# TECHNICAL EXERCISES

FOR THE

# **PIANOFORTE**

Systematically arranged as taught in the Conservatory of Leipzig

By

# BRUNO ZWINTSCHER

Translated from the German by C. H. PORTER Revised and Edited by
Dr. S. AUSTEN PEARCE

Part I. Exercises for Touch	.75	Part V. Thirds and Fourths	2.00
Part II. Scales	1.25	Part VI. Sixths and Octaves	1.00
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#### G. SCHIRMER

NEW YORK: 3 EAST 43d STREET LONDON, W.: 18, BERNERS STREET BOSTON: THE BOSTON MUSIC CO.

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Common Chords with Connecting and Changing notes in	Three notes and Divisions
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•	



#### INTRODUCTION.

The Piano-Forte occupies a prominent position among musical instruments. It was during the first half of the last century that the improved method of tuning gradually became general and Johann Sebastian Bach wrote many of his undying compositions for the Clavier.

All our most celebrated composers followed his example. Their art-products testify to the fact that they kept pace with the rapid progress made in the improvement of the modernized instrument. At the present day we find its technical development so advanced that performers on the Piano-Forte must acquire very considerable executive ability in order to overcome the difficulties that are presented in the works of the great tone-masters.

Piano-Porte technic has therefore become an essential branch of study. Without it satisfactory results are unattainable.\*

Technic here means artistic skill; and Piano-Forte technic, dexterity of the fingers on the keys of the instrument. Such dexterity must be obtained by continuous practice until it is exercised automatically, or in a mechanical way; i. e., without the assistance of the mind.

The player must know and learn to execute (through technical exercises) certain figures, runs, grasps, and skips, which are more or less common to every composition. He must make the fingers skillful, strong and independent, accustom himself to good touch, tone and systematic fingering, and strive to regulate his playing after melodic, harmonic and rhythmic laws. There must also be obtained through such practice a fuller knowledge of all keys, their indications, scales, and ground chords, as well as the ability to transpose a piece from one key, into any other key desired.

The present work presents abundant material for the study of Piano-Forte technic, from the very lowest to the highest degree of virtuosity. The exercises are founded upon the simplest forms of melody and harmony, upon scales, two three- and four-note chords and their divisions, and are classified as follows:

Touch, Scales, Chards, Double notes,

which are treated first in a diatomic, and finally is a chromatic manner.

The single exercises are arranged in systematic order, the aupil thereby obtaining an easier survey of the entire technic-work. His sense of system and order becomes educated, which is of the highest importance in independent and advanced mental effort.

The methodical use of the work may be arranged as follows:-

From the given classifications, select evercises which will sait the age, capacity, and already acquired technical skill of the pupil: these must be practised every day for a considerable period, at the same time gradually carrying them through all keys

Players who still lack the experience and independentnecessary for choosing exercises for themselves, may notice the following:—

Technical skill may be divided into three degrees, the elementary, medium and advanced the methodical grouping of the most important exercises belonging to each, being as follows:

#### I. Elementary-Technic.

Touch	Page	2, A. Elementary-exercises.
	1	3, Nos. 1—4.
		5, ,, 20,
Scales	,,	14. Prelimmary-exercises.
	31	16-27, No. 1
Common chords		31, Close Positions and Divisions.
		I and II.
		35, Division III, No. 1
Chords of the Seventh		54, Nos. 1 4
		58, 2
Thirds		64, 16
Fourths		82. [a 1-6 (only in C major)
Chromatic Exercises		169,   1-4,

These exercises should not however be practised all at the same period, but should be separated into three or four subdivisions, each to be carried through all the keys. In the remarks over the exercises given throughout the work, it is generally stated whether they are to be transposed only into the major, or into all keys. Where nothing regarding transposition is found, they are to be practised only in the chosen keys.

#### H Medium-Technic.

Owing to the large number of exercises belonging to it is class of technic, two divisions are given, (A and B) which are to be still further sub-divided.

ar arak

Touch	178321	4. Nos 5, 7, 11
	**	5, , 20-20b
	,,	B. 3-4
	4	S 13
	••	9 1—2*
Scales		15 16-22 (sily in U major)
	11	16-27, Nos 1 and 2
Comman ch	ords "	36, Nos. 2—2"
	4.	37. , 4-16 (only in C major).
	,,	38, 30—32
	,,	30, $1 - 3$ .
	ч	50, a 1
	.,	50, , 211
Seventh Che	orda	55, 5, 6, and 1-4.
	*1	59.
	**	60.

<sup>\*</sup> Phillip Emonatel Bach, son of the great Bach sage in his 'Essay of the true method of Pinno Forte Phyling,' (Berlin 1759) Page 14, § 4. The correct use of the fingers has a most important influence over the whole art of playing, therefore it will be easily perceited, that one loses more by a false transing of the fingers than can be garded by all the art and good most people. Skill depends therein and experience process that an executant harmy may a moderate degree of intelligence but well-trained fingers will outrough the preatest near in playing, if the latter is forced, while namy his are secured files methods of fingering, to perform before a critical a otherse.

Thirds	Page	65,	Nos.	710.
		67,		1313.
Fourths	11	82,	,,	7-10.
		83,	,,	11-13.
Sixths	٠,	94,	,,	1-10.
Chromatics	,,	108,		56.
	,,	109,	15	510.
		110,	C and	ł A major.
	"	119,	В.	-
		В		
Touch	Page	- <u>1</u> ,	Nos.	10, 12, 13.
	1)	5,	7.	20° 20° and 15—19.
	1)	7,	,,	7—S.
	1)	9,	1)	3—4•
Scales	"	16-	-27, N	ios. 3—5.
			No.	2,
		29,	,,	3.
Common chord		34.	.,	12.
	,,	40,	23	1-8.
	,,	45,	31	13-24.
	**	47,	•,	I —3.
	19	48,	11	34.
	"	51,	17	3453.
Seventh Chord	8 ,,	5C,	,,	7—10.
	1)	57,	,,	1-30.
	••	62,	12	12.
	••	63,	>)	35.
Thirds	37	66,	33	14—17.
	"	67,	,,	129,
	,,	69.		
	**	70.		
Fourths	,,	83,		14—16.
		84,	"	13.
	.,	85.		
Sixths	**	95,	**	12—15
	,,	96,	,,	I—18.
Octaves	37	103,	27	1 <del></del> 3°-
	3)	106,	,,,	1—6,
Chromatics	,,	110.		
	"	112.		
	n	119.		
	**	120.		
	**			l No. 1.
	.,	126,	Nos.	1—3.

#### III. Advanced-Technic.

Those who have studied the above given groups of elementary and medium technic, will find themselves competent, after using a little careful consideration, to select for themselves daily exercises belonging to the advanced technic, and able to fill the breaks in the medium class in a complete manner.

Some of the exercises not included in the above two classes belong to the medium, but the greater number to the advanced and highest degrees of technic, and it is of the greatest importance that the player should make use of them from time to time, and thus become familiar with the entire range and scope of Piano-Forte technic. He who has once attained success in technical exercises will use them for a life-time, as the surest means of keeping the fingers in training, and developing their powers to the limits Nature imposes on each individual.

#### General Advice.

Success in the study of technical exercises, as of Eludes and pieces, depends upon a correct method of practising,

The pupil must apply himself with his whole soul to the work, for it will be useless to play any of the various exercises only a few times, thoughtlessly, at sight.

Success may be quickest attained by appointing oneself a certain task, repeating it each day for some time, committing it to memory, and working at it until it can be played well; each time securing (by the employment of the muscles, feeling, hearing and understanding) correct movements, good touch, singing quality of tone, correct fingering and rhythmical regularity. Respecting the gymnastic activity of the fingers, hands and arms, which in most technical exercises are subjected to excessive fatigue through strain, care must be taken to avoid excess. The false belief "much helps much" is here a dangerous one; for any over-straining of the muscles makes them weaker, instead of stronger and more skillful.\*)

All exhausting exercises in stretched-hand positions, in which the fourth fingers are much employed, as in Sixths Octaves, and extended-chord positions, must be practised with caution, and not very long at any one time.

Avoid over-work by practising Touch, Scales, Chords and Double Notes, one after the other every day, taking each a short time only, and frequently with the hands separately, in order to give them a rest, by turns.

Devote to the study of technic only one-fourth of the entire daily practising time. The professional executant adopting four hours a day as a minimum, may give one hour, but amateurs practising from one to two hours daily, only from fifteen to thirty minutes to technical work.\*\*)

It should never be forgotten that technic is only a branch of Pinno-Forte playing, and is to be practised not for itself alone, but rather as a means to gain the desired end. He who does not learn to subject technical skill to intelligence, but thinks to play a composition well, by simply executing the notes clearly but monotonously, and without taste, or feeling, is as far from being a good Piano player, as one who renders everything with the best of musical understanding, but is unable to play clearly; or who stumbles over every difficult passage, or renders it with a hard and unattractive touch, giving the listener more pain and annoy ance than pleasure.

Technic without intelligence, in Piano-Forte playing, is as incomplete as intelligence without technic; for in a true artistic performance they must work together. In art, intelligence and talent should be educated: but genius being a divine gift, can never be acquired by those who do not possess it.

Technic is attainable to every one possessing the necessary common sense, diligence and endurance. A youth possessing talent, who for want of earnestness and application neglects to obtain, through diligence and work, the requisite technical skill, can only be pitied, not excused. When talent, perseverance and health are found united, it is then possible to succeed in art.

<sup>\*)</sup> Players of advanced years, who in youth, from lack of desire, time or opportunity, neglected the study of technic, and afterwards recognize the importance of it, often work too hard. Every thing requires time to its attainment. Between the ages of twenty and thirty years one can seldom, or only at the exponse of health, attain in as many months, that which should have been acquired in as many years, between the ages ten to twenty.

<sup>\*\*)</sup> To practise more than four hours a day is dangerous for even the strongest constitutions. Weaker natures should allow themselves three, and even fewer hours. It is understood that pauses for rest of a quarter-of an-hour each are to be taken between each hour of practice.

#### Position and Demeanor.

Phil. Emanuel Bach says in the before-mentioned work, Page 15, § 10-12:

"The pianist must sit before the middle of the key-board, that he may strike with like ease the highest and lowest keys.

One is at a proper height, when the forearm slants a little towards the finger-board.

Play with bowed fingers, and with reluxed sinews; as this is a point generally failed in, the more care is necessary.

Stiffness hinders all movements, particularly the ability to rapidly extend and draw together the fingers, which may be necessary at any moment."

To these few clear remarks of Bach, which contain nearly all that a novice has to consider before he begins to play, may be added; that one should not sit too near, nor too far from the keys, both feet being placed before the Pedals; the upper arm not hanging down in a straight line but held forward a little, so that the right hand may easily reach and play the lowest, and the left hand the highest keys of the instrument.

The position and movements of the player must correspond with the rules of deportment. All ungraceful gestures and habits are to be avoided. He must sit in an unconstrained, but quiet position, and the body should only be allowed to bend a little to the right or left, when the hands are employed on high or low notes.

Habits to be avoided are, unnecessary movements of the head and body.

distortion of the muscles of the face, making visible movements with the tongue, biting or holding open the lips, raising the shoulders or elbows, unnecessary raising or depressing the wrists, etc.

Quietness protects the player from absence of mind, promotes clearness and surety in his performance, and helps to make a favorable impression upon those who listen.\*)

Finally, great attention must be given to a good Position of the Hand, which must be, as in the position of the body, natural and unconstrained, and arranged in the following manner:—

First, let the whole arm hang downwards in a perfectly loose way, then bring the hand, by a very light, easy movement, over the keys, so that the elbows neither press against, nor hang too far from the body.

The thumb must be brought in an outstretched position, over a white key, a little farther than the root of the nail, and is to be hold in such a position as will allow it to strike the key with its outer surface in the vicinity of the nail.

The bending in of the thumb-joints, and all hanging down of the same, is to be strictly avoided. When the thumb is not employed it must still retain its position over the keys.

The remaining four fingers are to be lightly bowed, so that each, when pressed down, feels the key with the finger-tip: for the sense of touch upon the keys has an important influence in the formation of tone.

The most usual mistakes in every method of touch are the stretching out of a single finger, (one should never be able to see the fingernails,) and the cramped drawing in of the fingers to the inside of the hand. The little finger must not be allowed to strike on its side, but upon the end. No finger should be allowed to bend inwards, or strike the key with the nail.

The back of the hand must not slant to either side, but preserve a horizontal position; so that a coin laid upon it will not be displaced. The knuckles of the thumb and fingers must not bend inwards, or be too much elevated.

The wrist should noither be perceptibly raised nor depressed, but kept upon a lovel with the hand and arm.

A good position of the hand is eminently essential to the training of the fingers; which must attain, principally through technical practice, independence and character. Each finger must acquire a certain degree of strength, and learn to strike freely by itself, and not depend upon another, as is often the case in weak hands.

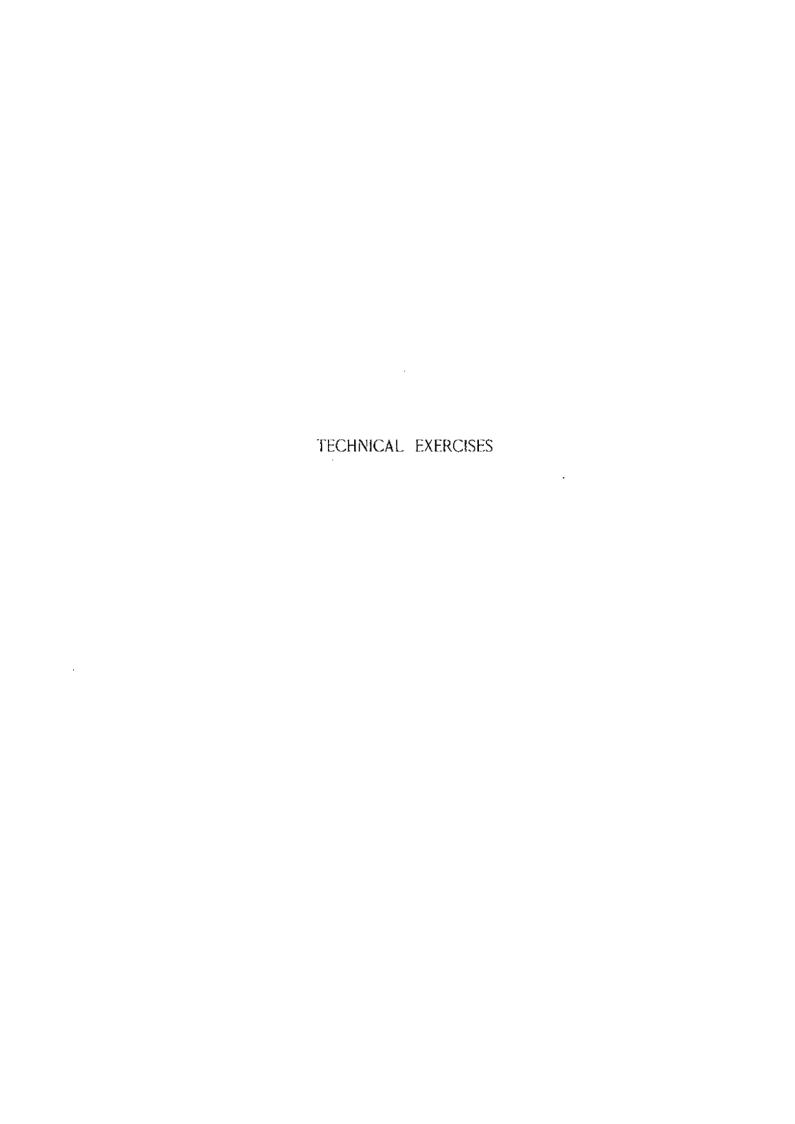
In conclusion, avoid a rigidly constrained and stiff manner of playing. The wrist and elbow-joints should never appear to be screwed together, but hang lightly, and held loosely, yet without disturbing the quietness of the hand- and arm-position. Even in the most strict legato, the hand and arm must not bear heavily upon the keys. The fingers are to be held down lightly, after the touch has been accomplished.

"Stiffness hinders all movements," This remark by Ph. Em. Bach is well known to be true; yet very many executants strangely ignore the fact.

All special rules and hints will be found given over each Section, and Number, of the following exercises.



<sup>\*)</sup> Inferior performers indulge in a rocking, unquiet demeaner at the instrument, but the most talented purils, and especially the greatest artists, almost without exception, preserve a quie position when playing. One perceives that their whole attention is bestowed upon the performance, and that they possess sufficient self-control to allow them to conceal any unavoidable hour excitement from the eyes of the audience.



#### EXERCISES FOR TOUCH.

The formation of a good touch must be acquired simultaneously with the training for finger dexterity. This principle should be carefully adhered to in all technical study; in which success depends more upon practising well, than upon mechanically practising much.

The various exercises for touch should be committed to memory as soon as possible, that the pupil may give more strict attention to correct movements, good touch and rhythmical regularity of tones.

The touch-movements are to be carefully executed in the way prescribed for each method of touch; though never without regard to the special peculiarities which may be found in the hands of the student.

The formation of a good touch requires on the part of the teacher, as well as of the pupil, a correct, and ever-wakeful ear, which must test every tone with regard to its beauty and quality.

Rhythmical regularity will be most surely obtained through counting aloud; and deficiency in time may be assisted by a moderate use of the Metronome.

Of the different kinds of touch, the most important is the connected, or

#### LEGATO TOUCH,

which must be studied before all others, and in which the pupil must observe: \_

- 1st A quiet but light position of the hand and arm.
- 2d A firm striking of the fingers upon the keys, by which a full, rich, singing tone is produced. It will, of course, be noticed that the blow of the hammer against the string corresponds exactly with the stronger, or weaker touch of the finger upon the key.
- 34 Quiet holding down of the key, with attention to the prolonged vibration of the tone.
- 4th Exact raising of the fingers, as each succeeding key is struck, with continued care as to the correct connecting of the tones.

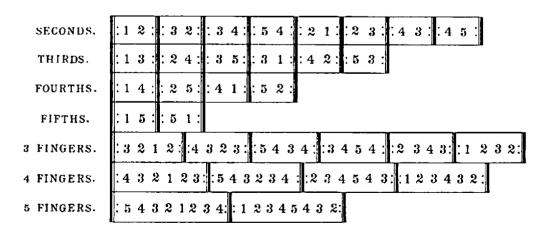
In the following *Elementary Exercises*, which are given with figures only, that they may be the more easily transposed into all keys, the five fingers are to be held over the first five notes of the scale selected, and with each separate count, sound the note that corresponds with the number of the finger.

Each group of numbers forms one exercise, and must be repeated with metronomic regularity from four to eight times, giving a loud count to each group of two, four, or six notes. Begin practising slowly (each note m. m. 80), raising the fingers high, and producing a full round tone.

In a quicker time the fingers are not raised so greatly.

Play the *Elementary Exercises* first with each hand separately, then with both hands together in contrary motion; after which the left with the right, and finally the right with the left hand in parallel motion through all major and minor keys, using the first five notes in each key.

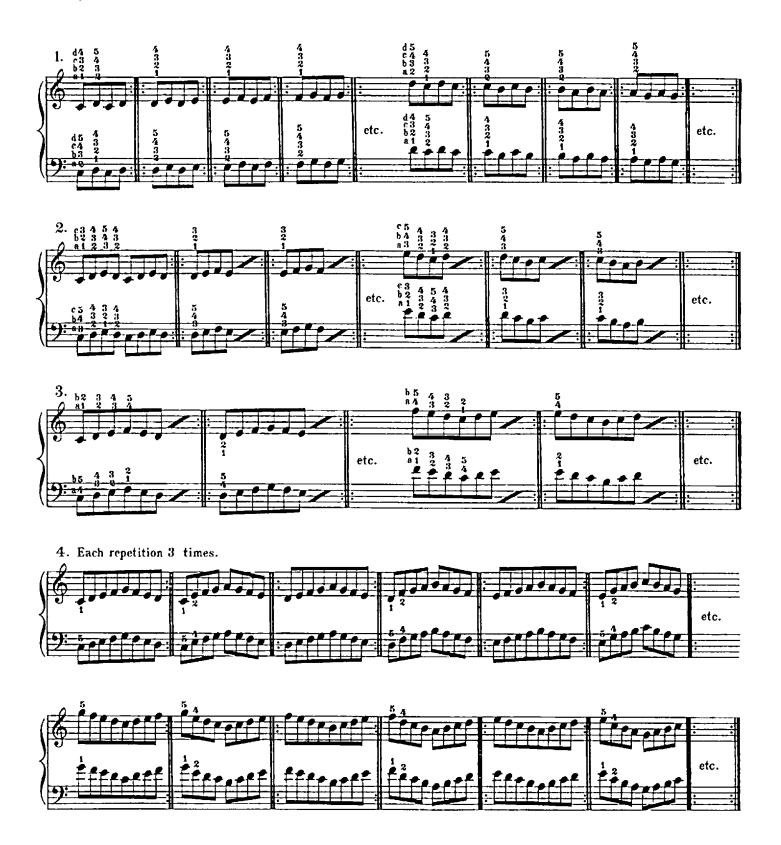
#### A. ELEMENTARY EXERCISES.



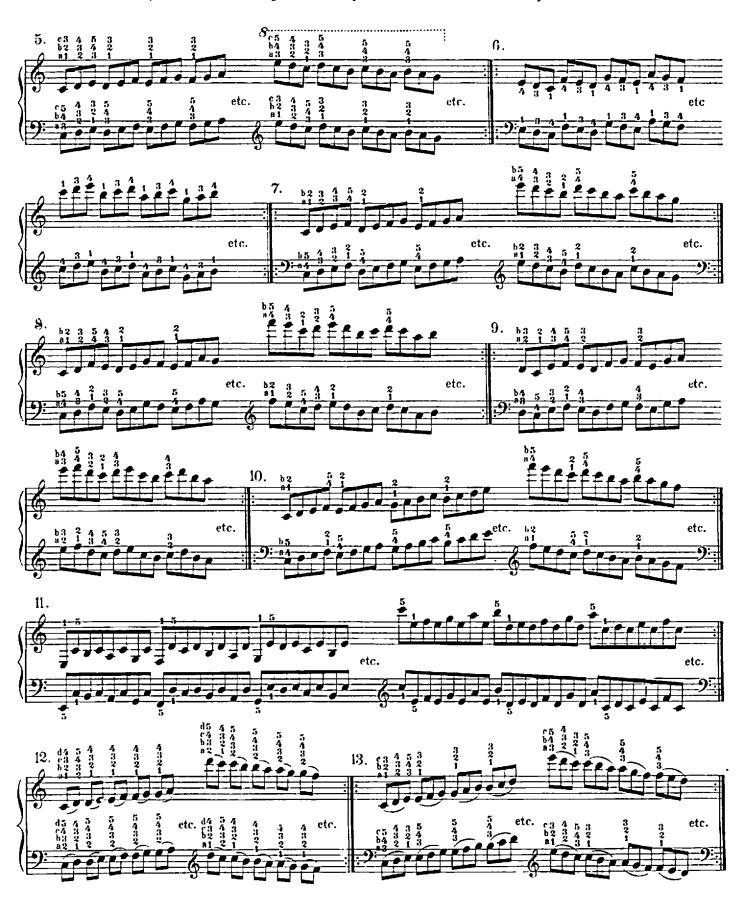
#### B. Exercises for from two to five Fingers on every degree of the major scale.

Exercises 1-4 are to be practised with both hands together through all the major keys, using the fingerings in their order as the letters a-d designate.

The changing of the position of the hand upon the same keys, in exercises 1-3, is effected by an easy, and barely perceptible lifting of the forearm, keeping the wrist loose, and quiet.



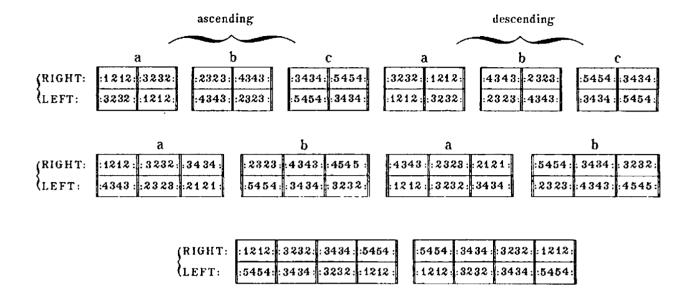
Exercises 5-20 are to be practised with each hand separately, then with both together through all the major keys, and with changed accents. The fingerings indicated by the letters a-d are for use in all keys alike, with the exception of exercise N? 6, in which the 2\frac{1}{2} finger takes the place of the thumb on black keys.





### C. Trill-Exercises on all degrees of the major scale,

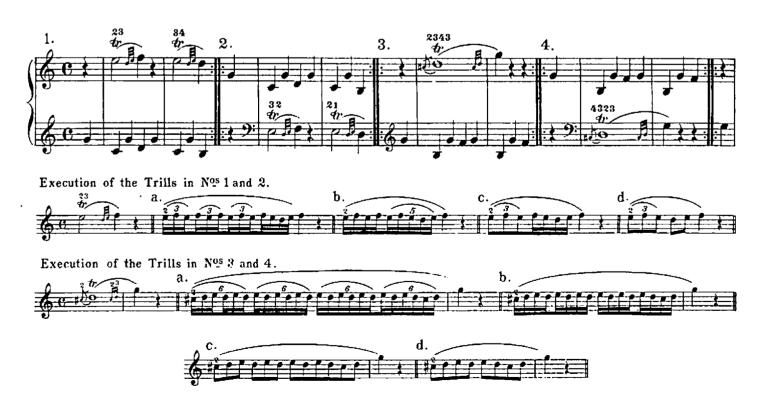
to be played through all keys, the same as exercises B, Page 3, Nos 1-3.



After the fingers have developed sufficient skill, through practice in the above trill-exercises, the student should next become familiar with the rhythmical formation of the trill, and its proper connection with a following note.

Advanced players particularly, are expected to know the exact possible number of notes belonging to each trill.

Aside from the length of the trill-note, the velocity of the piece performed must be considered; therefore, each trill in Nos 1-4 of the following exercises must be practised after the examples a-d, the tempo for a, being andante, for b, allegro, for c, presto, and for d, prestissimo.







The connected-trills in exercises 5 and 6, are to be practised after the three examples given above. (a-c) The



- a) Exercises 7-10 are also to be practised with 6 and 8 Trill-notes to the quarter.
- \*\*) Transpose the above 10 trill-exercises into all the major keys.

A second important method of touch is the changing of the fingers on one key, or the

#### TREMOLO TOUCH.

The following exercises are to be practised with a light touch, and with the usual position of the hand. Begin by practising slowly and lightly, in order that the exchange of fingers upon the key may be accomplished through use of the wrist; the fingers retaining their normal position, and not being withdrawn in a cramped manner. The arm should not move up, nor down, and the broken Octaves (19.29.39) must be connected in a light manner with the use of a quiet wrist. When the desired lightness of touch has been obtained increase the rapidity, in which case, the hand-movements must be less, until, at last, in a very rapid tempo, only a light finger-movement can be employed.

The given examples are to be transposed into all keys, and played in the chromatic scale, and may also be practised in contrary motion, and with changed accents.



The third method of touch, which secondary to the Legato, is the most important in use, is the disconnected, or

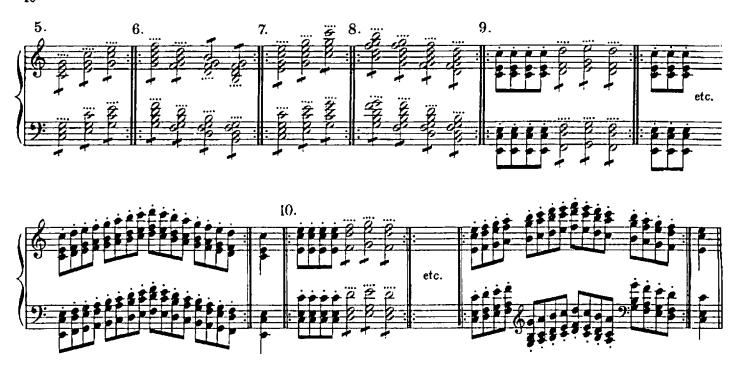
#### STACCATO TOUCH.

The staccato touch is accomplished by a quiet arm-and-hand position, with light falling, and elastic springing back of the hand, so that a perceptible silence may occur between each note. Care must be taken to ensure equality of tone, and to practice slowly and piano, before a sure and easy execution in a faster tempo, and with stronger touch is attempted.

These exercises are to be studied, with the same fingering, in all keys.



\*) The scales are also to be practised with changed accents after the manner of the rhythmically accented scales.



Players who, by means of the foregoing examples, have acquired a successful staccato-execution, may practice with the same touch, other technical exercises, such as Scales, Scales in Thirds and Sixths; Chord exercises in various divisions, Grand Arpeggios, etc. The fingering for Staccato, will be subject to the same rules as for Legato, but not having to make perfect connections between the tones, occasional exceptions may be allowed.

Staccato Octave-playing requires of the pupil special diligence and care. For exercises, the elementary exercises, on Page 2; Nos 5-11, on Page 4; Nos 15-18, page 5; all Scales, Scales in broken Thirds, and Fourths, Chord-exercises in the III division, and grand arpeggios of the dominant and diminished-seventh chords are to be practised.

Fingering. The fingering for all staccato Octave-playing is, as a rule, with the thumb and 5th finger; but the fingering for connected Octaves may also be used, which (particularly in a rapid tempo,) makes the execution less difficult.

When the simple staccato with correct movements, and good quality of tone in the different degrees of power of touch has been surely attained, proceed to practise the scales in rapid lempo, in which the movement of the hands must be decidedly less. In the very fastest time the execution will be performed by the fingers alone. This method is called the

#### LEGGIERO TOUCH.

and is accomplished with a quiet hand, but with a light striking and an elastic springing-back of the fingers. In order to learn this touch, practise Nos 1d and 2d of the staccato-exercises and simple scales, slowly, and with a strong touch; after which, repeat the same in as rapid a tempo as possible, striving, at the same time, for perfect lightness of finger-movement, and good, even, formation of tone. Chord-exercises of division III, and grand arpeggios are also to be practised with leggiero touch.

The mode of touch now remaining to be learned is known by the name of the "carried" or

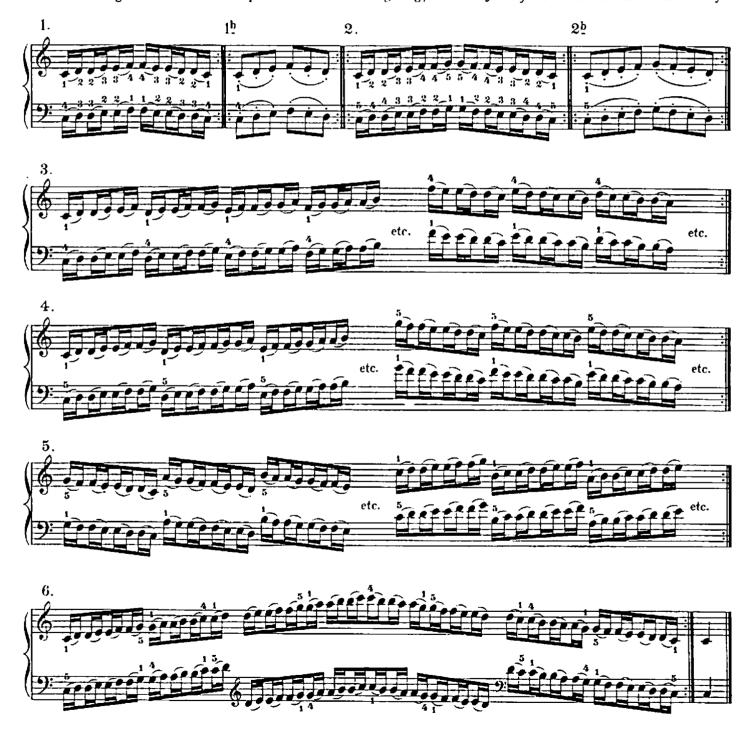
#### PORTAMENTO-TOUCH.

This will be accomplished by a very little movement of the arm, a quiet wrist, and a totally unnoticeable movement of the fingers; through which means each tone retains a certain arount of the *legato* quality, but is still separated by a slight silence between the tones. Examples 12, 2<sup>b</sup>.

The Portamento Touch in itself in little adapted for technical practice, but can be made of value by use in the following examples, which, with the assistance of simple, natural fingering, even in the most rapid lempo, are not difficult to perform. The first of each two connected sixteenth notes must be accented, observing carefully the slur. The second note must be struck lightly, the finger being suddenly withdrawn.

For other Portamento-studies, see chord-studies, VI division.

The following exercises are to be practised with like fingering, in all major keys. Nº 6 also in all the minor keys.



#### SCALES.

A diligent study of the scales has long been considered the surest method of obtaining a good Piano-technic. Beginners should commence practising scales within the compass of one Octave, as soon as a quiet position of the hand has been obtained by the proper preparatory exercises for five fingers. (See Touch-Exercises.) It is left to the pupil himself to write out, under the guidance of a teacher, scales of one Octave, in the various keys; and thus gain experience in the writing of notes, clefs, etc., and especially a thorough knowledge of the signatures of the different keys.

Those who wish to acquire a more advanced technic, must practice carefully the scales in progressive order, after the several ways presented on page 6, etc. It is advisable, however, to play numbers 1 and 2, until surety and ease have been obtained, before attempting the others.

In order to accustom the hands to other modes of fingering, it has been found necessary to institute in several keys, an independent fingering upon the 3d degree of the scale. The Roman numeral I or III placed before the staff, indicates which of the two fingerings is to be employed. See pages 16-27.

In the following tables, intended to aid the memory, are given the keys, upon which the 4<sup>th</sup> fingers come in every Octave, and in each different key. Pupils should accustom themselves to consider the 4<sup>th</sup> finger a guide to the correct fingering of all scales, as the order "1231234" is used only once in each Octave, the 4 always coming on the same degree of the scale.

A departure from the regular rule of fingering is necessary in many cases at the beginning, or end of a scale: for example, instead of the thumb the  $5\frac{th}{2}$  or  $4\frac{th}{2}$  is used, and in place of the  $1\frac{st}{2}$  and  $2\frac{d}{2}$ , the  $4\frac{th}{2}$  and  $5\frac{th}{2}$  fingers. Such cases must be considered as exceptions to the rule. The figures indicating them are placed in brackets.

#### TABLES of FINGERING.

		1. MA	IOR-S	SCALE	s.								
		C	G	D	A	E	В	$G \flat$	Db	Ab	E	$B \flat$	F
1et Degree (RIGH	T ). 4	b	<b>S</b> #	c#	8#	d#	a #	бЬ	бЬ	ðЬ	٥٦	۵۶	ðЬ
of the Scale.	. <b>4</b>	d	а	c	ь	f#	f#	gb	gb	ďb	ab	ch	g
		С	G	D	A	E	В	Gb	DЪ	$A  \flat$	Eb	Bb	F
3d Degree RIGH		d	а	c#	8#	d#	a#	dh	бb	ðЬ	f	с	g
of the Scale. LEFT	. <b>4</b>	f	ſŧ	<b>S</b> #	ſ#	ſ#	<i>f</i> #	gb	gb	dЬ	аЪ	eb	ЬÞ
		2. MI	NOR - S	SCALE b	s. _f#	c#	<i>g</i> #	eh	Вh	f	С	g	d
1st Degree RIGH		g#(g)	d#(d)	a ‡ (a)	d#(d)	a# (a)	u#	дь	<i>ا</i> ه	Вb	<i>ð (ð</i> b)	S#(J)	c# (c)
of the Scale.	). <b>4</b>	b	f#	f#	f#	f#	Sx(S#)	gh	g (gh)	g	d	а	e
		<u>a</u>	е	ь	f#	c#	E#	eb	65	f	с	В	d
3d Degree RIGH	T 4	E#(E)	d\$(d)	a # (a)	d#(d)	a# (a)	a #	ðЬ	Вb	db	<i>ð (ð</i> h)	S#(S)	c# (c)
of the Scale.	). <sup>4</sup>	S#(5)	S#	S#	b	S#	S×(S#)	gh	g (gb)	d (db)	a (ab)	e (eb)	b (bh)
		a	е	ь	ſ#	C#	g#	eb	۵b	f	c	g	ď
Harmonic (RIGH		g#	1#	a#	d	а	a#	bЬ	65	дЬ	ь	S#	c#

gh

gb

g

ď

f×

Scale.

LEFT HAND. 4

f#

 $f\sharp$ 

f#

#### PRELIMINARY- EXERCISES.

Each scale must be practised at first in a connected (legato) manner in which the chief difficulties lie in passing the thumb under the fingers, and the 2d and 3d fingers over the thumb. Exercises Nos1-8 and 16-18 are intended for special thumb-practice, during which, the following rules are to be observed:

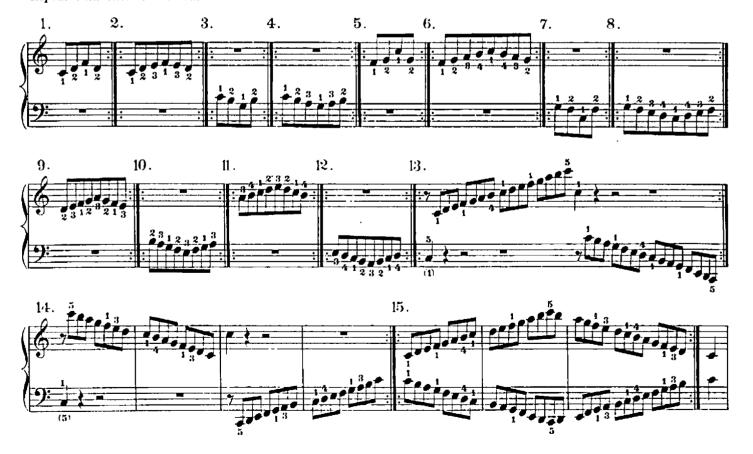
- I. The thumb must be held in a straight position, the other fingers being bowed in such a manner es to allow the thumb to pass freely (to the right or left) behind them.
- II. Immediately after the 2d finger has struck, the thumb, which should project over the keyboard a little farther than the root of the nail, is to be moved in a straight line toward the middle of the hand, and brought over its next key.
- III. The pupil should bend the hand a little inward, (but only a very little), being careful to keep it quiet during the moving of the thumb.
- IV. The arm should also be kept a little, but only a little from the body, and moved along in company with the hand; at the same time it should be perfectly steady, without twisting, or turning. (Preliminary Ex. 9 15.)

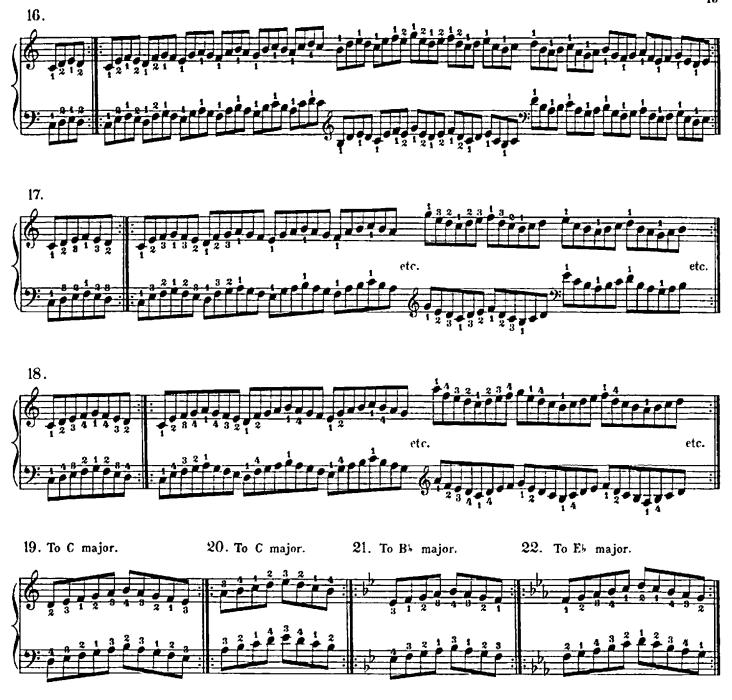
With many players two or more fingers in the same hand, after having struck, are strongly inclined to remain on their keys. Great care must be taken to avoid this fault. Each finger should be raised lightly, and with precision as soon as the stroke has been given, the eyes keeping strict watch over the movement of the fingers, and not allowing the legato connection to become legalissimo.

The height to which the fingers should be raised depends upon the condition of the hand. Stiff fingers may be made flexible by being lifted as high as possible, while pliant flexible fingers should be raised to an equal, but not extreme height; care being taken in both cases to maintain a light and quiet carriage of the hand.

Too much importance cannot beattached to the quality of tone produced. Every finger should strive to cultivate a firm, even touch; and to elicit a sympathetic, but never hard tone.

Repeat each exercise at least four times.



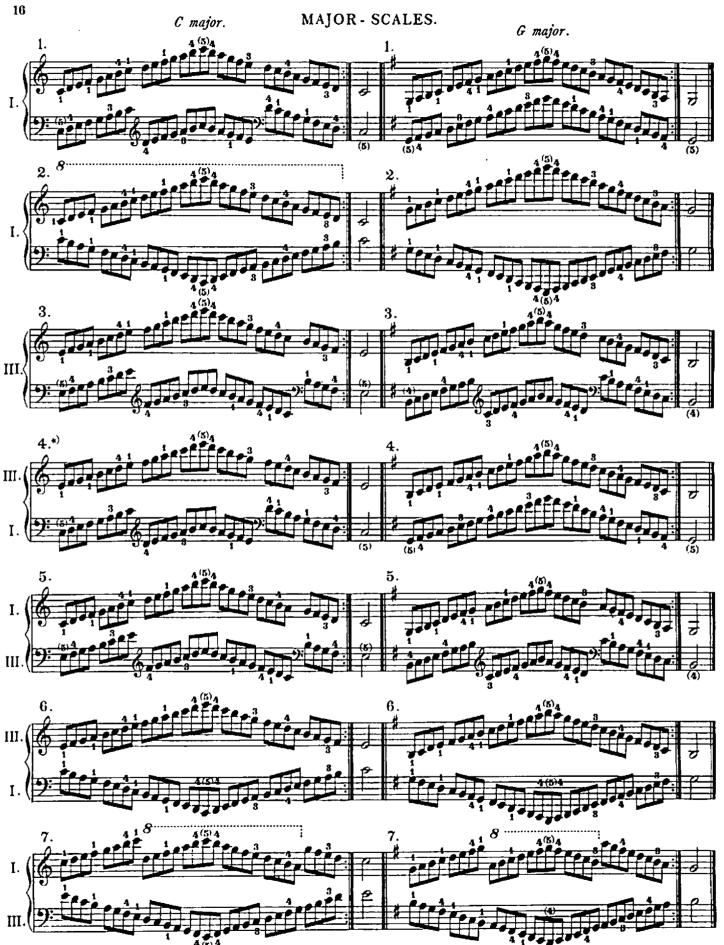


Numbers 1-3 of the following Scale-Exercises are to be practised by each hand separately, and not until surety has been acquired are the hands to be taken together. In order to obtain equality in both hands, each scale should be practised a long time in slow *lempo* only, striking each key with an equally strong blow, and lifting the fingers very high. Since in a slow Tempo more, and in a rapid Tempo less movement of the fingers naturally results, players who have attained in all scales sufficient ease and confidence, may study them in the following manner.

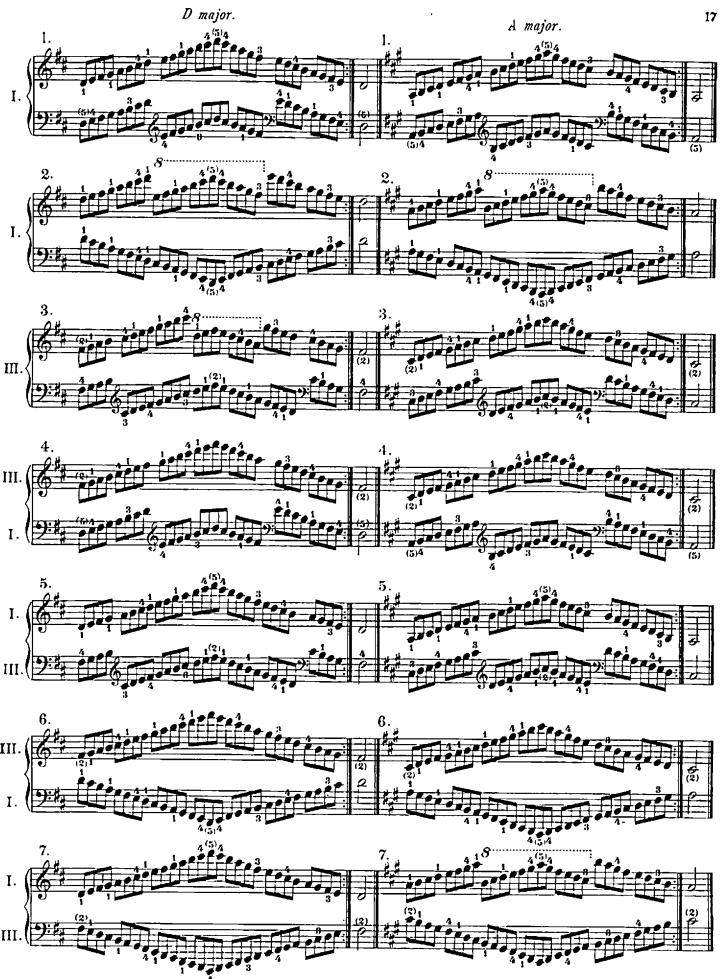
- I. Slowly, and forte, with fingers lifted high.
- II. Rapidly, and piano, with little movement of the fingers.
- III. Ascending crescendo, descending decrescendo, and reversed.

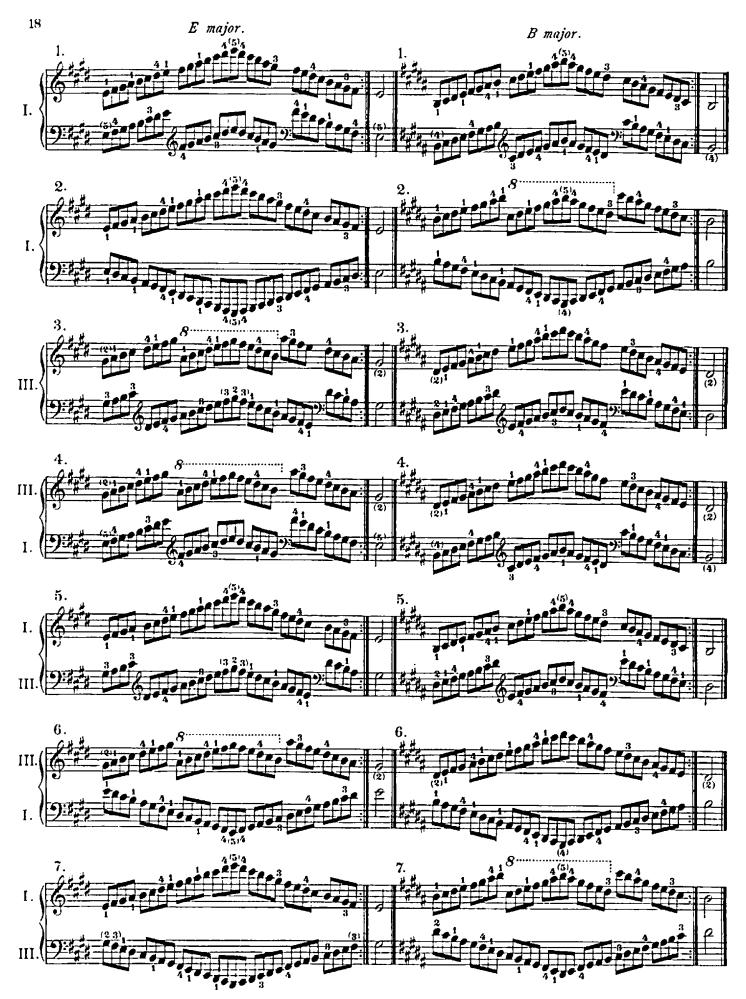
The Rhythmically accented Scales (page 28 and 29) will be found very useful for advanced players.



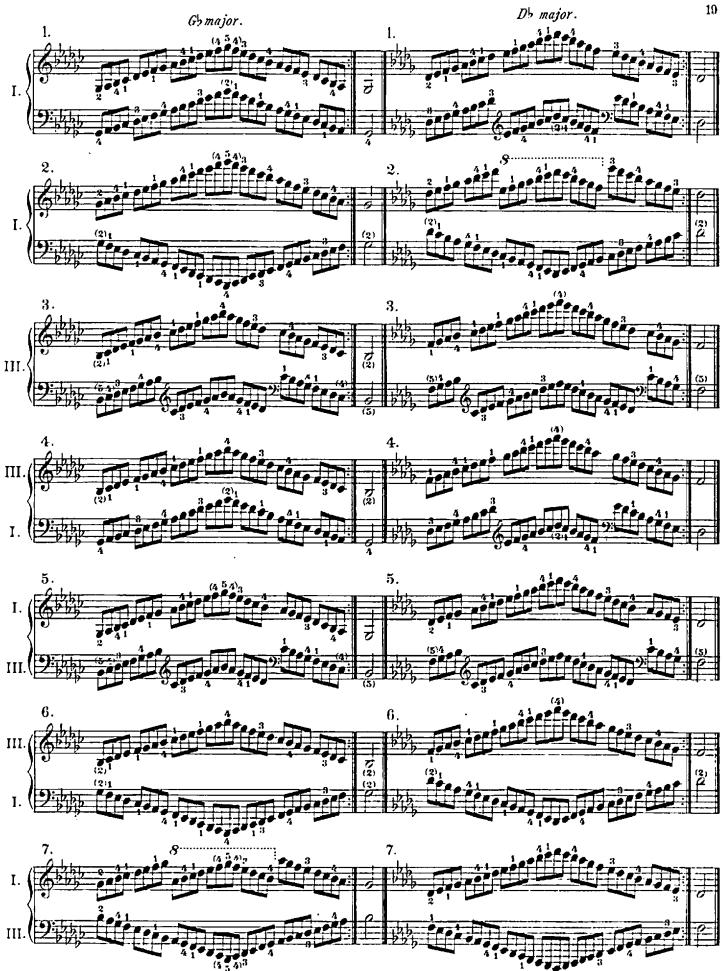


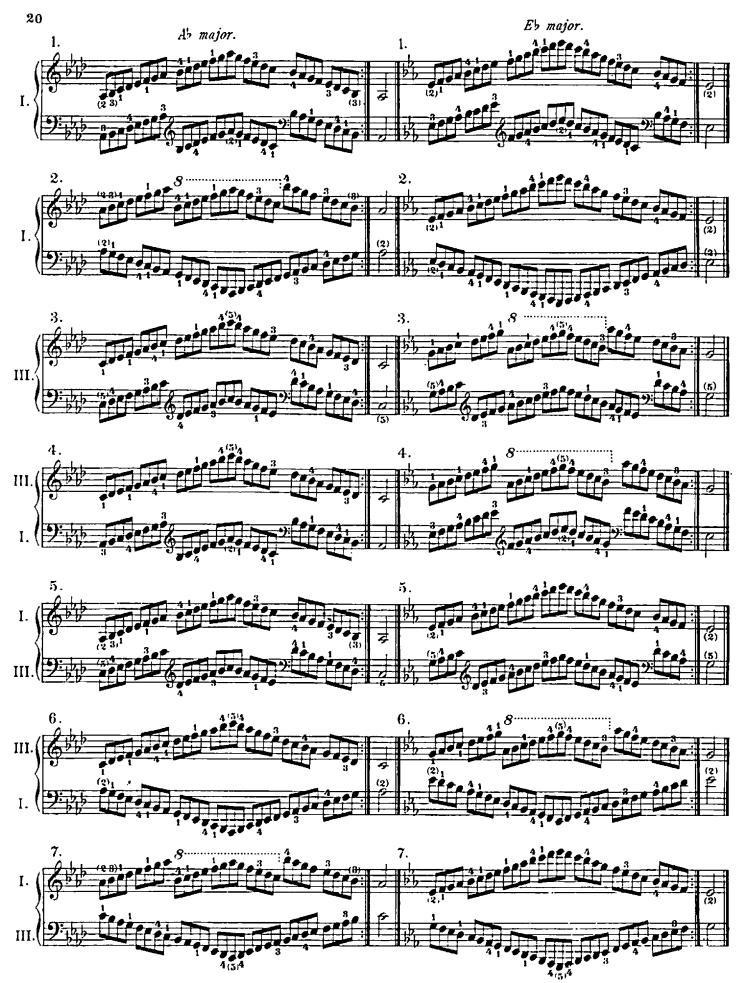
\*) The scales under N?4 may also be studied in Thirds, by taking the right hand an Octave lower, or the left an Octave higher. 5006

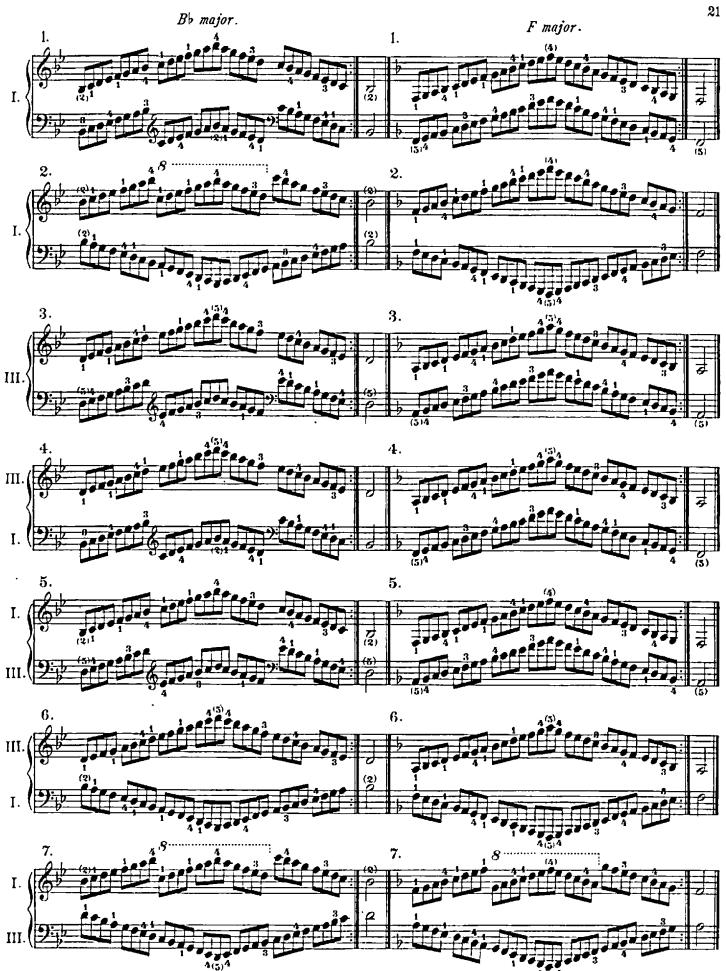








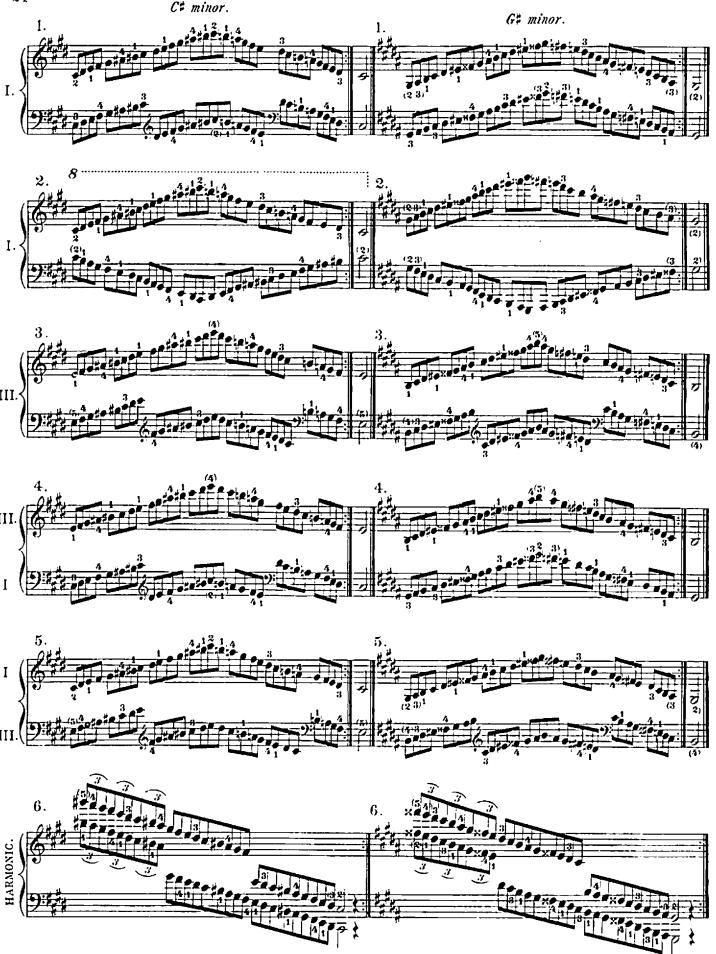




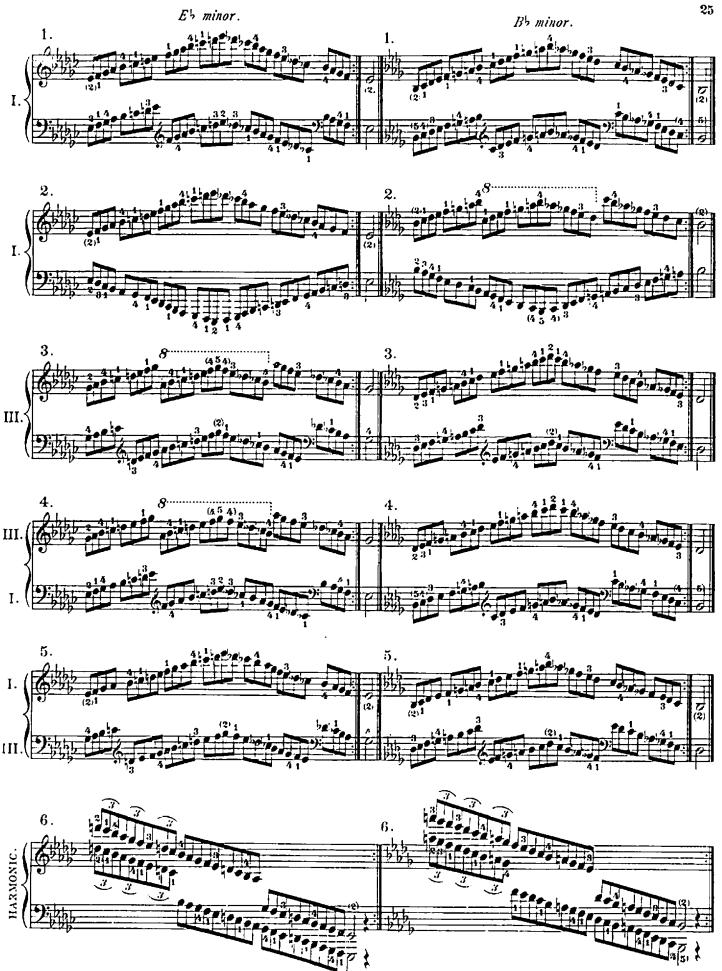






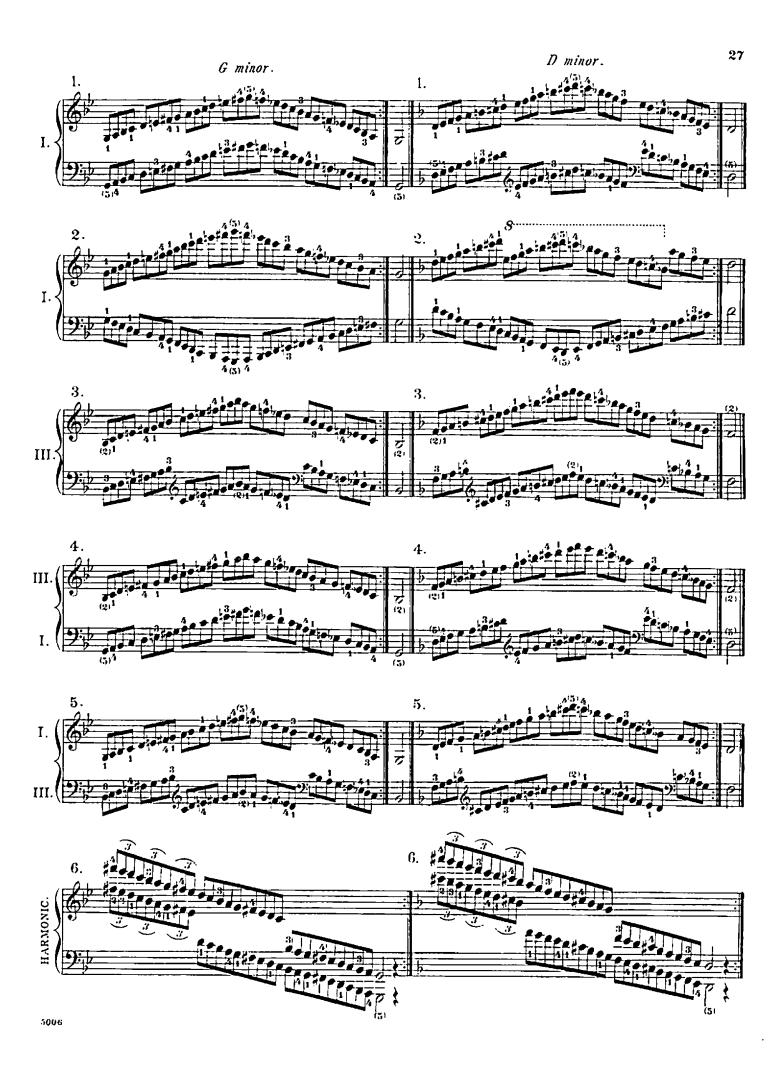






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#### RHYTHMICALLY ACCENTED SCALES.

As soon as the pupil can play the foregoing scales surely and rapidly, with correct finger-movement, light arm, good even tone, and exact fingering, let him study the same with Rhythmical Accents.

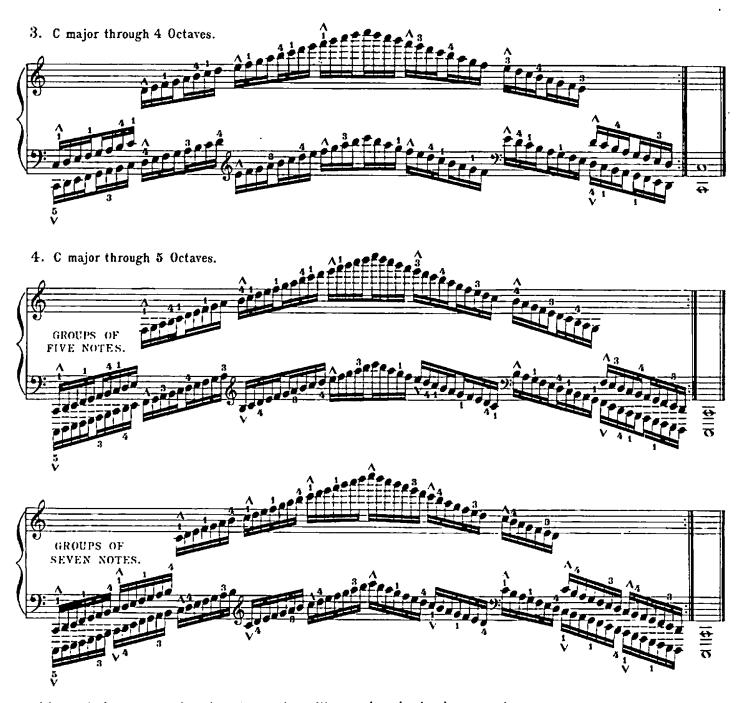
In the following examples, the first note in each group of eighth or sixteenth notes must be accented.

NB. The strongest accent in examples 2, 3 and 4, which have small groups connected with larger ones, falls upon the first note of each large group.

The first example here given in the key of C, will serve as a model for all the keys, both major and minor, and their different arrangements. These are to be carried out as far as the compass of the instrument will allow.

1. C major through 2 Octaves. (Example for changing the accents.)





Advanced players may also study the scales with the staccato-touch, and preferably in these two ways:\_

- I. Slowly, with lightly lifted hands, and quiet fingers.
- II. Rapidly, with lightly raised fingers, and quiet hand.

It is assumed that the elementary practice in staccato playing has already been accomplished. Great care must be taken when using the staccato-touch, to ensure equality, elasticity, and precise crispness of tone. Practise it a long time piano only. After surety in the movement of the hands and fingers has been obtained, the pupil may proceed to use more power.

The Portamento-touch in scale playing demands little technical study, and is accomplished by a slight raising of the forearm, each key receiving a certain pressure from the weight of the hand and arm. (See Touch - Exercises, Page 11.)

#### CHORDS.

Every player, striving for advancement, must seek to gain, through systematic practice in the different *Chord-Exercises*, divided and undivided, from the simplest to the most complicated, a full knowledge and sure execution of various harmonics, for which the following *Chord-studies* will serve as a groundwork.

The following general rules are to be observed:

- § 1. The chord-exercises should be practised from time to time through all the major and minor keys; for which, with few exceptions, the fingering here given in the key of C serves for an example. The player thereby learns to find easily and quickly, the different three- and four- note chords with the fingers, and to distinguish them one from another, surely by the ear.
- § 2. As soon as possible he must acquire the necessary skill for using the thumb and little finger of each hand freely on the black keys. To facilitate this, hold the thumb outstretched, and the fingers in a slightly bowed manner, so that they feel the keys with their ends, but yet do not strike them with the finger-nails. The hand should not be allowed to bend sideways, but retain a perfectly horizontal position.
- § 3. Common chords and chords of the seventh must at first be practised slowly, using the whole arm, and with quiet but yielding wrist. All the tones
  struck, must vibrate under the soft pressure of the fingers with equal
  strength, until the arm is lifted for striking the next chord. The blow
  being struck, the fingers retain their bowed position, and the knuckles
  keep in a straight line from the wrist. Strict care is to be taken not
  to let them sink inward. In a quick succession of chords the movements must of necessity be less, and the staccato-touch from the wrist
  mostly used.
- § 4. Divided chords are played with the same fingering as undivided: the necessary exceptions to the rule being marked whenever they occur.
- § 5. All chord-divisions, but principally the single-note (for example see division III, Common Chords) are to be practised strictly with the legato touch, (not by any means legatissimo) care being taken to lift the fingers correctly. Special attention must also be given to the connecting of the last note in the chord-position with the first note of the next.

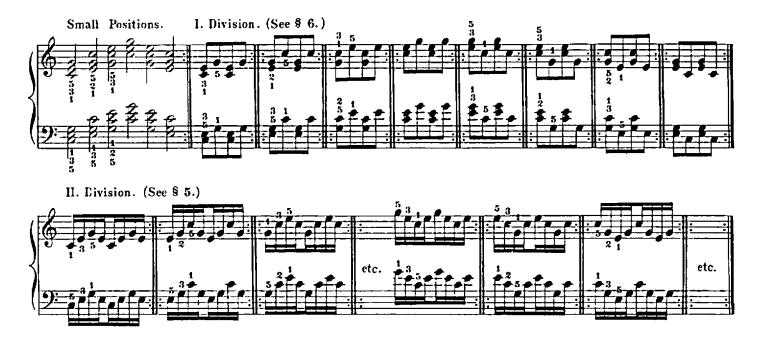


- 8 6. In divisions in which chord-or double-notes in company with a single note occurs, (common chords I division, grand chords I and II divisions) care must be taken to lift the fingers to equal height, and to strike the several keys together, and with like force.
- § 7. In all groups in which two eighth or sixteenth notes be found connected by a slur, the first note must receive a strong accent, and be strictly connected to the second, which should be struck lightly, the fingers being quickly withdrawn. (See Ex. grand chords I division N? 2, but more particularly, divisions V and VI.)
- 8 8. All chord-divisions, broken and unbroken, are to be studied at first with each hand separately, and only after surety has been attained, should the hands be taken together. Begin by playing them slowly, connectedly, and with a full, singing tone, and evenly-strong touch. When sufficient confidence has been gained, they may be practised rapidly and piano, ascending crescendo, descending decrescendo, and reversed.
- 8 9. Finally the numbers best adapted for it may also be practised with the staccato touch.

#### COMMON CHORDS.

#### A. CLOSE POSITIONS.

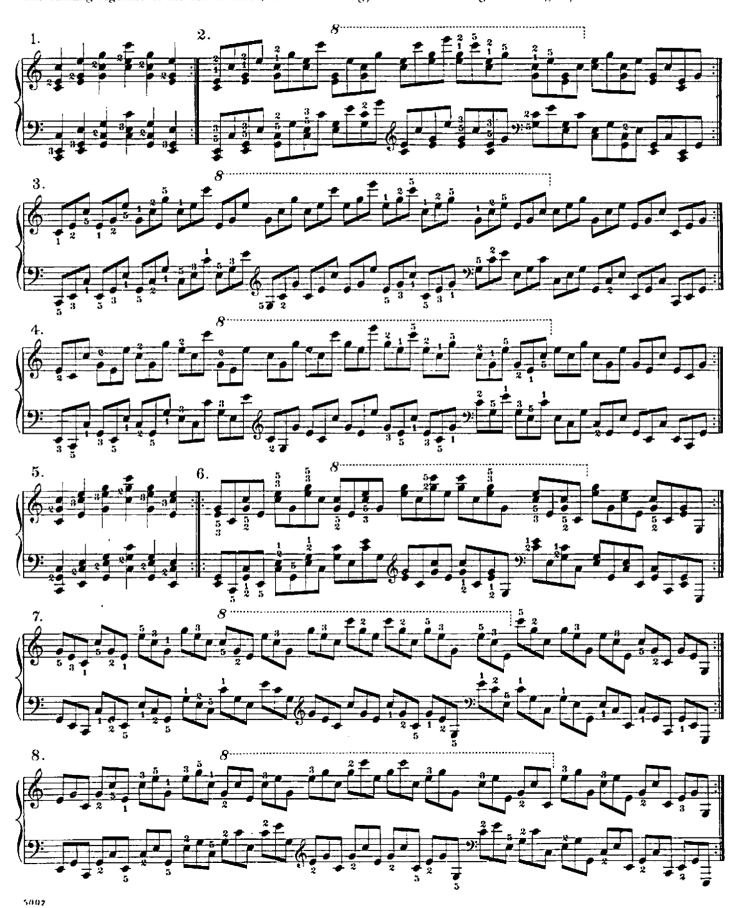
The following exercises in common chords are to be practised in all major and minor keys, with the same fingering, and as they are easily grasped by small hands, belong to the elementary studies in Piano-technics, which should be begun during the first year of study. Players who are not yet certain to strike the chords precisely together, should in the first exercise, play each one four times in succession, carefully noticing rule 3.



<sup>\*)</sup> The close positions must also be frequently grasped with different fingerings. Examples may be found in division V. of full chords in the extended positions, and in the first sixteen numbers of the circle-exercises.

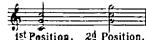
# B. OPEN POSITIONS.

The next exercises are the outcome of the inversions of the close positions of the common chord, and form the transition from the foregoing to the full-chord-positions. The fingering here given serves for all major and minor keys. The striking together of the double notes, exact connecting, and correct raising of the fingers, is to be observed.



Exercises 9-18 consist of incomplete common chords, the  $5^{th}$  being omitted.

Exactly the same divisions and groups may be formed out of the following:



Particular care in exercises Nos 10, 13 and 16-18 should be observed for a light arm movement.



#### C. FULL CHORDS

The execution of full chords forms the greater part of all chord-study. Such harmonies appear in many varied forms. Owing to the wide span necessary to the proper striking of these chords, they present some difficulty and require a hand of at least normal size. The introductory rule (§ 3) is to be observed, the tones must be all struck a-like, and at the same instant. The skipping from one chord-position to the same an Octave higher, or lower, is accomplished by a light arm-movement.

Fingering. Hands having a good span may retain the C major fingering for all major and minor common chords, using the 5th and 4th for the Thirds, and the 5th and 3th fingers for the Fourths. (See Ex.)



Hands having too small a span, may use in the 3d position of the right, and in the 1d position of the left hand, the 5th and 3d fingers as an exception, if the Third in question is major and is so situated, that the 5th finger falls upon a white key! See Ex.)



The thumb and 2d finger will be used in every chord.

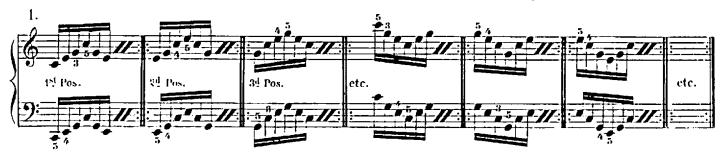




Division III. (See § 5.)

The exercises in the 3d division are also easily played by small hands, and, therefore, should follow, in most cases, directly after the common chords. The fingering is the same in all major and minor keys, except in the case of extremely small hands, which are allowed the exceptions before mentioned.

In exercises 2-3d, the perfect connecting desired between the thumb and 5th finger, requires special attention and care.

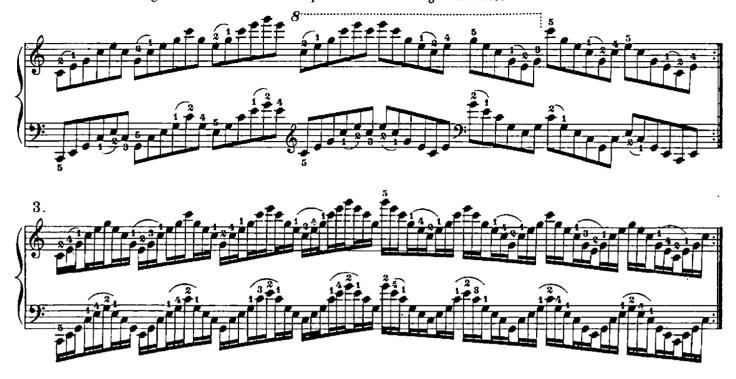




The following exercises form the transition to the Grand Arpeggios and are to be practised with uniform fingering through every major and minor common chord. Passing the thumb under the fingers and the fingers over the thumb, must be accomplished with great care, in order to effect a perfectly smooth connection.



2. The two following exercises are also to be practised with Changed Accents.

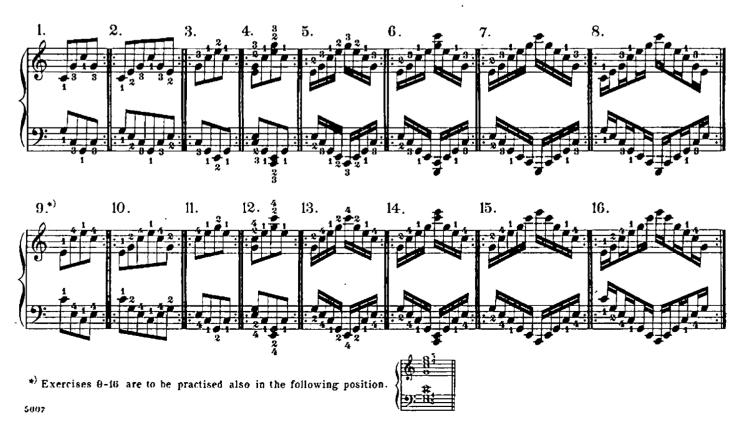


# GRAND ARPEGGIOS.

The extension of the 3d division through several Octaves is known by the above name, and belongs to the most used of all chord-figures; therefore, like scales, should be most diligently practised.

The same rules apply for the technical treatment of grand arrpeggios as have been already given in the preliminary exercises on the scales; except that the position of the hand is more stretched, and the thumb requires to be passed a greater distance under the hand, than in scale playing.

The following exercises are at first to be practised very slowly, with each hand separately, especial thought being given to the production of a full, round tone, perfect connection, correct raising of the fingers, and a quiet carriage of the arm, without twisting of the hand, or moving the elbows.

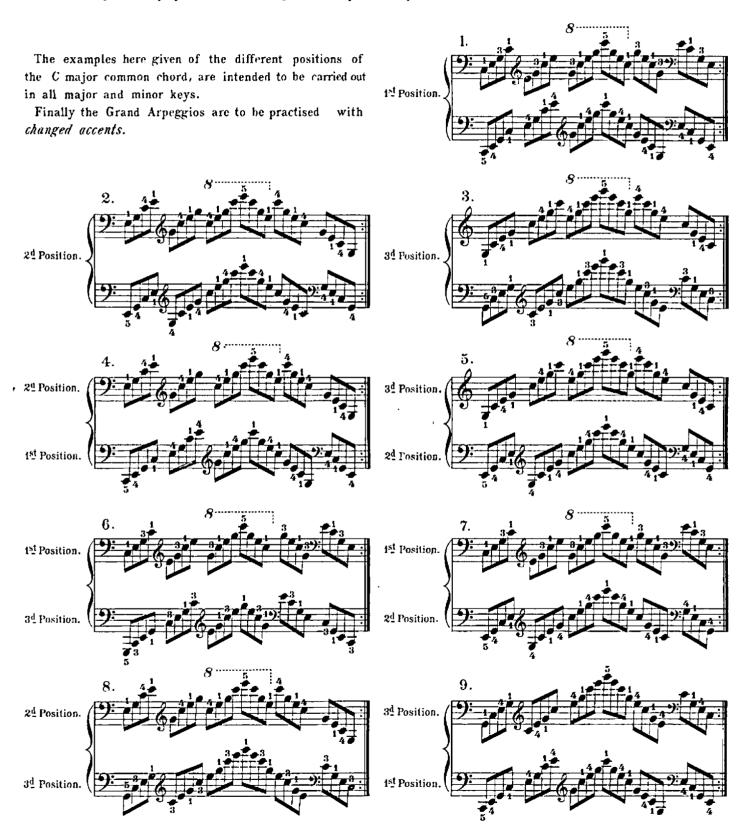




 $^{\bullet\, \flat}$  A and E major, C, G and F minor, belong also to this.

The C major-fingering serves in general as an example for all other major and minor common chords. One should not avoid, in keys such as Eb major, C\* minor, etc., passing the thumb under the fingers to strike the black keys for while it may, at first, present some difficulty, yet without this acquired skill many passages in difficult Piano compositions cannot be performed. Perfect smoothness, in passing the thumb in the various chord-positions, is of the highest importance.

Only such black-keyed-positions, between which two white keys are found, (as the 2<sup>d</sup> position of D major, G minor, etc.,) are to be excepted and played after the examples in the preliminary exercises Nos 30-32.



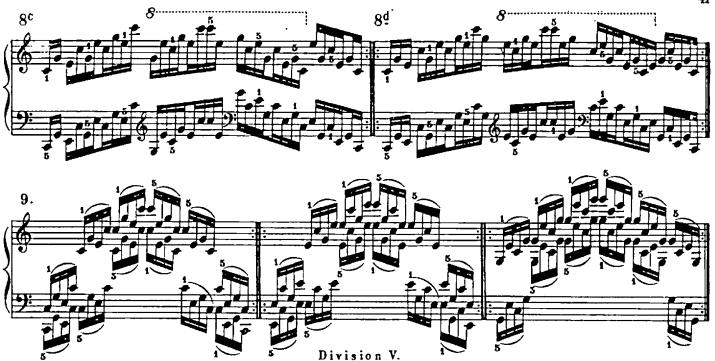
40 Division IV.

The exercises in Connected Double Intervals and the accompanying chord-figures are of the greatest value for giving strength to the fingers; and, therefore, should be practised with much zeal and diligence.

Care is required in exact connecting, in tone-formation and correct finger-raising. These exercises must also be transposed into the various keys.



\*) The fingering of this and Nos 8-84 of the following exercises, is practicable only for chords on all white, or black keys and possibly those containing one white key, (as Eb major, Common, etc.) while for D major, and similar common chords, the fingering for "Extended Positions." (Nos 16, etc.) is to be employed.



A full chord divided into two close positions requires careful technical treatment, because of the necessity of striking the same keys twice in rapid succession. Softness of touch-movement and exact striking together of the several tones, is to be observed.

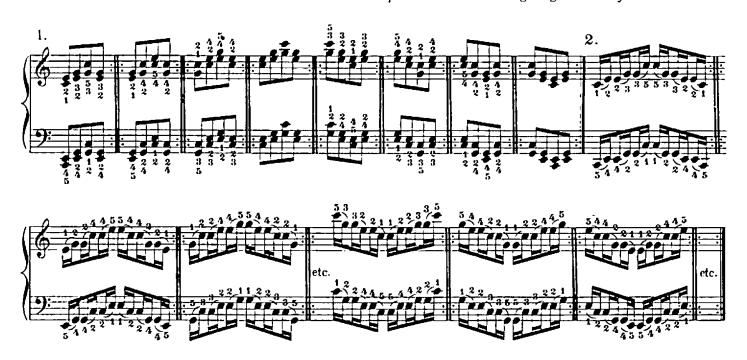
In exercises 2, 5 and 8, the first note must receive a strong accent and be correctly connected to the second note, which should be struck lightly, the fingers being quickly withdrawn.

All the following exercises are to be played, with the same fingering, in all keys.



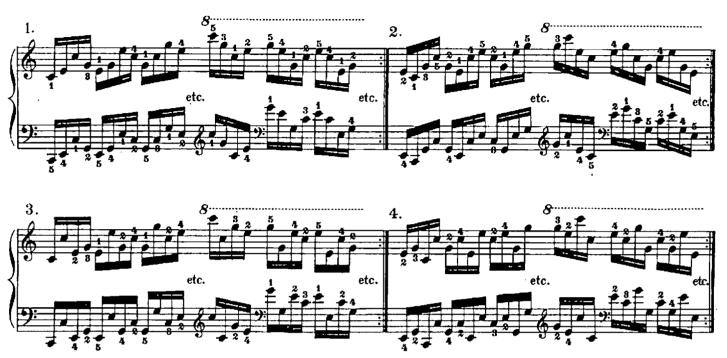


The following exercises are to be subjected to the same technical treatment as those in division V. The single-note numbers form the groundwork for a correct Portamento - Touch, and are particularly adapted for promoting lightness and smoothness in all touch movements. The exercises are to be practised with like fingering in all keys.



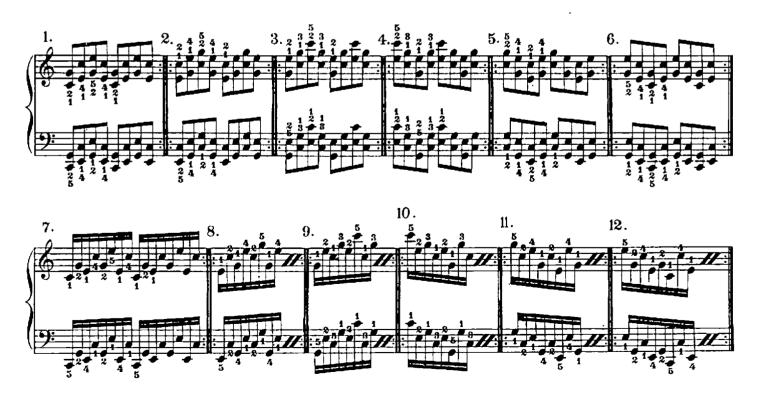


From these given divisions are formed the following chord-groups, which though not so frequently used, will be found serviceable. Similar divisions may be formed from the incomplete common chords. The fingering here given will always be employed. These exercises are also to be studied in all keys, and with changed accents.



### D. EXTENDED POSITIONS.

The next twelve exercises are for students with hands of normal size, and must be practised with like fingering in all keys. Players having small hands may select for practice some of the least severe exercises, such as No. 14,16, 18,20,22 and 24. The same groups will be found already given in the IV division; No. 8-8d (See foot-note, Page 12.)



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\*) The Nº 14, 16, 18, 20, 22 and 24, are to be studied also with changed accents.

The following exercises contain the various divisions in their inversions and are to be practised, with like fingering, in all keys. They form the transition to the widely-extended positions, and can only be played in a correct and connected manner by players with large hands. Those with small hands may endeavor to make as wide a span as possible; and those places in the exercises difficult to connect, may be made smooth by holding the last note in each group as long as possible, quickly and lightly springing to the next.



The common chord in widely extended-positions which consists of three, four and sometimes of five notes, was brought into general use by C.M.v. Weber, Chopin, Liszt, Hensell, and the more modern masters generally. In consequence of the wide span necessary, only players with long slender fingers and flexible hands can attain to full success in overcoming the difficulties presented in the following exercises.

Correct raising of the fingers is to be observed in the various divisions, and the chord-louch, No 1, is to be accomplished, particularly by hands of limited span, through a quick Arpeggio effect. When the hands are very small, and the chords are dispersed very widely, and over the black keys, raise the wrist till the fingers fall vertically over the keyboard, then spread them as a fan is opened and swiftly sprinkle the notes from lowest to highest, with the pedal down.





#### CIRCLE EXERCISES.

Finally; advanced players may study the chord-exercises connected harmonically, for which the *Modulating Tablet* (Page 53) will be found useful.

The simplest method of connecting chords will be found in the following example  $(N^0, 1)$ , in which the bass moves downward by steps of Thirds through the entire circle of keys, (hence the name Circle - Exercises).

It will be noticed that when the bass descends a minor third a minor chord is struck; and when a major, a major chord is used; and that these regularly alternate. The pupil should commit to memory these harmonies, as well as execute them with technical facility.

Only the beginning of each exercise is given, with the understanding that it is to be carried through the circle of keys shown in Ex. 1.

Numbers 4-16 and 19-33 are changed in the left hand only, the right hand playing simply the common chords, as in Nos 2 and 17. In Nos 34-41, the left hand plays the bass in Octaves, etc.

Examples 4-12 and 19-33 are to be practised in two ways, first with single bassnotes, then by an Octave bass, as in examples 2, 3, 17 and 18, followed by 2<sup>b</sup>, 3<sup>b</sup>, etc.

By means of such practice, the player acquires surety in the most useful accompanying figure of the left hand, in which the skips in the bass must be accomplished with a light arm, the 5th finger always striking on its end.

Aside from the above, opportunity is afforded to accustom the pupil to a proper use of the Pedal: the necessary dividing of one harmony from another requiring both good taste and skill. Care must be taken to employ a light foot-movement, a stationary heel and to avoid all disagreeable and disturbing noises.

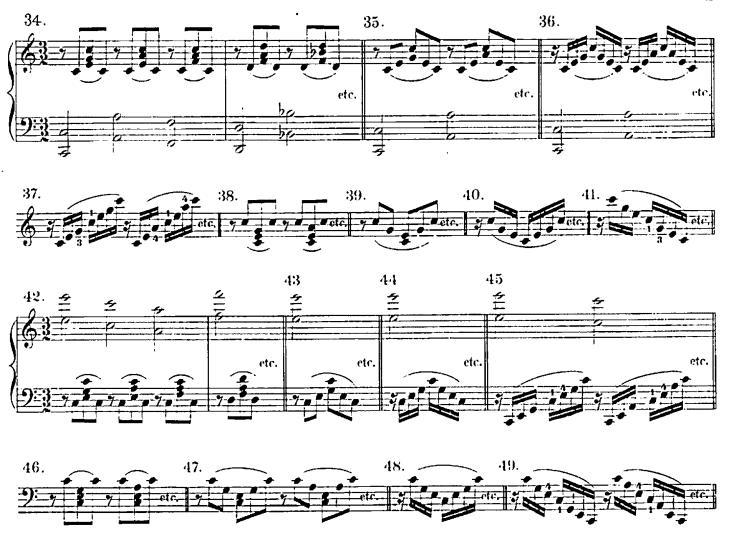
The few Circle Exercises given include only the most essential of the chordtechnics; but intelligent pupils will extend them. The variety and chord-combinations is practically infinite.



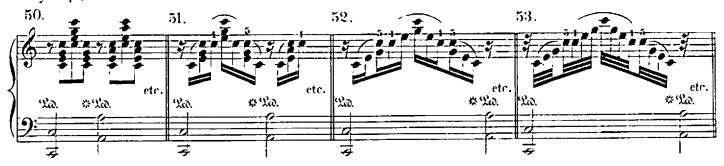
<sup>\*)</sup> Large letters indicate major, small, minor keys.







In like manner similar exercises may be formed out of all other chord-divisions and groups: for example, chords taken by skips, and their divisions, as follows: \_\_



Progressive exercises may be best arranged as in Nos 54 and 55. These are also to be studied in reversed movement, and in all the various divisions.

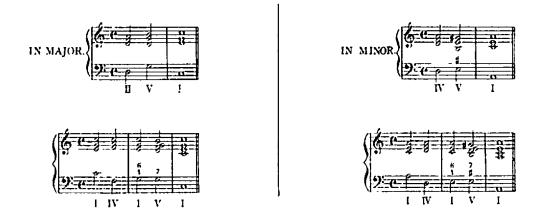


### The use of the Modulating-Tablet.

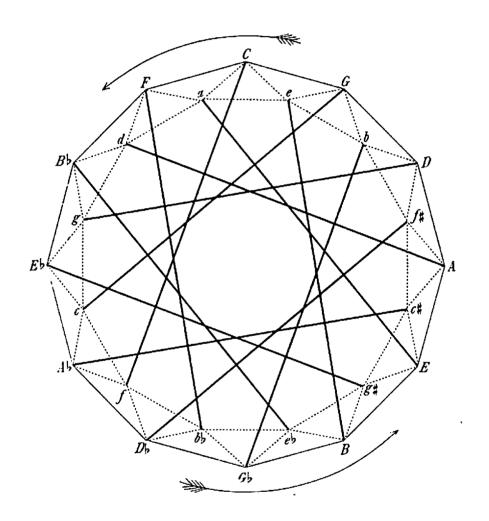
The following modulating-tablet gives a slight knowledge of harmony, as for as the natural or simple connection of chords is concerned. It exhibits the ground tones or roots of each major and minor common chord; the major chords being indicated by large, and the minor by small, letters. Their harmonic relation is shown by the straight lines leading from chord to chord.

The relation of the dominant to the tonic is indicated by heavy lines proceeding from a large letter to a small one. Note, however, that the tonic chord though represented by a small letter, may be either major or minor. Owing to the necessity for a clear survey over the orthography, a complete and correct drawing could not be presented, therefore, those enharmonic changing tones, which give the same sounds when struck on a keyed instrument, are not indicated. (For example, B=Cb, Gb=FA, Db=CB, Ab=GB, etc.)

The chord connections are to be treated as in the first number of the Circle-Exercises; in which the connecting of two chords is accomplished by retaining, in the same voice, the tone common to both chords. Students who have learned to play a few chord-exercises in every key, will quickly be able, with assistance from the tablet, to form a transition from one key to any other. After such a modulation, the new key must be established by a formal close. Examples of the most simple cadences are here given, which are equally useful in all keys.



# Modulating -Tablet.



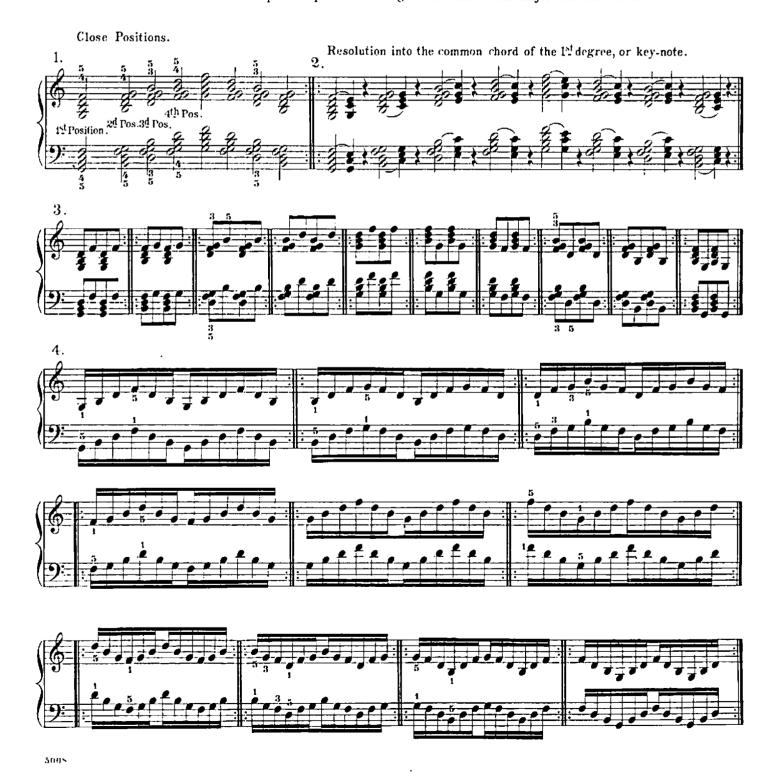
# CHORDS OF THE SEVENTH.

Rules Nº 1-9, given for common chords, serve also for chords of the Seventh.

# A. CLOSE POSITIONS.

The first four numbers belong to the elementary exercises of the chord-technic, and follow methodically after the close positions of the common chords. The fingering given is not the only one possible, for we may employ in the 1<sup>th</sup> and 4<sup>th</sup> positions of the right, and 1<sup>th</sup> and 2<sup>th</sup> positions of the left hand, the 3<sup>th</sup> finger instead of the 4<sup>th</sup>. It is necessary, however, to decide upon one certain fingering, and with it alone, practise the close positions in all keys.

I. The dominant-Seventh chord is placed upon the 5th degree or sound of the major and minor scales.



II. The diminished-Seventh chord is placed on the seventh note of the ascending minor scale, as it is given 55 on page 22.

The 4th finger may be used in all positions of diminished-Seventh chord; but to avoid any straining of the weaker finger, the 3dis recommended.

CLOSE POSITIONS, to be practised in the same divisions as Nos 3 and 4, through all keys and with like fingering. There are only two other chords of the diminished seventh on the keyboard. They may be found by raising this one semitone twice in succession. If the operation is repeated again the same keys will be found under the fingers. Twelve such chords are distinguished in writing but here we are only interested in manipulation. See pages 113 and 124.

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Resolution into the common chord of the 4th degree, or or 4th note of the scale.

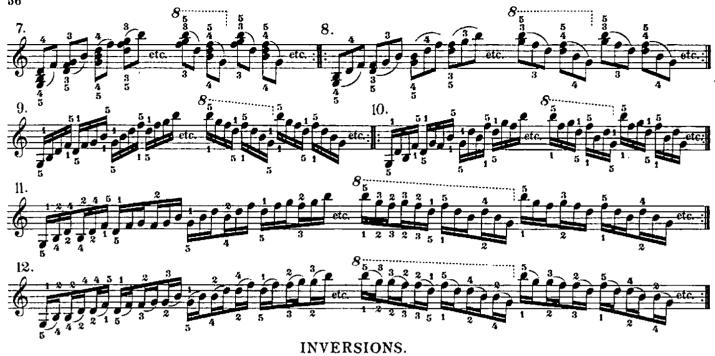
8. Resolution into the common chord of the 6th degree, or 6th note of the scale.

etc.

Divisions I-VI.

The close positions of the Seventh chords are to be treated in the same manner as the full common chords. In order to be brief, only the most important of the six divisions are here given, which should be practised, after—the manner of the following inversions, with each hand separately, then with both together, through all the dominant and diminished-Seventh chords. The 3\frac{1}{2} finger will be substituted for the 4\frac{1}{2}, and G\frac{1}{2} for G\frac{1}{2}, in diminished-Seventh chords.





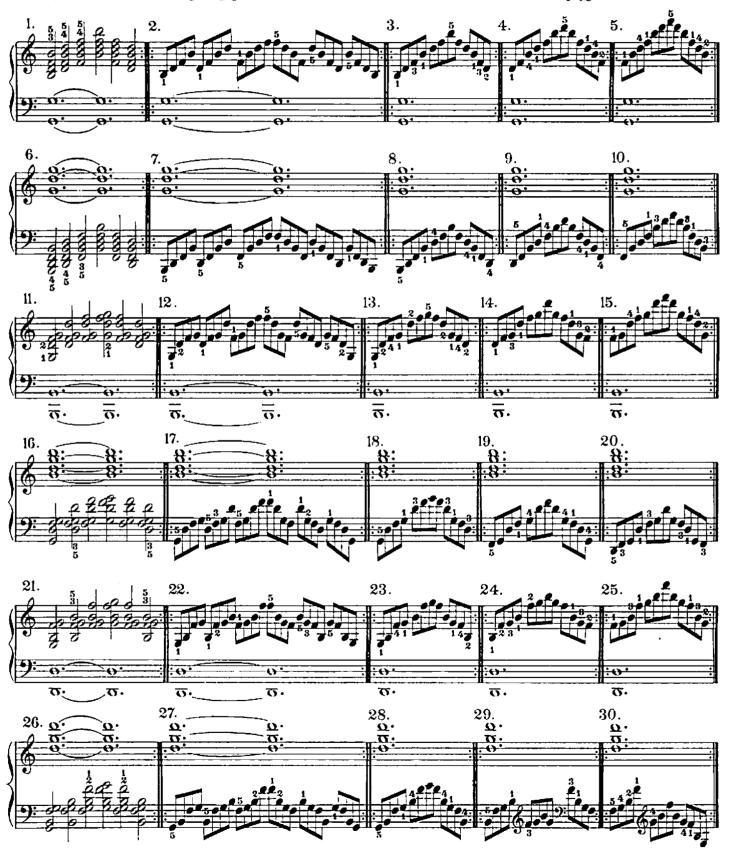
The following exercises are to be studied in all diminished-and dominant-Seventh chords, and  $N^{os}$  3, 4 and 5, with changed accents also. The fingering is alike in all keys, but the  $3^d$  finger is to be substituted for the  $4^t$ , and  $6^{\sharp}$  for  $6^{\dagger}$ , in diminished-Seventh chords.



# (INCOMPLETE CHORDS.)

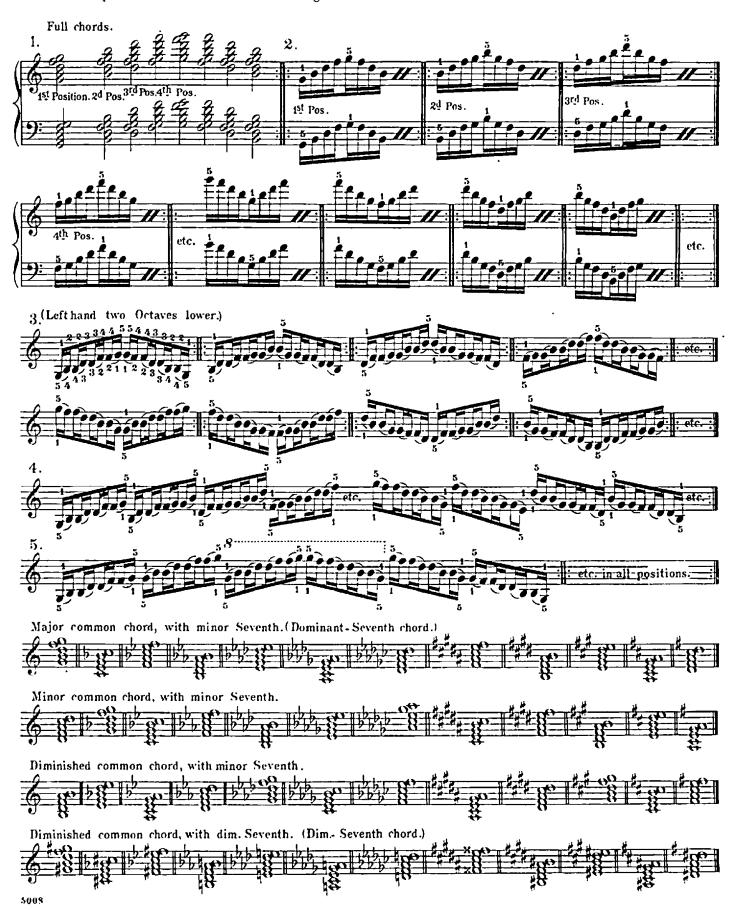
The following exercises are to be treated in the same way as the full common chords, page 34. Nos 2,7, 12, etc., are to be carried through two and three Octaves, and Nos 3-5, 8-10, 13-15, etc., through three and four Octaves.

The open positions of complete common chords, page 32, are to be practised through all the dominant - Seventh chords, and the rules for fingering given for those common chords serve for the Grand Arpeggios.

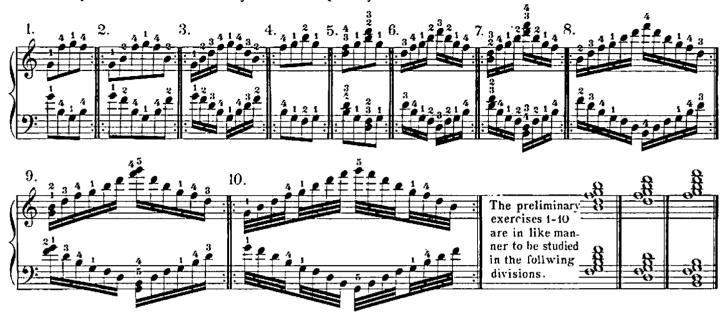


#### C. FULL CHORDS.

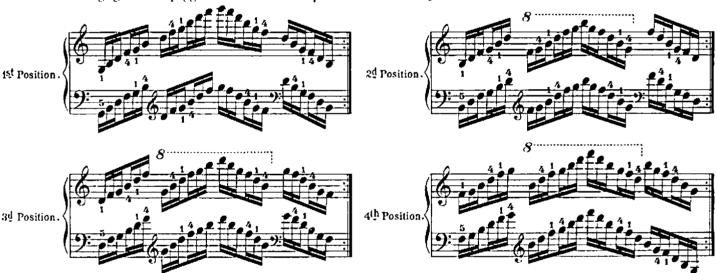
The full chords of the Seventh are to be studied only in the two following divisions, and in the Grand Arpeggios: because double intervals, etc. stretch the fingers apart in such a manner as to cause them too much fatigue. The following exercises are to be practised on all the Seventh chords given below.



Preliminary exercises to be studied by each hand separately.



The following grand Arpeggios are also to be practised with changed accents.

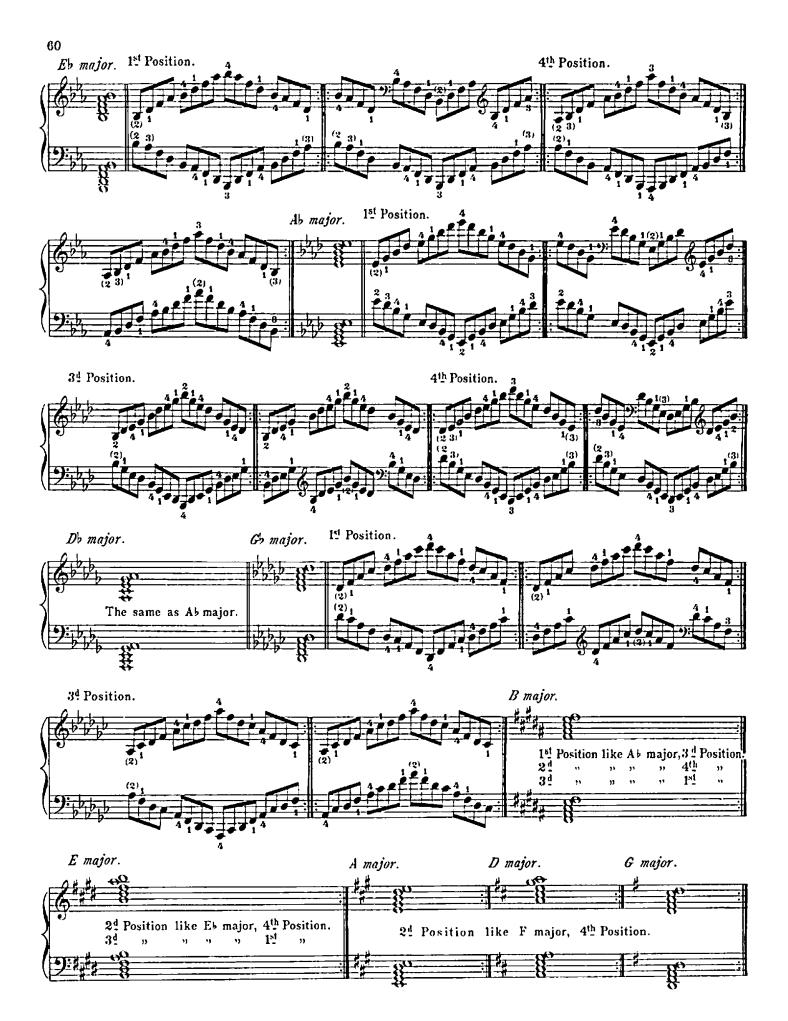


Fingering of the Grand Arpeggios.

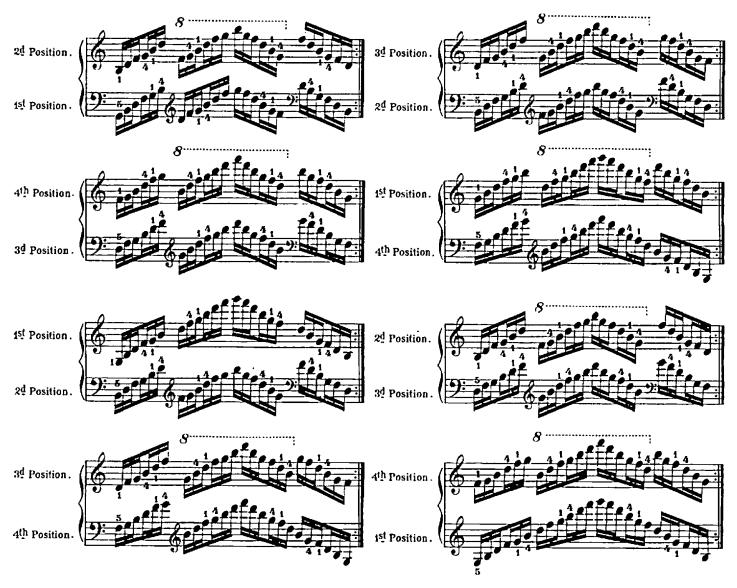
All the Seventh chords are to be studied after the manner of the four positions of the dominant-Seventh chord in C major, given above, at first taking only such positions as begin on the white keys. Those starting on black keys, owing to their being more difficult to execute, should be practised last.

The following examples will illustrate the fingering to be employed by players having small hands. It is shown that the right-hand thumb in ascending, (the left in descending) is placed upon the first white key occurring in the chord. This rule holds good also for large hands when the chord-position contains only one black key: for example, the dominant-Seventh chords of F major,  $4^{th}$  position, A major,  $2^{d}$  position, etc., while all positions in which two or more black keys occur, should be played after the fingering given in C major.





After surety has been attained in every position, the Arpeggios of the Seventh chords are to be practised in the following ways.



# COMMON CHORDS with CONNECTING and CHANGING NOTES in GRAND ARPEGGIOS.

These figures are to be treated in the same manner as the full chords of the Seventh, and as shewn on page 58, the necessary preliminary exercises being Nos 2, 3, 4.

The following 11 numbers should be practised in every major and minor key. The fingering may be arranged, 1st Position. for either large or small hands, after the rules on Page 59.



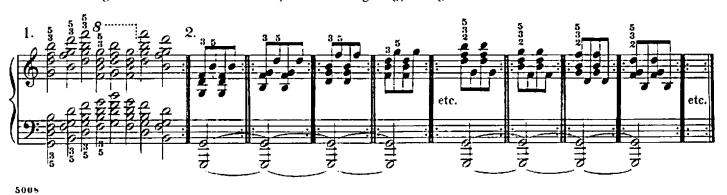


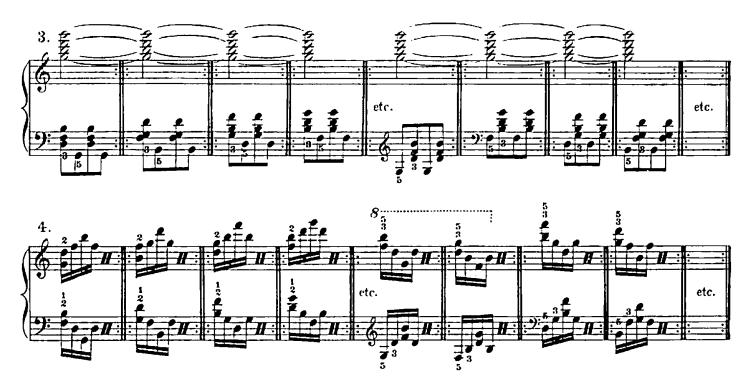
5008



# D. EXTENDED POSITIONS.

The following exercises are to be studied, with like fingering, through all dominant and diminished-Seventh chords.





 $N^{os}$  5-10, are to be practised also with changed accents.



# TWO-PARTS (OR VOICES.)

The study of scales in 3rds and 6ths in all keys is of the highest importance, and requires unremitting application and patience to gain the desired equality in strength of finger, and use of the thumb freely upon the black keys. The acquirement of a strict system of fingering may be greatly assisted, as soon as a foundation has been laid, by playing the two-part passages broken, using the same fingering as in the unbroken forms.

Through this practice the 5th and 4th fingers, being more constantly used than in the more generally accepted fingering, gain confidence and strength. The weak part of the hand becomes more independent.

#### THIRDS.

#### A. Elementary exercises.

Particular care is to be taken to ensure a quiet hand, light and equally-raised fingers, exact striking-together of the double notes, correct connecting, and a full, resonant tone. At first, each hand should be practised separately and very slowly. After surety has been obtained, the hands may be taken together in contrary motion, then the left in parallel motion with the right hand, etc.

NB. Exercises 1-6 are to be practised on the first 5 notes of all the major and minor keys.

Each exercise is to be repeated from four to eight times.



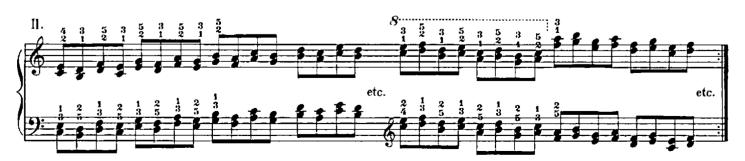
B. Progressive Exercises upon every degree of the scale.

The changing of the hand-position upon the same keys in Ex. 7, 9 & 12, is accomplished through a light, and barely noticeable, raising of the forearm, the wrist retaining a loose, quiet position.

M. Exercises 7-17 are to be practised in like manner, and with the same fingering in every major key. After surety in *legato* playing has been accomplished, the same exercises are to be practised with the *staccato* touch.



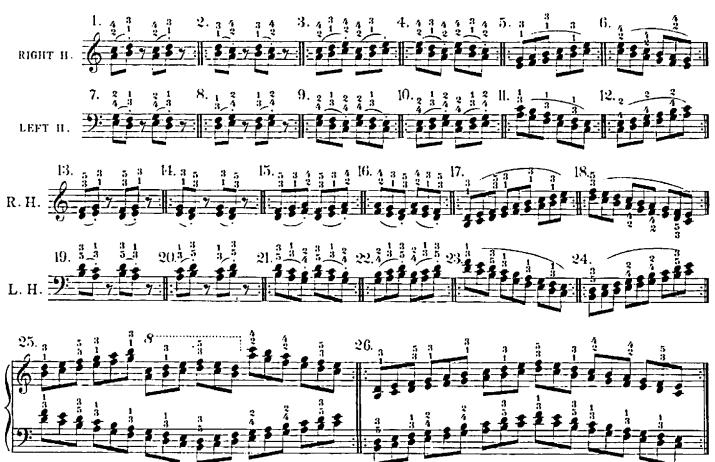
In exercise No 11, the 3d finger in ascending, is to be raised before the 1st, and in descending, the 2d before the 5th finger, (the left hand reversed). In this way a better connection is made possible. The same device is to be employed in exercises 14 and 16, with the 3d finger.





The passing in a connected manner of the  $3^d$  finger over the  $4^{th}$  and  $5^{th}$  in the right hand ascending, and left descending, in scales of Thirds, requires most scrupulous attention. The usual position of the hand is changed by turning it a trifle to the outside, thus assisting the fingering  $\frac{43}{21}$  in giving a perfect connection. The connecting between  $\frac{53}{31}$  is accomplished by the  $5^{th}$  finger only, which must remain down until the  $3^d$  is passed over, and placed upon the next key. In like manner, scales of Thirds are to be connected, in the right hand descending and left ascending, by means of the thumb, the hand however retaining its usual position. (Preliminary Exercises 2, 8, 14, 20, etc.)

Preliminary exercises.



In scales of broken Thirdscare is to be taken in forming a good connection when placing the thumb by the side of the  $4^{th}$  and  $5^{th}$  fingers, and the  $4^{th}$  and  $5^{th}$  by the thumb.



The following tables are intended to assist the pupil in learning to play from memory all the scales in Thirds: a task of no very great difficulty if he well knows the particular Third in every Octave upon which the fingers scome, in either hand and in every key.

Tables of the Scales in Thirds.

	1. IN C	MAJOR G	<i>D</i>	A	E	В	Gb	$D  \flat$	Ab	$E \flat$	$B^{b}$	F
RIGHT HAND. 3	f d	d b	a f#	e c#	b 8#	f# d#	gb eb	gh eh	g eh	g eb	g eh	il bb
LEFT HAND.	d b	S# d	c# a	c# a	c# a	c# a#	dh bh	db bb	uh f	e b	bb g	f d
	2. IN 3	MINOR.	b	ſ#	c #	£‡	eb	bb	f	c	g.	d

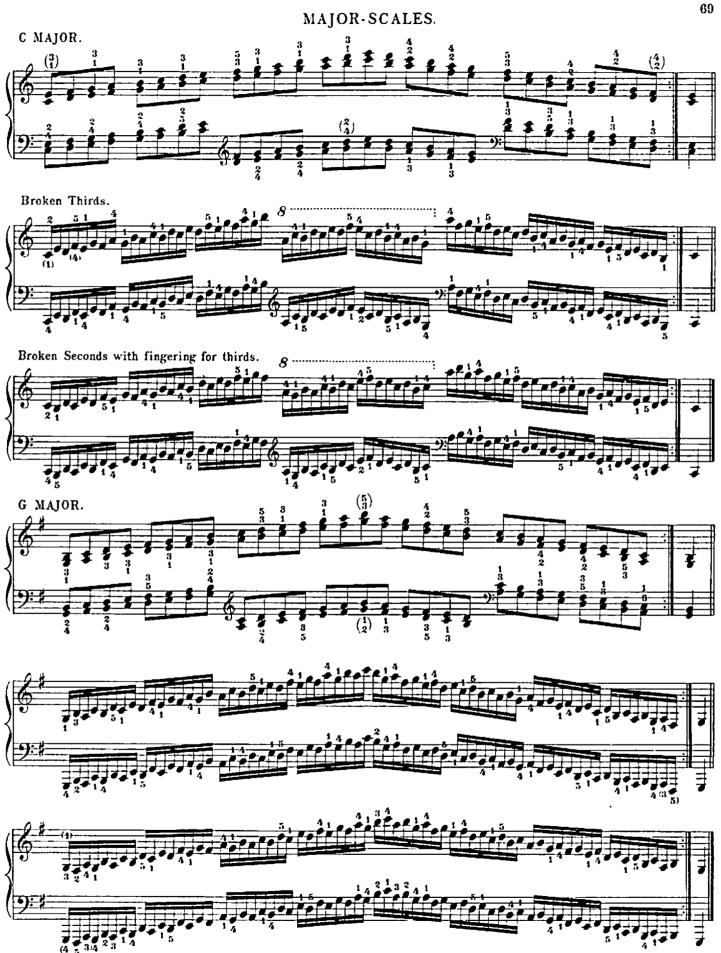
		~. 111	HIII OIL										
		a	e	b	S#	c#	g#	e b	11.	f	c	g	d
RIGHT I	HAND. 🖁	e c	h g	a# (a) f#	e# (e) c#	6# (b) E#	f× (f#) d#	(gb) eb	g (gb) eh	g e (eh)	g eh	d bb	e c# (c)
LEFT I	HAND, 3	S# (S)	c# (c) u	c# a# (a)	c# u	c# a# (a)	c# a#	d (db) bb	db bb	ab f	e h c	bb g	b (bh)

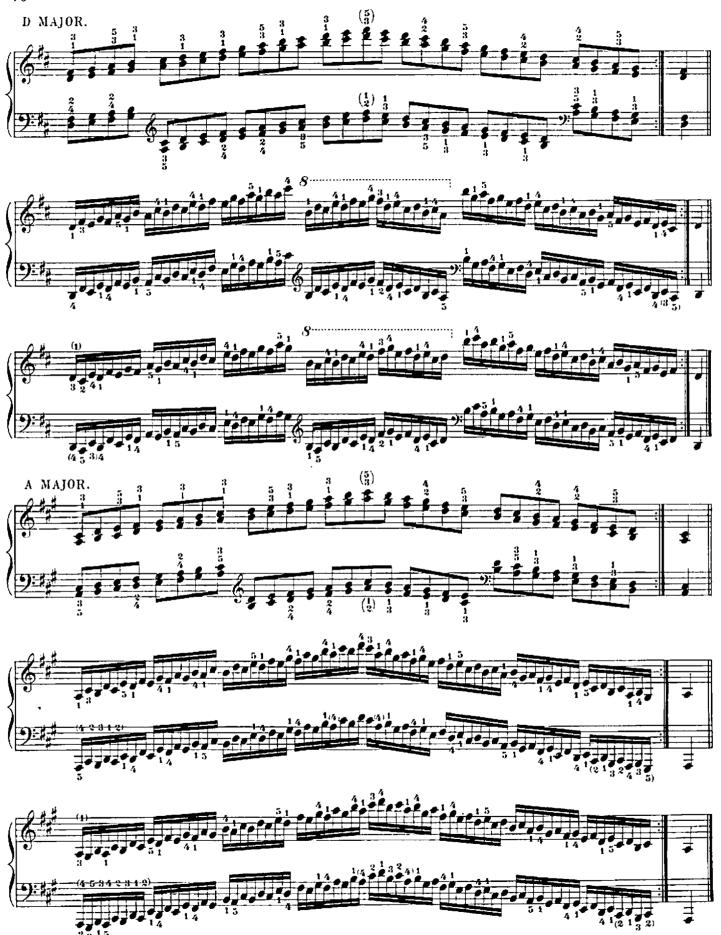
All irregular fingerings occurring in the beginning, middle, or at the end of the following scales are bracketed, () and generally necessitated by the repeat marks, or quiet-hand position.

All scales in Thirds, broken and unbroken, are to be practised a long time slowly, and by each hand separately. Not until the pupil has obtained confidence, and surety, should the hands be taken together.

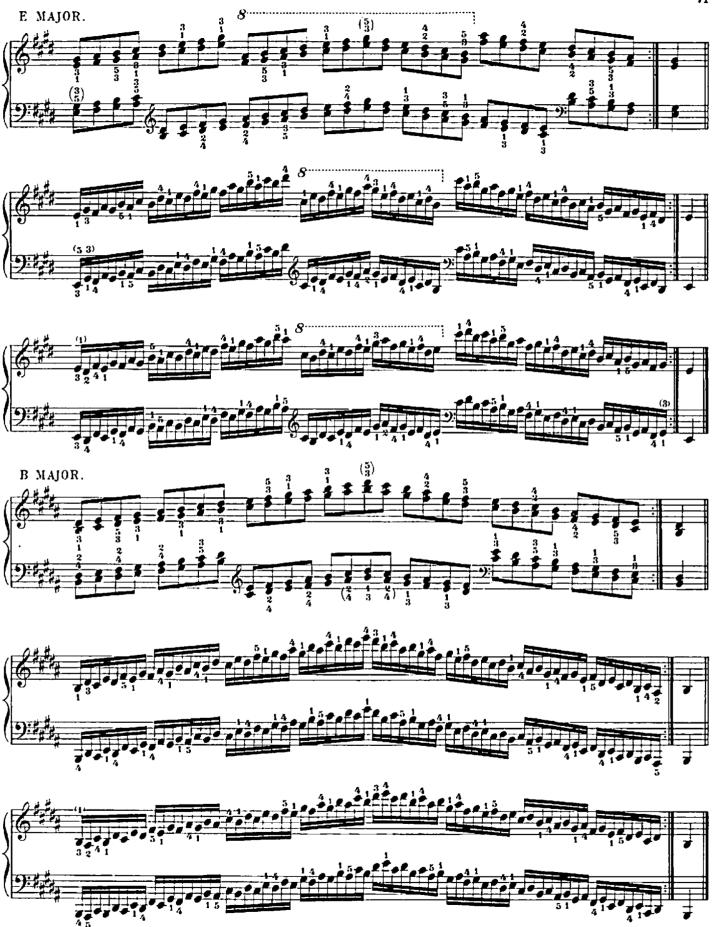
The free use of the thumb upon black keys, in two part playing, requires great attention, but after a considerable amount of practice has been bestowed upon it, less awkwardness and difficulty will be found than is generally supposed.

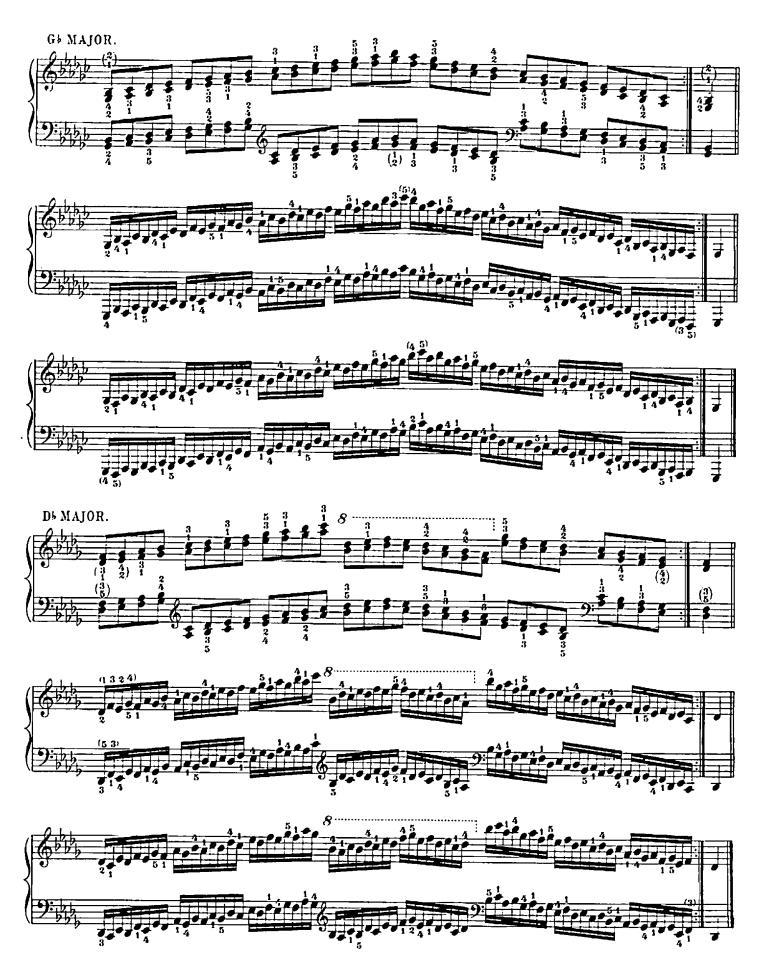
Ph. Em. Buch called the thumb the "Principal Finger," and advised his pupils to endeavor to develop its powers most fully.

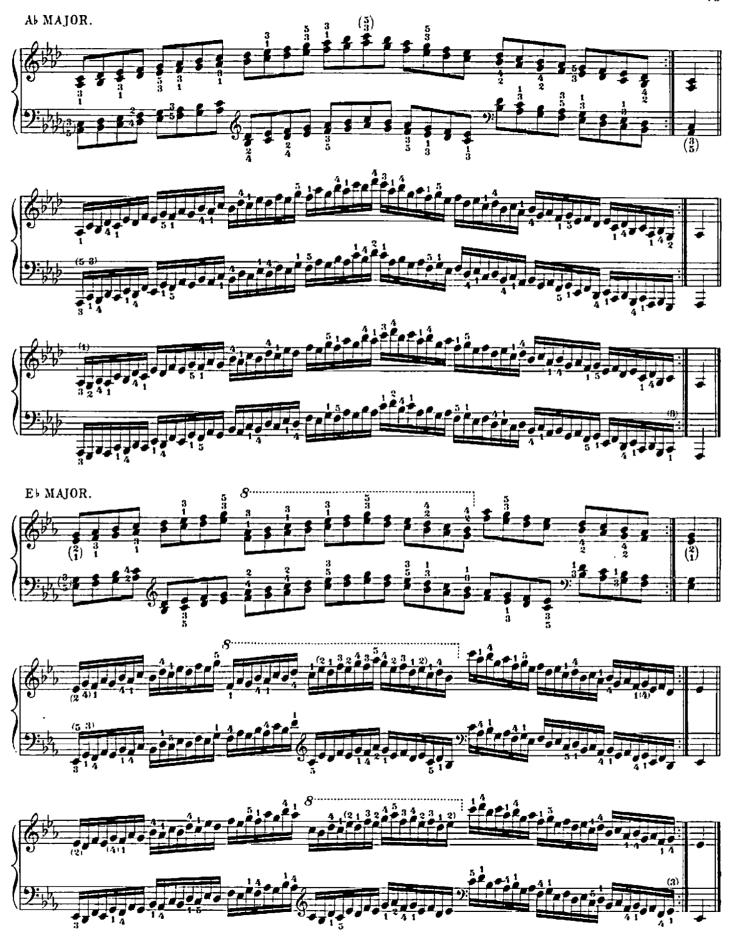


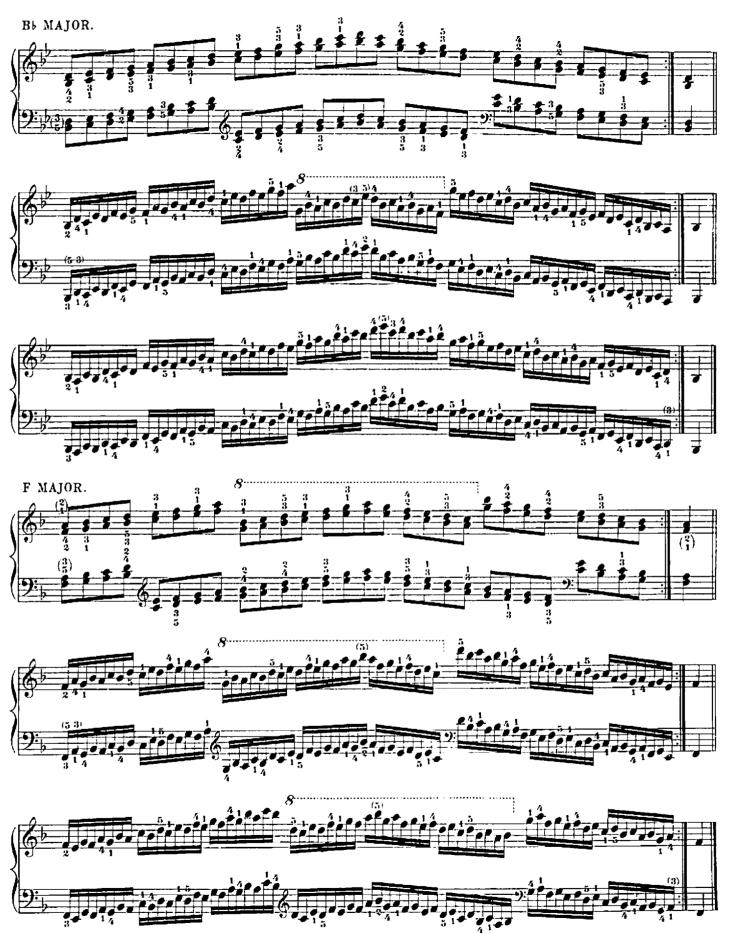




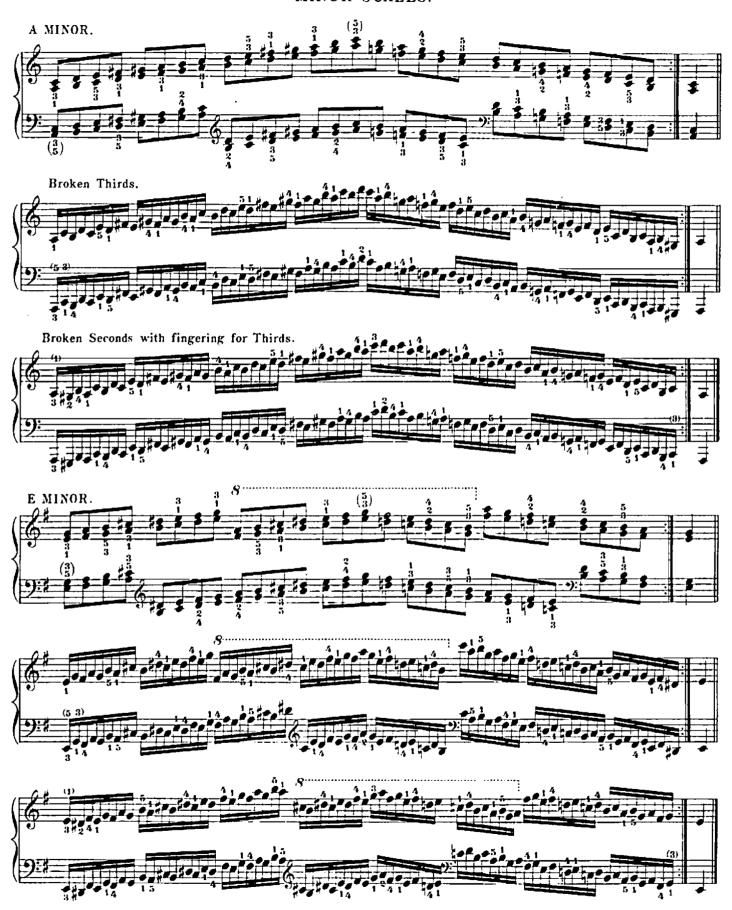




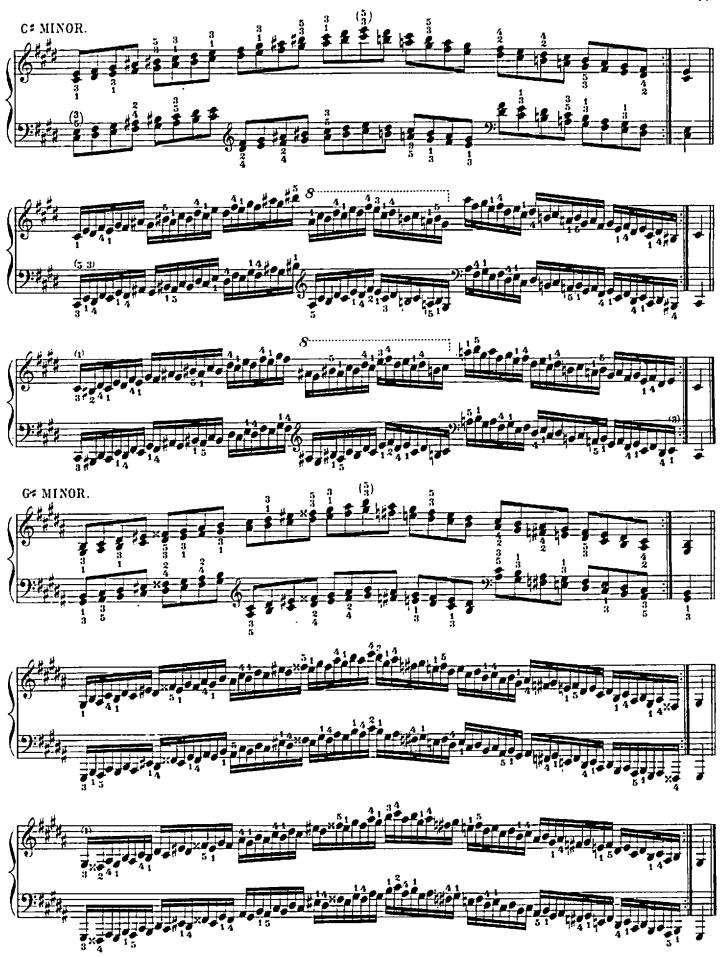


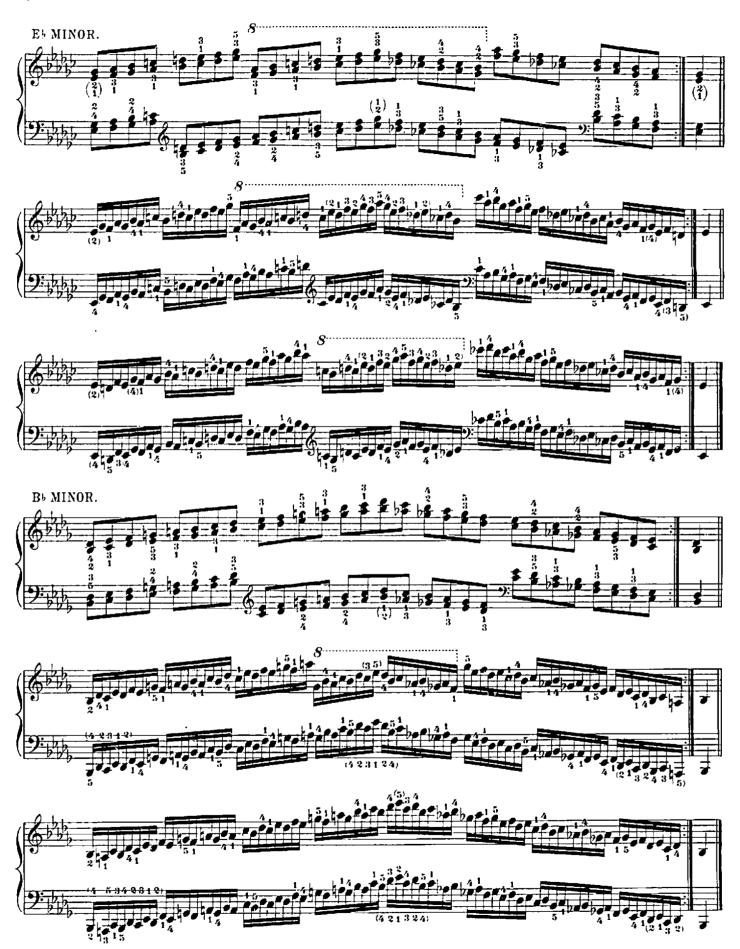


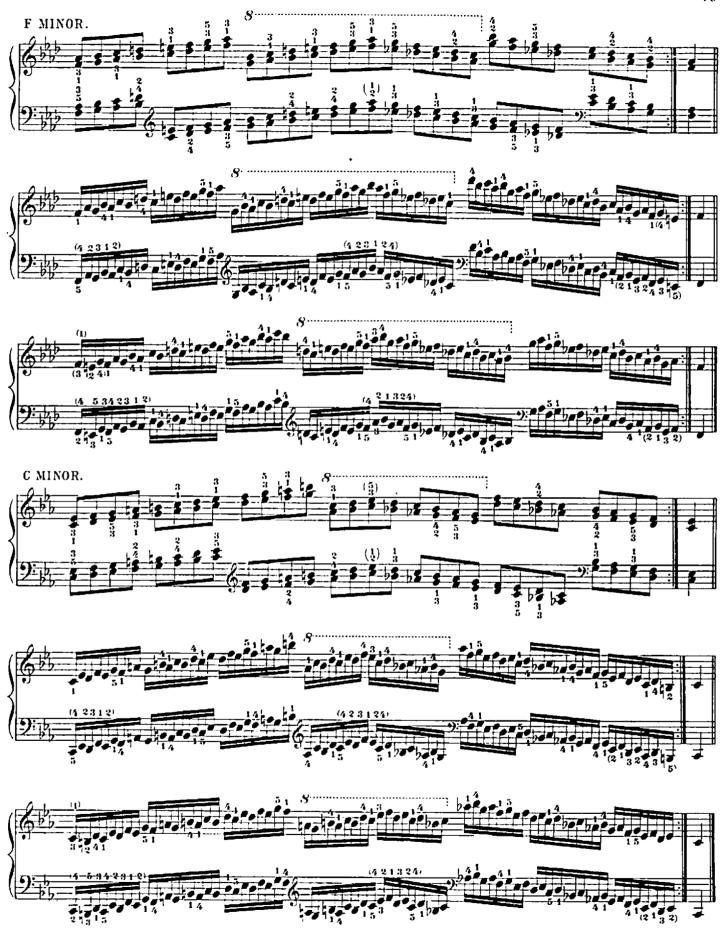
# MINOR-SCALES.

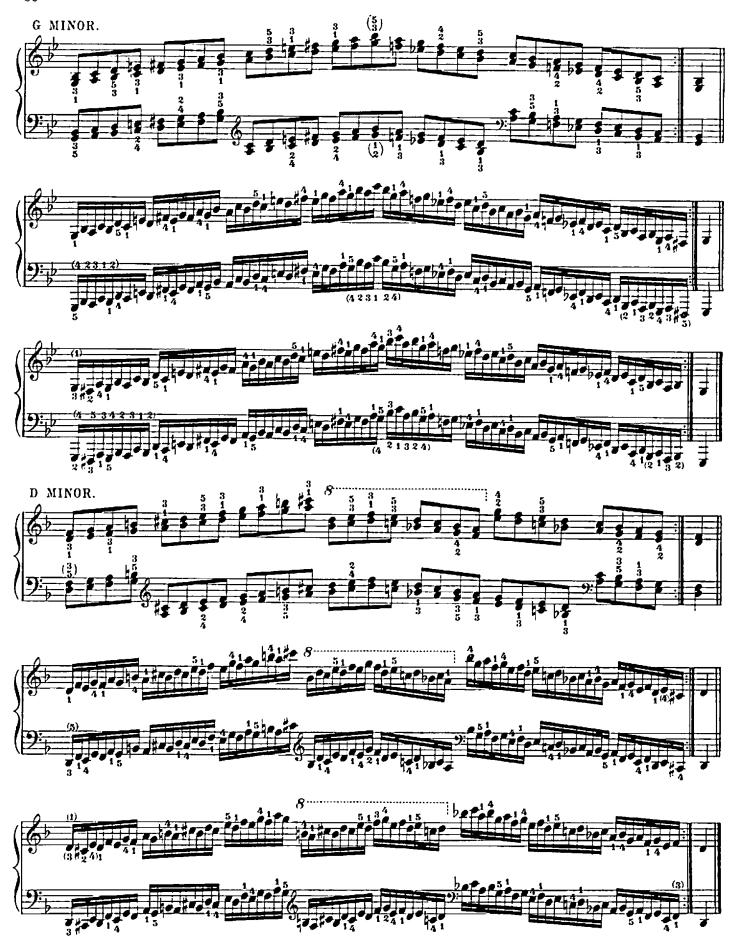












# HARMONIC MINOR-SCALES.

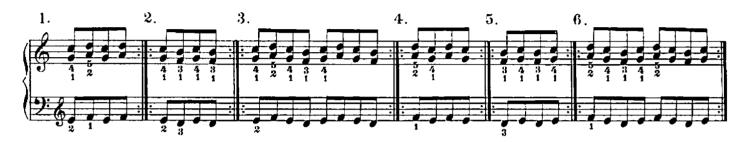


#### II FOURTHS.

# A. Elementary exercises.

The same rules of touch serve for the right hand as given for Thirds. Owing to harmonic considerations, the left hand has only single notes to play.

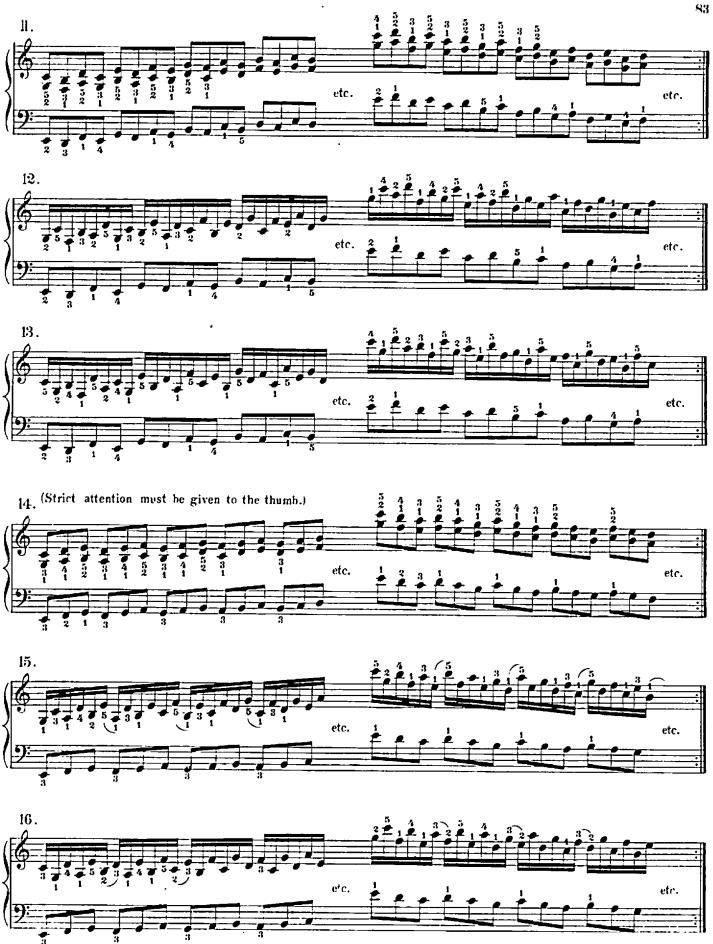
The connecting, in exercises 2 and 5 (partly in 3 and 6 also), can only be accomplished between the 4th and 3d fingers, the thumb springing from key to key in an elastic and easy manner.



B. Frogressive exercises upon every degree of the scale.



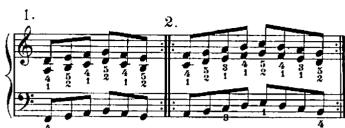




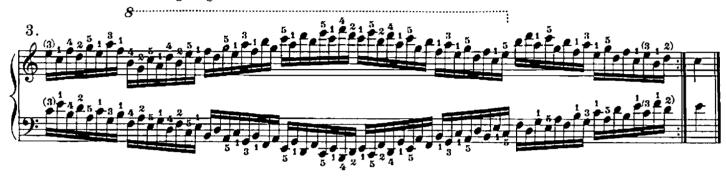
### C. SCALES OF FOURTHS.

Preliminary exercises.

Exact connecting of the double notes must be observed, and the passing of the  $4^{th}$  finger over the  $5^{th}$ , with the hand turned somewhat to the right, must be carefully studied. In descending, only the thumb can connect with the  $2^{th}$  finger, the hand retaining its usual position.



Broken Thirds with fingering for Fourths.



The following tables give the tones in each Octave, and in every key upon which the fingers 3 come.

Tables of the Scales in Fourths.

	1	1. IN 1	MAJOR.	•									
		С	G	D	A	E	В	G	DЬ	Аb	$E$ $\flat$	$B_{\mathfrak{h}}$	F
RIGHT HAND.	3 1	а е	c g	g d	g# d	c# 8#	g# d#	ah eb	ab eb	a h e b	bb f	f c	f
LEFT HAND.	3	c g	e b	e b	B S#	c# 8#	c# 8#	dh ah	db ab	ab eb	d $a  >$	d a	a e
•	;	2. IN I	MINOR										
		а	e	ь	T#	C#	g#	eb	Ub	f	c	g	d
RIGHT HAND.	3 1	f# (f)	c# (c) g	g# (g) d	d# (d) a	c# E#	8# d#	ab eb	f c	a b e (eb)		S# (f)	b (bb)
LEFT HAND.	3	c g# (g)	e b	e b	c# g#	c # g#	g# d#	(d) db ab	d b (a) ab	a b e (eb)	d a (ab)	d a	f c# (c)

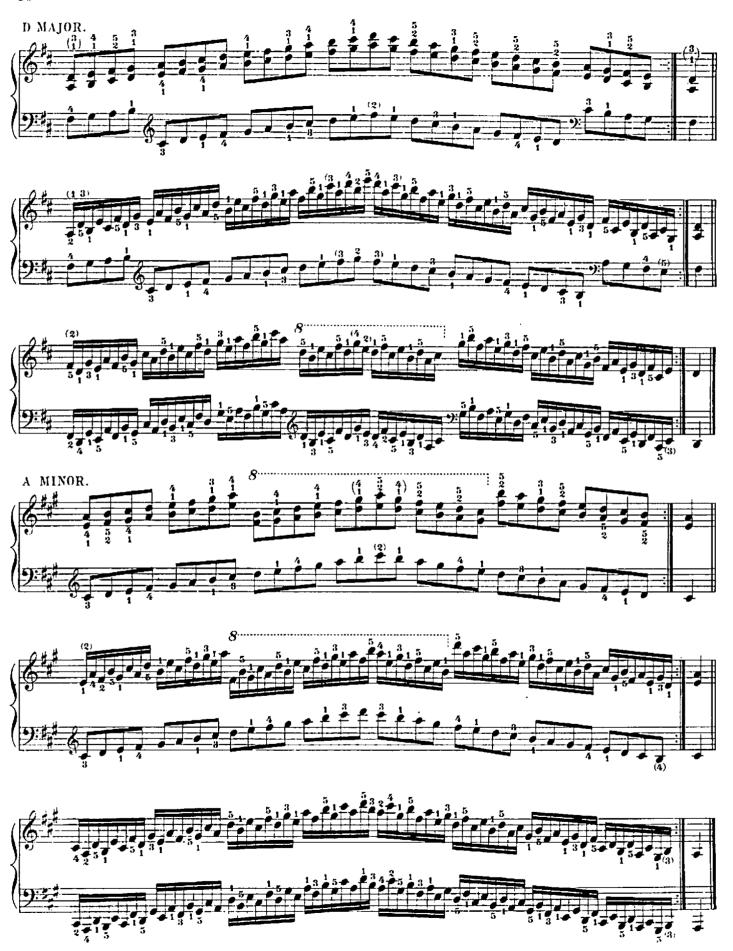
The fingering of scales in Fourths for the left hand, is only practicable for scales in broken Thirds. The same is the case in minor for the right hand.

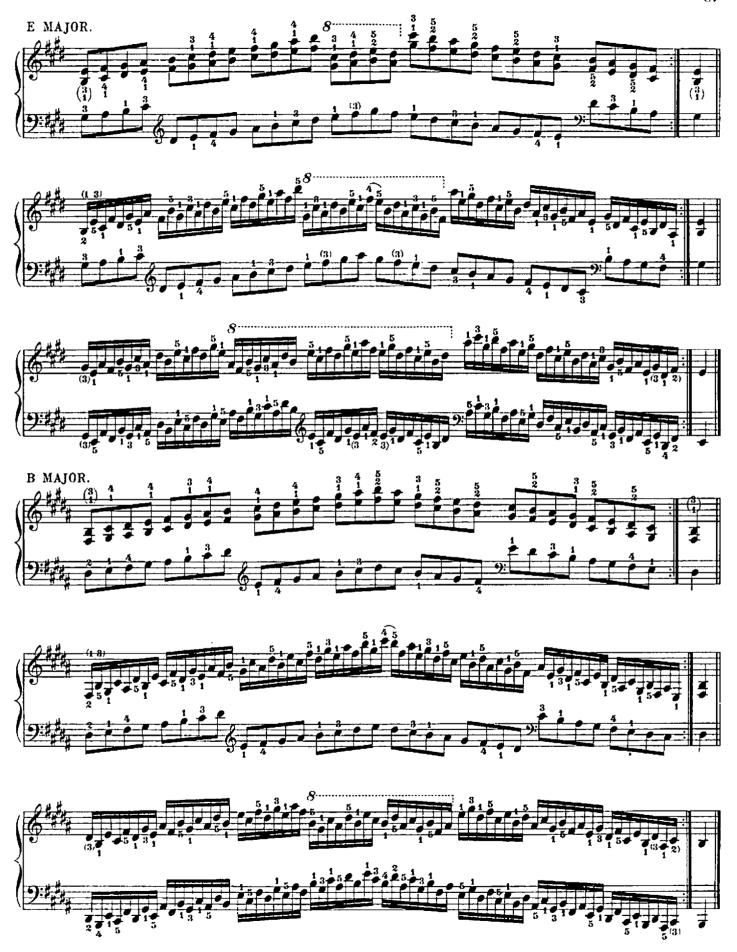
Scales of broken Thirds with fingering for Fourths, are to be practised with each hand separately and are particularly adapted for giving strength and independence to the 4th and 5th fingers.

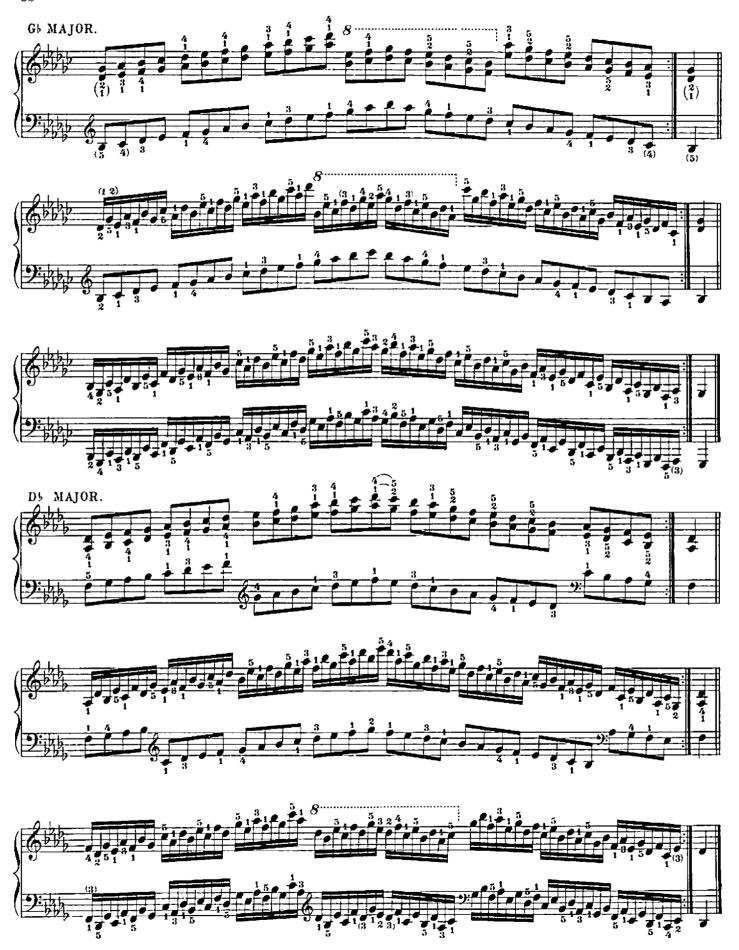
All irregular fingerings in the following scales, will be found in brackets (), as heretofore.

# MAJOR-SCALES.

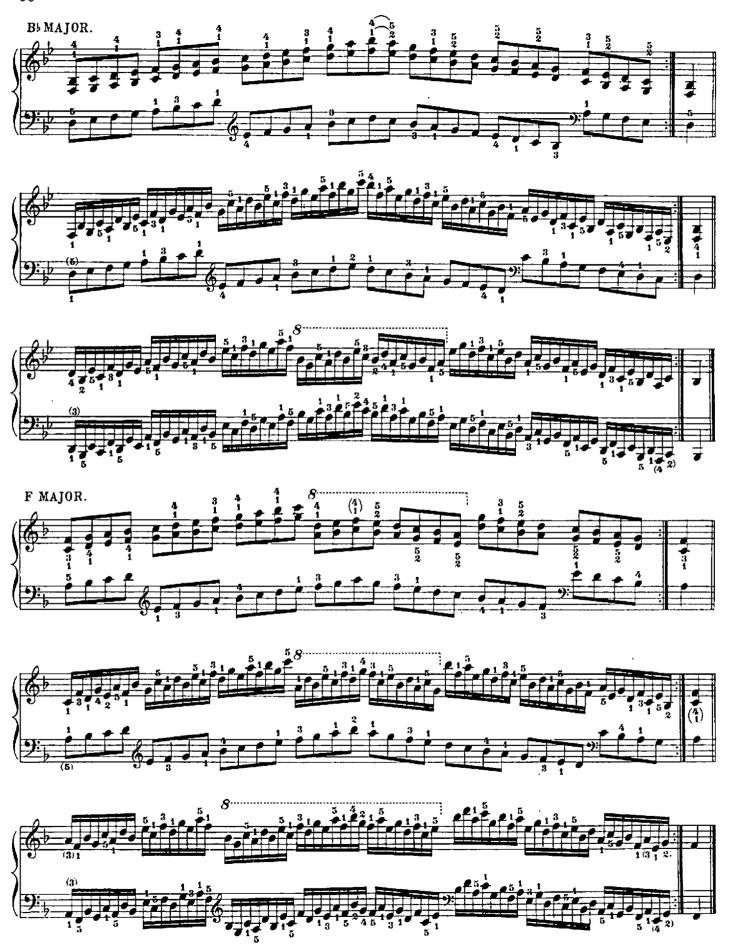




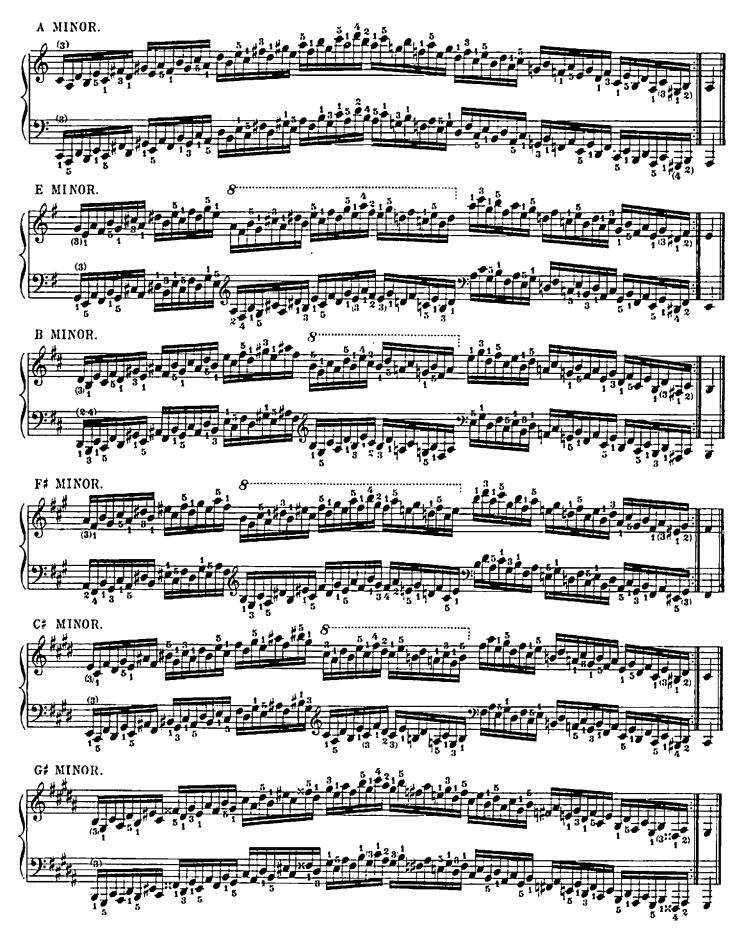


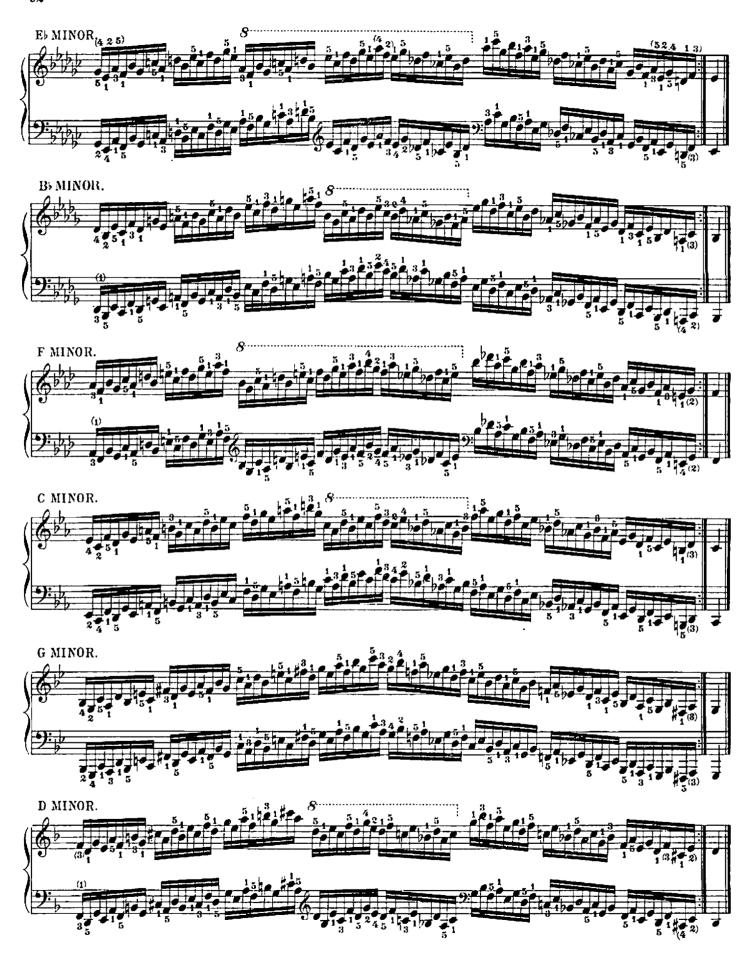






# MINOR - SCALES.





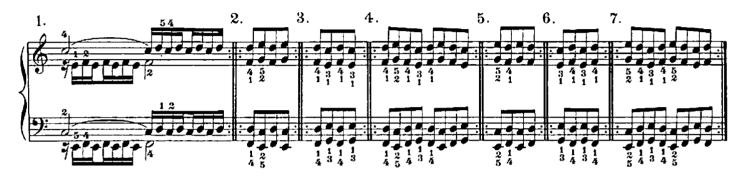


#### III. SIXTHS.

In the extended position of the fingers, which the connecting of Sixths necessitates, the hand must retain its horizontal position, and avoid all inclination to tilt to the outside. Much care should also be taken, as in Thirds and Fourths, not only to keep the hand quiet, but to raise the two fingers lightly, and to an equal height, and to strike both keys at the same instant, with exact connecting, and a full, round tone.

In exercises 3 and 6, (partly also 4 and 7), the connecting of one Sixth with the other is done with the 4<sup>th</sup> and 3<sup>d</sup> fingers, the thumb moving from key to key with light touch, and even motion.

The use of the 2d finger is not advised for small hands. The thumb should be substituted, and extra care taken to connect the outside fingers.



Progressive Exercises on all degrees of the major Scale.

Exercises 8-17 are to be practised in the same way, with like fingering, in every major key.



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#### SCALES IN SIXTHS.

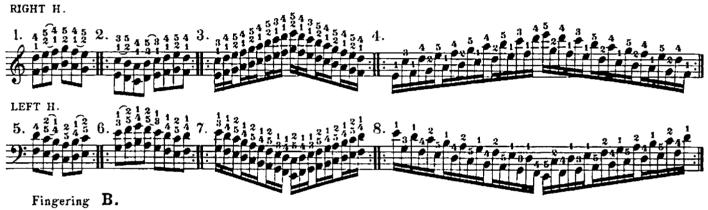
Scales in connected Sixths may be played by large hands, (such as can stretch the interval of a Sixth with the 2d and 4th fingers), after the system of Octaves, (Fingering B).

Scales in reversed broken Sixths, (Page 101), require fingering B, even for large hands, and the scales in broken Sixths, page 98, should be played by small hands also with the same fingering (B).

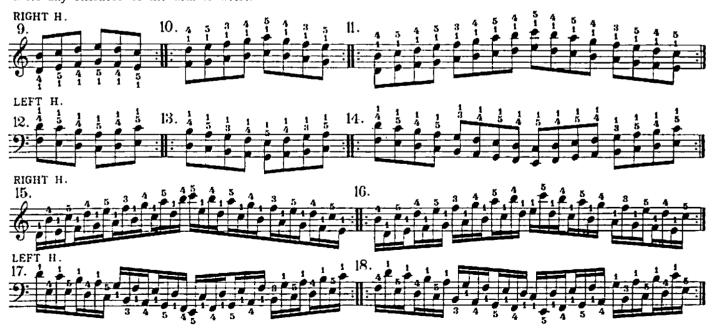
In staccato - playing, both large and small hands must use fingering, (B).

## Fingering A.

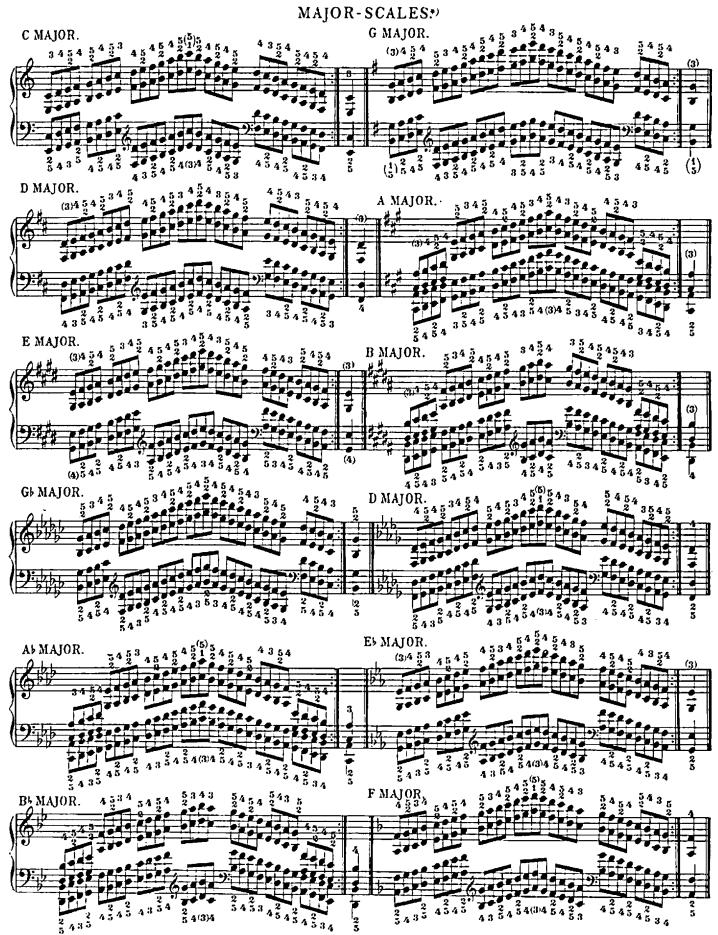
In ascending scales in Sixths, be sure to form a perfect connection in passing the 4th or 3th fingers over the 5th in the right hand. In descending, the passing of the 5 over the 3, and the 5 over the 4 is accomplished by raising the 3th and 4th fingers in advance of the thumb, which must form a smooth connection with the 2th finger. The same rule serves for the left hand in contrary motion.



The passing of the 4th or 3d fingers over the 5th, in ascending scales of Sixths, and the 5th under the 3d and 4th, in descending, must be attended to with great care, to make perfect connections in each hand. The management of the thumb also requires thought, to secure a light, even motion; and as perfect a legalo touch as possible. Strive to avoid any stiffness of the arm or wrist.

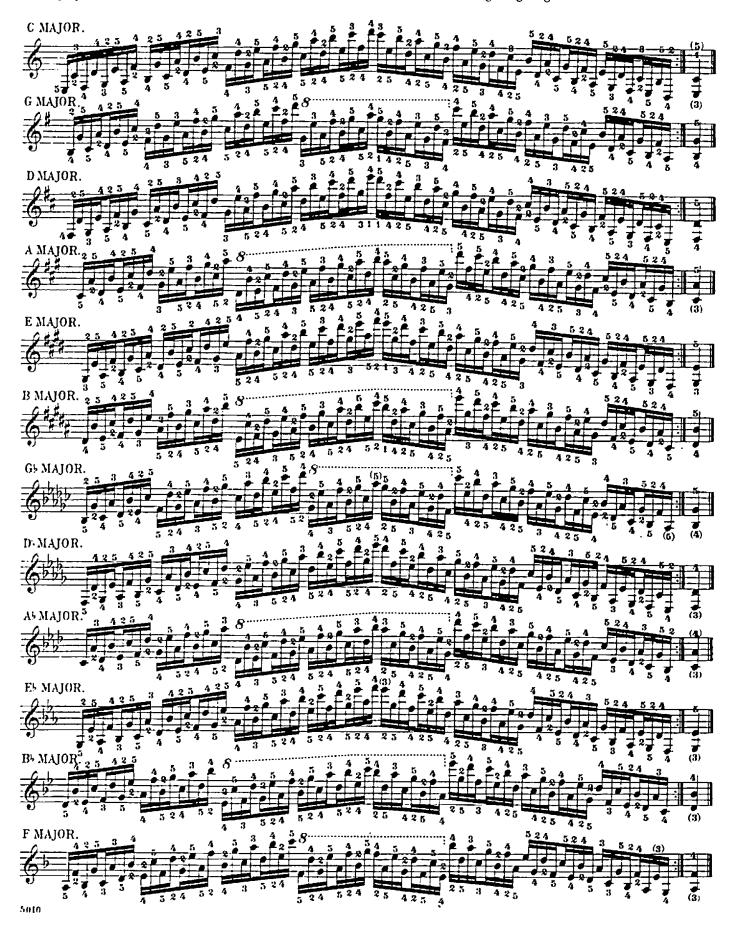


The following scales in Sixths, broken and unbroken, are to be practised slowly, and with each hand separately, until surety and exactness have been obtained; after which, increase the speed, and use both hands together. It is also advisable to commit the scales to memory as soon as possible.



e) In order to make the fingering clearer to read the thumb, which always plays with the 34 and 4th fingers, is not indicated.

The following scales in broken Sixths can also be played with fingering B, which even for large hands is, in many cases, the most convenient. The figures above the notes serve for the right, those below for the left hand; which must play one or two Octaves lower. The thumb is to be used where no fingering is given.



## MINOR-SCALES."

ascending melodic, descending harmonic.

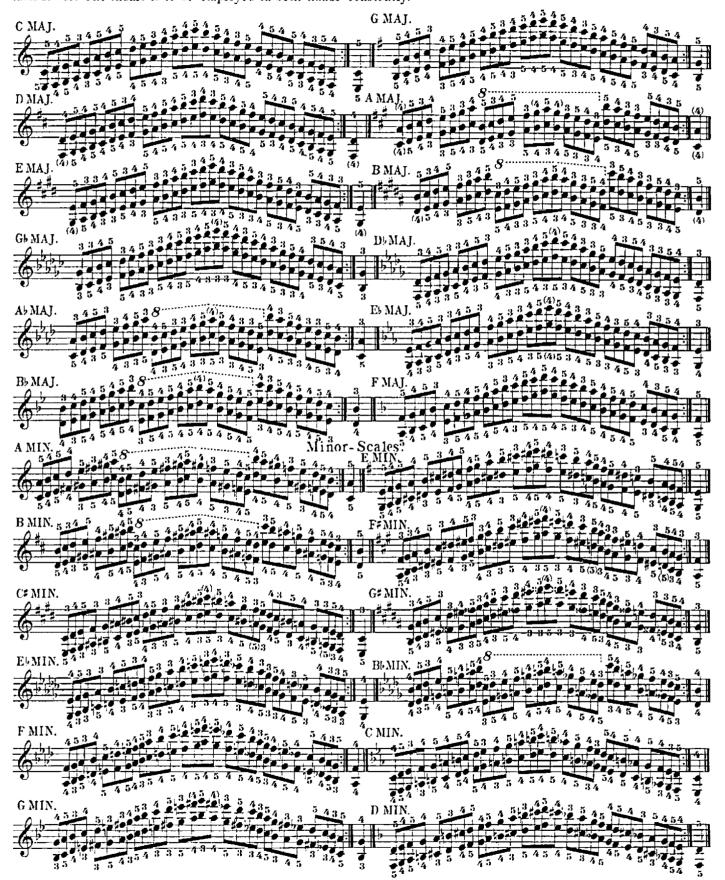


\*) The minor scales are to be practised broken, with the same fingering, after the manner of the previous major scales. 3010

## FINGERING B\*)

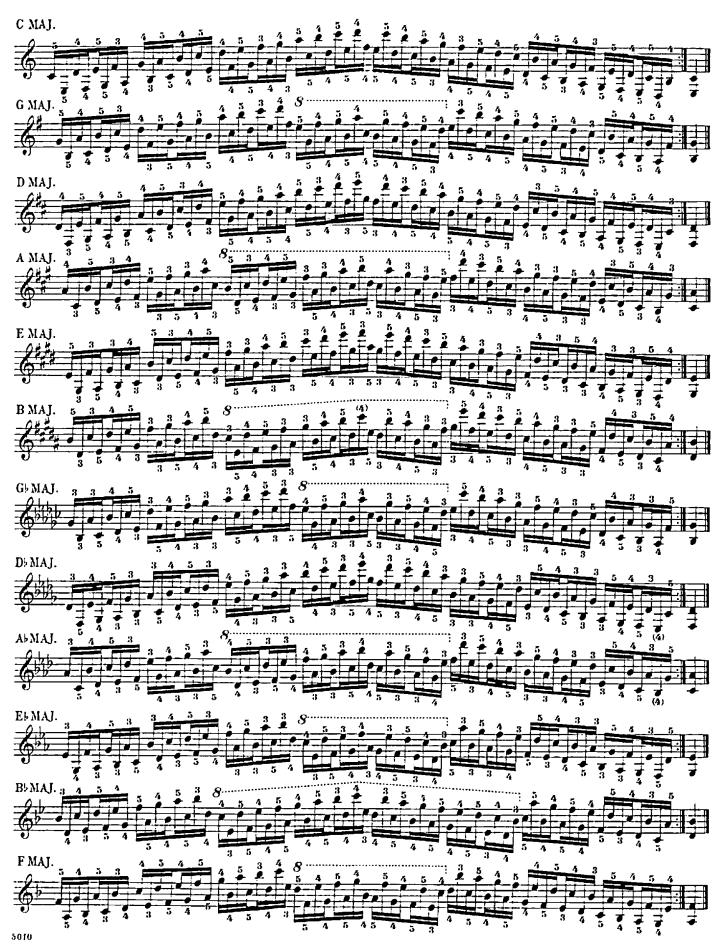
## Major-Scales.

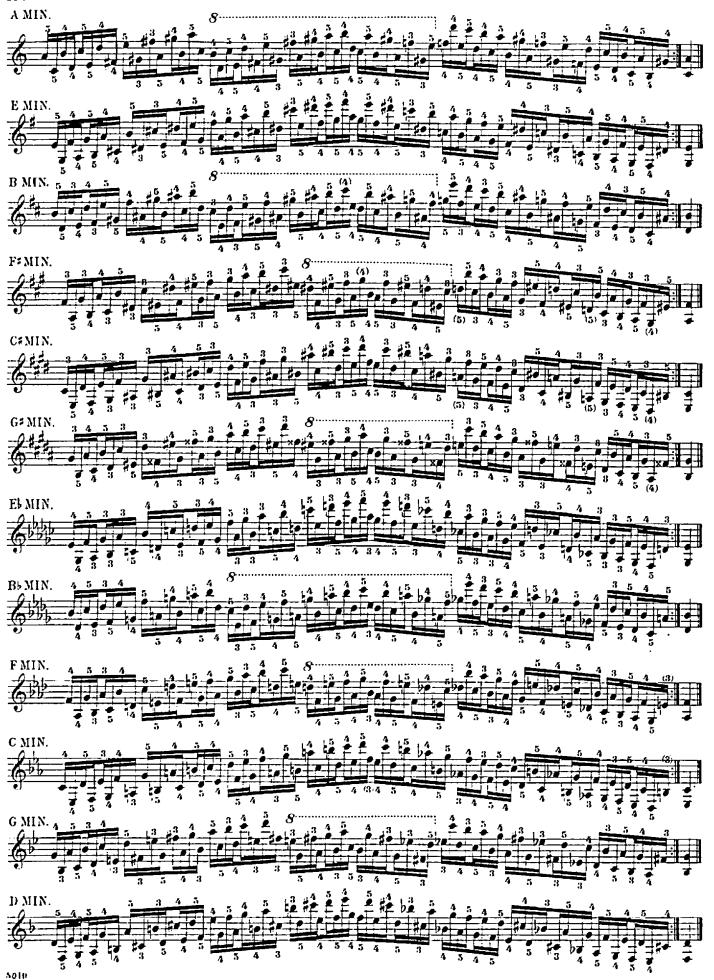
The figures above the notes are for the right, and those below, for the left hand; which must play one or two Octaves lower. The thumb is to be employed in both hands constantly.



\*) After long and careful practice in Irguto playing, these scales must also be studied stuccuto, using fingering B. 5010

The scales in broken Sixths on page 98, must also be practised with fingering B, the thumb being used in each broken Sixth.





Exercises Nos 20 - 20d, on page 5, of the Touch studies are to be used for elementary practice in Octave-playing, which should be begun as soon as the hand can span the interval.

More advanced players must have had continuous and painstaking practice in the strengthening of the wrist, through staccato-touch exercises, page 9 of the Touch-exercises, and page 10 of the given Octave exercises, before they begin the far more difficult study of connected Octaves.

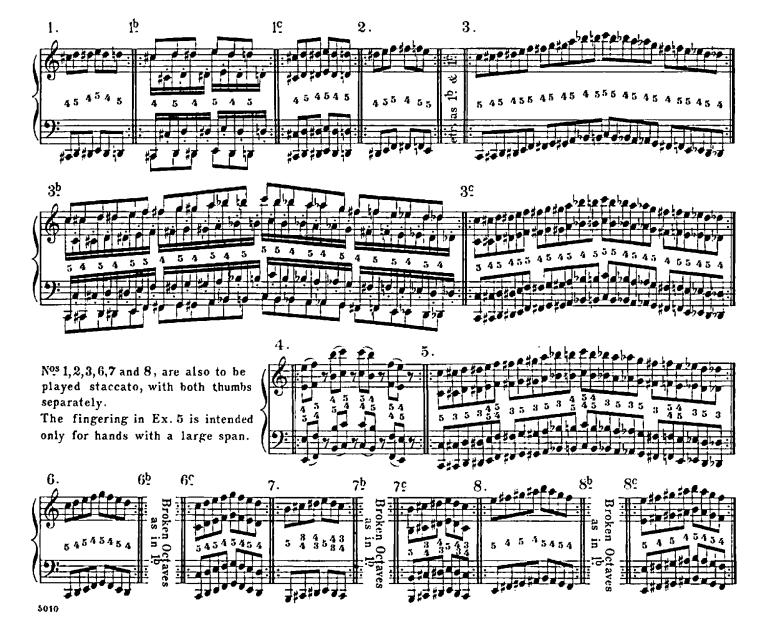
Octaves may be connected with the simple fingering 1-5, by holding the notes to their full value, passing the fingers from one Octave to another as quickly as possible, by means of a very light-hand movement. This method of connecting Octaves is in fact the only one possible for small hands.

Most important to the accomplishment of the next exercises, is a natural position of the hand. The knuckles must neither be raised nor bent inwards, but kept upon a level with the wrist, forming a straight line from the forearm: the hand thereby obtaining the greatest freedom and span.

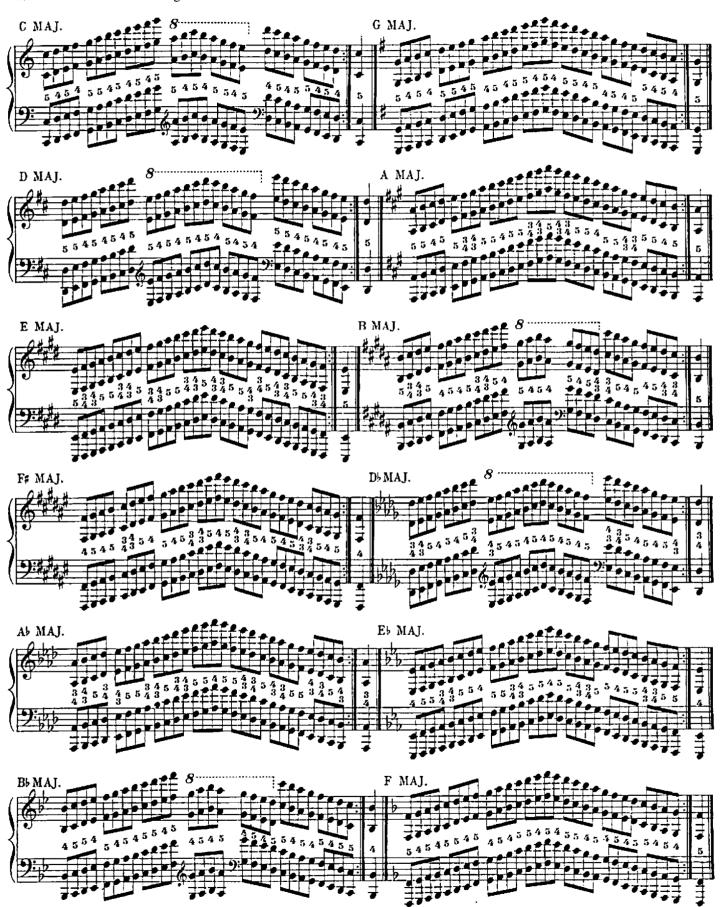
In all the following exercises, the hand rests upon the  $5\frac{\text{th}}{2}$ ,  $4\frac{\text{th}}{2}$  or  $3\frac{\text{d}}{2}$  fingers, which must connect, one with another, as perfectly as possible, the thumb passing from key to key with a light staccato touch. When this has been accomplished the thumb may strive to connect in the same manner as the other fingers.

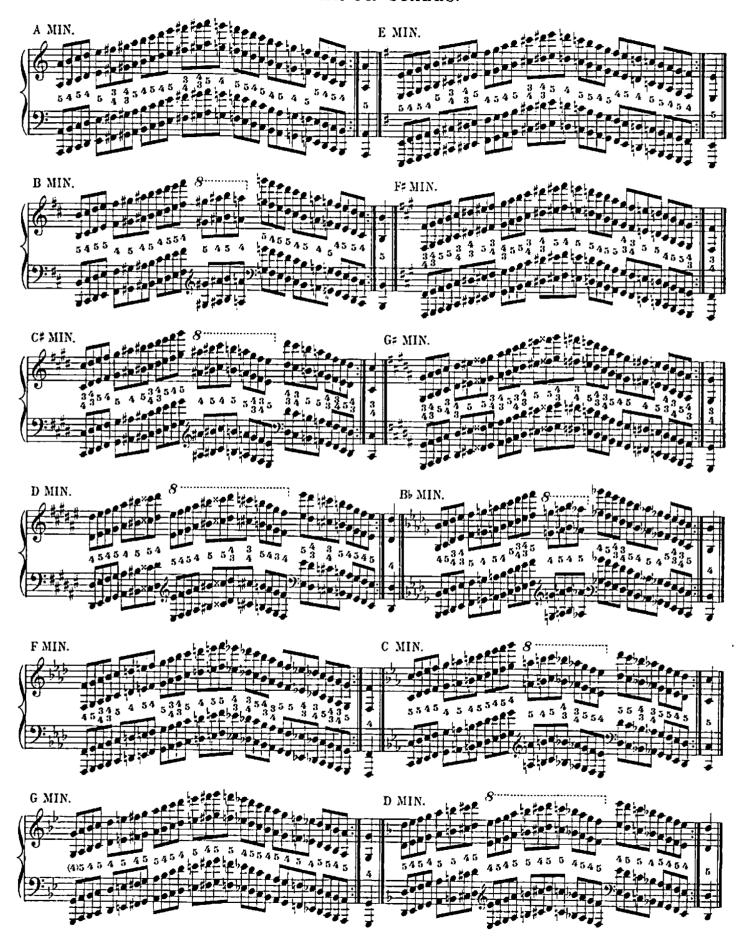
After long and careful practice in the following Octave-exercises, (particularly scales and chords) they are to be practised with the same fingering, staccato: first slowly, with the hands lifted high, then rapidly, with as little movement of the hands as possible.

The single line of figures between the notes are for both hands alike. In the double rows of figures the right hand takes the higher and the left the lower row.

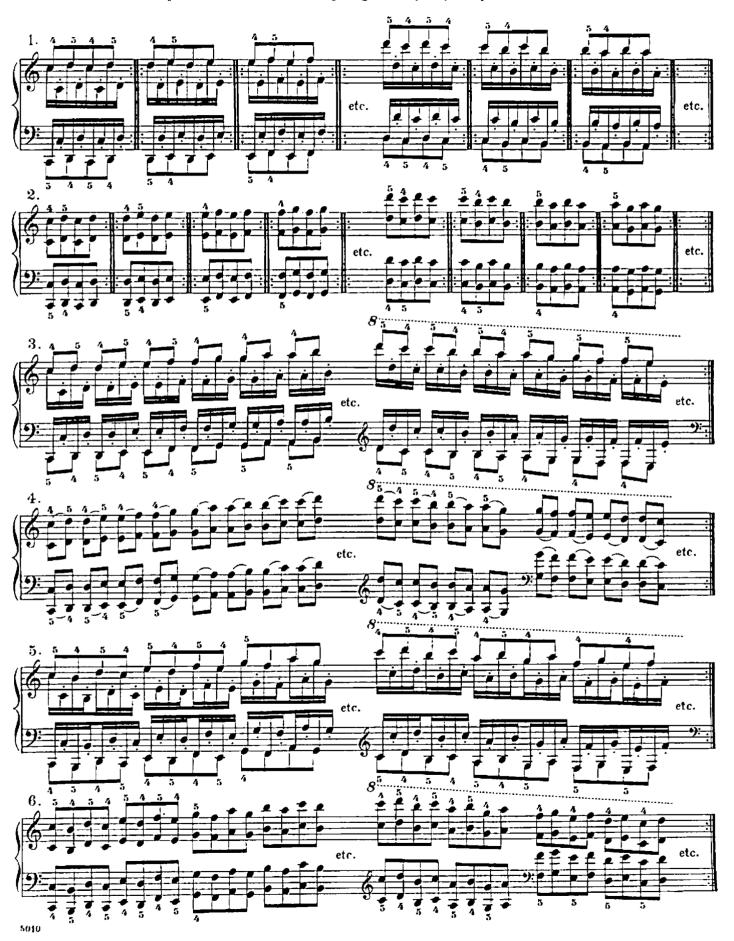


Each single scale is to be practised in three ways, (see Chromatic Scales Nº 3-3°) Executants with small hands must substitute the 4th finger for the 3th wherever it occurs.



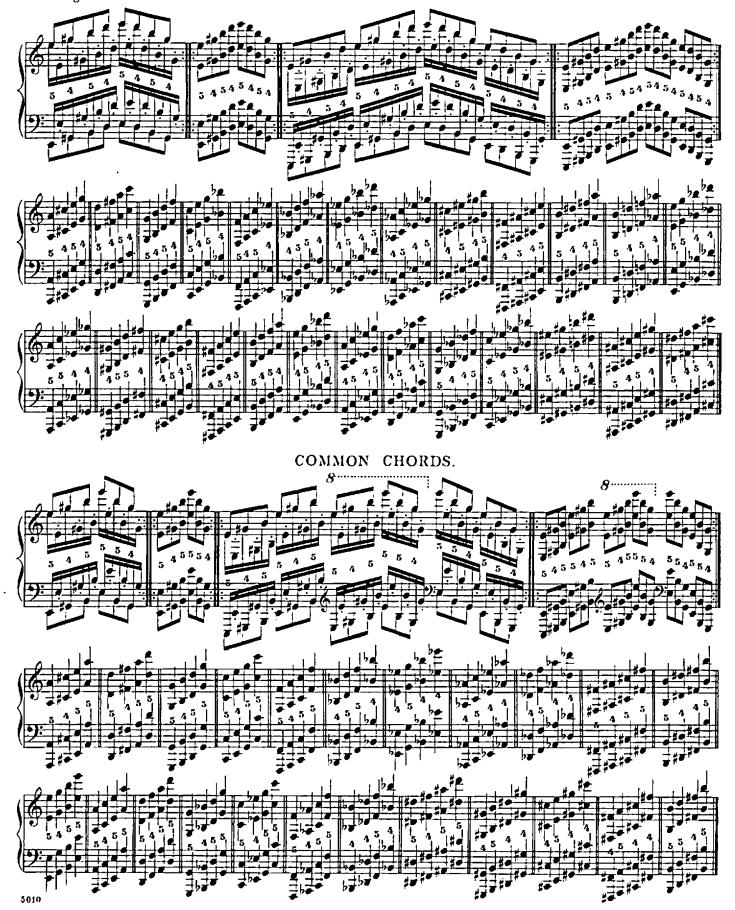


Exercises 1-6 are to be practised with the same fingering in every major key.



Each of the given common- and Seventh chords are to be studied in four different ways, after the examples given at first.

The figures between the notes are for both hands alike.



### CHROMATIC PRACTICE.

Each and every division of Piano-technic is amenable to chromatic treatment, the present work containing the most important of the exercises, arranged in systematic order. Begin the chromatic practice by selecting the following numbers from the *Technics*, practising them with like fingering, on all degrees of the chromatic scale.

### TOUCH-STUDIES. Pages 3-5, Nos 1-7 and 12-20d.



TOUCH-STUDIES. Page 8, Nos 1-35, and Page 11, Nos 1-6.

THIRD-STUDIES. Pages 65-66, Nos 9, 10, 11, 14 and 15, all of which are to be practised in minor Thirds only. The following exercise in Thirds is also to be studied.



then: FOURTH - STUDIES. Pages 82-83, Nos 7-11 and 14-16, to be practised only in major chords of the 6th.

SIXTH-STUDIES. Page 94, Nos 10 and 11 to be practised only in major Sixths, and with fingering B.



and OCTAVE-STUDIES. Page 103, Nos 1-5, and Page 106, Nos 1-6.

#### THE CHROMATIC SCALE.

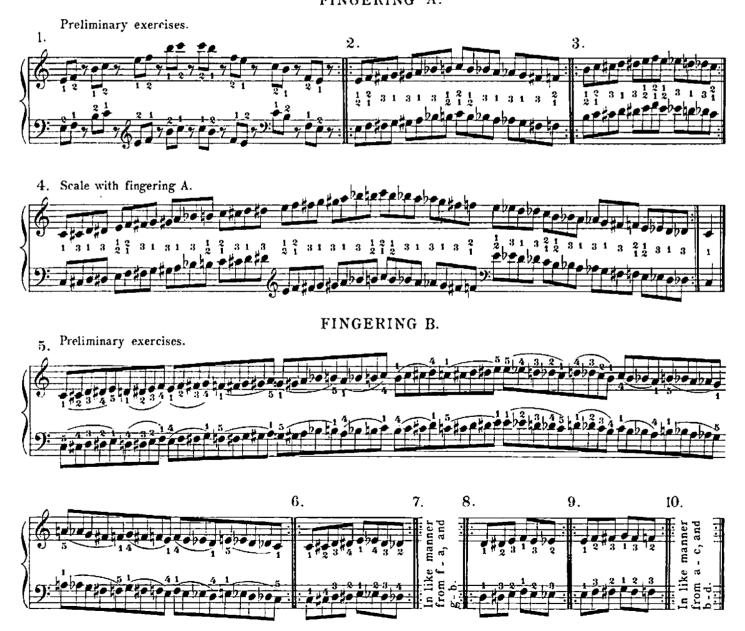
The chromatic scale is universally played with a variety of fingerings, all equally useful; but in order to learn the scale surely, the following principles should be observed.

Beginners, and executants of only moderate ability, may use fingering A. Its simplicity recommends it and cases it to be used by many excellent performers of the present day, in preference to other systems.

Advanced players, however, should confine themselves principally to fingering B, which by a close examination, will be found grounded upon very simple principles. All the scales with this given fingering should be practised legato, slaccato and leggiero, a long time, until facility has been attained. The trouble and care expended, will be rewarded by an extraordinarily smooth execution in chromatic scale-playing; and in the most rapid lempo, there will be found less liability of the fingers lagging, and sticking, than with fingering A.

When surety has been obtained, practise the Chomatic Scale in contrary motion, in minor Thirds or Tenths, in major Sixths, and with various accents.

### FINGERING A.





## CHROMATIC SCALES WITH ADDED NOTES.

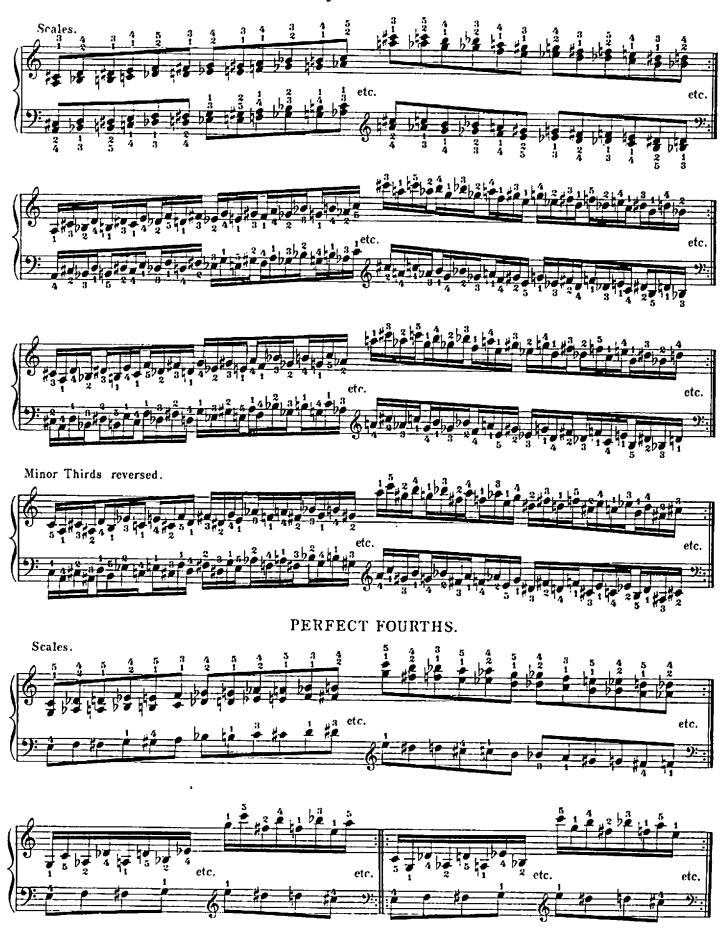
The following fingerings are given for use, when notes are added above, or below the chromatic scale.



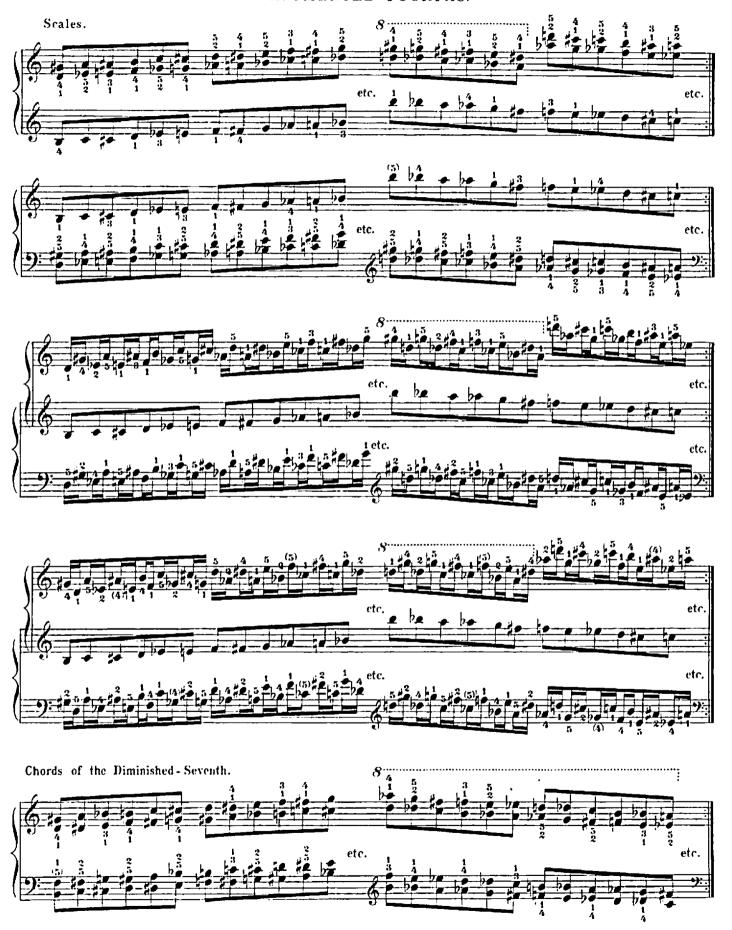
# MINOR-THIRDS.



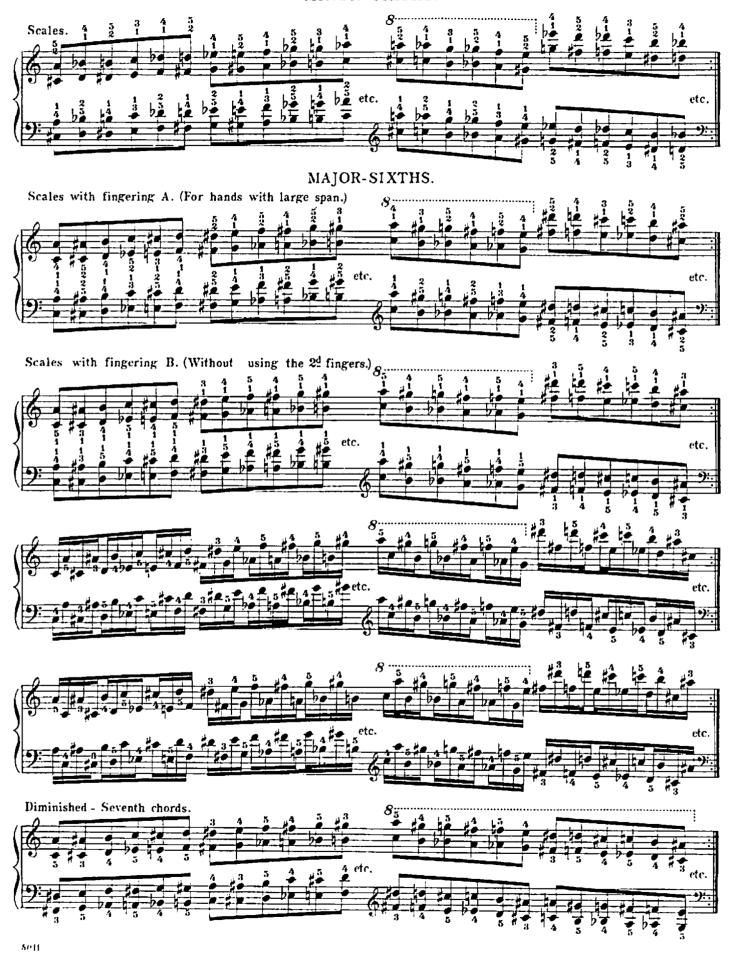
# MAJOR THIRDS.



# AUGMENTED FOURTHS.



# MINOR-SIXTHS.



# 116

The fingering of the next exercise, in minor Thirds and Seconds, is formed after the same principles as are contained in the diminished-Seventh chords following.



# DIMINISHED SEVENTH-CHORDS.

## A. Close positions. (Incomplete - chords.)



# DIVISIONS TO A. 1 - 3.

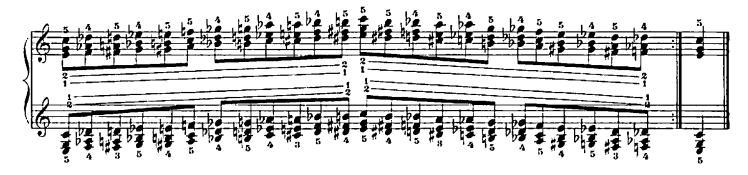
Incomplete chords in close positions are to be practised with the previously given fingering for each hand, in the following divisions.



Exercises Nº2 and 3 are to be divided in like manner, and may also be practised with both hands, as follows:\_



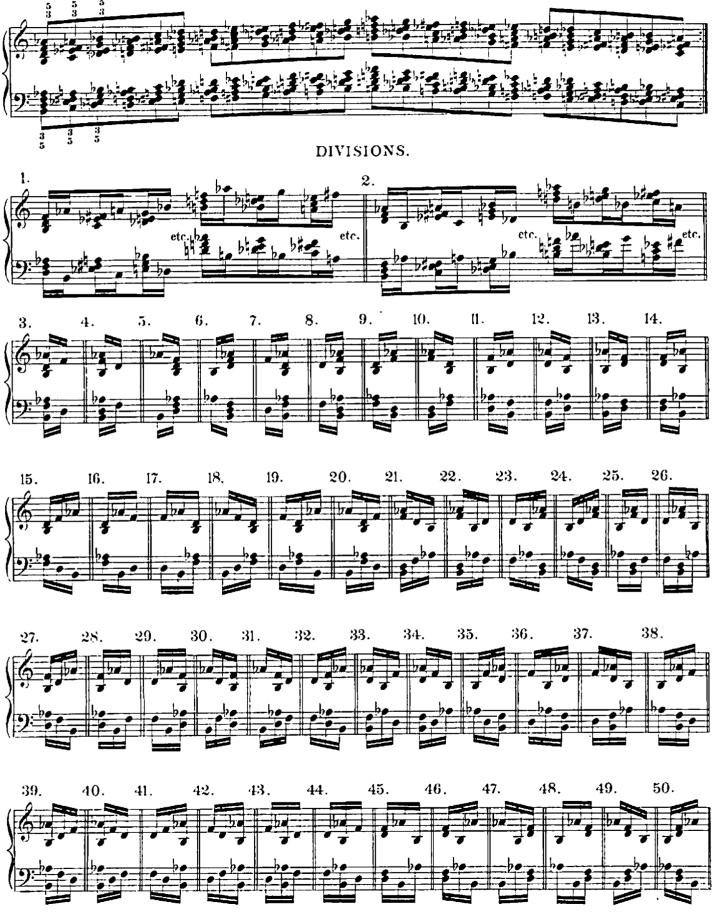
In the same way, similar divisions are to be formed on the major chords of the 6th, as for instance:\_



Finally, the incomplete chords in close positions may be extended in the following manner. Begin with each hand separately; then use both together in all possible divisions, and carry them to the highest octave of the instrument.

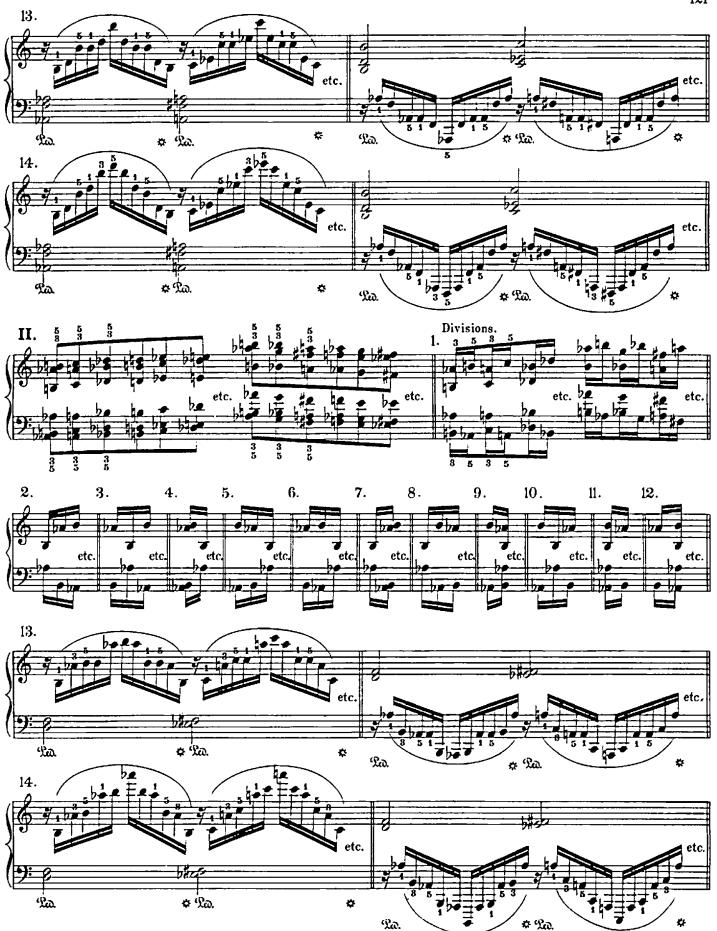


B. Close Positions. (Always the fingering 5, in both hands.

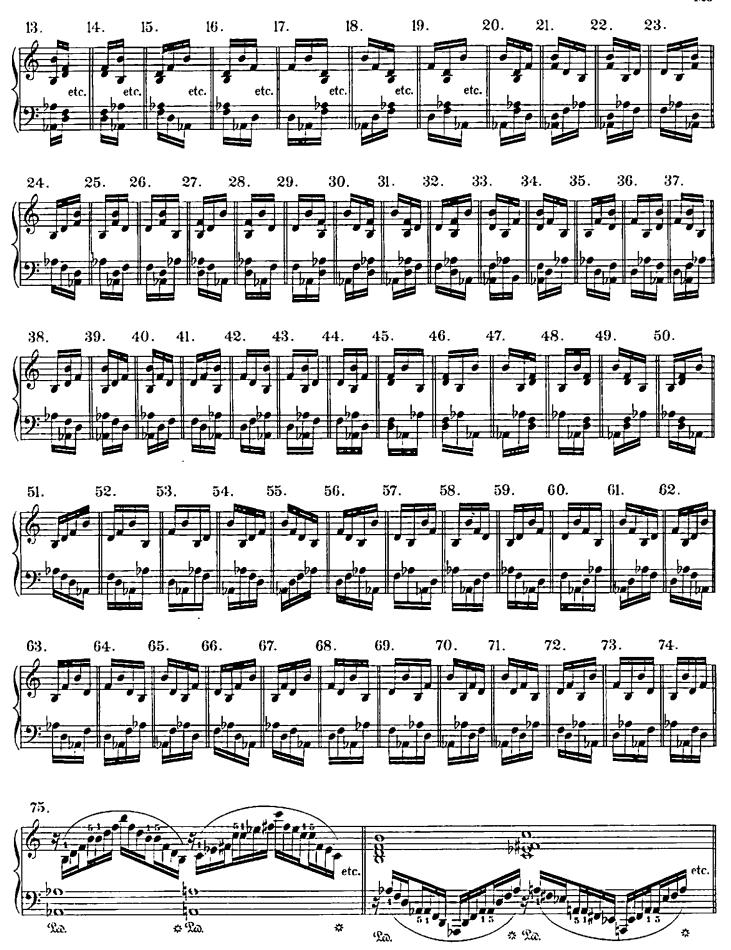


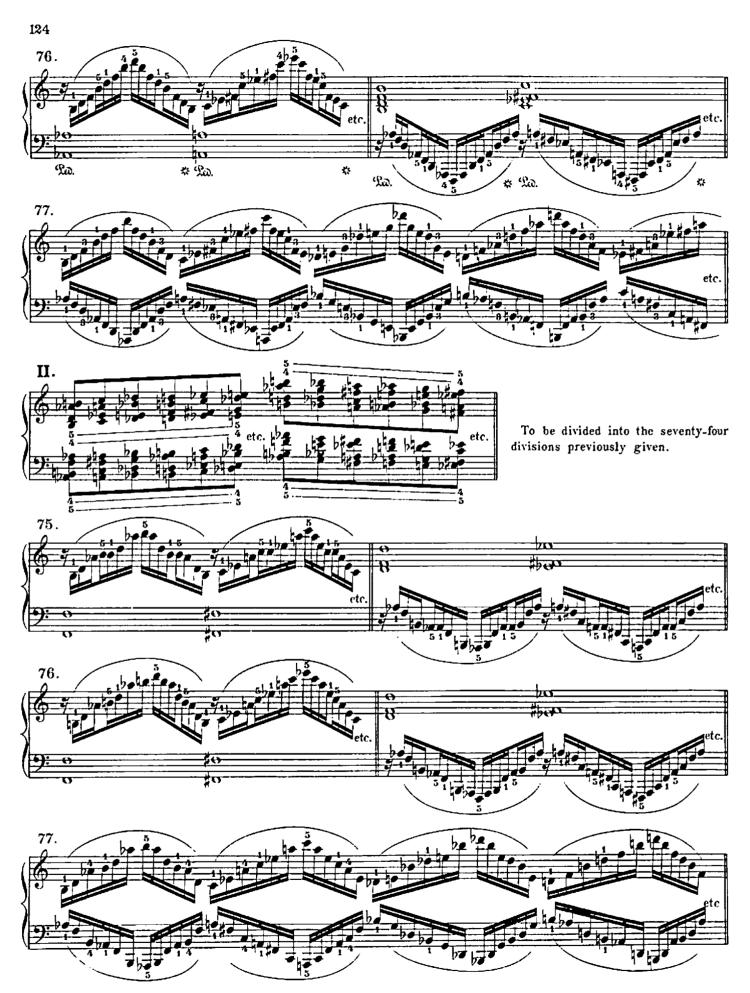


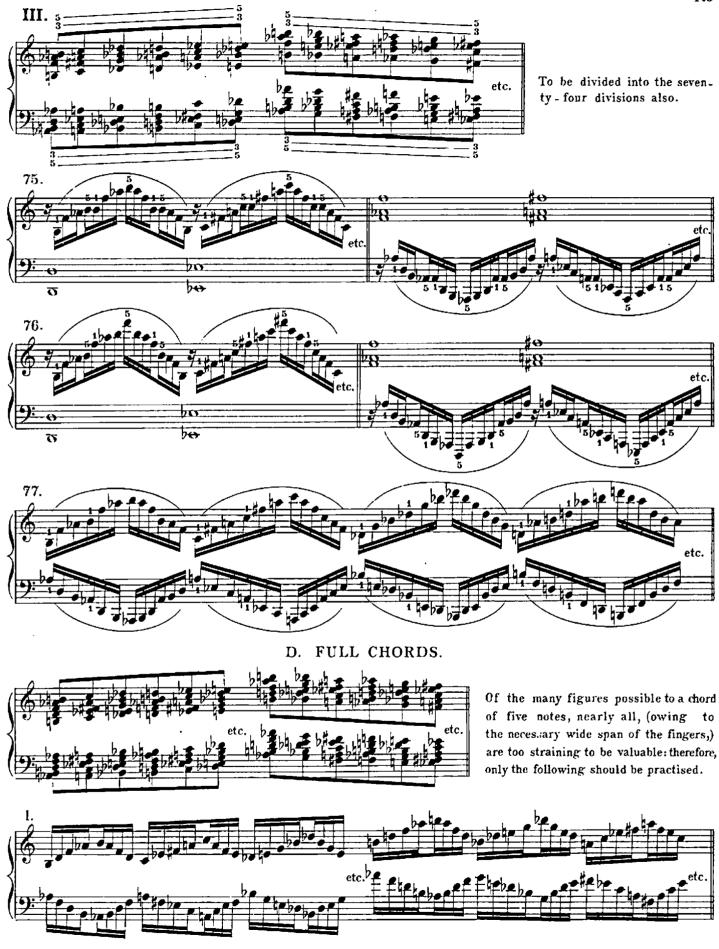


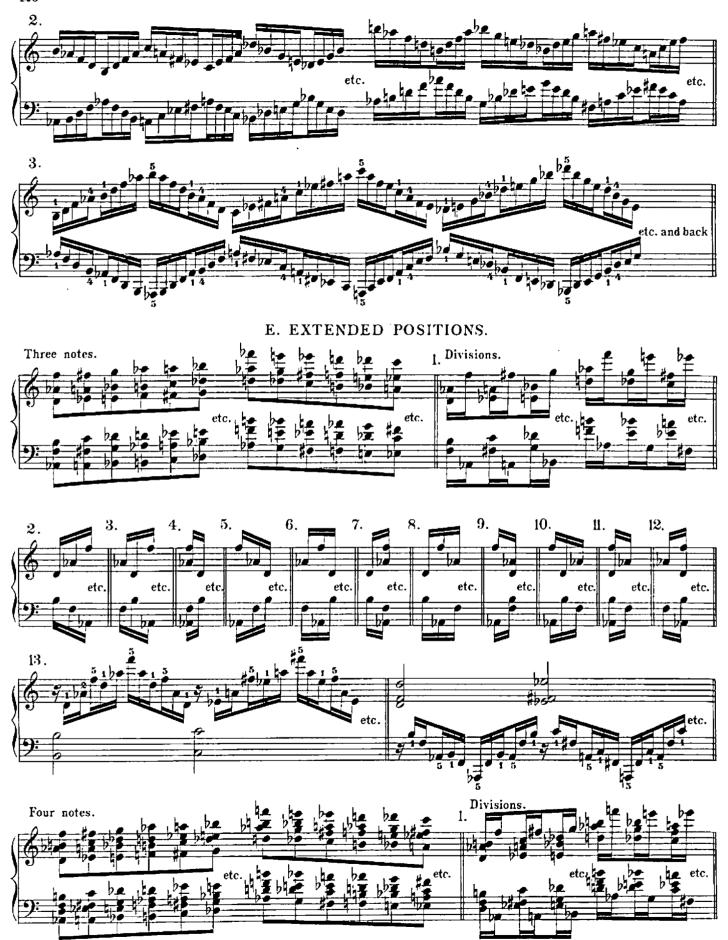


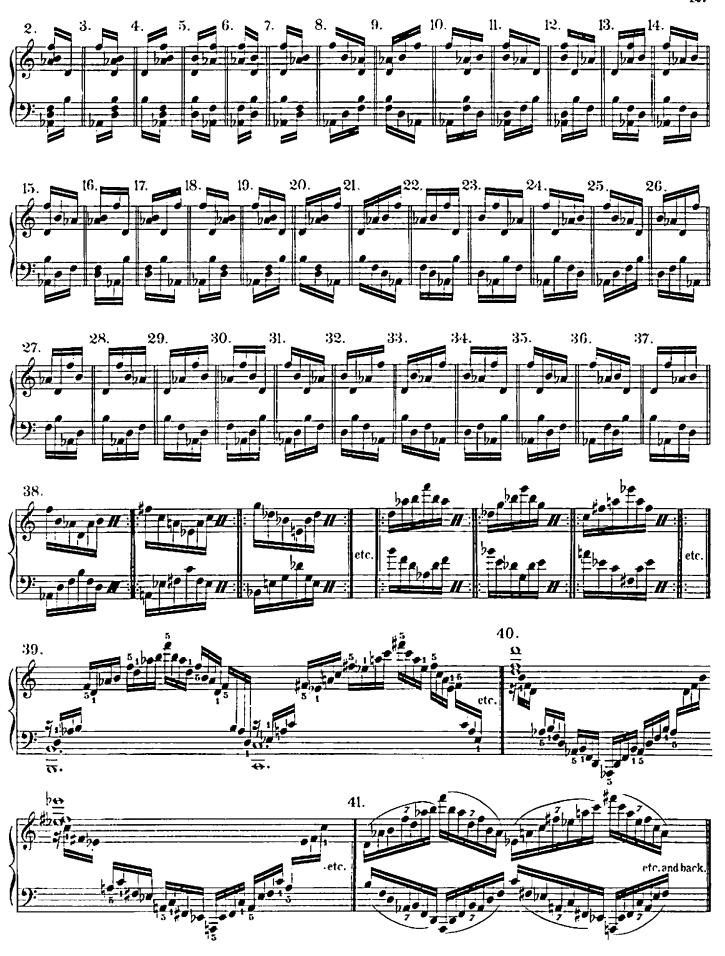








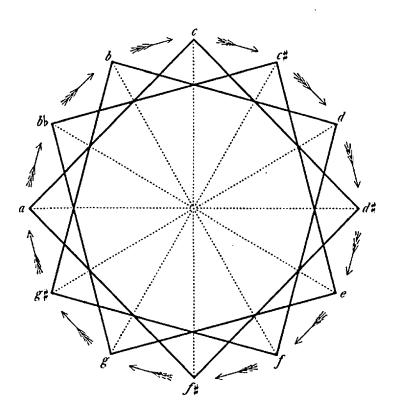




### MODULATING - TABLET

of the

Diminished - Seventh Chord.



A rule in harmony establishes the diminished-seventh chord on the leading tone of the minor scale, thus giving as many diminished-seventh chords as there are minor scales. The keys of the Piano or Organ, give only three chords of the dim. 7<sup>th</sup>; for every 4<sup>th</sup> chord, (owing to the temperament of the instrument,) is merely an inversion of the 1<sup>st</sup>, every 5<sup>th</sup> chord an inversion of the 2<sup>d</sup>, and so on.

The above Modulating-Tablet consists of three squares, each representing one of these three diminished-seventh chords, which can be directly resolved:

1st into the major or minor key, of the letter indicated by the dart.

2d " " " of each square.

The orthography may also be arranged after strict harmonic rules: for example, the diminished-seventh chord in the square  $\ell$ ,  $d\sharp$ ,  $f\sharp$ , a, will be resolved as follows:

