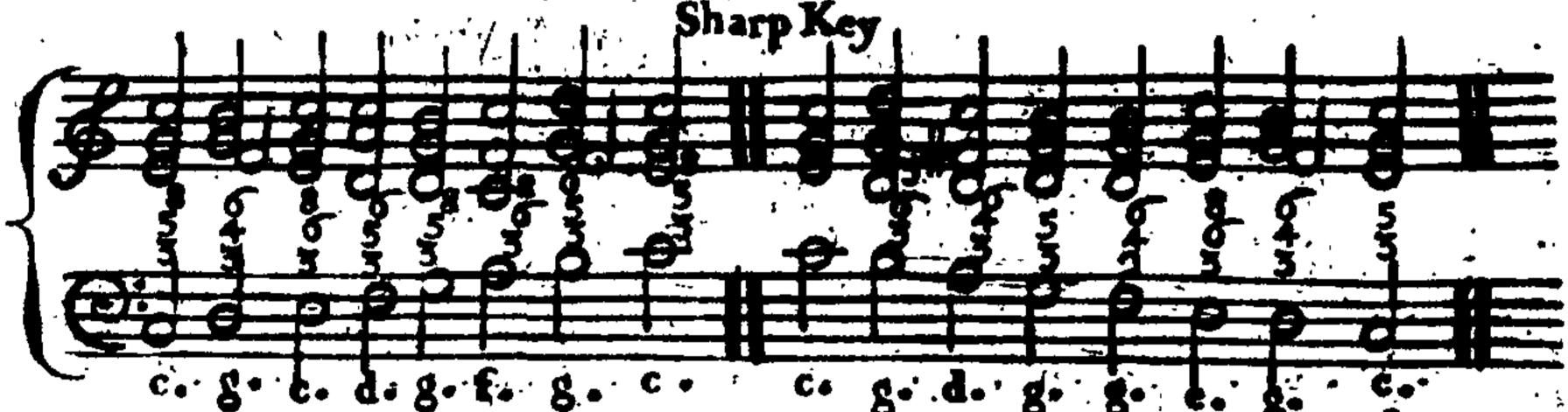
NB. With respect to the Extream 4th in a Flat Key. as also the Extream 2d in a Sharp Key it is to be observed that when a Third is to be taken thereto. it must not be the natural 3d which would be an Extream Flat (as fid.f.) but the Flat Third. If it is to be an Extream, it has a particular mark, because this sort seldomer occurs than the first.

Now follows the Ambitus both of Sharp and Flat Keys. together with their regular Figuring

		•	ascending					Sharp Key descending									
1	853	643	66	653	.5	9	5 5	\$ 5 3	2	643	8 5 3	6 4 2	863	643	. 5 . 5		
	C	D	K	F	G	A	В	С	В	A	G	F	E	D	C		
•		2	3	4	<u>5</u> .	6.	7	•,	7	6	5-	4	3	2		•	

NB. When a # stands over a Note, as here over E. it signifies a
Sharp 3d the same is to be noticed with respect to a b, which
signifies a Flat 3d and a both Sharp and Flat, according as
the Plan of the Notes directs.

The Exercise of this Ambitus in Sharp and Flat Keys is of great use in Learning the Thorough Bass in order to make it more intelligible, I will turn the Figures into Notes.



According to this Scheme all the remaining II Sharp Keys through y whole Circle of Fifths are formd yet so as that the Descant to the first Fifth in course (Viz: G.) begins in the Third and then again the next Fifth D. in the Octave and so farther.



According to this Schemeare all the remaining II Flat Keys in the Circle of Fourths to be form'd, yet with this Remark as in this Example the Descent must begin in the Third, the next D Flat in the Octave and so on.

Qu: What are we to remark as to the 2d useful Direction of the Ambitus mentioned above.

Anist That the Key Chord both above and below has its own proper Chord

2dly The Second in ascending and descending the Chord of the 5th

3dly The Third ______ the Key Chord

4thly The Fourth _____ 2d ____ the Fifth Chord

5th The Fifth _____ its own Chord

6th The Sixth _ _ _ _ 4th _ _ _ _ the Cord of the 2d

7th The Seventh _____ the Fifth Cord

So as is describ'd by Letters under each.

Ambitus in the Example above

Que: But how comes it that to several Chords which one reckons for original one meets with a 7th sometimes and to others on the contrary there is none:

An: Because where a 7th of that sort occurs such a Chord is always the Fifth to the next following and vice versa. But with respect to the Fifth Chord to the next following the Transition is made out of the Octave through the 7th into the 3d and is quite natural.

Que What belongs in the Third Place to the explanation of the Thorough Basa?

An: III The Removing of the Key into another nearer to it

Qu: What does the Sharp Key remove into!

An: Into all the neighbouring Keys except the 7th on account of its not having a perfect Fifth in the Scale without which no close can be made.

Qu: What does the Flat Key remove into?

An: Likewise into all its neighbouring Keys except into the Second for the same reason as above.

Qu: What are the proper Tokens of such removals?
An: When a new mark of Intension or Diminution appears.

Qu: Where is the former of these to be met with!

An: Before the 7th of that Key where one removes into, This new mark whether over or before the Note, is always the 7th of the Key one removes into, It is also call'd the Semitone of the Key.

Qn: Where does the other mark of Diminution appear?

An: In tharp Keys before the Seventh of the leading Key and in flat Keys before the 2^d of the tame, and is a Token that in the first of these one removes into the 4th but in the Second into the oth and when the Semitone of the flat Key is dropt, one passes into the 3^d of the same.

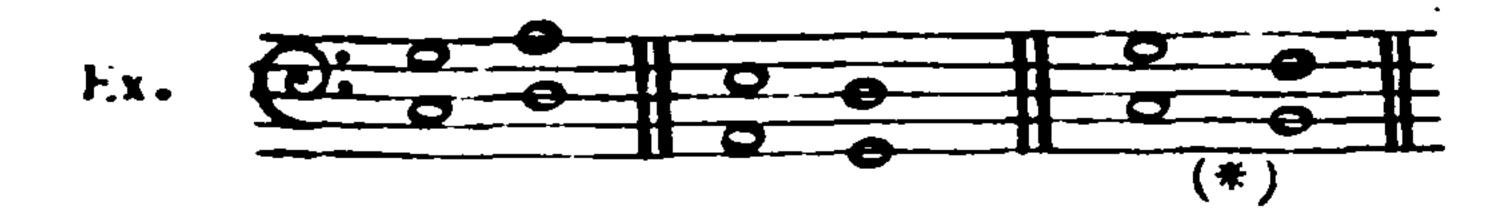
Qu: What Regulation is to be observed with respect to those Keys which, one removes into

An: They are regulated, whether the Keys happen to be there or flat, according to their Thirds as they lye in their natural Scale. For instance C. removes into D. with a flat Third because D. has no other Third in the Scale of C. besides F. and if that # Token Stands before C. whether in the Figuring or before the Bass Note This # C. is the 7th or Semitone of the Mood.

Farther one removes into E. with a flat 3d because it has no other 3d in the Scale of C.

Qu: Is there nothing to be observ'd which might prevent any Error ?

An: Yes. Two Fifths or two Octaves immediately following one another must for the most part be avoided by the use of the contrary Motion, because the Chords from whence the Octaves and Fifths take their rise have generally no Relation or Proportion to one a mother, one Stumbles out of one Mood into the other and such Dimeression has no fort of Regularity.



(*) This last Example and all others of the like fort where a false 5th follows a perfect are very well alow'd of because after the first Chord Cathe next is call'd G. and not B.

Faire or inharmonic Relations are to be avoided, because they arrife from the forementioned Cause; particularly those which are most Incolerable or if the Composer has set them the Player of the Thorough Basamust take care to qualify them by omitting the Octaves and doubling



For an Illustration here follows some Examples with the Thorough Bass described in Notes. In the first one may likewise see how a Digression into another Key is made. (All those Digressions will be marked with a Star.) In this Example we meet with a great many Sixes, but one is not just to take only Sixth Chords to them, but to regulate ones Self to the Ambitus, as to what proper Figures belong to each Interval and what Original Chord or Trias is therein contain'd.



To find the Chord of a Simple oth with more ease, one needs only take the Chord of the Line or Space below the Bass Note, but for avoiding the Error of two or more Octaves sometimes the 5d and oth is doubled (especially upon the Semitones) as appears in the 1st 4th oth and two last Bars.

Now I will subjoin a sew observations to Illustrate this Example.

N.I. is the falling Seventh of the Key, but because after the 5th has been touched it rises again, the Lesser Fish may very well be join'd with it for the Chord is G. and is likewise the Fish Chord to that next following, nevertheless when ever it occurs twice together it is very well with the last to take the 7th along with it.



One has liberty to do it or let it alone as long as one knows it is the Chord of G.

- 2. Is the Third of the Key and has according to direction of the Am. hitus P. 10.11. the Chord of the Key.
 - 3. Is the Second of the Key and has according to the Ambitus & over it which the Chord G. gives it with the Addition of its Seventh because it is the Fifth Chord to that next following.
 - + This Chord has properly its Seat upon the Fifth and Key Note.

 To find it with more ease one has only to imagine the Bass Note to stand a 5th higher or a 4th lower to which the natural Common Chord is required which in this Example is the Chord of C.
 - 5. Is the descending Fourth over which belongs or it is the Chord of the Fisth and Seventh which the Bass produces. that little Dash —, is instead of the Figuring and denotes the Transition.
 - 6. In the falling oth yet it may likewise while the Principal Key green no farther, be consider'd as the Second of the following Key,

because in that Chord the new mark of Intension occurs (as P. 13 in the Question is treated of) and therein the Modulation is further continu'd.

- 7. Is the 7th of the Key according to the Ambitus the 5th be longs to it, and the Chord is call'd D. with its 7th.
- The new mark of Intension (*) before the Note shews it to be the 7th or Semitone of the following Key over which belongs and is the Chord of B.
- Is the descending oth over which according to the Ambitus belongs of but when I stands over the 5th it is better to have a Six alone because the Chord is properly A. and that next following E. whereas of is the Chord of F. with a 7th F. sharp and E. have less Relation to each other than A. and E. but because the 7th accompanies F. sharp, and continues in the Key of E. it will pass.
- cause it has over it a new mark of Intension Namely G. sharp, which is the 7th to it with a flat 3d therefore it is properly the Chord of E. with a sharp 3d or the Fifth Chord of it with a flat Third the Proof there of is that it contains all that belongs to the Chord of E. This Signature 2 is the same as 2 or 2 and when it is to be an extream 4th we also find it sometimes marked thus 4th To find this Chord more easily, one has only to take the next Chord above the Bass Note, what remains in the Example may easily be gathered from what has gone before.

Now follows an Example of Fifths and Sixths above and next to one another: (5) (56)



N.I. By this fort of Procedure, as in the two first Bars the Octaves is to be omitted yet the Accompanyment to such like Figuring may be order'd in the following manner.



N. 2. This 7th which has the 6th next to it (76) is to be confidered as a Retardation of the 6th Chord, and therefore the 5th is commonly omitted and the 8th taken in its stead, but if a 5th is there already as in

N. 3. it must pass over it into the Sixth.

N. 4. 5. and of. according to Page 8. and 9.

N. 7. This Signature $\binom{5}{2}$ is an Anticipation of the next following Sixth Chord. one takes to such a Note just what belongs to the next Bass Note, which always falls either a whole or half Tone and has a 6 over it.





N.I. Is the ascending 4th and has according to the direction of the Ambitus P. 10. the Signature of gover it. To find this Chord easily one has only to take the Chord of the Line or Space below gover the Bass Note takeing the 7th along with it which the 5th forms like as the Bass Note does the 3th

- 2. Where a 7th stands the Chord has its name always from the Bass Note, and because it is the 5th Chord to the next Note, therefore the 7th is taken to it. In order to find such a Chord with a 7th more easily one need only take the Chord of the Line or Space above the Bass Note.
- 3. To this Signature (23) one only takes according to the direction of the Ambitus what belongs to the 7th or Semitone below Vizt. I as the Chord which commonly goes before, and one is to take nothing more than the foregoing Chord and Arike the after it.

is the extream oth fee P. ...

- 4. The Signature (43) fignifies the Chord of the Bass Note, and the this only a Retardation or the Accent above the 3d.
- 5. The Signature (98) lignifies in like manner the Chord of the Basa Note, and the 9th is also a Retardation of the 8th.
- The Ground of this Chord is the perfect Common Chord G.4B.D. with a flat 7th F. and flat 9th bA. when now the leading Note G. is left out and instead thereofthe 3d is placed first then we find the Chord of the extream flat 7th.

7 This Chord (7) which commonly has its place upon the Key or the Fifth of the Key is to be met with when one takes the Chord to the Semitone below the Bass Note (i e) Trias Desiciens, or likewise the Fifth Chord with its 7th in this Figuring the 7th always must proceed upwards into the Octave.

.. Finis.

. Wm Smith Sculp.