STARTING ON THE HARPSICHORD

A FIRST BOOK FOR THE BEGINNER

by JEAN NANDI

with the collaboration of

LÉONIE JENKINS (Musical Examples)
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INTRODUCTION

TO THE STUDENTS AND TEACHERS WHO USE THIS BOOK:

At the present time there has been no Method available for students whose first music lessons are on the harpsichord. Yet increasingly, in my experience, beginners are choosing this lovely instrument. Harpsichords are becoming ever more widely available, and interest in them has increased as recordings and live performances involving this instrument are now commonplace.

It is hoped that this book will fill the gap for teacher and student alike. Accompanying the Method itself are three supplemental volumes. The first, PLAYING WITH THE ELEMENTS OF MUSIC, is a reference guide to music theory. This volume, subsequently referred to as "PLAYING WITH THE ELEMENTS", should prove useful to the beginning student of any musical instrument.

The second supplement, SKILL AND STYLE ON THE HARPICSCHORD (referred to as "SKILL AND STYLE"), contains additional reference material of importance specifically to the harpsichord player. Much of the information contained in this volume is at present widely scattered and not easily understood by the musical beginner. A reading list is included which will direct the interested player to some of the English language literature on early music. Also included is a list of composers with their dates and national origins.

Unfortunately, music for real beginners was seldom (if ever) preserved from the period when the harpsichord was the most common keyboard instrument. Therefore my final supplemental volume, HARPICSCHORD MUSIC FOR THE BEGINNER, is a collection of actual baroque harpsichord music which has been simplified enough to make it accessible to the elementary student.

An additional rich source of elementary keyboard material from the 16th through the 18th centuries can be found in THE AMSTERDAM HARPICSCHORD TUTOR (particullar Volume I) by Kees Rosenhart (Muziekuitgeverij Saul B. Groen, Amsterdam, The Netherlands--2nd, revised edition published in 1982). Unfortunately this book is not consistently available in the United States, although I can but hope that the user of this book will be lucky enough to obtain a copy.

I strongly urge students to find repertoire in these or other books from the period of the great harpsichord masters. As soon as you find yourself able to read such music, include it along with the pieces in the present Method. In that way you will begin to develop a "feel" for different musical styles.

The present Method should be useful for beginners of all ages. Naturally it is not expected that the very youngest students will be able to read all the available commentary themselves. Its inclusion, however, should guide teachers and parents as to the intent of the exercises. I believe that even a very young child will be able to understand the text if it is read to him or her. I should point out the suitability of the harpsichord itself for
young children -- its small size and the physical ease with which the notes are played make it seem comfortable and friendly to small hands.

Older children (age 9 and up) and adults should find the included material self-explanatory. It is naturally desirable that each student be guided by a qualified harpsichord teacher. However, it is possible to use this Method for self-teaching as well. In such a situation, it is a good idea to use a metronome occasionally to check the steadiness of one’s counting of beats. Be sure that it is used only as a check, and not a constant companion!

Another invaluable aid to learning is the tape recorder. We often do not hear all the details of our performance while struggling with notes, articulations, counting, and all the rest! Even the simplest recording equipment will make obvious whether or not your rhythm is steady and whether articulations are clear.

Understandably, many students wish to plunge right in to the subject of note reading. I should like to encourage them to experiment with the instrument and get a "feel" for it before beginning to work with staff notation. Reading from the staff at first limits the exploration of the keyboard to a rather narrow range. It is important to discover the varieties of sound that come from the different parts of the instrument--early composers made much expressive use of these differences of register. Additionally, playing without music encourages listening--in the long run the most important tool in developing good performance practice.

Because of these considerations, a mixture of notations has been used in the early part of this Method. While the staff and musical notes are introduced gradually, the student is also continuing to play pieces with wider ranges from "pre-staff" notation.

Finally, I would like to urge all students, right from the beginning, to share their music-making with their friends. Remember that the harpsichord is still not too familiar, on close quarters, to the average music lover. Your friends will genuinely enjoy getting acquainted with the sound of the instrument, even while you are playing very simple pieces. On the other hand, there is never any time when one is truly "ready" to perform. Don’t wait for such a hypothetical moment--but be willing at all times to show others the things which give you such pleasure. Listeners do not mind "mistakes", but they are easily made miserable by an attitude which suggests that performance is painful for the player. By starting at the very beginning to play for others, knowing that they will in fact get pleasure from your sharing, performance will feel like a natural and inevitable part of making music.

Above all, I hope that this Method and supplementary materials will bring to many others the joy that I and my students have experienced in discovering the harpsichord and its music, both old and new.

Jean Nandi
Berkeley, Calif., 1989
FIGURE 1. Italian Harpsichord
CHAPTER I. YOUR HARPSICHORD

A DESCRIPTION OF "THE INSTRUMENT"

Harpsichords come in many shapes and sizes. Figures 1 through 3 (page 1 and facing, page 2) show several different styles of harpsichords.

If you look at the keyboard of any of these instruments, there is a row of even keys in the front (closest to you) which are called NATURALS. There are also some raised keys toward the back of the keyboard, which are called SHARPS. Figure 4 (p. 3) shows part of a harpsichord keyboard. What color are the naturals and sharps on your harpsichord? Can you color the keyboard in Figure 4? On the piano, the naturals are always white and the sharps are black. Various color combinations are used on harpsichord keyboards. Notice that the sharps are arranged in alternating groups of two and of three.

Some harpsichords, as shown in Figure 3 (page 2), have two keyboards. These are called DOUBLE MANUAL instruments (the word "MANUAL" means keyboard). You will notice that both keyboards look exactly alike. To begin with, use just the LOWER MANUAL (the row of keys closest to you).

FIGURE 2. English Virginal (or "Virginals")
FIGURE 3. French Double Manual Harpsichord

HOW DOES THE HARPSCICHORD WORK?

Figure 5 (page 3) shows the SOUNDBOARD, STRINGS and JACK RAIL of a harpsichord. You should be able to remove the jack rail of your harpsichord, and under it, you will find many JACKS (Fig. 6, page 4). These are straight sticks of wood which rest on the keys, and which can be pulled right out of the instrument. There may be several rows of jacks (1, 2, 3, or even 4). This depends on the kind of harpsichord that you have. In each row of jacks, there is one single jack corresponding to, and resting on, each single key.

For further discussion of the functions of more than one ROW OF JACKS (called a REGISTER), see SKILL AND STYLE ON THE HARPSCICHORD.

Figure 7 (page 4) shows the structure of a single jack. At the top end of the jack, you will find a felt DAMPER plus a small pick, or PLECTRUM (more than one of these are called "PLECTRA"). When you press a key down, the jack rises up and the plectrum plucks the string (from below). When you release the key again, the plectrum passes noiselessly back over the string, owing to the swiveling TONGUE which holds it. The damper comes to rest on top of the string. This instantly stops the sound.
(Occasionally buzzes will be heard, especially with very low strings. Sometimes the damping action is not instantaneous. If these effects are annoying, your harpsichord needs attention!)

**FIGURE 4.** A Part of the Harpsichord Keyboard (Manual)  
(What colors are the keys of your instrument?)

Try playing a few notes: some naturals, some sharps. Rest your finger lightly on a key: as you slowly depress it, feel the plectrum come up against the string, touch it, and then pluck it. Allow the string to vibrate without releasing the key. How long does the sound continue? This will vary from one harpsichord to another, and even from one part of your own harpsichord to another.

**FIGURE 5.** Looking down on the Soundboard, Strings and Jack Rail
Release the key, letting your finger ride up to the resting level of the key surface. Now pluck the string again. This time release the key before the sound dies away. Can you hear how the sound stops immediately when the damper comes down on the string?

Experiment often with plucking the strings quickly or slowly. Also release the keys, sometimes quickly and sometimes slowly. Listen to the way in which the sound changes as you pluck and release at different speeds. Listen also to the way in which the sound changes from the moment the vibrations begin (at the moment of plucking) until they naturally die away. As you learn to play, you will make use of all these different sounds which are possible from the plucking of a single string.

Notice that pushing the keys down harder or more softly does not produce a loud and soft sound in the sense that we hear this on the piano. On the harpsichord, we deal
primarily with differences in sound quality, and of emphasis. The question of loud and soft, as well as of different tone qualities, are also discussed under this heading in *Skill and Style*.

When playing the harpsichord, always remain conscious of the plucking action, and listen for the damping of the sound. This is the way in which you control your sound production.

**LET'S GET READY TO PLAY**

Sit at the center of the keyboard. Your elbows and wrists should be in a straight line just above the keyboard level. Your hands should be in a natural and relaxed position, rounded and with curved fingers. Look at Figures 8 (this page) and 9 (page 6). The fleshy part of the tips of your fingers should be touching the front ends of the keys. The thumb (also considered to be one of your fingers!) should rest on its side.

Remember that the FRONT of the key is the part closest to you. Keep your fingers in contact with the keys at all times. If you must change your position—as will happen often as soon as you start playing large intervals in one hand—try to return to this ideal position as soon as possible.

Do not bear down on your hands or fingers. Sit up straight, and be sure that your arms support your hands, not the other way around!

Let's begin with the fingers on the naturals, at the front of the keys as described above (see Figures 8 and 9). Start with all five fingers of each hand close together so as to cover three of the harpsichord keys. This gives you a nice rounded hand position. In all these exercises, begin by using each hand separately.

Now spread your fingers out so that one key is covered by each finger. This is called the FIVE-FINGER POSITION. Look at your fingers and count them. First the right hand: The thumb side always begins with 1. The
thumb is 1, and then come 2 (index finger), 3 (middle), 4 (ring finger), and 5 (little finger). Refer to Figure 10, below.

Look at the left hand. Again the thumb will be 1, the index finger on the left hand will be 2, then 3, the ring finger is 4, and the little finger, 5. Look at Figure 10 to see how the fingers are numbered.

Now that you know the numbers of your fingers, take them off the keyboard and try wriggling them one finger at a time. Can you wriggle No. 3 of the right hand, without moving any other fingers? How about No. 2 of the left hand? No. 4 of the right hand (harder!)? Make up lots of exercises like this. You can do them on the bus! They will help to give your fingers control.

It’s a good idea to cut your finger nails, because long finger nails will keep you from putting the tips of your fingers on the keys. Also, look out for flat tires! That’s what happens
when the finger joints near the tips of the fingers bend backwards. Be sure that your fingers look rounded as in Figure 9 at all times.

Now let’s look at the ends of the keyboard. Look at the right end, and play a few notes. These notes sound very high in PITCH. In fact, we call that end of the keyboard—the right end—the HIGH END of the keyboard. This end, and these notes, are called the TREBLE.

Look at the left end of the keyboard. This one plays very low sounds. We call the left end of the keyboard the LOW END. This end, and these notes, are called the BASS (pronounced "Base").

Now let’s play some notes in the middle, and also UP and DOWN the keyboard. UP the keyboard means toward the HIGH end. DOWN the keyboard means toward the LOW end. Up means toward the right (TREBLE), and down means toward the left (BASS).

Also try playing some low sounds with your right hand, and some high sounds with your left hand. If you do this with both hands at the same time, you will find that this is not the usual way of holding your arms and hands! Remember then, that usually the right hand plays high sounds, and the left hand plays low sounds.

Again, don’t lean on your hands or fingers, or pound on the keys! Keep the fingers resting lightly on the keys, supported by your strong arms! Notice how your arms move as you go up and down the keyboard. The arms should place your fingers over the right keys.

Remember to keep the fingers curved and the hands as relaxed as possible. The thumb and little finger, if short, should not be forced to remain on the keys when at rest. Just keep them close enough to be ready to play when it is their turn. Player’s hands, like harpsichords, are not all alike!

**LET’S PLAY ON SOME SHARPS**

If you are sitting correctly at the center of the keyboard, you should have a group (a pair) of two sharps in front of you (probably just slightly to the right of center).

Look at the group of sharps immediately to the right of this central pair. There are three sharps there. Look at the group to the left. There are three sharps there.

Notice that the groups of two sharps and three sharps alternate up and down the keyboard (Fig. 4, page 3).

What happens at the upper end (right end) of the keyboard? The last group may contain 1, 2 or 3 sharps—harpsichords are not all alike! What is the upper end of your keyboard like?
What happens at the lower end (left end) of your keyboard? The last group may contain 3 or 2, or only 1 sharp. Harpsichords are not all alike! What is the lower end of your keyboard like?

Now let's play the groups containing two sharps from one end of the keyboard to the other. First use the left hand and use fingers 3 and 2 (in whatever order seems comfortable). Remember, keep the fingers near the front ends (nearest you) of the sharp keys, and keep the hand rounded, with fingers curved. Now try it with the right hand, using the same pair of fingers, going from one end of the keyboard to the other.

Now play the groups of three sharps up and down the keyboard. First, use the left hand and this time use fingers 4, 3 and 2. Look at Figure 10 (page 6) to review the finger numbers. Then use the right hand, playing with fingers 2, 3 and 4. Remember to keep the fingers curved, and at the front ends of the keys.

Notice that when you play on sharps, you need to move your hand back (away from you) toward the NAMEBOARD (so-called because it often--not always--shows the name of the harpsichord's builder) (Fig. 11, above). It is nevertheless important, ordinarily, to play as near as possible to the front ends of the sharps. On the harpsichord, it is usually only necessary to "catch" the front corner of the raised key. Naturally, when playing many notes on only the sharps, you can keep your hands centered on these.

When you finish with sharps, be sure to again bring your fingers forward to the front ends (nearest you) of the naturals (home base!). Figure 12 (page 9) shows how to reach back for a sharp from the usual 5-finger position on the naturals.

Try making up a tune using the sharps only. Play the low notes with the left hand and higher notes (above the middle of the keyboard) with your right hand. Is your piece fast or slow? Does it have a steady beat? Does it end on the same note on which it began?
Before beginning this section, play some high sounds and some low sounds on your harpsichord. Play some long and some short sounds. Play some steady and some jerky sounds. Remember about keeping relaxed, curved fingers!

The notes that we name are the Naturals. Sharps are given names related to the Naturals.

The names of the notes are letters of the alphabet: A B C D E F G. These notes are called PITCHES. This alphabet seems rather short, because in fact, after seven notes, we start over again! If you experiment on your keyboard, you will find that there are only seven really different sounding Naturals on the keyboard.

Another strange thing about the MUSICAL ALPHABET is that we usually like to begin with the letter C. Because there are seven notes in the alphabet, we start with a C and go on to another C like this: C D E F G A B C' (C' = the next C up). Notice that after G, we have A not H! After G, we go to the real beginning of the alphabet.

Now try going back down. To play music, we need to be able quickly to say the alphabet backwards!

Let's try to find some C's on the keyboard. They are easy to find. Look for groups of two sharps. (Watch out at the very lowest end of the keyboard -- sometimes there is an exception here!)

Does your harpsichord have a C as its lowest note? (Harpsichords are not all alike!) Does the very highest C on your harpsichord have two sharps to the right? Watch out for exceptions here!

How many C's are there on your harpsichord? There should be five. Can you find the C in the middle of the keyboard? This one is called MIDDLE C.

FIGURE 12. Reaching for a Sharp
CHAPTER II. FIRST PIECES

LET'S PLAY A PIECE

Put finger 2 of the left hand (we will abbreviate this as LH) on the second C up from the bottom of the keyboard. Put finger 2 of the right hand (RH, for short) on the second C down from the top of the keyboard. Use only these fingers. Count and keep a steady beat: 1-2-3-4-1-2-3-4. Now play the following pieces:

IN THESE EXAMPLES, A DASH ( _ ) MEANS HOLD A NOTE AN EXTRA COUNT

### EXAMPLE 1

Left hand on the second C up from the bottom, finger 2. LH = L
Right hand on the second C down from the top, finger 2. RH = R

| R | R | R | R |
| L | L | L | L |

(count: 1 2 3 4 1 2 3 4)

### EXAMPLE 2

Same notes and fingers

| R | R | R— | R— | R— | R— |
| L | L | L— | L— | L— | L— |

(count: 1 2 3 4 1 2 3 4 1 2 3 4)

NOTE VALUES

In these pieces, some of the notes were held twice as long as others. We can write different kinds of notes to show how many beats each contains. The combinations of long and shorter notes, together with the way in which they are grouped, gives us the RHYTHM.

The rhythm of EXAMPLE 1 can be written as follows:

\[ \begin{array}{c c c c c c c c c}
& \text{1} & \text{2} & & & & & & \\
\end{array} \]

(count: 1 2 3 4 1 2 3 4)
As you can see, the notes which look like this: \( \text{♩} \) (they can also be written like this: \( \text{♩} \)) correspond in time to one single beat.

These notes are called QUARTER NOTES. When beats are grouped in fours, as in Examples 1 and 2, each quarter note takes up exactly 1/4 of the time of each group.

In drawing these notes, you must observe that there is a note head (bullet) and a stem (vertical line). The two together make a note like this: \( \text{♩} \) or \( \text{♩} \). Whether the stem goes up or down usually depends on its position on the STAFF (see Chapter III).

The note which looks like this: \( \text{♩} \) (or \( \text{♩} \)) is exactly twice as long as a quarter note. This is called a HALF NOTE. (Half notes take up exactly 1/2 of a 4-beat group.) Notice that the note heads of the 1/2 notes are white or empty. Otherwise, they look just like quarter notes.

Take a piece of paper and practice writing quarter notes and half notes. If you have lines on the paper, try writing quarter notes with the note heads on the lines or with the note heads between the lines. Try writing half notes with note heads on the lines. Now, again, write some half notes with the note heads between the lines.

Now we can rewrite Ex. 2, giving the note values, as follows:

**EXAMPLE 2a:**

\[
\begin{array}{cccccccccccc}
\text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} & \text{♩} \\
R & R & R (\text{hold}) & R & R & R & R \\
L & L & L & L & L (\text{hold}) & L & L \\
\text{(count: 1 2 3 4 1 2 3 4 1 2 3 4)}
\end{array}
\]

On page 12 is another piece with C's. You might try using different pairs of C's, and also try using different fingers (e.g. fingers 3 or 4 of each hand).

How do you keep your beat steady (no jerking)? Try marching around the room, counting ta-ta-ta-ta, 1-2-3-4-1-2-3-4. Now stand in place and swing your arms to a steady beat (ta-ta-ta-ta). Sit at the keyboard and clap your hands, 1-2-3-4-1-2-3-4. Now play your piece, and keep it just as steady.
It’s a good idea, before playing the notes of a new piece, to clap the beats and at the same time “ta” the rhythm. You can say “ta-a” for a held note (half note). This separates your examination of the rhythm from that of the pitches—a good principle in practicing is to try to solve only one problem at a time.

Thus in Ex. 3, while clapping a steady 1-2-3-4-1, say "ta ta ta ta ta-a ta ta ta ta ta-a ta-a".

**EXAMPLE 3:**

```
\[ \begin{array}{ccccccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
R & R & R & R & R & R & R & R & R & R
\end{array} \]
```

L L L L (count: 1 2 3 4 1 2 3 4 1 2 3 4)

Try one more piece with C’s. Choose which C’s and which fingers. Do the piece (Ex. 4) more than once, using different notes and/or fingers.

**EXAMPLE 4:**

```
\[ \begin{array}{ccccccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
R & R & R & R & R & R & R & R & R & R
\end{array} \]
```

L L L L L L L L (count: 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3)

**INTRODUCTION TO METER**

Can you feel, as you play, or count, or sing, that the first beat of each group of 4 (Examples 1 - 3) is stronger than the rest? This first beat, which seems to give the music a push, is called the DOWNBEAT.

Can you describe the difference in your beat with Ex. 4? Do you hear that music can sound in two beats or in three beats, just like the groups of sharps? Try marching, swinging your arms, and then clapping in three-beat groups (ta-ta-ta; 1-2-3; Left-Right-Left; Right-Left-Right). Keep it steady, with no gaps or spaces between groups (1-2-3-1-2-3-1-2-3, etc.). Again, can you identify the DOWNBEAT here? It is still the first one of each group.

The way in which beats are grouped (in twos or threes, among other possibilities) is called the METER. In order to help visualize the grouping of beats, a vertical line is placed just before each downbeat (except for the very first one in the piece).
Each group within the meter is called a MEASURE or BAR. The vertical lines which clarify these groupings are called BAR LINES. Just remember that the bar lines are simply there to make the downbeats more visible on the page. You should not interrupt the steadiness of your beat as you go across this line.

When we get to the very end of a piece, we write a DOUBLE BAR LINE.

Here are the note values of Examples 3 and 4, with bar lines written in to show the meter. Note the double bar line at the end of each one. Can you go back to these pieces and write in bar lines in the right places, to show the groupings of beats?

EXAMPLE 3a: (Rhythm only)
\[ \underline{\text{\textbf{\textit{J \textbf{J} \textbf{J} \textbf{J} \textbf{J} \textbf{J} \textbf{I} \textbf{J} \textbf{II}}} \text{ | \text{-} \text{-} \text{-} \text{ | \text{-} \text{-} \text{-} \text{-}}} \]  

EXAMPLE 4a: (Rhythm only)
\[ \underline{\text{\textbf{\textit{i i i i i i i i}}} \text{ | \text{-} \text{-} \text{-} \text{ | \text{-} \text{-} \text{-} \text{-}}} \]  

ARTICULATION

Remember that on the harpsichord, we cannot make the downbeat (or any other beat) appreciably louder by pushing harder on the key. How, then, do we make the accent on the strong beat clear? (See also the discussion of loud and soft in "SKILL AND STYLE").

The most effective method on the harpsichord is the early release of the note which occurs just before the downbeat (or other accented note). By releasing (letting go of) the note on the last beat of the previous bar, one can produce a tiny silence which uncovers the sound of the attack (pluck) of the note which forms the downbeat.

Try this! In Examples 2 - 4, practice making these tiny silences across bar lines. Also, try not making them! Can you hear the difference?

The little silence which gives emphasis to the note which follows is called an ARTICULATION. (The act of making such a silence is to ARTICULATE.) Be sure that you do not allow your articulations to interrupt the steadiness of your beats! The silence must be taken out of the time (note value) of the preceding note.

From now on, unless otherwise indicated, you should make an ARTICULATION at every bar line. Do not stop the beat or rhythm at these lines!

The next piece (Ex. 5) is difficult. Don’t worry if you can’t do it right away! Try to keep a STEADY, SLOW BEAT. Remember to articulate at bar lines.
EXAMPLE 5: Here is a piece using all five C's. Be sure they all sound like C's! You must jump around the keyboard!

Here are the 5 C's: ① is at the BOTTOM of the keyboard. (Not necessarily the lowest note!)
② is the next one up.
③ is called MIDDLE C.
④ is the second one down from the top.
⑤ is the VERY TOP C. (Probably not the top note.)

which C? ④ ③ ③ ② ② ① ① ① ① ② ① ① ⑤ ①
which hand? R L L(hold) R L L R R L L R L L R L L
(finger 2)
(count: 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4)

MORE NAMES

The distance from one C to another on the keyboard is called an OCTAVE or 8th. You can count the naturals from one C to the next, looking for the groups of two sharps. You will find that there are seven different naturals starting with C, before you get to the next C (going up, you can call the next one C').

Now let's learn the way each natural looks on the keyboard. Associate each name with its location. Use the groups of sharps to get your bearings! (Study Figure 13.)

FIGURE 13. Notes Associated with Pairs of Sharps
Start with a C to the left of a group of two sharps. Any C will do.

The note D is in the middle of the two sharps. Find all the D's on the keyboard. Watch out at the top. Sometimes a sharp is missing!

Here is a piece with two D's. How many D's do you have on your harpsichord? Try this with different pairs of D's. The LH plays a low one, the RH a higher one. (You might even try switching that!!) Use finger 2 on each hand.

Remember to clap the beats and "ta" the rhythm first. When you begin to play, don't forget the articulations at the bar lines! Notice how the articulations occur naturally at the repeated notes (going from bars 2 - 3, and 3 - 4).

EXAMPLE 6:

\[
\begin{array}{cccccccccccc}
\text{L} & \text{L} & \text{L} & \text{R} & \text{L} & \text{L} & \text{L} & \_ & \text{L} & \text{R} & \text{L} & \text{R} & \text{R} & \_ & \text{L} & \_ \\
\text{count:} & 1 & 2 & 3 & 4 & 1 & 2 & 3 & 4 & 1 & 2 & 3 & 4 & 1 & 2 & 3 & 4 \\
\end{array}
\]

E comes next, to the right of each group of 2 sharps. Do you have an E at the top of the keyboard? (Harpsichords are not all alike!) Pieces with E's will follow the next section.

WHOLE NOTES AND TIES

Before giving you a piece with E's in it, let us look at another note value--the WHOLE NOTE. This note looks like this: \( \text{,} \) like a half note without a stem. The whole note is four quarter notes long, filling the time of a whole group of four beats.

Many times we want to connect notes of the same or of different values together. This can happen, for example, if we wish to have a single held note of some irregular value, such as 3 or 6 beats.

When we wish to connect two or more notes together, we literally tie them together, using a mark called a TIE. This mark is always used to bind together notes of the same pitch, like this: \( \text{E} \text{ E} \) or \( \text{E} \text{ E} \).

When two notes are connected by a tie, we simply hold the initial note through all the counts indicated by the two note values. Some examples follow:
\[ \begin{align*}
\bullet \bullet & \text{ = 4 quarter note beats} \\
\bullet \bullet & \text{ = 3 quarter note beats} \\
\circ \circ & \text{ = 8 quarter note beats} \\
\circ \bullet & \text{ = 6 quarter note beats} \\
\circ \bullet & \text{ = 5 quarter note beats, etc.}
\end{align*} \]

Here are two pieces with E's. Example 7 illustrates a whole note, and Example 8 shows the use of a tie. Again, remember to practice the rhythm first, with clapping and "ta-ing". Don't forget to articulate, at the same time keeping a steady beat.

**EXAMPLE 7:** Use any two E's on the keyboard for this piece. Then try using two different E's. How many are there on your harpsichord?

<table>
<thead>
<tr>
<th>Finger</th>
<th>2 2 2 2</th>
<th>2 etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand</td>
<td>L L L L</td>
<td>R R R R</td>
</tr>
<tr>
<td>Count</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>

**EXAMPLE 8:** Use any three E's, making the second set of left hand E's (bars 3, 4) lower than the first set!

<table>
<thead>
<tr>
<th>Finger</th>
<th>2 2 etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand</td>
<td>R L L L</td>
</tr>
<tr>
<td>Count</td>
<td>1 2 3 1</td>
</tr>
</tbody>
</table>

When working on the rhythm of Ex. 8, use the syllables "ta-a-a" to represent the two tied notes in bar 4.
FIND THE REST OF THE ALPHABET!

Now let’s look at the groups of 3 sharps (see Figure 14, below). To the left of these comes the note F. Remember, too, that F comes right after E. Maybe you have an F at the top of your keyboard, but no sharps follow. Do you have an F at the bottom of your keyboard? (Harpsichords are not all alike!)

After F come G and A. These may be harder to remember, because they are in the middle of the 3-sharp groups. The note G is to the left (between the 1st and 2nd sharp) and the note A is to the right (between the 2nd and the 3rd sharp). Remember, that after G comes A, not H! We finally found the beginning of the alphabet!

Where is B? Between A and C, B lies to the right of the groups of 3 sharps.

Can you make up some pieces with F’s, G’s, A’s and B’s? Please refer to Figures 13 (p. 14) and 14 (this page) to help you find the face that goes with the name of each note. Remember to keep your fingers curved and hands relaxed as you play!

Now go from the lowest natural on your keyboard to the very highest, naming the notes as you go. Watch out at the lowest end! What is the first note? (Hint: find the lowest C and count down to B or A or G or F.)

Go from the highest natural on your keyboard to the lowest, naming the notes as you go. What is the highest natural? It might be C or D or E or F! Guess what? In order to play the notes from the highest to the lowest, you have to learn the alphabet backwards. Practice this!

Practice finding all the naturals with the same name:

Find all the B’s.
Find all the D’s and so on.
In doing these exercises, use the left hand for all the naturals below Middle C, the right hand for those above Middle C. You can use either hand for Middle C.

Can you play Examples 1 - 8, using notes of different names (for example, on all F's or all A's). If you do this with Ex. 5, you may run out of notes! (Harpsichords are not all alike!)

Here is a new piece to play. RH: finger 1 on middle C--play C - D - E using fingers 1, 2, 3. *Play and sing* this with a steady beat. Don’t neglect the articulation!

**EXAMPLE 9:**

<table>
<thead>
<tr>
<th>fingers (RH) : 1 2 3 2</th>
<th>notes for the RH : C D E D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4</td>
<td>C C</td>
</tr>
</tbody>
</table>

(count : 1 2 3 4) STEADY BEAT!

Notice which notes are going up, which are going down, and which notes stay in the same place. Try playing this piece again, starting on C', one octave higher.

As you play these little pieces, try to keep your eye on the music, after locating the first note. As much as possible, find the notes on the keyboard by feel. If you practice doing this now, note reading on the staff will be much easier.

Here is an example for the left hand. Find E below middle C, and put the first finger on this. Notice where the notes go down, where they go up, and where you skip a note. Remember to release the last D in the first bar early, without interrupting the steady flow of beats! *Play and sing* as follows:

**EXAMPLE 10:**

<table>
<thead>
<tr>
<th>fingers (LH) : 1 2 3 2</th>
<th>notes for the LH : E D C D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4</td>
<td>E C</td>
</tr>
</tbody>
</table>

(count : 1 2 3 4) STEADY BEAT!

Keep a steady beat. Look at your hand position. Are your fingers curved and near the front ends of the keys? Keep reminding yourself of how they feel when the position is correct. Try to remain conscious of your hands at all times.
Can you do the last two pieces together (Example 11)?

**EXAMPLE 11:** (Examples 9 and 10 together)

<table>
<thead>
<tr>
<th>RH (start on middle C) :</th>
<th>( \text{C D E D C -- C --} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH (octave lower = C#2) :</td>
<td>( \text{E D C D E -- C --} )</td>
</tr>
</tbody>
</table>

**TEMPO**

We have stressed the need to keep steady beats in all your pieces. However, this does not tell us how fast to make these beats! When you made up your own pieces, you made some of them fast and some slow. From listening, you surely know that music comes in all different speeds.

The *speed* of the beats in a piece of music is called the TEMPO. We usually describe this in words, as fast, slow, moderate, etc. Often these words are written in Italian, which is the international musical language. (See *SKILL AND STYLE*.)

When we want to be very precise about the tempo, we can indicate a METRONOME MARK (MM). The METRONOME (a clocklike devise which keeps steady beats for you) will tick at 1 beat per second if it is set at 60. MM = 120 is just twice as fast, at two beats per second.

On the next page is another piece to play, at a moderate tempo. (Try, for example, MM \( \text{= 72} \).) The right and left hands alternate in this one. Notice the groupings of three beats. Can you feel the downbeats? Be sure to articulate them! When studying the rhythm of this piece, count the tied notes in bars 4 and 8 as "ta-a-a".

Practice hint: Try to go *steadily*, even if slowly, to the end of the first good musical stopping place (end of bar 4). *Do not stop* or try to fix mistakes along the way! Only after reaching your goal, go back and see what went wrong if you heard yourself make a mistake. Check your fingering carefully, and try the whole "musical sentence" again. Now proceed in the same manner to the end of the piece.
EXAMPLE 12:

**Begin with the right hand alone**--

Fingers (RH) : 3 2 1 3 2 1 2 2 2 2
\[\text{\cell{E D C} \cell{E D C} \cell{D D D} \cell{\text{D --}}}\]

RH (at middle C) : E D C E D C D D D D
(count : 1 2 3 1 2 3 1 2 3 1 2 3)

**Continue with both hands**--

\[\begin{align*}
\text{RH (at middle C) :} & \quad \text{\cell{D E D} \cell{D E D} \cell{C C C}} \\
\text{LH (octave lower) :} & \quad \text{\cell{\text{D --} \cell{\text{D --}}} \cell{\text{D --} \cell{\text{D --}}} \cell{\text{C --} \cell{\text{C --}}}} \\
\text{Fingers (LH) :} & \quad \text{2 1 2 2 1 2 3 3} \\
\text{(count :} & \quad \text{1 2 3 1 2 3 1 2 3 1 2 3}}
\end{align*}\]

---

**FIGURE 15.** Musical Staff, lines and spaces numbered

---

**FIGURE 16.** Staff with Bass Clef and Bass C
INTRODUCTION TO THE STAFF

It is now time for you to start reading MUSICAL NOTATION. Notes are written on a STAFF. This is a kind of graph which shows the positions of the notes you are to play. The time value of the notes, of course, are indicated by note values--quarter, half, or whole notes, etc.--that are placed on the staff (review these on pages 11 and 15).

Figure 15 (page 20) shows a MUSICAL STAFF. The staff consists of five lines, numbered from the bottom: 1, 2, 3, 4, 5. It also has four spaces numbered from the bottom: 1, 2, 3, 4.

From a local music store, you should purchase some STAFF PAPER (with staff lines already drawn on it). Practice writing notes and other signs, as you learn them, on this paper. This will help you remember.

It is necessary to place a CLEF SIGN on the musical staff. The clef shows us exactly which pitches go on the lines and spaces of each staff. In Figure 16 on page 20, you see a BASS or F CLEF. This symbol, which looks like a backwards "C" with two dots, always designates the F below Middle C, by definition. The staff with this clef is used mostly for the left hand.

Try making this clef on your staff paper. Notice where the backward-looking "C" begins (on the 4th line), and where the two dots go.

On this bass staff (Fig. 16, p. 20), the C one octave below Middle C is on the 2nd space (from the bottom).

On the staff, the notes are placed in sequence. The notes get higher as you go toward the top of the staff, and lower as you go toward the bottom. We use both the lines and spaces to indicate pitches. Each letter of the musical alphabet is shown on either a line or a space.

On a Bass or F staff (Fig. 17, below), we can start on Bass C as shown and go by steps on the naturals up the staff. Therefore, the 3rd line will have a D, the 3rd space an E, and the 4th line has an F. Now we have reached the line (4th line from the bottom) which is surrounded by the two dots of the F clef.

Notice that the bass clef itself curls around this 4th line. It

FIGURE 17. Bass Staff with Notes C through F
should be easy for you to recognize the line on which F is written. This F (Bass F) is the first one below Middle C. Remember that this musical graph shows us exactly which F to play, out of all those on your keyboard (how many?)! (Remember: harpsichords are not all alike!)

Practice writing these notes, shown in Figure 17 (p. 21), on your staff paper. Use different note values for this. Practice drawing the bass clef sign until it gets easy.

Let us observe some things about the movement of notes in sequence on the staff. This kind of movement is called MELODIC. You can see that notes can do three possible things on the staff (see Figure 18, below).

1) They can stay in one place. We could write F, F, F or C, C, C, for example. These are REPEATED NOTES.

2) They can move up as we did in writing Bass C to F.

3) They can move down. We could start on the F and move down toward C.

Of course, notes can move alphabetically (STEPS), as they did in Figure 17 (p. 21), or they can SKIP one or more letters of the alphabet on the way up or down (Figure 18 shows these varieties of movement on the staff).

When you read music, you need to observe quickly whether the notes are moving up or moving down, and whether by step or skip, because then you know how to move your fingers on the keyboard. If the notes move up on the staff, of course, you will need to move your fingers from left to right. If they move down, you’re going to move from right to left. And, watch out for repeated notes! With repeated notes you will stay in the same place on the keyboard.

Another thing to observe about notes on a staff is whether a note is associated with a line or a space. For example, in the bass clef, F below Middle C is always a LINE NOTE (and always on the 4th line). Bass C (octave below Middle C), is always a SPACE NOTE (2nd space). We have found already one other line note and one other space note (D and E) on the bass staff.
Let’s try some pieces written on the bass staff. Remember, as usual, to go over the rhythm first. Don’t forget to articulate at the bar lines, and to be sure this does not alter the rhythm as you heard it with your clapping and "ta-ing". Continue to pay attention to your hand position!

Before you play, name all the notes as you come to them. Also observe whether adjacent notes go up or down by step or skip, or whether they stay in the same place.

Keep working at all your pieces in this way, until you have made good friends with all the notes on the staff!

---

**EXAMPLE 13:**

![Example 13 notation]

fingers: 5 4 3 4 5

---

**EXAMPLE 14:**

![Example 14 notation]

fingers: 2 5

---

**EXAMPLE 15:**

![Example 15 notation]

fingers: 5 3 4

---

**EXAMPLE 16:**

![Example 16 notation]

fingers: 5 4 3 4 2 3 4 5 5 3
Can you play the notes of Examples 13 - 16 with the right hand? Doesn’t it feel awkward to play such low notes with the right hand? What do you have to do about your fingering? Think hard about whether the notes go by skip or step, and how you use your fingers in order to do this! Now try playing the pieces one, and then two, octaves higher with the right hand. Try playing them one octave lower with the left hand. Can you play two octaves lower? Why not?

NAMING THE SHARPS ON THE KEYBOARD

Now let us name the sharps. Funny thing—they don’t always have the same names. Today we will name each of them as the sharp of the note immediately to the left.

Thus, the first (lowest) sharp of the two-sharp pairs is called C sharp. Every one of these is a C sharp—octaves apart.

The second (highest) sharp of the two-sharp pairs will be ____________?

We can abbreviate the word sharp with the following sign: # (two vertical lines crossed by two horizontal lines). Can you write this?

Whenever you write the names of the notes in letters, as we have been doing, you write the sharp sign after the letter. Thus we say C#, A#, and so on.

EXAMPLE 17: Use the 2nd finger of each hand. Play briskly.

\[
\begin{array}{ccc|ccc|ccc}
\text{RH} & \text{LH} & \text{count} \\
\hline
C\# & C\# & C\# & C\# & C\# & C\# & \text{C\#} & \text{C\#} & \text{C\#} \\
\text{(just above middle C)} & \text{(octave lower)} & \text{(lowest octave)} \\
\text{1} & \text{2} & \text{3} & \text{4} & \text{1} & \text{2} & \text{3} & \text{4} & \text{1} & \text{2} & \text{3} & \text{4}
\end{array}
\]

Notice the long notes on the second beats of bars 2 and 3. These long notes create unusual accents, called SYNCOPATIONS. More about these later!

Play Ex. 17 again all on D#'s. (Playing the same piece on a different set of notes is called TRANSPOSING.)

Can you name the sharps in the groups of 3 sharps? (F#, G# and A#).

Now, can you name all the notes on your harpsichord? You should be warned, however, that the sharps can change their names, and so can some of the naturals.
EXAMPLE 18:

finger (RH) : 1 5 1
octave original
higher pitch

\[
\begin{array}{ccc}
\text{RH:} & \text{F} - \uparrow \text{F} & \downarrow \text{F} - \text{octave lower} \\
\text{LH:} & \text{F} - \downarrow \text{F} - \text{another octave lower} \\
\text{finger (LH)} : 1 5 1 5 (on same note!)
\end{array}
\]

(count : 1 2 3 4 1 2 3 4 1 2 3 4)
(STEADY BEATS!)

On this page and the next are two new pieces on naturals. Try playing them slowly, then faster. Try also to TRANSPOSE (shift) them to the nearest sharps. You will need to jump from one octave to another.

Keep articulating at bar lines. Make this a constant habit! Also notice your hand position. Is your body relaxed as well as your hands? Are you sitting up straight? Make your touch as light as possible! Be sure your arms are supporting your hands.

TRY TO KEEP STEADY BEATS! Here is a practice suggestion for the next piece.

In Ex. 19, stretch for the octave in one hand! Small hands will have to jump! Do some exercises to learn the size of the octave. Place your first finger on any note, and try to find the octave above (RH) or below (LH) with the fifth finger. Then do this again, placing the fifth finger on any note (natural or sharp) and finding the octave above (LH) or below (RH).
EXAMPLE 19:

Start with both hands--

finger (RH) : \begin{align*}
&\text{above middle C} \quad &\text{below middle C} \\
&\text{RH} : &\text{A} &\text{A} \\
&\text{LH} : &\text{A} &\text{A} \\
\end{align*}

\begin{align*}
&\text{fingering (LH)} : \\
&(\text{count}) : 1 \quad 2 \quad 3 \quad 1 \quad 2 \quad 3 \quad 1 \quad 2 \quad 3 \quad 1 \quad 2 \quad 3 \\
\end{align*}

Continue with the left hand alone--

\begin{align*}
&\text{LH (start again just below middle C)} \\
&\text{finger} : \\
&(\text{count}) : 1 \quad 2 \quad 3 \quad 1 \quad 2 \quad 3 \quad 1 \quad 2 \quad 3 \quad 1 \quad 2 \quad 3 \\
\end{align*}

* If you do not have a low A on your instrument, just play the same one as the previous note.

FIRST TECHNIC--RELAXATION AND FINGERING

TECHNIC refers to the manner in which we use our fingers, hands, arms and body when playing the harpsichord. We need to think about technic in order to have the notes that we want to hear come out of the instrument the way we want to hear them.

The most important aspect of harpsichord technic is to keep the body, arms, and hands as relaxed as possible at all times. If you feel your muscles tensing up in any part of your body, stop and think about them for a minute. Stay in the position at the keyboard that we showed you in Figures 8 and 9 (pages 5 and 6). Try to get your
muscles to relax. At first you will need to stop playing in order to do this, but don’t take your hands away from the keyboard. Soon you will learn to relax while you are playing notes.

Naturally, not every single muscle in your body can be relaxed. You don’t fold up like a rag doll while playing the harpsichord. You do need to sit up straight. You need to use your arms to support your hands, to hold them up so that they do not press into the keyboard. And, of course, the fingers which are actually playing notes are going to be busy. See if you can keep the fingers which are not playing notes from being busy too!

While keeping your hands very relaxed, try playing the new pieces which follow. Remember to study note names, skips and steps, and to "ta" the rhythm first. When you play, try to go steadily to the end, without stopping to fix errors!

**EXAMPLE 20:** Moderate tempo

\[
\begin{align*}
\text{fingers:} & \quad 3 \quad 4 \quad 5
\end{align*}
\]

Can you figure out the rest of the fingering? Try not to write it down. Just remember to skip a finger when you skip a note.

It’s important to try at all times to read the *notes* as you go along, and not the finger numbers. Finger numbers should be there as a guide, and a reminder of the movements you will make on the instrument. It is best to finger your pieces incompletely—showing only where to place your hand and how to move it from one position to another.

How would you finger this same piece for the *right hand*? Try playing this piece in the octaves above and below the written notes. Which hand is most comfortable in which octave?

Remember to keep your eyes on the *music*, not on your hands!

On the next page is a piece (Ex. 21) for both hands *together*. Try each hand by itself first. Remember articulations! Notice that both hands articulate at the same time. To study the rhythm, try tapping the rhythm of the two hands on your knees. First one at a time, then together.
EXAMPLE 21: Not too fast!

<table>
<thead>
<tr>
<th>fingers</th>
<th>3 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>RH</td>
<td>E D E E</td>
</tr>
<tr>
<td>LH (2 octaves lower)</td>
<td>C — — —</td>
</tr>
<tr>
<td>fingers</td>
<td>1</td>
</tr>
<tr>
<td>(count)</td>
<td>1 2 3 4 1 etc.</td>
</tr>
</tbody>
</table>

PARALLEL AND CONTRARY MOTION

When playing hands together, it is important to notice whether the hands, or the fingers of the two hands, move toward or away from each other on the keyboard. These two kinds of motion feel very different, and knowing which is about to happen will help a great deal in accomplishing the act!

In Ex. 21, between bars 1 and 2, the fingers do not move laterally on the keyboard—they both stay in the same place.

Between bars 2 and 3, the fingers of both hands move in the same direction—downward. This is called PARALLEL MOTION. The trick is to observe that the right hand is moving toward the thumb, while the left hand is moving toward the little finger. Try wriggling your fingers up and down in parallel motion. Another exercise to work at on the bus!

Going from bar 3 to 4 (Ex. 21), the fingers are moving in opposite directions. The left is moving up, while the right moves down. This is called CONTRARY MOTION, and is actually easier than parallel motion, because in both hands, the movement is toward the thumb. Try some finger wriggling in contrary motion to find out how this feels. Notice, in Ex. 21, that the right hand makes a skip while the left hand has only a step. (Go back to Ex. 11, p. 19. What kind of motion do you have here?)

SHARPS ON THE STAFF

Notice that there is no room for sharps on our staff! You know then that we have left out many pitches.
If we want to write sharps on a staff, we have to write the sign for a sharp, just as we do when we use pitch letters. On the staff, however, we always write the sharp signs before the note (Fig. 19).

![Figure 19. Sharp Notes on the Staff](image)

Here are two pieces for the left hand, bass staff, using sharps. By convention, a sharp written into a single measure remains for the entire measure. To cancel the sharp, it is necessary to write in another sign--a NATURAL SIGN--which looks like this: 📖.

**EXAMPLE 22:** Sprightly

![Example 22](image)

LH fingers: 2 3 2 1 2 3 2

In Ex. 23, notice how you have to scrunch your fingers together, closer than in the normal 5-finger position!

**EXAMPLE 23:** slow

![Example 23](image)

LH fingers: 5 4 5 3 2

* this sign cancels the preceding sharp
Try playing these same pieces an octave higher in the right hand. They have been written for you again, with a sign, 8va _______, which means an octave above or below the written pitches. When the sign, 8va _______, appears above the staff it means to play an octave higher than written. If the sign is written below, it means an octave lower. (Note: The symbol 8ve is an abbreviation for OCTAVE. It is found more frequently in the form 8va, as here, for the Italian OTTAVA.)

EXAMPLE 22a: for the right hand

8va

RH fingers: 3 2 3 4 2 3

EXAMPLE 23a:

8va

RH fingers: 1 2 1 3 4 3 1

Notice in Examples 22a and 23a, how the fingering changes when the pieces are played with the RH.

Now try playing these pieces with the hands together, an octave apart. This will make each entire piece move in parallel motion! Don’t forget, at the same time, to clap and "ta" the rhythms, and to articulate at every bar line.

As always, think about your hand position. Remember to reach back for the sharps, rather than moving your entire hand up among the sharps. When you are finished with a sharp, bring your hand back to home base! (Refer again to Figure 12, page 9.)

MORE NOTES ON THE BASS STAFF

Let us write some more notes on the staff (Fig. 20, p. 31). Starting from F on the 4th line, we can continue upward to G (4th space), to A (5th or top line) and finally to B, which sits on top of the staff. This B is considered a space note, because it is not on a line.

Practice writing these new notes, along with reviewing Bass C to Bass F, on your staff paper. Write the notes with different note values. Write some that skip, and others that go by step. Try grouping your notes in groups of three or of four quarter note beats.
(Note: For students who are ready to learn about different sizes of skips and steps, see the section on INTERVALS in *PLAYING WITH THE ELEMENTS OF MUSIC.*)

![Bass Staff with Notes F through B](image)

**FIGURE 20.** Bass Staff with Notes F through B

Here are three pieces using your new notes:

**EXAMPLE 24:** slowly

![Example 24](image)

fingers: 1 3 2

**EXAMPLE 25:** slowly

![Example 25](image)

fingers: 5 1 2 4

**EXAMPLE 26:** not slow

![Example 26](image)

fingers: 5 2 2 1
Try the previous piece also an octave lower (same fingering).

**EXAMPLE 26a:** An octave lower

Can you finger the pieces just given (Examples 24 - 26) for the right hand, and play them higher up on the keyboard?

On the staff, we seem to have run out of lines and spaces! What next? There are a lot more notes on the keyboard!

We will have to write some extra lines above this bass staff! These are called ledger lines. We just write a very short line--just big enough to hold the one note we want to write.

See where Middle C is in the bass clef. Middle C is on the first ledger line above the Bass Staff (Fig. 21, below). Can you write the ledger line above a bass staff on your staff paper?

![FIGURE 21. Bass Staff with Notes A through Middle C](image)

Here is a piece to try out this new note:

**EXAMPLE 27:** flowingly

fingers: 1
Here is an example (28) which uses an octave reach. You will have to stretch your hand way out of five-finger position to do this. If your hand is pretty small, you may not make it—then you need to jump a little. Go back and review Ex. 19 (page 26) and do the recommended exercises on page 25.

**EXAMPLE 28:** not too slow

Think about how this octave looks on the staff, and how it feels when you stretch or jump, playing both notes in one hand.

This example is given again for you to play with the right hand, so that you can feel the stretch in that hand also.

**EXAMPLE 28a:**

Here is one more piece in the bass clef. Try playing this in parallel motion with both hands. Can you work out a good fingering? Start each hand with finger 3. Notice the effect of parallel motion on the fingering for the two hands. Don’t forget to articulate!

**EXAMPLE 29:** slow
PHRASING

Beginning with Ex. 12 (on page 20), you may have noticed that many of the pieces seem to divide themselves into two or more shorter segments. These are called PHRASES, and can be thought of as musical sentences. It is important to treat them like sentences, too—that is, to make the music flow from one end of the phrase to the other. It is important also to breathe between the phrases, just as if you were singing them.

Remember when you practice, to try to move steadily from the beginning all the way to the end of a phrase, not stopping or fixing mistakes! Only by consistently practicing in this way will a good performance be possible. It is too easy to get in the habit of stopping and repeating a misplaced note—students are very often not aware that they are "hiccouphing" in this manner.

Here is a piece with words—two sentences—which correspond to two phrases of music. If you make the music breathe the way you do when singing the words, the harpsichord will not sound so mechanical! Again, look over the piece before you begin—say the names of the notes, the skips or steps or repeated notes, and "ta" the rhythm. Once you begin, play steadily phrase by phrase.

EXAMPLE 30: deliberately

Step down, step up, stay the same. Skip- ping downs' a - no - ther game!

When playing a piece without words, we can mark the end of each phrase with a little comma ( , ) above and to the right of the last note. (We don’t need to mark the last one, which ends at the end of the piece.) This has been done for you, starting with Example 14 (page 23). Go back to these pieces, and try to make the music flow in phrases, breathing like a singer in between. IN DOING THIS, IT IS IMPORTANT NOT TO MAKE A NOTICEABLE BREAK IN YOUR STEADY BEATS!

In Example 30, the two phrases are of the same length (each 4 bars). This is common, but not necessary. On the next page is a piece with two phrases of unequal length.

Another interesting thing about the phrases in the next example is that they both begin before the downbeats. Notes which begin a phrase or other subunit by leading up to a strong beat (downbeat) in this manner are called UPBEATS.
Can you find another phrase starting with an *upbeat* among your earlier pieces? (Try Example 28 on page 33.) Below is a piece (Ex. 32) in which the second phrase starts with a *two-note* upbeat! (Look carefully!)

**EXAMPLE 32:** moderate tempo

```
<table>
<thead>
<tr>
<th>RH</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E  F#  G#</td>
<td>A G# F#</td>
<td>G# B</td>
<td>F# B A</td>
<td></td>
</tr>
<tr>
<td>fingers</td>
<td>1</td>
<td>4</td>
<td>3 5</td>
<td>2 5 4</td>
</tr>
</tbody>
</table>
```

*continue--*

```
<table>
<thead>
<tr>
<th>RH</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F# B A</td>
<td>G# F# E</td>
<td>F# B</td>
<td>G# F# E</td>
<td></td>
</tr>
<tr>
<td>fingers</td>
<td>2</td>
<td>3</td>
<td>2 5</td>
<td>2</td>
</tr>
</tbody>
</table>
```

**TOUCH**

One special aspect of technic on the harpsichord can be called TOUCH. Talking about touch is talking about the way we relate notes to each other. Go back to pages 2 and 3, and review the manner in which the harpsichord works. Remember that when you push a note down on the keyboard, you are *plucking* its associated string with the plectrum. Notice again how your fingers feel as you pluck the strings. Can you feel the damping action, and can you hear the dampers cut off the sound when you raise the key to its resting position?

When you play two notes in succession, you can pluck the second string at *exactly the same moment* as you release (damp) the first one. When you do this, the two notes sound smoothly connected. This is called LEGATO (pronounced "Leg-ah-toe"). Listen for
this! Be sure you do not hold one sound over into the next one when you wish to play legato. Also, be sure that you cannot hear any silence between the notes. The damping action of the first jack should come simultaneously with the plucking of the second.

Try playing two notes in the right hand—any two notes—with fingers 2 and 3. Make the connection very smooth. Listen for the legato sound. Be sure there is no gap or space between the notes. Be sure the first note is not held over into the second note. That makes a smear!

Do the same thing with the left hand. Using fingers 2 and 3, play any two notes legato. As you do these exercises, be sure that your arms are supporting your hands, so that the fingers are at all times lightly resting on the keys!

Now you can try playing three notes in a row, using fingers 2, 3 and 4, first in the right hand and then the left. Be sure that the connection is very smooth, and that you are plucking each string in succession at exactly the same moment as you release the preceding note. Here are some examples of notes to play:

**EXAMPLE 33:** First play with the right hand, then the left. Make smooth connections between the notes. Try the same notes in different octaves.

```
<table>
<thead>
<tr>
<th>G</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
```
```
<table>
<thead>
<tr>
<th>C</th>
<th>C#</th>
<th>D</th>
<th>C</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
```
```
<table>
<thead>
<tr>
<th>B</th>
<th>C#</th>
<th>D</th>
<th>B</th>
<th>C#</th>
<th>D#</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
```

RH fingers: 2 3 4 3 2
LH fingers: 4 3 2 3 4

To indicate legato playing, we often use a *curved line* over or under the notes which are to be connected in this manner. The curved line is called a SLUR. A SLUR looks a lot like a TIE (page 15). However, the slur always connects notes of *different pitches*.

**EXAMPLE 34:** slurs:

```
| C | D | C | D | E | G | B | D |
```

**EXAMPLE 35:** Try to slur *only* the notes under the marked slurs! That means to ARTICULATE in between, at the bar lines, as usual.

```
fingers: 1 2 3 2 3 4 3 4 5 1
```
```
| RH: D | E | F | E | F | G | F | G | A | D | _ | _ |
```
Another way of touching the keys, which you already know about, is to release one key a little bit before plucking the next string. This type of playing, called DETACHED or ARTICULATED, leaves a tiny silence before the second note. The silence can be very, very small, or quite big and obvious (review page 13).

Now try playing several notes in succession in this manner, articulated or detached. Try making the articulations very big; then try making them very small. Then see if you can make them even smaller! Use different fingers for this to see how they work. Listen to the sound.

Try playing the next piece (Ex. 36) with every note detached! Then play it with every note legato. Can you do this, in fact? (Listen carefully!)

**EXAMPLE 36:** slow

\[\begin{array}{c}
\text{LH: 3 4 2 2 1 4 1}
\end{array}\]

Notice that when you play the same note twice (or more than twice), you automatically play with articulations. It is not possible to repeat a note in a truly legato manner. This is because it is necessary to raise the key and bring the plectrum back below the string before the note will play again.

Now try playing this piece an octave higher, in the right hand. Play it first all detached or articulated, then all legato (except for the repeated notes!).

**EXAMPLE 36a:**

\[\begin{array}{c}
\text{RH: 3 2 3 4 4 5 3}
\end{array}\]

In order to mark articulations in the music, I often use a short line to separate the notes like this: \(C \ D \ E\). Sometimes composers place a dot over the note which is to be shortened to make the silence, for example, \(\dot{C} \ D \ E\). In either case, it is the second
note which is spoken of as articulated, but it is the *first* note which is shortened to produce the effect (of brief silence).

You will discover later, perhaps to your dismay, that composers rarely make *any* markings to tell you when to articulate! You must develop a sense of the effects that articulations have in music, and be sure to *listen* to the musical consequences of the movement of your fingers.

Notice, for example, that the articulated note (that is, the one *after* the little silence) sounds louder or stronger than does a note preceded by a slur. For this reason, downbeats and other strong beats are generally preceded by an articulation. Remember that articulation gives *emphasis* on the harpsichord.

**BE SURE THAT WHEN YOU MAKE ARTICULATIONS YOU DO NOT SIMULTANEously ALTER THE RHYTHM.** The silence must come out of the time value of the preceding note. It should not result in a gap in your steady beat or count.

Now try the same piece (Ex. 36) again, using the slurs and articulations marked below. Can you hear how clearly the important notes are emphasized? Experiment a bit with other combinations of slurs and articulations. Learn the effects of these powerful tools of expression on your harpsichord!

**EXAMPLE 36b:**

Here are more examples. Practice the slurs and articulations carefully, always listening for the effect. Remember to keep your fingers *lightly* in contact with the keys. Always support your hands with your arms.

**EXAMPLE 37:** *moderately*
EXAMPLE 38: sprightly

Here is one for the right hand:

EXAMPLE 39: moderate tempo

fingers: 1 3 5

RH: F G A G A C C F G A G F G F

Some more pieces follow in which to practice touch. These pieces are written with the hands together. However, begin by practicing the hands separately, until you are sure you can do each part correctly. As you put the hands together, do it a little at a time. Remember that you need to solve each problem separately, only gradually putting all the elements of a piece together.

When you start to put the hands together, play five beats in a row and then stop, thus: counts 1 2 3 4 1. Then do another next set of five beats, overlapping the first, like this: 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4. Finally try the whole piece with hands together. In this way you will naturally pause after the all-important downbeats, and your music-making will have the correct rhythmic impulse.

Remember, once you can make these transitions between bars, to play all the way through to the end of a phrase before stopping to correct mistakes.

Remember to notice, in hands together, whether the motion is parallel or contrary between the two hands. In Ex. 40 (next page), there is CONTRARY MOTION at the beginning and end. Going from bars 2 to 3, and 3 to 4, the motion is PARALLEL.

In Examples 40 and 41 (next page) you decide in which octave to play--try it with different combinations (e.g. same octave for both hands, or 1 or 2 octaves apart).
EXAMPLE 40:

fingers: 2 3 4

RH : F# F# G_ A A A_ G G G_ A G_ F# _ _
LH : D _ _ _ C# _ _ _ B _ _ _ C# _ _ _ D _ _ _
fingers: 1 2 3 2

In Ex. 41, remember to look for contrary and parallel motion. Remember to practice 5 beats at a time, when putting the hands together, always ending on a downbeat!

EXAMPLE 41: Can you write the left hand part in the bass clef on staff paper?

fingers: 3

RH : C# B A B C# C# C# B B B C# E E _
LH : A _ _ _ A _ _ _ G# _ _ _ A _ _ _
fingers: 1 2

Continue--

RH : C# B A B C# C# C# C# B B C# B A _ _ _
LH : A _ _ _ A _ _ _ E _ _ _ A _ _ _
fingers : 1 4

In working on the rhythm of pieces for two hands, clap and "ta" the hands separately at first. Then tap the rhythm of the two hands on a table or your knees, first separately and then together. Again, remember the principle of solving one problem at a time!

In the next pieces with hands together, see if you can write the left hand parts on staff paper, making a good bass clef with the two dots surrounding the 4th line (bass F).
**EXAMPLE 42:** slowly

- **Fingers:** 2 4 2 4 2 4 2 4 2

- **RH:** F# A F# A F# A F# A F# F# F#

- **LH:** D C# D C# D C# D C# D D D

- **Fingers:** 2 3 2 3 2 3 2 3 2

**EXAMPLE 43:** Start with the RH on A above middle C, the LH on D below middle C.

- **Fingers:** 5 4 3 2

- **RH:** A A G A F# A E E

- **LH:** D E F# G A G F# E D E F# A A G F# E

- **Fingers:** 5 3 1 1

**Continue**

- **Fingers:** 5 4 5 2 1

- **RH:** A A G A E A E

- **LH:** D E F# G A G F# D A G F# E D D

- **Fingers:** 5 3 5 1
EXAMPLE 44: a little faster

fingers: 2 3 4 3 2 4 3 2 3 4 3 4 2

RH: F# G A G F# F# F# G A G A G F#
LH: D C# D D D C# D C# D D D

fingers: 2 3 2 3 2 3 2

A NEW NOTE VALUE

So far, we have been using just three different note values (notes of different lengths, or numbers of beats). These were: whole notes (\(\text{whole}\)), half notes (\(\text{half}\)), and quarter notes (\(\text{quarter}\)). (If necessary, review pages 10-11, 15.)

Let's add a new note value, the EIGHTH NOTE.

The eighth note is just half as long as a quarter. That means that two eighths equal the time of one quarter note. In the many cases where one quarter note equals one beat, then two eighth notes will also equal one beat. At any given TEMPO (speed of the beats), eighth notes move twice as fast as quarters.

What does an eighth note look like? When one is by itself, it has a single FLAG, like this: ♩ (or ♩ ). Often eighth notes occur in pairs--each pair giving the value of one quarter note. When they do, they are connected together with a BEAM, like this: ♩

Sometimes we want to put four eighth notes together--filling in the time of a half note (= two quarter notes). Then the beam can go across all four, like this: ♩  ♩  ♩  . (Occasionally we want three eighth notes together. We call this a TRIPLET. You will learn more about these later.)
When clapping and "ta-ing" the rhythms of pieces with eighth notes, it is useful to use the syllables "ti-ti" to represent two eighths. Remember to make them even, and to have them fill out exactly the time of one quarter note.

Here are some examples of pieces with eighth notes. Compare Ex. 45 with Ex. 15 (page 23)—it is the same piece with some new notes added. Notice how this is done. You might like to try this yourself sometime!

**EXAMPLE 45:** quickly

```
\begin{music}
\begin{notation}
\begin{stave}
\ StaffZoomLevel=9 %Choose a suitable zoom level
\close\end{notation}
\end{music}
```

In Ex. 45, remember to clap and "ta" the rhythm first, as follows:

\begin{align*}
&\text{ta ti-ti ta ti-ti ta ti-ti ta - a} \\
&\text{ta ti-ti ta ta ti-ti ta - a}
\end{align*}

Try Ex. 46. Notice how much easier it is to find the beats when beams are used on the eighth notes.

Rhythm: ta ti-ti ta - a ta ti-ti ta - a ta ti-ti ta ta ta - a ta - a

**EXAMPLE 46:**

```
\begin{music}
\begin{notation}
\begin{stave}
\ StaffZoomLevel=9 %Choose a suitable zoom level
\close\end{notation}
\end{music}
```

In order to be really sure that the quarter notes are exactly twice as long as the eighths, you should replace the "ta" syllables with "ti-ti" some of the time. Be sure to hold each quarter note through these two smaller counts. Half notes can also be counted as four eighth notes: "ti-ti-ti-ti". Examples 45 and 46 are rewritten on the next page with all the eighth note counts indicated under each note. Whenever you are uncertain about the steadiness of your beat, counting all the notes with the smallest note value will enable you to hear their correct relationships.
EXAMPLE 45a:

EXAMPLE 46a:

Do the same with Examples 47 and 48, which follow on the next page. Remember to keep steady beats, to articulate at bar lines, and to play legato when notes are slurred. That's a lot to remember! Can you keep your hands light while you do all this? Remember to support your hands with your arms, not the other way around!

Before playing these new pieces, stop to think about how to place your fingers. When your pieces are in five-finger position, all that is required is that you look ahead to find the lowest note and the highest note. Simply place your five fingers over these two "outside" notes—if they are five notes apart, you will finger them 1 and 5, respectively (depending on which hand!). Then it is easy to figure out the fingering of the notes which come in between.

If your piece has a RANGE (spread of notes from top to bottom) of less than five notes, you may have a choice of fingerings. For instance, Ex. 45 could start with 4 or 5. Here I chose 4, as it is a stronger finger, and naturally more capable of playing the fast, repeated eighth notes. Sometimes your choice will depend on the presence of sharps, which are most comfortably played on fingers 3, 4 and 5.

Try playing all these examples (45 - 48) one or two octaves higher than they are written, with the right hand. Can you finger them for the right hand? Also try them an octave lower than written, with the left hand. Notice how differently the notes feel down in the low bass of the instrument, or in the high treble.

Note: In practicing pieces with "fast" notes, such as eighth notes, be sure to go very slowly at the beginning. This will ensure that you gain control of the fingers, and that your playing will be perfectly even. Another excellent way to practice is to leave out the second of each pair of eighth notes, playing only the notes which appear on the beats.
While doing this, continue to count "ti-ti" for each pair of eighth notes, so that your ear learns where the second eighth note is supposed to sound. Gradually add all the notes and increase the speed as you gain confidence and skill.

**EXAMPLE 47:** moderate tempo

Ex. 48 leaves the fingering up to you.

**EXAMPLE 48:** slowly

---

**RIGHT HAND NOTES**

Having written one ledger line above the bass staff, we still have only achieved one octave above bass C. There are certainly many more notes on our harpsichord!

We could, of course, go on writing ledger lines in order to make more lines and spaces above the bass staff. For example, Figure 22, on page 46, shows D, E, F and G above middle C, written on ledger lines above the bass staff. Sometimes we use such ledger lines to indicate notes above middle C which are to be played by the left hand. Remember that the left hand is usually (not always!) associated with the bass staff and bass clef.
You can see that many ledger lines would be very hard to read quickly, as it is easy to lose count. A better way is to make a new staff for the right hand notes. Here it is (Fig. 23).

The staff for the right hand has a new clef sign. Otherwise, it looks just like the bass staff, with five lines and four spaces numbered in exactly the same manner. The clef sign, however (such a complicated figure!) is called a TREBLE CLEF or a G clef. The staff is called a TREBLE STAFF. The coil of the treble clef encircles the 2nd line of the staff. This note is G—precisely the one above middle C. (We call this note TREBLE G, as its location corresponds to that of the treble clef.) (Fig. 24, below.)
We have just made a big jump from middle C on the bass staff--the first ledger line above the staff--to a G on a new staff with a new clef. How do we find middle C on the treble staff? We might need to play middle C with our right hand.

Try going down from G on the treble staff. We can go by step, moving down toward the bottom of the staff, just as we did on the bass staff (Fig. 25). Moving down from the 2nd line (treble G) to the 1st space on the staff brings us to F. Then the first line on the treble staff will be E.

![Figure 25. Treble Staff with Notes G, F, E](image)

What happens next? Well, we can write another note which just hangs under the first line of the treble staff. That note is a *space note*. Going backwards in the alphabet, we can see that it is D. Finally, as you can guess, to get to middle C we need to draw a ledger line *below* the treble staff (Fig. 26).

![Figure 26. First Ledger Line below the Treble Staff](image)

We have now written all the notes--some in the right hand and some in the left--from the first G above middle C, down to the C one octave below middle C.

Practice writing these notes on staff paper. The treble clef is hard to make! Trace it from the figures until you get the hang of it. Remember to make the coil of the treble clef around the second line (Treble G).
LANDMARKS ON THE STAFF

It is helpful to memorize the location of certain notes on the staff. Some positions are easier to recognize than others. We call these easily remembered locations LANDMARKS. We can readily find other notes on the staff by noticing whether they are steps or skips above or below these landmarks.

Remember that on any musical staff, notes going from a line to an adjacent space (that is, to the very next one, up or down), are moving by step. So are the notes that move up or down from a space to the very next line. When you jump from line to line or space to space, you will be skipping on the keyboard!

To review the bass staff for a minute (Fig. 27), we have the following LANDMARKS so far: Bass C, Bass F (corresponding to the bass or F clef), and Middle C (first ledger line above the staff).

![Figure 27. Three Landmarks on the Bass Staff](image)

Figure 28 shows the landmarks we have learned on the treble staff: Treble G (corresponding to the Treble or G clef), and Middle C (first ledger line below this staff).

![Figure 28. Two Landmarks on the Treble Staff](image)
Now let's look at some pieces written in the treble clef. What is the first note in Ex. 49? Remember to think of a landmark, such as Treble G, and notice that this first note, E, is a skip down from the landmark. As you play, remember to articulate at the bar lines, and to connect in a legato manner all notes marked with slurs (do not smear!). Keep your hands light, and try to keep a steady beat at all times!

**EXAMPLE 49:** moderate tempo

RH fingers: 3

![Example 49](image)

Here are two more pieces using the treble staff. Be sure to clap and "ta" the rhythms before you try to play notes. (The last bar in Ex. 50 goes "ti-ti-ti-ti ta - a".) Do you have the habit of naming notes before playing? Of observing skips and steps? Remember, when counting, to try some of the time to count 8 eighth notes ("ti-ti-ti-ti-ti-ti-ti-ti") in each measure! Figure out, in all that counting, where to play each half note and quarter note! This will ensure that all are in correct relation to each other.

**EXAMPLE 50:** moderately slow

![Example 50](image)

Notice the unusual accents (on the second beat of groups of three) in Ex. 51. You will need to articulate those notes, as indicated, in order to bring out these accents. The next to the last bar in Ex. 51 has been left for you to decide whether to play legato or detached. Try it several different ways. Then, remember to complete the phrase before going back to make corrections!

**EXAMPLE 51:** boldly

![Example 51](image)
CHAPTER IV. TIME SIGNATURES, METER, AND MUSICAL FORM

METER AND TIME SIGNATURES

The last two Examples (50 and 51) illustrate two different groupings of quarter note beats. We are familiar with these groups of four and of three quarter notes, as we have been grouping beats all along by drawing bar lines in our music. The manner in which beats are grouped is called the METER (see pages 12-13).

In fact, there are only two fundamental ways of grouping beats: either in twos (DUPLE METER) or in threes (TRIPLE METER). Other types of meter turn out to be multiples or combinations of these. Sometimes the grouping of four, which as you have seen is very common, is called QUADRUPLE METER (it is really a form of duple meter).

The meters we have encountered so far (3 and 4) are based on quarter note beats. However, it is also perfectly possible to have duple and triple meter in which some other kind of note comprises the beat. Therefore, if we want to indicate the meter ahead of time, it is necessary to state both the number of beats in each measure, and the kind of note (note value) which gives the beat.

We accomplish this in the following manner: Each meter has associated with it a TIME SIGNATURE. The time signature will appear at the very beginning of the piece. It consists of two numbers, one written above the other. The top number indicates the number of beats in each measure. The bottom number indicates the type of note (or note value) which gets a single beat.

If you know about fractions already, you will know that one way of notating a quarter is \( \frac{1}{4} \). Musicians use this as an abbreviation for the quarter note. Therefore, time signatures use the 4 on the bottom to indicate that a quarter note equals one beat.

The duple and triple meters we have used already are therefore, \( \frac{4}{4} \) and \( \frac{3}{4} \). Can you put correct time signatures in your pieces from this book? (The bar lines will enable you to count the number of quarter note beats in each measure.)

As implied above, duple meter may consist of two beats per measure as well as four. In that case, we have groupings as shown at the top of the next page, with bar lines after every two (quarter note) beats:
Of course, we articulate at each bar as before.

Here are some examples in different meters, showing how the TIME SIGNATURE helps orient you to the kind and number of beats to expect in each measure.

Ex. 52 was written in the bass clef to remind you what that is like! Notice that you are to play an octave lower than the written notes. After doing that, write the piece on the treble staff for the right hand. What finger should you begin with in the right hand? Play the piece in four different octaves on your harpsichord.

**EXAMPLE 52:** Moderately fast

![Example 52 musical notation]

Here is a piece in triple meter:

**EXAMPLE 53:** flowing, not too fast

![Example 53 musical notation]

The next two examples (54 and 55) consist of the same music! However, the meter is different. Notice how drastically the change of articulation and emphasis affects the sound of the piece!

These two pieces (Examples 54 and 55) illustrate another musical symbol—the REPEAT SIGN. The double bar line with two dots in front of it directs you to go back to the beginning and play over again everything up to this symbol. Only after this second
performance do we go on to the very last measure of the piece. Observe that, with the use of this shorthand, there are a total of 7 measures in Ex. 54 and 9 measures in Ex. 55.

**EXAMPLE 54:**

4(or 5)

```
\begin{music}
\begin{fis}\end{fis}
\end{music}
```

**EXAMPLE 55:** Same piece as Ex. 54, different meter

```
\begin{music}
\begin{fis}\end{fis}
\end{music}
```

In the bar just before the repeat sign in both pieces, the F is raised to F sharp. By convention, a sharp is indicated only once (the first time it appears) in each measure. Therefore the second sharp in Ex. 54 is unnecessary, and is placed in parentheses. In Ex. 55, the second sharp, which should be understood, is not indicated.

Finally, here is a piece in $\frac{2}{4}$ meter.

**EXAMPLE 56:** rather quickly

```
\begin{music}
\begin{fis}\end{fis}
\end{music}
```

A

A'

B
As you work on the preceding pieces, remind yourself always to study the rhythm separately by "ta-ing" and clapping, and to read the names of the notes and the skips and steps before you begin to play.

Remember, too, to practice very slowly at first, until your fingers will play each note exactly in time with your "ta-ing"! If you have trouble keeping a steady beat, try playing only the notes on the beats (leaving out the second eighth note of each pair), while "ta-ing" the rhythm as it appears on the page. Gradually fill in the "details", observing that the smaller, faster notes within a piece are in fact just that. They should feel and sound to you as being less important than the notes which occur on the main beats of each measure. (See the section on OUTLINING in Chapter V.)

If you need to practice very small segments--a measure at a time--always go across the bar to the following downbeat (unless you have reached the end of a phrase). Next, practice a phrase at a time, not allowing yourself to stop or fix a mistake until reaching your goal! Finally play the entire piece straight through without stopping, but feeling yourself "breathe" at the ends of phrases. In this way you will be able to give a really good performance of each piece. Share them with your friends!

**CONDUCTING THE METER**

One way to get a good feeling for the character of different meters is to learn to conduct them, just as though you were leading an orchestra. Each meter has a different conducting pattern, which helps you feel the strong and weak beats.

Let's start with the simplest meter to conduct, $\frac{2}{4}$. Start with your right hand in front of your nose (about one foot away from your face), and beat down and slightly to the right for the first beat. For the second beat, bring the hand up again, following the same path, and ending at the spot where you started. The shape of the path in simple duple meter (\(2\)\(\frac{1}{2}\)) is shown below:

Can you feel that the second beat is not as strong and energetic as the first? This beat is literally an UPBEAT. In speaking of the beats of $\frac{2}{4}$ meter, we can say for 1-2, "strong-weak" (abbreviate SW). If the piece starts with an upbeat, you must begin conducting from the bottom of the pattern, lifting your hand upward, and letting it fall on the first downbeat. There is an example of a piece in $\frac{2}{4}$ meter starting with such an upbeat (Ex. 70) on page 67. Try conducting the meter of Ex. 70 even before you know the notes, "ta-ing" the rhythm of the right hand. Can you feel the rhythmic pattern fit into the SW pattern of the measures?
For conducting $\frac{3}{4}$ meter, start with your hand in the same spot in front of your nose (not too close!), and go down, then to the right side, and finally "catty-cornered" upwards, back to your starting place. This pattern looks like a triangle, as shown:

```
   3
  /|
 / |
1 2
```

In this meter, the first beat feels much stronger than the other two, and the pattern can be described as SWW. Try conducting and "ta-ing" the rhythms in Ex. 55 (page 52, above). Use the conductor's beat instead of clapping.

When a $\frac{3}{4}$ piece starts with an upbeat, as in Ex. 31 above (page 35), you will need to begin with the "catty-cornered" arm of the triangle, bringing your hand up in front of your nose just in time to start the strong downbeat. Try "ta-ing" and conducting the right hand of this piece.

Lots of your pieces have been in $\frac{4}{4}$ meter. In fact, this is known as COMMON TIME, and is often indicated at the beginning of pieces with a large C . (Surprisingly, perhaps, the "C" designating this meter is not just an abbreviation for "Common" time, but is left over from a medieval time signature.)

The conducting pattern of C or $\frac{4}{4}$ meter is a little complicated. The relationship of the beats is actually strong-weak-medium-weak (SWMW), as reflected both in the conducting pattern and the usual scheme of articulations.

To conduct this meter, start in the usual place in front of your face. Bring the hand down on count 1, over to the left on count 2, then all the way over to the right (as far as you would go in $\frac{3}{4}$ ) on count 3, and finally "catty-cornered" back up (to your nose!) on count 4. On paper, the pattern looks like this:

```
  4
 /|
 / |
1 2
  3
```

How would you start a $\frac{4}{4}$ piece which begins on an upbeat? What if it started on the 3rd beat of the measure? On the 2nd beat? (Later on, you will find that some pieces actually do these funny things!) Go back over some of your earlier pieces in $\frac{4}{4}$ meter, "ta-ing" and conducting.

On the next page (Ex. 57) are a number of rhythmic examples (no pitches) with various combinations of note values. In each example a meter is indicated. Now try drawing bar lines to group the notes into the appropriate meter.
Clap and count each of the examples. Then *conduct* and "ta" the rhythms. Can you feel the strong and weak beats in these measures?

(Note: When working with your pieces, it is a good idea to conduct at least one full measure of the meter *before* beginning to play. Start these exercises (EXAMPLE 57) in this manner, to make it a habit!)

**EXAMPLE 57:** Rhythms only

<table>
<thead>
<tr>
<th>a)</th>
<th>(\frac{3}{4})</th>
<th>(\frac{3}{4})</th>
<th>(\frac{3}{4})</th>
<th>(\frac{3}{4})</th>
<th>(\frac{3}{4})</th>
</tr>
</thead>
<tbody>
<tr>
<td>b)</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
</tr>
<tr>
<td>c)</td>
<td>(\frac{2}{4})</td>
<td>(\frac{2}{4})</td>
<td>(\frac{2}{4})</td>
<td>(\frac{2}{4})</td>
<td>(\frac{2}{4})</td>
</tr>
<tr>
<td>d)</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
</tr>
<tr>
<td>e)</td>
<td>(\frac{4}{4})</td>
<td>(\frac{4}{4})</td>
<td>(\frac{4}{4})</td>
<td>(\frac{4}{4})</td>
<td>(\frac{4}{4})</td>
</tr>
<tr>
<td>f)</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
<td>(\frac{3}{4})</td>
</tr>
</tbody>
</table>
Can you make up a tune to correspond to each of the rhythms in Ex. 57? Try it! Make LH and RH melodies.

**DOTTED NOTES**

You will recall that *irregular* note values are often expressed by means of TIES (see page 15). Some of these values are used so frequently, that it is convenient to use a shorthand symbol to indicate them. This symbol is a DOT, and its function is to *add value* to the note which precedes it.

DOTS are written immediately to the right of the notes which they modify. These notes are then called DOTTED NOTES.

Dotted notes look like this: \( \dot{\text{\textbullet}} \) = dotted half note

\( \dot{\text{\textbullet}} \) = dotted whole note

\( \dot{\text{\textbullet}} \) = dotted quarter note

The amount of time that a dot adds to a note is exactly *half* the value of the written note. Thus the dotted half note is sustained for exactly three quarter note beats \((2+1)\). It is exactly as long as \( \text{\textbullet} \text{\textbullet} \). A dotted whole note will be *six* quarter note beats in length \((4 + 2)\). As you can see, this is exactly equivalent to a whole note tied to a half note \( \text{\textbullet} \text{\textbullet} \).

How long is the dotted quarter note? When counting quarter note beats, this one would be 1 1/2 (one quarter plus one *eighth* note). It is easiest to understand when combining it with another eighth note: \( \text{\textbullet} \text{\textbullet} = \text{\textbullet} \text{\textbullet} \text{\textbullet} = \text{\textbullet} \text{\textbullet} \text{\textbullet} = \text{\textbullet} \text{\textbullet} \text{\textbullet} \text{\textbullet}\). Count ta ti-ti, or ti-(ti-ti)-ti. In the tied and dotted examples, do not lift the finger or sound a note except on the first and last "ti’s".

Ex. 58 is a piece in triple meter which uses many dotted half notes. This symbol conveniently replaces the half note tied to a quarter note, which we have seen so often in pieces in triple meter. You can count this in the same manner as the tied notes, ta - a - a, remembering to keep your finger down on the key the entire time.
MORE ON PHRASING -- MUSICAL FORM

Some of the pieces you have played lately consist of three or four phrases. As pieces get longer, it is helpful to figure out how the different phrases relate to each other. Are they all different? Are some of them exactly the same? Are some of the phrases a lot like others, with small variations? You can see that it would be easier to learn and understand a piece if you had this information in your mind from the beginning.

Let's ANALYZE the relationships of the four phrases in Ex. 58. This means to figure out how similar or different the phrases are to each other, and make some kind of DIAGRAM which summarizes this information.

The first four bars constitute the first phrase. We can call this one "A". The next phrase, bars 5 - 8, contrasts with this one (this kind of phrase pair is sometimes called QUESTION and ANSWER). Since the second phrase is clearly different from the first, let's give it a different letter, "B".

What about the third phrase of Ex. 58? Have you heard this one before? Better call it "A"! The very last phrase is a different answer to the "A" question, and can be designated "C".

To make a DIAGRAM of these relationships, we can simply say that this piece goes ABAC. This describes the MUSICAL FORM of this piece. It helps us a lot to know that we only have to learn phrase A once!

It is a good game to compare the MUSICAL FORM of different pieces. Look at Ex. 56 (page 52), for instance. Here the first two phrases are very similar to each other. Can you describe precisely the difference between them? (The second phrase is a step
lower than the first). When two phrases are very much alike, but not identical, we give them the same letter name, but call the second one PRIME (indicated by the symbol ’).

The diagram of the MUSICAL FORM of Ex. 56 would look like this: AA’B. Practice doing this with your new pieces.

THE GRAND STAFF

When we want to play music with both hands, as we have already been doing in many of our examples, we want to be able to see the right hand (treble) staff and the left hand (bass) staff at the same time. As you see, they connect through middle C. The notes flow readily from the bass staff, through B and middle C and D up into the treble staff and down again.

When we write these two STAVES (the plural of STAFF) one on top of the other, we have then what we call the GRAND STAFF. This is simply a treble staff above and a bass staff below, linked together with a bracket or BRACE (see Fig. 29).

Middle C occurs on a ledger line just in between the two staves of the grand staff. If we leave it right in the middle, we can write continuously from Bass C (2nd space in the bass clef) all the way up to Treble G (2nd line on the treble staff) (see Fig. 30). Most often middle C will be written closer to one or the other staff. When it is just under the treble staff, we should play it with the right hand. If it is written closer to the bass staff, we play it with the left hand (Fig. 31).
FIGURE 31. Grand Staff with Middle C, Right or Left Hand

Here are some examples of pieces on the GRAND STAFF. Notes on the treble staff should be played with the right hand, those on the bass staff with the left hand.

In this first example, and also in Ex. 61 (next page), look carefully at the time signature. The bottom number of this signature is a 2, not a 4! This means that the half note \( \frac{1}{2} \) \( \ \frac{\text{C}}{\text{C}} \) gets one beat, and that there are two of these beats per measure. (Conduct this as though it were \( \frac{2}{4} \) meter.)

Notice also that in Examples 59 and 60, one hand is silent while the other plays. The "official" term for a silence in music is REST. Play two more pieces on the Grand Staff, and then learn some more about RESTS!

EXAMPLE 59: Moderate tempo, two half note beats per measure

Practice making a Grand Staff on your staff paper, connecting the Treble and Bass staves with a brace. Have you noticed, in the staff notation that you have seen so far, that when a note with a stem is on lines or spaces 1 and 2 (in either staff) the stem goes up? When a note with a stem lies on lines or spaces 3, 4, or 5 (either staff), the stem generally points downward. This varies a little, depending on how notes are grouped. Practice writing half, quarter and eighth notes on your Grand Staff, making the stems go in the right direction.
RESTS

Lots of times we want to indicate some silence in our music. If we had just regular notes, and could say that this one is silent and that one is played, we could be as precise about the length of the silences as we are about the sounding notes. But how could we tell a silent note from the ones that should be sounded?
To get around this problem, we have another set of symbols which represent silences. These symbols are called RESTS. There is one kind of rest corresponding to each kind of note.

Here are two kinds of rests:

**WHOLE NOTE REST** -- \( - \) (Notice that this hangs down below a line.)

**HALF NOTE REST** -- \( - \) (This looks like a whole note rest, but it sits on a line.)

Examples 63 and 64 illustrate the use of whole and half note rests in pieces:

---

**EXAMPLE 63:** not too fast

---

Here are two more kinds of rests. You need to learn all of these just as though they were note values. Practice drawing—at first tracing—these symbols.

**QUARTER NOTE REST** -- \( \frac{1}{4} \)

**EIGHTH NOTE REST** -- \( \frac{1}{8} \)
EXAMPLE 64: calmly

On the following pages are some rhythmic exercises which involve rests. Do these on a table, your knees, or with single repeated notes on the keyboard. Also practice "ta-ing" and clapping, as with any of your pieces. Also try "ta-ing" and conducting. Remember, when you come to a rest, that you must make a silence for the exact length of that rest! COUNT AND KEEP A STEADY BEAT.

When in doubt, count all the notes as combinations of eighth notes (ti-ti for a quarter, ti-ti-ti-ti for a half note, etc. This is especially helpful for dotted notes! Calculate how many of the smallest value in each.

These exercises are difficult. They have been made deliberately much harder than the music you play--when you encounter even moderately difficult rhythmic combinations in your music, you will not be stumped! Do not try to conquer all the exercises in Examples 65 and 66 before going on to other matters. Just keep coming back to these, from time to time, until they are mastered.

Can you make up some tunes to go with these rhythms? Do some for the left hand as well as the right.

Note that, as in Examples 65a and 66d, when a piece starts with an upbeat, the final measure has fewer than normal beats. It is customary to subtract the value of the initial upbeat from the last bar.
The next examples are for the two hands together, each doing different rhythms! Again, try this on the table or lap first, and then with just two notes (one finger of each hand) on the keyboard. This will help you to get your two hands moving in different patterns as you play more complicated pieces.

Remember to begin with the hands separately, and to "ta" and clap the rhythms of these separate parts. Also, as you work with hands separately, practice conducting the meter, remembering to conduct a full measure before beginning to "ta" or tap the rhythm.
EXAMPLE 66, continued

After doing these once, try switching hands, so the LH plays the RH part, etc.

Two pieces follow, using quarter and eighth note rests. Be sure to count very carefully, and at least some of the time fill in all the notes with "ti-ti's". This will keep your quarter note beats steady and even. Watch the highest note in Ex. 68! It should fall easily under your five-finger hand position. (Remember to begin these before you work your way to the end of Examples 65 and 66.)

MORE NOTES ON THE STAFF

So far, we have learned the notes from Bass C (one octave below Middle C) up to Treble G (the first G above Middle C). Remember how these notes looked on the Grand Staff (review Fig. 30, page 58).

Let's have a look at some additional notes on the treble staff, going up above Treble G. If we continue by step from G up to C, we go to the 2nd space, 3rd line, and 3rd space on the treble staff (Fig. 32, p. 66). The 3rd space then, is the C one octave above Middle C. We can call this Treble C.
EXAMPLE 67: lightly

EXAMPLE 68: not too fast

Practice writing the new notes (Fig. 32) on your staff paper, remembering which stems go up (up to the second space) and which go down (on or above the third line).

Remind yourself of what an octave looks like on the staff (line to space, or space to line, with a big skip in between). (Fig. 32)
Have a look at the three C's which are located on the Grand Staff. We can start with Treble C (3rd space of the treble staff), then Middle C (in between the 2 staves), and finally Bass C (2nd space of the bass staff). Notice how symmetrical these appear: Treble C is the 2nd space down from the top on the Grand Staff, and Bass C is in the 2nd space up from the bottom. Remember this symmetry—we’ll see that it occurs among the other C's as well! (Fig. 33.)

EXAMPLE 69: like a brisk dance
Ex. 69 is a piece using these new notes. Remember to begin your practice with rhythms and naming of notes in each hand. Observe the musical form of Ex. 69 (ABA'C). The two pairs of phrases are examples of QUESTION and ANSWER phrase pairs.

KEY SIGNATURES AND THE NATURAL SIGN

Examples 70 and 71 show the use of a KEY SIGNATURE on the musical staff. The KEY SIGNATURE, in this case the one sharp which appears at the beginning of the piece on each staff, is another example of musical shorthand. The sharps appear on the lines which mark F's on the staff: High F on the treble staff and Bass F in the bass clef.

This KEY SIGNATURE tells you that all the F’s are to be played as F sharp. That includes F’s written on other lines or spaces, such as the Treble F’s in Ex. 71. The F’s in Examples 70 and 71 have been marked with stars, to remind you to play F sharp each time. Usually, you just have to remember about all the F’s all the way through the piece!

EXAMPLE 70: not too fast

![Example 70](image)

* See text

EXAMPLE 71: slowly

![Example 71](image)

* See text
If you want to play an F in a piece that has F sharp in the key signature, you have to add a NATURAL SIGN. The natural sign looks like this: \( \natural \). You have seen this once already, in Ex. 23, page 29. The natural sign cancels that particular sharp within the entire measure. Starting at the next measure, the sharp in the key signature would again apply.

You will learn a lot more about key signatures when you study SCALES. Try Examples 70 and 71 now, just to get used to the idea.

**TECHNIC--FINGERING PIECES IN 5-FINGER POSITION**

Very often in music, as indeed you have found so far, entire phrases are found to be in one 5-finger position. Later you will learn to move out of this position even in the middle of a phrase.

How do you start fingering a new piece? First of all, determine whether or not the entire first phrase—or, indeed, the entire piece!—is in one five-finger position for each hand. You can do this easily by looking through each line of music and finding the highest note and the lowest note.

Look at the entire right hand part of Ex. 71 (page 67), for instance. The highest note is Treble B and the lowest note is E. Place the five fingers of your right hand over these notes—see how easy it is to decide that the first note, B, begins with finger No. 5!

Try this with the right hand of Ex. 70. The highest note is Treble C, the lowest is G. Put your five fingers over these notes. You see that you have a choice here, since there are only four notes between top and bottom. You might begin with either finger 3 or 4. Which seems more comfortable to you? Where there is a choice, your decision will often be influenced by the presence of sharps within the five-finger position.

Remember, while playing in any five-finger position, to keep your fingers right down on the keys. Try to avoid any tension in the fingers or hand. As much as possible, do not raise your fingers above the keys. Contact with the keys gives you control (you can feel the plectra), and also tells you where you are on the keyboard at all times.

**MORE NOTES ON THE TREBLE STAFF**

Now can you name the notes all the way to the top of the treble staff? Going up from C we have D on the 4th line, E on the 4th (top) space, and finally the top (5th) line is F. This note (F) makes another good landmark, because it is easy to remember the top line. We should add one more note, the G sitting on top of the treble staff. This is a space note (Fig. 34, page 69). We know, of course, that if we are going to add any more notes, we have to use ledger lines.

The next few pieces will introduce these notes at the top of the treble staff.
FIGURE 34. Top Notes on the Treble Staff (Landmarks are labelled LM)

EXAMPLE 72: slow

EXAMPLE 73: lightly
As usual, go over the hands separately in Examples 72 and 73, first "ta-ing" rhythms, and then naming notes and INTERVALS (that is, the size and direction of skips or steps—see Chapter V, as well as the appropriate section in PLAYING WITH THE ELEMENTS). Be sure that when you encounter a note with a sharp, you get in the habit of saying "F-sharp", etc. This will be particularly important when you encounter a key signature, and you have to remember which notes are sharp all the way through.

Before going any further, practice writing the high treble notes on your staff paper. Are you now expert at drawing a treble clef?

Ex. 73 will help you learn to articulate in one hand while playing legato in the other. This is often necessary when the melodies of the right and left hand have accents in different places. To do this, keep the hand with the silences very light, while letting the hand which plays legato rest a little more heavily on the keys.

In Ex. 74, the 5-finger position leads you to play a sharp with the 5th finger of the right hand. You can feel that this puts the hand in an awkward position, and brings it too far back (away from you) on the keyboard. You will soon learn how to move out of 5-finger position in order to avoid such problems, as well as to extend your reach to include more notes.

**EXAMPLE 74:** quickly

```
\begin{music}
\begin{musicnotes}
\input{example74}
\end{musicnotes}
\end{music}
```

* Doesn’t finger 5 feel awkward on this sharp?
SOME FURTHER REMARKS CONCERNING ARTICULATION

Up to this point, slurs and articulations have been marked into the music for you. Unfortunately for us, early composers for the harpsichord never indicated articulations in their written music. Occasionally slurs are written for us, showing where notes should be played in a legato manner. (This does not imply that everything without a slur should be played in a detached manner, however.)

Normally, then, it is up to the player to decide where to use articulations. You already know that these are usually required at bar lines, and in fact also at other strong beats within measures. Thus it is common to articulate at the first and third beats in $\frac{4}{4}$ meter. In $\frac{3}{4}$ meter, the first and any other beat which seems strongly accented should be articulated. As you learn about other meters, pay attention to where the strongest beats occur, and articulate at those places in each measure.

Another consideration is the shape of the melodic line. For example, the smooth motion of the right hand melody in Ex. 73 (page 69) suggests that all the notes within one measure be played legato. A leap or sudden change in direction of the melody might suggest an articulation. (See, for example, measure 2 in the left hand of Ex. 72.)

A long note preceding or following a short note is generally articulated. This will make the longer note sound more important. In fact, being longer, it generally is more important!

Often, the beams of eighth or other short notes will suggest places where the composer thought of these as separated (articulated) or joined (legato).

Go over the pieces you have practiced and try to understand the principles underlying the articulations given to you. In new pieces, try to apply these principles in deciding where to apply articulations and slurs. It is suggested that, at first, you write these in to the music yourself. This will give a cue to your fingers, to tell them what to do. Above all, listen to the effect of what you do, and use your ear as a final guide to your uses of touch.
CHAPTER V. INTERVALS AND FIVE-FINGER PATTERNS

INTRODUCTION TO INTERVALS

The distance between two keys on the keyboard, and between any two musical notes or pitches, is called an INTERVAL.

We already know one interval--the OCTAVE (also called an 8th). The octave is the distance between the two nearest notes of the same name, for example, Middle C and Treble C; or Middle C and Bass C. It is also the same distance, of course, between any other two notes of the same name: for example, Treble F sharp to the next F sharp up (High F#) or the next F sharp down (Bass F#). Those intervals are all octaves.

The smallest interval on the keyboard is a HALF STEP (this is also called a MINOR SECOND, or m2 for short). This is the distance between two immediately adjacent notes--that is, two notes that lie right next to each other--such as C and C sharp.

For most naturals, the half step up or down is on a sharp, for example, D to D# or D to C#. Can you find any naturals that have another natural a half step up or down? (B to C, E to F, C to B, F to E)

Practice playing a MINOR SECOND = HALF STEP, naming each note.

<table>
<thead>
<tr>
<th>Up from:</th>
<th>Down from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>A</td>
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</tbody>
</table>

Notice that when you go from C to D on the keyboard, you actually skip a note (C#) and play an interval that is equal to two half steps. This interval, as you might expect, is called a WHOLE STEP (also a MAJOR SECOND, abbreviated M2). These are still called steps (and not skips or jumps), because they turn out to be stepping stones in SCALES. (See the chapter on Scales in PLAYING WITH THE ELEMENTS.)
Find MAJOR SECONDS = WHOLE STEPS

<table>
<thead>
<tr>
<th>Up from:</th>
<th>Down from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>G</td>
<td>A</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
</tr>
</tbody>
</table>

To remember the names of these two kinds of seconds, try to remember that MAJOR means large, and MINOR means small. These same words are used to describe other pairs of intervals.

Notice that within the groups of two and three sharps on the keyboard, the sharps themselves are whole steps apart. (For example: C# to D#, F# to G#, and so on.)

Name sharps that are more than a whole step apart (D# to F#, A# to C#).

Name naturals that are less than a whole step apart (E to F, B to C). What are these intervals? (m2)

Try singing half steps and whole steps. Have someone play half steps and whole steps on the keyboard for you. LISTEN. Can you tell what kind of steps you are hearing?

Using fingers 2 and 3, 2 and 4, 3 and 4, etc., first in the right hand and then the left, can you find half steps and whole steps on the keyboard with your eyes closed?

Feel how a half step down from F compares with a half step down from A. Feel how a whole step up from B compares with a whole step up from C. During these exercises, be sure to check the sound of the interval with your ear!

We are often taught that all the half steps up or down the keyboard are equal in size. However, they may not be all the same on your harpsichord, depending on how it is tuned! Listen for differences between C - C# and A - A#, or between E - F and A# - B, for example. On the piano, these will all sound alike.

Differences may also exist between different whole steps, and indeed all intervals (except octaves) on the harpsichord. When all like intervals sound alike, the tuning is called EQUAL TEMPERAMENT (as on a piano).

See your SKILL AND STYLE for an explanation about the tuning and temperament of your instrument. Find out how your instrument is tuned, and try to be aware of differences in the sound of like intervals, as related to the tuning.
SECONDS ON THE STAFF

We can see that 2nds on the musical staff will be represented by notes which go from a line to the very next (adjacent) space, or from a space to the very next line, either up or down (Fig. 35).

![Figure 35. Major and Minor 2nds on the Staff](image)

We cannot tell just by looking at the staff, whether the 2nds are major or minor (whole steps or half steps). To tell these apart, you need to name the actual pitches, and then to decide from their positions on the keyboard whether they are a whole step or a half step apart (see PLAYING WITH THE ELEMENTS).

Some half steps are going to be represented by what look like repeated notes on the staff, but with a sharp written before one of them (Fig. 35).

Here and on the next page are some musical examples involving major and minor seconds. Mark the interval between each succeeding note as M2 or m2, or, where appropriate, N for Neither! You will learn the other intervals later.

EXAMPLE 75:

![Example 75](image)

* These are so-called COURTESY NATURALS. They are not strictly necessary because the bar line cancels any sharp not included in a key signature.
Notice that new fingerings may have to be used when moving through minor seconds involving sharps. Sometimes you need to stretch your fingers wider apart than is normal for 5-finger position. Sometimes you have to scrunch your fingers closer together than you are used to in 5-finger position. Concentrate on the feel of these new fingerings--the pieces are each for one hand only in order to let you do this.

**EXAMPLE 76:**

<table>
<thead>
<tr>
<th>SCRUNCH!</th>
<th>STRETCH!</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 1 3 1 2 4</td>
<td>5 1 2 3 4</td>
</tr>
</tbody>
</table>

Note that the span B to G is more than 5 fingers!

**EXAMPLE 77:**

<table>
<thead>
<tr>
<th>PRACTICE FINGERING CAREFULLY!</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 4 2 2 1 2 1</td>
</tr>
</tbody>
</table>

Half steps are squirmy, very slightly angular worry.

<table>
<thead>
<tr>
<th>Whole steps can be plainly seen to have a little space between!</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 3 2 1 4 5 2</td>
</tr>
</tbody>
</table>

For review of the subject of major and minor seconds, see *PLAYING WITH THE ELEMENTS*.

**FLATS--NEW NAMES FOR OLD FRIENDS**

So far, we have been calling the raised keys (at the back of the keyboard) sharps. However, I did point out (p. 24) that these notes sometimes change their names.

When we speak of a raised note as a sharp, we’re thinking of it as the named note--natural--raised a half step (m²). As we saw on page 24, we think of the raised key just to the right of C as being C sharp. Another way of saying this is that we have raised C by a half step. We have similarly named all 5 of the sharps--that is the raised keys--in relation to the naturals just to the left of each one. ( C# D# F# G# A# )
Sometimes we need to think of these raised keys in relation to the naturals which lie just to the right of each one. That is, we may wish to lower a named note by a half step. Supposing we take the note B and decide to lower it by a half step (minor 2nd). If we do that, we come upon the raised key which we have previously called A#. However, if we want to talk about it as a lowered B, we need to give this note a different name.

The new name that we give to A# when we look at it as a lowered B, is B FLAT. In fact, if we think of the raised keys as the next lowest note (half step) from each of the naturals, we must speak of all of them as FLATS. We can rename each of the 5 raised keys as flats. They would now be: D flat, E flat, G flat, A flat, and B flat.

We have a symbol for the word FLAT and it looks like this: \( \text{b} \). As in the case of sharps, when we write the note names in letters, we put the flat symbol after the note name: D\( \text{b} \), E\( \text{b} \), G\( \text{b} \), A\( \text{b} \), B\( \text{b} \). When we write notes on the staff, we put the flat symbol before each note just as we did with sharps (Fig. 36).

![Figure 36: Flat Notes on the Staff](image)

As with sharps, flats can be cancelled by the use of the NATURAL SIGN (the same sign, \( \text{h} \), used to cancel sharps). Also, as was the case with sharps, a flat written in to a measure applies for that same note throughout the measure, and is cancelled at the beginning of the next bar. As you will see later on, flats can also appear in a KEY SIGNATURE, in which case you have to remember, throughout the piece, which notes to lower by a half step!

Although we have been using "sharps" as a general term for the raised notes on the keyboard, this practice can cause confusion. Sharps may become flats at any moment! There is another general term that can be used for the raised notes, or for sharps and flats collectively. That word is ACCIDENTAL. The word accidental is kind of "neutral". That is, it does not specify whether we are raising a note or lowering a note.
The next few musical examples show the use of flats. In Ex. 78, the starred (*) flat in parenthesis is not necessary, since the one at the beginning of the bar carries throughout the measure (but only for E's in the top space!).

**EXAMPLE 78:** slowly

\[
\begin{align*}
4 & \quad * \\
5 & \quad 3 \\
1 & \quad 1
\end{align*}
\]

Ex. 79 (on page 78) gives two more illustrations of musical shorthand. On the second line of music, you see two double bars with dots facing each other. The second of these (with dots on the left), as you have already seen, means to repeat the section of music just before it. The first double bar with dots (on the right), in fact, tells you where to start the repeat. Thus you don’t go all the way back to the beginning of the piece, but instead, start repeating at this "reverse" repeat symbol.

Above this first double bar with dots, you see the word "FINE". This is an Italian word (remember that Italian is our universal musical language) which means "END". It is pronounced "fee-nay". This point is actually the end of the piece!

At the double bar (repeat sign) which looks like the end of the piece, you will see the abbreviation "D.C. AL FINE". This is short for the Italian words "DA CAPO AL FINE (fee-nay)", which means "from the head up to the end". The "head" refers to the beginning of the piece. All of this means, then, that after repeating the last four bars, you go all the way back to the beginning of the piece and play again everything up to the point marked "Fine".

Since there are two phrases in the first section of Ex. 79, the musical analysis of this piece would look like this: ABCCAB. Can you label the parts with the correct letters?

When you practice this piece, review your approach to practicing. Don’t forget to articulate at bar lines! Remember to breathe between phrases.

Finally, in Ex. 79, you will notice that there are some long notes placed on weak beats (beat 2 in the \(\frac{4}{4}\) meter). These create unexpected accents! This rhythmic devise is known as SYNCOPATION. You saw this before in Ex. 17 (page 24). The notes which are accented on weak beats are called SYNCOPATED NOTES, and should always be articulated.
EXAMPLE 79: not too slow

WATCH FINGERING!

* See text for explanation of these symbols, as well as of the repeats.

Here is another piece with flats. Notice the unusual accent in bar 7, left hand. Because only the first of each group of three beats is normally accented in this piece, the C in bar 7 feels like a syncopated note. Make the left hand here feel very light, so it will come off the keys easily in order to make the articulation. The right hand fingers should feel heavier, and glued to the keys!

EXAMPLE 80: casually
TECHNIC--CHANGING HAND POSITION

Ex. 81 illustrates one way of changing your hand position in the middle of a piece. If you were to play this whole piece in one 5-finger position, you would need to play two accidentals (B♭ and E♭) with the fifth finger and the thumb of the right hand. Instead, start much more comfortably with finger 4 on B♭, and then shift positions in the last bar. Simply move your whole hand down, putting the 4th finger on G. Notice that this shift is made at a point of articulation--there is no need to keep a smooth legato fingering across this bar line.

To practice this technic, try putting your 2nd finger (RH) on treble G (see first bar of Ex. 81). Then, without looking at the keyboard, move your hand down so that the 4th finger is on this same note. This maneuver is actually very easy for us to do--our bodies are designed to tell us how! You can practice this kind of movement with any combination of fingers: e.g. place the 5th finger on the note where the 3rd finger now is, etc. This will give you confidence that you can easily move from one position to another.

Now, in practicing Ex. 81, do the right hand alone until you are confident that the 4th finger in bar 4 will move to the position that the 2nd finger was in. Now try it with the left hand moving in contrary motion, from bar 3 to 4. You have just made a big technical advance!

EXAMPLE 81: cheerfully

WATCH THE CHANGE OF HAND POSITION!

LOOK OUT FOR REPETITIONS OF FLATS WITHIN A SINGLE MEASURE!

As you proceed, you will be introduced to many additional technics for changing your hand position in mid-stream!

LOWEST NOTES ON THE BASS STAFF

Let's add the rest of the notes to the bass staff. Starting with bass C in the second space, we can go down by steps. On the 2nd line we have B, and the first space is an A. Finally, on the very first line--the bottom of the whole Grand Staff--we have Bass G.
What will be the space note just under the staff (hanging below it)? (This will be F.) Again, if we want to add any more notes below this low F, we must use ledger lines.

**FIGURE 37. Lowest Notes on the Bass Staff (Landmarks are labelled LM)**

Fig. 37 shows these new notes. Practice drawing whole notes, half notes, quarter notes and eighths in this part of the staff, naming the notes as you go. Make steps and skips up and down the staff, and then play your notes on the keyboard.

Here is a piece using some of these new notes:

**EXAMPLE 82: Moderate tempo**
Here is a piece that you will remember (Ex. 77, page 75), with a BASS LINE (single line for the left hand) added. *Skill and Style* has a section that shows you how to add such a bass line when you are given a tune in the treble clef. Practice the new bass line first, and then add the right hand part that you already know.

**EXAMPLE 83:**

```
<table>
<thead>
<tr>
<th>3</th>
<th>4</th>
<th>2</th>
<th>2</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>B</td>
<td>D</td>
<td>G</td>
<td>B</td>
</tr>
<tr>
<td>G</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

Half steps are squirmy, very slightly angularly.

```
<table>
<thead>
<tr>
<th>5</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>4</th>
<th>5</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>C</td>
<td>E</td>
<td>G</td>
<td>C</td>
<td>E</td>
<td>G</td>
</tr>
<tr>
<td>F</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

Whole steps can be plainly seen to have a little space between!

**LANDMARKS ON THE GRAND STAFF**

Now let's review all the notes on the Grand Staff (see Fig. 38). Now you know quite a large number of notes that are easy landmarks. Remember that you want to learn to read notes by interval (that is, by step or skip up or down) from these landmarks. The landmarks, reviewed below, are indicated in Figure 38.

```
<table>
<thead>
<tr>
<th>F</th>
<th>G</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
</table>
```

**FIGURE 38.** All Notes on the Grand Staff (Landmarks are labelled LM)
The landmarks in the treble clef are: Middle C in the center between the two staves; Treble G (2nd line on the treble staff); Treble C (3rd space, treble staff); High F (the very top line).

Going down from Middle C, we have the following additional landmarks in the bass clef: Bass F (4th line of the bass staff); Bass C (2nd space on the bass staff); and Bass G (the very bottom line).

Here is an exercise in finding the landmarks on the keyboard. Do them as fast you can, and be sure that you are in the correct octave on the keyboard.

**EXAMPLE 84:** Finding landmarks--be as quick as you can!

Two pieces follow which use notes that are landmarks, or that are a step (2nd) above or below each of the landmarks. As usual, you should work at the hands separately, naming the nearest landmark, and then the name of the note itself.

In Ex. 85, notice how your third finger crosses far over the fourth in the left hand, in order to change positions. Can you figure out where the second phrase of this piece begins?

In Ex. 86 notice the difference in the usage of your finger crossings in the two hands. In the LH, you just cross 1 over 2 and come back again to the original position. Later, in the RH, you cross 1 over 2, but now re-align your hand in a new position, with the 2nd finger now permanently on the F sharp. At the beginning of the second phrase, stretch to place your 3rd finger where 5 was. Don’t forget the key signature!

We actually do most of our reading of music by interval, starting in a known place on staff and keyboard and moving up or down by step or skip. However, even with thorough learning of landmarks and recognition of intervals, it is still important to be able to recognize each note on the staff at sight.

If a mistake occurs, you have to be able quickly to reorient yourself to the next note! Also, when large jumps are made, or when you move to a new line or start a new phrase, you need to be able to instantly recognize the new note out of context of preceding notes. For all these reasons, it is important to continue to work on note recognition apart from the landmarks (which you should now be able to identify easily).
EXAMPLE 85: Moderate tempo

WATCH CHANGE OF HAND POSITION!

EXAMPLE 86: quickly

Cross over and back!

Cross over to NEW POSITION!
Continue to name the notes of your pieces, as quickly as possible, before beginning to play. You can also drill yourself by writing notes on staff paper, with a clef sign in front of each note. These can be cut out and made into flash cards for practice (on the bus!—but even more importantly, at the keyboard!).

With all this effort, Figure 38 (page 81) still reveals a discouragingly large number of notes to learn! Here are a couple of other helpful aids in the mastery of the notes on the staff:

Figure 39 shows the "ACE" groups on the staff. There are just three of these, and as you can see, they are also symmetrically located. Try to get firmly in mind the appearance of A and C and E in bass and treble clefs—your recognition of the three landmark C's will make this easy. ACE's are of course a skip apart (you will soon learn that these intervals, from space to space or line to line, are THIRDS).

![FIGURE 39. "ACE" Groups on the Grand Staff](image)

After mastering the "ACE" groups, you can then move on to the "GBDF" groups. These are shown in Fig. 40. Again, you will find these symmetrically located on and between the staves. These two groups, once learned, will give you all the notes from the first line of the bass staff through the fifth line of the treble.

![FIGURE 40. "GBDF" Groups on the Grand Staff](image)
OUTLINING AS A METHOD OF PRACTICE

An excellent method of study, both for musical and technical reasons, is the OUTLINE. In a piece such as Ex. 88 (page 86) one tends to get overwhelmed by the number of notes, and "bogged down" in the struggle to achieve details. Practicing an outline--or sometimes several different ones--serves to give you a musical overview of the piece.

Details, in between the notes of your outline, can be filled in gradually as you master them. In this way, you, and your listeners, will always be aware of the essential character of the piece, and details appear in their proper perspective. Many details can even be omitted, in the interest of performing the piece without stumbling!

The technic of OUTLINING, as described here, should be used in the examples which follow. Outlining should begin with playing, in one hand only, the notes which appear on just the first beat of each measure. Do this a phrase at a time, hands separately. Then do the outline with the hands together. Plan your fingering so that you will eventually be able to put in all the notes. Try to do the outline at the tempo of your final performance--surprisingly, you will find that you actually hear the piece as it should sound.

Now begin to add some further details. For example, you might do the left hand with only the notes on the first and third beats, while preserving the first-beat-only outline on top. You can gradually add more and more detail, trying always to maintain the same tempo and spirit! Of course, you may need to stop and do some slow practice of the notes of the left hand on the second line of Ex. 88, for example. As soon as these are brought up to the correct tempo, they can be inserted into the whole piece.

Use your imagination with outlining, seeing how best to capture the essence of a new piece with the fewest possible notes. In Ex. 87 (page 86), for instance, the left hand can be outlined with beats 1 and 3 (this usually works well for pieces in \( \frac{4}{4} \) meter). The simplest outlines will always involve the strongest beats, with upbeats and weaker beats being added gradually.

Apart from the wonderful musical perspective that an outline can give, it also is technically liberating. You learn from this to look ahead and be able to pick out important notes, without having to play everything in between!

The importance of this becomes immediately apparent in performance, when you make a mistake. (By the way, you should expect to make occasional mistakes--we all do!--no matter how well you think you have practiced your pieces.) A player who needs to plod from one note to the next is unable to drop the mistake and shift immediately to the next strong beat. Sometimes, when a mistake is made, all the rest of the notes in the phrase become misplaced, as the player is unable to produce any interval other than the steps or skips he has previously practiced. Working at a variety of outlines will entirely eliminate these purely technical problems.
EXAMPLE 87: slowly

WATCH FINGERING!

EXAMPLE 88: gaily WATCH OUT FOR KEY SIGNATURE! ALL B’S ARE FLAT!

SCRUNCH!

JUMP!

THIS PIECE IS DIFFICULT! DO PLENTY OF WORK WITH THE HANDS SEPARATELY.
When putting the hands together, try OUTLINING first one hand, then the other (see text)
Examples 87 and 88 are challenging pieces which review the low bass and upper treble notes. In Ex. 87 the right hand part demonstrates another method for extending the hand position, and avoiding the use of the thumb on a sharp. In this case, the 2nd finger simply crosses over the thumb in order to play the sharp (RH, bars 6 to 7), and then immediately returns to its previous position (straightening the hand out in the final measure so that the 2nd finger is again over A).

This method can be used with any long finger reaching over a shorter one in order to "catch" the corner of an accidental (e.g. 3 over 4 and back, 4 over 5 and back, in the left or right hand). You have, in fact, already used this technic going from one natural note to another in EX. 86 on page 83. Again, in that case, you extended your reach from five up to six notes.

In EX. 88 the change of hand position at bar 5 involves placing the 5th finger of the right hand on the key where the 2nd finger had been (review exercises on page 79).

To make the leap going into bar 9, where the right hand again changes position, extend your hand to reach the octave from Treble G (bar 8) to High G. (Review, with a few exercises, what an octave reach feels like.) This will naturally place the 4th finger over the High F in bar 9. As you do this, contract your hand again into the normal 5-finger position. Follow these directions carefully, and you should be able to play the whole of the right hand of Ex. 88 without ever looking at your hand!

**FIVE-FINGER PATTERNS**

Except for the last few pieces, we have kept our fingers in the basic five-finger position. Let us examine closely the musical patterns created by the 5 notes which occur under the 5 fingers.

Starting with the right hand alone, begin with C (the beginning of the musical alphabet) and play C - D - E - F - G. When these notes are played in sequence, they form a FIVE-FINGER PATTERN.

Five-finger patterns always go by step, and use the letters of the alphabet in sequence. These patterns, as you will see later on (see PLAYING WITH THE ELEMENTS), actually form the first 5 notes of a SCALE. You should think of the 5 notes as numbers 1 - 2 - 3 - 4 - 5, corresponding to the fingers of your right hand.

Now play the same five-finger pattern with your left hand. Play the same notes, perhaps an octave lower, again going by step. You should still think of these notes as 1 - 2 - 3 - 4 - 5 of the pattern. However, they don’t correspond to your left hand fingers! Your left hand is playing with fingers 5 - 4 - 3 - 2 - 1!

On the musical staff (see Fig. 41, page 88), since the notes go by step (2nds) in the sequence of the musical alphabet, they will go from line to space to line etc. throughout the pattern.
Let's look at this same five-finger pattern (from C) from the point of view of the kinds of steps that occur between each of the notes. C to D is a whole step (M2), and so is D to E. What about E to F? This is a half step (m2). Finally F to G is a whole step (M2). We can write this pattern as follows: W W H W. (Another way of writing this would be M2 M2 m2 M2.)

This pattern, W W H W, is called the MAJOR FIVE-FINGER PATTERN. As I said before, this pattern is the beginning of a SCALE. Other terms which represent the concept of a fixed set of intervals upon which a phrase or a piece is based are KEY and TONALITY. The pieces based on the C major five-finger pattern are said to be in the KEY OF C MAJOR. (Refer to PLAYING WITH THE ELEMENTS.)

A great many of your previous pieces are based on this 5-finger pattern beginning on C (the C MAJOR PATTERN). In some of these, not all the notes of the pattern have been used. Others do not use the notes in sequence, although only these and no other notes are used (they are still formed from this basic pattern, therefore).

Look at the following pieces which you already know: Examples 9-16, 20, 21 (RH only), 26, 31, 45, 46, 49-52, 56, 58, 62 (both hands), 67 (both hands), 69 (LH only), 77 (bars 5-8 only). Look at Ex. 82 (page 80). Most of the right hand part is in the C major 5-finger pattern. Where is the exception? What effect does this have on the piece? (Look in PLAYING WITH THE ELEMENTS, on the subject of TONICIZATION).

As you go through these pieces, try to think in terms of the NOTE NUMBERS within the pattern (C - D - E - F - G = 1 - 2 - 3 - 4 - 5). Thus, in Ex. 9 (page 18), think note numbers 1 2 3 2 / 1 - 1 -. Ex. 20 (page 27) begins with 3 2 1 3 / 2 2 2 -, and so on. These note numbers are known as SCALE DEGREES (see PLAYING WITH THE ELEMENTS, section on SCALES).
COMPARING DIFFERENT FIVE-FINGER PATTERNS

Let's try a five-finger pattern starting on a different note--G, for example. Starting with the right hand, put the first finger on the note G and obtain a sequence with the 5 fingers: G - A - B - C - D. This five-finger pattern will sound similar to the one that started on C. Try the same pattern in the left hand: G - A - B - C - D; this time with the fingers 5 - 4 - 3 - 2 - 1.

Look at the whole steps and half steps in this new five-finger pattern. G to A is a whole step; A to B a whole step; but B to C is only a half step; finally, C to D is another whole step. Again, the pattern is: W W H W. This is the G MAJOR 5-FINGER PATTERN. It sounds similar to the C major pattern, because the sequence of intervals is the same.

Examples 68 (page 65, left hand only) and 70 (page 67, right hand only) are based on the G major pattern. They are in the KEY OF G MAJOR. Again, think of these pieces in terms of note numbers (scale degrees). (G - A - B - C - D = 1 - 2 - 3 - 4 - 5). The first three notes of the left hand in Ex. 68 are thus 1 3 4; the first four notes of Ex. 70 (right hand) are 3 2 1 2.

You can construct a MAJOR FIVE-FINGER PATTERN starting on any note on the keyboard. But you must be careful that the intervals are always W W H W. Also, when naming the notes in such a pattern, you must remember to go alphabetically. You are not allowed to skip a letter, or to name the same letter more than once.

Try starting on the note A, for example. A whole step up from A is B. A whole step up from B is _?_ (C# -- watch out!). Next we need a half step from C#, which would be D. Finally, the last interval is a whole step, from D to E. The A major pattern is thus A - B - C# - D - E = 1 - 2 - 3 - 4 - 5. To illustrate, look at the right hand parts of Examples 41 (page 49) and 63 (page 61).

Try again, starting on F: The first whole step gives G, another whole step leads to A. Now we need a half step. This produces Bb (not A#, since we are not allowed to name the note A more than once!). Finally, the last whole step results in C (again, if we had used A#, that would have resulted in skipping a letter--not allowed!). The F major pattern is F - G - A - Bb - C = 1 - 2 - 3 - 4 - 5. Refer to Ex. 39 (page 39), and to the left hand parts of Examples 80 (page 78) and 88 (page 86).

Now that you know the rules of the game, try constructing major five-finger patterns that begin on other notes. Confirm that Ex. 32 (page 35) uses an E major pattern, Examples 38 and 43 (pp. 39 and 41, both hands) are based on the D major pattern, and Ex. 81 (page 79, right hand) uses the Eb major pattern! Look at the fingering of this last one, however. If you try to play it in 5-finger position, your hand will be very uncomfortable! Nevertheless, the sequence of intervals is still W W H W.
TRANSPOSITION—MOVING FROM ONE PATTERN TO ANOTHER

It is very easy to change from one major five-finger pattern to another (called TRANSPOSITION), because the note numbers are the same in each case. You simply have to make sure that the new pattern is still in the sequence W W H W.

Let's take some examples. The note numbers (scale degrees) of Ex. 20 (page 27), in C major, would be as follows: 3 2 1 3 / 2 2 2 - / 2 2 3 2 / 1 1 1 -. What notes would these numbers represent in G major? (B A G B / A A A - / A A B A / G G G -)

In D major? ( F# E D F# / E E E - / E E F# E / D D D -)

Try TRANSPOSING Ex. 26 (page 31) from C major to F major. Remember to think of the SCALE DEGREES or note numbers first, and then do the numbers in the new key. Can you transpose to B major? Be sure you have the right sequence of intervals in the new key! What about B major? Try transposing Ex. 38 (page 39) from D major to C major and again to the G major five-finger pattern.

ACCIDENTALS ON NATURAL KEYS

So far, all accidentals—sharps or flats—have involved the raised keys at the back of the keyboard. The note D, for example, can be raised a half step to D sharp on the raised key just to its right. D can be lowered to D flat, using the raised key just to its left. The same is true of G and A.

What happens if we want to raise or lower the note C? We can raise it a half step and arrive on the raised note C sharp (which also sometimes has the name D flat!). What happens if we want to lower C by a half step? The note immediately below or to the left of C is a natural! We already know the name of the note: B.

The only solution to this dilemma of lowering C a half step is to rename the B. When we think of it as C lowered by a half step, we call this natural key C FLAT (C♭). Notice then that even the naturals can sometimes get new names. Can you tell which natural keys are likely to get new names?

Let's look at the note B. We already know that lowering B a half step gives us B flat (sometimes called A sharp!). But when we want to raise B by a half step, we have to use the natural note C. We then call this note B SHARP (B#).

As you have already guessed, the other natural notes which commonly get new names are E and F. E can sometimes be called F flat, and F can sometimes be called E sharp. Occasionally, however, notes are raised or lowered by two half steps, resulting in DOUBLE SHARPS or DOUBLE FLATS. In such cases, still greater confusion can occur!
For example, B DOUBLE SHARP (using the symbol B\#\#) will end up on the key we normally call C sharp. C\# will be on the key usually referred to as D! Similarly, A DOUBLE FLAT (notated A_{bb}) will have to be played on the key which is normally G natural, etc.

Fortunately for the beginner, double sharps and flats normally only occur in pieces in what we call REMOTE KEYS. These are tonalities or scales which have many sharps or flats in the key signature to begin with. They are called "remote" because they are only distantly related to our central key of C major. For further information on this subject, consult the section on the "Circle of Fifths" in PLAYING WITH THE ELEMENTS.

Let’s try some pieces in which some natural keys have new names. If you find these difficult, remember that in harpsichord music, the naturals with new names are not used very often!

These examples illustrate some more ways to extend your hands beyond the basic five-finger position.

**EXAMPLE 89:**

STRETCH OR fl

JUMP!

SHIFT HAND (4th finger where the 2nd had been)

Ex. 91 (next page) has a new time signature. There are six quarter note beats in each bar. This is an example of COMPOUND TIME (see Chapter VI). The principal accents come on beats 1 and 4. As a consequence, the 4th beat usually needs an articulation. Notice in the left hand of bar 7, how the fingering helps the articulation on this beat.
EXAMPLE 90:

SCRUNCH!

LEFT HAND TOO!

(Cross longer 3rd finger over shorter 4th, and bring it back.)

EXAMPLE 91:

NOTICE THE NEW AND UNUSUAL TIME SIGNATURE--WATCH ARTICULATIONS!

SCRUNCH!

STRETCH!

Cross 2nd finger over thumb and bring it back.

WATCH FINGERING!
NOTE VALUES--SIXTEENTH NOTES

The note values we have been learning have gotten progressively smaller. In fact, beginning with the largest value—the whole note—each new note value was half as long as the one before.

In theory, we can make note values indefinitely short. After eighth notes, the next value is the SIXTEENTH. Each sixteenth note is half the value of an eighth note. That means that two sixteenth notes equal the time of one eighth. When we have quarter note beats, there will be four sixteenth notes in each beat.

Single sixteenth notes look like eighth notes except that they have two flags, as follows: \( \text{\textbullet} \) or \( \text{\textbullet} \). If we want to connect sixteenth notes together, we make a double beam like this: \( \text{\textbullet---\textbullet} \), \( \text{\textbullet---\textbullet} \), \( \text{\textbullet---\textbullet} \).

Sometimes, we want to combine eighths and sixteenths, usually to have an entire quarter note beat included under one beam. We can do this by combining single and double beams to create various rhythmic patterns, like this: \( \text{\textbullet---\textbullet} \), \( \text{\textbullet---\textbullet} \), \( \text{\textbullet---\textbullet} \).

We can even combine a dotted eighth note with a sixteenth, as follows: \( \text{\textbullet.} \). Remember that the dot adds half the value to the note before it. This means that the dot has added the value of exactly one sixteenth note to the eighth. Remember that \( \text{\textbullet.} = \text{\textbullet} \).

The use of a tie to replace a dot, as illustrated above, is very useful when you are practicing dotted rhythms. This simple device can often help you to clearly understand a complicated rhythmic pattern.

To count sixteenth notes I recommend that you use the syllables ti-ri-ti-ri. This would represent four sixteenth notes, taking up the time of one quarter note beat. In counting, combinations of eighths and sixteenths can be counted as follows:

\[
\begin{align*}
\text{\textbullet---\textbullet} & = \text{ti-ri-ti-ri ta} \\
\text{\textbullet---\textbullet} & = \text{ti-- ti-ri ta or ti-(ri)-ti-ri ta} \\
\text{\textbullet---\textbullet} & = \text{ti-ri ti -- ta or ti-ri-ti-(ri) ta} \\
\text{\textbullet.} & = \text{ti-(ri-ti)-ri ta}
\end{align*}
\]
Be careful not to play the syllables included in parentheses. In the case of the dotted eighth and sixteenth, it is helpful to think of the sixteenth note as a quick *upbeat* to the following beat.

As you know, each note value has a corresponding rest. The SIXTEENTH NOTE REST looks like an eighth note rest but has two flags, like this: 🎵.

As I said above, we could make increasingly smaller note values almost indefinitely. In practice, nothing much shorter than SIXTY-FOURTH NOTES is ever used. For a look at these kinds of notes and a description of their usage (particularly in early music), see *SKILL AND STYLE*.

One very important concept: The use of small note values (or any other kind!) does not tell you anything about their *speed* or *tempo*. This is determined by the speed of the beats. This, in turn, is indicated by a tempo marking of some kind, or your own evaluation of the *character* of the piece. As a matter of fact, the occurrence of many notes of very small value in a piece is usually an indication that the *beats* are very slow (see *SKILL AND STYLE*).

**NOTE VALUES--TRIPLETS**

Sometimes we want to divide a note into *three* subunits instead of two. The general term for the new note value is TRIPLET.

Any kind of note can be divided in this manner. The most usual is the quarter note or the eighth note. When we divide a quarter note into three smaller notes, we end up with three EIGHTH NOTE TRIPLETs. These are written like this: 🎵 or 🎵. If we want to tie two of these eighth note triplets together, we write them as follows:

The eighth note can similarly be divided into three SIXTEENTH NOTE TRIPLETs. These look like this: 🎵 or 🎵.

In early music, triplets are used in a *decorative* or *ornamental* manner (see *SKILL AND STYLE*). However, you need to be able to count these and get them even. The syllables which will help you do this are "tri-pl-et".

Ex. 92 is a set of rhythmic exercises involving sixteenth notes and triplets. Practice *conducting* and "ta-ing" the rhythms. Do each rhythm in *each* hand, separately and then together. Switch hands with each exercise, so the right hand doesn’t always do all the work. Play these on your knees or a table at first, and then with single notes in each hand.
at the keyboard. DO NOT TRY TO PLAY THEM FAST! In each case, I have indicated how to "ta" the rhythm of the complicated right hand part.

Again, do not try to master all of these difficult rhythmic exercises before going on to other pages. Keep coming back to them, until you find that rhythms alone--no matter how complex--can be solved with relative ease.

**EXAMPLE 92:** RHYTHMIC EXERCISES--these are continued on the next pages

---

RH: ti--ri ti--ri ta ti-ri-ri / ti--ri ti-ri-ri ti-ri ti--ri ta

---

RH: ta ta ti-ri / ta ti-ri ti-ri-- / ta--(ti)-ti ti-ri ti-ri /ti-(ri-ti-)ri- ta ta /

(first line)
Ex. 92, continued

RH: ti-(ri-ti-)ri ti-(ri-ti-)ri / ti-ri-ri ti - ti / (first two bars only)

* Be sure to distinguish between the rhythm in measures 3, 4 and 8 from that in bar 10!
For the latter, remember that \( \frac{3}{4} \) , and count tri-pl-et.

RH "ta's" (first three bars and into the fourth downbeat):
tri-pl-let tri-pl-let / ta (ti-ti / ta ti-(ri-ti)-ri / ta
* What kind of note gets a beat with this time signature? (eighth) How would you conduct this meter? (like \( \frac{3}{4} \))


(to the end of the first line only)
The next few pieces have sixteenth notes in them. In Ex. 93, remember that each *dotted quarter note* is as long as *three eighth notes*. In the first complete measure, for example, the first two sixteenth notes don’t even start until halfway through the second beat of the measure! Count carefully, filling in as many counts (of small note values) as you need to in order to be sure that you wait long enough on the held notes or rests.

Watch out for key signatures! Mark in the sharps or flats if you need to.

**EXAMPLE 93:** "Hurry and Wait" very slow beats

![Musical staff notations with a fermata symbol indicated as "SCRUNCH!"]

Practice your "ta-ing" and conducting! Ex. 94 is quite long, but the different sections seem to be related to each other. I have marked some letters in the piece, to help you with the analysis of its musical form (review pp. 57 - 58). Other words to describe this process, which you should be working at in all your pieces, are MUSICAL ANALYSIS and FORMAL ANALYSIS (this is discussed in more detail in *PLAYING WITH THE ELEMENTS*).

Little *fragments* of melody *within phrases* are called MOTIVES. There are several motives in Ex. 94 which appear more than once. Examples of motives are the upbeat figures beginning each of the phrases. Can you find others?

There is also a new musical symbol in Ex. 94. This is called a FERMAITA, and it looks like this ♩ or this ♩. The fermatas in both hands appear twice in this piece, and they actually have different meanings!
The fermata at the end of phrase A’ means to hold the written notes somewhat longer than their normal values. You decide how long a wait is dramatic enough and not too long!

The fermatas at the end of the piece were used by early composers simply to indicate the end of the piece (in addition to or instead of a double bar). Probably you will want to hold these notes a little bit beyond their written value.

**EXAMPLE 94:** (Letters in parentheses are suggested for musical analysis)

![Example 94](image)

Ex. 95 (next page) is a new kind of musical form, called THEME AND VARIATIONS. In this particular piece, the theme has only one variation. Often there are a large number of them.

Try to simplify the variation, making an outline of it (see pages 85 and 86). You should come out with something very close to the original theme (here called "melody"). Be sure not to begin playing the theme too quickly, or you will have trouble keeping the same tempo (beats at the same speed!) in the variation.
You should be able to work out a good fingering for this piece, and to mark the ends of phrases in both parts (they should come out in the same place!).

**EXAMPLE 95:** MELODY AND VARIATION. Very slow. **YOU** mark the phrases!

**VARIATION**
(Compare downbeats, measure by measure with the theme, above.)

On the next page is an example with some triplets. Remember that these are to be viewed as a way of ORNAMENTING or DECORATING the melodic line. Notice that the third quarter note in the first full measure is part of a triplet figure.

It helps to *outline*—play first all the notes which come right on the four beats of each measure. Starting with the upbeat, you would thus play D, B, B, B, G, and A in the right hand. This would take you to the downbeat of the second full measure (don’t forget to always play through to a downbeat!). Mark the fingerings and phrasing in this piece (Ex. 96), and notice the key signature!
MELODIC AND HARMONIC INTERVALS

Remember that an interval is the *distance* between two tones or pitches. These can be notes on a keyboard, pitches that you sing, or notes as you see them on the staff. So far we have learned three intervals: the octave, the major 2nd, and the minor 2nd.

So far we have described intervals in terms of notes that follow one another *in sequence*. We refer to these intervals as MELODIC INTERVALS. This means that we are hearing them as they would occur in a melody or tune.

Now that you have lots of practice playing with hands together, you must also be aware that intervals can also refer to the sound of two notes played at the same time (*simultaneously*). The interval that results from playing two notes together is called a HARMONIC INTERVAL. HARMONY is the sound which results from playing notes together. The study of harmony is the study of the sequence of sounds so produced.

Be sure, as you progress in your study of harmony, that you always think of harmony in terms of sound! All too often, this aspect of music theory becomes a study of how to manipulate notes on the staff, on paper and away from your instrument. For more detailed information on these topics, consult the two supplementary volumes, *PLAYING WITH THE ELEMENTS* and *SKILL AND STYLE*.

Try playing the intervals you know--8ths, M2nds, m2nds--as harmonic intervals (that is, as two notes played at the same time). Think about the differences in the sounds of these intervals!
The *octave* (8th) has an OPEN sound. Sometimes it is hard to tell that two notes are actually playing (unless your harpsichord is out of tune!). This is the very simplest kind of sound an interval can have.

The *seconds*, on the other hand, have a "biting" sound. Played by themselves, out of any musical context, seconds may seem quite unpleasant! This kind of sound is called DISSONANT. Would you want to end a piece with this dissonant sound? (Sometimes this happens, in some 20th century music!). Can you distinguish between *major* and *minor* seconds? Both are dissonant, but m2's are even more tense and biting than M2’s.

Ask a friend or your teacher to play 8ths, and M2nds and m2nds for you—try to guess which is which. The octave should be easy! As you learn new intervals gradually, try to learn to recognize their sound, both MELODICALLY and HARMONICALLY. Can you hear these sounds in your pieces as you play them?

**MORE ON INTERVALS—THIRDS**

Now we’re going to look at another pair of intervals that also occurs in a large or small form (like major and minor 2nds. These intervals are called THIRDS (3rds). They can be defined as the *smallest skip* that you can have on the keyboard.

Thirds are represented by two *nonadjacent* letters of the alphabet (that is, not right next to each other, or not in sequence). For example, C - E (skipping D), or A - C (skipping B) are thirds. With thirds, you skip just *one* letter of the alphabet.

If you play a natural on the keyboard (such as C), and and then *skip* a natural, the following natural key will be a third away (E). Any pair of nonadjacent naturals, skipping just one, will be a third apart.

If you look at notes on a staff, you will find that 3rds are those that *skip* a line or a space. Think of thirds as LINE-LINE or SPACE-SPACE on the staff (in either direction).

If you start with the first space on the treble staff (F), skip the second line and go to the very next space (the second space), you will have written a 3rd: F - A. On the same staff, if you start on a line note such as treble G, skip the space above and go to the very next line (the third line), you also have a 3rd: G - B.

Of course 3rds (and any other intervals) can go in either direction on the keyboard and also on the staff. When they go up, we call them ASCENDING. When they go down, we say they are DESCENDING.

Find 3rds below F and G, or A and B on the staff and the keyboard. It is easier at the beginning, to think about the 3rds and other intervals going up. Soon you will be able to easily identify them in both directions.
Figure 42 shows 2nds and 3rds in various places on the Grand Staff. Both melodic and harmonic forms of these intervals are shown. Can you tell which is which? Play these intervals as written.

(Can you tell which are major and which minor? Which are melodic and which harmonic?)

\[ \text{FIGURE 42. 2nds and 3rds on the Grand Staff} \]

Let's look at the keyboard again, and play the 3rd, C - E. How many half steps are there? C - C# is 1; C# - D, 1; D - D# (or Eb) is 1; D# - E is 1. 1+1+1+1=4. There are 4 half steps in the 3rd between C and E.

Count the half steps between G and B, another 3rd. Again you should find that there are 4 half steps.

Play the notes C - E together (simultaneously). Play the notes G - B simultaneously (both together). Listen to the sound of this harmonic 3rd. This 3rd is called a MAJOR THIRD. Can you find other major 3rds among the naturals? (F - A)

Now try the 3rd from D - F. Count the half steps. D - D# is 1, D# - E is 1, E - F is 1. 1+1+1=3. Play this 3rd, playing D and F simultaneously. Does this sound like the 3rds you played above? This kind of a 3rd is called a MINOR THIRD. It consists of only 3 half steps.

How many minor 3rds can you find among the naturals? (E - G, A - C, B - D)

Practice writing all the 3rds you have learned so far on the grand staff. Notice that, like 2nds, you cannot tell by looking at the staff whether the 3rd is major or minor. You need to imagine the keyboard and to think about the number of half steps in each interval, in order to tell major and minor 3rds apart.
CHANGING THE SIZE OF THIRDS

Suppose you start with the note D and play the minor 3rd above (ascending): D - F. Do you think you could turn this into a major 3rd? What would you need to do in order to make minor D - F into a major 3rd that sounds like C - E?

You know that there are 3 half steps in a minor 3rd—if you could just add one more half step, you would have a major 3rd (= 4 half steps). How could you do that? Try playing the next note, a half step up from F. What note is this? (F#) Play D and F# together. LISTEN to the sound of this 3rd. It should sound like F - A, or C - E, or G - B. That is, it is a major 3rd.

Now try playing 3rds (major and minor) all over the keyboard, using sharps as well as naturals. Suppose, for example, you start on F# and want to go up a minor 3rd. Where will the next note be? (A) Suppose that you start on Db and want to go up a major 3rd. Where will the next note be? (F) Can you find a minor 3rd that goes from a sharp to a sharp? (D# - F#) Can you find a major 3rd that goes from a sharp to a sharp? (F# - A#)

Try going down a major 3rd from C (Ab --why?)!

REMEMBER when you name the notes in a major or a minor third, the musical alphabet needs to skip one letter only. That is why we say F# - A#, and not F# - Bb. That is why we say Bb - D, and not A# - D.

Have someone play major and minor 3rds for you on the keyboard. Listen to them when the notes are played one after the other (melodically), as well as when they are played together (harmonically). How would you characterize these two types of thirds?

The third is a lovely interval! It sounds restful, but complex enough to have a most interesting character! This type of interval is called CONSONANT. Can you distinguish this type of sound from that of the DISSONANT seconds and the OPEN octaves? The minor third has a rather sad character, while the major third sounds happy. Listen for these various sounds in your pieces.

The examples which follow use many 3rds. Can you find all of the 3rds? Remember to look for harmonic 3rds (between two parts sounding together), as well as melodic 3rds (going from one note to the next in a single part). What other intervals do you find in these pieces?

Ex. 97 illustrates COMPOUND THIRDS between the two hands. In the second measure, Bass G - Treble B is such an interval. G - B is a major third, but in this case
an entire octave intervenes. We could (and sometimes do) give this interval another number (TENTH). Usually it is more useful to think of it in terms of the smaller (SIMPLE) interval we already know.

Three or more notes played at the same time are called a CHORD, as you see in Ex. 97. Notice carefully, in this example, how the right hand changes its position (how many times?).

One more feature to be noticed in Ex. 97 are the SYNCOPATIONS. Remember that these are accents on beats which are normally weak and unaccented. The syncopated notes should be articulated in order to make them sound appropriately strong and forceful. (Review page 77, and Examples 17, page 24, and 79, page 78.)

**EXAMPLE 97:** Most of the HARMONIC THIRDS in this piece are COMPOUND (see text).

![Example 97](image-url)

The notes in the final measure form a CHORD. Playing the two notes TOGETHER in the left hand is a good exercise for weak fingers!
EXAMPLE 98: On the harpsichord, PARALLEL THIRDS in one hand are often played detached, and fingered as is the left hand of this piece.

Ex. 99 (page 107), is a piece in BINARY FORM. This is the most common musical form used in Baroque keyboard music. The vast majority of DANCE PIECES are binary. These pieces consist of two sections, sometimes called "first half" and "second half". These two "halves", however, are often of unequal length. In early French music, the "second half" of a binary piece was called the REPRISE (pronounced "ray-preez").

The first section of a binary piece ends with a repeat sign. As you know, you must go back to the beginning and play the section again. The second section is treated similarly, repeating from its beginning. This is marked with the "reverse" repeat sign that was described on page 77, with the dots to the right of the double bar.
EXAMPLE 99: Distinguish between HARMONIC and MELODIC major and minor thirds. Distinguish between COMPOUND and SIMPLE major and minor thirds.

Note change in both hand positions for second half

Color can be added here, then play the scale steps for you.
MINOR FIVE-FINGER PATTERNS

Try playing a five-finger pattern on the natural keys, starting with A or D. Remember to use the letters of the alphabet in sequence (A - B - C - D - E or D - E - F - G - A). Do these patterns sound the same as the major 5-finger patterns studied earlier? Indeed, they do not.

To discover what is "different" about the pattern starting on A, again look at the sequence of whole steps and half steps. A - B is a whole step; B - C is only a half step; C - D is a whole step; and D - E a whole step. Look at this pattern! This is W H W W.

What a difference it makes to move the position of the half step! Is this a surprise? Remember, that in the major five-finger pattern (starting on C or G) the half step is between numbers 3 and 4 in the pattern. In the new pattern beginning on A, the half step is between numbers 2 and 3.

The new pattern, starting on A and using only naturals, is called a MINOR FIVE-FINGER PATTERN. Remember, this pattern is: W H W W.

Can you figure out the whole and half step sequence for the pattern starting on D? This is also a minor pattern. Does it sound like the one starting with A? These are the first five notes of the D minor and A minor SCALES, respectively (see PLAYING WITH THE ELEMENTS).

Because the notes of the minor 5-finger pattern occur in alphabetical order--the note numbers or scale degrees are also the same as they are in the major pattern--the two kinds of patterns look just alike on the staff. It is up to us to figure out the INTERVAL CONTENT—that is, the sequence of major and minor intervals—that make up the pattern you see on the staff.

Notice that the first three notes of any five-finger pattern outline the interval of a 3rd. In the C major five-finger pattern, the notes 1 2 3 outline what kind of a 3rd? (Major) In the five-finger pattern starting on A, notes 1 2 3 outline what kind of a 3rd? (Minor) The difference between the major and minor patterns is just this difference in the third note of the pattern: that is, whether the interval formed by scale degrees 1 - 3 forms a major or a minor 3rd.

Quite a few of your earlier pieces are based on minor five-finger patterns. These include:

A minor--Ex 73 (p. 69), RH
D minor--Examples 25 (p. 31), 35 (p. 36), 37 (p. 38), 48 (p. 45)
E minor--Examples 24 (p. 31), 71 (p. 67), RH only
G minor--Ex. 87 (p. 86), LH
B minor--Ex. 74 (p. 70), RH
C minor--Examples 78 (p. 77), LH, and 79 (p. 78), LH
Before playing the melodies in these different patterns, try constructing the pattern for yourself, using the sequence W H W W. For example, C minor will be: C - D - Eb - F - G (remember about using each letter once and only once, without skipping any!). Again, as you play, think in terms of the note numbers or scale degrees as you go along.

Can you transpose any of these melodies from one minor pattern to another? Use the same technic that you used in transposing major patterns: simply think in terms of note numbers, and move your hand to the new five-finger position. Just be sure when you do so, that you are fingering a new minor pattern, with the sequence W H W W.

How does the sound of these minor pieces compare with those in major? Do the minor ones sound sad or happy? Serious or carefree? Think about the way in which these feelings are expressed in musical terms.

TRANSPOSING FROM MAJOR TO MINOR PATTERNS

Can you guess how to make a major five-finger pattern minor? Remember that the important scale degree in this transition is number 3! Starting on C, the major pattern goes: C - D - E - F - G. To change this to minor, simply lower the 3rd degree--E--by a half step (to Eb ). This changes that important skip, from 1 to 3, from a major to a minor third. Confirm the fact that C - D - Eb - F - G is a minor pattern, (W H W W).

It is just as easy to go the other way, from minor to major. Start on D, for example, with a D minor pattern (D - E - F - G - A). To change this to a major pattern, you need to raise the 3rd degree by a half step! This results in D - E - F# - G - A --W W H W!

Now try playing different major and minor patterns, starting with all different notes on your keyboard, and changing from one to the other. Try also to transpose one of your major pieces into a minor one! Remember about note number 3--it will have to be lowered a half step every time you come to it. Can you also take a minor piece and change it into major? (Raise every 3rd degree a half step.) How does this change the character of the pieces?

TECHNIC--USING THE 5-FINGER PATTERNS

The five-finger position and five-finger patterns are of the greatest importance in learning to use our hands on the keyboard. It is helpful to devise some exercises to become even more familiar with both the position and the patterns.

Put your right hand in the five-finger position (on naturals only), beginning on G. This is G major. Try playing the following sequences of fingers: 1 3 5 3 1; 1 3 5 4 2 1;
1 4 2 5 1; 2 4 3 5 1; 4 5 3 2 1. In how many other ways can you think of playing these 5 notes with 5 fingers?

Familiarize yourself with the notes under each finger. Starting with the right hand on G, what note is under the 3rd finger? What note is under the 5th finger? What note is under 2? Under 4? Under 1?

Now change your right hand to the C major position, 1 on C. What note is under 4? What note is under 2? What is under 5? Under 3? Try this again in A minor starting with 1 on A. What note is under 3? Under 2? 5? 4?

Now try similar exercises, starting with the left hand on a low G. (Write this on the staff, bottom line.) Try playing the following sequences: 5 3 1 3 5; 4 2 3 5; 1 3 2 4 5. Think up as many of these patterns as you can, using the 5 fingers of your left hand.

Again with the left hand finger 5 on G, what note is under 2? What note is under 3? Under 1? Under 4? Try this again with your left hand in the C major five-finger position. With finger 5 on C (below middle C), what note is under 3? Under 2? 4? Under 1? Try again with an A minor pattern, starting on the A a step above Bass G. Again, think of which notes are under finger 2, finger 4, finger 1, and so on.

You have probably noticed, while doing these exercises, that some of your fingers are weaker than others. Did you find that fingers 4 and 5 of both hands are especially weak? This is true for everybody!

Here are some exercises, using five-finger patterns, which will help strengthen these weak fingers. Play them one hand at a time, keeping your hand in any five-finger position. Play each group of numbers several times in a row, keeping a steady beat. Move to a different five-finger position and play again. Repeat in the right hand and in the left hand. Begin slowly, and play very evenly, gradually increasing your speed as your fingers become more controlled.

1 3 5 4 5 4 3 - 5 -
1 5 4 3 4 5 3 -
5 4 5 4 3 4 3 4 5 -
4 3 4 3 4 5 4 5 3 -
2 3 4 3 5 4 3 -
1 4 5 4 5 4 5 4 1 3 4 3 4 3 4 3 1 3 4 5 1 - (add 5 - in left hand)

Be sure, when you work at these exercises, that you use five-finger patterns with sharps and flats as well as naturals. You can undoubtedly design many more exercises of this nature to help strengthen and gain control of your weakest fingers. Work at your weakest fingers—they will not be the same ones for every player!

Remember, when playing on sharps (or flats!) to reach back for the corner of the sharp by extending your finger (review Figure 12 on page 9). Try to avoid moving your whole hand up among the sharps. Think of them as a dangerous forest! When you finish
with a sharp, scurry back to the basic five-finger position on the front ends of the natural keys!

The next few pieces are designed to exercise some of the weak fingers of your two hands. Watch the key signature in Ex. 100! Is this piece major or minor? Notice how the shifts in hand position are made in each hand.

**EXAMPLE 100:**

Ex. 101 (page 112) is another binary piece. This one has an extra repeat at the end known to the French as a PETITE REPRISE (pronounced "pe-teet ray-preez") (this means a "little" reprise, or second half).

The petite reprise is indicated with yet another musical symbol! The funny looking sign which you see at the end occurs half way through the second section as well. This sign is called a SEGNO (pronounced "sain-yo"), which is the Italian word for "sign". The instruction DAL SEGNO (meaning "to the sign") tells you to take a repeat from the first sign up to the second. In a binary piece, you go DAL SEGNO only after the normal repeat of the entire second half.

Be sure that the second measure (which has relatively few notes) is the same speed as the first! Add some "ti-ri-ri-ri’s" to your count.
EXAMPLE 101:

Note the SIGN (SEGNO) for the PETITE REPRISE. Go back to the sign after one full repeat.

Another way to write a binary piece is seen in Ex. 102. Here the first "half" or section has two possible endings, known as the "FIRST and SECOND ENDINGS". As the name implies, ending No. 1 is used the first time, to go back to the beginning. Ending No. 2 is used after repeating once, and will go on to the second section. Don't forget to skip the first ending when coming through the second time! Alternate endings of this type can occur at any repeat.
EXAMPLE 102: Sprightly. Watch for PARALLEL and CONTRARY motion!

Notice the SYNCOPATIONS in measures 2, 4, and 10.

See text for use of first and second endings.

Finger numbers have been added for you. Can you tell where to STRETCH or SCRUNCH your fingers to change hand positions?
EXAMPLE 103:  Watch the key signature!
Distinguish simple eighth notes from TRIPLETs.

Try using different combinations of articulations and slurs in the faster notes of Examples 100 - 103. To illustrate what I mean, Ex. 102a illustrates the first measure of Ex. 102 (page 113) with a variety of articulations. Practicing in this way will give you control over all your fingers, as well as introducing different TEXTURES into your music!

EXAMPLE 102a:  Different ways of articulating Bar 1 of Ex. 102
Ex. 104 (pp. 116 - 117) introduces still another musical form, the RONDEAU. This word is pronounced "RONDO", and in fact was spelled that way by the Italians! The RONDEAU was very common in 18th century French music.

This form consists of a single section, which is repeated, called the GRAND COUPLET (pronounced "grahnd coo-play"). After repeating this (we can abbreviate it as G.C.), you go to a second section. This second section, confusingly, is called the "FIRST COUPLET"!

The First Couplet is not repeated. Instead, you take a "DAL SEGNO" (here abbreviated "D.S."), which takes you all the way back to the beginning of the Grand Couplet. The directions at the DAL SEGNO tell you to go "al FINE" (= "fee-nay"), or to the end of the piece, which (eventually!) will be at the end of the G.C. Do not repeat the G.C. at this time!

After arriving at "Fine", skip the First Couplet and go on to the Second Couplet. Play through this once, and again you are directed to return to the SEGNO and once more play through the Grand Couplet up to the end, or Fine. Keep the same tempo throughout the entire piece, unless directed otherwise. Many Rondeaux (the plural is pronounced "ron-doze") have a great many couplets--the Grand Couplet is always sandwiched in between each of them.

Notice the time signature in this piece. This is an example of COMPOUND TIME (see Chapter VI) in which the beat is a dotted quarter note. Play each of the groups of three eighths legato, and articulate between them. In the 2nd Couplet, count "ti-ti-ti" or even "tri-pl-et" for each dotted quarter note, to help you keep the same speed.

Turn the page for this longer piece, which takes up two pages (116 and 117).
EXAMPLE 104: RONDEAU (see preceding text for explanation of this musical form)

"Grand Couplet"

SCRUNCH

Repeat only once

"1st Couplet" (Skip this after second time through the G.C., go on to 2nd Couplet.)
Continuation of Ex. 104

"2nd Couplet"

D.S. ∞ al FINE
CHAPTER VI. EXPLORING NOTES BEYOND THE STAFF

THE LOWEST NOTES BELOW THE BASS STAFF

The lowest note on the bass staff, which you know from Figure 37 (page 80) is LOW F. How many notes does your harpsichord have below Low F? On some harpsichords there are only five. On some harpsichords there may be a full octave from Low F to the LOWEST F.

All of these notes must be written on or around ledger lines below the bass staff. The first ledger line will be E. Figure 43 shows the ledger lines and associated notes all the way down to the Lowest F.

What is the lowest note on your harpsichord? Mark that as a landmark (LM).

FIGURE 43. Lowest Notes below the Bass Staff--Lowest ACE Group

The landmarks below the bass staff include the LOWEST C (second ledger line) and the very lowest note on your harpsichord. You should also learn the appearance of the very lowest ACE group, shown in Figure 43.

Draw a bass clef on your staff paper and practice writing these low ledger lines and their associated notes. Try writing the BASS LINE of Ex. 88 (page 86) an octave below where it was originally written. (A BASS LINE is the melody formed by the very lowest notes of a piece—in this case equivalent to the left hand part.)

The pieces which follow use these new notes. Since harpsichords are not all alike, you may not have all these notes on your instrument. In Examples 106 - 108, play an octave higher if your keyboard does not include all the notes. You should practice reading the low bass notes (even if they are not on your keyboard) in order to learn them. You may have to play on someone else's harpsichord some day!
In Ex. 105 notice that the right hand does not begin in the treble clef! Also watch out for changes of clef during the piece! This does happen frequently when the right hand notes are placed low on the keyboard—notice how many of them are below middle C.

**EXAMPLE 105:** LOOK OUT for the clefs in the right hand part!

Observe finger changes on one note, changing hand positions

![MUSIC SHEET](image)

In **SKILL AND STYLE**, you will learn that early musicians changed clefs very often in order to avoid ledger lines in the music. Try writing the right hand part of Ex. 105 all in the treble clef, using ledger lines instead of clef changes. Is this easier or harder to read and write?

Practice the hands separately in Ex. 105. Notice the number of different ways in which the hand positions are changed in the right hand part. Can you describe these ways? You change fingers on a single note; you scrunch the fingers together to achieve a new position; you stretch the fingers further apart to change position; you let the long third finger leap over the thumb, bringing your hand (after straightening it out) into a new five-finger position.

Notice, in this example, that the bass in the last line remains on the same note for three full measures! This is called a **PEDAL POINT** (sometimes called **ORGAN POINT**). The harmony above this single note is changing, but the repeated bass note (the all-important fifth note of the scale, or the **DOMINANT**) signals to the listener that the music is about to come to a close. (Read about this in **PLAYING WITH THE ELEMENTS**.)
In Ex. 106 the $B_b$ of the key signature (for the key of F major) is cancelled in two of the measures. The introduction of the B natural causes us to think momentarily in a new key or tonality—in this case, the key of C major. (In **PLAYING WITH THE ELEMENTS** you will learn that the note C, the fifth degree of the scale of F major, is of great significance as the DOMINANT of the key.) Making the C temporarily into a TONIC or first degree (first note) of a new scale (having no $B_b$) is called TONICIZATION. Thus in bars 7 - 8 and 12 - 13, C has been TONICIZED. Notice that the immediate introduction of the $B_b$ brings you right back to F major.

**EXAMPLE 106:**

Ex. 107 is in a different key or tonality—this time, G major. At the end of the first line, as well as the end of the bottom line, the fifth degree (DOMINANT) of this scale—D—is also tonicized. You can tell when this happens, with the introduction of a C#, which is not in the original key.
The next piece, Ex. 108, also changes to a different key in the middle. Here the change is much more extensive than the tonicization, as we saw in Examples 106 and 107. When the change of key is more than momentary, we call it a modulation.

In Ex. 108, the piece, which is in the key of E minor, modulates to D major. This is a relatively distant tonality (that is, not very closely related to the original key). In this case, the key of D major begins to be introduced in bar 6. E minor is not clearly re-established until nearly the end of the last line.
EXAMPLE 108:

This piece starts in E minor

```
\[ \begin{aligned}
\text{move RH} \\
1 & 2 & 1 & 2 \\
\end{aligned} \]
```

modulation to D major

```
\[ \begin{aligned}
\text{move RH up} \\
4 & 4 & 4 & 4 \\
\end{aligned} \]
```

moves back to E minor here

TOUCH--OVERLEGATO

Besides the varieties of legato (slurred) and detached or articulated touch, there is another way in which notes can be connected by means of sound and touch. This is called OVERLEGATO. With overlegato, the notes are allowed to overlap by means of deliberately holding one sound over into the next one. This is achieved by holding down one key while playing the next note.

Try doing this with some notes in any five-finger pattern. Observe that you can overlap a great deal, holding several notes down together. Or you can just barely extend a slur or true legato to produce a slight blurring of sound between the first and second note.
Listen carefully to the degree of blurring or smearing of sound that you are making, and try to gain control of this sound with your fingers.

The use of overlegato results in the sounding of two or more notes in *harmony* (that is, simultaneously), even when they have been written *melodically*—that is, in sequence. There are many occasions when this blurred mixture of two or more sounds is desirable. Overlegato is used very frequently when playing notes which, together, would form CHORDS. CHORDS are three or more notes sounded simultaneously. The notes 1, 3 and 5 of any five-finger pattern are commonly played together in this manner. When written in sequence, they are called BROKEN CHORDS or ARPEGGIOS ("are-pej-jee-ohs"). (See *PLAYING WITH THE ELEMENTS*.)

Overlegato is indicated in music by a slur of indefinite length, which goes under or over two or more notes which appear in sequence. Figure 44 shows examples of such slurs. Sometimes the overlegato sound is written out in a combination of note values and slurs, as also indicated at the end of Figure 44.

![FIGURE 44. Overlegato on the Staff](image)

Remember, overlegato is used in very special places. Be careful not to do it by accident! Listen carefully! The following two pieces use this special kind of touch. You might try cautiously adding it in some other pieces as well, even if it is not specifically indicated.

Notice how the overlegato softens the notes under the slur, and blurs their beginnings and endings. Experiment to discover where this sounds nice! Notice, in Ex. 109 (page 124), that the written overlegato is confined to the BROKEN CHORDS (see above) at the ends of phrases.

The degree to which the overlegato touch is useful depends a lot on the resonance of your particular instrument. You need also to experiment with the high and low notes of your instrument—the low ones will blur together to a much greater extent than the high ones. It will even make a difference how many people are in the room while you are
playing! Try to develop a really sensitive ear for the sounds you are producing, how they relate to each other, and how they change with changing conditions.

Examples 109 and 110 are PRELUDES. You will learn much more about these and other kinds of pieces in *SKILL AND STYLE*. A Prelude is an introductory piece, meaning that it is usually followed by one or more other pieces in the same key or tonality. These two pieces are both in D major. Can you find any other D major pieces that might go well with them?

**EXAMPLE 109:** Little Prelude

In the next Example (110), try playing and writing the piece with the hands up an octave, and down an octave. Be aware of overlegato and of ordinary legato! Notice where one plays legato across a bar line—an unusual feature! Notice also, that although it looks similar, this is not a binary piece (the second "half" is not repeated).
The highest note on the treble staff is High G (Fig. 34, p. 69). To go above this we need to add ledger lines. How many notes are there on your harpsichord above High G? Many will have seven notes. A very few will have a full octave. Most large harpsichords end on the HIGHEST F. Figure 45 (page 126) shows these notes all the way up to the Highest G.

The HIGHEST C (second ledger line above the staff) is another important landmark. Make the highest note on your harpsichord be another landmark. Also learn the highest ACE group in this region. Do you have a Highest E?

Figure 46 (page 126) shows the Grand Staff with all the ACE groups and all the C's. Notice how symmetrical the five C's look on the Grand Staff. These are your most important landmarks.

Practice writing the notes above the treble staff. Also write the top line (right hand part) of Ex. 88 (page 86) an octave higher than it was originally written.
What is the highest note on your harpsichord? Mark this as a landmark (LM).

**FIGURE 45.** Highest Notes above the Treble Staff

The next few pieces use these new notes. In Examples 112 - 114, if the notes go above the top note of your harpsichord, play the entire right hand an octave lower. We often have to do this (and to accommodate the low bass as well) when we come to pieces which extend beyond the range of our particular instrument. In Ex. 111 notice that the entire left hand is in the treble clef!
The next piece, Ex. 113, modulates into D minor. This is a key which is closely related to the key of the piece, F major. It actually has the same key signature (Bb), and is called the RELATIVE MINOR. Consult \textit{PLAYING WITH THE ELEMENTS} for more information on this point. Can you hear (and see) where this happens in Ex. 113?
In Ex. 114, there are four sharps (key of E major)! Look at the key signature. The notes which will be sharp are F#, C#, G#, and D#. Can you remember to use the sharp for each of these as you come to them? For this first time, don’t be afraid to write in a sharp sign before each of those notes, just to remind yourself!
EXAMPLE 114: Sprightly

LOOK OUT FOR THIS KEY SIGNATURE! What notes are sharp?

TOUCH--"TEXTURAL" ARTICULATIONS

So far, you have learned to make articulations which clarify the strong beats within the meter. These articulations occur before the first beat of every measure (at the bar line), and at other strong beats within each measure. (Go back and review the strong and weak beats of different meters as described on pages 53 - 54.) The articulations which define the meter, I call ORGANIC.

Very often we want to play other notes in a detached manner. The addition of extra articulations serves to change the texture of the piece. When a piece is played with many
detached notes, it will sound lighter and brighter than it would if the touch were more legato. These articulations, which alter the character of the music, I call TEXTURAL.

You can add as many textural articulations as you like, but be sure that you don’t interfere with the strong and weak beats of the meter. The organic articulations must always be clear and distinct.

Remember, also, that articulations can be any size. Sometimes we make organic articulations that are so small that the listener has the impression of totally legato playing. (However small, these articulations must still be there, or the strong and weak beats of the meter will not be clear.) The texture of the piece can be changed radically by increasing the size of the articulations (that is, by shortening the note which comes before each one). Experiment with articulations of different sizes in your pieces. Deliberately alter their size in various ways. This will give you the finger control which will allow you to produce exactly the sound you want to hear.

Usually articulations are not indicated in the music. You already know how to add the organic ones, although a knowledge of dance types is required to understand some of the metrical accents needed in the different dance forms (see SKILL AND STYLE). Textural articulations are added according to your concept of the character of each piece. Allow yourself to experiment with these!

Two pieces follow in which textural articulations have been indicated by means of dots placed over the notes.

Ex. 115 is an example of a GAVOTTE. This is a graceful, piquant dance, and the rather detached manner of playing helps bring out its character. Not all gavottes should be treated in this way, however! This dance form is characterized by an initial upbeat of two quarter notes, comprising the third and fourth beat of the measure. Each phrase begins on such an upbeat, and ends on the second beat of the measure. Can you mark the phrases in this piece?

The left hand of mm. 8-12 (mm. is an abbreviation for "measures") in Ex. 115 is a DOMINANT PEDAL. Go back to page 119 and Ex. 105 for a discussion of PEDAL POINTS. Look also at Ex. 79 (second section) on page 78 for another example.

On page 132 is another kind of piece (Ex. 116), marked with textural articulations. Learn how these sound, and begin to add them into other pieces according to your taste. Be careful, as you play the shortened notes, not to make them too short. If the sound is choked off too quickly by the damper, the string will not develop a good tone or clear pitch. Listen carefully—the clarity of tone and pitch production will depend on the nature of your instrument, whether you are plucking a high or a low string, and the acoustics of the room.
EXAMPLE 115: Gavotte

MORE ON METER--COMPOUND TIME

Ex. 91 (page 92) is a piece in COMPOUND TIME. COMPOUND TIME is actually a group of meters in which the beat is a dotted note of some type. In Ex. 91, the beat is a dotted half note. This means that there are only two main beats in each measure.

In fact, one conducts $\frac{6}{4}$ meter exactly as though it were $\frac{2}{4}$ meter. As you can see, the result of this is that each beat is divided into three subunits. Does this sound familiar? You could accomplish a similar effect by counting in $\frac{2}{2}$ (two half note beats)
and dividing each beat into three quarter note triplets, as follows:

\[
\begin{align*}
\cdot & \quad \cdot \\
\cdot & \quad \cdot \\
\end{align*}
\]

\[
\begin{align*}
\cdot & \quad \cdot \\
\cdot & \quad \cdot \\
\end{align*}
\]

Remember, however, that triplets are *ornamental* notes and, at least in early music, are treated somewhat freely. Therefore, COMPOUND TIME is a more usual way of treating the subdivision of beats into three.

The most common version of compound time is \( \frac{3}{8} \) meter, in which the main beats are dotted quarter notes. In this meter, each beat is subdivided into three eighth notes (these are regular eighth notes, not triplets!).

Ex. 117 is a piece in \( \frac{3}{8} \) meter. The simple "triplet-like" rhythm of the subdivisions of each beat was characteristic of the Italian GIGAS. Such a piece is lively and exuberant even when, as in this case, it is in a minor key.

You should refer to *SKILL AND STYLE*, section on Dance Forms, when you begin pieces which are related to Baroque dances.

---

**EXAMPLE 116:** Notice the many ways of changing hand position.

\[
\begin{align*}
\text{and back} & \\
\end{align*}
\]

\[
\begin{align*}
\text{back} & \\
\end{align*}
\]
Sometimes the two beats of $\frac{6}{8}$ meter are divided into complicated subdivisions involving dotted eighths and sixteenths. Pieces with these complicated rhythms cannot (and should not) be played as fast as those with the simple "triplet" rhythm seen in Ex. 117.
EXAMPLE 118: French Gigue

In counting the dotted rhythms of Ex. 118, remember that \( \frac{3}{4} \) = \( \frac{3}{8} \). Thinking in terms of the tied version, you can count "ti (ti)-ri ti" for each subdivided
beat, remembering *not* to play on the second "ti". After doing this for a while, you can then start thinking of the "ri" syllable as a very quick upbeat to the following "ti". You will be able to play the rhythm successfully without counting at all, as long as you are careful to hold the first note of each beat long enough!

This type of dotted rhythm in $\frac{6}{8}$ meter is commonly found in the French *GIGUE*, which is the French version of the Italian dance mentioned above (see *SKILL AND STYLE*).

Ex. 118 presents a new technical problem—that of playing notes in one part of the hand (here the left) while simultaneously holding a note in the same hand. To accomplish this, lean toward, or put more weight on, the finger which is holding the note down. In this piece, the little finger of the left hand holds down a *pedal point* (Tonic, then Dominant) while the other fingers play two or more notes above the pedal.

An even more complex variety of $\frac{6}{8}$ meter is found in the "Scotch Snap", which occurs in English, Irish and Scotch *JIGS* (see Ex. 119 on page 136). This rhythmic figure looks like this: $\frac{\underline{J} \cdot J}{\underline{J} \cdot J}$. It is best learned as a "backward" version of the dotted rhythm used in Ex. 118, in which the shortest note comes first. Simply play the sixteenth note very quickly, and then hold the dotted eighth long enough. The third note of the group of three comes at the same time as it did in the French rhythm, above. Be sure to carefully observe the different patterns in Ex. 119—it is easy to trip up!

Other types of compound meter occur, somewhat less commonly than $\frac{6}{8}$ and $\frac{4}{4}$. These include $\frac{9}{8}$ (three dotted quarter note beats in each bar, conducted like $\frac{3}{4}$) and $\frac{12}{8}$ (four dotted quarter note beats in each bar, conducted like $\frac{4}{4}$). The latter has Strong-Weak-Medium-Weak beats just like $\frac{4}{4}$. Other note values besides dotted quarters and half notes can be used in compound meters, such as $\frac{12}{16}$ (four dotted eighth notes in each bar).

You have already had an illustration of $\frac{9}{8}$ meter in Ex. 104, pages 115 - 116.
EXAMPLE 119: Irish Jig

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CHAPTER VII. LARGER INTERVALS AND SCALES

INTERVALS--FIFTHS AND TRITONES

When in five-finger position, the intervals extending between your first and the 4th and 5th fingers are called FOURTHS and FIFTHS, respectively.

The easiest of these intervals to learn is the FIFTH. It corresponds to the distance between note numbers (scale degrees) 1 and 5 in any five-finger pattern. Starting on the note C, what note is a fifth above? (G). How many half steps are there in this interval? (Seven--watch out!)

Play some fifths on your keyboard. Play MELODIC FIFTHS (notes in sequence), and HARMONIC FIFTHS (notes played at the same time). Be sure there are always seven half steps in each one.

What kind of sound does this interval have? Like the octave, the fifth is an OPEN interval.

Also like the octave, there is only one kind of fifth (not two kinds, as in the case of 2nds and 3rds). This type of interval is called PERFECT (this means that there is only one size!). The abbreviation of an octave is P8, meaning "Perfect octave or eighth". The abbreviation for a fifth is P5, meaning "Perfect fifth".

Try playing a fifth up from each natural, starting with C. What happens when you start on the note B, and try to play the fifth above? The natural you will arrive at is F.

Play B to F as a melodic and as a harmonic interval. Doesn't this have a strange sound? Count the half steps in this interval (there are six). This strange interval, which is DISSONANT, is called a TRITONE.

How could we "correct" the tritone, in order to turn it into a perfect fifth? Since there are six half steps in the interval from B up to F, we need to add one more half step, raising the F to F#. B to F# is now a P5. Try it out--you should hear an open, rather than a harsh, dissonant sound.

Try starting on any note and going down a fifth on the keyboard. C goes to F below (7 half steps); B goes to E below, etc. Again, watch out when you start on Fl! Going down a fifth, you need to play Bb rather than B, in order to achieve a P5 and not a tritone! Always listen to the intervals you play, in order to avoid mistakes. When in doubt, count half steps!
Fifths are very easy to identify on the staff. You need to go from a space, skipping one space up or down, to another space. Or, if you start on a line, skip one line up or down, and end up on another line. Think SPACE-SPACE-SPACE or LINE-LINE-LINE. Verify this by writing on staff paper, the notes C to G, D to A, etc., that you already know are fifths.

In working with fifths, you must always watch out for the tritone! In early times, this interval was called the "Devil" in music. The appearance of notes on the staff will not distinguish between the "Devil" and a real fifth!

The following pieces use fifths, and sometimes tritones, in various ways. Ex. 120 has several fifths and tritones in the melody. Watch out for intervals that are not either! Try to identify all the intervals. When you come to one you don't know, figure out how many half steps it contains. By consulting PLAYING WITH THE ELEMENTS, see if you can't give each interval its proper name!

**EXAMPLE 120: smoothly**

Ex. 121 shows the use of harmonic intervals to ACCOMPANY a melody. Some of these intervals are fifths. Taken together with the notes of the right hand, these intervals form CHORDS (review pages 105 and 122). Chords (three or more notes) or intervals (two notes) used in this way add harmony, underlying or sometimes above a melody.

In Ex. 121, feel the sizes of each harmonic interval. How many of these can you identify at this stage? Can you find melodic and harmonic fifths in the right hand?
Practice each hand separately a lot. When you need to hold one finger and move others in the same hand, put your weight on the finger that is holding a note. This leaves the other fingers free to move. Compare this with the technic used in Ex. 118 (p. 134).

**EXAMPLE 121:**

![Music notation image]

Ex. 122 (page 140) shows another way of accompanying a melody. This involves a BROKEN CHORD (see page 122). However, you will observe that the same chord or arpeggiated figure accompanies the melody all the way through the entire piece! This type of repeated accompaniment is called an OSTINATO. Notice that this ostinato is based on the interval of a fifth. However, to play all of the figure, you will need to stretch your hand a bit to catch the note above.

**INTERVALS--FOURTHS; COMPLEMENTARY INTERVALS**

Like the fifth, the fourth (note numbers 1 to 4 in your five-finger pattern) is a PERFECT interval, meaning that there is only one size. You therefore abbreviate the fourth as P4 ("Perfect fourth").

Count the half steps in a perfect fourth, for example C up to F. You should find five half steps here. (It may be hard to remember that a fourth contains five half steps, while a fifth has seven!)
As you continue playing *fourths*, watch the one up from F. If you count five half steps, you will come to B♭, not B! (Of course you already know that number 4 in the F major or F minor pattern is B♭ and not B.) With the fourth, then, the addition of an
extra half step produces the dissonant TRITONE (the Devil!). Notice that this strange interval lies right in between the fourth and the fifth.

Like the fifth and the octave, the fourth is also an open interval. Play some fourths, fifths and octaves and compare their sounds. Notice that, as the interval gets smaller, it gets more complex. Sometimes fourths, especially when played in the low bass of your instrument, sound almost dissonant! Ask a friend to play these intervals for you. Try to tell them apart by ear.

Fourths on the staff are a bit trickier than fifths or thirds. If you start on a line, you need to go up or down another line, and then to continue on in the same direction to the space above or below. When starting on a space, skip a space and go on to the line above or below.

Like seconds, then, the fourth goes from a line to a space or a space to a line. Just remember that the fourth skips the line or space in between. Figure 47 shows some fourths and fifths on the staff, comparing their appearance. Practice writing these on your own staff paper.

You can see that fourths and fifths have a lot in common. In fact, these two intervals are called COMPLEMENTS. COMPLEMENTS are any two intervals which, taken together, add up to one octave! Have you ever counted the half steps in an octave? Try it now. (You should get 12.) Now add together the number of half steps in a fourth (5) plus a fifth (7). 5+7=12 (an octave)!

Look at these intervals on the keyboard. Start on any note, such as D, for example. A fourth above D is G, and a fifth above that G is D! This is exactly an octave above where you started.

Try combining a fourth and a fifth going the other way. A fourth below F is C, and a fifth below that C is F; exactly an octave below where you started.
with the fifth and then adding a fourth, going up or down from any note on the keyboard. Again, you should finish an octave above or below where you started. (Watch out for tritones!)

Can you guess what is the complement of a tritone? Another tritone! (6+6=12.) Figure 48 shows these complementary intervals on the staff.

![Complementary Intervals on the Staff.](image)

One further thing to notice about these complements: when you go up from note numbers 1 to 5, you are going up a fifth. However, going up from note 5 to the 1 above, you are rising a fourth. Remember, too, that in dropping down from 1 to the note number 5 which lies below, you are dropping only a fourth.

Practice these maneuvers from different starting notes. The concept that playing from 1 - 5 (down) or 5 - 1 (up) actually involves a fourth is often very hard to understand. (This is because we usually associate note number 5 with the fifth.) Remember that this results from the fact that fourths and fifths are COMPLEMENTS.

Ex. 123 uses fourths, among other intervals, melodically (in the melody).

Ex. 124 uses a number of intervals harmonically, as parts of chords. Some of these also are fourths. Practice the hands separately with care. Remember, in the right hand, to lean toward the thumb when playing other notes with fingers 2, 3, 4 or 5. When holding a note with the 5th finger while playing other notes, shift the weight of your hand toward the held note.

In Ex. 124, which of the harmonic intervals are fourths? How many other intervals can you recognize?
EXAMPLE 123: Melodic Fourths

Notice this characteristic ending in the bass. The notes form a FIFTH plus a FOURTH, and should be fingered as shown.

EXAMPLE 124: Harmonic intervals, with two parts in the right hand.

SCRUNCH!
TECHNIC--FINDING INTERVALS

You now know quite a large number of intervals: P8, P5, P4, M3, m3, M2, m2, and the tritone. Review in your mind how many half steps there are in each of these intervals. Also review the relationship between each interval and the note numbers or scale degrees of your five-finger patterns.

Now practice finding these intervals by feel up and down from different notes on the keyboard. Be sure to include some sharps as starting notes.

Practice writing these intervals on a staff. As you did with note names, you can cut out the intervals you have drawn and make flash cards to help you learn them by sight. As you work with the flash cards, say the names of the intervals and also play them on the keyboard. Being able to recognize intervals quickly will help your reading a great deal.

CONTINUED STUDY OF INTERVALS

Your theory guide--PLAYING WITH THE ELEMENTS--has a description of all the intervals that you know already. There are still some more SIMPLE INTERVALS between the fifth and the octave, as well as those larger than an octave (COMPOUND INTERVALS--review pages 104, 105). You can learn these new intervals in the same way that you have studied those you know so far.

First count the half steps in each interval, and try to memorize the number of half steps in each. Next play the interval in its melodic and harmonic forms. Try to learn the feel of each interval in relation to your basic five finger hand position. Some intervals involve a stretch, others a scrunch! Listen to the sound of each interval and decide whether it is open, consonant, or dissonant. Have a friend play them for you and try to identify them melodically and harmonically.

Practice writing each interval on the staff. Add new intervals to your collection of flash cards. Decide how you would distinguish between large and small (such as major and minor) forms of the same interval (remember to visualize the keyboard).

Finally, analyze the intervals which you find in your pieces. Name the melodic intervals as you go from one note to the next in each hand. Where you have two notes together, name the harmonic interval. Between the right and left hand, the interval is usually more than an octave in size (these are called COMPOUND INTERVALS). However, you can analyze them as though they were within a single octave. For example, Bass D to Treble G can be thought of as a fourth (it is actually called a COMPOUND FOURTH).
MORE ON METER--TRIPLE METERS; ALLA BREVE

So far, we have been exposed to the most common meters. Remember, $\frac{3}{4}$ meter is so ordinary that it is often called COMMON TIME (page 54)!

Although other meters may be less usual, it is important to understand how to deal with them when they do turn up. Remember that any kind of note value can represent the beat, and will be indicated as such by the bottom number of the time signature.

For example, with three beats in each measure (given by a "3" at the top of the time signature), we can have the following possible meters:

\[
\begin{align*}
3 & = \text{three whole note beats per measure} \\
2 & = \text{three half note beats per measure} \\
1 & = \text{three quarter note beats per measure (an old friend!)} \\
\frac{3}{8} & = \text{three eighth note beats per measure} \\
\frac{3}{16} & = \text{three sixteenth note beats per measure.}
\end{align*}
\]

In addition, there can be theoretically any number of beats per measure. However, if a number at the top of the time signature is a multiple of three (such as 6, 9, 12, etc.), then the time signature represents some kind of COMPOUND TIME (see pages 131-136, above). Signatures involving odd numbers of beats such as 5 or 7 are not likely to be encountered in early music, but are quite common in 20th century pieces.

Another kind of time signature is that for ALLA BREVE or "CUT TIME". This signature is written like the "C" of COMMON TIME, but with a line through it, like this: $\frac{\text{C}}{\text{C}}$. This meter is like $\frac{2}{2}$, in that one counts the half notes as beats, and there are two in the measure. *Alla breve* meter generally implies a faster tempo than $\frac{2}{2}$, however.

Refer to *SKILL AND STYLE* for more information regarding the uses of various meters in early music for the harpsichord.
EXAMPLE 125: Minuet, exhibiting a HEMIOLA.

HEMIOLA

An important aspect of any *triple meter* (\(\frac{3}{2}\), \(\frac{3}{4}\), etc.), as well as some *compound meters* (especially \(\frac{6}{4}\) and \(\frac{6}{8}\)), is the possibility of HEMIOLA. This is a rhythmic device in which the main accents are temporarily shifted to a different set of beats.

In \(\frac{3}{4}\) meter, the strong beats or principal accents normally come on the first beat of every measure (1 2 3 / 1 2 3 / etc.). Occasionally it is musically interesting to introduce new accents on the *third beat* of one measure, and on the *second beat* of the following measure, eliminating the normal accent on the downbeat of the second measure: 1 2 3 / 1 2 3 /.
This type of rhythmic shift is known as HEMIOLA. The result of the hemiola is that the two bars sound like a single measure of six beats, such as would occur in \( \frac{3}{2} \) meter! Thus \( 1 \ 2 \ 3 / \ 1 \ 2 \ 3 / \) becomes transformed into \( 1 \ 2 \ 3 \ 4 \ 5 \ 6 / ! \)

In Ex. 125, above, where the meter changes to \( \frac{3}{2} \), the second bar is marked with a dotted line. Be sure to mark the new accents (on beats 3 and 5 of the new, longer measures) with articulations. It is best to count across the barline, in six beats, at the points when the accents change. This will enable you to make your listeners feel the metrical change--as well as the change back--with the most effect.

Theoretically, hemiola could occur anywhere within a piece in triple or compound meter. In fact, however, it is characteristic of certain types of dances, such as the MINUET or the FRENCH COURANTE (see SKILL AND STYLE, section on DANCE FORMS). In most pieces, it occurs only at the ends of phrases (at CADENCES--see PLAYING WITH THE ELEMENTS), and often only at the very end of the piece. In the French Courante, however, hemiola characteristically occurs repeatedly throughout the piece.

Ex. 126 (page 148) is a piece in a different meter in which the hemiola occurs very frequently throughout. Observe that, in such a case, the meter becomes very unclear. This feature is a characteristic of the FRENCH COURANTE (see SKILL AND STYLE). In this piece, too, bars are marked with dotted lines where the meter changes to \( \frac{6}{2} \). Again, be sure to mark the new accents on beats 3 and 5 of the new, longer measures with articulations.

**TECHNIC--MOVING STILL FURTHER BEYOND FIVE FINGERS**

In many of your recent pieces, you have been asked to extend your reach beyond the basic five-finger position. As you have seen, there are a number of ways to do this.

Often the extension beyond five fingers is a temporary move. For example, you may have to stretch (or even jump!) to reach a larger interval (see Ex. 28, p. 33). This is called HAND EXTENSION. However, after playing the larger reach, you have brought your hand back to its original position.

Similarly, you have learned to cross a longer finger over a shorter one (2 over 1, or 3 over 4, for example) to gain one note beyond your five-finger position. In these cases you have again brought your hand quickly back to the original position. The following pieces used this technic: Examples 79 (p. 78), 87 (p. 86), 90 (p. 92), 91 (p. 92).

It is possible to use these methods to move to a new five-finger position. The 5-finger position should feel like the most natural way to hold your hand. The hand should remain in this basic position at all times, except when shifting positions or reaching for single far-away notes. The fingers should otherwise maintain contact with the keys.
EXAMPLE 126: Another piece with hemiola.

When using HAND EXTENSION to change positions, notice that your hand must contract again to place the fingers over the new notes. Ex. 88 (p. 86) showed the reach (or jump, depending on how big you are!) of a large interval (a minor seventh—see PLAYING WITH THE ELEMENTS). When the fifth finger played a high note (F), the hand contracted so as to bring it into a new five-finger position with the fifth finger on this high note.
Try some exercises using this method. Place your right hand in a C major five-finger pattern. Now reach or jump to the C an octave above, and use this high C as note number 5 of a new five-finger pattern. What will this one be? (F--although, since you haven't changed tonality or key, you do not need to introduce the B♭.)

Try the same exercise with the left hand, reaching the first finger up to the high C, and bringing the fifth finger into position over F.

Do a similar exercise the "other way". That is, from the RH C major pattern, reach down an octave to G, and contract your hand into a G major pattern with the first finger on G. What note will now lie under your fifth finger?

Repeat this exercise with the left hand. Try using different starting places for each hand. Without looking at the keyboard, can you visualize what notes will be at the top and the bottom of the new five-finger patterns?

Another method of changing hand positions is to scrunch the fingers closer together, and then extend (straighten) the hand out into a new five-finger position or pattern.

As an example, try changing from the RH five-finger pattern on C to one on the A below. You can scrunch the fingers together so that the fifth finger lies over E instead of G. Then extend the hand so that the first finger reaches A, a fifth below. The feel of the five-finger position should be very natural to you now, so that you do not have to look at your hand to make this extension.

Make up some additional exercises using this technic of scrunching the fingers, and extending to a new five-finger position.

The technic of crossing longer fingers over shorter ones can also be used to change hand positions. This can be done by crossing 2, or more often 3 or 4, over the thumb. When doing this to change hand positions, you need to straighten the hand into its new five-finger position.

For example, start with your RH in the C major five-finger pattern. Cross the third finger over the thumb, placing it on B. Now straighten the hand, leaving 3 on B, and find yourself in a new five-finger pattern. Which one? (G major) Make up some more exercises for the left and right hand using this technique. Try using 2, 3, and 4 for crossing.

This technic of crossing fingers over the thumb is used particularly when playing SCALES (see below).

It is also possible to simply pick up your hand and move it to a new five-finger position at any point of articulation in the music (see Examples 81, p. 79, and 89, p. 91).

Remember the technic used on page 79, where you learned to move your hand by placing one finger where a different one had been. This can be done without any attempt to preserve a legato touch. In fact, it is an excellent (and very musical) way in which to
produce articulations! Use your forearm to move your hand laterally along the keyboard. Try to keep your fingers in contact with the keys as much as possible during these maneuvers.

When writing your own fingerings into pieces, you must indicate the way in which you are changing your hand position. Always place a finger number over the note before you begin a change of hand position, and another one after the change to show the new position. As long as you remain in one five-finger position, it is not necessary or desirable to place finger numbers over any but the first note (see page 27, above).

**INTRODUCTION TO MAJOR SCALES**

A SCALE is a ladder by means of which we climb from any note to the octave above or below. This topic is covered in detail in *PLAYING WITH THE ELEMENTS.* Here we will talk only about MAJOR SCALES.

In a major scale, the ladder consists of seven notes. We have already learned five of these notes in the major five-finger patterns (see pages 87-89, above). The major scale is an extension of this five-finger pattern, continuing up the alphabet without skipping or repeating any letters. You only have two more notes to learn: SCALE DEGREES (note numbers) 6 and 7.

Major scales contain only seven different notes. After number 7, you start again on number 1, an octave higher.

Let’s link the last two notes of the major scales onto the major five-finger patterns that you already know. For example, the C major pattern ends on G (note number 5), and scale degrees 6 and 7 will be A and B, respectively.

Look at the intervals at the upper end of the scale. Scale degrees 5 to 6 (G - A) is a whole step; 6 to 7 (A - B) is a whole step; 7 to 1 (B - C) is a half step. The location of this final half step is of great importance.

Confirm that the entire scale consists of W W H W W W H.

Now try making another complete scale starting with a G major five-finger pattern. You need to add W W H at the top. The notes to be added will be E, F sharp (watch out!), and G.

In exploring major scales on the keyboard, you may find it convenient to divide the notes between your two hands. Obviously more than five fingers are needed to play an entire scale. In fact, to feel a sense of completeness about a scale, you will find you need to play *eight notes,* finishing on the note number 1 an octave above your starting place.

The best fingering to use for this is LH: 5 4 3 2 RH: 2 3 4 5. (See *PLAYING WITH THE ELEMENTS.*) Now try starting on different notes and construct major scales, naming the notes as you go. Be sure that each scale has W W H W W W H.
While consulting *PLAYING WITH THE ELEMENTS*, let's explore scales in a more systematic way. Start with C major. The notes which result in W W H W W W H are all naturals. Now go up a perfect fifth (see pages 137-138) from C, and begin a G major scale. Notice that you need to add an F#. (Remember about using each letter once and only once!--this is an F# and not a Gb ).

Try going up another P5, and construct a D major scale. The pattern of W W H W W W H results in the use of both F# and C#. Continue to go up by perfect fifths, constructing the A major and E major scales.

Sooner or later you will run out of notes on your harpsichord, if you continue to go up by leaps of a P5! Any time you want, you can go down by perfect fourths instead (do you remember about complements?--see pages 140-142 above).

Experiment will show that with each new scale you have to add a sharp on the 7th scale degree. At the same time, you have to keep the sharps that you used in the previous scale.

This reflects the fact that there is a systematic relationship between the scales. Theoretically, you could continue almost indefinitely with this scheme, although you would soon find yourself involved in DOUBLE SHARPS (see pages 90-91) and rather improbable looking scales! The theoretical relationship between the scales expressed here is summarized in a diagram called the CIRCLE OF FIFTHS. This is discussed in detail in *PLAYING WITH THE ELEMENTS*.

So far we have been going up by perfect fifths from a central note, C. This procedure takes us around the "sharp side" of the circle of fifths. You will also find a relationship between each scale going the other way--down by perfect fifths from central C, around the "flat side" of the circle.

Try going down a P5 from C, and constructing an F major scale. You already know that the F major five-finger pattern contains a Bb on scale degree 4. Confirm that the entire scale (W W H W W W H) requires no additional sharps or flats.

Continue to go down by fifths. Watch out! What is a P5 below F? (Bb) (How many half steps?) Confirm that with each new scale you need to add a flat on the 4th scale degree, while retaining the flats you have already added. Continue down by perfect fifths through Eb and Ab. Refer to *PLAYING WITH THE ELEMENTS* to see how these fit into the circle of fifths.
KEY SIGNATURES OF MAJOR SCALES

Much of what we have learned about major scales can be summarized in their KEY SIGNATURES. Refer back to pages 67, 68, and 76, where the concept of using a key signature was introduced. Remember that the placement of sharps or flats at the beginning of a piece instructs you to use the same sharps or flats throughout the whole piece (unless cancelled by a natural sign).

We can choose a key signature that will tell us which major scale we are using in our piece. If the piece is in G major, we put an F♯ in the key signature. If the piece is in A major, then F♯ C♯ G♯ are in the key signature. What is the key signature of E♭ major? (B♭ E♭ A♭)

Referring to PLAYING WITH THE ELEMENTS, learn the key signatures of the major keys around the "sharp side" of the circle of fifths as far as E major (four sharps = F♯, C♯, G♯, and D♯). Learn the key signatures around the "flat side" of the circle as far as A♭ major (four flats = B♭, E♭, A♭, and D♭). These will cover most of the keys used in Baroque music.

When we say that a piece of music is based on a certain scale, we mean that much of the piece (at least the beginning and the end) is built out of the notes of that scale. It is not necessary that all the notes of the scale are used, but simply enough of them for us to identify that scale. This is what is meant by being "in" a certain KEY or TONALITY.

It is not necessary to remain for an entire piece in the same tonality. As you have seen, music can MODULATE (change keys) into different tonalities, and back to the original scale by the end of the piece (see pages 119 - 121, as well as PLAYING WITH THE ELEMENTS).

For the beginner confronted with a key signature, it is permissable to write the necessary accidentals (sharps or flats) into the music. However, one should learn to think in terms of the scale or five-finger pattern represented by the key signature. Your scale practice (see below) will then make the sharps and flats seem "natural"!

TECHNIC--SCALE FINGERINGS

Sometimes you may need to play an entire major scale in one hand. The technic for doing this involves the technic of finger crossing learned above (see pages 147, 149).

In the right hand, the technic of going down the scale (DESCENDING) is similar to that of changing hand positions by crossing a long finger over the thumb. To descend the scale of C major, for example, the fingering will be: 5 4 3 2 1 3 2 1. Remember to straighten your hand out as soon as the 3 has crossed over 1 (onto E). Observe that in the
left hand, this procedure will apply to the scale as it ASCENDS (goes up). (See *PLAYING WITH THE ELEMENTS*.)

When starting with the thumb, as in the right hand going up, one has to reverse the fingering. It's a bit tricky! As you play numbers 1 2 3 of the scale, your thumb should start moving under the "tunnel" produced by the second and third fingers. You must *zip* the thumb under quickly enough so that it arrives on scale degree 4 just in time to play it! *Immediately* straighten the hand (into a five-finger position), getting the 2nd finger ready to play the 5th degree of the scale right on time. This same technic is used in the left hand going down.

*PLAYING WITH THE ELEMENTS* gives details of fingering for many scales. When you practice them, try to learn the structure of each scale. It is important to note that scale fingerings of this type are seldom used in early music. I therefore do not recommend endless practicing of scales. Practice just enough so that you are comfortable with a variety of scales, and feel familiar with each major tonality.
CHAPTER VIII. READ AND PRACTICE FOR PLEASURE

SIGHT PLAYING

Some simple pieces for SIGHT PLAYING follow, beginning with Ex. 127. This means that they are not for study and practice, but to see how well you can make them sound like real music right from the start! You should begin to acquire some simple keyboard music with which you can practice sight playing. It is fun to do, and you also need to develop this skill in order to enjoy playing in groups with other instrumentalists.

These pieces explore some major keys, using their key signatures. A couple of them change key temporarily. Can you tell where this happens? (Watch for the introduction of accidentals which are not in the key signature.)

With each piece, decide first of all what scale is used, and which sharps or flats you need to remember from the key signature. Be sure, also, to check the clef signs at the beginning—it is possible to be surprised by a left hand part in treble clef, etc.! From the time signature, figure out the kinds of notes which give the beats, and how many of them are in each measure.

Scan the music for difficult spots in the rhythm, and clap and "ta" these rhythms before you start. Also decide, before you play, what is the musical form of the piece. Are any sections repeated exactly? Do you have phrases repeated with some type of variation, or a new ending? Clearly your task will be greatly simplified if you know ahead of time what to expect.

Finally, scan the phrases to decide on fingerings. Remember to check the high and low notes in each phrase in each hand—can you play these in one five-finger position? What finger must begin in order to play all these notes? If you move out of five-finger position, how should you do it? By a stretch (what interval)? By scrunching and extending the hand to a new position, or by simply picking the hand up and moving it horizontally to a new place? Be prepared before you have to make these maneuvers!

Some fingerings have been added in the more difficult pieces to help you out. Try to decide, by examining these fingerings ahead of time, just what kind of technic is involved in changing position each time.

Now play each piece straight through, keeping a steady beat. Do not stop to fix any mistakes! Try to keep the music going all the way to the end, even if this means dropping almost everything but a simple outline on the downbeats. When you get to the end, start again, and see how much more you can fill in the second time. Do not practice these pieces, but just enjoy playing them through several times, and see how much fun it is!
EXAMPLE 127:

EXAMPLE 128:
Examples 130 - 137, which follow, have been taken from the Baroque harpsichord literature. They have been somewhat simplified from their original versions, but will give you a taste of the music written for your instrument during the period when it was most popular!
EXAMPLE 130: simplified from a piece in Elizabeth Roger's Virginal Book (1656)

Source: 15 Pieces from Elizabeth Roger's Virginal Book (Dawes, ed.), page 12, no. 15.
Copyright 1951 by Schott and Co., Ltd., London.
EXAMPLE 131: "The Emperor of Germany's March"
simplified from Jeremiah Clarke

EXAMPLE 132: Minuet--another piece by Jeremiah Clarke, simplified

Source: Jeremiah Clarke, Selected Works for Keyboard (Barsham, ed.), page 18, no. 23
Copyright Oxford University Press, 1975. Used by permission.
EXAMPLE 133: "The Canaries, or, the Hay"
a simplified piece from *Musick's Hand-Maid*

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EXAMPLE 134: A Sarabande, by Sandley
simplified from Musick’s Hand-Maid

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Used with permission by Galaxy Music Corporation, sole U.S. agent.
EXAMPLE 135: "The King's Delight"
simplified from Musick's Hand-Maid

Source: The First Part of Musick's Hand-Maid, published by John Playford in 1663
(Dart, ed.), page 12, no. 24.
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Used with permission by Galaxy Music Corporation, sole U.S. agent.
EXAMPLE 136: "Ayre", simplified from the second part of *Musick's Hand-Maid*

Source: The Second Part of Musick's Hand-Maid, revised and corrected by Henry Purcell in 1689 (Dart, ed.), page 1, no. 1.
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Used with Permission by Galaxy Music Corporation, sole U.S. Agent.
EXAMPLE 137: "Cibel", simplified from the Harpsichord or Spinnet Miscellany

MUSICAL TEXTURE--CONTRAPUNTAL AND HOMOPHONIC STYLES

The term TEXTURE has more than one meaning in music, and is somewhat difficult to define. Until now, I have used this term to refer to the sound quality produced on your instrument, resulting from the character of your touch (see pages 114, 129, 130). Another meaning of TEXTURE, referred to in this section, is the number of parts occurring at the same time, as well as the relationship of these parts to each other.

Keyboard music for two hands can be written in two very different styles. In one, two (or more) melodies occur simultaneously in two different parts. If the right and left hands are each playing an independent melodic line, we call this CONTRAPUNTAL STYLE. Advanced players learn to play from two to six independent parts at once!

Good examples of CONTRAPUNTAL MUSIC that you have encountered so far are Examples 120 (page 138), 123 (page 143), and 124 (page 143). Observe the relative independence of the parts--can you find other pieces that fit this description? The vast majority of pieces for harpsichord are to some degree contrapuntal.

EXAMPLE 138: A CONTRAPUNTAL PIECE--play the left hand alone and hear what a nice melody it makes!
Very often, contrapuntal music is also IMITATIVE. This means that a second voice "copies" something that the first voice has already played. Some typical imitative contrapuntal pieces are the CANON and the FUGUE. (See SKILL AND STYLE for a description of contrapuntal musical forms.) One of my students called these "copy-cat pieces", which is a good way to think of them.

The trick in playing contrapuntal music is to think of each part independently. The texture is basically horizontal, with each part flowing along each line from left to right on the page. You need also to make them sound flowing, with each line moving toward the end of its own phrase (the phrases may not actually end in the same place in each part!).

This is quite difficult to do! You need to play short segments of each VOICE (a voice is what we call each independent part), one at a time. Gradually put the parts together, trying to hear each one while they are both going at the same time! Be patient with yourself, and go back over this exercise many times until you really succeed. Success means that the piece will sound as though two people were playing in perfect ENSEMBLE (meaning "togetherness"). The ability to do this will open up worlds of wonderful harpsichord music for you!

EXAMPLE 139: Another contrapuntal piece. This one is also IMITATIVE.
The contrasting keyboard style is called HOMOPHONIC. In homophonic music one voice or part is dominant. The other parts ACCOMPANY this single melody. That means, these parts provide HARMONY (intervals or chords which combine to give the sounds of two or more pitches at once, without forming an independent melody or voice). The single line of melody can be in any part (top, bottom, or middle). Examples 121 (page 139) and 122 (page 140) illustrate the HOMOPHONIC STYLE of keyboard writing. Additional pieces in this style are presented below.

Although we speak of contrapuntal and homophonic music as contrasting styles or textures, harmony is still provided in contrapuntal music by the various parts which are played at once. The difference is that these parts which provide the harmony are at the same time singing an independent tune in contrapuntal pieces. In homophonic music, these parts are subordinate, and composed only to support the single line of melody.

In homophonic music you have to think vertically, from the bottom to the top of the Grand Staff. The tones which are heard at the same moment should be thought of as CHORDS, rather than as parts of separate melodies.

On the harpsichord, in order to sustain chords and to make the individual pitches clear, it is usual to not play the notes at exactly the same moment. This is true even if the notes are written directly on top of each other on the Grand Staff. This style of playing a chord is called ARPEGGIATION (a single chord played with the notes slightly separated is known as an ARPEGGIO).

Arpeggiation can be done in many different ways. For example, notes can be spaced closer together or farther apart. The arpeggiation will be more or less obvious (as we have seen in the case of articulations), depending on how quickly or slowly you "break" the individual chords.

The normal method of arpeggiation is to start at the bottom note of the chord, and to "break" the chord very slightly from the lowest note to the top. This means to start with the lowest note note right on the beat, and to play each higher note a tiny bit later. The delay of the upper notes should be so little that one is scarcely aware of it. Remember that the idea is to clarify the tones within the chord.

Arpeggiation will also serve to soften the touch, which will sound very harsh if all notes are plunked down at exactly the same moment. You will need to experiment a bit to achieve a nice effect.

Usually the melody note (you will need to figure out where that is!) is played on the beat, at the very same time as the BASS (meaning the very bottom note).

Ex. 140 (p. 168) is a CHORD PROGRESSION. This means a sequence of chords, as discussed in PLAYING WITH THE ELEMENTS. This will allow you to practice different kinds of arpeggiation. Ex. 140 is written in the bass clef, but you should try the exercise in each hand (it would be good practice to write the progression on the treble staff). See if you can invent a good fingering for your right hand. Play it one or two octaves higher than the written notes.
First play these chords with *no arpeggiation* (all the notes of each chord played at the same moment). Then try breaking the chords *slightly* from the bottom up. Next try breaking them so that the notes are quite far apart. Experiment with all different degrees of arpeggiation. Listen to the effect. Try to gain control over the sound of each chord.

**EXAMPLE 140:** A CHORD PROGRESSION--Practice ARPEGGIATING in various ways.

(After playing as written, try the progression in the right hand, one or two octaves higher.)

Arpeggiation can also involve breaking a chord *downward* (that is, playing the notes one after the other from top to bottom), or in various other arrangements. Sometimes, if the chord needs to be sustained (held) for a long time, some or all the notes can be repeated. Ex. 140a indicates some possible ways to rhythmically arpeggiate the progression played above. Experiment with others.

**EXAMPLE 140a:** The same progression--some different ways to arpeggiate the chords.
The following pieces illustrate the homophonic style. In Ex. 142, play the arpeggios in the "normal" manner (meaning a slight separation of the notes starting from the bottom). If you like, the final chord in the piece can be arpeggiated in a different or more elaborate way.

**EXAMPLE 141:** A HOMOPHONIC PIECE--Left hand chords give harmonic support to the melody.

Can you find any homophonic pieces among your earlier examples?
Examples 142 and 142a show you how solid chords are often spread out by the composer. You need to be able to recognize such broken chords as such in your music.

**EXAMPLE 142:** Another homophonic piece, with solid chords in the left hand. (These chords are *arpeggiated* in the next example, 142a.)
EXAMPLE 142a: The same piece, left hand chords BROKEN (ARPEGGIATED).

On the next page is another homophonic piece, this time with the melody in the bass. See if you can finger this piece yourself. Notice first where changes of hand position are necessary, and figure out how to accomplish them!
EXAMPLE 143: Another homophonic piece, with the MELODY in the BASS.
Finally, it should be pointed out that many pieces are neither clearly contrapuntal nor clearly homophonic, but consist of a mixture of the two styles. This is particularly true of many dance pieces—especially the slower varieties, such as ALLEMANDES and PAVANES (see SKILL AND STYLE).

Try to figure out what parts of any piece seem to consist of separate voices or melodies (contrapuntal), and where the notes are filling out and sustaining chords or harmonies (homophonic sections).

Finally, there are some types of pieces which consist only of chord progressions with no melody! (See SKILL AND STYLE, under PRELUDES).

TECHNIC--METHODS FOR PRACTICING DIFFICULT PASSAGES

Ex. 144 (pages 174-5) is a piece which contains some difficult PASSAGE WORK. These are fast passages, usually in sixteenth notes, which often look very formidable! How does one even begin to practice such a piece?

First of all, mark out the segments which are in five-finger position. If some of the fast notes come under weak fingers, such as 4 and 5, use the material in the piece to develop some exercises for these fingers. Such exercises are shown in Ex. 144a (p. 176).

Usually, you will want to maintain a smooth legato within groups of four sixteenth notes, or within each beat. Your fingering must be designed to make smooth connections between these notes.

Next, you need to plan the best means of changing from one five-finger position to another. If at all possible, do this at a point of articulation. Also, you may wish to change positions even when the notes still fall within your five fingers, in order to use the strongest fingers for the most difficult maneuvers. Sometimes this means stretching or scrunching, or otherwise changing hand position in places where this is not absolutely necessary. The greater facility achieved by this is illustrated by the beginning of bar 8 (Ex. 144). Try playing this with the 5th finger on the High F (no change in hand position from the previous measure) and feel the difference!

When beginning to put an entire passage together, work from the end of the long group of notes backwards, picking up more and more of the notes each time. Practice in groups of five sixteenth notes, always going over into a strong beat. This also produces overlap, so that you are able to weld together chains of notes which are strongly linked technically and rhythmically across your points of articulation. This overlapping approach to practicing short segments of your piece was introduced on page 39.

Gradually extend the number of 5-note groups, always working toward the end of the passage. This gives the necessary motion toward, and focus on, the final note. It is also a sure way to avoid a stumble just before the end, where it is most conspicuous!
As you get the chains of sixteenth notes together, you may still find some unevenness within some of the groups. This is due to lack of perfectly uniform control over each of your fingers. A good way to correct this, and to gain control of individual finger pairs, is to deliberately introduce dotted patterns. You should practice each difficult spot with the sixteenth notes dotted, first long-short ($\frac{3}{4}$) and then short-long ($\frac{1}{4}$). This approach is illustrated in Ex. 144b (p. 177).

Ex. 144 is a PRELUDE, and therefore should be played in a rhythmically somewhat free style. This means to not make all the notes exactly according to their written values--hold back a bit at the beginnings of phrases, and take care not to make it too rigidly according to the meter. Consult with SKILL AND STYLE for more information on this style of performance.

The time signature--Alla Breve (C)–indicates that you are to think in terms of two half note beats in each measure. These beats are necessarily somewhat slow, because there are so many quick notes in each. However, giving a slow count of two (once you are familiar with the placement of all the "ti-ri-ti-ri’s") will result in a more flexible rhythm than you would have if you counted four quarters in each bar.

**EXAMPLE 144:** PRÆLUDIUM (composer ANONYMOUS, or "Unnamed")
Adapted from The Fitzwilliam Virginal Book, No. 22.

Used with Permission.
Example 144, continued
You will notice occasional numbers above some of the bar lines in Ex. 144. They have been placed in little boxes in order to tell them apart from finger numbers. These are MEASURE NUMBERS. In a long piece it is very helpful to have these marked (write them in yourself if none are printed on the page). When working with ensembles it is absolutely essential to know the measure numbers, in case the group needs to start together somewhere in the middle of a piece!

Notice, also, the FERMATAS at the end of the piece. These are of the type which simply designate the final notes (see page 99).

**EXAMPLE 144a:** Exercises for weak fingers developed from Ex. 144.

- from bars 3 - 4
  - same, TRANSPOSED
  - YOU make other transpositions!

- from bar 5
  - two transpositions -- can you do others?
  - you can practice the change of hand position with this one too!

- from bars 9 - 10 (YOU transpose)

- from bar 11

- from bars 12 - 15 Practice little by little, from the END!

Can you transpose this into any other keys?
EXAMPLE 144b: Practice of difficult passages in DOTTED RHYTHMS.
START SLOWLY! If anything, EXAGGERATE the dotted figures.

from bars 5 - 7, first rhythm

from bars 5 - 7, second rhythm

from bars 7 - 9, first rhythm

from bars 7 - 9, second rhythm
CHAPTER IX. ELEMENTS OF CREATIVE PLAYING

INTRODUCTION TO ORNAMENTATION--THE MORDENT

ORNAMENTS are musical gestures which adorn or decorate a musical line, or sometimes a chord. The subject of ORNAMENTATION (the adding of ornaments) sometimes scares students, because they think it will be hard!

Actually, the ornaments are graceful, lovely little notes, usually added spontaneously, that serve to make the music more beautiful. One should never use an ornament that feels "difficult", since it will not sound beautiful or decorative, but only uncomfortable! Since the ornaments are usually IMPROVISED (made up on the spot!), one can always substitute a simpler one that will feel comfortable, or leave them out altogether.

Many of the most common ornaments can be indicated by small SYMBOLS placed over, or otherwise near, the notes that they decorate. However, no one can possibly think up all possible kinds of decorations! So you are always free to add other things which for which no symbols have been invented.

The whole subject of ornaments is covered in detail in SKILL AND STYLE. We will just start with two very simple--and very common--ones. Hopefully, you will find that they are not so very terrifying, and will want to try more of them.

The first, and simplest, of these ornaments is the MORDENT. Since this is used very, very often, we use a SYMBOL to show where to put it. The usual symbol for a MORDENT looks like this: \( \text{Mordent Symbol} \). (There are some other symbols for this same ornament, which have been used by various early composers. Eventually you will need to learn all of these. SKILL AND STYLE gives different views of the mordent!)

Knowing the symbol doesn’t help much unless we understand its REALIZATION. This is a set of "directions" for making the ornament. Each ornament, then, has a REALIZATION to go with it. The ornaments and their realizations are listed in TABLES OF ORNAMENTS. Most early composers made such tables so that players would know what their symbols meant.

The realization of a mordent goes like this: Start with the written note over or under the symbol (this note is called the MAIN NOTE). Then play the note which is a step below the main note, and immediately go back up again to the main note.

The size of the step down (whether half step or whole step) depends upon the scale or key in which you are playing. Thus, in C major, a mordent on C would go down and up a half step, from C to B and back to C. In the key of C major, a mordent on D would go down and up a whole step, from D to C and back to D. Isn’t that simple?
The *lower note* of this ornament, whether a half step or a whole step away, is called the LOWER AUXILIARY (pronounced "awg-zill-ee-airy"). Be aware that this note is actually not written in the music—you have to remember to play it when you see the mordent symbol.

The entire mordent—main note + lower auxiliary + the rest of the main note—must be played *legato* (no articulations in the middle of an ornament!).

Notice that nothing has been said about the SPEED or TEMPO of your mordent. In fact, that is never fixed. Mordents can be fast or slow, largely depending on the note value of the main note, and also according to your feeling about the way you want the decoration to sound.

The only rule about speed is that the whole operation—ornament plus the remainder of the main note—take no more time than the note value of the written (main) note. Thus a mordent on a quarter note in $\frac{4}{4}$ meter cannot take more time than the value of one beat. In the same piece, a mordent on a half note could take as much time as two beats. More often, the ornament itself would take much less time, with the remainder of the two beats taken by *holding* the main note.

On the following pages are some pieces which you already know. MORDENTS have been added to decorate these pieces, to give you an idea of how this ornament is used. Notice that these are added in places where we might like to add an extra *accent* (that is, to make a note sound a bit stronger than the others).

Notice also, that the mordent sounds particularly well in cases of repeated notes, or where the melody line is *ascending* (going up). It is less common to add mordents when the melody is descending.

Experiment with mordents of different speeds, remembering that each note (with or without an ornament) must have its usual note value. If you have trouble making them sound smooth, practice them very slowly, feeling a smooth connection between the plucking action of each of the three notes. As you speed up the mordent, try to keep that *legato feel* in your fingers.

Although these are familiar pieces, you may need to change some fingerings when you add mordents. Therefore, fingerings have been left off the present versions—you should add ones of your own which are comfortable. For your convenience, the page numbers of the original versions of these pieces have been indicated.

Finally, when you feel comfortable with mordents, try adding some of your own to other pieces that you like. Do they seem to decorate the piece in a beautiful way? If they sound harsh and not lovely, you are probably playing them too fast! Slow down and enjoy the sound of your ornaments, which are so characteristic of the harpsichord and its music!
EXAMPLE 61a:  (Ex. 61 is on page 60)

EXAMPLE 68a:  (Ex. 68 is on page 65)
EXAMPLE 69a:  (Ex. 69 is on page 66)

EXAMPLE 79a:  (Ex. 79 is on page 78)
EXAMPLE 101a: (Ex. 101 is on page 112)
The most frequently occurring ornament of all is the TRILL. This has two very common symbols: $tr$ and $\sim$. Trills can sometimes be prolonged, beating repeatedly over a very long note. First, however, you need to learn a short trill, which is not much harder than the mordent.

The realization of the trill is as follows: Start with a note which is a step above the note over or under the symbol. Notice that this is a note which is not actually written in the music! The actual written note, under (or over) the trill sign, is again called the MAIN NOTE.

The note on which you begin the trill is called the UPPER AUXILIARY, being above the main note.

The shortest, and most usual, type of trill has four notes in its realization. Starting with the upper auxiliary, you go down to the main note, up again to the auxiliary, and finally down again, ending on the main note. Remember to start above the written note, go down and up and finally down again, always finishing your ornament on the main note. (Almost all ornaments do in fact end on the written, or main, note.)

Whether the upper note (or starting pitch) is a whole step or a half step away from the written note again depends on the key or tonality. In C major, a trill on C would start a whole step above, on D. The realization would be: DCDC. A trill on E in the same key would start a half step above on F, and go FEFE.

As with the mordent--and any other ornament, in fact--the notes of the ornament are all played legato, and as smoothly as possible. Likewise, the speed of the trill depends upon the length of the main note and upon your judgement about how it sounds. On a short note, the trill has to be a little faster than a mordent on the same note, because there are four notes in it instead of only three.

Practice making trills on different notes of your harpsichord. Play any scale, and practice trills on each note of the scale, thinking about whether to start a whole step or a half step above. Begin your practice very slowly, and speed up only as you can preserve the legato feel, and keep your notes even.

Try using different finger combinations in each hand to produce trills and mordents. You will probably find that 3 and 2 together works best at first. Try doing the exercises with 4 and 3, 4 and 2, and even 5 and 4! Trill exercises make very good exercises for weak fingers!

In performing or practicing these ornaments, think clearly about which note you start on, and which note ends the ornament (always the main note, which is the one you see written in the music). The chief difficulty in learning to play trills is to remember that you must start one note above the one which you see in the music. Also, in the trill, remember that you do not end on the note you started with, but you must go on down a
second time to the written main note. Generally, you should hold the final note a bit, just to finish out the time of the note value.

To review, a TRILL starts on the note a step (within the key) above the written note, goes down and up and down again, finishing on the written note--four notes in all (at a minimum). The MORDENT starts on the written note, goes down a step (within the key) and back up to the written note--only three notes.

Both trills and mordents may be extended for a longer time by adding more "ups and downs" (called BEATS or REPERCUSSIONS). Don't try this until you are comfortable and secure with short ones!

(Note: the term BEAT is another that has many different definitions in music. Most of our discussions of beats have referred to the pulsations of a steady rhythm, as well as to the division of recurring metrical units into groupings of stronger and weaker pulsations of this type. Many early writers on music used the term in the sense defined on the present page, as the recurring, rapid note pattern produced by a trill or mordent. In SKILL AND STYLE, you will learn still another use of this word. ACOUSTICAL BEATS refer to the pulsating interference waves produced by two vibrating strings which are slightly out of tune with each other.)

Some familiar pieces follow, to which trills have been added. Notice that, generally, trills sound nice when the melody is either repeating notes, or moving downward. Go back and review the places where mordents are added. In these ornamented pieces, try trading a trill for a mordent, and vice versa, to hear the effect. Many times, either one will do.

Starting with Ex. 115a (page 186), both trills and mordents have been added to pieces from your earlier repertoire. Again, compare the usage of these two ornaments, and listen to the different effect of each.

When you are comfortable with these pieces, try adding trills and mordents yourself to other pieces. Where do they sound nice? What happens if you add too many? Continue to experiment with these and other ornaments (from SKILL AND STYLE). Many times you will find them written in to your music. Equally many times, they are not written, but you are expected to add them where appropriate! Also, it is usual, when repeating phrases, (as in binary pieces), to change the ornamentation the second time.
EXAMPLE 72a: (Ex. 72 is on page 69)

EXAMPLE 89a: (Ex. 89 is on page 91)
EXAMPLE 115a: Gavotte  (Ex. 115 is on page 131)
EXAMPLE 106a:  (Ex. 106 is on page 120)

EXAMPLE 86a:  (Ex. 86 is on page 83)
EXAMPLE 113a:  (Ex. 113 is on page 128)

Play this piece one more time with the right hand an octave lower.

EXAMPLE 104a:  Rondeau  (Ex. 104 is on pages 115-116)

Grand Couplet
Ex. 104a, continued

1st Couplet

2nd Couplet

D.S. \( \times \) al FINE
SUMMARY OF PRACTICE TECHNICS

Now you will be on your own, exploring increasingly complex music. *HARPSICHORD MUSIC FOR THE BEGINNER* will give you a number of pieces to start you off on the exciting process of self-discovery. It is helpful, at this point, to review the technics at your disposal for learning new music.

"Practice" in music is really *problem solving*. It is important to think first! Once a solution to a technical problem has been found, only then is it worthwhile to repeat the solution enough times to really learn it. Enormous amounts of time are wasted by students in mindless repetition, often with incorrect fingering and phrasing. Worse yet is the continued repetition of a piece while changing fingering or phrasing each time. Repetition alone will not solve your problems, but often results in your mind and hands learning patterns which need to be unlearned in order become truly proficient.

Rule No.1 in practice, therefore, is to always keep your mind engaged! Work from the brain forward, through your arms and hands and into the keys, plectra, and dampers of the instrument. Sooner or later you will discover that the thought itself will enable your body to work with the instrument to make the music come to life. The more you can imagine the sounds in your head *before* you play, the less repetitive practice will be required to enable those sounds to be realized at the instrument.

The first step in the study of a piece, therefore, should be MUSICAL ANALYSIS. What is the FORM of the piece? Are there repeated parts? (These only need to be practiced once!) What is the key of the piece? Does it go through MODULATIONS (changes of key)?

Are you sure of the phrase structure of your piece? Are there important stopping places within the piece, or does it move steadily toward the end?

What is the musical TEXTURE (homophonic or contrapuntal)? Does the texture remain constant throughout? Does IMITATION occur, either in the contrapuntal sense or SEQUENTIALLY (following one after the other in a single part)? One needs to make
imitative sections sound similar, or the "point" is lost! (POINT was a term used by early English composers to mean the melodic fragment which was being used in imitation.)

What is the metrical structure of this piece? You should be able to place the ORGANIC ARTICULATIONS at bar lines and other strong beats right from the beginning.

What do tempo and other markings indicate to you about the character of this piece? Can you classify it as a dance type, or other musical form (see SKILL AND STYLE) which is known to have a particular character? Will your texture be largely LEGATO, with only the smallest and most discreet articulations, or will you want to add TEXTURAL ARTICULATIONS? At what points in the piece will the use of OVERLEGATO be appropriate?

Most of these questions (and perhaps you can think of others) can be answered before you begin to play! Practice will have focus and direction when these ideas are clear in your mind. Naturally, if you are very young, you will need a teacher's help to work out the answers to these basic questions. Even the youngest person, however, can get in the habit of working out many of these matters before plunging in with the fingers!

Now (still before playing!) look at your piece from the purely technical point of view. Which passages or phrases look like the most difficult ones? It is often a very good plan to practice these sections first. They will then automatically get the most practice, which they need, and will not be spots where you flounder once you put the whole piece together.

Related to this is the idea of starting your practice at the end of the piece and working backwards, so to speak. This does not mean playing the notes backwards! Instead, play the last phrase, up to the end of the piece. (The last phrase is also very often the hardest one!). Then, picking up the phrase just before the last one, play through both phrases to the end. In this manner, gradually work your way through the piece back to the very first phrase. The importance of this approach is the focus it gives to the end of the piece, as well as the assurance with which you lead up to the last few bars. Nothing is worse in a performance than to falter just before these final notes!

As you work at the keyboard, remember to keep the hands and body relaxed at all times. (You need just enough tension to hold yourself erect, and to have your forearms always supporting the hands, holding the fingers just at the surface of the keys.)

Try to develop an awareness of any muscle tension in hands, arms, neck and back. When you discover that any of these muscles feel tense or sore, maintain your position at the keyboard and try to let the muscles relax in place. At first this will take time. As you get better at it, you will find that you can actually do this while playing! Constant body awareness is the secret of success, and will lead both to pleasant sensations and a beautiful touch.

While picking out difficult spots to begin your technical study, you can also go through the entire piece with the hands separately, putting in the necessary fingering. Do not change this fingering unless you find it unworkable when actually playing with the hands together at the correct tempo. Every time you change a fingering, your nerves and
muscles have to learn new pathways for accomplishing the same old task--this is not accomplished easily!

A good part of your early practice time should be spent OUTLINING the music. Try to capture the essence or character of the piece with an outline, leaving out a great many notes. While outlining, try to use the fingering you have already planned. This means that your outline will really be applied to the performance of all the notes. You will be used to finding the strong beats with the correct fingers, no matter how much or how little of the remainder has been filled in. As I have said before, this kind of practice is invaluable when it comes to recovering from stumbles in a performance!

Use a metronome occasionally, even while at the outlining stage, to make sure you have the whole piece at one tempo. It is often helpful to set a metronome marking early in your study of the piece, using the outline or humming the melody at a speed which feels "right" for your concept of its character. Many times we find that, after much practice, we are actually playing too fast without being aware of it. As you gradually fill your outline with more and more details, review with the metronome from time to time to make sure that everything is still in the correct proportions.

Practicing from this stage does consist in just filling in these details, using the skills you are learning about fingering and hand movements, as well as placement of the hand with the forearm. You need to think about how your eye moves along the page of music--you should be reading just a tiny bit ahead of your fingers, with occasional glances at phrase endings to focus on where you are going.

Sometimes you will need to look down at your hands, to place the fingers correctly in a big leap, for example. You need to know exactly where your eye must leave the page, and the spot to which it returns (not the same place where you looked down!). Intelligent practice essentially involves CHOREOGRAPHY (as in planning dance steps) of all the eye, hand, and body movements required to produce the sounds of the whole piece.

Make liberal use of the tape recorder while you practice. This is a most effective means of checking on your progress, particularly in terms of rhythm, tempo, and articulation.

Finally you will begin to get whole phrases, and finally the entire piece, to move as a unit. It is very important to spend much time at this stage in practicing the entire piece as if you were performing it. This means no stopping or fixing of mistakes! Simply keep going, reverting to your outline wherever necessary to keep the beat steady.

Listen to your tape of this practice--you may be surprised at how good it sounds, even with some mistakes or gaps in the notes. If you have practiced your outlines and individual phrases without stopping for corrections, this will become an excellent habit that does not seem difficult. And performance, too, will not seem difficult if it is prepared for in this manner.

As you do this final practice "as performance", learn to make mental notes along the way regarding things that went wrong. Go back and work over those sections, trying to puzzle out the reasons for any mistakes. Then again run through the whole piece
without stopping. Often a mistake will be found to result from some misconception of what was actually written. Occasionally, you will find that you can improve a fingering to avoid a consistent mistake.

Sometimes you are aware that mistakes are made because your attention has wandered. In fact, performance of longer and longer sections of your pieces will increase your attention span. To produce a good performance, you must concentrate with all your mind right up until the end of the final note! Practice doing this, both while you are alone, and also with others in the room!

And please, after all this work to bring a piece to life, do make a point to play it for others! The joy and delight of having discovered the sounds represented by dry markings on a page of music is enhanced many times over by sharing it with interested friends. As I said earlier, by doing this from the very beginning, performance (however intimate you wish to make this) will seem a natural and unselfconscious part of music-making, as indeed it should be.

DISCOVERING THE JOYS OF ENSEMBLE PLAYING

Playing solo pieces for your good friends is a great delight. Even more delightful, for many of us, is the act of playing together with other musical friends. Working with players of a variety of instruments, and also with singers, gives one much additional insight into the possibilities of musical expression. Use your imagination to translate these ideas into expression on your own instrument!

Earlier, I mentioned the need for practice in SIGHT PLAYING (also known as SIGHT READING--whatever the term, it still involves playing without prior practice!). Acquiring this ability will certainly improve your general music reading skills. However, it is essential to become a good sight reader or player if you wish to play in ENSEMBLE (two or more instruments or voices together). Part of your early preparation for this, therefore, will simply be to play and read at sight as much music at your level as you can lay your hands on.

Remember the rules for sight playing (review pages 154 and following):

1) ANALYZE as much as possible of the musical form before you begin, to avoid unnecessary surprises!

2) As you begin to play, make yourself keep a steady beat, and do not allow yourself to stop--keep going as if your life depended on it! When doing this alone, sometimes the use of a metronome helps force you to keep going (be sure you are listening to the ticking of the metronome, however, and not ignoring it!).

3) If the music is too difficult to grasp all the notes at first, then OUTLINE the music as intelligently as possible. Remember to think in terms of the hierarchy of beats, keeping at least the very strong ones, then the next strongest, and so on. Leave out the ornaments and anything else that seems like a small detail.
4) As you improve in your sight playing ability, you will begin to work with music having more than two parts or lines. Possibly your music will have many CHORDS with three or more notes to be played simultaneously. In these cases, your sight playing should at first involve only the OUTER PARTS. (These are the highest and the lowest notes occurring at any one time). INNER PARTS or voices can be filled in later.

Reading of outer parts is another form of OUTLINING. It is consistent with the general notion of leaving out everything non-essential in the interest of keeping going and getting the sense of the music right from the beginning.

As you begin to feel some confidence in your ability to play at least the outline of a piece of music at sight, you can immediately apply this to group playing. I would encourage you to do this as early as possible in your study of music. Like performing, the ability to play with others comes only with the doing of it, and there is no moment when you are suddenly "ready" to begin!

SKILL AND STYLE gives you some hints about CONTINUO PLAYING. This is the style of accompaniment used by harpsichordists in early times. For most ensembles, the harpsichordist was given only a BASS LINE (the very lowest notes of the piece).

The continuo player was supposed to invent a right hand part which would fill out the necessary harmonies to accompany the other instruments or voices. Sometimes the composer helped out, indicating the harmonies with a series of small numbers (called FIGURES). These numbers were written over (sometimes under) the bass notes. Such a bass line, with numbers or figures, is called a FIGURED BASS.

The most important elements in an ensemble composition can be seen to be the BASS LINE and the parts for the other instruments or voices. (Remember that the composer left the right hand part to be improvised, and therefore did not view it as fixed.) A beginner can thus logically start with the bass line alone, in any piece written for "basso continuo".

In order to keep up with the ensemble, however, it may be necessary to simplify even this single line. You already know how to do this: use your outlining technics to select the most significant notes (usually on the strongest beats). Use your sight-playing skills to keep up with the group, not allowing yourself to stop. When you feel yourself scrambling to catch up, then leap ahead to the next important strong beat, playing this just at the moment the group arrives there! Keep counting, and don't lose track of where you are!

At first you will find it a struggle just to keep your place. As you gain confidence and skill, begin to try to listen to what the other members of the group are doing. Only when you can hear all the parts will the great pleasures of group playing be apparent. Usually the harpsichordist has a full SCORE (the music with all parts written in), so that you will eventually be able to follow the other players with eye as well as ear.

It is hoped that these final remarks will point you in the direction of marvelous musical experiences, and that this method has helped give you the basic skills to enable you to realize them!
## SHORT LIST OF SOME IMPORTANT HARPSICHORD COMPOSERS

<table>
<thead>
<tr>
<th>NAME</th>
<th>NATIONAL ORIGIN</th>
<th>DATES</th>
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<tbody>
<tr>
<td>Bach, Carl Philipp Emanuel</td>
<td>Germany</td>
<td>1714 - 1788</td>
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<td>(son of J.S. Bach)</td>
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<td>Bach, Johann Sebastian</td>
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<td>1685 - 1750</td>
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<td>Bull, John</td>
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<td>1626 - 1661</td>
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<td>Pachelbel, Johann</td>
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READING LIST

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