HOW TO IMPROVISE PIANO ACCOMPANIMENTS

by

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PREFACE

THE AIM OF THIS BOOK

In music, as in other languages, we are apt to be the slave of the printed page. Many who can read anything and everything in the English language and even recite long passages from the masterpieces of our literature find themselves tongue-tied if suddenly called upon to "say a few words". Similarly, many competent and fluent pianists are at a loss, unless they have the music before their eyes. Because they lack keyboard initiative there are innumerable occasions when they are uncomfortably aware of being unable to do easy, everyday things at the piano which could increase their own enjoyment and enable them to be of far greater service in music-making circles.

The aim of this book, then, is to assist pianists who seek to acquire keyboard initiative, and to help, particularly, those whose piano technique and musical knowledge is limited to become useful pianists.

The useful pianist does not need to keep his eyes fixed upon the music. On many occasions he can be independent of it and even supplement the printed sheet. He can make up, on the instant, a simple accompaniment for voice-training exercises or for familiar national and folk songs when they are being sung at friendly, social gatherings. He can play a few appropriate chords to serve as an introduction to a song in order to help the singers to get a sense of the key in which the music is written and so ensure confidence, unanimity, and good intonation; or he can invent a few bars to form a link between the items in a group of songs which differ in key, mood, or style.

In tutorial and appreciation classes, study groups, and discussion circles he not only has definitions and explanations at the tip of his tongue, but he can aid perception and enjoyment by illustrating them at the keyboard. He can use a single short framework of chords as a basis for illustrating points concerning tonality, mode, rhythm, melodic structure, phrase-length, and harmonic progression. He can make his own made-to-measure keyboard examples and thus save the time and effort which must otherwise be spent in long and possibly fruitless search among published music.

The simple specimen formulæ given in these pages will be found easy to carry in the head and to keep at the finger tips. Only four particular skills are considered, yet their acquirement will ensure a basic ability which can be applied or adapted to fit a wide variety of needs and occasions.

The four simple skills are :

1. *The ability to play a suitable pianoforte accompaniment for scales in any key which may be required.*

This particular skill is placed first because the scale (major, minor and chromatic) is the basis of the majority of voice exercises used in school classes, for voice training in choirs and in teaching individual students of singing.

Skill in scale accompaniment also promotes a ready and necessary familiarity with all keys. In instrumental music, students can and usually do make a gradual approach to keys, so that the study of music in keys with many sharps or flats is often delayed until a fairly advanced stage. The accompanist and teacher of singing, however, need great and equal facility in all keys. The order of keys used in vocal exercises is settled not by the number of sharps or flats in a key, but by the range and the development-stage of the voices under training. Vocal exercises most frequently consist of a short phrase or melodic pattern which is repeated at different pitch-levels. The keys of successive repetitions do not follow the "cycle of keys" (C, G, D, A, E major, etc.): they usually move by semitone from the open key of C to the key with five flats (D flat) and then from the five-flat key to the two-sharp key (D), etc. The facility possessed by the accompanist needs to be equal in all keys: there should be no "difficult" keys, no fear of the keys which bristle with black notes.

Skill in scale accompaniment also provides a solid foundation upon which harmonic (chord) facility and knowledge can be built.

2. *The ability to play a few suitable chords while the voice sustains a long sound, to give the necessary instrumental and harmonic support or to invest the exercise with rhythmic sense or drive.*

3. *The ability to play a succession of single sounds or of chords which will effect an orderly modulation (change of key) from any key to any other key, as required or desired.*

The modulations required for voice accompaniment or lesson-illustration are not limited to the group of "nearly related" keys which are used in *gradual* modulation. As we have already noticed, the fact that voice exercises ascend or descend by a semitone involves *chromatic* modulation, e.g. from C major to D flat major or G major to F sharp major. And in aural work and appreciation lessons, to help the process of key-change to be recognized, mentally and aurally, it may be necessary to make it rapidly and dramatically, e.g. from C major to A flat major.

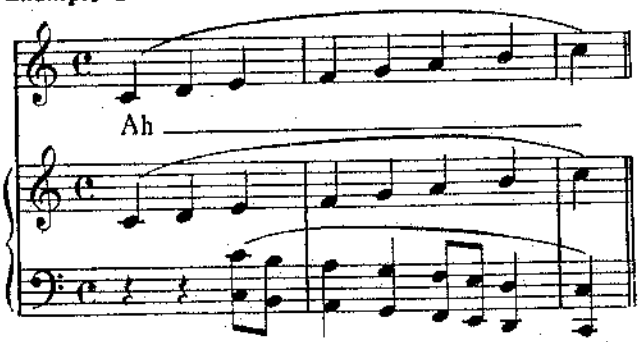
4. *The ability to provide an outline or very simple piano accompaniment to familiar songs (nursery, folk, national) at times when only a "melody" edition is available.*

Nothing is more embarrassing or harmful to reputation than inability to accompany (without the music) *The National Anthem* and other simple songs which are sung at special celebrations or during recreational times.

1. SCALE ACCOMPANIMENT

Very frequently, when accompanying scale and voice exercises, weak pianists are inclined to play thick chords and to use handfuls of notes, with the likelihood that an occasional wrong note will be played. It will be found that a simple bass consisting merely of a counter-theme can be effective, particularly if it moves in contrary motion to the vocal line :

Example 1



If you play the above accompaniment the following points in its favour will be noticed :

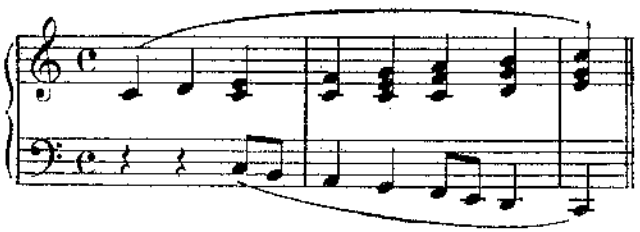
(*a*) the singers have a chance to hear the quality of the tone produced and it is likely, therefore, to encourage good tone-quality : it certainly will not hide faults in tone-production or inaccuracies of pitch and rhythm.

(*b*) it gives sufficient support to the voices.

(*c*) it is very easy to play : it is also easy to remember and easy to transpose into any other major key.

Example 1 is, of course, the top and bottom of the following harmonic progression :

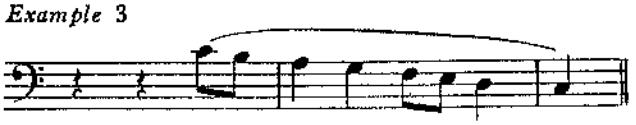
Example 2



Play and listen to the chord-progression in Ex. 2 and you will recognize that it has diatonic strength and, because every chord is a primary chord of the key (Doh or I; Fah or IV; Soh or V), it presents to the listening ear a good aural picture of the key.

Now look at the bass line (or lowest part) of the above example. Here it is :

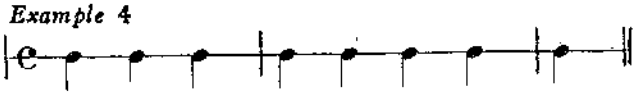
Example 3



Play it; and, as you play, listen. If you have not already done so, you now see and hear that it is simply a descending octave of the scale of C major. The only other points you need to keep in mind are :

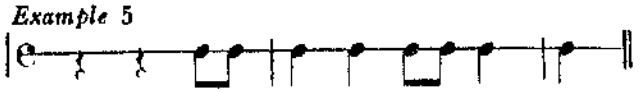
(i) that the rhythm of the ascending scale is

Example 4



(ii) that the bass or left-hand rhythm, which does not start until the last beat of bar 1, is

Example 5



Play Ex. 1 again—possibly several times, with eyes, ears and mind alert.

Play very rhythmically Ex. 1, 3, 4 and 5 again, possibly several times, so that each is clearly grasped; and then demonstrate to yourself the strength of that grasp by playing Ex. 1 without reference to the copy.

Now play an ascending octave of the scale of D major—D to D with the F and C made sharp (♯). Keep to the rhythm as shown in Ex. 4—all the sounds are of crotchet duration.

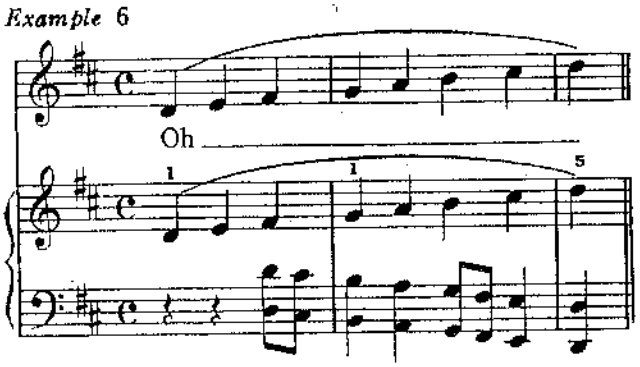
Next play the descending octave of the scale of D major. Keep the rhythm as in Ex. 5.

Now combine the ascending (right hand) and descending (left hand) scales. Listen, so as to be sure that you are reproducing Ex. 1, but in the key which is a tone higher, *i.e.*, in D major. Repeat this a few times. Do not be satisfied until your mind and ear grasp clearly what you are doing and until your fingers feel quite comfortable.

All *doing* in music, every purposed and intelligent action is a combination of two things: *understanding* and *manipulative skill.* Your hands—until action becomes automatic or sub-conscious—can be only as wise as your head makes them.

Here is Ex. 1 as it appears when written or printed in the key of D major:

Example 6



(Note: fingering is indicated because the choice of suitable fingering makes for ease and fluency in performance. By keeping consistently to one fingering for each scale, the fingers learn their way).

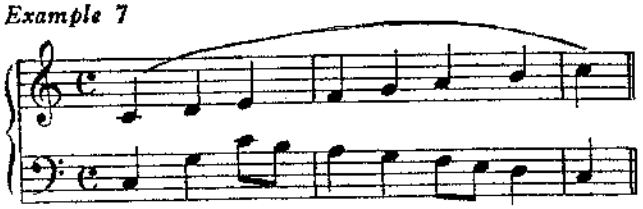
Test the sureness of your knowledge of this scale accompaniment by playing the ascending scale, together with the descending counter-theme, in the major key with five flats, that is, D flat major. Before you put your fingers to the keyboard, run over in your mind or even say aloud the note-names of the scale of D flat:

D flat, E flat, F, G flat, A flat, B flat, C, D flat.

(It may help, if you remember that in the key of D major, all the notes are white keys except F and C, which are sharpened and black; and in D flat major, the reverse applies: all the notes are black except F and C which are white. If the correct notes can trip from the tongue, they stand a chance of tripping from the fingers.)

If desired, the opening notes of the ascending scale may be accompanied thus:

Example 7



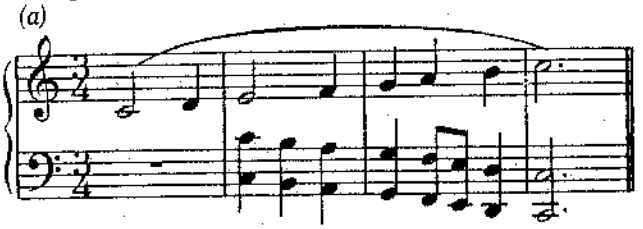
By now, you should have secured a firm grip of this simple scale accompaniment and you can best assure yourself on this point by playing it in a number of keys of your own choice. Before you play, see in your mind's eye the key-signature and spell the note-names of the key of your choice, so that when you play you will sharpen or flatten the required notes.

Rhythmic Variants of the Scale

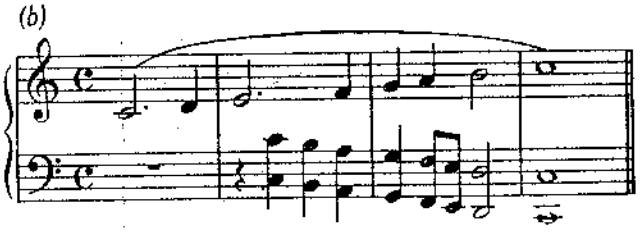
This same scale accompaniment can, of course, be applied to rhythmic variants of the scale, such as:

Example 8

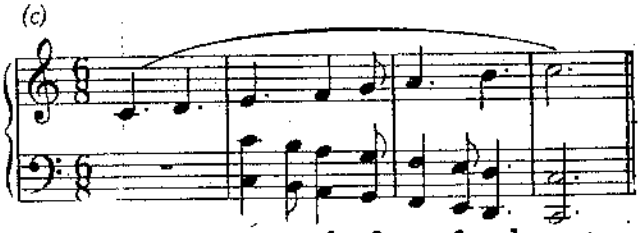
(a)



(b)

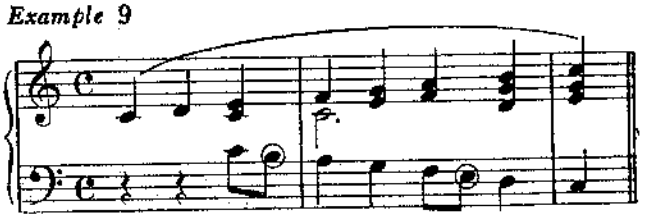


(c)



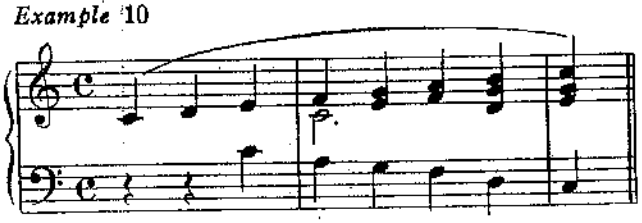
You are now ready for a further step. Here is the first music example again:

Example 9



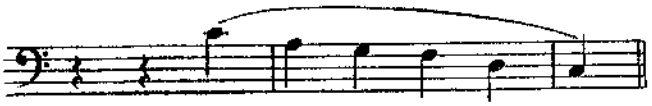
Play it: look and listen. Hear that the ringed notes are what are known as *passing-notes*: they are not an integral part of the chords with which they occur: they are non-essential in character. Now play the passage omitting the ringed or passing-notes:

Example 10



Play the bass only, without the ringed passing notes :

Example 11



Notice with eye and ear that it is now a "gapped" scale (the 3rd and the 7th notes of the scale are omitted). In sol-fa notation it is :

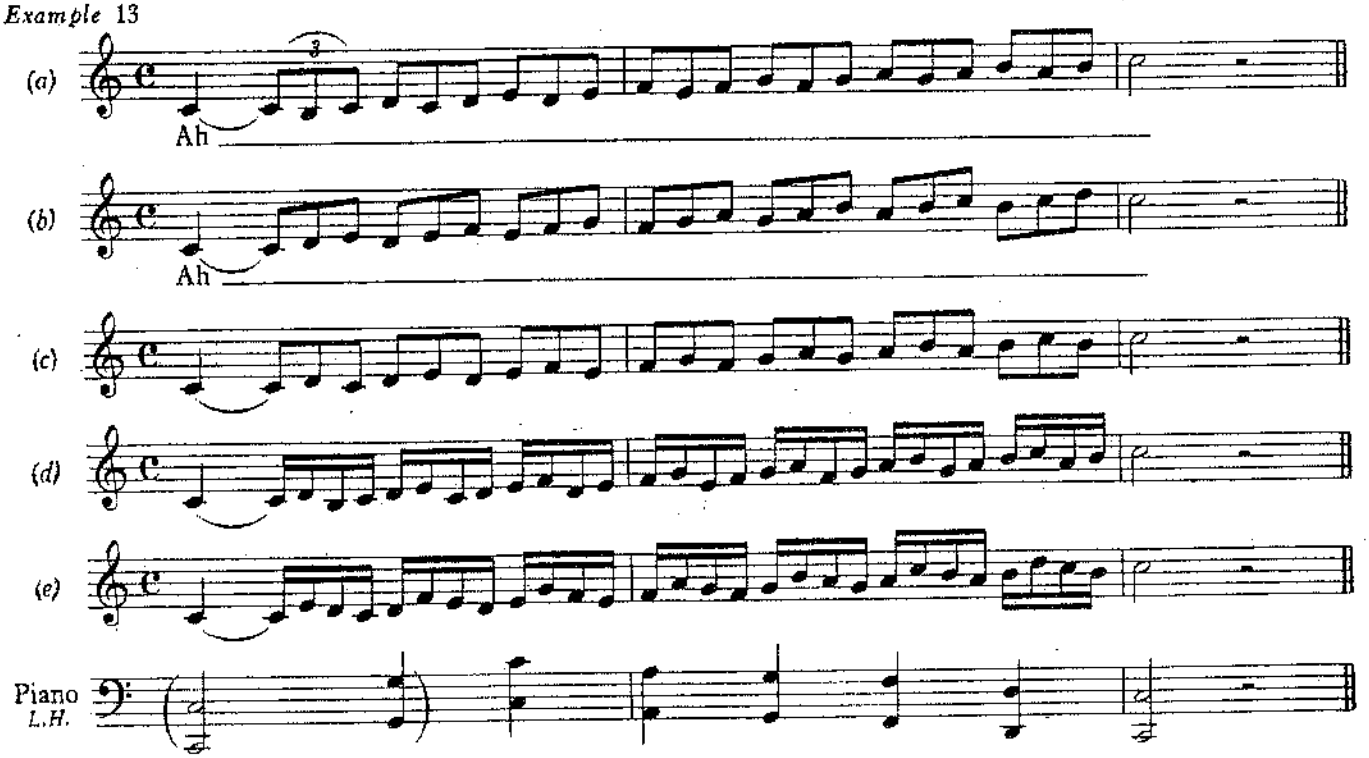
Example 12

‖ : | : d' | l : s | f : r | d : | : ‖

This gapped form will be easier to set against melodic variants of the scale because each of the bass sounds occupies a full beat.

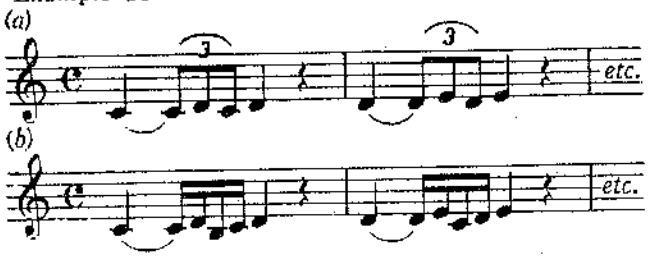
Here are voice exercises based on the scale. All can be accompanied by the left hand part we have used throughout and which is printed on the lowest stave :

Example 13



The above exercises may be varied in many ways such as :

Example 14



but the same bass accompaniment can be used.

The degree of a scale on which a chord is built is indicated by either (*a*) the technical name of the degree—tonic, supertonic, etc.; (*b*) the solfa name—doh, ray etc., or (*c*) by a roman numeral I, ii, etc. Here is a list which covers the simple chords used in this book :

CHORD INDICATIONS

TRIADS

(i) Root position

Doh	Ray	Me	Fah
or			
I	ii	iii	IV
or			
Tonic	Supertonic	Mediant	Subdominant
Soh	Lah	Te	
V	vi	vii°	
Dominant	Submediant	Leading-note	

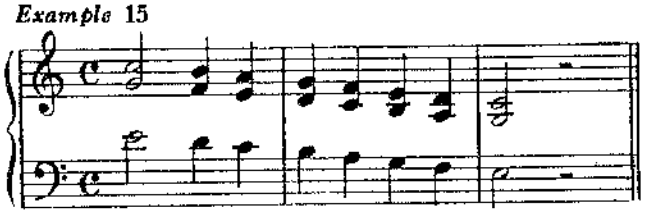
(ii) First Inversion	I6 or Ib or (in figured-bass) or 6
(iii) Second Inversion	$I\,^{6}_{4}$ or Ic or (in figured-bass) $^{6}_{4}$
SEVENTHS	
(i) Root position	V_7, ii_7 etc.
(ii) First Inversion	$^{6}_{5}$ (figured-bass)

Note : A ♯, ♭, or ♮ sign placed against a figure indicates that the note is to be raised or lowered: if used without a figure, it applies to the third of the chord.

2. THE DESCENDING SCALE

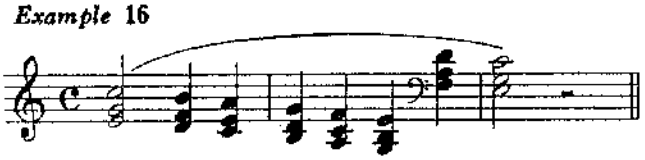
Now consider the harmonization or accompaniment of the descending scale. It is very easy. A succession of "first inversions" (or "six-three") chords is quite satisfactory :

Example 15



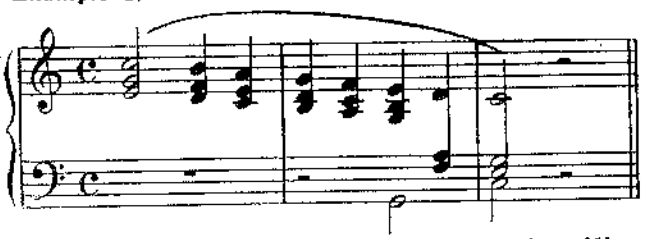
The above accompaniment can be played by the right hand alone :

Example 16



but the feeling of key (or key-sense) can be greatly strengthened by the use of a simple dominant to tonic (soh to doh) bass at the end, thus :

Example 17

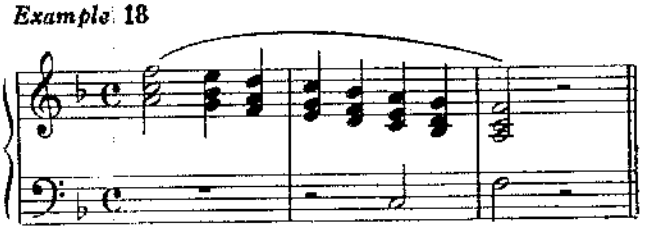


Make the hand thoroughly familiar with this "six-three" shape. In the key of C major the hand may be kept in the one position throughout, using the same fingers for every chord. Avoid tensing the muscles and if you use the right (or sustaining) pedal—which is not recommended at this stage—change it with every chord.

Play Ex. 15 and Ex. 17. Listen keenly. Hear that the cadence in Ex. 17 is stronger and creates a more definite sense of the home-note.

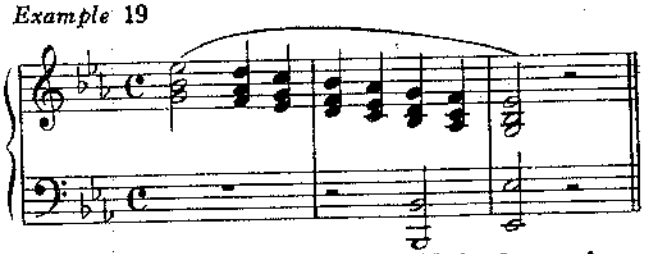
Play this chord accompaniment to the descending scale in some other major keys of your own choice. Here it is in F major :

Example 18



and E flat major :

Example 19

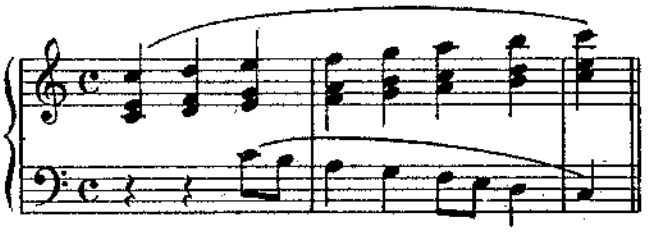


Try it in (*a*) E, (*b*) A. If, before playing this chord accompaniment in any particular key, you run up and down the notes of the scale on the keyboard, it will help you to remember the location of the sharps or flats. In this succession of first inversions, every note, whether it be the top, bottom or middle note, belongs to the key. Alternatively, a mental self-reminder such as "Key D major: every F and C wherever it occurs in a chord is *sharp*" may suffice.

3. VARIETY IN SCALE ACCOMPANIMENTS

The bass or accompaniment with which we began our experimenting is only one of a great number of ways in which the scale may be accompanied: it is presented here because it is, possibly, the simplest. If the body of voices is large or if, for any reason, a fuller tone-amount is desired, octaves may be played in either or both hands instead of single sounds, or the octaves may be "filled-in", that is, a 3rd may be added:

Example 20



The pitch-level of the left hand will give ample tone: and various adaptations will suggest themselves. If, for example, both the left- and right- hand parts in Ex. 20 were played an octave higher, the tone-weight would be reduced; and, in passing, it may be noted that this device of playing the vocal line an octave higher in pitch than the voices is a much-used and effective corrective when a class or choir is disposed to sing flat.

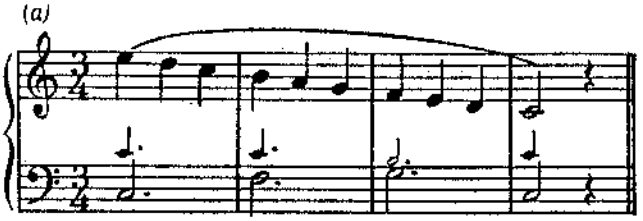
Extended knowledge and increased facility will make it easy to build alternative accompaniments; for it is clear that, while nothing elaborate will ever be required, variety in scale accompaniment is highly desirable, if monotony of sound and a consequent lack of aural attention and of interest is to be avoided.

Use of Primary Chord Roots as Accompaniment

The roots of the primary triads (I or doh; IV or fah; V or soh) or the chords themselves make a simple, obvious, yet quite effective accompaniment for scalic passages, as will be evident to your ears if you play the following examples:

Example 21

(a)



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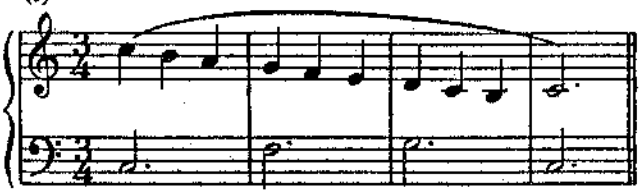

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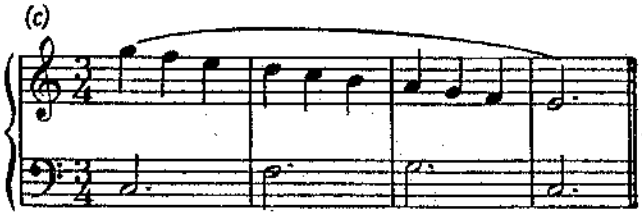
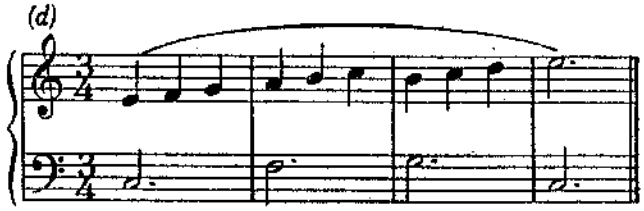
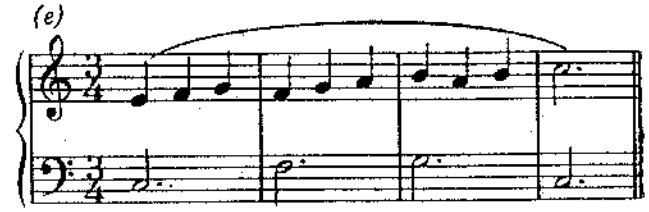


(d)



(e)

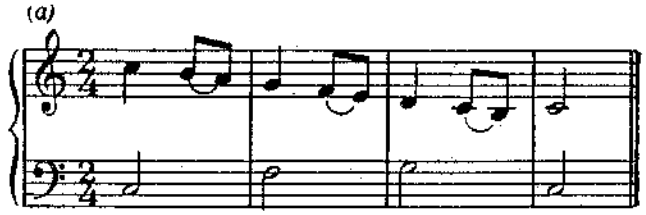


The eye and ear will observe that in each of the above examples the left-hand part or bass is identical.

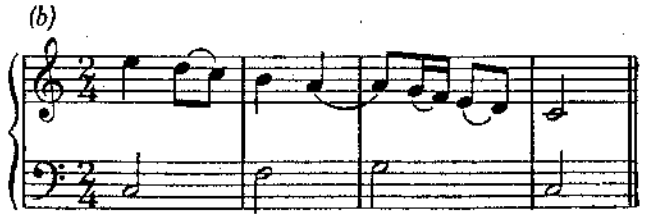
Scalic passages in various rhythms can, of course, be accompanied in the same way:

Example 22

(a)



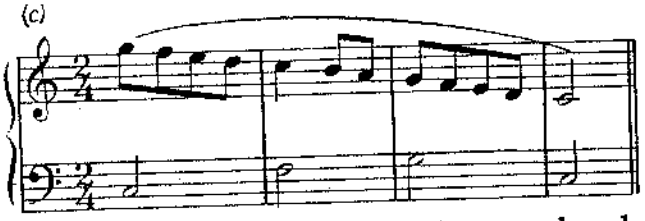
(b)



The strong effect of the primary triad roots and the stepwise movements of the scale melody make it almost impossible to go wrong. Here is an example with a still wider compass :

Example 22

(*c*)



Play the roots of the primary chords (the tonic, doh or keynote; the subdominant or fah; the dominant or soh, followed by a repetition of the tonic) in a variety of major keys; and then use them as the accompaniment of the scale, ascending and descending and in different rhythms. Practise until familiarity and facility are gained.

Experimentation might usefully include some transposition at the keyboard. If you have never attempted keyboard transposition, a beginning could be made by playing Ex. 21(*a*) in other keys. All that is necessary is that you should know and remember :

(*a*) the time ($\frac{3}{4}$), and that each sound, except the last, is a crotchet (or full-beat) note;

(*b*) that the bass notes are the first, the fourth, the fifth, and first notes of the scale and each is sustained throughout a full bar;

(*c*) that the right-hand part starts on the 3rd note of the descending scale (me).

Without reference to the example, reconstruct from the above description Ex. 21(*a*) and play it first in C major and then in some other key of your own choice. If you fix clearly in mind the notes of the scale, then the keys of C sharp, F sharp, D flat major, etc., will be just as easy as C—indeed, easier from the playing and technique point of view. The key of C is easy only because we know that all the notes are natural or white notes: if we know well the order of succession of black and white keys, any key is easy to play in.

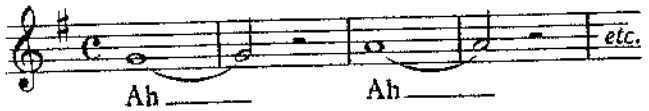
This practical knowledge of transposition will be found to be of great service at many points. (Exercises such as that given at Ex. 13 and 14 will be seen to be the transposition of a pattern); and this knowledge can help to fix knowledge of keys and aid facility at the keyboard.

In singing, every major scale is practically alike in "sound" and "feel"; but, on the keyboard, each of the major scales, sharp and flat, feels different, because the order in which the black and white keys occur is different. To make the ends of the fingers as familiar as the ear and mind with the different keys is to take a big step in the right direction.

4. ACCOMPANIMENT OF SUSTAINED SOUNDS

Many voice exercises consist of a series of long-sustained sounds such as:

Example 23

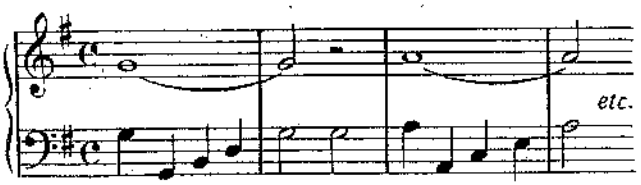


Their objective is usually the attainment of control over breath and tone, though they are sometimes used to teach, through doing, an appreciation of sounds of different durations. In either case, a simple accompaniment may be required. It may be desired to give temporary instrumental support to the voices or to help in maintaining the pitch. Sometimes an accompaniment may encourage the attempt to sustain a sound for a period of several slow, steady beats, and so develop control and endurance. It can help singers to know when the sound should begin and cease: an essential in rhythmic precision.

A main aim, however, is to create a sense of rhythmic purpose and to develop a feeling for rhythmic progression which is equally essential in song or exercise.

The means of fulfilment are as simple as the objectives. The requirements are (1) that the march of the beats should be made evident to the ear : this means that the sounds need not be less than full beats; (2) that there should be nothing in the accompaniment which might distract the ear or the attention from the main objective, namely the production of a sustained vocal tone. These requirements could be met by the notes of the triads on successive degrees of the scale :

Example 24



Play or look at the left hand part of Ex. 24 and you will recognize that it consists simply of the notes of the triad played in arpeggio form.

Repeat Ex. 24 and continue up the scale so as to complete one octave. The triads which you play will conform to the key of the scale, *i.e.*, wherever F is a note of the chord, it will be F sharp, because the key is G major.

Play one octave of the scale of D major, with the same simple arpeggio accompaniment.

Do the same in some key(s) of your own choice, in order to gain facility. In practising and before starting to play, remind yourself of the key-signature of the chosen key, to ensure that you sharpen or flatten such sounds as may be necessary to keep within the key; but "facility" at its best means that enough practice has been done to enable the fingers to play the correct sounds without conscious thought.

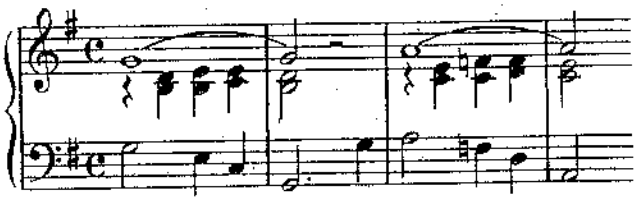
This triad accompaniment is an example of *disjunct* movement, *i.e.*, successive chords having no note in common; but the effect is rendered less angular because (*a*) there is a sequential effect : the pattern of the initial bar is repeated a step higher all the time; and (*b*) the "outside" parts, *i.e.*, the top and bottom notes, are the scale sounds and thus provide a binding element.

The accompaniment in Ex. 24 would suffice if the singers were small in number or if the voices were young and immature. As keyboard facility increases, a number of alternative treatments will present themselves to head and hands. If a chordal accompaniment is desired, a repetition of the one chord for four or five beats is obviously undesirable because of its monotony. The simplest chord accompaniment, therefore, consists of different chords in each of which the sound sustained by the class forms a part. This means that the sung sound could be, in turn, the root, the 3rd and the 5th of a triad. The first sound (G) of the slow scale of G would be treated therefore as :

(1) root of the triad on G (I)
(2) third of the triad on E (vi)
(3) fifth of the triad on C (IV)

so :

Example 25

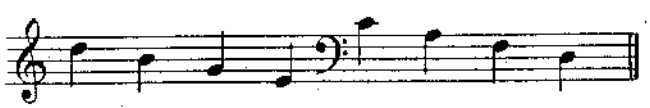


Play the above first as it is written and then omitting the inner notes. Listen and it will be heard that either plan is to be preferred to Ex. 24.

It will be observed that in the above accompaniment the roots of the first three chords in bar 1, bar 3, etc., drop by the interval of a 3rd. Sometimes it is a major 3rd and sometimes—according to the key—it is a minor 3rd. Some simple location exercises at the keyboard such as those which follow will increase facility.

1. Play the following :

Example 26



2. Now play the same passage as if the key-signature of D major were placed between the clef sign and the first note.
3. Proceed similarly imagining the key-signature to be, in turn, E flat major, E major, F major, G major, A major, B flat major.

4. Repeat a number of times to ensure both speed and accuracy.
5. Play E flat immediately above middle C and then play in descending skips of a 3rd until the note E flat is reached two octaves lower. Follow, of course, the key signature of E flat major.

* * *

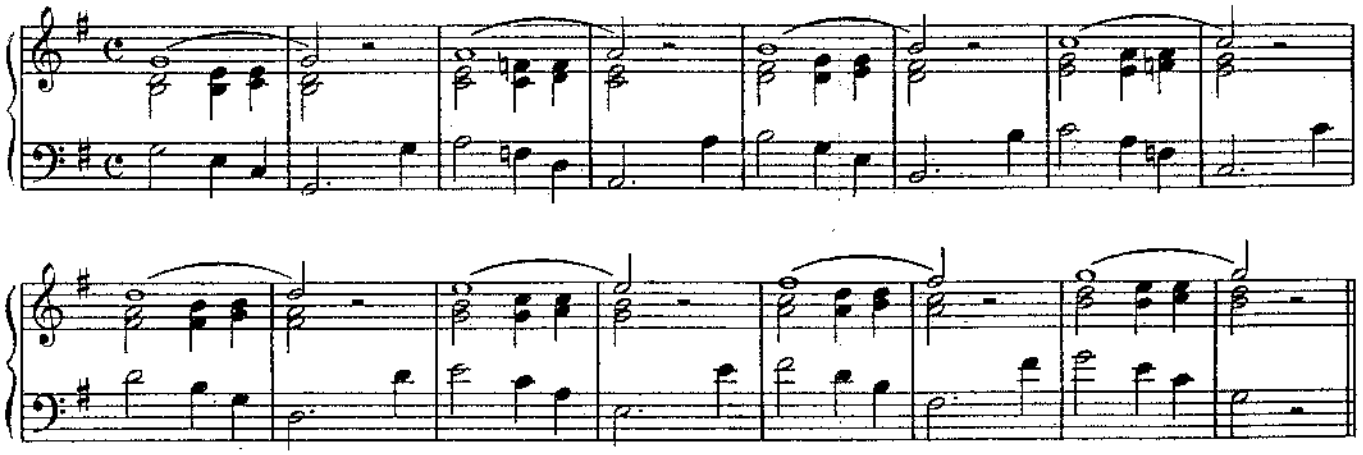
Some practice also will be either necessary or desirable in associating any particular note with the three triads of which it can form a part. Here are a few sample exercises :

1. Play the triad in which the tonic of D major is (*a*) the root, (*b*) the 3rd, (*c*) the 5th.
2. Proceed similarly with the tonic notes in the major keys of E flat, F sharp, A, B flat, C sharp.
3. Sing and sustain the sound of D and then play (*a*) the minor triad in which it is the 3rd, (*b*) the major triad in which it is the 5th, (*c*) the major triad of which it is the root.
4. Play (*a*) the major triad, (*b*) the minor triad, (*c*) the diminished triad of which G is the 3rd.

* * *

Here is the complete scale with each sustained sound harmonized according to our formula :

Example 27



Play the above and note that each bass note is the *root* of a triad. Listen. Note that F natural is used at two points (bars 3 and 7) in order to avoid the use of the diminished triad which would sound ungainly here. Note however, that in bar 13 the diminished triad is used and that prominence is given to the leading-note by doubling it. This departure from text-book orthodoxy is permissible because :

(i) the whole passage is a form of *sequence* (=the repetition of a passage at different pitch-levels) and, provided that the original pattern is correct, departures from rule are permissible in such repetitions;

(ii) the sound effect is, at least, tolerable as it must inevitably be whenever the successive chords contain a sound which is common to both chords;

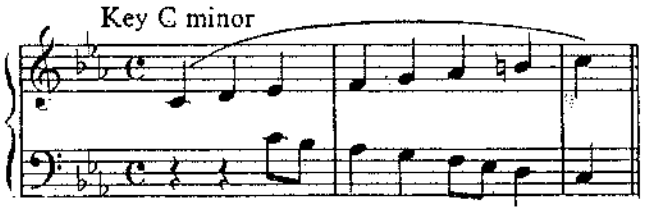
(iii) the doubling of the leading-note (as in bar 13) may be of service : the doubling gives exceptional prominence to this sound; and it may therefore counteract a tendency to lose pitch which often occurs in the singing of the leading-note;

(iv) keyboard harmony often lacks the precision and accuracy of written work, just as spoken English may lack something of the exactness and polish associated with the written word. It is as foolish to be a slave to rules as it is to flout them. There are exceptions to every rule; and no rule is known unless and until exceptions to it are also known. The ear is the final court of appeal.

5. THE MINOR KEY

Play and listen to :

Example 28

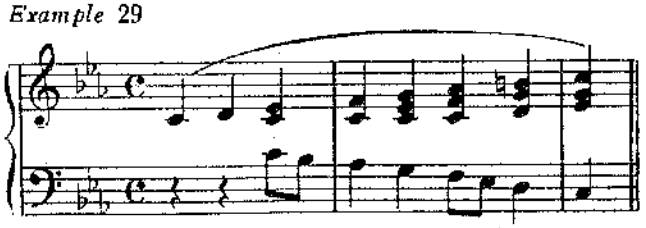


and you will observe that the descending scale accompaniment which we used with the major scale is equally effective as a formula for the harmonization of the minor scale. Note that the upper part of Ex. 28 is the harmonic form; the lower part is the melodic form of the minor scale.

Repeat this example and then play it in some other key(s) of your own choice.

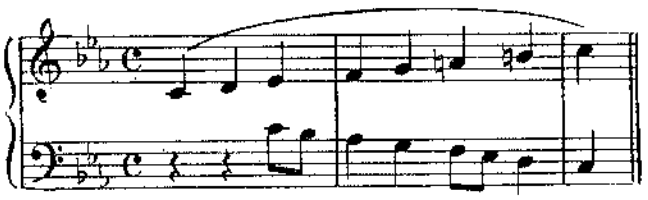
The harmonies implied in the above example are identical with those previously used in the major mode, namely, the primary (I, IV, and V) triads :

Example 29



The same descending scale formula may be used to accompany the ascending form of the melodic minor scale. Play :

Example 30

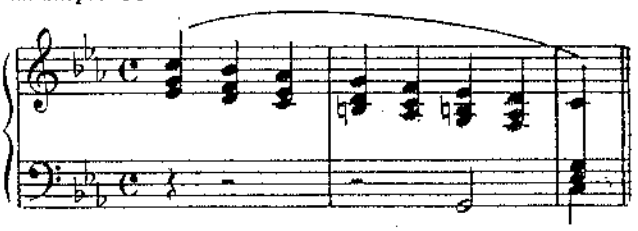


and it will be heard that the effect is less happy than in the case of the major and the harmonic minor scales, particularly if played rapidly. Repeat Ex. 30, first treating each sound as a steady two-beat note; and then play it at a much faster tempo. Listen and notice the difference in effect.

The descending melodic minor scale can be harmonized—as in the major scale (p. 4)—with a succession of $\frac{6}{3}$ (first inversion) chords.

Play :

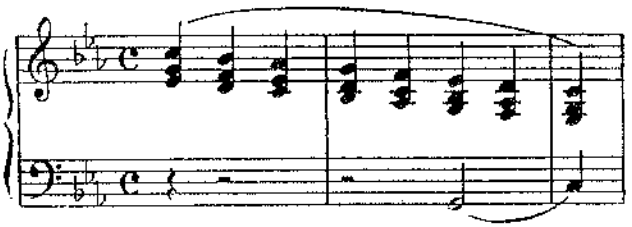
Example 31



If you examine the above example you will note that, except when the flattened leading-note occurs in the top or voice part, the notes of the chords are all drawn from the harmonic form of the scale.

Play :

Example 32

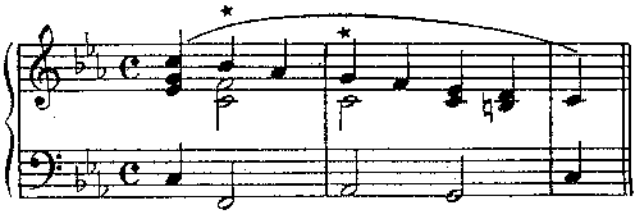


and you will hear that a very pleasant alternative is provided by the use, exclusively, of the notes of the melodic form of the minor scale : it gives indeed an added modal flavour to the passage

Repeat Exx. 31 and 32 and then try to play them in some other minor key(s) of your own choice.

Experiment to find other alternative accompaniments of a simple character. By now, your familiarity with the primary triads (and, so far, they are the only chords which have been employed) may have led you to presentations such as :

Example 33

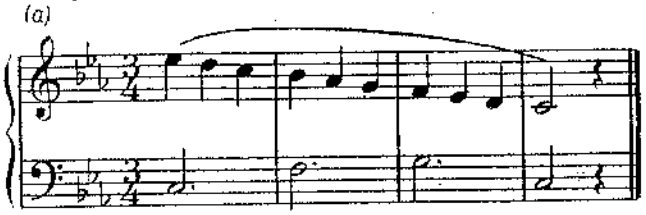


The above passage uses only the primary chords with the notes marked * treated as appoggiaturas (or accented passing-notes).

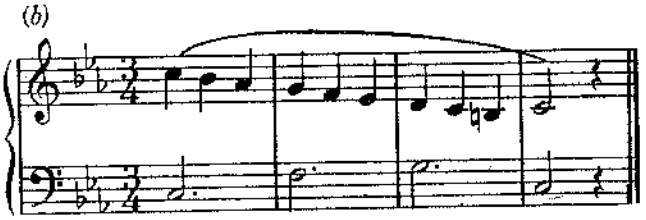
As you play the following :

Example 34

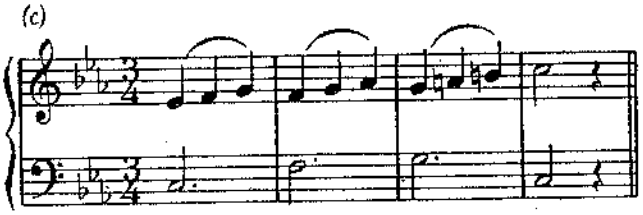
(a)



(b)



(c)



the ear will recognize that the roots of the primary triads are equally effective as a left-hand part for scalic passages in major and in minor keys.

Satisfy your mind and ear on this point by repeating Ex. 34 as it is printed and then play each passage in its major form—ignore the key-signature and play nothing but white keys.

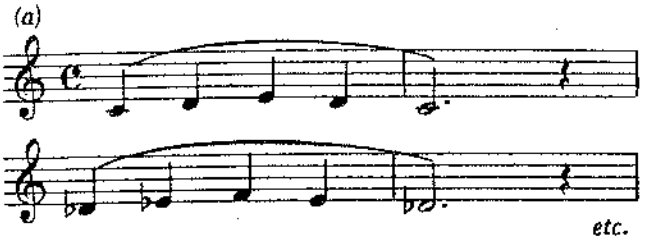
Make sure that the ear, mind and hands have a firm grasp of these simple accompaniment formulas for the diatonic (major and minor) scales and test the certainty of your knowledge by playing in different keys of your own choice. Play some of the passages from memory.

6. THE CHROMATIC SCALE AND CHANGES OF KEY

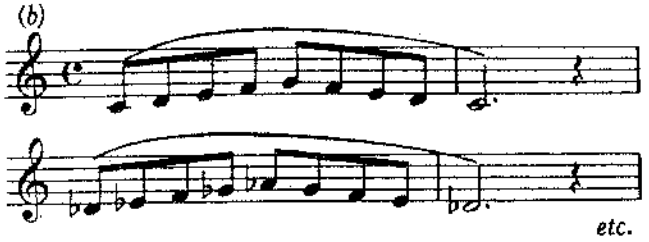
In voice exercises, when a note or melodic pattern rises in pitch by steps of a semitone, *e.g.*:

Example 35

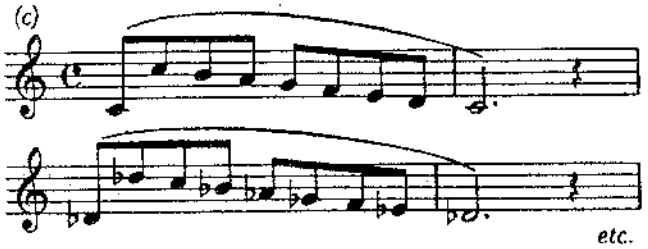
(a)



(b)

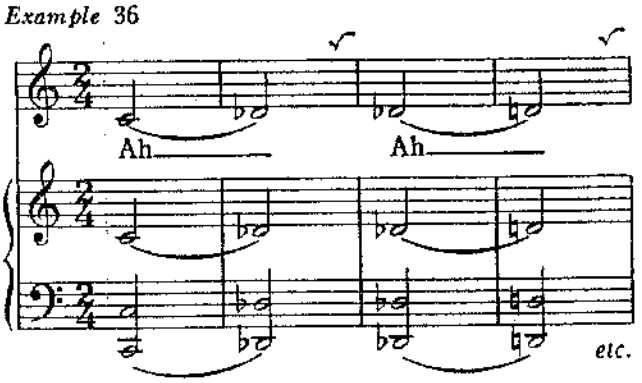


(c)



it is possible to be satisfied with a piano accompaniment which merely doubles, or plays in octaves, the sounds of the voice part :

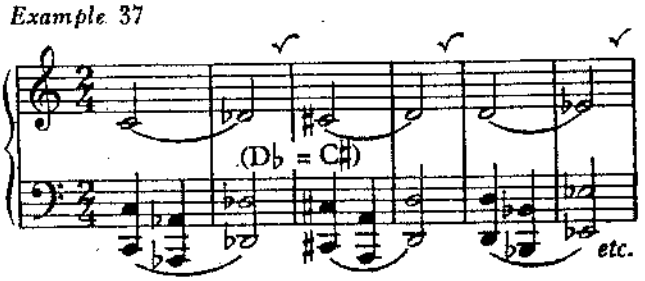
Example 36



This rightly seems to be weak and to lack purpose in rhythm and tonality. The effect is far better if each half-tone step is made to register a definite change of key.

Play again the octave accompaniment given in Ex. 36. Listen and compare it with :

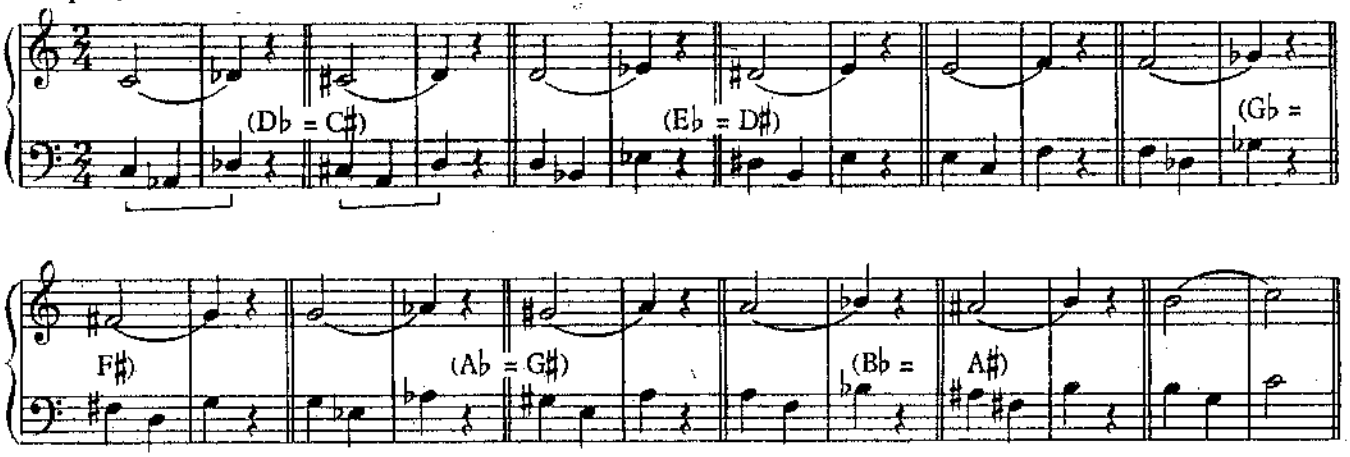
Example 37



Listening to the above example it is clear that, without the use of chords, the change of key is plainly demonstrated to the ear; and in addition to creating increased aural interest and providing a sense of rhythmic progression, the strengthening of the sense of key will be of service in securing greater pitch accuracy from the singers.

Here is the complete octave of the scale, ascending by semitones :

Example 38



Play the above. Listen to the definite, recurring change of key. Now play the left-hand part of Ex. 38 alone. Listen and, with eye and ear, observe the repetition of the three-note pattern marked |_____| Play the left-hand part again. This time, look at the keyboard and observe the repetitions of the pattern or sequence in regard to keyboard location.

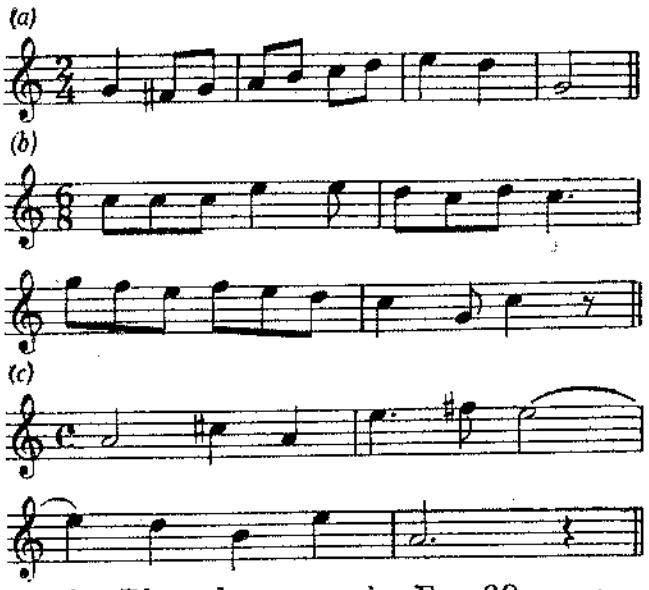
Repeat Ex. 38 two or three times and you will realize how easy it is to play. The only difficult point is the notation —the sharps and flats which seem to crowd one on another. Yet this chromatic sequence of keys requires only the simplest knowledge for its understanding and playing. If you can name and locate the sounds which are (i) a major 3rd below and (ii) a diatonic semitone above any note, if you understand the difference between a chromatic semitone (*e.g.*, C to C♯) and a diatonic semitone (*e.g.*, C to D♭), and if you can provide an alternative name (enharmonic change) for any of the black keys on the piano, you can play this ascending chromatic passage with understanding, ease and certainty.

Look at the left-hand part of bars 1—2 of Ex. 38. The first sound is C; the second is A flat, the note a major 3rd below C; and the third sound is D flat, the note a diatonic semitone above C. Now examine the bass of bars 3—4: the D flat is changed to C sharp and this change from flat to sharp is made whenever you reach a flat note. Then the three-note phrase is repeated : C sharp is the first note; A (a major 3rd below C sharp) is the second note; and D (a diatonic semitone above C sharp) is the third note. The process is repeated in an ascending pattern until the upper octave is reached.

Give yourself some practice in naming and locating on the keyboard the required sounds. For instance :

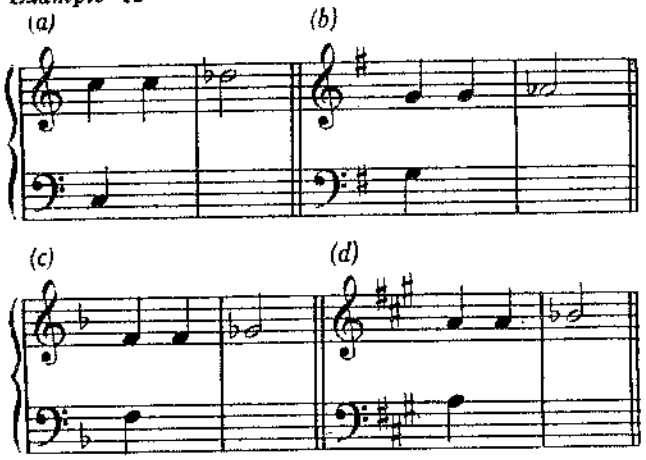
1. Name the notes which are a diatonic semitone above C; D; E; F; G; A, and B.
2. Play these diatonic semitones at the keyboard.
3. Name the notes which are a diatonic semitone above C♯; D♯; F♯; G♯ and A♯.
4. Play these diatonic semitones.
5. Name and find on the keyboard the root of the major triads in which (i) E, (ii) F, (iii) F sharp, (iv) G sharp, (v) B is the 3rd.
6. Play the note D and follow it by the sound which is a major 3rd below D and then the note which is a diatonic semitone above D.
7. Treat similarly the following notes, in turn : E; A; B; F sharp; G sharp; A sharp.

Example 39



8. Play the tunes in Ex. 39—not as printed, but making each note a major 3rd lower :
9. Each of the following notes can also be called by another name—something "sharp." As you play each note, say this other name aloud : G♭; A♭; B♭; D♭; E♭.
10. Complete, at the keyboard, the bass part in each of the following so as to lead from the starting key to the key a semitone higher :

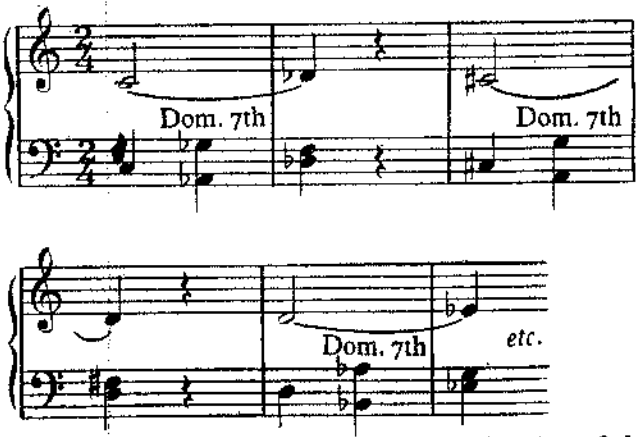
Example 40



11. Write down in the above examples the notes you used to effect the change of key.
12. Starting on the C below middle C play, with the left hand, the note which is a major 3rd below it and then the note which is a diatonic semitone above it. Without reference to a written or printed copy, continue this rising three-note sequence until you reach middle C. (Check for accuracy by turning to Ex. 38 [page 11] and playing the bass part right through.)

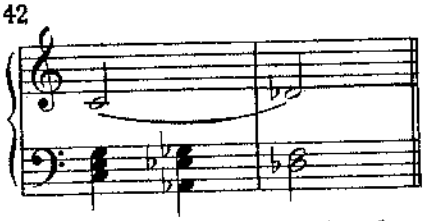
Here is Ex. 38 with the chords which were there "implied" filled in :

Example 41



Play the above and it will be felt that the change of key is still more clearly defined. The sung note (*e.g.*, the note C in bar 1) is treated for the first half of its duration as the tonic (or doh) of key C; and, in the second half of the bar it is regarded as the leading-note (or te), *i.e.*, as the third of the dominant 7th chord in the oncoming key, D flat major, so :

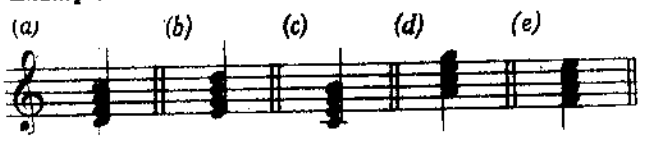
Example 42



Familiarize yourself with the dominant 7th chord root position in a variety of keys and associate this discord with its most usual resolution, *i.e.*, tonic harmony. Here are some preliminary exercises :

1. Play the dominant 7th chord (a) *on* F, (b) *in* F.
2. Play the dominant 7th chord of which F sharp is the 3rd.
3. Sharpening or flattening not more than one note in each chord, play each of the following so that it is a dominant 7th chord in some key or other :

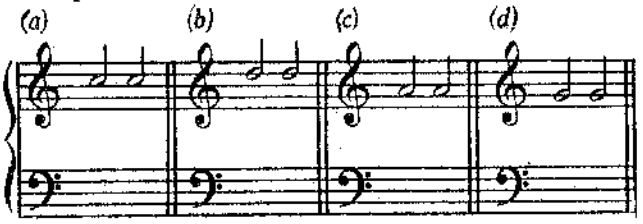
Example 43



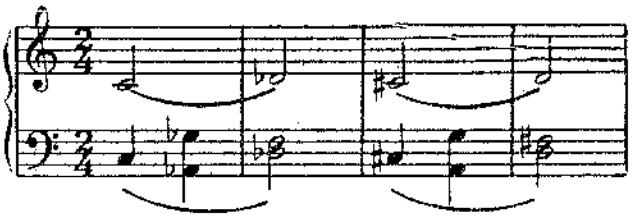
4. Repeat the dominant 7th chords played in Ex. 43, resolving each on the tonic chord of the major key to which it belongs.

5. Play the chord of the dominant 7th in each of the following keys : (*a*) B flat major, (*b*) G major, (*c*) E major. In each case keep the third of the chord at the top.
6. Play the pentatonic scale formed by the black keys of the piano between F sharp and F sharp; and, as you play, give to each note two different names—one "sharp," one "flat."
7. Harmonize at the keyboard the following examples, treating the first of the two notes in each example as the root of a major triad and the second note as the 3rd of a dominant 7th chord.
8. Write down the chords you have just played, so as to give greater precision to your knowledge and to provide a link, connecting hand, ear and eye.
9. At the keyboard, repeat Ex. 44, but this time let each dominant 7th chord resolve on the tonic chord in the major key to which it belongs.
10. Continue the following chromatically so as to complete the octave :

Example 44



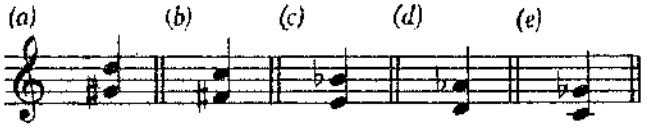
Example 45



7. DESCENDING CHROMATIC PASSAGES

Play the following diminished 5ths :

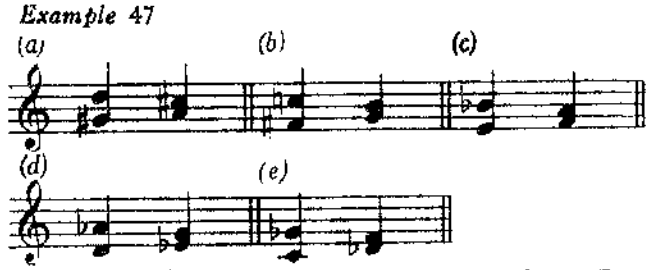
Example 46



Listen. Hear the *dissonant* effect in sound.

Repeat the above intervals, but this time add the most obvious *resolution*, by letting the lower sound rise a semitone and the upper sound fall a semitone :

Example 47



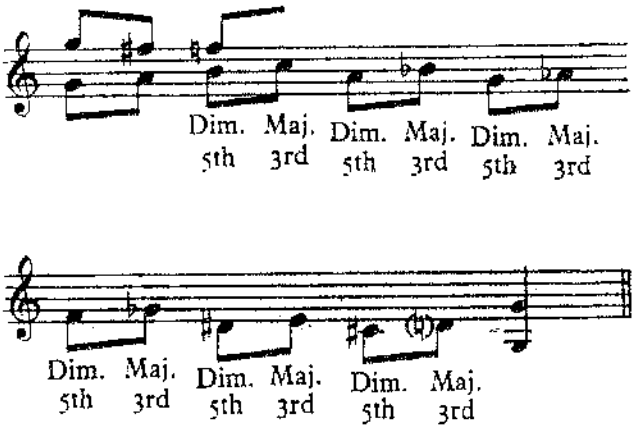
Play the above passage again. Let the ear take in the sound-effect of the dissonant interval (diminished 5th) followed (or resolved) by the consonant interval (major 3rd). Let the eye observe that the semitone move in resolution, up and down, is a *diatonic* semitone. (This is important as a guide to the key and in written work).

Now play the upper notes only of Ex. 47 (a) to (e) as a continuous phrase Listen. Hear that it is part of a descending chromatic scale.

Play Ex. 47 again and realize that the descending chromatic scale can satisfactorily be harmonized by an alternation of diminished 5ths and major 3rds.

Complete the upper part of the following by writing in the notes which will make the intervals indicated :

Example 48

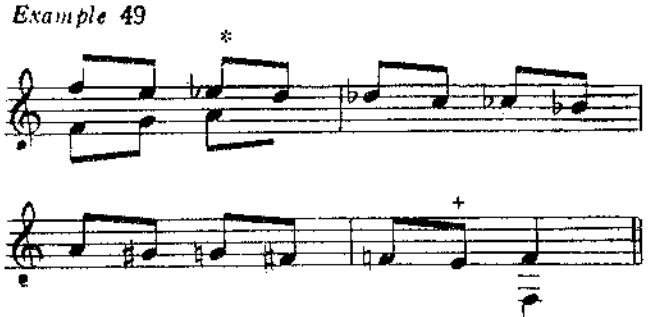


Play the two parts of the above together. Then play the upper part

alone and the lower part alone. Note again the construction : the start on the octave followed by a major 6th and then diminished 5th and major 3rd alternately until the lower leading-note is reached—then the octave to complete the scale.

Complete the following. Start with a diminished 5th at * and then alternate with major 3rd as far as +

Example 49

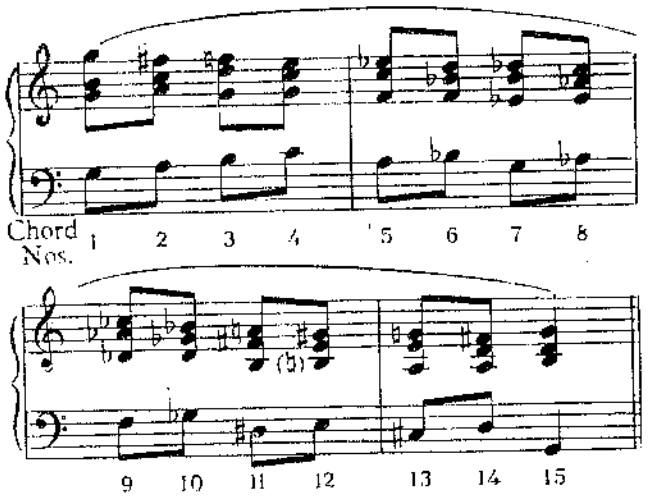


Fix it in mind that after the octave followed by a major 6th at the start, the remainder of the scale is an alternation of diminished 5ths and major 3rds.

Satisfy yourself as to your grasp of this formula by harmonizing the descending chromatic scale between C and C and other notes of your own choice.

The diminished 5th used in the above harmonization is part of the dominant 7th chord, as the ear will recognize if you play :

Example 50



Repeat, making a slight break between each group of two chords. Listen. Hear the descending pattern (or sequence) as each pair of chords registers a new key.

If you examine the chord-structure of the above example you will find that except for the first two chords and the final chord the passage consists of an alternation of dominant 7th chords in 1st inversion and major triads in root position.

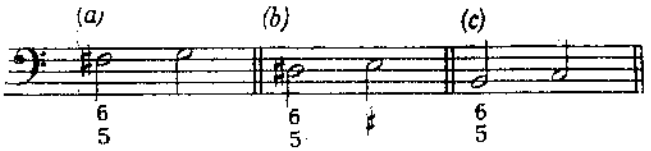
Play Ex. 50 again noting with ear, eye and mind the nature and key of each chord, so :

Chord 1.	Tonic triad	Key G
2.	Leading note triad $(^6_3)$	
3.	Dominant 7th 1st inversion	Key C
4.	Tonic triad	

Chords 5 and 6—Repetition of 3 and 4 Key B flat.
Chords 7 and 8 ditto Key A flat.
Chords 9 and 10 ditto Key G flat.
Chords 11 and 12 ditto Key E.
Chords 13 and 14 ditto Key D.
(Chord 14 is quitted as dominant triad in G).
Chord 15 Tonic triad Key G.

It will provide useful practice to select at random notes which make a diatonic semitone, and to treat the first as the bass of a dominant 7th chord in its first inversion and the second as the root of a major triad :

Example 51

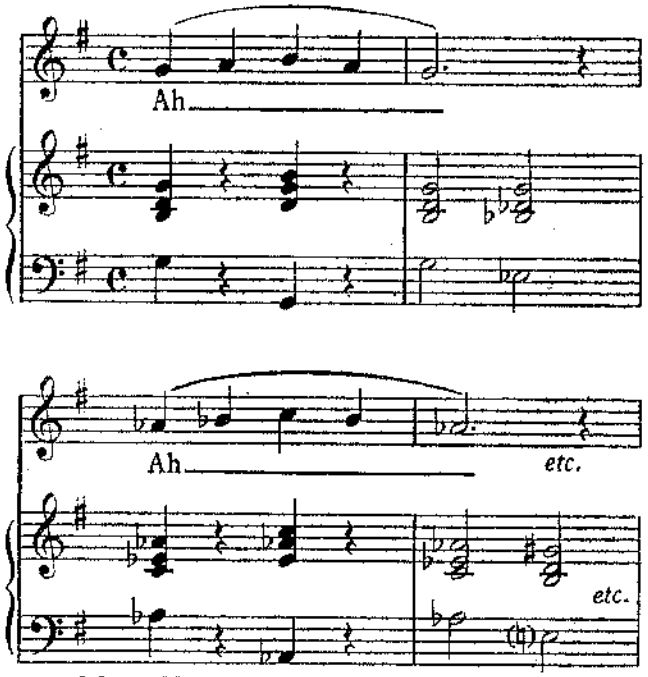


Keep the seventh of the dominant 7th at the top.

This chord-accompaniment will be of service in exercises where the tempo is slowish or when the singers are numerous enough to warrant or require a fuller instrumental support : the texture of any accompaniment should vary according to the weight of vocal tone.

The means employed in accompanying single sounds of the ascending chromatic scale can be used also for voice exercises which consist of short phrases or patterns such as those shown in Ex. 35 (page 10). For these a very simple accompaniment such as :

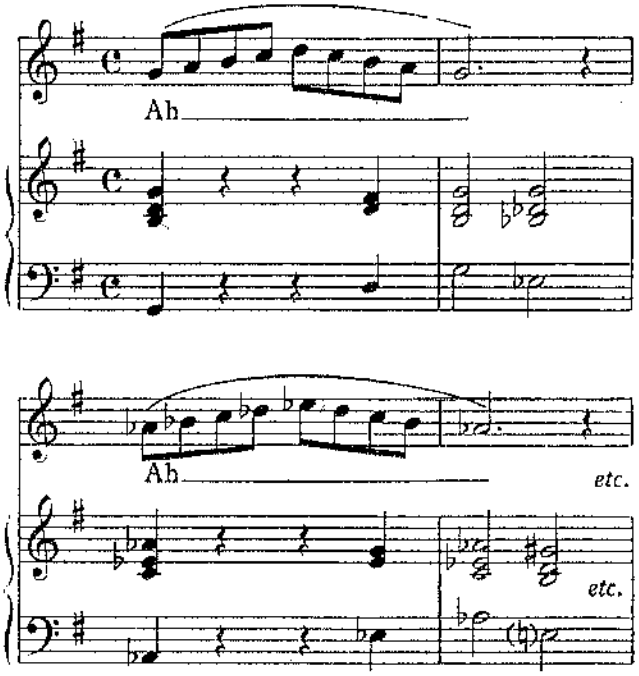
Example 52



would suffice for all of the three specimens of Ex. 35.

If it were desired to develop or encourage a firmer rhythmic response additional harmony could be employed as in :

Example 53



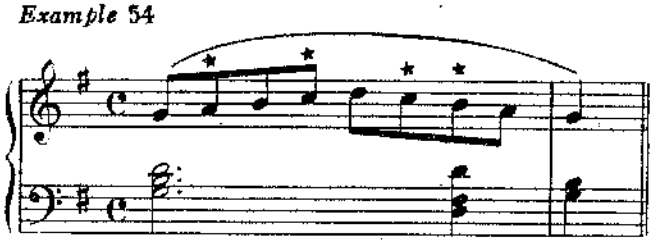
You will see that the above accompaniment is equally acceptable for all three exercises, as it would be for any phrase in which the fourth beat was filled by the 2nd, 5th, or 7th (ray, soh, te) of the key.

8. PASSING NOTES

Now turn back to Ex. 34 (page 10). Sing or hum the vocal line as you play the simple chordal accompaniment again. Listen. Notice that while the piano part contains only notes of the primary triads of the key (*i.e.*, harmony or *essential notes*) the voice part contains in addition, sounds which do not belong to the chords (*i.e.*, non-essential or decorative notes).

Now play :

Example 54

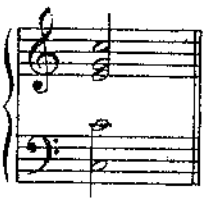


and you will recognize that at the keyboard non-essential notes (marked *) and essential notes may be mixed so as to provide movement and variety in the melody. In playing Ex. 54 you have, in an extremely simple way, incorporated the voice part in the piano accompaniment.

Broadly, chords are either plain or coloured. You can restrict yourself to the use of the notes which are a basic or essential part of the harmony, in which case you are forced to rely upon rhythm to provide the movement and variety; or you can use notes which are alien to the accompanying harmony to aid rhythmic movement in the music and to make the melodic line more interesting : the decorative notes are used in conjunction with the harmony notes but they are not actual notes of the chord and are known, therefore, as *non-essential* notes.

Play :

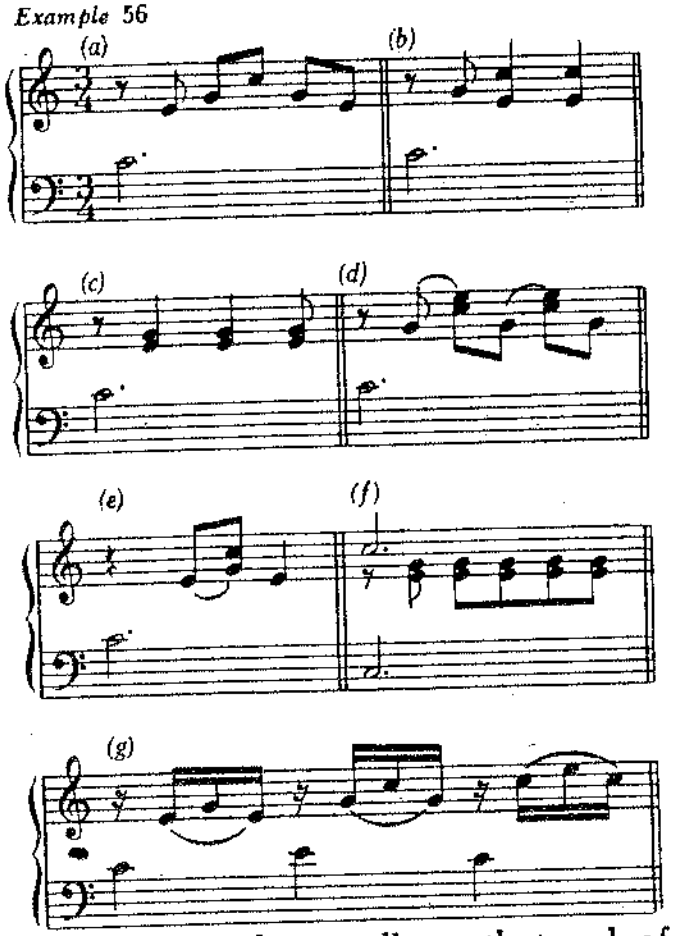
Example 55



which you would describe as "a major triad on C."

Now play :

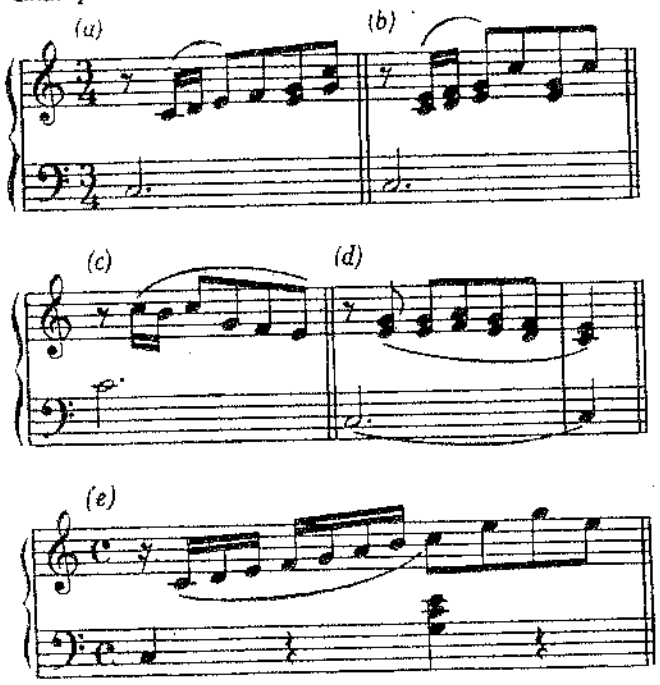
Example 56



Your ears and eyes tell you that each of these bars is, likewise, a " major triad on C;" but it is dressed up in different rhythms or styles suitable for use as a simple figure in a piano accompaniment or improvisation. Chord-notes used melodically in this way are known as *bye-tones.*

Play :

Example 57

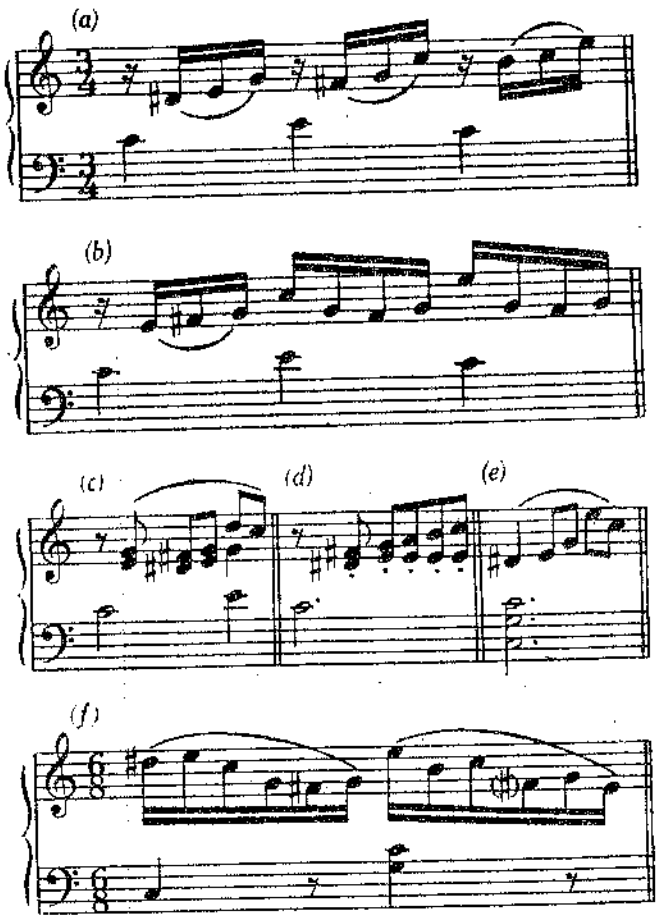


Here again, your ears and eyes tell you that each of these bars is " a major triad on C." In addition to the chord-notes, non-essential notes or *passing-notes* are used to make the desired rhythmic outline; and you will observe that passing-notes are notes which can assist smooth melodic movement between one harmony (or chord) note and the next harmony note.

If you play Ex. 57 you will notice two points : first, that although the passing-notes do not belong to the chord, they do belong to the scale; and they are, therefore, called *diatonic* passing-notes. Next, you will notice that the passing-notes do not obtrude themselves in the shaping of the rhythm. Hence, a more precise description is : unaccented, diatonic passing-notes.

Now play :

Example 58



Listen. Look. Think. And again you will perceive that each of these bars also is " a major triad on C."

Play Ex. 58 again and you will realize that passing-notes may also be chromatic and that, sometimes, they tem-

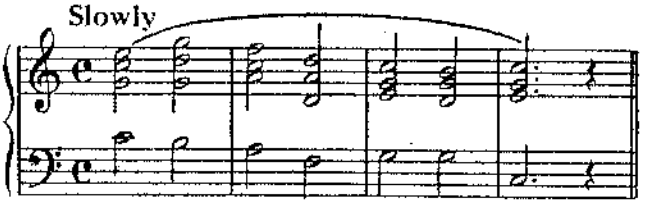
porarily usurp the rhythmic position of the chord notes. Hence you can use accented as well as unaccented chromatic passing-notes. But the names are the least important thing. In music, whether we are learners or teachers, the order of importance and of presentation is: first, the sound, then the sign or symbol and, finally the name. Here then are some simple experiments which should help you in gaining keyboard facility in the use of passing-notes.

9. KEYBOARD EXPERIMENTS

1. Play the following chord-succession:

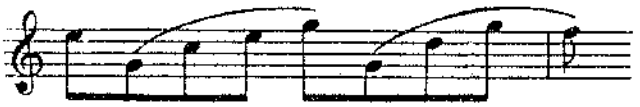
Example 59

Slowly



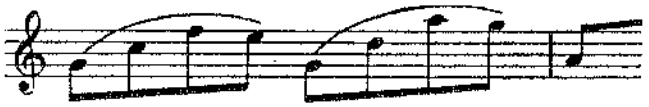
2. Play it with the chords on the upper stave in broken harmony:

Example 60



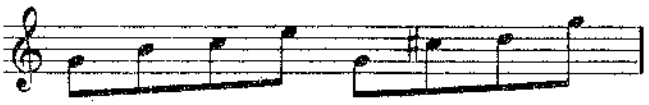
3. Play it, temporarily displacing the top note by the sound one step higher:

Example 61



4. Play the passage again temporarily displacing the middle note of the right hand part by the note a semitone below:

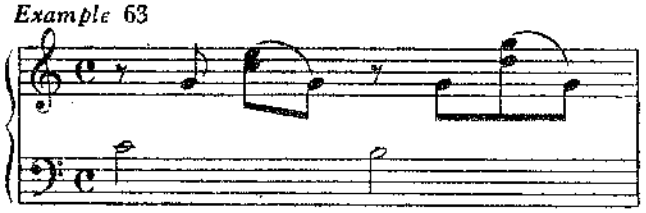
Example 62



5. Play the passage keeping the chords as two-beat notes, but introducing different kinds of passing-notes into the melody so that it maintains a crotchet movement except in the final bar.

6. Using the same chord-succession play a simple accompaniment figure so as to maintain a quaver movement throughout bars 1—3. Use only chord-notes:

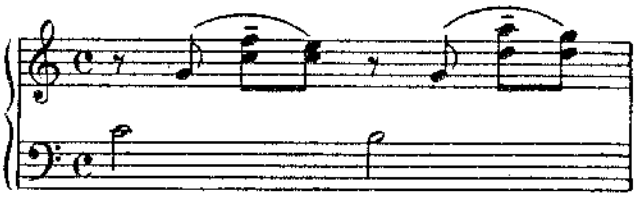
Example 63



etc.

7. Repeat, but this time use the upper accented passing-note in each chord group:

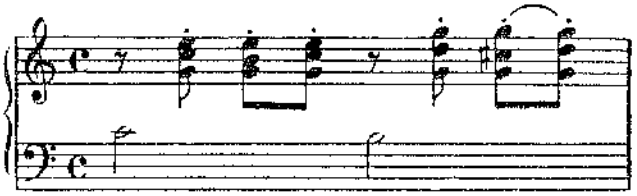
Example 64



etc.

8. Play the chord-succession as an accompaniment, introducing in each chord the lower auxiliary note a semitone below the middle sound of the chord:

Example 65



etc.

9. Now try to devise for yourself a different distribution of the sounds of chord I. Then apply it to the remainder of the chords or to such as you think will create a good effect.

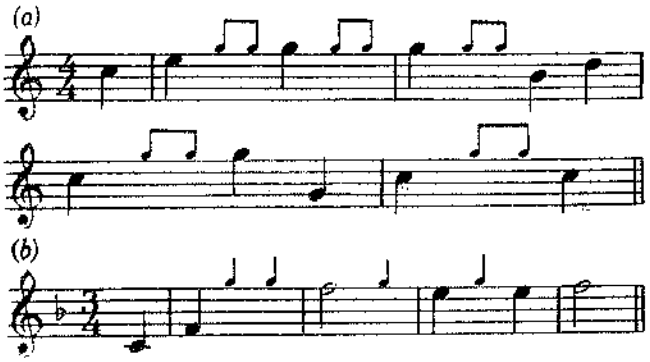
10. Play the chord succession (Ex. 59) as straight up-and-down chords as written, but change the key towards the end to A minor by playing (bar 3) a cadential six-four (second inversion followed by a root position) on E.

11. Repeat what you have played with the right hand part in broken harmony.

12. Play the following melodies

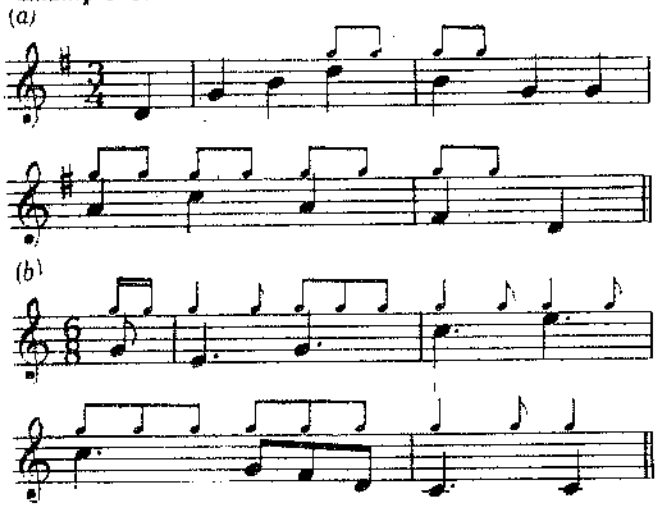
adding chord-notes (bye-tones) to fit the rhythm indicated :

Example 66



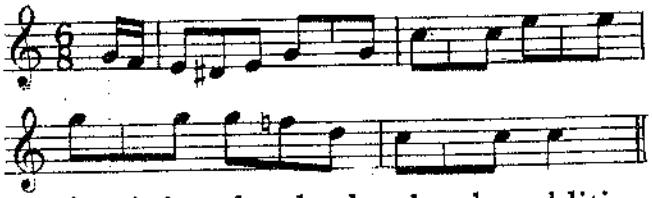
13. Play the following melodies, adding diatonic passing-notes as indicated :

Example 67



14. Similarly, play :

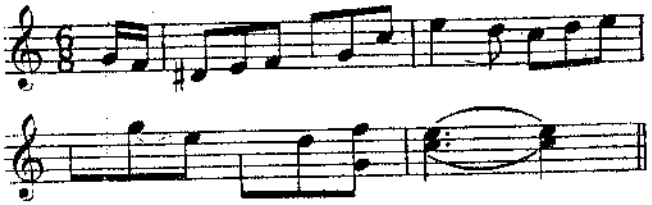
Example 68



maintaining the rhythm by the addition of a passing-note a semitone below the main note. (Such passing-notes are sometimes called "lower auxiliary notes" and it is usual to indicate whether they are diatonic or chromatic, accented or unaccented).

15. Play the following :

Example 69



adding an accented chromatic auxiliary note below the main note at the indicated points.

Take each of the above melodies in turn. Play it in its plain and then its decorated form. Finally, add the simple supporting harmonies which are indicated by the essential notes.

10. KEY SENSE AND MODULATION

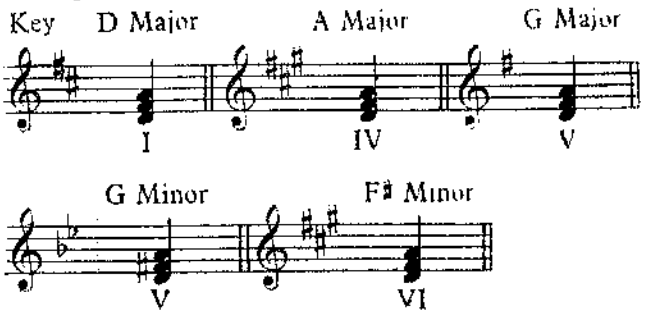
In the development of facility and freedom at the keyboard, the most important thing to know about a common chord is that it is common to a number of keys. Any major or minor triad may belong to five different keys. Prove this for yourself by playing the following triads, all in root position :

The tonic (I) triad in D major
The sub-dominant (IV) triad in A major
The dominant (V) triad in G major
The dominant (V) triad in G minor
The sub-mediant (vi) triad in F♯ minor

Listen as you play and you will recognize that—regarded as isolated, detached chords—each is absolutely identical.

Here are the triads in written form :

Example 70



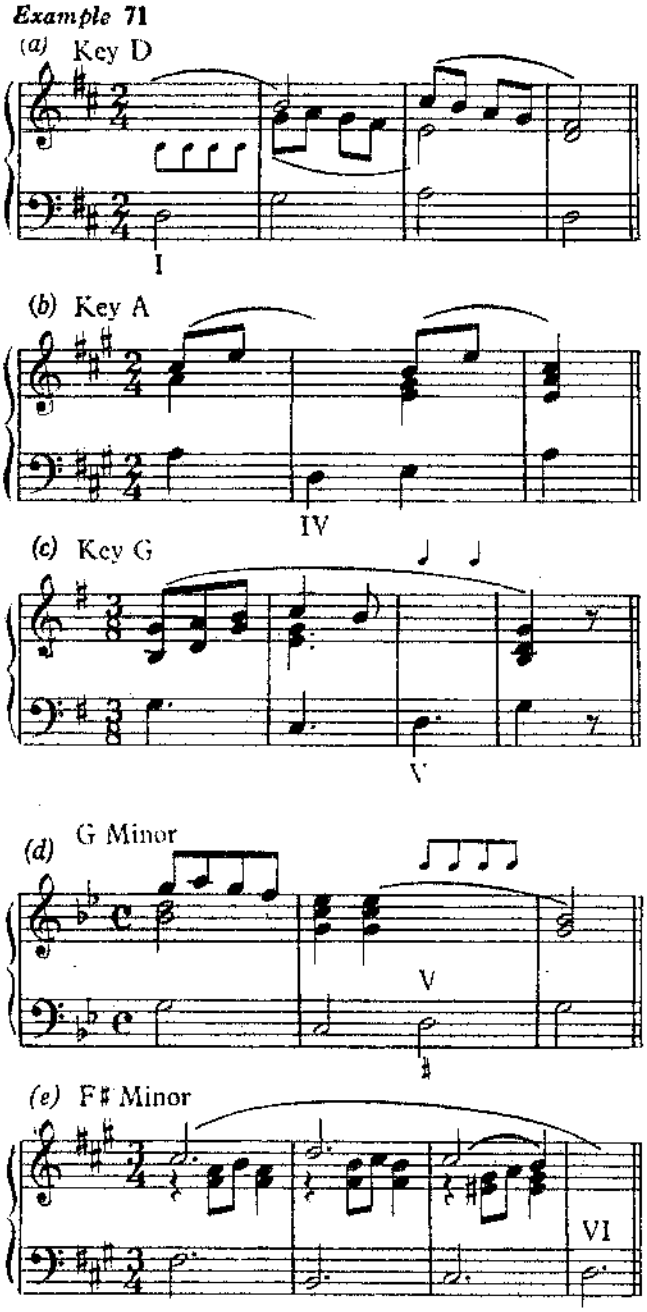
Play the above triads and your eyes and ears will recognize that all are alike. The major triad (D, F sharp, A) is as much a part of the keys of A major, G major, G minor, and F sharp minor as it is of D major; and *any* major triad is the common property of five keys—three major keys and two minor keys.

Prove this by finding the five keys to

which the major triad C—E—G belongs. Do likewise with some other major triad of your own choice. (You will find the keys more speedily if you remember that they are the major keys in which the root of the triad is respectively tonic, sub-dominant and dominant; and the minor keys in which the root of the triad is respectively dominant and sub-mediant).

To the following passages add the major triad on D at the points indicated: At (a) (b) (c) and (d) employ a suitable rhythm, as indicated:

Example 71



Play the above. Listen. Hear that, while the triads you have inserted in each example are identical in structure, each differs in effect because it stands in a different relationship to the tonic (or home-note) of each key.

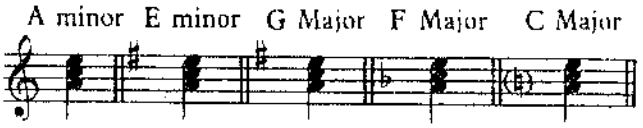
Now play the following triads in their root position and simplest form:

The tonic (I) triad in A minor
The sub-dominant (IV) triad in E minor
The super-tonic (ii) triad in G major
The mediant (iii) triad in F major
The sub-mediant (vi) triad in C major

Again listen as you play, and recognize that each of the five triads contains the same sounds.

Here they are in written form:

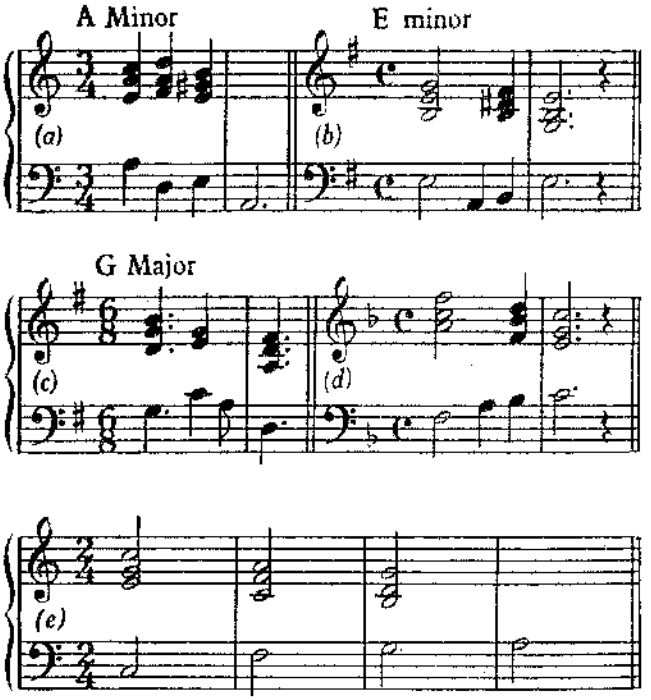
Example 72



Play the above triads so that ears and eyes may recognize that the minor triad A—C—E is the common property of A minor, E minor, G major, F major and C major.

Fit this triad into the following examples at the blank points:

Example 73



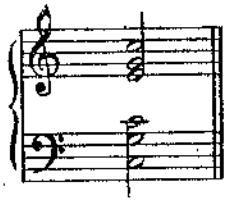
Make each section of Ex. 73 into a four-bar phrase in the key and time indicated. Keep the triads as the harmonic foundation. Use ornamental notes so as to introduce the rhythm you wish, *e.g.*, gavotte, waltz, minuet, etc.

Discover the five keys (3 major, 2 minor) to which the minor triad on D belongs; and then demonstrate its part in each of these keys by including it in a short chord-succession similar to those you played in Exs. 71 and 73. The five keys in which any minor triad may occur are the minor scales in which the root of the particular triad is respectively tonic and sub-dominant and the major scales in which it is super-tonic, mediant and sub-mediant.

It will be apparent that because every common chord is common to five keys, a single triad is not sufficient to establish a key-sense or to create a feeling for the home-note.

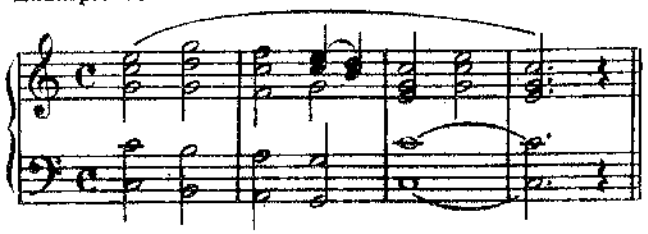
If you were to play to someone with a fair degree of listening experience, the following chord :

Example 74



and to ask for the home-note (keynote, tonic or doh) to be hummed or sung, he would probably sing C, but G or even E are possible. If, however, you were to play

Example 75



the response would not be in doubt.

The chordal progression which you have just played could—even in its plain, unadorned form—be of much teaching service. These few bars could for instance be used :

(i) to fix the key-centre before a vocal exercise or song which lacked introductory bars.

(ii) to help in the development of a feeling for key, for the home note and chord, and for the major mode;

(iii) to assist in securing aural recognition of :

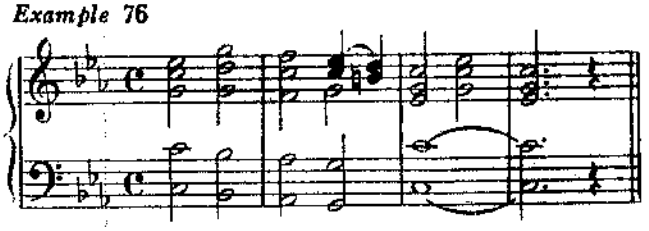
(*a*) the major triad and its inversions : every triad in Ex. 75 is a major triad and both the first and second inversions as well as direct position are used.

(*b*) the perfect cadence (V to I); and, if the final chord (bars 3—4) were changed from I to vi, an example of the interrupted cadence would be provided.

(*c*) the cadential six-four (bar 2).

If Ex. 75 is played and immediately followed by

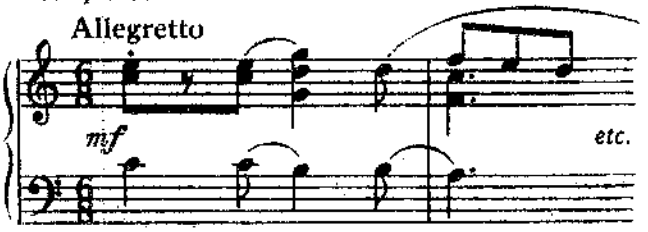
Example 76



it will show forcibly the contrast between music in the major and the minor modes, while the bass or left hand (bars 1—2) demonstrates the use of the melodic form of the minor scale in the descending melody. Ex. 75 and 76 also establish the point that the primary harmonies of the minor key are situated exactly as in the major key *viz.*, on the 1st, 4th, and 5th notes of the scale.

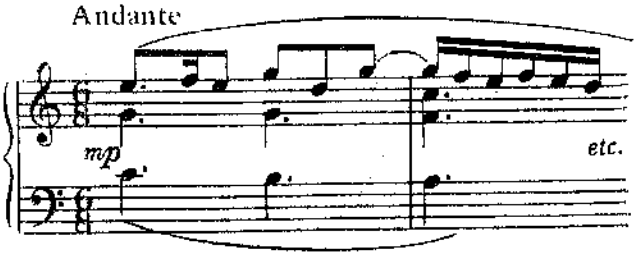
If this simple progression is used as a key-stabilizer or preliminary to the learning of a song, it can be modified to the time, tempo and character of the chosen song. In a song of a bright or pastoral type it might be played in the following rhythm :

Example 77



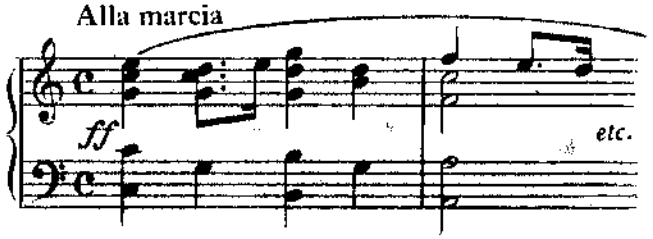
In a quiet, contemplative song, a possible presentation is :

Example 78



In music and movement work, it might be used in march-like rhythm :

Example 79



Replay Exx. 77, 78, and 79. Listen Then play the first three chords of Ex. 75 again. Listen and satisfy your mind and ear that in all these examples the harmonic foundation or framework is identical.

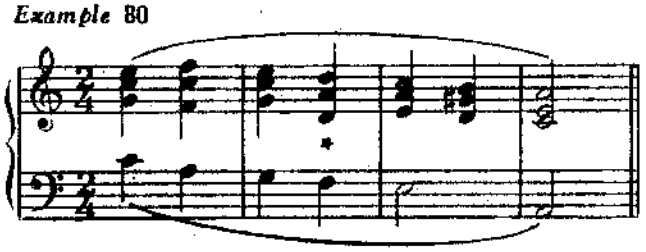
11. THE COMMON CHORD IN MODULATION

The fact that a common chord is common to five keys makes it clear that the simple triad can be of service when we wish to change key in the course of the music, *i.e.,* to modulate. Points to keep in mind are :

1. That modulation involves the use of two different home-notes (or key centres) between which there is a kind of neutral or no-man's land. (This may consist of a single chord or of many bars).
2. That the primary triads give prominence to the key-centre and the secondary triads weaken the sense of key and so pave the way for the move to a new key.

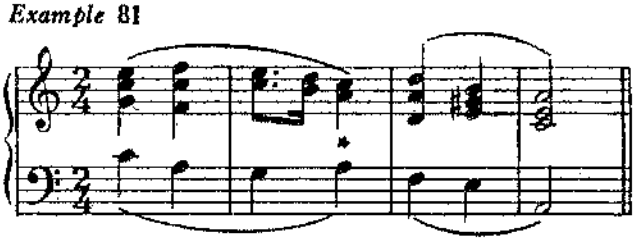
Play :

Example 80



Listen. Hear that this short passage begins in C major but moves to and ends in A minor. Now repeat the passage more slowly. Hear that the chord marked * is the super-tonic triad (ii) in its first inversion, *i.e.,* with the 3rd of the triad in the bass. It is the " switch " or " pivot " chord. It belongs to both C major and A minor : it is the triad on the second degree of C major and it is the triad on the fourth degree of A minor. It helps to make the change of key sound smooth and natural, because it is a weak (secondary) triad in C major and a strong (primary) triad in A minor. It is a good choice of chord for, though there are other secondary triads in C major, none would be as effective. You could use at * the sub-mediant triad (vi) in C major :

Example 81



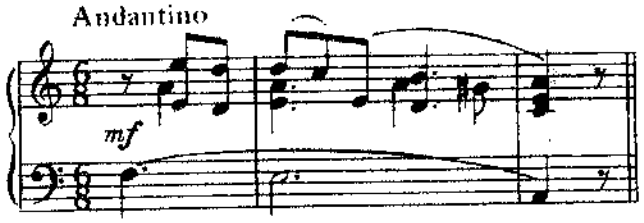
Repeat the above example stopping at at * chord. The notes of this triad A—C—E are also the sounds of the tonic or home triad in A minor; but its use at this point interrupts the flow and robs its repetition (bar 4) of some finality.

The remaining secondary triad in C major is the mediant (iii) triad the notes of which are E—G—B; but a triad containing a G♮ would obviously be of little service in helping the music to move to the key of A minor in which the leading note is G♯.

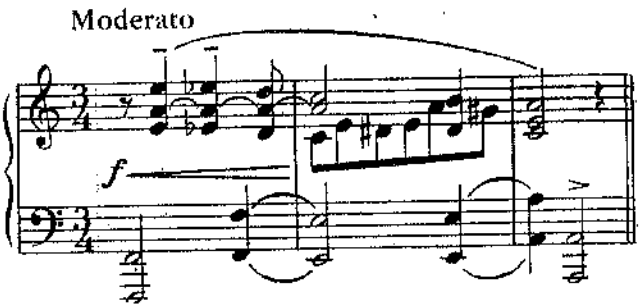
These and earlier examples are presented as plain up-and-down chords with a desire to aid perception, but listen as you play the following variants of the last four chords of Ex. 80 and

you will readily recognize that both are based on the same harmonic framework and simple triad foundation :

Example 82



Example 83



12. GRADUAL MODULATION

Modulation implies the existence of at least two different keys, so that there are usually three stages, which may be described as the old key; the new key; and the connecting link between.

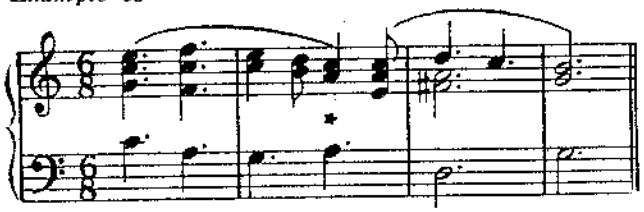
In these stages, the different types of chords serve their special purpose : the primary chords and the discords are needed to establish the key-centre and to give to a particular sound or chord the effect of the home-chord, while the secondary triads are most useful if you wish to weaken the key sense, or to reduce the aural authority of the key, thus paving the way for a change of key.

Play the following example and hear that the primary chords are followed by a single secondary triad (the sub-mediant or vi).

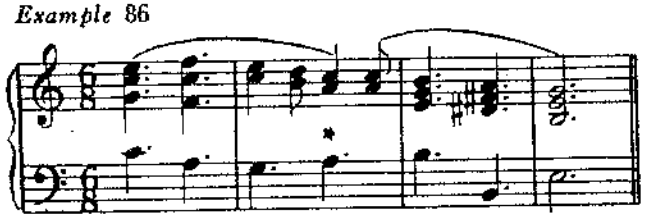
Example 84

Now play :

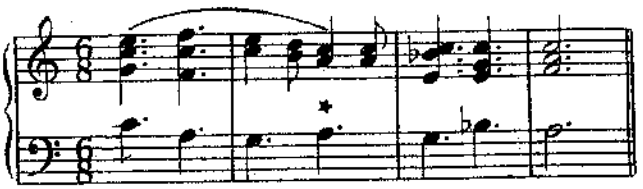
Example 85



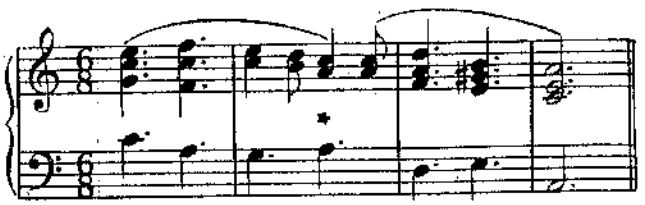
Example 86



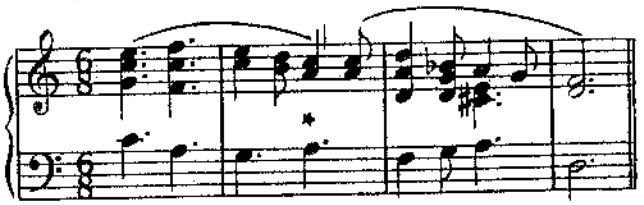
Example 87



Example 88



Example 89



Play again—and again if necessary—the examples in modulation Ex. 85 to 89. Listen keenly so that ear, eye, and mind may grasp :

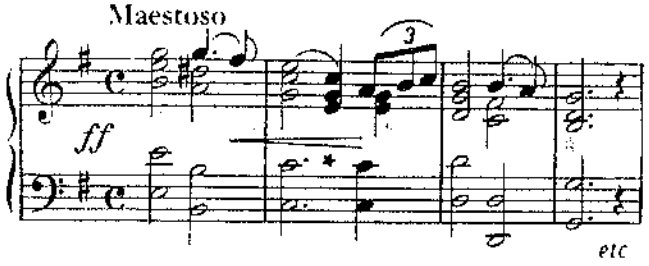
(i) that in all the examples the first two bars are identical;

(ii) that in all, the secondary triad on the sub-mediant (at the end of bar 2) is used as a "switch" chord;

(iii) that following the secondary or "switch" chord, primary harmonies in the new key effect a *modulation.*

Now play the following :

Example 90



Listen. Hear that the new home-note is G : the music has moved from E minor to the relative major key. The home-note and the mode are changed. This new tonality creates a fresh interest for the ear.

Experiment with modulation at the keyboard. Use a note or a chord as a switch-point. Recognize the three steps (a) the setting-up of the first key, by means of the primary triads; (b) the switch chord or chords (secondary triads) which weaken the existing key: (c) the setting-up of a new key.

In G major, play the plain chord-succession I, IV, V, vi, and follow it with V and I in D major.

Repeat I, IV, V, vi, in G major and follow it with IV, V and I in E minor.

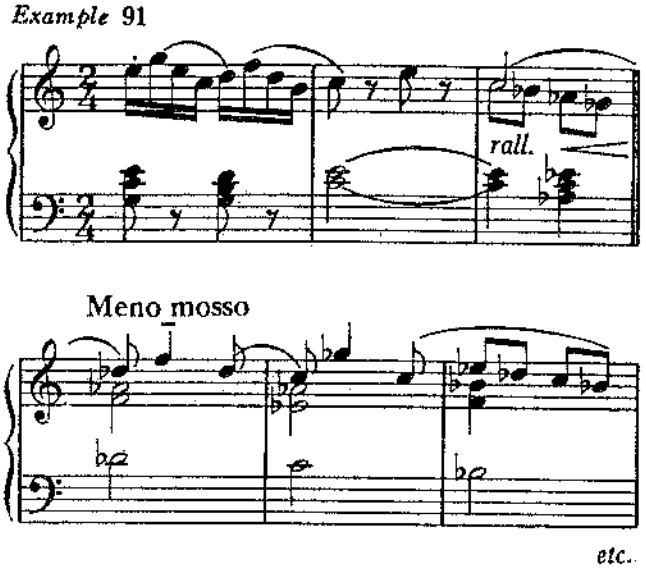
Repeat I, IV, V, vi, in G major and follow it with V and I in B minor.

Play Ex. 90 as far as *, then modulate to some key(s) other than G major.

13. RAPID KEY-CHANGE

Here is an example of a single note (C) used as a switch. The passage gives the end of a phrase or section in C major followed by the opening of a new section in the key of D flat major :

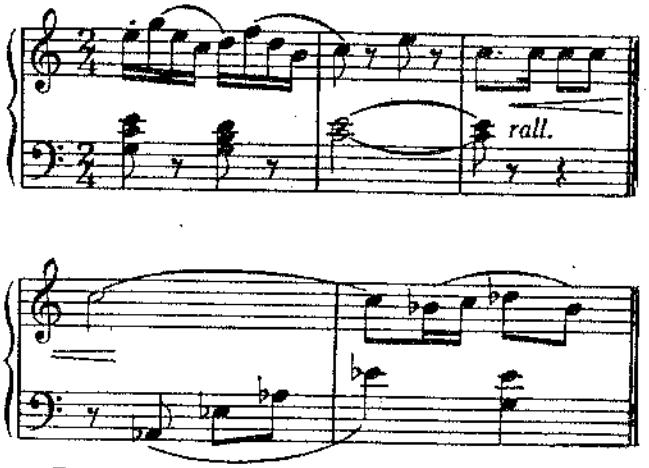
Example 91



Repeat the above. Listen to the effect. Look at the notation. A moment's thought will show that this change is effected in exactly the same way that the chromatic scale was harmonized (see Ex. 41, page 12).

Here is another example of swift or sudden modulation where the note C is treated first as the keynote and then as the mediant—a single note C is the link between the keys of C major and A flat major :

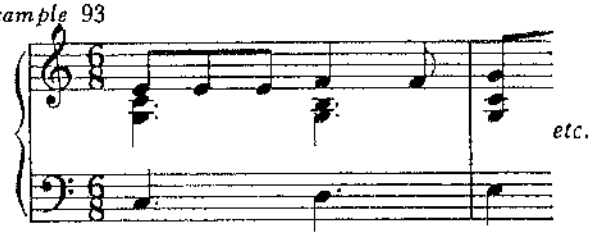
Example 92



In establishing a key quickly the dominant 7th chord is more useful or more definite than the dominant triad. It is, indeed, so serviceable that it is liable to be over-used. To use a dominant 7th harmony in making a half-close (or imperfect cadence) is wrong because it destroys completely that sense of rest or repose which is an essential in all cadences, except the interrupted cadence. The dominant 7th chord followed by the tonic chord is apt to have the effect of a full stop and the use of this progression may induce the invention of the improviser to come to a full stop. Make your

familiar therefore with all three of the normal resolutions of the dominant 7th chord, *i.e.* (i) on tonic harmony, (ii) on sub-mediant harmony and (iii) on an inversion of sub-dominant harmony. Remember that the 7th may rise when the second inversion of the dominant 7th resolves on first inversion of the tonic, as in the usual harmonization of *Drink to Me Only:—*

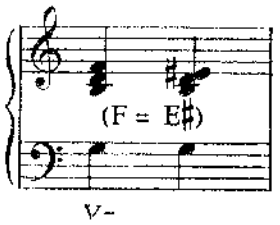
Example 93



The dominant 7th chord can be of use, too, in rapid key-change. It can make possible a modulation, in a single chord, to remote keys, *e.g.*, from C (major or minor) to B (major or minor). This is done by a simple enharmonic change.

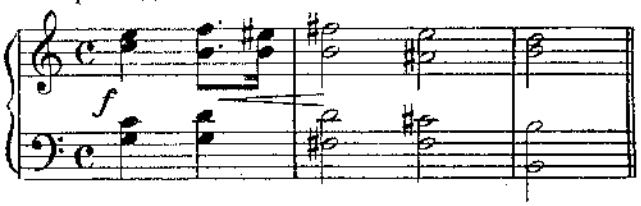
Play :

Example 94



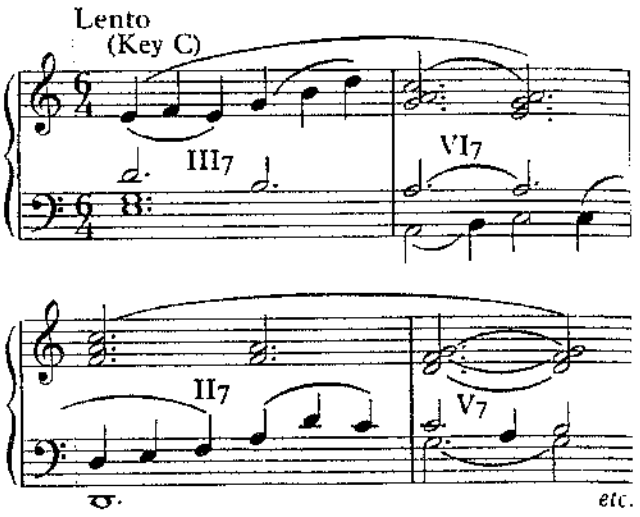
The modulation from C major to B minor is effected so :

Example 94a



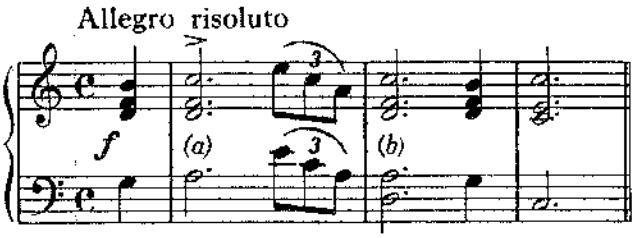
So far we have used only the dominant 7th chord. There is no reason why if musically treated, we cannot play a chord of the 7th on any degree of the scale. Play :

Example 95



Listen. Hear the secondary seventh chords on mediant, sub-mediant, and supertonic followed by V_7. Until real facility has been acquired be content with adding the super-tonic seventh (ii_7) to your harmonic store. Play the following and hear its effect :

Example 95a



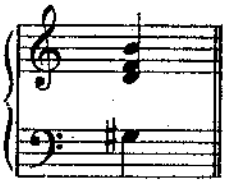
In the above the ii_7 chord is used at (a) in its second inversion and at (b) in its root position. Note, too, that it can resolve on V or V_7 chord.

14. THE DIMINISHED SEVENTH CHORD

The chord of the diminished 7th is a very helpful switch chord, because each of its notes can be altered enharmonically, with each change opening the door to a different key. You know that the simple triad can open the door to many keys, but in the case of the diminished 7th chord each change brings us a chord which is very closely identified with one single key. It is the one dissonant chord which can be linked with five keys. A diminished triad belongs to no more than three keys and the augmented triad to one key only. The diminished 7th is, of course, the chord of the 7th built on the leading-note of

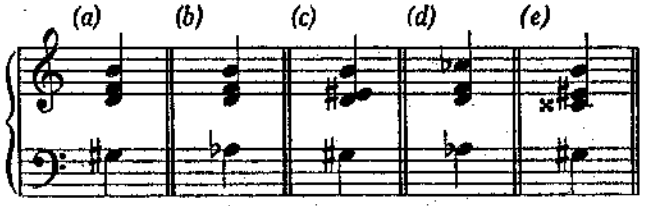
the minor key. In A minor, it is G sharp —B—D—F.

Example 96



Look at the following chords :

Example 97



You see that each, in appearance, is different. Now play the five chords. Listen and hear that, despite the differences in notation, the sound of each chord is identical and, of course, your fingers recognize that in each case the same set of keys is depressed.

The enharmonic alteration of the notes of this chord link it with different keys; G sharp and A flat, for example, indicate different tonalities. Though the chords may sound identical when heard as separate, detached chords, each takes on its own distinctive sound when heard in its proper setting, that is, when heard as part of a particular key.

The method of discovering the normal tonality or key of each chord is simple. In this or any other chord the note which forms the smallest even-numbered interval above the bass note is the root or foundation note. If there is no even-numbered interval then the bass note itself is either actually or for all practical purposes the root. Let us take each chord in turn.

At (a) the notes are G sharp—D—F —B. D is a 5th, F a 7th, and B a 3rd above G sharp : there is no even numbered interval. G sharp is therefore the root of this diminished 7th chord on the leading-note of A minor.

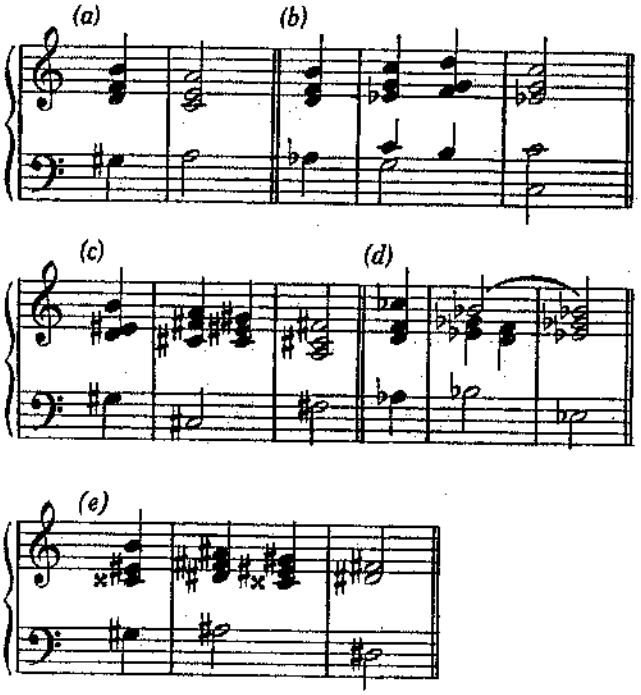
At (b) the notes are A flat—D—F— B. D is a 4th, F a 6th and B a 2nd above the A flat. B therefore is the root and leading note : Key C minor.

At (c) the notes are G sharp—D—E sharp—B. D is a 5th, E sharp a 6th and B a third above G sharp. E sharp makes the only even-numbered interval and the key, therefore, is F sharp minor.

Proceed similarly with the chords (d) and (e).

Here are the five enharmonic versions followed by resolving chords each in its normal key :

Example 98



Play the first chord only in Ex. 98 (a), (b), (c), (d), (e). Listen. Recognize again that, despite visual differences, the aural effect of each chord is identical. Now play Ex. 98 complete. Listen closely. Make a short break after each section. Hear that the difference between (a), (b), (c), (d) and (e) is not merely a "paper" difference in notation. It is a real difference. The sound of the diminished 7th chord and its several enharmonic changes differs because the context is different. Each is set in a different key. Just as the words which come before or after "progress" influence our pronunciation or accentuation and enable us to let listeners know whether we are using the word as a noun (prógress) or as a verb (progréss) so the altered relationship of the discord to different home-notes distinguishes the chord from its enharmonic equivalents.

If the explanation which has been given should seem at all complicated

replay Ex. 98. Re-read the text, too. Read it slowly. Aim at the immediate objective which is to secure a grasp of the construction and treatment of the discord and to acquire facility in converting that knowledge into sound at the keyboard. Keep in mind also the wider objective. We aim at more than a mere understanding of a discord which, because of its chameleon-like qualities, can be of service. Knowledge plus keyboard skill means that we have added to our storehouse of aural impressions and to our finger skill: a storehouse which may be drawn upon and employed in our extemporary work at the piano. We are interested in gaining skill in the use of this diminished 7th because it means that, with the aid of the change in notation, we have a choice of five chords—at the least—which can satisfactorily follow or resolve the discord; and not only five resolving chords but also five keys—some quite remote—to any of which we may move, when desired, with speed and sureness. And, using our ears, we learn that modulation or change of key is an interest-building and an interest-sustaining device which is used in all music and which we may use to avoid the monotony that comes with an overlong use of any particular key. Our interest in the chord is increased because, like all other chords, it can be of practical service.

(*a*) in melody-making, for all melodies have a harmonic basis;

(*b*) in demonstrating in aural or appreciation work the sound-effect and the purpose of key-change;

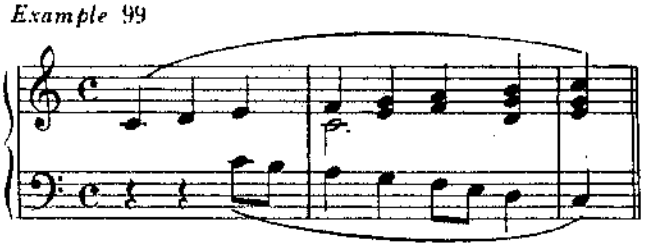
(*c*) in linking two songs which may be part of a programme-group but which happen to be in different keys. A few well-chosen chords between the end of one song and the beginning of the other will produce an artistic, musical effect and also help people to sense or feel more firmly the new home-note or tonic;

(*d*) in giving shape, direction and purpose to any improvisation, *e.g.*, in explaining (in sound) the key-scheme and design of short, simple dance movements in binary, ternary, or simple rondo plan.

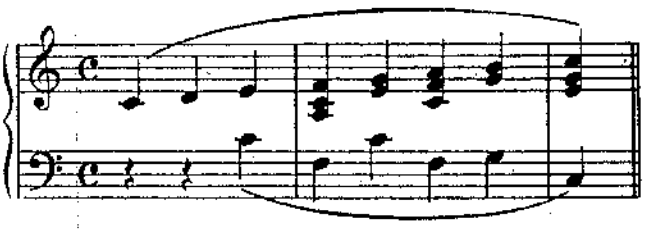
15. MORE KEYBOARD EXPERIMENTS

Now for some further simple experiments in which you can prove in sound that you know these chords. They exercise mind, ear, and hand. Listen all the time to make certain that the chords are used easily and naturally. Do not strain after effect. Do not try to squeeze examples of all the different kinds of chords into a passage of a few bars' length. Make use of inverted harmonies: a change of position in a chord may be as effective and even more appropriate than a change in the harmony. The good effect of inverted chords will be demonstrated to your ears by playing the following examples. Ex. 99 is the simple harmonization of the ascending major scale which you played at the outset—and which, by now, you should have memorized. And here is the same harmonization but with all the chords in their direct (or root) position:

Example 99



Example 100

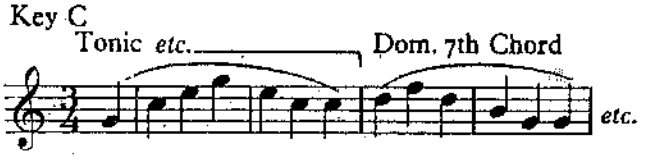


Listen as you play. Now replay Ex. 99. Listen again and realize that the use of inversions can make a smooth bass and give a far more musical result than would be possible if all or the majority of the chords you used were in root position.

Do not feel that a change of harmony is always necessary with every melody note or at every beat—or bar. The following well-known tune will demonstrate this point :

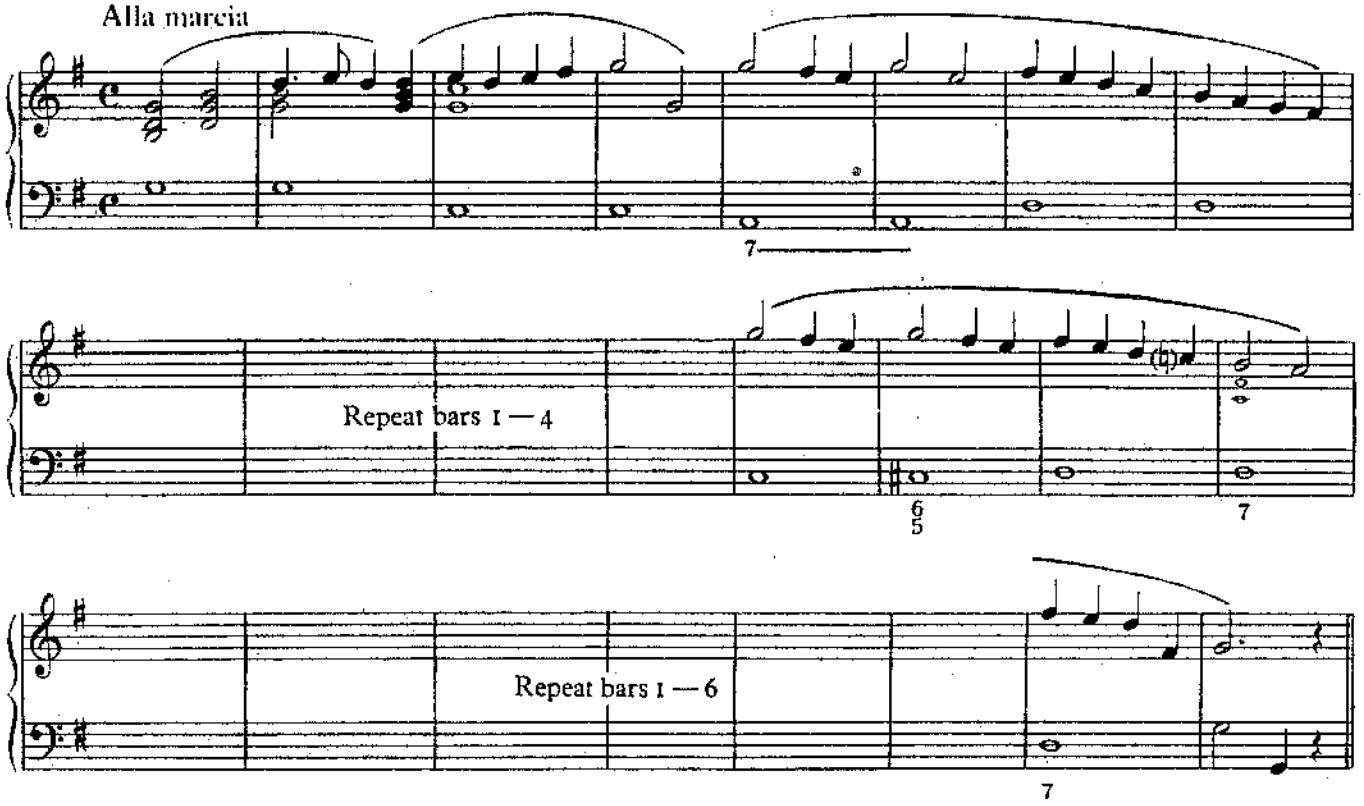
Example 101

Key C



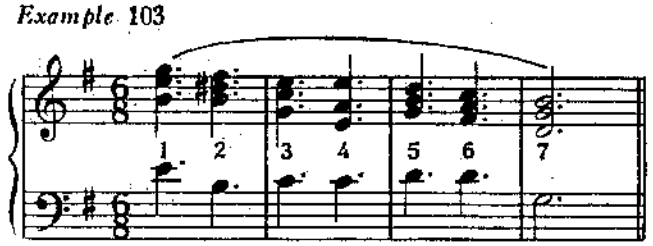
And you can satisfy yourself on this point if you will play and fill in the following outline of a very simple march (Ex. 102) in which each harmony is used throughout two bars :

Example 102



The following chord outline, with which you are already familiar in another rhythm, forms the basis of some further keyboard experiments, which are preceded by very simple tests which should fix the chord progression well in mind. Read each requirement carefully, and do not put the hand(s) to the keyboard until you are quite clear as to what you intend to do. You will, on the way, see how a degree of keyboard facility can be of service at many points. Here is the chord-outline :

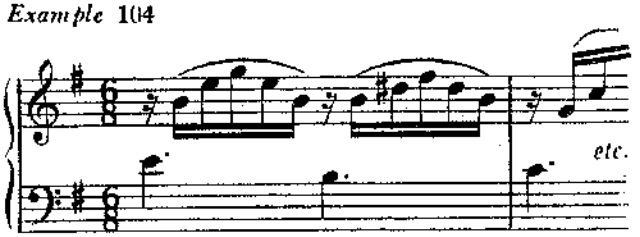
Example 103



1. Play the above. Listen.

2. Play Ex. 103 in arpeggio fashion, so :

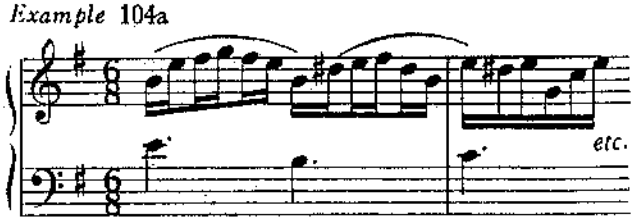
Example 104



* * *

3. Repeat the passage maintaining a semiquaver movement but mixing passing-notes with the harmony notes.

Example 104a



4. Play the chord-outline (as printed) very slowly. Listen Think. Describe it, to yourself, chord by chord, *e.g.*, Key E minor. Chord I, tonic chord (I); 3rd in top part. Chord II, dominant (V); root position, fifth at top; etc.

* * *

5. Play the chord which serves as the pivot (switch or modulating) chord from E minor to G major.

* * *

6. Play the one example of a dominant 7th chord used in the progression.

* * *

7. Play this same chord in its several inversions.

* * *

8. Play the chords which are primary triads (a) in E minor; (b) in G major.

* * *

9. Play the chords which are secondary harmonies.

* * *

10. Locate and then play the chords which form (a) a cadential six-four, (b) a perfect cadence.

* * *

11. Play the chord-outline but at chord 4 alter the harmony and follow it with chords which will make a modulation to C major.

* * *

12. Play the chord-outline again, but alter the last three harmonies so as to end in the original key of E minor.

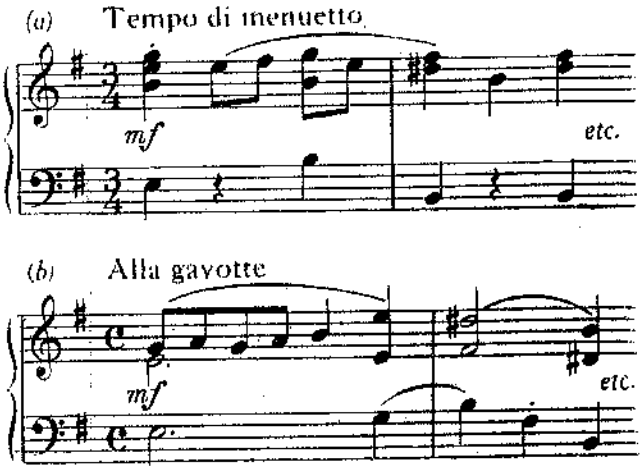
* * *

13. Play the chord-outline altering only the bass or left hand sound in the final chord (7) to make the passage end with an interrupted cadence in G major.

* * *

14. Using the chord-outline (quite freely) suitably continue the following openings:

Example 105



* * *

15. Extend the chord-outline in length by:
    (*a*) Playing the four bars as printed, but making chord 7 one beat in length.
    (*b*) Playing in E minor a dominant 7th second inversion with the 7th at the top.
    (*c*) Playing again chords 1, 2, and 3 (an octave lower than printed).
    (*d*) Playing chords (in place of chords 4 to 7) which will keep the passage in the key of E minor. (Try to remember the chords you substitute.)

* * *

16. Repeat, if you can, the chords you used to retain the key of E minor.

* * *

17. Replay your *extended* chord outline, *i.e.*, bars 1–4 modulating to G major, bars 5–8 ending in E minor. Listen. Hear the miniature simple binary form (A + B) which you have made. Its two sections (Bars 1–4 and 5–8) are contrasted in key: the A section ends in G major while the B section returns to and ends in the original key of E minor. Many movements of the early *suites* are built on this plan and quite often the length of the sections does not exceed eight bars.

18. Play the original chord-outline, without looking at the copy.

* * *

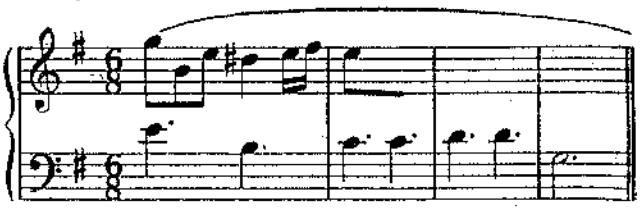
19. Prove to yourself that the original simple chord-progression of four bars is firmly fixed in mind by playing it in some key other than E minor. (Make an attempt at this —make several attempts—but before you begin, know the particular key to which the passage must modulate at the half-way point).

* * *

20. Attempt to write down the seven chords in the chord-succession which has been the basis of these experiments.

21. Extemporize a simple melody against this bass starting :

Example 105a



* * *

22. Attempt to write down the extended chord-outline as used in experiment 15.

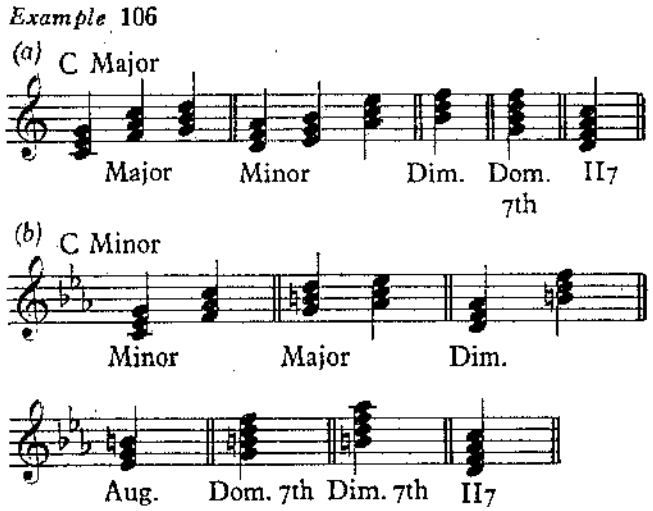
* * *

23. Work out a chord-succession of your own choice and apply it to a number of the experiments you have just finished.

16. CHROMATIC CHORDS

Play the following triads and chords of the 7th. Listen carefully and you will recognize afresh that each type of chord has its own distinctive flavour or colour :

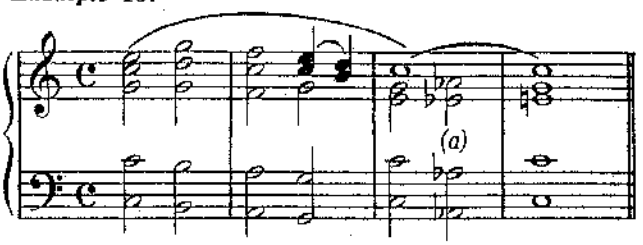
Example 106



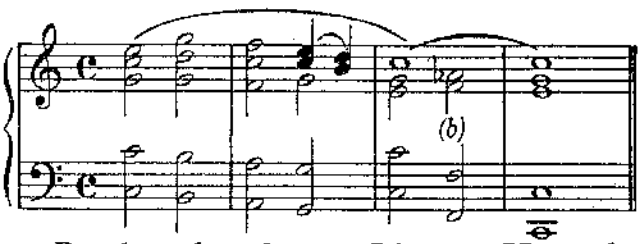
All the above chords are *diatonic* chords, that is, they are all formed from the diatonic scale of the key—in this case, C major or C minor. It is possible also to use *chromatic* chords to extend the harmonic range and to achieve greater variety of harmonic colour.

A chromatic chord is a chord (concord or discord) which is borrowed temporarily from some other key and used in such a way as not to cause a change of key. But an example played at the keyboard will save much verbal definition. Modifications of Ex. 75 will demonstrate the point. Play :

Example 107



Example 108



Replay the above. Listen. Hear the effect of the single chromatic chord used in each case. At (a) the triad on A flat is the chromatic chord. It is a normal part of several keys (*e.g.*, A flat major, etc.), but C major is not one of those keys. Hence the fresh sound with which it falls upon the ear. And the home-chord of C major which is played on either side of it shows it to be a borrowed chord.

At (b) the chromatic chord is the minor triad on F. In C major this chord

is normally major; and again its chromatic nature is shown not only by the accidental but also by the surrounding chords.

It is possible to use almost any chord as a chromatic chord. Of course, in a given location, all would not sound equally well and, until certainty is attained, it will be well to reserve their use for the demonstration of some particular point and also to keep to the more usual chromatic harmonies. The freshness they bring and the relief they afford to the ear depend upon the rarity of their use; and, in short passages, the diatonic harmonies are ample enough in number and wide enough in variety to meet all needs. The two chromatic chords used in Ex. 107 and 108 are borrowings from the tonic minor key (C minor) in which they are the normal sub-dominant (IV) and sub-mediant (vi) triads.

It is clear that chromatic chords are of service in modulation because distant keys are brought nearer in the sense that a change to them may be made with fewer chords.

17. AN EXPERIMENT IN MEMORIZING

It is obvious that, whenever we play the piano, we either :

(*a*) translate and interpret — from the copy or from memory—the musical thoughts of some composer or arranger of music; or

(*b*) initiate, for ourselves, a musical utterance which, however simple it may be, has its origin in what we know about melody, rhythm, harmonic progression, and musical design.

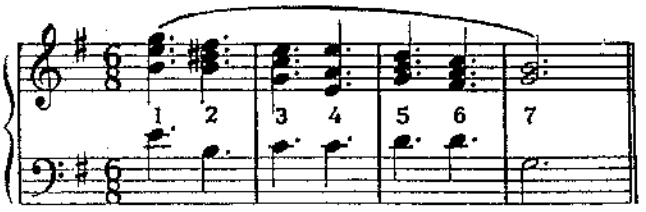
We are not here concerned with (*a*) though the skills we are gaining may well ease and illuminate all our performance. Our concern is with (*b*) keyboard or musical initiative; and the fact that memory must play a part in this explains why tests such as Nos. 16, 18, 20 and 22 were suggested on pages 28 and 29. It is time, therefore, that we considered memorization, its development and its values a little more closely, particularly as it has a vital connection with the provision of a simple accompaniment to a familiar tune, for instance when we have only a "melody" edition of a song book.

Memory in music or in any other subject is not a gift which is given to some and denied to others. There are, of course, those who are exceptionally endowed, but memory is a power possessed and used by all of us at a hundred and one points and in a variety of ways. And it is a power which can be developed to a high degree and applied to any subject of interest.

Memory is of many kinds. Whenever you recall or identify a tune which you may hear played or sung, whether it be a nursery song or a theme from a concerto, you are remembering music and proving the possession of *aural* memory. Whenever you play music and your hands move over the keyboard without conscious thought yet unhesitatingly and unerringly find their way to the right notes, you prove that you have developed a *tactile* (or end-of-the-fingers) memory. Whenever you hear some familiar music—even a chant, hymn tune, or popular song—and, at the same time, you see a mental image of its picture as it appears on the printed page, you demonstrate *visual* memory.

If you can remember a friend's telephone number or postal address, you can remember or train yourself to remember a chord-outline like those with which you have been experimenting at the keyboard, such as :

Example 109



Note the following points :

(i) The passage consists of seven

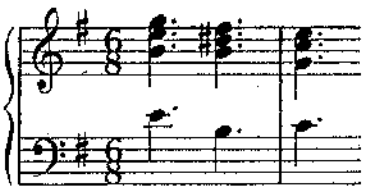
chords: it modulates from E minor to G major, *i.e.*, the relative major key.

(ii) The first three chords are in E minor: the fourth is a "pivot" or "switch" chord belonging equally in E minor and G major.

(iii) The fifth, sixth and seventh chords are in G major.

Chords 1, 2, and 3:

Example 109a



are:

1. Tonic Triad
2. Dominant Triad
3. Sub-mediant Triad

} All in root position Key: E minor

or, in still more compact chord-indication form: I, V, vi.

You can easily hold this brief formula in your memory, and, if you can remember three chords, why not five or seven or more? It is only necessary to go about it in a systematic way and at a suitable pace. Repetition will increase the depth of the impression and so extend the length of the period during which recall is possible. And, at some point in this repetition process, the ear, or the ear and the hands will subconsciously have taken over the load. In any case, there is seldom need for a "long" memory: the few things that we need to do again and again will, through frequency of use, become impressed indelibly on the mind.

Should even the memorization of this "I, V, vi," give trouble, the following points will give the mind some association on which to fasten:

The first chord is the chord which you would most expect to find at the start of a piece of music: it is the home-chord (key chord or tonic harmony) on which the great majority of compositions, from the simplest chant to the greatest classical symphony, begin; and nearly always, the tonic chord is used—as here—in its most ordinary or obvious position, with the root of the triad in the lowest part.

The second chord is—after the tonic chord—the most prominent chord in any key: the dominant triad, built on the fifth degree of the scale (V).

The third chord. Having fixed the second chord as the dominant triad, the next chord may be seen in relation to it, because it is the triad which stands on the scale degree immediately *above* the dominant.

Without looking at the copy, play the chords I, V, vi in E minor. Put the 3rd of chord I at the top, and then let the melody descend scale-wise with each of the other two chords. Repeat, two or three times. Think. Listen.

Now consider the remaining chords.

The fourth chord. This is the "switch" chord. It is the first inversion ($^6_3$) of the sub-dominant (IV) triad in E minor; and it is, likewise, the supertonic (ii) triad in the key to which the chords modulate, G major.

Now play Ex. 109a and follow it with another chord in E minor, this time the first inversion of IV. In the last two chords keep the same note (E) in the top part.

Now consider the remaining chords:

Key G
- *The fifth chord* is a "six-four", *i.e.* a second inversion of the tonic harmony (Ic)
- *The sixth chord* is a dominant 7th on the same bass note (V_7) and resolves on:
- *The final chord* which is the tonic chord.

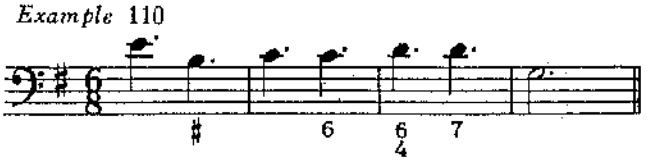
These three chords make what is a very common form of the perfect cadence, a cadential six-four on the dominant bass followed by the tonic harmony (Key G). So you have the complete outline:

I, V, vi, (IV6 = ii6) I^6_4, V_7, I

E minor..... G major.....

Another printed picture of this chord-outline is:

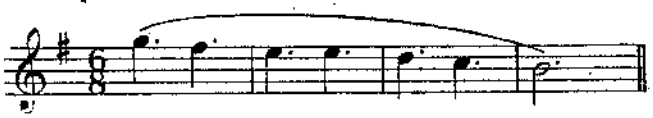
Example 110



6 indicates a 1st inversion of a triad; $\frac{6}{4}$ a second inversion; and V_7, a dominant 7th, and thus it is easy to reconstruct the music.*

The harmonies certainly would be identical with those of Ex. 103, but the upper notes including the melody might not be quite the same. But, if in addition to memorizing the chord succession we fix in mind the melody, then we could reproduce the passage exactly. And surely the melody is easy to remember. The first chord has the 3rd of the triad in the top part. Thereafter each succeeding melody note is a scale step lower moving exactly according to the key-signature: only one note (F) is sharpened, the remainder being white keys on the piano. Look at it:

Example 111



Now make an attempt to play, chord by chord, the passage we have been examining in close detail. Proceed as follows:

1. See in your mind's eye (you may close your eyes if you wish) the treble part, *i.e.*, the melody. You know that the key is E minor and that the first chord is the I chord with the 3rd of the triad at the top. It is the G just above the stave. After this, the melody moves down the notes of the descending melodic minor scale to B (middle line), except that E is repeated.
2. Play the whole of the top part once or twice. (In solfa the melody is d¹ t l l s f m .)
3. Now take a piece of paper and write the melody down. (Check your accuracy by comparing what you have written with Ex. 109 on page 30.)
   Without reference to the copy, play the melody again.
4. Recall again the chord-outline and then play it, fitting it into the melody as you know it to be.

You must be the judge of the measure of success with which you have reproduced—without the music before your eyes—this short chord progression. The explanations have been lengthy and may even have been wearying. But they show how close analysis, repetition, and determination may be used to achieve an objective; and these are the things which are needed to gain the power, through your intellect and through your hands at the keyboard to say something for yourself—to express in terms of musical sound something that is original, in the sense that you have thought it out for yourself. Try to play the passage in D minor or some other key of your own choice. Remember that the modulation is to the relative major key.

Now let us tackle another succession of chords which, later, we will associate with a very well-known tune. The chord-outline is:

I, vi, ii6, V, V6 || I, vi, ii6, $\overline{\text{I}^{6}_{4}}$, V, vi

As you examine the above outline, you can discover that:

(*a*) the passage is entirely diatonic: there are no accidentals and no change of key.

(*b*) only triads and their inversions are used.

(*c*) the first three chords in each section are identical (I, vi, ii6).

(*d*) the outline is obviously not complete, because the cadence marked $\overline{\quad\quad}$ is a deceptive (or interrupted) cadence: it is the familiar cadential six-four, Ic V ($\frac{6}{4}$ $\frac{5}{3}$) on the dominant bass followed by the sub-mediant (vi) harmony.

Do not accept the above points blindly. Satisfy yourself that they are accurate statements of fact. Having done this, take a piece of manuscript paper and

(*a*) place a bass clef and the signature of G major at the beginning of a stave;

(*b*) write out the bass (or bottom) note

*Where no figures are shown the chord is a $\frac{5}{3}$ *i.e.*, a triad in root position, but the sharp sign in bar 1 (Ex. 110) indicates that the third of this particular triad is to be raised a semitone.

of each chord in the chord-outline :

Key G I, vi, ii6, V, V6, || I, vi, ii6, $I\frac{6}{4}$ V, vi. Your mind and pen should work as follows :

The first chord (I) is in root position, so the bass note is the first degree of the scale, G.

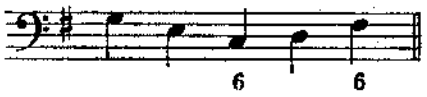
The second chord (vi) is also in root position so the bass note is the sixth degree of G major, E.

The third chord (ii6) is the triad A C E in its first inversion $\frac{6}{3}$ so the bass note is C.

The fourth chord (V) is in root position so the bass note is D.

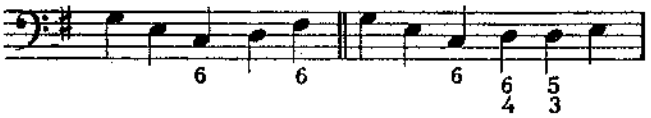
The fifth chord (V6) is the same chord in first inversion, so the bass note is F sharp. So far you have written :

Example 112



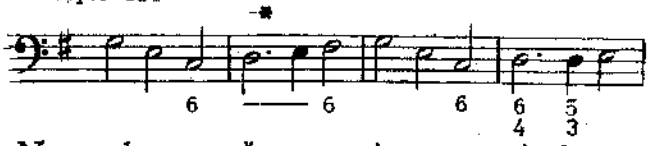
the figure 6 underneath indicating that these chords are "six-threes" or first inversions of triads. Continuing to find the bass notes, the whole of this outline gives the bass line as :

Example 113



Here is the bass in a more familiar rhythm :

Example 114



Note that at * a passing-note is introduced into the bass: the "line of continuation" indicates that the harmony is not changed. Play the above bass line. Listen. Can you name the well-known tune with which it is associated?

Play, in Key G, the melody of the first two lines of the National Anthem.

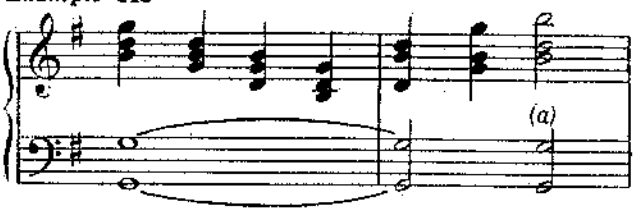
Repeat the melody, but this time accompany it by the bass line shown above. Listen to the two parts.

Repeat what you have just played, but this time in chords, *i.e.*, "fill-in" the harmonies with chord-notes added between bass and melody. (It will be more convenient if the "filling-in" is done by the right hand, leaving the left hand to play the bass part, either in single notes or in octaves). Listen as you play.

Assuming that what you have just played is a recognizable reproduction of *God Save the Queen,* repeat it once or twice to fix it still more firmly in the memory. As you play, say (aloud), the name of each chord, *i.e.*, I, vi, ii6, etc.

You can and should apply this chord formula in other major keys. Tonic is tonic in any key. You know that there are no accidentals and this means that every note, whatever the chord and in whatever part of the chord it is used, will follow the key-signature. As a preliminary exercise you will find it useful to play the I or tonic chord in half-a-dozen major keys. Play the I chord in G major. Let the left hand play the root in octaves while the right hand plays various spacings of the remaining notes of the triad :

Example 115

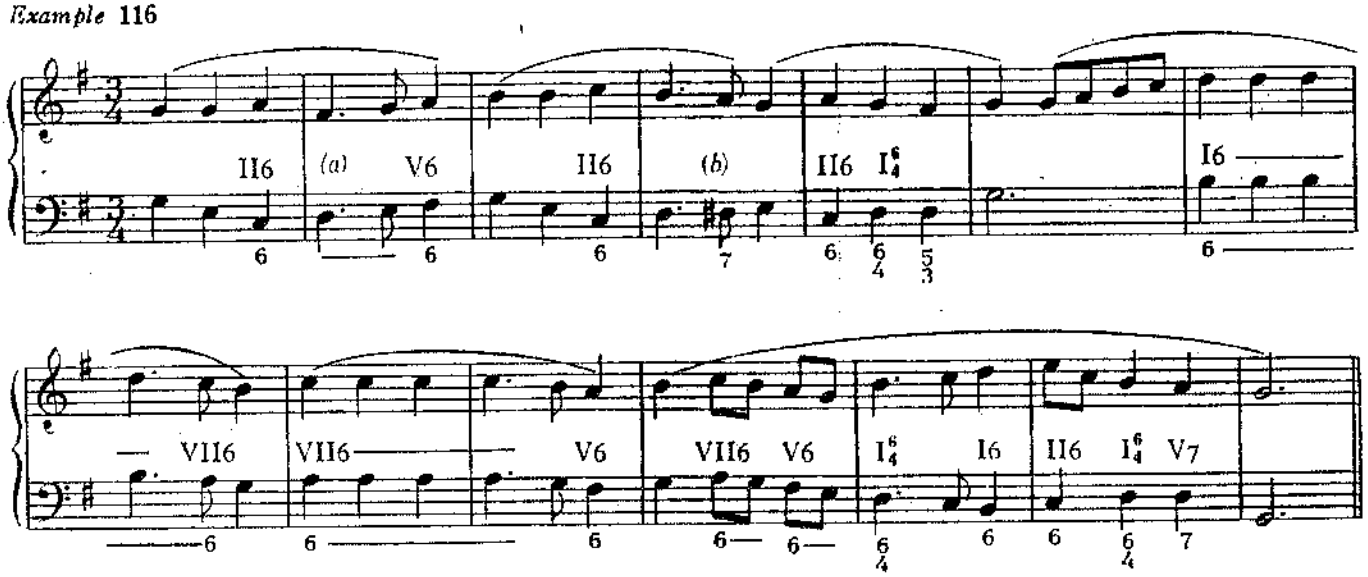


Play, similarly, the I triad in some other major and minor keys of your own choice. Remember that as the left hand plays the root only, the right hand groups must always include the 3rd of the triad; otherwise it would sound hollow and empty. Apart from this you need not worry over text book rules about doubling notes. At (a) in Ex. 115, the third of the chord is doubled. For certain purposes the doubled major 3rd may be desirable or even essential, although most text-books forbid the doubling of the 3rd in the primary chords. In addition not all state clearly that such doubling in the secondary triads is to be encouraged, because the 3rd of these chords happen to be the strongest notes of the scale. Here, as

elsewhere, use rules as guides, not masters or taboos.

If you have kept your ears on the alert, you will have learned much from the repetition of the incomplete tune. You will surely never forget the aural effect of one of the most frequently-used forms of the interrupted cadence (V to vi). You can now work through the remainder of the tune. Your ears should be a little wiser than they were when we set out and your harmonic knowledge may be better organized, and you will be able to complete the harmonization of the National Anthem with less help. Take the next little phrase which brings you to the end of the first section of the tune. You will find it easy, because the harmonies are very simple and familiar, the ii6 chord followed by a cadential six-four over the dominant bass, followed by the tonic chord. The harmonization of this tune is traditional: it is so frequently heard and so consistently used that the ear of the average listener would detect any departure from the usual chords and regard it as the equivalent of a wrong note. You may, therefore, like to have the melody complete with the usual chord-indication:

Example 116



(a) A passing-note is often introduced into the bass parallel with the melody.
(b) D♯ is optionally used here.

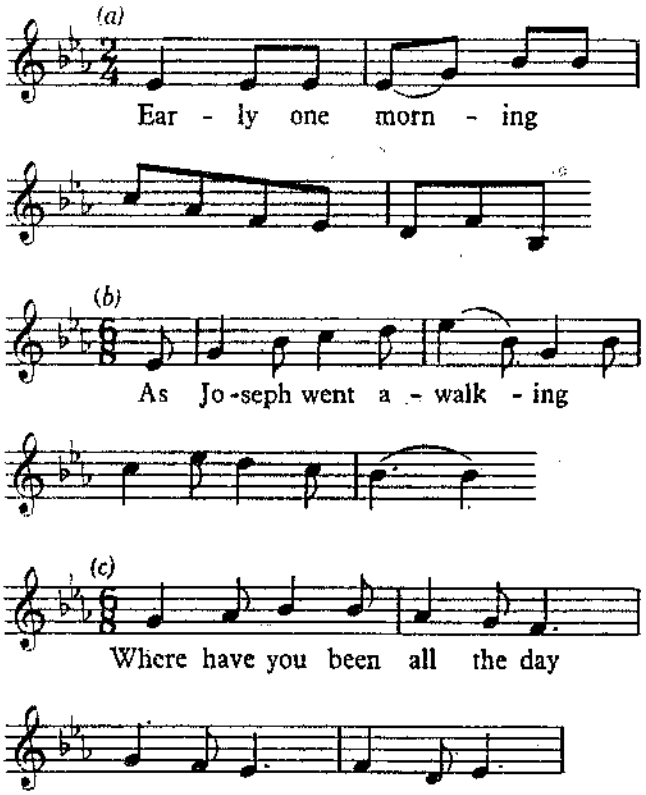
18. BROAD LINKS BETWEEN TUNES AND CHORDS

The first thing that anyone, whether a student of music or a great composer, must do before setting out to provide a pianoforte accompaniment is to consider the melody. It is necessary to examine it, read it, hear it, absorb it, and really know it, because every well-organized tune holds within itself the answer to all questions, the solution of all problems which might arise when providing an accompaniment. Time spent on a close, careful scrutiny of a number of melodies is time well spent. Choose the melody edition of any collection of nursery tunes and national songs. Some folk tunes and traditional airs may be in one or other of the old modes (Dorian, etc.) or in some form of pentatonic (=five note) scale; but nursery tunes and national songs while, at times, containing simple modulations to nearby keys, are usually purely diatonic *i.e.*, they are composed of notes which belong to the major or the minor scale which is associated with each key-signature. Accidentals, like the key-changes, are few; and if there are any chromatic sounds, they will be of an ornamental nature and not an integral part of any chord: they can be ignored in providing an accompaniment.

Now let us consider the points upon which there is need to concentrate in the preliminary survey of any melody.

Here are three very well known and simple tunes :

Example 117

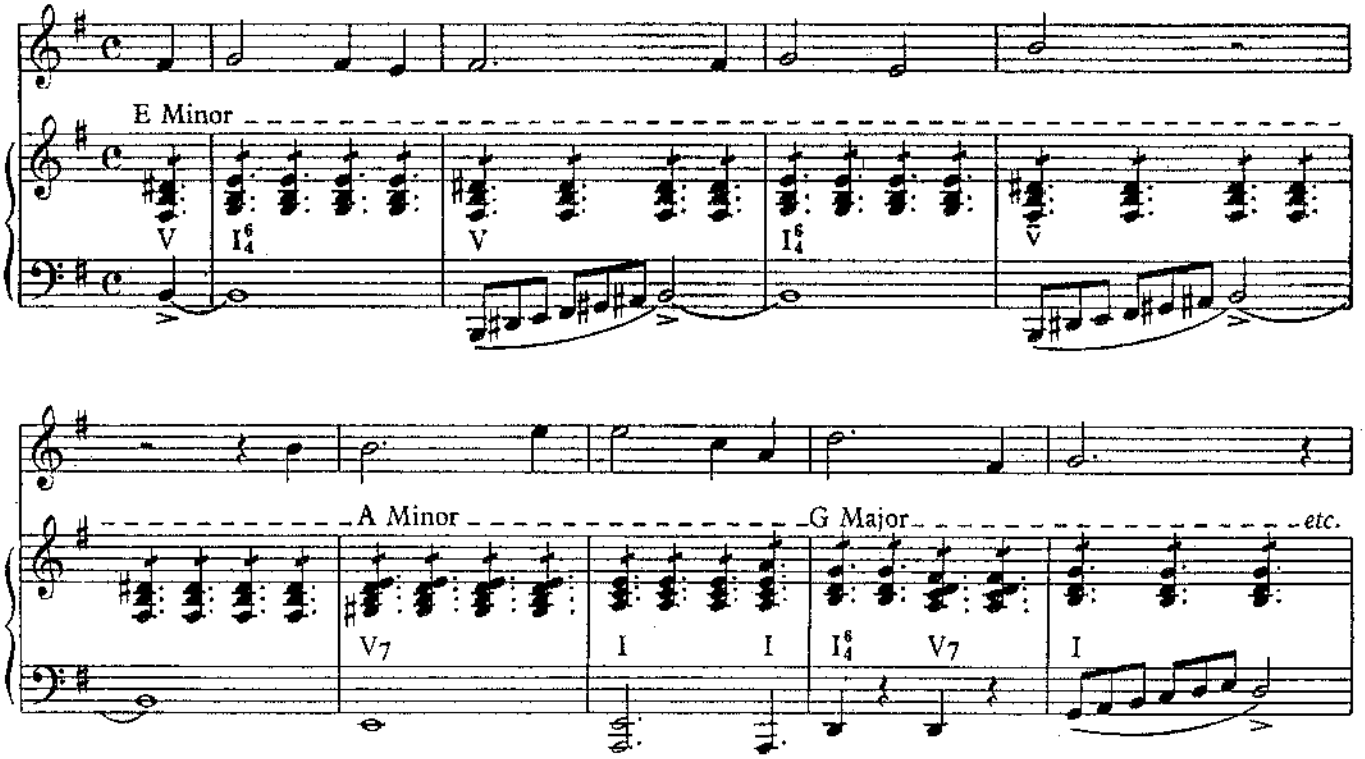


Play them. Listen, so that with mind and ear you may recognize that these typical examples of national air, carol, and shanty are entirely diatonic.

You discovered earlier, when considering the accompaniment to vocal exercises based on the scale, that the primary triads (I, IV and V) are, in themselves, sufficient to provide a satisfactory accompaniment for all the notes of the scale. In the above tunes, and in hundreds and hundreds of other melodies, every note of the tune belongs to the key : the tunes are scales, though the sounds are not used in scale order. It follows, therefore, that all melodies which are composed entirely of scale sounds, as these are, can quite satisfactorily be accompanied without the use of any chords other than the three primary triads of the key. It follows, too, that the chords which you have already handled are more than sufficient in number and variety to provide the harmonic plan of an accompaniment. Because these triads are called primary triads and are simple in structure, you should not regard them as elementary in effect or limited in scope. If used with skill and artistry, they can make great music. Here is a phrase from an immortal song :

Example 118

Schubert – The Erl King



In these few bars Schubert, with magical touch, moves from E minor to G major, passing A minor on the way. As you will observe from the chord-indications which have been added, every chord is a primary chord, though a 7th is sometimes added to the dominant triad. The introduction of this short extract is not intended to suggest that improvised accompaniments

should be works of art: the purpose is (*a*) to dispel any idea that the primary chords are of use only in the accompaniment of nursery or national tunes, and (*b*) to discourage undue haste in using "more difficult" chords.

The firmer the grasp of the simple triads of the key, the firmer the harmonic understanding. So, in your mind and at the keyboard, link the primary triads with the melody notes which they may accompany:

When the melody note is the first, third, or fifth note of the scale, the accompaniment can be based on tonic (I) harmony.

When the melody note is the fourth or sixth note of the scale, the accompaniment chord is sub-dominant (IV).

When the melody note is the second or seventh note of the key, the dominant (V) chord can be used; and where appropriate—often at the beginning or near the end of a song—the fifth note of the scale can conveniently be accompanied by the dominant (V) chord.

Commit this broad formula to memory: "1, 3, and 5 take I; 4 and 6 take IV; 2 and 7 take V." The application of this simple formula would lead you to use the identical chords which Schubert used in the extract from *Erl King*. The dramatic expressiveness achieved through the key-change, the choice of position and spacing of the chords and the vital rhythm reveal genius in the choice and treatment of simple chords; and they serve as a reminder that the harmonic plan or background is only one of the points which demand attention.

In examining a melody, you will need skill in:

(*a*) selecting the notes which need to be harmonized, *i.e.*, the eye must be able to pick out rapidly the essential notes which guide you to the appropriate accompaniment chords.

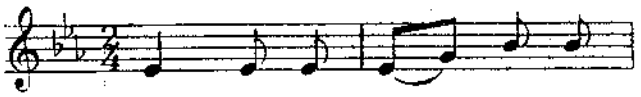
(*b*) detecting structural points, including any modulations which may be indicated by the presence of accidentals or which, in the absence of accidentals, may be implied by the curve of the melody.

(*c*) recognizing the phrase-ends, at which some form of intermediate (or non-final) cadence may be required.

(*d*) devising a simple rhythm, so that the chosen chords may be used in suitable pianistic form.

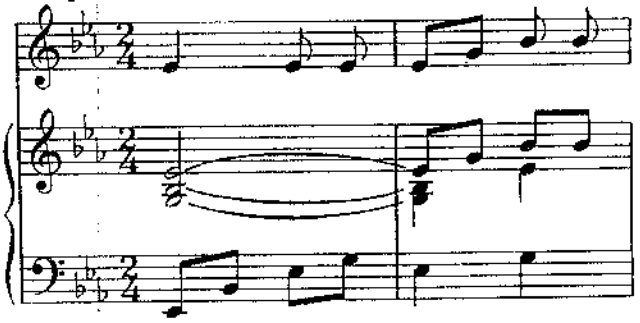
Every melody consists of (*a*) *essential* notes and (*b*) *non-essential* notes, and the eye assisted by the mental ear should be able to distinguish between them. The terms "essential" and "non-essential" imply that it is neither necessary nor desirable that every note in a melody should be harmonized.* You have only to glance at the start of *Early One Morning:*

Example 119



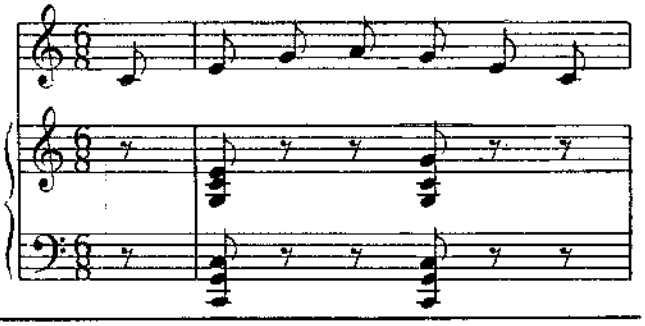
to see that the first two bars of the melody are formed from the notes of the tonic (I) chord; and, though there is a range of possible harmonizations, you will recognize that any arrangement of the I chord will form an acceptable accompaniment, so:

Example 120

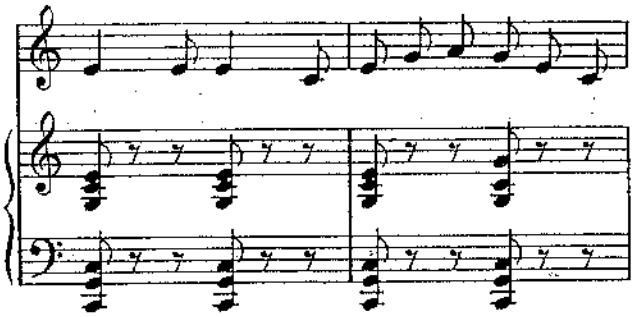


If you glance at the first three bars of the chorus of *The Campbells are Coming:*

Example 121



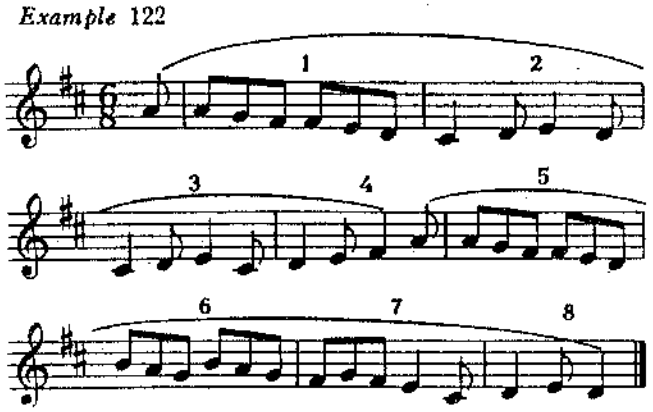
*Do not make the mistake of thinking that non-essential notes serve no purpose in a melody: they may add grace, charm, expressiveness, power, and tunefulness.



you will see that a very high percentage of the notes of the melody belong to the tonic (I) triad and that, in consequence, this chord can make a satisfactory accompaniment. You will find it interesting and instructive to recall or search out other well-known tunes in which many bars are similarly based on a single chord. Examine any collection of national songs with this object in view. Look up, for example, *John Peel, John Brown's Body* and *Polly Wolly Doodle* in all of which the first two bars are based on a single harmony.

If you examine the following melody

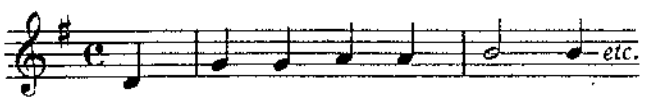
Example 122



you will see that in bar 1 the essential notes are the notes of chord I, viz., D, F sharp, and A. In bar 2, the D is non-essential and the essential notes are C sharp and E which can both be accompanied by V. Bar 3 is a repetition of bar 2. In bar 4, the E is non-essential and the vital notes are again those of the I chord. Find for yourself the essential notes in the remaining bars. You will have noticed that the essential notes are sounds which, relatively, have more importance in accentuation and length.

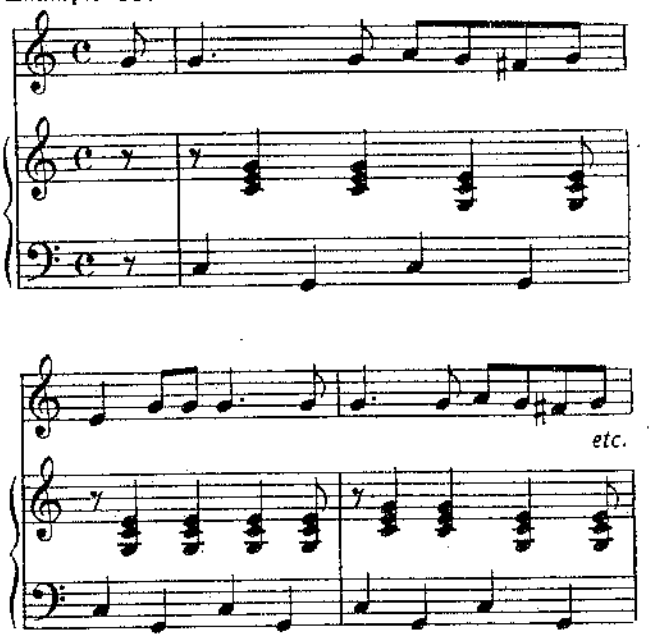
Now look at the opening of *Now is the Month of Maying:*

Example 123



and it is at once apparent that the basic melodic outline has the G and the A not as repeated crotchets but as single minims. The repeated notes are necessary to make the tune agree with the number of syllables and, as we know, the precise rhythm often varies from verse to verse. Our task is to sense quickly the broader melodic curve and also the harmonic rhythm or march, for music has a chordal rhythm. Repetition of sounds can usually be ignored, even when the repetition is of a decorative type. A good example of "decorated" repetition is to be found in *There is a Tavern in the Town:*

Example 124



A moment's reflection will show that in the above tune the note G in the second half of the opening bar is decorated by non-essential notes and that these are really the sounds of an ornament (or *turn*) round the note G. G is the foundation note: the A and F sharp are ornamental, and you will observe that, in the accompaniment, the decorative notes are ignored. The examples have been cited to encourage visual recognition and to show that it is necessary; to help you to apply your knowledge; to demonstrate the wide range of usefulness possessed by the simplest of chords: and to display a few of the many guises or dress in which such chords may be presented.

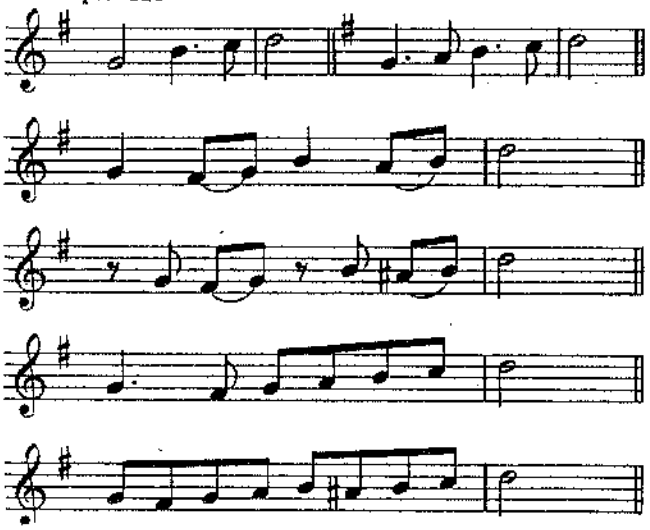
You will find it profitable to practise, at the keyboard, the addition of non-

essential notes to a melody. Play the following :

Example 125

These are the sounds of the major triad of G. Now play the following, making a short break after each double bar : *etc.*

Example 126

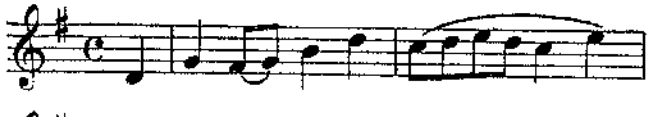


Repeat Ex. 126 and you will recognize that each is a variant of the notes of the G major chord.

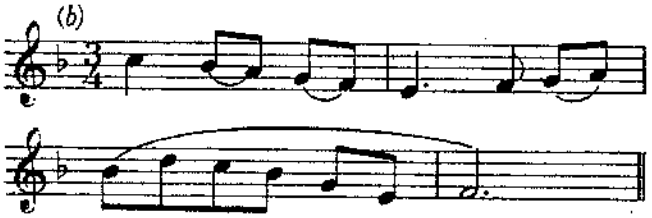
Repeat the example again, this time adding, in the left hand, a triad (G–B–D) and sustaining it throughout the melody. Make a short break after each section. As you play, listen. You will hear that the chord makes a fairly satisfactory effect : it cannot be otherwise, for the essential sounds in any of these melodic variants are G B D—all other notes in the top part are unessential. Give a quick glance at the following melodic phrases and play the notes which you regard as *essential* notes :

Example 127

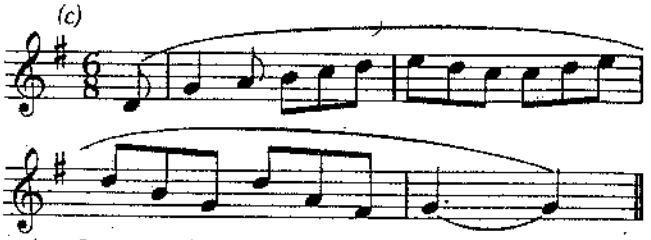
(a)



(b)



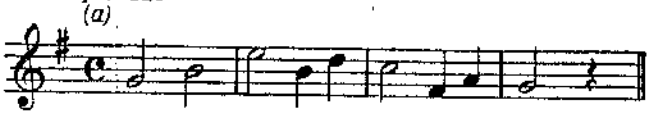
(c)



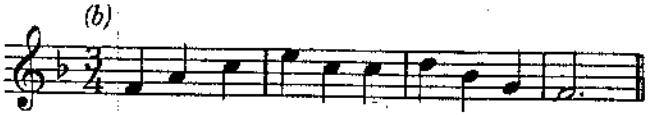
And to the following examples *add* occasional non-essential notes :

Example 128

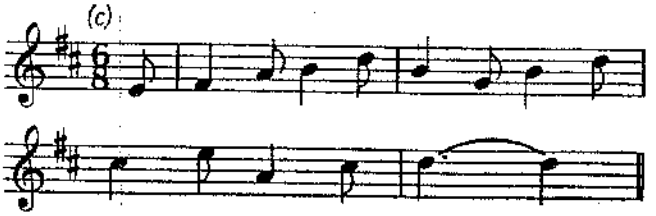
(a)



(b)

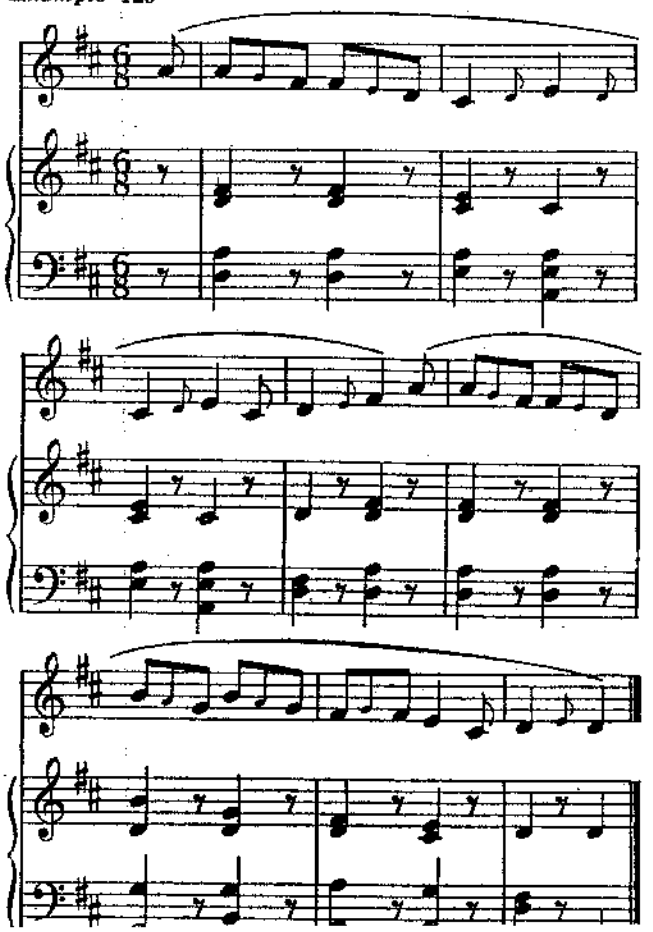


(c)



Now let us add a simple, supporting accompaniment to the melody in which you picked out the essential notes (Ex. 122 on page 37). Here it is with the essential notes shown in heavier type and with the primary chords which are indicated by them used in the accompaniment. Sing or hum the melody as you play the following accompaniment:

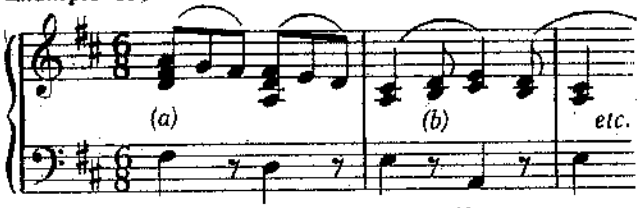
Example 129



This piano part is, of course, the barest skeleton, but it forms a basis which can be modified, refined, or elaborated. Make the following experiment at the keyboard :

1. Repeat the piano part as printed.
2. Repeat the piano part, but adapt it by playing the voice part in the right hand :

Example 130

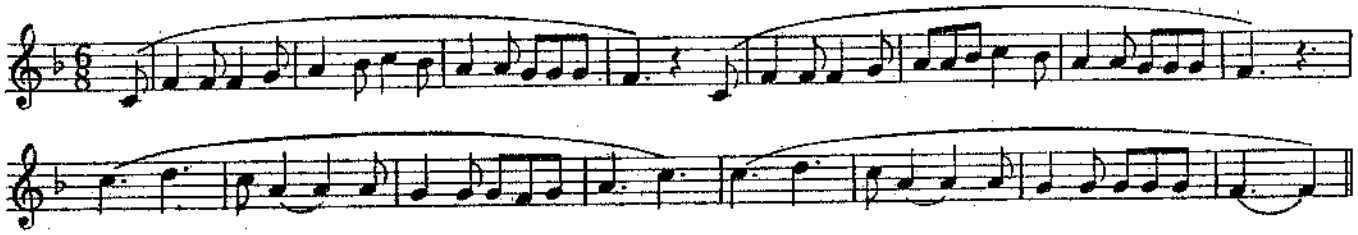


Experiment with this outline accompaniment and improve and refine it. Vary positions or inversions. Listen closely and compare the different effects. Every modification no matter how slight alters the whole effect. It will be noticed, for instance, that in Ex. 130 the opening chord (a) is used in its first inversion instead of the usual root position. This enables the right hand to follow the tune and gives a sense of movement and variety in the bass-line. A similar change made in the first chord of bar 5 would avoid the static effect created whenever one bar ends and the next begins with the same chord in the same position. In bar 2 it will be observed that at (b) the use of a passing-note (B) in the inner part makes an agreeable succession of thirds.

* * *

Here is a well-known tune, *One More River:*

Example 131



Even the best known tune may be strange so far as its harmonic implications are concerned. So, once again, the first thing to do is to examine the melody carefully. Doing so, you make mental notes as follows :

The key is F major.

There are no accidentals—no notes outside the key and no key-change.

In bar 1, the only note that matters is F, the keynote and (still keeping to the primary triads) the harmony indicated is I formed of F–A–C.

In bar 2, the essential notes are A and C : these, too, indicate the I chord.

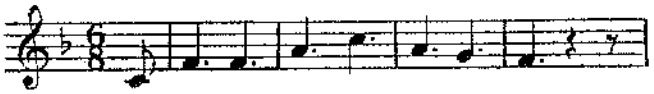
The first half of bar 3 indicates that the harmony is still I.

The second half of bar 3 is the second degree of the scale harmonized by V.

Bar 4 comes back to the keynote and the I chord.

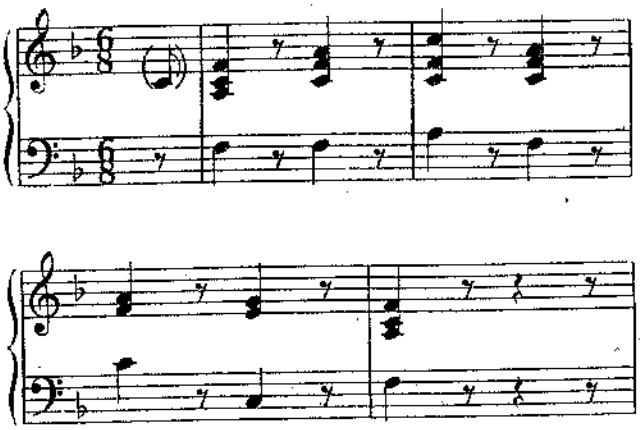
The mental eye will strip the melody of its rhythmic detail and its non-essential notes and see the framework as :

Example 132



A possible accompaniment therefore is:

Example 133

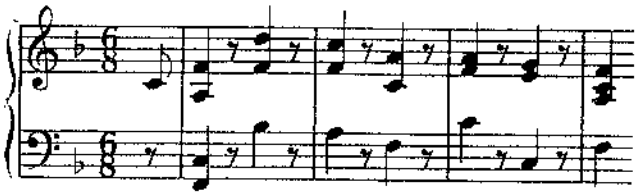


Repeat the above accompaniment and at the same time sing or hum the melody. Listen. Once again you recognize that the chordal accompaniment is simple, perhaps obvious or even crude

—but it is possible. There is no reason why anyone who has covered the ground that we have, should not be able to select these simple chords correctly and put this knowledge directly into action at the keyboard.

Now here is the piano accompaniment to *One More River* as it appears in the *Penguin Song Book* by Leslie Woodgate :

Example 134



There is a whole world of difference in the basic accompaniment shown in Ex. 133 and that which is reproduced by permission from the *Penguin Song Book*. Play both examples and your ear will confirm the point. Yet the material differences are slight: they are (i) the use of an alternative harmony (IV) in bar 1 to avoid the monotony of the tonic chord and to help the rhythmic vitality and (ii) the better spacing of the notes of the chord—but you will notice that the only chords used are the primary triads and—let it be repeated —the accompaniment first suggested (Ex. 133), because it represents an improvised effort, is a good and possible basis which fulfils its main objective and as such would pass muster.

We have dealt in detail with bars 1–4 of *One More River*. Bars 5–8 are identical with bars 1–4. A plain repetition of the accompanying chords would be acceptable, though a slightly different distribution of the notes of the chords would be both reasonable and welcome but, in first attempts, not essential.

Examine the remainder of the tune : it breaks into identical halves as before. When you have decided on the required primary harmonies for the accompaniment, start at the beginning of the tune (to get yourself going) and then complete it. You need not play it at quite as fast a tempo as the song really goes, but—whatever pace you take it at—endeavour to keep time. Urge your thoughts to keep pace with the regular beat.

Experiment with other tunes of a similar grade and type. Search through some song books to find suitable tunes and, on the way, you will learn something from those you reject as well as from those you choose, because your rejection will be based on a quick visual recognition of points such as modulations and chromatic sounds which, for the moment, may rule them out. But there is no lack of suitable tunes (such as *Bobby Shaftoe* and *Come, Landlord, Fill the Flowing Bowl*) which are purely diatonic and which can be supported by the primary harmonies.

19. ALTERNATIVE HARMONIES

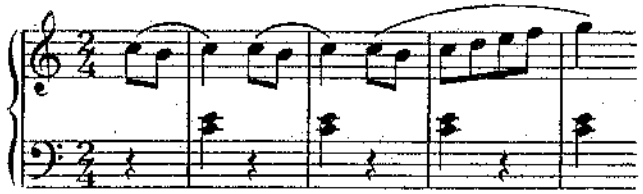
After you have gained facility in the use of the primary chords, when you can use them at the keyboard without stammering or stopping and without first writing them out, you are ready to consider the use of the secondary harmonies or those chords which, if mixed with and used as alternatives to the primary triads, afford relief to the ear and thus sustain the interest. And, as you know, these secondary harmonies are of great service whenever the music changes key. Chords added to your store are like words added to your vocabulary : the more you know, the less likely you are to be tongue-tied or " stuck for words."

Fix in mind that—quite broadly—any melody note may be part of three different triads; and, of course, this means that for each note you have a choice from three chords for use in the accompaniment. The reason is simple : a given melody note may be the root of a triad and, equally well, it may be either the 3rd or the 5th in other triads. In key C major, for example, the note C may be and perhaps most frequently

is accompanied by I, *i.e.*, C is treated as the root of the accompaniment chord. It may also be accompanied by a minor triad on A in which case the melody note C is being treated as the 3rd of the triad; and it may be accompanied by a major triad on F, in which case the C is the fifth of the accompaniment chord (see Ex. 27, page 8). These are all equal possibilities which are available to you, but they will vary in their appropriateness according to the actual tune. Sometimes you will wish to repeat the same chord; at others, a change will be desirable. Let your ears understand this point.

Play the following :

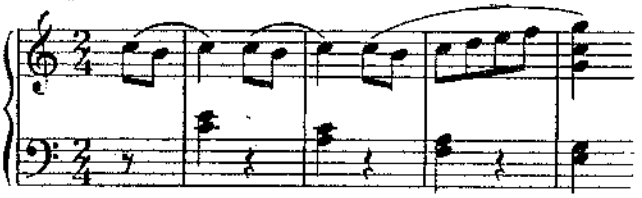
Example 135



Repeat the above. Listen. Hear the repetition of the little three-note figure with which the melody starts; and hear, too, the use of the same harmony in the accompaniment each time.

Now play :

Example 136



Repeat. Listen. Hear that each repetition of the three-note figure in the melody is marked by a change in the accompaniment chord. You hear that the change in the chords helps to create a greater sense of progression onwards : it is less static than the repetition of the same chord. No one can give you rules in the matter except yourself; and the wisdom of your self-made rules will depend upon what you know, the amount of your experience and the care and zeal with which you use your ears and make them a reliable and final court of appeal. You will come to recognize that almost everything depends upon the character of the song; in a song of the lullaby type, the unchanged chord may help to create an atmosphere of repose, while in a vigorous or marching song a change in the harmony (as in Ex. 136) can help to keep the music " on the move." Even the point in a song at which a phrase is used can be a deciding factor. At the outset of a song you may choose to keep to the one harmony, because it will help to stabilize the key-sense; but, if a similar melodic feature recurred near the end of the song, you might decide to change the harmonies : and you might do this because your confidence had increased and you felt that variety was desirable and that the changing harmonies quickened the harmonic march and helped you more effectively to build up to a better climax.

It will be helpful if you practise finding alternative chords at the keyboard. Below are suggestions for graded self-tests. Remember to use head, hands and ears and to use them in that order. Think quickly. Hurry, but do not flurry or worry. When you have decided upon the constituent notes of a chord aim to translate thought into instant action. And as you play, listen. Listen with two clear objectives : (1) to let the ear provide an aural check upon the accuracy of the hands and (2) to strengthen and speed the link which connects mental intention with prompt action at the keyboard.

I. (In the following tests, the chords are isolated chords : they are not to be regarded as making a desirable or ordered succession of chords. If you use the sustaining pedal, be sure to lift it clearly between the chords).

Think of the note E. E is part of every chord which you are here required to play and it should be kept at the top of each chord. Now, using both hands (the root in octaves in the left hand, with the remaining notes of the chord in the right hand so disposed that E is at the top), play :

(*a*) the minor triad of which E is the 3rd;

(*b*) the diminished triad of which E is the 3rd;

(*c*) the major triad of which E is the 5th;

(*d*) the augmented triad of which E is the 5th;

(*e*) the dominant 7th chord of which E is the 3rd;

(*f*) the diminished 7th chord of which E is the 7th;

(*g*) the super-tonic 7th chord of which E is the 5th.

Observe that you have used seven different chords to accompany one note, E. The above tests can and should be applied to notes other than E. (If you do not find them easy, effort will be rewarded by an improvement in the speed of thinking and the fixity of the knowledge).

II. (The following tests require you to think of and to keep in mind more than one chord; and the chords in each test make a simple chord progression. Before you put your hands near the keyboard, think of the notes in the several chords which are stipulated in the test and then play them promptly. Aim to let it be a case of "no sooner thought than done"). These tests are all in the key of F major. In each test there is a note which occurs in all the chords mentioned in the test and this note should be kept at the top.

Using both hands, play:

(*a*) Chord IV followed by I with both chords in direct (=root) position.

(*b*) Chords I, IV, I all in direct position.

(*c*) Chords I, IV^{6}_{4}; I, *i.e.* I in direct position and IV in its second inversion.

(*d*) Chords I, vi, I in direct position. Put the 3rd of I in the top.

(*e*) As at (*d*) but with the root (doubled) of I at the top.

(*f*) I, vi, IV, I all in direct position.

20. A CUMULATIVE TEST

It is hoped that students have found interest and instruction in their reading and playing of this book and that they will, in addition, have stored in their minds certain useful harmonic formulas. Still, they may feel a little uncertain of their ability to sit at the keyboard and play half-a-dozen chords in, as it were, one breath. Such students may find very real help in the following experiment which is of a cumulative kind. The first test (*a*) requires the playing of two chords. Test (*b*) requires the same two chords plus a fresh, additional chord; and so on, each time playing one more chord to make a longer harmonic progression. Keep going at a regular pace. Decide to make each chord of equal duration, by giving to each the value of two steady beats. Here is the suggested experiment:

Play, using both hands and in the key of C major, the following chords all in root position. In the left hand play the root of the chord as an octave; and, in the chord-groups you play with the right hand, keep C (octave above middle C) at the top throughout the first four chords:

(*a*) Chords I and vi.
(*b*) Chords I, vi, IV
(*c*) Chords I, vi, IV and ii_7.
(*d*) Chords I, vi, IV, ii_7 and V_7.
(*e*) Chords I, vi, IV, ii_7, V_7 and I.
(*f*) Repeat (*e*) but as the final chord play vi instead of I.

Repeat the above experiment and let ear and mind register the fact that you have used four different chords to accompany the note C. If at any point in this cumulative test you experience difficulty, you should discover and remove the cause of the hesitancy or uncertainty. Go through the six chords again, and even again and again. In

any such repetitions remember that, in the key of C, every note in this chord-progression is a white key on the pianoforte. There can, therefore, be little chance of confusion so far as the hands are concerned; and this fact will permit you to concentrate on the thinking processes. When you have played this succession of chords with what you feel to be real ease and sureness, you should play it in some other major keys of your own choice. Whatever key you choose, remember that the home-note of that key should be played at the top of the first chord. When you have successfully done this in a number of major keys, your harmonic sense and also your confidence will be strengthened. Your keyboard facility will generally and permanently be increased. You will find it interesting to clothe your harmonic framework with melody and rhythm.

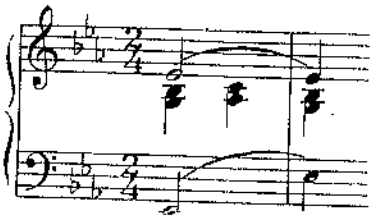
Now apply one of the easier of the chord-progressions you have just played to a piano accompaniment in order to demonstrate the usefulness of " alternative " harmonies. The test was (*c*) in Section II :

Play, using both hands, the chord progression I, IV$^{6}_{4}$, I.

Keep the note which is common to the chords in the top part.

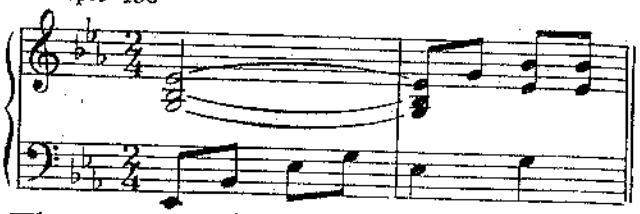
The following is a possible written form of what you then played :

Example 137



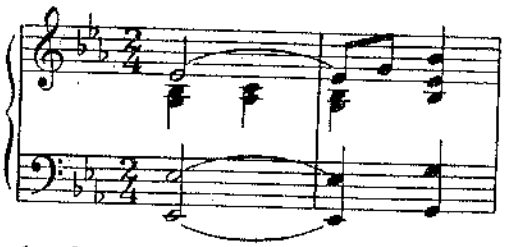
Now try the effect of the above progression in place of the continued use of the tonic (I) chord as in the first attempt at the accompaniment to the opening of *Early One Morning*. The earlier form was :

Example 138



The form now suggested, with IVc as an " alternative " between the I chord on either side of it, is :

Example 139

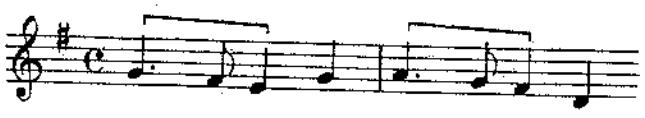


Play both versions again. Listen and hear the less static or more rhythmic and purposed effect produced by the change of harmony.

21. TREATMENT OF SEQUENTIAL PHRASES

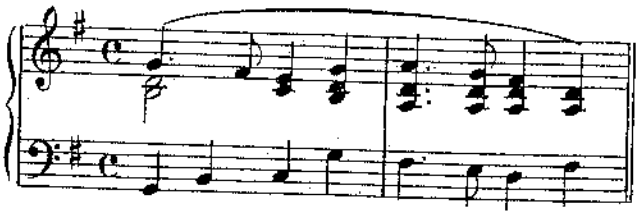
When a sequence occurs in the course of a melody it may involve departure from the broad rules of harmonization. At the opening of *All Through the Night* there is a short sequence :

Example 140



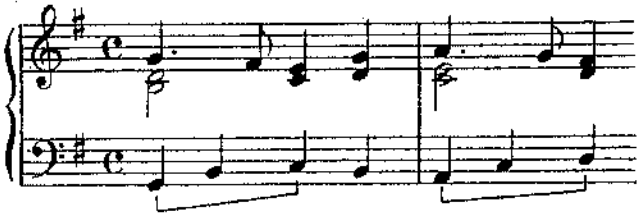
Listen to the above short passage with the mental ear and you will observe that the three-note motif marked in bar 1 is repeated, but lifted a scale-step higher in bar 2. Although the broad rule could be applied quite satisfactorily in :

Example 141



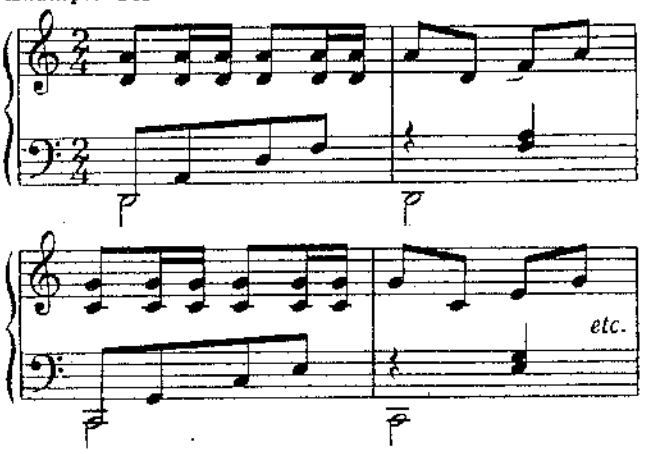
it is usual to repeat the accompaniment of bar 1 at the second bar lifting it a scale-step to produce a harmonic sequence as well as a melodic sequence :

Example 142



There is another example in the modal shanty tune *What Shall We Do With the Drunken Sailor?*

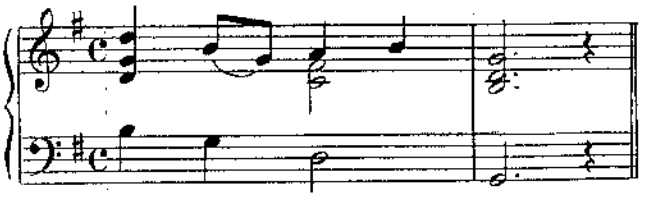
Example 143



The rarity of the sequence in popular folk and national tunes is explained by the fact that it is a device which belongs to organized music rather than to simple, spontaneous song.

Another definite exception occurs when the note immediately preceding the final keynote at the end of a tune is the 3rd of the scale placed at the unaccented part of the preceding bar. In such conditions, the 3rd (which would normally be regarded as part of the I chord) is treated as part of the dominant harmony and of the perfect cadence so:

Example 144



22. IMPROVISING AN ACCOMPANIMENT

Now make an attempt—and there is no reason why it should not be a successful attempt—to improvise an accompaniment to some well-known tunes. The examples provided will be familiar. Read each tune through. Hear it mentally and, if you wish, play it to check the accuracy of your impression. The tunes are short and simple. In none of them is there any change of key and all can be harmonized with the primary triads. Observe the tempo indication, because speed influences the number of different harmonies which may be necessary or desirable within the bar. Feel the lilt and catch the spirit of each tune. When you have done this:

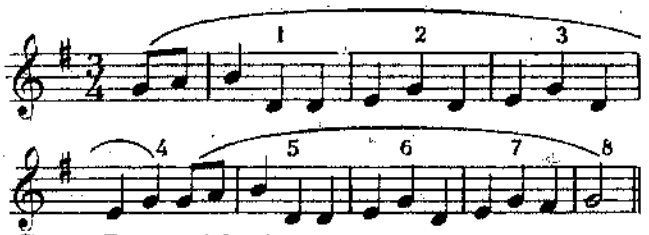
1. Consider the rhythm of the harmony, *i.e.*, discover the exact points at which the tune invites or implies a change in the harmony or accompaniment chord;
2. Select the actual harmonies which you know will be appropriate. At this stage, limit your choice to the primary triads. Make a mental, visual note of the points at which a cadence—particularly any intermediate (or non-final) cadence may be required.

Then, without writing them down, play the harmonies you have chosen. Play them as straight up-and-down accompaniment chords. Use both hands but do not make the chords too thick; and, as you play, sing or hum the tune and see that the hands move quickly enough to ensure a regular tempo. This done, you may then consider any way in which you might improve upon your first attempt at the accompaniment and then play the improved version. Listen all the time.

An actual example, working on the

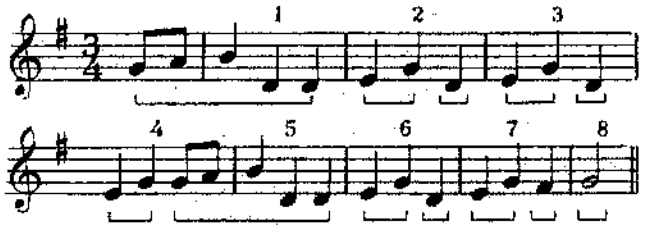
above plan, will help. Here is the tune of *There's a Hole in my Bucket:*

Example 145



Step I would give you something like :

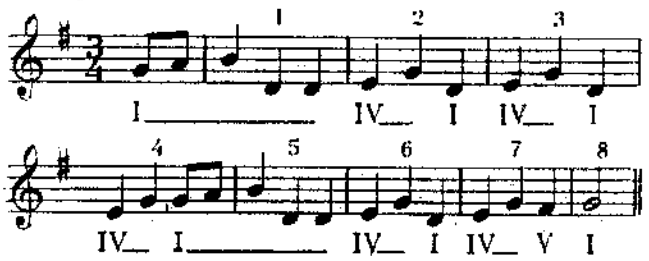
Example 146



in which the brackets show the duration of each harmony. It will be observed that, except at the beginning of each phrase, the harmonies keep to the rhythm of minim followed by crotchet, *i.e.*, in each bar the IV chord accompanies the first two beats and there is a change of harmony on the last beat of the bar. This gives you a clue as to the rhythm of the accompaniment chords : they could be minim followed by crotchet chords in every bar except bar 1 and bar 5; or you may feel that a short chord on the first and third beats would be more effective. Do not make the mistake of thinking that there is always a rigid harmonic rhythm, but very frequently the pattern of the chordal rhythm is clear enough and regular enough to be recognizable.

Step 2 would give you something like this :

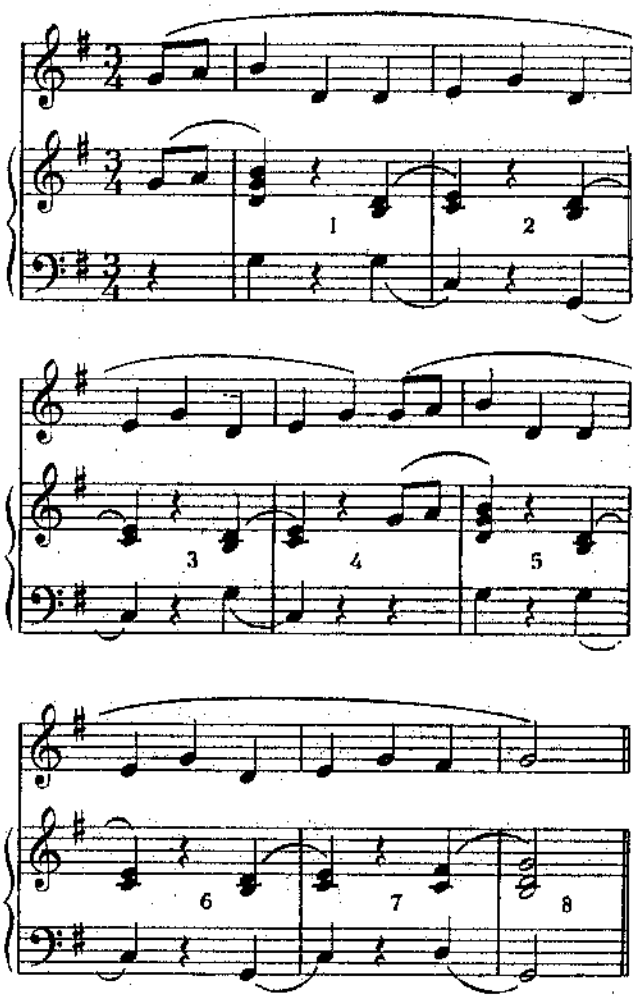
Example 147



In bars 2, 3, etc., the E and G on the first and second beats of the bar belong to the same little phrase and, therefore. both are regarded as part of the same harmony (IV). The only non-essential note in this short tune is the quaver A which occurs at the opening and at the corresponding point four bars later.

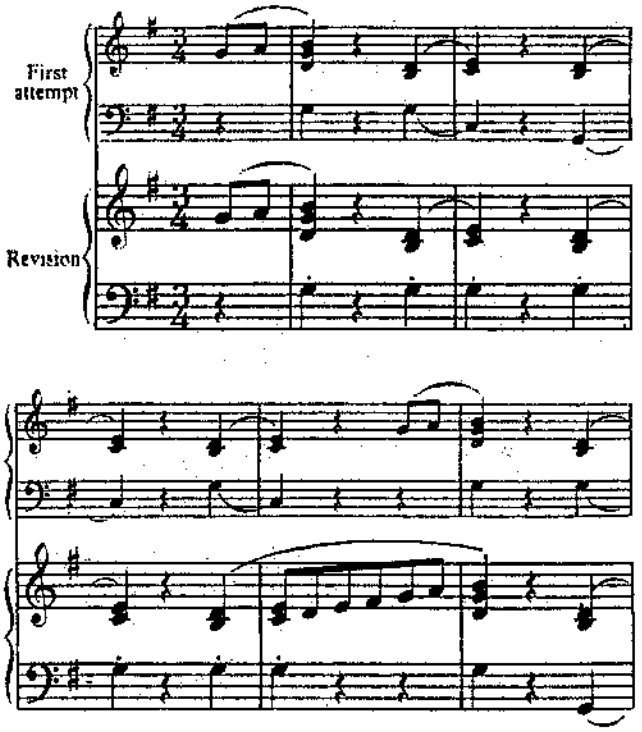
Step 3. Here the plainest, most obvious accompaniment would be :

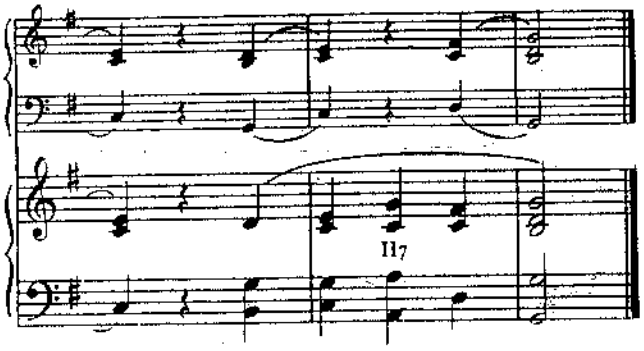
Example 148



Step 4. The following examples show the first attempt and also the "second thoughts" :

Example 149

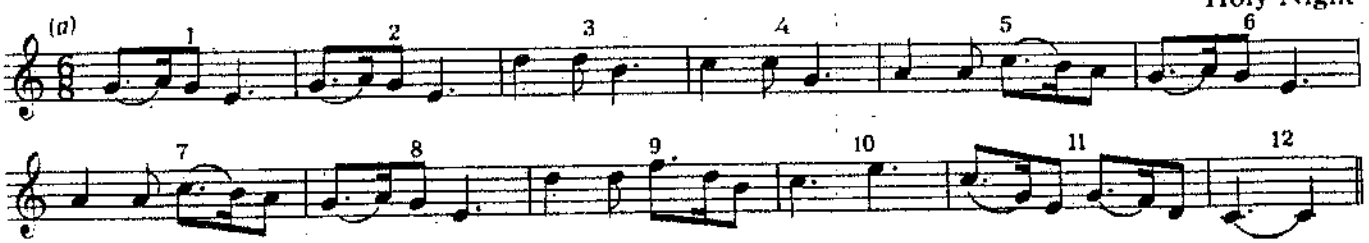




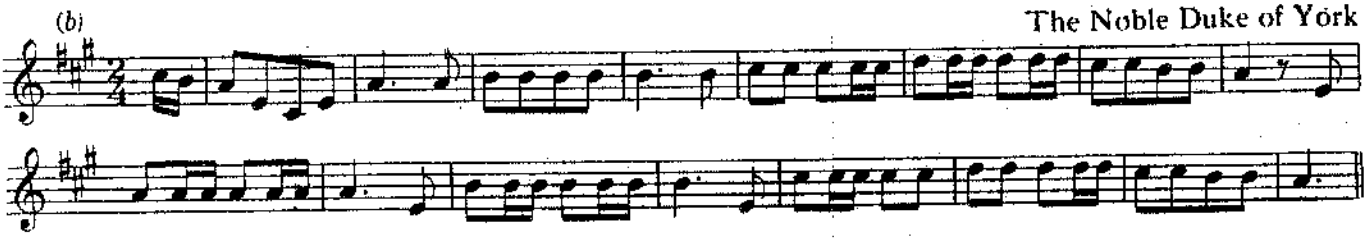
Play the first attempt and then the revision. You will hear that a succession of chords in root position creates a heavy, stodgy effect and the occasional use of inversions is an improvement. The repeated use of IV, I is kept unchanged: the repetition is part of the character of the tune and the repetition of the same chords is therefore quite "in character." Moreover, the tune is very short and the ear has not an opportunity of tiring of the primary harmonies. The only secondary harmony used is in the penultimate bar: the chord on the middle beat is the chord of the seventh on the super tonic (ii_7) which gives relief to the ear and added strength to the final cadence. At the junction (bar 4) one or two passing-notes help, neatly and firmly, to knit the two halves of the tune together. The two versions are printed together to facilitate examination of the slight differences.

Now improvise simple accompaniments to the following tunes:

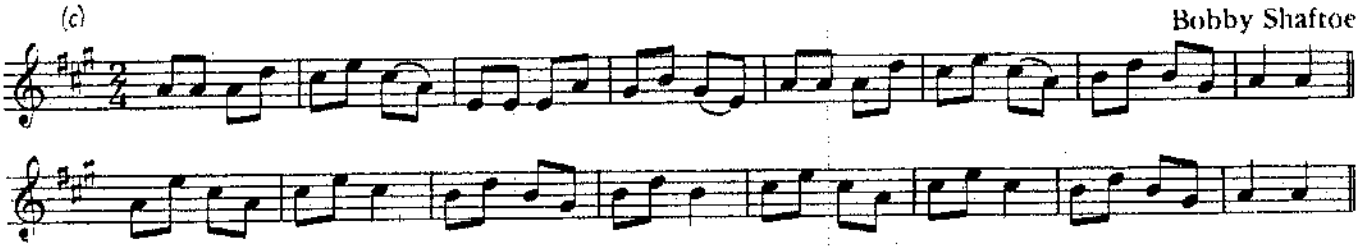
(a) Holy Night



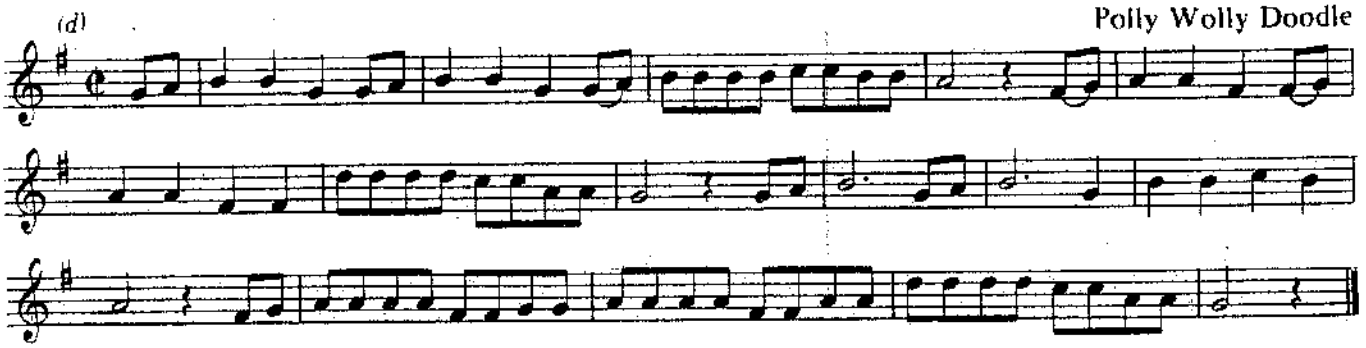
(b) The Noble Duke of York



(c) Bobby Shaftoe



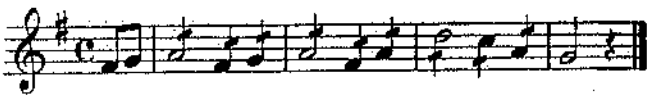
(d) Polly Wolly Doodle



Incorporate the tune in the right-hand part together with chord notes, limiting —so far as may be convenient or desirable—the left-hand part to single notes

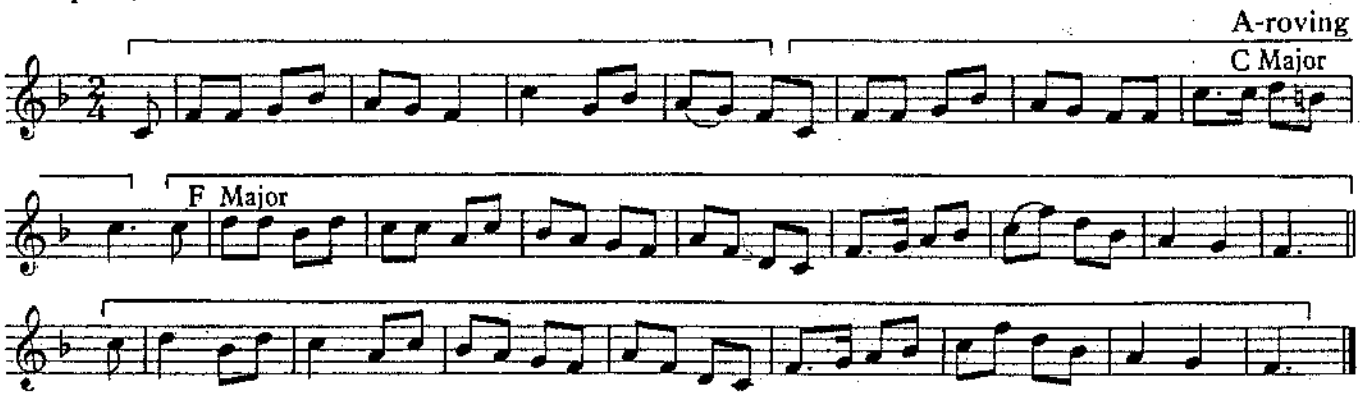
or octaves. Make a mental note of the primary triads of the key of each tune. Observe points in the design of the tunes, for example, in *Silent Night*, the repetition of bar 1 and other short phrases. Ignore note repetitions. See the sub-structure. In *Polly Wolly Doodle*, for example, the last phrase should be seen as :

Example 150



Finally, here is a tune in which there is a brief modulation to the dominant key (C major) at the half-way point :

Example 151



We have now covered the four simple skills listed at the outset, and so reach the last page of this book. Inevitably, the rate and range of progress must vary with the individual; but it is hoped that all who have followed, with patience and persistence, the explanations and the experiments have gained increased keyboard facility and a more realistic understanding of one of music's raw materials—harmony. It is hoped, too, that this increased knowledge together with its practical application may ease the teacher's task and also serve as an incentive to further enjoyable experiment at the keyboard.