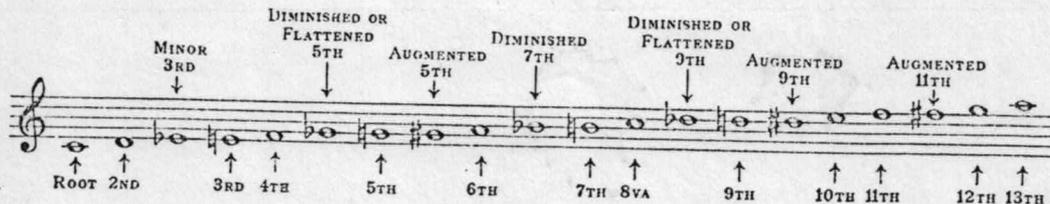


THE PRINCIPLES OF CHORD CONSTRUCTION



The method of chord construction employed in this Tutor is based on a scale of notes (fig. 1) and, by using the numerical names for each of the notes in the scale, the "formula" for any given chord is built up. This may appear a rather complicated process but as the system is developed it will be seen that it is not at all difficult.

The scale of notes in fig. 1 is in the scale of C but, of course, could just as well be written in any other key. For the sake of simplicity, however, the open key (C) will be used in the following chapter when the construction of chords is studied. Having once mastered the technique of chord construction, the student will be able to apply them to any key. To help the student in the early studies, the scale of fig. 1 will be found transposed into all keys at the beginning of each section of chords in the tables of pages 14-41. However, to save any confusion, all illustrations throughout this Tutor will be given in the key of C, unless otherwise stated.

As all the chord formulae dealt with in the next chapter are based on the scale of notes in fig. 1, a closer and more detailed study of the scale is worth while. It is as well to point out right at the beginning that students should make themselves fully conversant with the notation and the respective numerical names of the scale, as these details will facilitate the understanding of all chord structures.

A glance at the scale of fig. 1 will show that, except for the omission of two notes, it is an ordinary chromatic scale. The two missing notes are the C \sharp (or D \flat) between the root and second note, and the G \flat (or A \sharp) between the 12th and 13th notes. These two notes are not used at all in any of the chord formulas and so, of course, are not needed.

The notes whose numerical names are written under the staff form the ordinary MAJOR SCALE. Besides the notational names and the numerical names, the notes also have an academic name. This will not be used at all in this tutor in reference to any of the chord structure, but they are well worth knowing, and so the major scale in all its forms is as follows:—

NOTATIONAL FORM	NUMERICAL FORM	ACADEMIC FORM
C	THE ROOT	THE TONIC
D	THE 2ND	THE SUPERTONIC
E	THE 3RD	THE MEDIANT
F	THE 4TH	THE SUB-DOMINANT
G	THE 5TH	THE DOMINANT
A	THE 6TH	THE SUB-MEDIANT
B	THE 7TH	THE LEADING NOTE
C	THE 8VA	THE TONIC
D	THE 9TH	THE SUPERTONIC
E	THE 10TH	THE MEDIANT
F	THE 11TH	THE SUB-DOMINANT
G	THE 12TH	THE DOMINANT
A	THE 13TH	THE SUB-MEDIANT

It will be noticed that although the notational and academic forms keep repeating throughout each octave, the numerical form does not. The reason for this is that the notes of a scale are naturally the same in any octave and consequently their academic names also remain the same regardless of whichever octave they appear in, but in the numerical form these are counted from the root, which in the case of the scale in fig. 1 is middle C. It must be remembered that these same principles apply in all keys, thus, in the key of G, the note G would be the root or tonic and the note D would be the 5th or dominant. Similarly in the key of E, the note E would be the root of tonic and the note A the 4th or sub-dominant.

The notes whose numerical names are written above the staff in fig. 1 have no academic names but their notational and numerical forms are as follows:—

NOTATIONAL FORM	NUMERICAL FORM
E \flat	THE MINOR 3RD
G \flat	THE DIMINISHED 5TH
G \sharp	THE AUGMENTED 5TH
B \flat	THE DIMINISHED 7TH
D \flat	THE DIMINISHED 9TH
D \sharp	THE AUGMENTED 9TH
F \sharp	THE AUGMENTED 11TH

It is usual, in popular music using chord symbols, to call the diminished 5th the flattened 5th, and the diminished 9th the flattened 9th.

This chapter has covered the basic principles of the scale of notes upon which all the chords in this tutor will be built upon. If the notes and their numerical names are really learnt, the chord formulas set out in the next chapter will be easier to grasp.

GROUP 1
THE BASIC SIMPLE CHORDS

THE MAJOR
THE MINOR

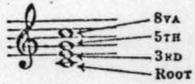
THE AUGMENTED
THE SIXTH
THE MAJOR SEVENTH

THE SEVENTH
THE DIMINISHED

THE MAJOR CHORD

(Symbol C)

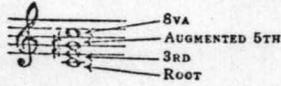
Formula: THE ROOT, 3RD, 5TH, 8VA.



THE AUGMENTED CHORD

(Symbol *Caug.* or *C+*)

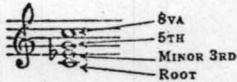
Formula: THE ROOT, 3RD, AUGMENTED 5TH, 8VA.



THE MINOR CHORD

(Symbol *Cmin.*)

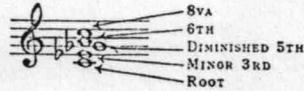
Formula: THE ROOT, MINOR 3RD, 5TH,



THE DIMINISHED CHORD

(Symbol *Cdim.* or *C°*)

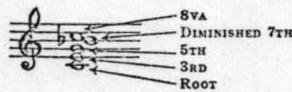
Formula: THE ROOT, MINOR 3RD, DIMINISHED 5TH, 6TH,



THE SEVENTH CHORD

(Symbol *C7*)

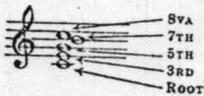
Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH,



THE MAJOR SEVENTH CHORD

(Symbol *Cmaj7* or *C7♯*)

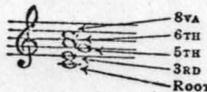
Formula: THE ROOT, 3RD, 5TH, 7TH, 8VA.



THE SIXTH CHORD

(Symbol *C6*)

Formula: THE ROOT, 3RD, 5TH, 6TH,



(This group contains the chords that are made up of combinations of the basic chords.)

THE MINOR SIXTH

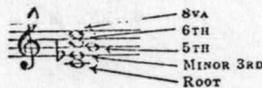
THE MINOR SEVENTH

THE AUGMENTED SEVENTH

THE MINOR SIXTH CHORD

(Symbol *Cmin6* or *Cm6*)

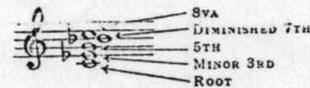
Formula: THE ROOT, MINOR 3RD, 5TH, 6TH,



THE MINOR SEVENTH CHORD

(Symbol *Cmin7* or *Cm7*)

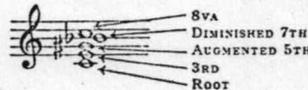
Formula: THE ROOT, MINOR 3RD, 5TH, DIMINISHED 7TH,



THE AUGMENTED SEVENTH CHORD

(Symbol *C7aug.* or *C7+*)

Formula: THE ROOT, 3RD, AUGMENTED 5TH, DIMINISHED 7TH.



GROUP 3

EXTENSIONS OF THE BASIC

(This group contains the chords that extend above the normal octave.)

THE NINTH

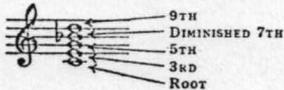
THE ELEVENTH
THE MAJOR NINTH

THE THIRTEENTH

THE NINTH CHORD

(Symbol *C9*)

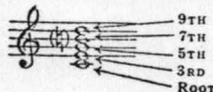
Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH, 9TH.



THE MAJOR NINTH CHORD

(Symbol *Cmaj9*)

Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH, 9TH.



THE ELEVENTH CHORD

(Symbol *C11*)

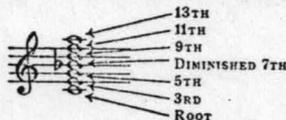
Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH, 9TH, 11TH.



THE THIRTEENTH CHORD

(Symbol *C13*)

Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH, 9TH, 11TH, 13TH.



GROUP 4

COMBINATIONS WITH THE BASIC EXTENSIONS

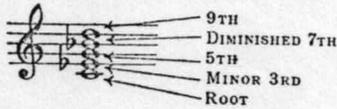
(This group contains the chords that are made up from combinations of the Basic chords and extensions of the basic chords.)

THE MINOR NINTH

THE MINOR NINTH CHORD

(Symbol *Cmin9* or *Cm9*)

Formula: THE ROOT, MINOR 3RD, 5TH, DIMINISHED 7TH, 9TH.

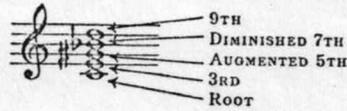


THE AUGMENTED NINTH

THE AUGMENTED NINTH CHORD

(Symbol *Caug9* or *C9+*)

Formula: THE ROOT, 3RD, AUGMENTED 5TH, DIMINISHED 7TH, 9TH.



GROUP 5

COMPOUND CHORDS

(This group of chords have as their basis one of the previous groups but whose notes have been altered in some way, or they have had extra notes added.)

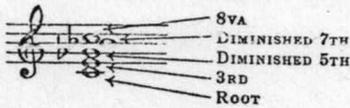
THE SEVENTH FLATTENED FIFTH
THE SEVENTH FLATTENED NINTH
THE NINTH AUGMENTED ELEVENTH

THE ELEVENTH FLATTENED NINTH
THE THIRTEENTH FLATTENED NINTH
THE THIRTEENTH AUGMENTED ELEVENTH

THE SEVENTH FLATTENED FIFTH CHORD

(Symbol *C7b5*)

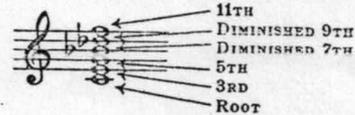
Formula: THE ROOT, 3RD, DIMINISHED 5TH, DIMINISHED 7TH, 8VA.



THE ELEVENTH FLATTENED NINTH CHORD

(Symbol *C11(b9)*)

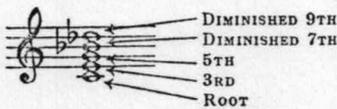
Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH, DIMINISHED 9TH, 11TH.



THE SEVENTH FLATTENED NINTH CHORD

(Symbol *C7b9*)

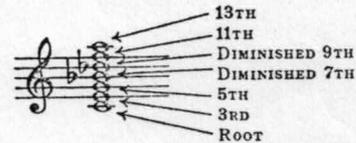
Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH, DIMINISHED 9TH



THE THIRTEENTH FLATTENED NINTH CHORD

(Symbol *C13(b9)*)

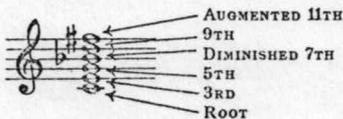
Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH, DIMINISHED 9TH, 11TH, 13TH.



THE NINTH AUGMENTED ELEVENTH CHORD

(Symbol *C9(+11)*)

Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH, 9TH, AUGMENTED 11TH



THE THIRTEENTH AUGMENTED ELEVENTH CHORD

(Symbol *C13(+11)*)

Formula: THE ROOT, 3RD, 5TH, DIMINISHED 7TH, 9TH, AUGMENTED 11TH, 13TH.

