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The New York system of tangible musical notation

William Bell Wait



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THE NEW YORK SYSTEM

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TANGIBLE MUSICAL NOTATION

AND

POINT WRITING AND PRINTING

FOR THE USE OF THE BLIND.

BY

WILLIAM B. WAIT,

Superintendent of the New York Institution for the Blind.

NEW YORK: Bradstreet Press, 279 Broadway. 1873.

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MAR 26 1910 Pres. C. W. Eliot

PREFACE.

The Musical Education of the Blind is a subject to which my attention has been called for years, and for a long time past I have bestowed upon it so much time and such consideration as the active discharge of my daily duties would afford.

At the convention of the American Association of Instructors of the Blind, held at Boston, in August, 1872, during the discussion of the subject of music, I presented the outlines of the proposed system. At the close of the discussion a resolution was adopted, requesting me to perfect this system, and present it to the several Institutions at the earliest practicable moment. The labor involved being great, and the time which I could devote to it being limited, I had not expected to complete it so soon. But in conformity with the very general desire, as expressed by the resolution, I have labored diligently to complete the work without delay.

If we consider the slight changes, whereby one lesson is made to differ from another, the great similarity which marks a whole series of exercises, no two of which are alike, and the vast variety of musical compositions, we shall be impressed with the magnitude of the task imposed upon the memory of the blind student of music, and with the many difficulties which beset his way.

That this task should be lightened, and these difficulties obviated, is self-evident.

For this purpose the System of Tangible Musical Notation, for the use of the Blind, herewith presented, has been devised. To render such a system practical the following features are essential: Ľ.

First. It must be tangible, not only to those whose sense of touch is exquisitely nice, but to the great mass of blind persons, without selection.

Second. It must be a chirographical or written system, not simply a printed system.

Third. It must be simple, but yet methodical and progressive, and so far as possible, analogous to the system used by the seeing.

The first and second points are amply guaranteed by the success of the New York Point System of Writing and Printing for the Blind hereto annexed.

To what extent the requisites under the third head have been secured will appear upon examination. The System of Alphabetic Point Writing and Printing, and the System of Tangible Musical Notation, as now presented, constitute one complete whole. That the latter is perfect I will not assert, but any modification which experience may show to be advisable will refer to the manner of applying the system, rather than to the principles upon which it is based, or the plan upon which it is constructed. I submit the work to my colleagues and co-laborers in this country and elsewhere with the remark that it is designed for, and dedicated to, the use of the blind. To enable them to acquire a practical knowledge of the system, it should be presented with the same consideration and care which are bestowed upon any other branch of instruction.

The treatment of the subject is such, that the general principles will be very easily understood. But this involves the danger that both teacher and pupil may fall into the fatal error of supposing that a general knowledge of the system, such as may be derived from a superficial perusal, will suffice. It must be borne in mind, however, that to know how a thing should be done, is by no means equivalent to having the ability to do that thing. The first may result from study alone; but the second can only be acquired, in the highest degree, by study and practice conjoined. This system is projected solely on account of its utility as an art; but without practice it can have no utility.

If the course, here indicated, be pursued, the results, I doubt not, will justify the effort, and inure to the lasting good of those for whom the system has been especially designed.

New York, Dec. 26, 1872.

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A SYSTEM

OF

WRITING AND PRINTING MUSIC FOR THE USE OF THE BLIND.

CHAPTER I.

OF TONES, NOTES, INTERVALS, OCTAVES, AND RESTS.

THERE are four characteristics by which tones (or notes as they are more familiarly called) may be distinguished.

First. By pitch, to designate which, the following letters are used; viz.:

C, D, E, F, G, A, B. In all seven.

Second. By duration, which is represented by characters called notes, viz.:

Whole note,	Half note,	Quarter note,	Eighth note,
2	P	ſ	5
Sixteenth note,	Thirty-se	cond note,	Sixty-fourth note.

In all seven.

Third. By difference of pitch.

The difference of pitch between two tones is called an interval. These are named in their order as follows:

First, second, third, fourth, fifth, sixth, seventh, and eighth, or octave. In all eight.

N - N - T

Fourth. By position in either of the subdivisions of the great scale or key-board.

These subdivisions are called Octaves. They are known as:

First, second, third, fourth, fifth, sixth, seventh, and eighth.

In all eight.

To indicate silence, characters called rests are used. These correspond to the notes in respect to length, and are named from them as follows:

 Whole rest, Half rest, Quarter rest, Eighth rest, Sixteenth rest,

 Y
 Y

 Thirty-second rest, and Sixty-fourth rest.

 Y
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In all seven.

It will be observed that the number of letters which indicate pitch; the number of notes; the number of intervals; the number of octaves; or the number of rests; does not exceed *eight*.

For this reason the *first eight* of the numeral signs of the New-York System of Point Writing and Printing for the Blind will be used as the basis or ground work of this system of Musical Notation. In this connection they will be known as Primitive signs.

They are as follows:

These primitive signs are the basis of four classes of derivative signs, viz. :

First. Melodic-Rhythmic signs, which indicate the pitch and the length of tones.

Second. Interval signs, which indicate the difference of pitch between two tones.

Third. Octave signs, which divide the great scale; or keyboard of the Piano into octaves.

Fourth. Rest signs, which indicate silence. Other classes of derivatives are also formed from the primitive signs.

CHAPTER II.

PITCH. -TIME.

THE primitive signs in order represent the pitch of tones, and take the names of the first seven letters of the alphabet, as follows:

C D E F G A B They may also be known by the syllables do, re, mi, fa, sol, la, si.

The same characters are used to indicate the length of tones, and for this purpose will take the names of the notes as follows:

Whole note,	Half note,	Quarter note,	Eighth note.
a ::	P ••	•••	
Sixteenth note,	Thirty-seco	ond note, S	Sixty-fourth note.
		•	

If now one of the pitch signs as C \therefore be written, and after it without separation one of the time signs as the whole note— \therefore a new character, *four points in length*, will be produced, consisting of two equal parts, thus \therefore The first part is a pitch sign, and corresponds to a degree of the staff, and always indicates the pitch. The second part as a time sign, corresponds to a *note*, and *always* indicates the length of the tone.

These characters, four points in length, we shall call notes. As will be observed, they are derived from the primitive signs; by combining two of them in a single character.

 $EXAMPLE \ FIRST.$

٠			EXAMPI	LE SECON	7D.		
	a	P	ſ				
Ċ	••••	•••	••••	•••	••••	••••	••••
D	••••	• • • •	••••	••••	••••	•••••	•••••
E	•••	•••					
F	••••				• • •	•••	•••
G	••••		•••		•••	••••	••••
A	••••	•••			••••	•••	••••
B	•••	• • • •	••••	••••	••••	••••	•••

From these examples the following rule for the formation of *notes* may be deduced.

Write the Pitch sign, and after it, without separation, the Time sign. The note thus formed must be four points in length. The first half always indicates the pitch, and the last half the time.

CHAPTER III.

ACCIDENTALS .- THE DOT, AND DOUBLE DOT.

In writing it will often be necessary to make use of a blank or free space. Thus when one point horizontally is omitted, it makes one blank space.

Two points horizontally being omitted, makes two blank spaces. Three points being omitted, makes three blank spaces.

The SHARP. A single point in the *upper* row, placed before a note or interval sign, and separated from it by one blank space, indicates a sharp.—Example: Sharp C, a half note.



The FLAT. A single point in the *lower* row, placed before a note or interval, and separated from it by one blank space, indicates a flat.—Example: Flat D, a half note.

b D Q

The DOUBLE SHARP. Two points in the upper row, placed before a note or interval, and separated from *it* and from each other by one blank space, indicates a double sharp.

Example: Double Sharp C, a quarter note.

The DOUBLE FLAT. Two points in the *lower* row placed before a note or interval, and separated from *it* and from *each* other by one blank space, indicates a double flat.

Example: Double Flat C, an eighth note.

The NATURAL. A point in each row, placed before a note or interval, and separated from it by one blank space, indicates the natural.—Example: Natural E, a half note.

The Dot. A single point, placed in the *upper* row, after a note or interval, and separated from it by *one* blank space, indicates the dot.

Example: F, a half note dotted.

The DOUBLE DOT. Two single points, placed in the upper row, after a note or interval, and separated from it and from each other by one blank space, indicates the double dot.

Example: G, a quarter note, double dotted.

RULE. The sharp and double sharp are placed in the *upper* row, the flat and double flat in the *lower row*, and the natural in both rows, *before* the note or interval affected.

The dot and double dot are placed in the upper row, after the note or interval, and all are separated from the note or interval, and from each other, by one blank space.

CHAPTER IV.

THE OCTAVE SIGNS.

EACH scale or octave consists of eight successive tones, ascending or descending. But the tone called *eight*, becomes one of a scale above it. The tone called one, is also *eight* in a scale below it. Thus A is one and *eight* of the first octave. But A, which is *eight* of the first octave, is one of the second octave. In other words, A occurs twice in each scale or octave.

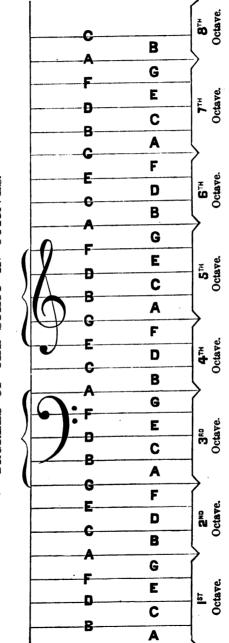
The position of a note on the staff indicates clearly to the eye its relation to the key-board. But when a letter which is both *one* and *eight* in a given scale, and also *eight* in one scale and *one* in the next, is read to a blind person who is learning from dictation, the 'key to which it corresponds must be designated. In like manner, some mode of locating with certainty upon the key-board, the notes which are written upon the staff; is essential to a system of writing and printing music for the blind. The result may be effected in either of two ways:

First. By the aid of certain signs which shall indicate whether a letter is to be taken on *one* or *eight* of a scale or octave, in which it occurs twice.

Second. By dividing the key-board or great scale in such a manner that no letter shall occur twice in either of the subdivisions.

The latter method will be followed in this work, and the sub-divisions will be called octaves; it being understood that the term is applied in a restricted sense and for the sake of convenience. Accordingly upon a key-board beginning with A, and ending with C; and which includes fifty-two white keys, the octaves are as follows:

First. From the lowest A; to G, above inclusive. From the second A; to G, above inclusive. Second. Third. From the third A; to G, above inclusive. Fourth. From the fourth A: to G, above inclusive. Fifth. From the fifth A; to G, above inclusive. A; to G, above inclusive. Sixth. From the sixth Seventh. From the seventh A; to G, above inclusive. Eighth. From the eighth A; to G, above inclusive.



DEGREES OF THE STAFF IN OCTAVES.

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The fourth line in the Bass staff on which the F or Bass clef is placed, is the last degree but one in the third octave.

The second line in the Treble staff on which the G or Treble clef is placed, is the last degree in the fourth octave.

The signs indicating the octaves, are formed from the eight primitives which form the groundwork of the system, by suffixing to each one a single point in the upper row. This point will be called an *index*; because its position in the upper row indicates that the primitive sign to which it is added, is to be used as an octave sign.

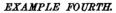
The octave signs are as follows:

First 8va.	Second 8va.	Third 8va.	Fourth 8va.
		••	
• •		• •	•
Fifth 8va.	Sixth 8va.	Seventh 8va.	Eighth 8va.
	• •	• •	• •
•	• •	•	•

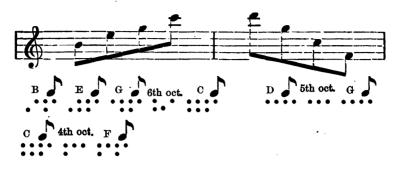
The quarter note C in eight octaves.

••• •• •• •• •• ••	3rd oct. c 4th oct. c
	7th oct. c Sth oct. c

The octave sign must be separated from the character which follows it by one blank space.







In using the octave signs, the following rules should be observed :

First. They will not be placed before Seconds or Thirds.— The reason for this is, that a tone which is a Second or Third above a given tone, will never have the same name, as the . Second or Third below the given tone. Hence there can be no doubt as to the position of Seconds and Thirds.

Second. They will not be placed before Fourths or Fifths, unless such Fourths or Fifths fall in another octave.—In this case, a tone which is the Fifth above a given tone, will have the same name as the Fourth below the given tone. Thus, the Fifth above C, and the Fourth below it is G. But the G above is in one octave, and the G below in another. Hence the rule.

Third. They will always be placed before Sixths, Sevenths, or greater Intervals.

Fourth. They will always be placed before the lowest note or root of a single Chord; and also before the lowest note in each of a succession of Chords whenever such note moves into another octave, unless perfect clearness of expression can be obtained without using them.

CHAPTER V.

DEGREE OR INTERVAL SIGNS .- CHORDS.

Two tones having the same pitch are said to be in Unison. The difference in pitch between any two tones is called an Interval. The Intervals are seven in number, and are known as the First, Second, Third, Fourth, Fifth, Sixth, Seventh, and Eighth.

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The Interval signs are formed by adding to each of the primitive signs, beginning with the second, a single point, or *Index*, in the *lower* row. Thus:

•	First, or Prime,	Second Interval,	Third Interval,	Fourth Interval,
•	••	•••	• • •	•••
	Fifth Interval,	Sixth Interval,	Seventh Interval,	Eighth Interval.
:	••	• • •	•••	•••

The Interval signs are employed in expressing tones, which are sounded together in a Chord.

There are four methods by which Chords may be expressed, but two only will be given.

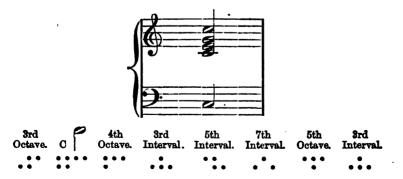
First. Write the Octave in which the root-note of the chord occurs, then the root-note in the usual manner, and after it, the sign of the octave in which the next interval occurs, and then the intervals *in that octave*, and after this, the sign of the octave in which the next intervals occur, and then the intervals in their order.

In this case, every Octave represented in the chord is expressed, and all Intervals are counted *from the first of the octave* to and including the seventh interval.

If an interval exceeds the Seventh, it must be counted in the next octave.

The Octave sign will not be *repeated* for a succession of intervals in the same octave.

EXAMPLE FIFTH.



Second method. Write the sign of the Octave in which the root-note falls; then the root-note, and after it the intervals, counting from the root or key-note.

In expressing Chords by this method, the intervals must be reckoned from the root or key-note up to and including the *eighth* interval.

If an Interval exceeds the Eighth, it must be reckoned from the Eighth which is the octave of the key-note.

This method will not be used in case the distance between any two *adjacent* intervals is greater than from one to eight.

Example fifth may be expressed as follows:

3rd Octave.	o p	8th Interval.	3rd Interval.	5th Interval	3th Interval.
•••	••••	•••	•••	•••	•••
		· EXAN	APLE SIXTH.		
		Ğ			. f
4th Octav	e. ()	P 3rd Ind	terval. 5th]	interval. 8	th Interval.
•••	•••	•••••	• •	•••	•••

The first method is thoroughly analytical, and is adequate for the expression of the most extended chords.

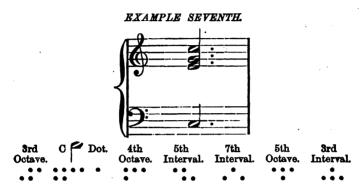
The second method frequently obviates the use of the octave signs, and for this reason it requires less space than the first.

It should be applied, however, in expressing those chords only in which the greatest distance between any two adjacent intervals is not greater than from one to eight.

When the distance between any two adjacent intervals of a chord is greater than from *one* to *eight*, the first method should be employed.

In any composition, both methods may be brought into use, in which case it should be observed that where an Octave sign precedes a note; any intervals which follow are to be reckoned from that note. But *intervals* which follow an Octave sign, are to be reckoned from the first of the octave indicated by such sign.

When a Chord is dotted, the dot is placed after the root-note, and all intervals take the same value.



When any part of a chord is changed by an Accidental, such accidental sign should be placed before the part changed.



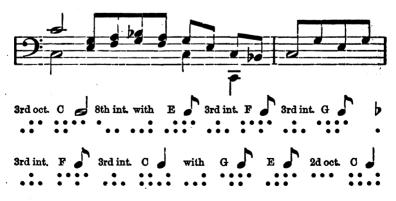
By the first method these Chords are expressed as follows:

1st Chord.
3rd oct. C \$\vert 4th oct. 3rd int. 5th int. 7th int. 5th oct. 3rd int.
2nd Chord.
3rd oct. \$\vert A\$ \$\vert 4th oct. \$\vert 5th int. \$\vert 7th int. 5th oct. \$\vert 1st int. 3rd int.
3rd Chord.
3rd Chord.
3rd oct. \$\vert D\$ \$\vert 4th oct. \$\vert 4th int. 6th int. 5th oct. \$\vert 1st int. \$\vert 4th int.

4th Chord.
3rd oct. A ● 4th oct. 5th int. 7th int. 5th oct. 1st int. # 3rd int.
5th Chord.
3rd oct. D ● 4th oct. 4th int, # 6th int. 5th oct. 1st int. 4th int.
6th Chord.
3rd oct. b B ● 4th oct. 4 6th int. 5th oct. b 1st int. b 2d int. 4th int.
7th Chord.
3rd oct. b E ● 4th oct. b 5th int. 7th int. 5th oct. b 2d int. b 5th int.
8th Chord.
3rd oct. 4 B ● 4th int. # 6th int. 5th oct. 1st int. 4th int.
9th Chord.
3rd oct. E ● 4th oct. 5th int. # 7th int. 5th oct. 2d int. 5th int.

When the notes of a chord are not of the same length, the longest are placed first; then the sign, with— \dots followed by the shorter notes.

EXAMPLE NINTH.



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with 3rd oct. C h b B h 3rd oct. C d with C h G h E h G h

CHAPTER VI.

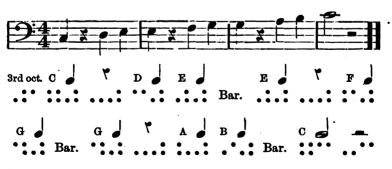
RESTS.

As before stated; a note is composed of two parts or sections, the first part indicating Pitch, and the last part Time. If now we suppose the last part to be written alone, we should have a character indicating Time only. Hence the rests will be represented by the eight primitive signs, with the sign $\bullet \bullet$ prefixed. This prefix is an index of silence. Thus:

Whole rest.	Half rest.	Quarter	rest.	Eighth rest.
••••	••		•	•••
Sixteenth rest.	Thirty-se	oond rest.	Siz	ty-fourth rest.
•••	• •	• •		•••

At least one blank space must be left both before and after the rest signs.

EXAMPLE TENTH.



Double bar.

...

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CHAPTER VII.

THE SIGNATURE. --- TIME. --- THE BAR AND DOUBLE BAR.

THE SIGNATURE. When a composition is in any key other than C, the signature is expressed *before the time signs*, by writing the sign for a Sharp or Flat, then the prefix of Number, and after it, the numeral indicating the number of Sharps or Flats in the signature.

	#	Prefiz.	Numeral
Key of G; Signature, One sharp		•••	••
Key of D; Signature, Two sharps	•	••••	••
Key of A ; Signature, Three sharps	•	:::	••
Key of E; Signature, Four sharps	•	:::	:•
Key of B; Signature, Five sharps	• .	:::	••
Key of F sharp; Signature, Six sharps	•	•••	:.
Key of C sharp ; Signature, Seven sharps	٠	••••	••
•	b	Prefiz.	Numeral.
Key of F; Signature, One flat	•		Numeral. • • • •
Key of F ; Signature, One flat Key of B flat ; Signature, Two flats	•	•••	Numeral. • • • •
	•	•••	•••
Key of B flat; Signature, Two flats	•	· · · · · · · · · · · · · · · · · · ·	•••
Key of B flat; Signature, Two flats Key of E flat; Signature, Three flats	•		•••
Key of B flat ; Signature, Two flats Key of E flat ; Signature, Three flats Key of A flat ; Signature, Four flats	•		•••

EXAMPLE ELEVENTH.

KHT OF A.

TIME. The Time of a composition is indicated at the beginning of a piece, by the numeral written after the prefix of number.

Common time	至		.: :*
		<u>¥</u>	•

All other varieties of measures may be expressed in the same manner.

The BAR and DOUBLE BAR. The Bar, which marks the limit of a measure, will be represented by the sign ••• or by a blank space of three points in length, and the Double Bar by the sign

EXAMPLE TWELFTH.

	•		K	er of G.				
Signature.	Time	.						
Sign of No. 1	Sign of No.	٠		4th oct.	D	Е	Bar	F
D Double Bar.								

CHAPTER VIII.

FINGERING.

First finger	•••
Second finger	••
Third finger	•••
Fourth finger	•••
Fifth finger	•••

These signs will be placed before the note. It will be observed that these are the first five numerals, without suffix or prefix.

Time.	EXAMPLE	THIRTEENTH.	
	Sthoot C	1st finger. D fin	2d N
		· · · · · · · · ·	e e e
3rd finger. F fing	er. G finger.	F J finger. E	3rd finger. D
	•••••	• • • •	•••••
2d finger. C			
••••			

CHAPTER IX

REPEATS .- THE DA CAPO AND PAUSE.

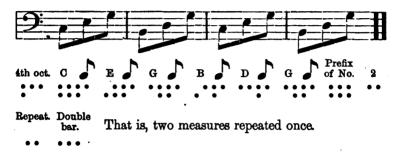
First. When part of a measure is repeated, the sign $\bullet \bullet$ will be made in the measure once for each repetition of such part.

EXAMPLE FOURTEENTH.

4th oct. C $A = A = A = A$ 5th oct. C A repeated three times.
4th oct. C \rightarrow E \rightarrow G \rightarrow 5th oct. C \rightarrow repeated three times. 4th oct. C \rightarrow E \rightarrow G \rightarrow 5th oct. C \rightarrow repeat, rep., rep., Double bar.
Second. When one measure is repeated, it will be expressed by the sign made once in each repeated measure. Example fourteen, repeated twice, is expressed as follows:
4th oct. C Repeat, rep., rep., Bar, repeat,
repeat, Double bar.

Third. The repetition of two or more measures is expressed by writing after such measures the prefix of number, $\overset{\bullet\bullet\bullet}{\overset{\bullet\bullet\bullet}}$ then the numeral indicating the *number* of measures to be repeated, and after it the sign $\bullet\bullet$ which must be made once for each repetition.

EXAMPLE FIFTEENTH.



Fourth. When at the end of a passage, a number of the preceding measures are repeated, write the prefix of number at the end of such passage, and then the numeral which indicates how many measures must be counted backwards to the place where the repeat begins, then the sign ... and after it the prefix of number with the numeral showing the number of measures included in the repeat.

Thus, if after twelve measures, the first four are to be repeated, it will be expressed at the end of the twelve measures as follows.

EXAMPLE SIXTEENTH.

Prefix Prefix of No. 1 2 Repeat of No. 4

That is, count back twelve measures and repeat four. This use of the repeat, obviates the necessity for the Dal-Segno sign.

The Da-Capo ••• and Pause sign ••• are used in the same manner as in ordinary music, and with the same effect.

CHAPTER X.

THE TIE.—THE SLUB.

THE sign for a Tie is . and is written between the notes which are to be joined in one tone.

EXAMPLE SEVENTEENTH.

C	Tie	C	5
•••	:.	::	

The Tie may occupy the bar space when it joins two notes separated thereby.

The sign for the Slur mark is •. It is placed before the notes slurred.

The sign • placed after the notes which are slurred together indicates the end of the slurred passage.

EXAMPLE EIGHTEENTH.



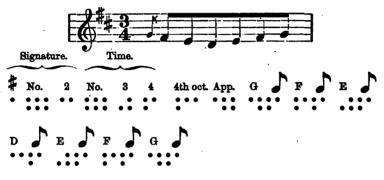
CHAPTER XI.

MELODIC SIGNS, NOT HERETOFORE DESCRIBED.

THE sign for the Appoggiatura is

An Appoggiatura of one tone is indicated by the sign •••• which is placed before it.

EXAMPLE TWENTIETH.

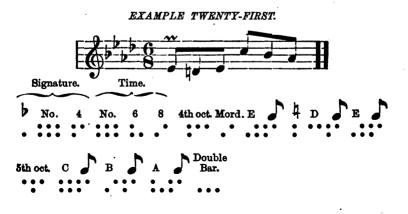


When the Appoggiatura consists of two or more tones, the sign $\bullet \bullet \bullet \bullet$ is placed before, and the sign $\bullet \bullet \bullet \bullet \bullet$ after it, to mark its termination.

The long Appoggiatura should be written as it is to be played, and without the sign $\bullet \bullet \bullet$

An After-tone should be expressed as it is to be rendered.

The MORDENT. ** The sign for the Mordent is • which is placed before the notes affected.



The same, written as played.

E F F F E f Dot, 4 D f E f and so forth.

The TURN. This is indicated by the sign •• To represent as nearly as possible the great diversity of effects produced by the Turn, two methods may be pursued.

First. When the ornamental tone precedes the essential tone, place the sign $\bullet^{\bullet} \bullet$ before such essential tone. When the ornamental tone follows the essential tone, the sign $\bullet^{\bullet} \bullet$ should be placed after it.

When a Sharp, Flat, or Natural is placed above the Turn, the sign •• should be preceded by the Sharp, • Flat, • or Natural, • When the Sharp, Flat, or Natural is placed below the Turn, the sign •• should be followed by the corresponding point sign expressing such Sharp, Flat, or Natural.

In each case, a blank space of but one point should separate the signs.

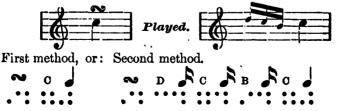
When the above methods are pursued, the judgment and taste of the reader or player must determine the form of the embellishment, and the manner in which it should be performed.

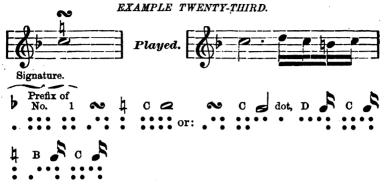
Second. By the following method, the Turn may be expressed more clearly than by that before given.

When the Turn precedes the essential tone, write the sign ••• then the ornamental notes in full, and after them the essential note.

When the Turn follows the essential tone, write the sign •• first, then the essential tone, and after it the notes of the Turn in full as they are to be rendered. By thus expressing the exact pitch and time of the notes constituting the Turn, the use of the accidentals in connection with the sign •• is avoided.

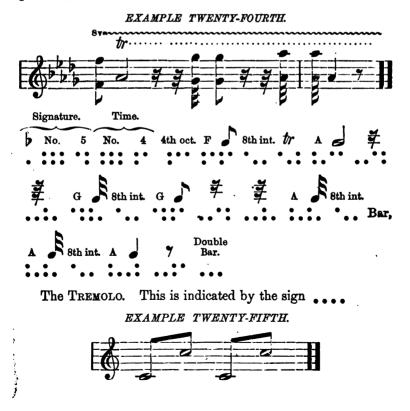
EXAMPLE TWENTY-SECOND.





The Turn as now indicated by the sign \sim . \circ is properly an aftertone generally consisting of four notes.

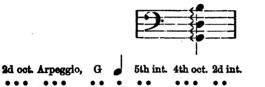
The TRILL. This is expressed by the sign $\bullet_{\bullet\bullet}$ which will precede the note to be trilled.



Tin			•				
\sim	-			1		Doub	le
No.	4	4th oot.	Tremolo,	0 🥑	8th int.	Doub Repeat, Bar.	
	••				•		
	٠	•		• •			

The ARPEGGIO. This indicates that the tones of a chord are to be played in rapid succession in imitation of the harp. It is expressed by the sign •••• placed before the root-note of the chord.

EXAMPLE TWENTY-SIXTH.



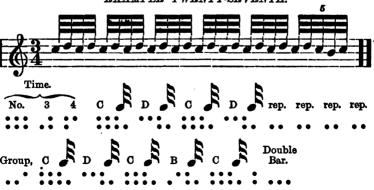
TRIPLETS, QUINTUPLETS, SEXTLETS, &O.

Groups of three, five, six, seven, nine, or ten notes are called Triplets, Quintuplets, &c.

Instead of indicating each of these groups separately, the single sign $\bullet \bullet^{\bullet}$ will be used.

It will be placed before the notes which form the group, and will be known as the Group sign.

The sign \bullet will be placed after the last note of the group. The group will thus embrace all the notes between the sign $\bullet \bullet^{\bullet}$ and the sign \bullet Whether the included notes constitute a Triplet, Quintuplet, or other group will be determined by inspection.



EXAMPLE TWENTY-SEVENTH.

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CHAPTER XII.

DYNAMIC SIGNS, NOT HERETOFORE DESCRIBED.

THE following words and marks of expression will be indicated by the signs which are placed opposite to them:

<i>Piano</i> , or <i>p</i>	••••
Pianissimo, or pp	• • •
Forte, or f	••••
Fortissimo, or ff	••••
Orescendo, or cres., or <	••••
Diminuendo, or dim., or >	••••
Swell, <>	••
Staccato, or stac	• •
Sforzando, or sf	:
Pizzicato, or pizz	:••.
Pedal, or ped	••••
Foot off mark, *	••••

In all cases, these signs must precede the passage affected thereby, at the close of which the sign * may be made. Otherwise the sign used may be repeated before the last note.

In simple passages the sign • will render the meaning sufficiently clear; but when a number of melodic or dynamic signs are used to modify the same passage, each sign should be repeated before the last note of the passage or part which it affects.

CHAPTER XIII.

MISCELLANEOUS SIGNS.

RIGHT HAND. The sign *** shows that the part which follow belongs to the Right hand.

LEFT HAND. The sign ... shows that the part following belongs to the Left hand.

The HOLD, or PAUSE This sign should succeed the note.

Whenever the sign ******* occurs, it signifies that the characters following are used to express numbers.

The word with is represented by the sign $\bullet \bullet \bullet \bullet \bullet$ which is used in expressing chords or passages in which certain notes are to be sustained while other shorter notes are performed.

(See: Chapter V, Example Ninth.)

When at the end of a line the measure is not complete; the sign will be made to show that the measure is continued on the next line. Hence it will be called the sign of Continuance. The sign • as heretofore employed, indicates that the effect of a sign previously used is discontinued. It is called the sign of Discontinuance.

CHAPTER XIV.

THE ORGAN.

THE key-boards of the Organ are known as the Pedal, First Manual, Second Manual, Third Manual, and in very large organs the Fourth Manual.

The Stops in the Pedal bank and Manuals of any particular Organ may be indicated by numbers. Owing to the fact that Organs differ widely in regard to the character and arrangement of Stops, no other method of particularizing them is practicable.

The particular choice will then depend upon the judgment and taste of the organist. The Manuals and Stops to be employed, should be indicated at the beginning of a piece by the proper words or their abbreviations, and afterwards whenever a change occurs. In all cases, the parts—composed for the respective Manuals, should be written separately.

In general the terms Soft, Loud, and Full will sufficiently indicate the character of the Stops to be used.

CHAPTER XV.

STRING INSTRUMENTS.

The STRINGS, POSITIONS, and so forth, will be indicated as follows:

First string...... Third string......

BOWING. The down bow is indicated by the sign ••••. The up bow by the sign ••••

HARMONIC NOTES are indicated by the sign

All of these signs should precede the notes.

Inasmuch as the plan of the best instruction books is to give a large number of Exercises for each position, which is indicated at the beginning of each class of exercises; and inasmuch as the positions which are essential to the proper rendering of compositions for the violin are not indicated; but are to be determined by the knowledge, judgment and taste of the player; I have deemed it unnecessary to indicate the positions, by signs.

Following the course laid down by the best authors, (see: Wichtl, Andre, and others,) the means herein provided will be found adequate for all purposes.

CHAPTER XVI.

THOROUGH-BASS.

The Bass, or Root-notes, should be formed in the usual manner.

The figures which are placed above the notes will be expressed by the interval signs.

The octave in which the root occurs, should be indicated by the proper octave sign.

EXAMPLES.

<u>الم</u>	3rd oot.	c a	0 4	3rd int, 5th int.
2 a	••	•••• or:		•••

Chord of the Sixth.

Srd oot. E 2 6th int.

Chord of the Fourth-Sixth.

3rd oct.	G 2	4th int.	6th int.
•••	••••	•••	••••

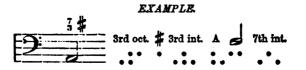
Chord of the Seventh.

3rd oct. G 7th int.

Chord of the diminished Seventh.

3rd oot # G / 7th int

When a Sharp, Flat, or Natural is placed over or under a Bass note to signify that the Third to that Bass is to be made sharp, flat, or natural, it may be expressed by placing before the Bass note the third interval sign preceded by a Sharp, Flat, or Natural.



31

The same may be expressed thus:

Srd oct. A a # 3rd int. 7th int.

An interval which is affected by an Accidental should be preceded by such accidental sign.

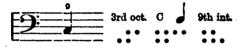
EXAMPLE

Chord of the extreme sharp Sixth.

6 #	3rd oct. þ	E	# 6th int.
	• •	• •	• •
L	•• •		

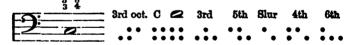
The Ninth may be expressed by the sign

EXAMPLE.



When different chords are taken on the same Bass-note, each chord should be fully expressed, and the slur sign placed between them.

EXAMPLE



When the notes which accompany a Bass-note are retained while the Bass-note changes; which is commonly expressed by short horizontal lines; each Bass-note with its accompaniment may be expressed in full as follows:

EXAMPLE



The same example may be expressed thus:

Srd oct. C = 5th int. 6th int. Slur, # C =

EXAMPLE.

c # 9

48 **3 6** 7 **6** 9 8 6 4 . = 0

\$ \$ 3rd oct Е 2 Gł 4 6th B 2 4th Slúr Srd 3rd oct. E 2 6th ' Blur 5th G Slur 2 F 9th Slur Srd 6th E 2 4th 8th F 1 2 2d 4th 4th Slur 🛔 6th \$ ò a B 名 3rd D 🖉 5th 0th Slur 8th 4th oct. B 📿 4th Slur 🇯 2 9th 3rd 0 2 4th Slur Slur 8th 3rd oct. G 名 9th 3rd C 2 5th 6th 圡 5th 6th D 2 8th 4th D @ 3rd Slur 5th 6th Е 2 9th Slur 8th 2 6th B Double Slur 🛱 4th 6th Slur 4th 5th 4th 7th Е 2 Bar.

PRACTICAL REMARKS.

As soon as may be practicable; each pupil should begin to write the Scales, Exercises, and Studies, in the order in which they are taught.

These should be properly described by numbers or otherwise. Each page should be numbered, and the whole suitably indexed and preserved for binding in book form.

The beneficial results of this practice may be stated as follows. The progress of the scholar will be more rapid, because in addition to reproducing the lesson upon an instrument; a separate and distinct effort must be made to reproduce it upon the written page. As the progress of each pupil will be more rapid, more work can be accomplished in the same time than before; and hence the working capacity of the department of music will be increased. And best of all, each pupil, at the end of his course will find himself in possession of a large amount of valuable music, accumulated without appreciable cost or effort; but yet with lasting benefit.

These Exercises, Scales, and Studies, with compositions of a higher order, constitute the essential means of instruction upon the Piano; and hence the student should persist in this work with tireless zeal.

The repertory of the blind organist should include the greatest possible number of standard Psalm and Hymn tunes, old and new, in every variety of meter; together with Chants, Anthems, and the like.

The collection should be adequate for the various forms used in the public worship of God, and for use at funerals, festivals, or other special occasions. In addition to the above there should be a sufficient number of Voluntaries, Offertories, figures and arrangements from Oratorios.

The following Examples illustrate the general application of the system. It may be remarked, however, that pieces in four parts may be written in a variety of ways.

First. Each part may be expressed separately.

Second. The right hand parts may be written together, and the left hand parts together.

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Third. Applying the rules of Thorough-bass, all the parts (in many cases) may be condensed in a single expression.

ST. MARTYNS. C. M. TANSUR. A N 8 M, 8 т M R т Y O Т R Ň 8 Π 4 4th oct. G Bar Slur G Dot No. 1 No. 3 R'G D Bar Slur G Dot A Dot C Bar Stur D Dot C В B Bar Shur D Dot C B G Bar A Bar Slur A Bar G ø C Bar D E Bar Slur D Dot В Dot C Bar Slur D В В C Bar A J D Bar Slur E Dot D C B Bar G d Bar. B Bar Slur A G F

.

In the same manner, the other parts may be written. When a measure is completed at the end of a line the bar-space is made at the beginning of the next line. A single point in the lower row at the end of a line indicates that the measure is not full, and is continued in the next line.

	STUDY.		
Allegro Assai.	ST	HELLER. Op. 4	6, No. 1.
	8 T U D	х • •	·
A 1 1 e g	r o A	888i •••••	
S t <u>H</u> e 1	ler O	p No 4 6	3 No 1
No. 4 R.H. 5th oct	. Slur G	A F A G	Bar
E F F D D			
B B C B A F			
Bar E A F A			
O B B Othini	t y 5th c		▲ .A
F G G Bar		d A e A	
E R D R C	вкск	АВА	G A

35

A F F G Bar E F F D B E A O BE B D B C B B 64h int. B Ath oct. G Bar C Joth oct. A Ath oct. D 5th oot. B Stih oot. E S5th oct. C Sith oot. E S5th oot. C Bar 4th oct. F 5th oct. D 4th oct. G 5th oct. E A A 6th int. y 6th oct. Slur A S b B G & A & Bar F & G & E & F & D & F & E & D & # c & D & E & C & A B b B B G B A B Bar F B G S E S $\mathbf{F} \stackrel{\mathbf{P}}{\rightarrow} \mathbf{D} \stackrel{\mathbf{P}}{\rightarrow} \mathbf{F} \stackrel{\mathbf{P}}{\rightarrow} \mathbf{E} \stackrel{\mathbf{P}}{\rightarrow} \mathbf{D} \stackrel{\mathbf{P}}{\rightarrow} \stackrel{\mathbf{F}}{=} \mathbf{C} \stackrel{\mathbf{C}}{\rightarrow} \mathbf{6}$ th int. y 6th oct. Slur A A B B B G A A Bar F A G & E & F & D & F & E & D &

‡ o ♪ D ♪ E ♪ c ♪ A ♪ b B ♪ G ♪ A Rear F R G R E R F R D R F R E $P D F \ddagger O f th int.$ Y Stac. C 5th oot: A . Bar 4th oot. D 5th oot. B S 4th oct. E # O Sth oct. F Sth oct. D Sth oct. 5th oct. F 5th oot. D Bar 4th oot. G 5th oot. E **♯** F ♪ B ♪ 6th int. 7 Slur G 🔊 4 F Å G Å Bar E Å F Å G Å E FFGFEFFJDFEFF D RE FF RD FE Bar C FD R E A O A D A E A O A D A B A O A D & B & C & D & B & C & Bar A &

в Ло Лв Ло Л # о Лр Ло Л D & E & F & E & F & F & F & G & A & A G Bar A B B C B B C B B C с Вв Вс Вв Вс Вв Вр Вс В B A Bar G 4th oct. E F F G F B C Bar A B B C B D B B D B E B F B G B Bar E 6th oct. Slur O Srd int. 5th oct. G Sch oct. D St 4th int. 5th oct. G A 3rd int. 5th oct. E Bar 6th oct. B th int. 5th oct. E F F 3rd int. 5th oct. C F G

4th int. O B B 6th int. 4th oct. G Bar 5th oct. ••• ••••• C 3rd int. 4th oct. G 5th oct. C 3rd int. 4th oct. G 5th oct. D 4th int. 4th oct. G A 3rd int. ••••• 4th cot. E Bar 5th oct. B 4th int. 4th cot. E F Sord int. C J G J 4th int. 4th oct. C J B 6th int, 3rd oct. G Bar 4th oct. C Srd int. 3rd oct. G •••• 4th oct. B 🎝 6th int. 3rd oct. G 🎝 4th oct. C 🎝 3rd int. •••••••• Srd oct. G 4th oct. B 6th int. 3rd oct. G Bar 4th oct. ••• •••• C 3rd int. G B B 6th int. 4th oct. G 5th oct. C J 3rd int. G J P Sch int. G J Bar 6th oct. ••••• O 3rd int. v 5th oct. C 3rd int. 8th int. v Bax Double 5th oot. C 🗢 6th int. Bar.

STUDY.

ST. HELLER. Op. 46, No. 1. Allegro Assai. 8 T U D Y A 1 1 0 •• • • • • No 1 1 No . 6 r •••••••••••• 4 L.H. 4th oct. Slur B 6th int. Bar 0 5th int. No. Slur A 6th int. G 8th int. 3rd oct. B ••••• 6th int. Bar C 🤳 5th int. Slur A 🛱 6th int. G •••• 7 4th oct. Slur B 6th int. Bar C 8th int. 5th int. Slur A 🖡 6th int. G 🚽 8th int. 3rd oct. •••• Slur B 6th int. Bar C 5th int. Slur ••• # 6th int. G Sth int. 7 Srd oct. Slur 4; r 🔊 A & G & F & Bar E & G & F & E & D & F & E & D & C & F & F •••

D. R. C. R. B. B. D. R. C. R. B. Bar A. A о Я Ь в Я а Я д Я в Я а Я д Я д 7 4th oot. Slur # O 6th int. Bar D With int. Slur b B a # 6th int. A sth int. 3rd oct. Slur # O 6th int. Bar D 5th int. Slur **b** B # 6th int. A Sth int. **₽**o **⊿** 7 4th oct. Slur 6th int. Bar D 5th int. Slur b B 46th int. A 8th int. 3rd oct. Slur # 0 6th int. Bar D 5th int. Slur • • • • • • • b B J # 6th int. A Sth int. 7 3rd oct. G S **b** B **A A** G **A** Bar F **A A** G **A** F **A** E FG FF FE FD FF FE FD F O FE FD FC FBar B F.D FO F

B A A C A B A A G J Y 4th orga Slur B 6th int. Bar Stac. C 5th int. 7 Stur • • • • • • • • • A 6th int. Stac. B 5th int. 7 # G 6th int. ••••• • • Bar Stac. A 5th int. 7 Slur # F 6th int. • • • • • Stac. G 5th int. 7 Slur E 6th int. Bar F •••• • • • • 7 F J 3rd int. 5th int. 6th int. F J 3rd int. 5th int. 5th int. 6th int. F 3rd int. 5th int. Cth int. Bar F 3rd int. 5th int. 6th int. # F 🚽 3rd int. 5th int, 6th int. F 🤳 3rd int. ••••••••••••••• •••• 5th int. 6th int. F 3rd int. 5th int. 6th int. Bar G 4th int. •••••••••••• 6th int. 4th oct. C Srd oct. G 4th oct. D Srd oct. G 4th oct. E Srd oct. G Bar 4th oct. F Srd oct. G ••••• ••• ••• 4th oct. G Srd oct. G Sth oct. A G B B

G J Bar 5th oct. C J Slur C F E F D F C F B & D & C & B & A & C & B & A & Bar Slur G & B & A & G & F & A & A G & F RE RG RF RE RD RF RE R D Bar C 7 4th oot. Slur C B E D R C R B R D R C R B R A R C R B & A & B Bar G & B & A & A G & F & A RG RF RE RG RF RE RD R F F E D Bar C 2d oct. Slur G R 3rd oct. F R E R D R C 2d oct. Sing G R Srd oct. F R E R D R Bar C J Slur G R 4th oct. F R E R D R O J 4th oct. Slur G

5th oct.	.F				
	0				

KEY.

PRIMITIVE SIGNS.

••••••••••••••

THE NOTES WITH THEIR VALUES,

0 ø	° d	o 🚽	•	۰ •	° ,	0	
D 53	D	D	D	D	D	D ••	
			E				
			F				
			G J				
Å 69					A	A	in the second se
			в				
• • •	•	• • •	• •	• •	• • •	• •	•

OCTAVE SIGNS.

ł

1st Oct. •••	2d Oct.	3rd Oct.	4th Oct.	5th Oct.	6th Oct.
		7th Oct.	8th Oct.		
Prime, or			L SIGNS.		
lst Int.	2d Int.	3rd Int.	4th Int.	5th Int.	6th Int.
• •	•••	•••	•••	•••	••••
	7th	Int. St	h Int., or Oc	tave.	
	•		•		

REST SIGNS.

Whole Rest.	Half Rest.	Quarter	Rest.	Eighth Rest.
• • •	••	• • •	•	•••
Sixteenth Re	st. Thirty-see	ond Rest.	Sixty-fo	urth Rest.
•••	• •	• •	•	••*

FINGERING.

lst Fing. •••	2d Fing. ••	3rd Fing.	4th Fing.	5th Fing.
# c d	ACCIDENTALS.		/ _	₿ F Ø
C Dott	ed C Double		•	

,

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EMBELLISHMENT SIGNS.

Appoggiatura	•••	Turn.	•••
Mordent	•	I'rill	• •

EXPRESSION SIGNS.

P	••••	Slur••	
PP	•	Swell	
F	• • •	Staccato •.•.	
FF	•••	Sforzando	
Cres	• • •	Pizzicato	
Dim		Arpeggio	

Tremolo.....

MISCELLANEOUS SIGNS.

Tie	•••	Pause, or Hold	•••
Repeat	6 •	Bar	•••
With	:	Double Bar	• • •
Group sign	• • •	Prefix for Number	•••
Right hand	•••	Pedal	••••
Left hand	•••	Foot off mark	••••

STRING INSTRUMENTS.

1st String	•••	2d String	•••
3rd String	••	4th String	•••
Down Bow	•••	Up Bow	••••

Harmonic.....

SURPLUS SIGNS.

-



THE NEW YORK SYSTEM

07

Tangible Point Mriting and Printing

FOR THE

USE OF THE BLIND.

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. . • ¥,

THE ALPHABET.

CAPITAL LETTERS.

A	E	}	C	D	•	E	F
••	•	•	•	•	•	•••	•
G	E	[1	J		K	L
•••		•••	•••	•••	•	••••	••••
М	N	T	0	Р		Q	R
••••	••	••	•••	•	•	••••	•••
S	r		U	v		w	X
• • • •	••	••	•••	•••	•	••••	••••
			Y	\mathbf{Z}			
		•	•••	•••	•	•	
			SMALL	LETTERS	•		
8	b	c	d	e	f	g	h
••	•••	••••	••	•	•••	•••	•••
i	j	k	1	m	n	ο	р
:	•••	••••	•••	••	••	•*	•••
q	r	8	t	u	v		x
••••	.:	•.	•	•••	•••	•••	•••
			у •••	Z • • • • •			

It will be observed that the capital letters are derived from the small letters, by suffixing to each of them as many poin's

.

as will form a new character *four points* in length, in the following manner:

1st. When the small letter ends with a point in the upper row, as in the letter "a," add the suffix in the lower row.

2d. When the small letter ends with a point in the lower row, as in "c," or in both upper and lower rows, as in "d," add the suffix in the upper row.

WORD AND PART WORD SIGNS.

the	and	of	that	ing	ch	ou
-		•••		•••	•••	•••
·		sh	th	wh		
		•••	••	•••		

NUMERALS.

1	2	3	4	5	6	7	8	9	10
••	••	•••	•••	•••	• •, •	••	•.	*	•

Prefix, indicating that the characters which follow are numerals, ••• The Decimal point is

PUNCTUATION MARKS.

Period, •••••, or a blank space equal to five points in length.

Comma, •, preceded and followed by a blank space equal to two points.

Semi-colon, , preceded and followed by a blank space equal to two points.

Colon	Exclamation
Apostrophe	Asterisk
Hyphen	Quotation
Interrogation	Dash
Parenthesis	

53

· · · · · ·	n	0	1	t	u	t	1	L	8	n		L	
		1	1		i i	N N	1		i al				
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			1	n -	л Г	1		T	u u		- r ÷	i I	
5													
	1 1 1		l .	i i	X I	- I- 10		r			r i	T Y	
>							1						
	h to be at			10.00		1.20		10	174.5	194. ¹ 1	And top	1999-97 1999-97	

The above cut represents a section of the New York "Guide," with the word Institution as it appears when written. When the paper is turned over, for reading, it appears thus:

Institution

The following abbreviations will be found useful in mathematics. They are much more natural and simple than any arrangement of signs would be.

-	•		
For	plus	write	p. .
66	minus or subtract	"	8.
. 46	multiply by	" "	m.
66	divided by	"	d.
"	plus or minus	"	pors.
.46	the radical sign	"	rad.
"	equality	"	eq.
"	greater than	"	gr t.
66	less than	"	1 t.
"	angle	"	al.
"	triangle	"	tr al.
66	rectangle	"	rec, or rec al.
"	square	"	sq.
"	circle	"	ci.
"	circumference	"	cir.
"	parallel	"	pl.
"	- perpendicular	"	pr.
u	plane	"	pe.
"	ratio of circumfer	ence t	- diameter wri

" ratio of circumference to diameter write;—pi.

" cube root write ;—rad (followed by the number indicating the root) before the quantity whose root is to be taken. To indicate the power to which a quantity is to be raised, write after the quantity ;—pr, followed by the number indicating the power.

" co-tangent " co tan.

" secant " se.

" co-secant " co se.

The writing is done upon a tablet, which is grooved to receive the points.

These are made by a "style" which is constructed of a piece of small wire, properly rounded at one end, and inserted in a suitable handle. In writing observe the following rules:

1st. Write from *right* to *left*. For convenience the points in the upper row are known as 1, 3, 5, 7; and in the lower row 2, 4, 6, 8. This order will be the same for both writing and reading.

2d. Between all letters leave a blank space equal to one point.

3d. Between all words leave a blank space equal to two points. At the end of a phrase, clause, or sentence, the proper punctuation mark may be used, or a blank space left equal to three or four points in length.

In practice the capital letters and punctuation marks are not absolutely essential, and need not be used.

Pupils will find great benefit in carefully writing out their lessons in every branch of study. These manuscripts should be preserved and bound. To insure preservation; each page may be coated on the back or perforated side, with a solution. of bleached shellac and alcohol. Books made in this manner will endure constant using for years.

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