# Resume and bibliography of piano fingering material 

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A RESUME AND BIBLIOGRAPHY OF PIANO FINGERING MATERIAL

> by

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B. A. Whitworth College, 1956

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## Approved by:



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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

Fingering has always been a problem to many pianists. In an article in a well known magazine the late Dr . Guy Maier, a well known piano teacher, used a quote from Schumann which can also be applied to other pieces. Schumann, in talking about his Caprices, said:

I have furnished very precise and carefully considered fingering for the Caprices, fingering being the primary foundation of all thorough playing. The student should pay most earnest attention to this all-important point....In one Caprice, No. 6, I have purposely fingered only particular notes. But if the student really cares to learn this piece thoroughly, he must fill out all the blank spaces; otherwise, if he doesn't make up his mind about the fingering of every individual note, a perfect mastery of the piece will be a sheer impossibility. ${ }^{2}$

Dr. Maier concludes the article by saying:
Selah, and thrice Amen, Mr. Schymann\& All of us teachers bless you for those words.....Our students must very early learh never to leave the fingering of any passage to chance....Fingering must always be clearly written down, memorized and strictly adhered to.....There is no other way. 3

By refingering many passages, thus simplifying them, most teachers would probably get considerably better results with their students than is possible by neglecting the problem. The mere fact
$1_{\text {See }}$ definitions, p. 3.
${ }^{2}$ Robert Schumann, cited by Guy Maier in published article, periodical and date unknown.

3Guy Maier, in published article, periodical and date unknown.
that even great pianists must spend hours perfecting their fingering should point up how much more less talented pianists need to work on this.

The purpose of this paper is to help pianists realize the importance of fingering and to give them constructive ideas to help them devise fingering to fit their own needs.

## I. THE PROBLEM

Statement of the problem. As a help in selecting the best fingering, the purpose of this study was: (1) to summarize all material that could be found on the subject of piano fingering; and (2) to compile a bibliography of this material.

Importance of the study. Piano teachers will generally agree that fingering is an important phase of playing the piano well, and one that cannot be left to chance. They will also agree that there is both good and bad fingering. In spite of this fact there are editions still published using impractical fingerings that are unnecessarily difficult and that could be simplified to the playey's benefit. Many students accept fingering without any question as to whether it fits their particular hands, making many passages harder to perform musically. In this study an att enpt was made to put down the ideas of many authors on the subject of fingering so that the students and teacher could easily judge given fingerings and alter them to fit their particular need.

Delimitations. The material which was available at Montana State University, Missoula Public Library and from private sources was used in this paper. Periodicals from the year 1890 and following were used. The material which was not available was compiled separately in bibliographical form.

Method of procedure. All articles and books available were read and summarized and alphabetized according to authors. The books were listed separately fram the periodicals. That material which was not available was listed in a separate bibliography.

## II. DEFINITIONS OF TERMS USED

Fingering. The term "fingering" was interpreted as: (1) the marking of music notes with the numerals $1,2,3,4$, and 5, 1 representing the thumb, 2 the index finger, and on in order with the little finger being represented by the number 5; and/or (2) playing the music with certain specified fingers.

## CHAPTER II

SUMMARIES OF BOOKS

According to C. P. E. Bach, 1 the correct use of the fingers is inseparable from the whole art of performance. Playing facility depends upon the fingering used with every figure calling for its own fingering. If the fingers are not used correctly, no one can even hope to play well. While playing, even in difficult passages, the motion of the hand should be barely noticeable. Children's hands should be trained to stretch rather than to skip with the fingers bunched.

When changing fingers, the thumb is the natural one to turn under, but it should not be turned under the fifth finger. The little finger is used only at the beginning and the end of scales. Bach's rule for scales is, "The thumb of the right hand is brought in after one or more black keys in ascending, before them in descending, and the left thumb after in descending and before in ascending. ${ }^{n 2}$ He goes on to say, "The thumb or fourth finger plays the tone immediately preceding the black key, which is then struck by the second

[^0]or the third finger."3 These rules are not without exception and the author goes into great detail illustrating the rules and their exceptions. Fingering variations are given for all of the scales and in some instances fingers are crossed over the others, mainly third over fourth.

Several fingerings are given for the playing of thirds together, broken thirds, leaps, fourths, fifths, sixths, sevenths, and octaves.

Bach believes that the player should always seek an unforced and natural fingering. Another thing to remember is that one cannot always get the degree of clarity from a weaker finger that a stronger finger can achieve.

There are many illustrations in this chapter on fingering.

Thomas Fielden4 feels that fingering hasn't developed with technique and that the cause of this slow progress has often been the use of "old-fashioned fingering with modern technique methods. The use of different fingers on repeated notes is part of the old system, the fixed wrist and elbow making it impossible to use the same finger because of the strain. Mr. Fielden thinks that alternating fingering in very quick bravura passages is better than using the same finger.

Another aspect of fingering is that of arpeggios. Brahms'

[^1]method, and one that Mr . Fielden likes, was to carry each group of notes to the full extent of the hand, ending on the fifth finger, instead of putting the thumb under.

The author concludes by saying, "It is generally conceded that. any finger-grouping which begins on the thumb is always more certain of control than one which begins on a finger. 45

In a book by Andor Foldes6 theoretical questions are asked and answered. One of the questions asked is whether or not any general suggestions can be given about fingering. He answers by saying that there are no rigid fingering rules but that the student needs to learn how to play with any finger on any key. He also believes that fingering is an important enough part of the piano player's security that once he has learned a piece with a particular fingering, it should not be changed. The author concludes by saying:

It takes considerably longer to unlearn bad habits than to acquire good, new ones. It pays to spend same time in fingering a piece before learning it, to figure out the best possible method of using the fingers in the right way to the best advantage. 7

5Ibid., p. 178.
6Andor Foldes, Keys to the Keyboard (New Yorks Oxford University Press, 1950) • p. 94 .

7Ibid., p. 94.

In a technique book by John Mokrejs ${ }^{8}$ fingerings for single notes and combinations of notes, intervals, trills, arpeggio groups, chords, broken chords, shifting, repeated notes, crossed fingers, chromatic scales, playing two parts with one hand, hand over hand, left hand, fifth finger crossing, glissando, leaps, embellishments, scales, octaves, and double third and sixth scales are covered.

Mr. Mokrejs says that it should be made a habit to play bass notes with the little finger, keeping the hand open an octave. The author says, "Fingering does not mean playing single fingers here and there, but combinations of fingers expressing a musical idea a Figure, Motive, or Phrase."9 If this is not clear in the mind, the fingers will stumble. The player cannot finger artistically if he does not know exactly where figures, motives and phrases begin and end. He also has to know the meaning of slurs, dots, and all markings, including musical terms.

Mr. Mokrejs goes on to say, "The fingering always corresponds to the musical intent. ${ }^{10}$ Rhythm and the velocity of the passage being played should guide the fingering in most instances. The player

[^2]must hear the passage in a group, even after having chosen the proper fingering, as, if the passage is not understood in a definite way, it is not possible to control the fingers and they will often get tangled up. The style will also influence the fingering. The player must take his hand into consideration as all hands are different and fingering must be adjusted to suit the individual needs.


#### Abstract

Mr. Newmanll believes that almost invariably students of inferior teachers are careless or indifferent about fingering and that the reason is that the importance has not been pointed out to them. With regard to fingering he says, "It can profoundly affect memorizing, stage poise, technical mastery, speed of learning, and general security at the piano.nl2


The author feels that after repeated playings of a piece, the student falls into some sort of fingering which becomes habitual and which, if not planned, may cause trouble. The best solution is to have the student work out his own fingering before he forms bad habits. The lessons, when the piece is new, should center around the fingering and the student should be shown more practical solutions if necessary.

The author thinks it is best to have an edition which has not been fingered by the editor so it will not influence the student. But,

[^3]if this is not possible, the given fingering should be tried out critically. When the most usable fingering is found, it should be written in and used, as trying to break a bad habit is very difficult. The student should use his own judgment on how much fingering to write in and put it only where there might be a question as to what finger to use.

Mr. Newman says that fingering should be as simple as possible so as not to impair concentration and memorization. Also there should be consistency, fingering similar passages the same so as not to confuse the player. The strongest fingers should be used when the greatest strength is required. As many notes as possible should be covered ahead of time so the number of thumb shifts are reduced.

In the question and answer section of a book by Abbey Whiteside ${ }^{13}$ the question is asked if fingering should be stressed. The author's reply is:

I should say that the importance of a prescribed fingering is practically nil. If you avoid fussing about fingering you will never produce a lasting obstacle to fluent passage work. If a rhythm is working, a finger will be ready to deliver power. 14

13abbey Whiteside, Indispensables of Plano Playing (New York: Coleman-Ross Company, Incorporated, 1955), p. 50.

14 Ibid., p. 50.

## SUMMARIES OF PERIODICAL MATERIAL

In an article by Myron Bickford ${ }^{l}$ on major scales only, he points out that scales beginning on white keys, with the exceptions of $F$ major for the right hand, and $B$ major for the left hand, use the fingering 1-2-3-1-2-3-4-5, and the reverse. In the scales beginning on black keys, the right hand has the fourth finger on $B$ flat in every case, while the left hand always uses the fourth finger on the added flat, taking the scales in order beginning with one flat, with the exception of the G flat scale. For the G flat scale, the new or added flat being a white key, the first finger is used. The fingering for the F major scale, for the right hand, is 1-2-3-4-1-2-3-4, the same as the B major scale in the left hand. The descending scale in the right hand of $F$ major and the ascending scale in the left hand of $B$ major begin with the fourth finger.

Mrs. Noah Brandt ${ }^{2}$ believes that too many pianists accept all standard piano fingering editions as final, regardless of adaptability to individual requirements. She goes on to say that no edition is infallible and all students need to recognize this. Fingering must be made to suit the individual hand. The same set of fingers through-

[^4]out similar passages enables the performer to concentrate his attention exclusively on the musical effect. Hundreds of passages may be simplified and perfected by a study of individual requirements.

There are piano passages in this article which are fingered several different ways, showing why one is more practicable than the others.

The author, Harriette Brower, ${ }^{3}$ points out that J. S. Bach established the fingering of the $C$ scale and that Chopin was responsible for using the thumb on the black keys. She goes on to say that the artist is his own master in choice of fingering but before he becomes his own master, he has to be taught by someone. There are certain principles of fingering which should be observed in order to play easily and effectively. The author lists five principles which govern the fingering of a passage. They are: (1) the quality of touch required, whether it be legato or staccato; (2) the phrasing of a passage so as to bring out the effect wanted; (3) the quality of tone wanted, whether it be weak or strong; (4) each individual finger and which particular effects each one can bring out; (5) the size and flexibility of the hand.

The author quotes Leschetizky, an eminent piano teacher, as saying, "A fingering is good when easy, provided the effect is the

[^5]same. $n^{4}$
The author also quotes Tobias Matthay, a noted pedagogue of London, as saying:

When yourtechnic is inefficient, or your knowledge of its laws inadequate, that choice of fingering assumes vast importance, since it then means the difference between barely managing a passage, and not being able to negotiate it at all. 5

The author points out that the teacher should always make clear to the student why a certain fingering has been chosen and why it fits the fingers best.

In an article by I. J. Cogswell, 6 one rule for scale fingerings is given. The rule, which applies to the right hand ascending and the left hand descending, is:

When there is a group of two black keys, the last one is to be played by the third finger and when a group of three black keys, the last one is to be played by the fourth finger - even though it means the use of a different finger for each hand. 7

This rule is based on the theory that when the second, third, and fourth fingers are supported upon the black keys, the thumb passes easily underneath and the fingers pass easily over the thumb in shifting the hand towards the thumb from that position.

[^6]The author, J. W. Dickey, ${ }^{8}$ begins by saying, "Poor fingering has been the cause of many a juvenile pianist 'meeting his Waterloo' at a pupil's recital." 9
J. W. Dickey believes that the reason for good fingering should be explained to the pupil and illustrated, and that the pupil should be given the chance to figure out his own fingerings with the guidance of the teacher. The author concludes by saying, "After correct fingering habits have been formed, it becomes easier to enter the fields of phrasing and of dynamic contrast."10

In a very short article by Esther Dixon, 11 two rules in scale fingerings were given. The first rule is always to have a reserve of fingers, and the second is to use the thumb usually on the white keys only.

According to Maurice Dumesmil, 12 in repeated notes, the use of one finger is advisable if the chief consideration is smoothness of

[^7]tone at a moderate or slow tempo. Speed makes it imperative to change fingers, however flexible the wrist may be. Changing the fingers on the same note as in organ style instead of sustaining the note with the pedal is recommended because relying too much on the pedal might gradually lead to carelessness and neglect of a rich, full, singing tone.

Gustav Ernest ${ }^{13}$ believes that some of the common notions on fingering should be overhauled. For a long time the thumb was not counted as a finger and the little finger was not used either. J. S. Bach and Couperin began the trend of using these fingers because the position of the keyboard had changed to make this possible. By sheer force of necessity the thumb and little finger were allowed on the black keys also and, as time went on, this use was relaxed more and more.

The author goes on to say that there also used to be rule that if a certain note was repeated a number of times a different finger should be used each time. This is not true any more as the fingering depends upon the nature of the piece and the effect wanted. Nowadays pianists use different fingers on repeated thirds and other combinations, too. But since chords must and can be played properly without change of fingers, the same should be possible with thirds, too.

Another rule that the author states is not to play a mordent's

[^8]first and third notes with the same finger. This rule came into being from the days of Liszt and even though the author agrees it is a good one, he also believes mordents can be played the other way as well, depending upon the flexibility and control of the fingers. Technique is only a means to an end, the end being the playing of the music in the most musical manner. Thus the author says that fingering should be chosen to achieve this with the greatest ease, whether it is according to the rules or not.

Otto Fischerl4 is convinced that a common trait of the average piano student is carelessness in the matter of correct fingering. He believes that this is due to a desire to play with fluency and the student's inability to grasp the reason for each particular fingering: The author suggests that a student take each piece, study it and use what he terms "finger forms" in figuring fingering. For example, the following notes are written above middle $C: D, B$ flat, $G, F$ sharp, and G in that order. Mr. Fischer maintains that if one plays them as a chord, $D, F$ sharp, $G$ and $B$ flat with the fingering $1-2-4-5$, it will help in reading music and also the hands will, after a while, begin to fall automatically over the groups of notes and help in the execution.

Clement Harris 15 relates that until quite recent times students

Ilotto Fischer, "Finger Forms," Etude, XIIV (April, 1926), p. 270. 15clement Antrobus Harris, "Black Notes," Etude, XIIX (October, 1931), pp. 697-698.
were told that the thumb and little finger must not be used on black keys except in chords. On the other hand at the opposite extreme it was claimed that they should be used without any restriction whatever. The author says that there should be a limit to this usage because these fingers are shorter than the others and if the hand is held sufficiently far over the keys so they can reach the black keys, it is then hard for the second, third, and fourth fingers to play white keys. A great deal depends on the size and shape of the hand. A player with weak hands would have difficulty in getting the correct weight and tone on the white keys since playing in the middle of the key presents problems.

The author says:
The thumb and little finger may be freely employed on black notes:

1. When the hand is strong enough not to be strained by the heavier touch of a key near its pivot.
2. When chords are being played.
3. When their (the thumb and little finger) playing black keys does not make it awkward for the other fingers to play white ones.
4. When they (thumb and little finger) do not have to play white keys in the same passage. 16

Mr. Harris concludes by saying that ease and convenience should be the criteria of playing, and he has written this article from this point of view.

In another article by Clement Harris, 17 the author concerns him-

16Ibid., p. 698.
17Clement Antrobus Harris, "The Most Useful of All Fingering Rules," Etude, XIVIII (August, 1930), p. 539.
self with one rule and its explanation. The rule given is:
In groups of not more than four notes, the interval of a fourth or more in compass, of which the innermost key is white and the outermost black, the latter key should be played with the fourth finger. 18

Mr. Harris says that the simplest way of indicating a scale is to name the note on which the fourth finger falls, because there is only one note to remember.

Edwin Hughes 19 points out that in the sixteenth century, organ keys were three to six inches wide and toward the end of the sixteenth century, this went out of fashion, but the octave span was still about two inches wider than today's instriments. He says that the first example of marked fingering was in 1571 when only the second, third, and fourth fingers were used. With Bach, the thumb and little finger came into use because of the new position of the hand on the keyboard.

The author emphasizes that to make hard and fast rules to fit everything is futile. Fingering is a means to an end, and tone, phrasing, shading, and accentuation are all linked with fingering and the build of the hand. Two things which must always take precedence in the choice of fingering are: ". . . Clarity in the presentation of the musical idea, and Effectiveness in its declamation.n20

18 Ibid., p. 539.
${ }^{19}$ Edwin Hughes, "Fingering at the Pianoforte," Musician, XXII (May, 1917), pp. 336-337.

20 Ibid., p. 337.

Players should discover the capabilities of each finger and be guided by their advantages and diadvantages, as the fingers will never be alike in ability, according to Mr . Hughes.

Mr. Hughes ${ }^{21}$ gives many hints for fingering at the keyboard. When a strong accent or tone is wanted the strong fingers should be used. In figure repetitions, the playing may often be simplified by distinguishing between rhythm groups and finger groups. The pedal can help much in fingering, especially in legato passages where it can bind the passages together.

The author says that the change of fingers on the same key is organ technique and does not need to be used on the piano, as the pedal will connect the tone easier. When there is quick repetition of the same key it is best to change fingers but in slow tempi this is not necessary. Sometimes it is possible to strike a note with two fingers where more sureness and strength is wanted. Sliding from black keys to white is often found useful. Difficult passages, especially caderizas, may be divided between the two hands so the musical content can be played with greater ease and musicality. The crossing of the thumbs appears in some editions of Schumann's works and in a few of Chopin's, but Mr. Hughes believes it should not be done, as it is very awkward.

The author states that in a new composition the player should

[^9]give the marked fingerings a thorough test and then make any alterations which may be necessary. The choice of fingering depends a great deal upon the final tempo of the piece, as when it is played slowly many more fingerings are possible than when playing at final speed. Ability in the choice of fingering comes with time and experience just like everything else.

According to Gladys Hutchinson, ${ }^{22}$ students usually make simple things difficult. This is especially true in working out fingering for the bass, which involves the left hand. The author is convinced that if the teacher would request that the student first play the bass in solid chords this would be a great time saver. She concludes by saying, "All pieces should be analyzed in this manner."23

In an article by Austin Keefer, 24 the author points out that choosing a fingering is a personal and individualistic question, but a matter of great importance to every performer. It is largely a personal habit as artists, even though they differ from each other in their choice for certain passages, usually finger their own passages in the same manner. Paderewski once said that, "once a comfortable fingering was discovered, it was advisable to stick to it
${ }^{22}$ Gladys Hutchinson, "The Road to Correct Fingering," Etude LIV (July, 1936), p. 410 .

## ${ }^{23}$ Ibid.

${ }^{24}$ Austin Roy Keefer, "Logic in Choice of Fingering," Etude, XIVIII (October, 1930), p. 748.
and that usually the most simple and obvious method of fingering was the preferable one. 25

Mr. Keefer goes on to say that young students in particular should be guided by the teacher in their choice of fingering. Lefthanded pianists require a different fingering than right-handed pianists. Fingering is such an individual thing that it must be tried out just like trying on a new shoe.

Hope Kramerer ${ }^{26}$ firmly believes that a few rules of fingering should be taught beginning students and that fingering should be insisted upon by marking every note. The first rule is: if two notes are a second apart, use adjacent or fingers a second apart; if a third apart, use fingers a third apart, etc. The second rule given is, for two notes more than a fifth apart, use fingers a fifth apart. For playing of chords, the thumb and fifth finger should be used for outside notes.

Guy Maier ${ }^{27}$ states that artists use the fourth finger in octave playing to achieve legato, and also to facilitate speed in certain kinds of passages. However, both brilliance and endurance are lessened by the use of the fourth finger. Use of the fifth finger

[^10]in playing octaves is better for the hand. The student should develop the strength of the fifth finger as, "It is the most important finger of 211.*28

In another article by Guy Maier ${ }^{29}$ a question is asked when to change fingers on repeated notes. Dr. Maier answers by saying:

Only change fingers on repeated notes (a) if it facilitates the playing of the notes, (b) if you cannot get the proper color by using the same finger, (c) if it makes you feel better. 30

Another question is asked if the pianist should use the first and fourth fingers in black key octave playing. Dr. Maier's answer is, "Using the fourth finger on black key octaves depends on size and span of hand, also on the speed, tone quality and quantity required." 31

The author goes on to say that many persons with small hands find it impossible to use fourth finger octaves at all in rapid passages. For average hands slow legato octaves require the fourth on black keys. In long, sustained, brilliant passages the hand will tire quicker using the fourth finger, but for rapid passages

28 Ibid, p. 640.
29Dr. Guy Maier, "The Teacher's Round Table," Etude, LX (August, 1942), p. 528.
${ }^{30}$ Tbid.
$31_{\text {Ibid. }}$
requiring evenness the fourth finger on black keys is more effective. This is because the use of the fourth finger makes for economy of in-and-out movement.

Two authors, Mallet and Ornstein, 32 believe that few pupils realize the importance of deciding upon the best fingering before commencing to practice a new piece. Wrong habits are formed which take a long time to break down. Once a bad fingering is learned, certain fingers follow each other almost without thought and, being muscular habits, they are so subconscious that they are almost impossible to alter. The student should analyze and work out practical fingering so practice time is not wasted. The authors say, "Uniformity, wherever possible, is very helpful in matters of fingering."33 The authors believe that all decisions should be practical. They go on to say, Whatever feels easiest for the hand is the best, unless in simplifying one difficulty, you unnecessarily complicate what follows.n34

It is the authors' opinion that many times there are passages where more than one fingering is possible, and that one will be comfortable for one type of hand while another is preferable for

32Pauline Mallet and Prevost Ornstein, "Principles of Fingering in Piano Playing," Etude, XLIII (October, 1925), pp. 691-692.

33Ibid., p. 691.
34 Ibid.
differently formed fingers. This is why the student should learn to work the matter out for himself. It is usually helpful, when figures repeat in sequence, to use as nearly the same fingering as possible for similar figures. One point illustrated by scale fingering is that it encourages the student to cover as many notes in advance as possible. This prevents waste motion. Slow practice is the most beneficial as it is only possible to analyze the mechanism of positions and fingering when playing slowly. Whenever practicable a strong finger should be used where any unusual stress is required. The authors say:

The development of the pedal in the modern piano has, more than any other single factor, altered theories of fingering. Notes which had to be held by the fingers to be connected may now be released and connected by the use of the pedal. By using the pedal as a third hand to hold and connect what is necessary, the result will sound exactly the same as if these notes had been held by the fingers. 35

The authors mention several different phases which help in fingering. In trills, it will be found easier to skip a finger rather than to use adjacent fingers. Octaves are better played with the thumb and fifth finger when the passage lies on white keys. If black keys enter, the thumb and fourth finger can be used on the black keys, depending upon the player and passage. When skipping to low bass notes the student should use the fifth finger and not be allowed to skip to third or second finger, as the fifth is the safest
finger. Although the fingering of thirds and sixths has been somewhat conventionalized, much individual choice can be used. The important matter to bear in mind is to choose a fingering that will as nearly as possible permit playing the upper voice legato. The lower voice should be played staccato to facilitate this and the hand must be held at an angle with the keys rather than straight. The wrist should be towards the body and the fingers pointing away. This makes it possible for the third finger to reach to a sharp above the fourth or fifth fingers.

The authors conclude by saying that although fingering is one of the points in piano study which is most shirked by students, it is one that needs most careful and detailed consideration. Much painful experience can be avoided by establishing, from the beginning of study, correct habits of fingering.

According to Eugene Marks, 36 the general effectiveness of a passage depends to a large extent upon the fingering choice. If a poor fingering is selected, the results are wrong notes, incorrect accentuation, weakened rhythm, and many other faults. Natural fingering helps and leads to correct and accurate delivery of the mental conception. The hand should assume and hold the most natural position possible to the musical figure being played.

The author says that for the right hand, generally speaking,

[^11]the lowest note should be taken with the thumb and the highest with the little finger. The fingering of different passages should 2lways be made to suit the hand of the particular player.

An author 37 of an article in the Musician periodical says that a good fingering method is a necessity because without it, easy passages become difficult. All passages can be divided into two classes as far as fingering is concerned - scales and chords. The following rules were givens:
(1) One finger for each note in natural position.
(2) Never make unnecessary contractions.
(3) Never make unnecessary extensions.
(4) The thumb is not to be used on a black key unnecessarily.
(5) Do not change the position of the hand unnecessarily.
(6) The second, third, and fourth fingers may pass over the thumb, and in rare cases over the little finger, but never over each other, at least in passages of single notes.
(7) All repetitions of the same figure should be fingered with the same fingering. 38

Karl Rackle39 gives five ways to finger a chromatic scale.

37"Principles for Fingering, " Musician, XXVI (September, 1921), p. 12.
${ }^{38}$ Ibid., p. 12.
${ }^{39} \mathrm{Karl}$ Edmund Rackle, "Fingering the Chromatic Scale," Musician, XVI (July,1911), pp. 450-451.

They are: (a) thumb alternating with second finger, using third finger on the first black key of each group; (b) thumb alternating with third finger, using second finger on the extra white keys; (c) same as (a) ascending right hand, descending left hand, and same as (b) in the opposite directions; (d) thumb used after second, third, fourth, and fifth fingers respectively; and (e) thumb used after third and fourth fingers alternately, within two octaves.

The author points out that these are just a few of the many ways to finger a chromatic scale.

Karl Rackle 40 believes that fingering can cause the success or downfall of a pianist, but that there is no standard of fingering. Difference in size, strength, and flexibility of hands is the reason for so many fingerings.

According to the author, the teacher should tell the student to use the thumb as little as possible on black keys, even though there are cases where this is better and necessary. Phrasing is the first guide to a good fingering, whether the passage be legato or staccato. The process consists in dividing the phrases into natural hand positions and each position should include as many notes as possible. There should be as few positions as possible.

40Karl Edmund Rackle, "Principles of Fingering," Musieian, XVIII (October, 1913), p. 661.

According to Adelia Randall, 41 major scales can be put into two classes - those which are fingered like the C major scale and those which are not. The succession of fingers used in all of the scales is $1-2-3-1-2-3-4$, and the reverse of these numbers. Those scales beginning with a white key begin with the first finger. The author says, "Play toward the little finger and use the thumb on the white key immediately following a black one. $n^{42}$ This would be reversed for the right hand descending and the left hand ascending. To find where the fourth finger comes find where 1-2-3-1 comes and this solves the finger problem for that key.
T. L. Rickaby ${ }^{43}$ states that fingering must be correct and so firmly established as to be practically automatic. Fingering seems to hinder the progress of the average pupil, and even the greatly talented pupil, if not carefully planned. In deciding what the best fingering will be, the character of the passage to be played and the size and shape of the hand and fingers must be taken in consideration. Conventional rules for scales and arpeggios are often not found in the music being played. Therefore one's own initiative must be used. The same set of fingering for one passage does not

[^12]suit everyone. The teacher and pupil have a very good opportunity to use judgment and common sense. The fingering to be used depends entirely upon what has to be played. In order to have good fingering, which could be said to consist of having a finger conveniently ready for any key, some thinking and planning must be done. Many times the young pupils do awkward things for which the teacher must be on guard, like crossing one finger over another. Sometimes a passage may be fingered several ways. The student should try all possible ways and choose the easiest. He should also learn to think ahead while playing so he will have a finger ready for each note. The teacher should try to develop initiative on the part of the pupil as far as possible, so he will learn to use good fingering.

Victor Seroff 44 begins by saying, "Fingering is one of the most important items in piano technique. 145 Any group of notes, played whether in succession or together, should be within the comfortable reach of the hand. Also, correct fingering is closely bound up with correct phrasing. A wise procedure would be to group notes into 2 chord that is convenient for the hand, and then follow the fingering of the chord. Every piece should be carefully fingered after the first reading. From then on, the student should always play with

[^13]the same fingering, as it will help not only the execution of the piece, but the memorizing, too. The author says, "Fingering should be worked out as if the pianist is going to play the piece all legato. ${ }^{46}$

In fingering of runs in double notes, consider the upper part the leading part, and finger it as legato as possible, avoiding all jumps. Sliding with the second finger from a black key to a white key is sometimes useful.

Mr. Seroff believes that editions have been done always with a good reason for the fingering and usually by someone with long experience in the field and that they should be tried.

According to Mr. Vantyn, 47 the performer should arrive at a fingering whether it be a difficult or easy composition and not change it except under very exceptional circumstances. Changing fingering all the time can only be a hindrance to good interpretation. By playing a certain series of notes over and over again, always using the same fingering, the brain will automatically group notes and fingers, and the mental effort will practically be reduced to a minimum. If fingering is continually changed, everything must be done with the fullest of attention and there is no possibility of

46 Tbid.
47Sidney Vantyn, "Learning How to Finger," Etude, XLIII (May, 1925), p. 323.
giving undivided attention to expression and other things needed to play musically. When writing a fingering, the position of the hand should be the easiest possible, by which is meant the most natural.

The author says that it is impossible to lay down rules which will meet all problems. The number would be vast and limitless. The teacher should show the pupil how to arrive at the desired result, and reason, logic, labor, and patience will guide and help him to resolve difficult questions of fingering. In choosing a fingering, the first thing to be done is to find how to group the notes so that there may be a minimum of movement of the hand. Every one of the fingers has qualities and defects peculiar to itself, which should be exploited scientifically. The player should always work for equality of tone.

In a very short article Gertrude Walker48 states that fingering that suits the pupil and enables the performer to give a smooth rendition of the composition mast be used. The student should find for himself 2 new and easier method of rendition when possible.
F. van Werkhoven49 emphasizes that the use of the right fingering is just as important as following the notes correctly and that a

48Gertude Greenhalgh Walker, "The Correct Fingering," Etude, LXI (October, 1943), p. 684.

49F. van Werkhoven, "The Importance of a Certain Fingering, Etude, L (March, 1932), p. 174.
teacher should help the student along this line. If the same fingering is used consistently it helps in memory work because the fingers become accustomed to touch. Many pupils neglect using the weaker fingers (fourth and fifth) and avoid stretching the hand, losing the opportunity to develop the hand. In order to achieve the right musical effects, proper fingering is necessary.

## TABLE I

a TABLE FOR CORRECT FINGERING OF COMMON-CHOFD ARPEGGIOS49

| Keys | Hands | First <br> Position | Second Position | Third Position |
| :---: | :---: | :---: | :---: | :---: |
| C, G, F, F\#, Gb, -M | R.H. | 124-5 | $124-5$ | 124-5 |
| A, E, D, DH, Eb, -m | L.H. | 5-421 | 5-421 | 5-421 |
| D, E, A, -M | R.H. | 123-5 | 2-124 | $124-5$ |
| G, C, F, -m | L. H. | 5-421 | 421-2 | 5-321 |
| $\mathrm{Eb}, \mathrm{Ab}, \mathrm{Db},-\mathrm{M}$ | R.H. | 2-124 | 124-5 | 241-2 |
| F\#, E\#, G\#, -m | L.H. | 2-142 | 5-421 | 421-2 |
| B -M | R.H. | 123-5 | 231-2 | 2-123 |
| B -M | L.H. | 5-231 | 2 31-2 | 2-132 |
| B -m | R.H. | $123-5$ | $124-5$ | 2-123 |
| $B-m$ | L.H. | 5-421 | 5-421 | 421-2 |
| $\mathrm{Bb}-\mathrm{M}$ | R.H. | 2-124 | $124-5$ | $124-5$ |
| $\mathrm{Bb}-\mathrm{H}$ | L.H. | 321-2 | 5-421 | 5-321 |
| $\mathrm{Bb}-\mathrm{m}$ | R.H. | 241-2 | 2-124 | $124-5$ |
| $\mathrm{Bb}-\mathrm{m}$ | L.H. | 321-2 | 2-132 | 5-321 |

Noter Mr. Wirtz intended the table for playing arpeggios as a technical exereise and not from printed notes. To use the table, the player must first find the key in which he wants to play. This can be found in the left hand column with 2 major key being designated by a capitol $M$ and a minor key by a small $m$. The first position

49Conrad Wirtz, "Table for Correct Fingering of Cormon-Chord Arpeggios," Etude, XLII (May, 1924), p. 302.
begins with the first note of the arpeggio, the second position with the second note, etc. The player should use the fingeting for the first position, right hand, which is marked to the right of the key, and repeat the series of fingers up to the dash as many times as the number of octaves to be covered. The finger marked after the dash is used for the top note only.

In descending the player would begin with the figure after the dash and then repeat the remaining series, backwards, until back to the starting point. The second and third positions should be taken in similar manner.

The left hand starts with the figure marked before the dash and then takes the remaining series, repeating them as often as needed.

## SUMMARIES OF UNPUBLISHED MATERIAL

According to Mr. Viehl teachers should not let their students get the idea that an editor whose name appears on the cover of a music book is the last word in fingering. This idea, he believes, has caused a barrier between many piano students and their goal. Many times it is thought that this barrier is caused by a lack of talent. High technical attainments have been achieved by students adopting an independent attitude toward the subject of fingering, and these students have used more rational methods than many editors. The idea that fingering provided by the editor should be followed at all cost is a false one. It is up to the teacher to guide the student and not let him set piano music editors up on 2 pedestal without questioning critically the fingerings given.

The author says that the fact is known that virtuosi work out their own fingering and make redical changes from printed fingering, even in the best editions. In order to achieve the best results, the great host of less gifted students must resort to the same procedure.

The author states that many editors for the publishers are first of all fine musicians and only secondarily pianists. Many

[^14]- 35 -
editions are fingered so as to throw the hand into a strained position, but this should not be allowed. Such a passage should be refingered until the strain disappears. A high degree of attainment is possible to those of talent who work out their own method of fingering.

According to Mr. Vieh, the rule which said that when a key is struck several times in succession different fingers must be used should be forgotten. This rule has done much damage. Also the influence of the rule preventing the use of the thumb on black keys is still seen in the work of most modern editors. By the use of the thumb on black keys many difficulties in awkward passages are diminished. Instead of trying to make wide, legato reaches with the hand, the pedal should help in the effort. There are frequent opportunities where many difficulties may be helped by redistribution of the notes between the hands.

## CHAPTER V

## SUMMARY AND CONCLUSIONS

All but one of the authors agreed that fingering is one of the most important aspects of good artistic piano playing. They agreed that most students are careless about fingering and that teachers should insist that their pupils use good fingering. The authors also agreed that bad fingering makes easy passages difficult. For some players, not changing or revising fingering means that they cannot play the particular piece well. Following are the main ideas that the authors thought most important as related to fingering:

There should be as much uniformity as possible and a minimum movement of the hand.

Fingering should be as simple and natural as possible to fit the individual hand.

Given fingering should be critically analyzed and changed if necessary.

The teacher should help the student to become aware of the problem and guide him, letting him do his own fingering.

The player should arrive at a definite fingering and not change it.

The player should know each of his fingers and its possibilities and finger accordingly, using the strongest fingers for the strongest notes, ete.

The player should spend the time fingering a piece when it is new before bad habits set in.

Phythm, velocity, style, and the whole musical intent should be a guide to fingering.

Fingering affects memorizing, technique, and the whole security of the player.

When notes are repeated, it is usually best to change fingers when the tempo is very fast and not to change when it is slow.

The use of the thumb on black keys is permissible, but should not be done unnecessarily.

In the playing of legato passages, the pedal should be an aid to the fingering.

A mordent's first and third notes are better played with different fingers.

Sliding from 2 black key to a white key is sometimes useful.
In octave playing of a passage which requires endurance, the first and fifth fingers should be used whereas in slow legato passages, the first and fourth fingers should be used. The first and fourth fingers are sometimes used to facilitate speed, but the situation depends upon the passage and the hand.

In the playing of thirds and sixths, the upper voice should be fingered so it can be played legato.

The following is a list of things which the authors agreed
should not be done:
Do not cross the thumb under the fifth finger.
Do not cause strain on the hand because of fingering.
Do not change the fingering after it has been decided upon.
Do not eross the fingers over one another.
Do not cross the thumbs.

## THE NEED FOR FURTHER STUDY

Within the scope of this study it was impossible to cover all of the intricate side-paths of fingering. The author was limited to those fingering problems for which the necessary documentary material was available.

One of the fingering problems not covered by the study is the crossing of one finger over another, in which process the lower finger crosses over the next highest in an ascending scale in the right hand, using fingers $5-4-5-4$ or 4-3-4-3. One obvious example of this use would be Chopin's Chromatic Etude, Op. 10, No. 2.

After having done reseach on the subject, the author is more convinced than before of the importance of fingering in piano playing. The author agrees with those who believe that the teacher must insist and guide the student in matters of fingering. If help is not given many students who could become proficient pianists may fall by the wayside or become discouraged, The author believes that even though fingering is carefully planned out in the beginning stages of a piece there are times that it may have to be changed later when the speed of playing is increased. But once the student has found a fingering that serves adequately he should not change it.

All of the authorities agreed that strongest fingers should be used for strongest notes, ete. This author believes that the piano student should strive for control and strength of every finger
and be able to use them, in many instances, interchangably.
The author is convinced that fingering is an individual problem to every piano player. There rests with almost every piece, new or old, a problem of fingering peculiar to the very succession of notes, to the individual hand, and to the efficiency of the player, also taking into consideration the style of the piece and the speed of the passage. No one can say that what is good for himself is good for another. A paper of this type can be used only for suggestions and can give the player ideas on how to choose the best fingering. Then he must go ahead on his own and master the art.

There would be many problems which would undoubtedly arise in a further study of the fingering problem. From a conversation, the author quotes Jeno Takacs, Visiting Prcfessor of Piano at Montana State University, as saying, "A further research of fingering problems might be continued to an almost infinite limit."

## CHAPTER VI

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