

A COURSE OF INSTRUCTION
IN PURE HARMONIC WRITING
IN THREE VOLUMES

BY

S. JADASSOHN.



Volume first:
Manual of Harmony.



LEIPZIG, BREITKOPF AND HÄRTEL

NEW YORK, G. SCHIRMER

ENTR. STA. HALL,

1890.

MANUAL
OF
HARMONY

BY

S. JADASSOHN,

PROFESSOR AT THE ROYAL CONSERVATORY OF MUSIC, LEIPZIG.

TRANSLATED FROM THE GERMAN

BY

PAUL TOREK AND H. B. PASMORE.

THIRD EDITION.

REVISED BY THE AUTHOR.

FACULTY OF MUSIC
10,007
UNIVERSITY OF TORONTO

1-8-62



THIS WORK IS COPYRIGHT.

LEIPZIG, BREITKOPF AND HÄRTEL.

NEW YORK, G. SCHIRMER

ENTP. STA. HALL.

MUSIC PUBLISHERS ASS'N.

1899.

EDWIN ASHDOWN (Ltd)

68 KING ST. WEST,

TORONTO - - - ONT.



PREFACE TO THE ENGLISH TRANSLATION.

The English translation of my Manual of Harmony has been made in accordance with my special wish, and under my supervision, by my highly gifted pupils Messrs. Paul Torek from New-York, and H. B. Pasmore from San Francisco.

It represents carefully and conscientiously the German text, as well as all the examples and exercises of the Original.

Heartily thanking the above excellent musicians for their industry and intelligent labor, I hope that this translation of my work will have a wide-spread circulation.

LEIPZIG, June 1884

S. Jadassohn.

TRANSLATORS' PREFACE.

A strong desire to make the English speaking public acquainted with the maxims and theorems of so eminent a theoretician as is our esteemed teacher, the author of the present volume, was the main motive for undertaking to translate his "Harmony", which desire was naturally heightened by his specially expressing the wish that we should be its interpreters.

We are convinced that, through its explicit treatment of the subject, and its clear and direct explanations, as well as the arrangement of the several topics, and — what is of greatest importance — because of the fact that it is written with special

reference to the capacity of the *average* student (as we had ample occasion to notice during the instruction of the different classes in the Conservatory), this text-book, with all these advantages, is far in advance of other similar ones.

During all the time in which its author was engaged upon the present volume, and the two that followed, we were constant witnesses of the enthusiasm, the conscientiousness, and the sincerity with which he pursued his idea; at his home, in class, in frequent walk and talk, we heard his views and comments on his work, at every stage of it; during long hours of intercourse, we have been enabled to become acquainted not only with its letter, but also with its spirit — all of which has, we hope, at any rate not lessened our fitness for the task with which he entrusted us.

With regard to the translation, we would merely say that, knowing the special qualities to be desired in the translation, as in the original text-book — from the *standpoint of the student*, as well as from that of the instructor —, we have, above all, striven to avoid the to us foremost error of stiffness and solemn mysteriousness, and have made it our constant effort to be simple, clear, concise, and to make use of as plain and general terms, as are possible in so technical a subject.

Hoping that we have been successful in our enterprise, we only wish that this book may benefit our countrymen to as great an extent, as it has already benefited the German student of musical art.

LEIPZIG, June 1884.

Paul Terek.

H. B. Pasmore.

PREFACE.

Appealed to from many sides, and frequently called upon to make public the method of teaching adopted by me during many years of instruction in the theory of music, I at last came to the conclusion to have my experiences, gathered through self-study and through practice in teaching, published in the form of three books. At present the first appears under the title of "Manual of Harmony"; the instruction in Simple and Double Counterpoint, in Canon and Fugue, will follow as soon as possible.

It would lead too far if I should here indicate what new statements I have made both in the explanation of the chords and their connections, and in the method of instruction; this is clearly expressed in the present volume. Let me not however omit to call attention to the fact that examples are added in the appendix, which are worked out in accordance with the rules contained in the different chapters, and can be constantly referred to as a guide. Experience in practical instruction has taught that, in many cases, it is not sufficient to show the pupil the application of a rule by itself, i. e. apart from its connection with an organically formed piece of music, however small. The proper understanding of the rule is obtained more easily and surely by nearly every pupil, if he sees its application brought before his eyes in the condensed form of one or more small pieces of music. The manifold and peculiar difficulties in the instruction of the theory of music almost demand such a proceeding. Whatever we call our rules, we deduce from the works

of the classic masters; but at the same time we find so large a number of exceptions to the rule, that the latter often seems to be quite doubtful to the pupil. Let us take but one instance. The pupil first hears that the *seventh* of a chord of the Seventh must resolve downward by a step. Soon after he learns that, in very many cases, it may ascend by a step, or be sustained, or enharmonically changed, or even be led by a skip downward to the tones of other chords. In consequence of this, there remains for him of the first stated rule nothing but the *principle* that the *seventh* is led downward a step, when the following chord and the correct leading of the voices admit of it. If the pupil were shown examples from the classic masters, in which occur in great numbers all the exceptional cases mentioned, — provided the material for it were always at hand — he would, in the beginning, scarcely quite perceive and understand these examples taken from larger compositions, and would possibly regard them as licenses which a genius is permitted to take, whereas these exceptions, just as the rule itself, are established in the nature of things. It is more appropriate, therefore, to place before the pupil the application of the rule and its exceptions, in special, suitable examples, even if such little pieces of music, worked out for definite instructive purposes, have not the value and the charm of artistic compositions.

I have given to the present first part of my work the customary title of "Manual of Harmony"; but in the book itself I have not used the word "harmony", but exclusively the term "chord". Experience in instruction also induced me to adopt this resolution. Before the pupil begins the study of theory, the term "chord" is known and familiar to him from the beginning of his practical instrumental, or vocal musical training. Everyone knows what is meant by this word in music. The term "harmony" is generally used in a different sense from that used in older text-books. It astonishes the pupil, that *dissonant chords* also are called "harmonies", — as for instance, the aug-

mented and diminished triads, and all chords of the Seventh. It astonishes him furthermore that the term "harmony" is used only for the fundamental position of the chords, that their inversions, however, are always called "chords" and not "harmonies", while both expressions are used in exactly the same sense for the fundamental position of the chords. The words "Chord of the Sixth", "Chord of the Sixth and Fourth", "Chord of the Sixth and Fifth", of the "Fourth and Third" and of the "Second" are used as technical terms.

It is unnecessary to discuss here, whether, and to what extent the terms "harmony" and "chord" can be used in the same sense; my object is to present my text-book to the pupil — without any superfluous word-apparatus, and without any attempt at ornate and embellished style — as simple, clear, and comprehensible as possible. What is the use, then, of two terms the one of which, being strange and not clear to the beginner, is used in a limited sense, when the other, known to the pupil from the beginning, is sufficient for all cases?

And now a few more words to the pupil. Whoever wants to make the most of this book, must not be contented with simply understanding and getting acquainted with the principles and rules laid down in it. He must also know how to practically employ them with artistic freedom. For this reason I added to the book a very large number of exercises, which, in each individual case, rise from simpler and easier ones to such as are more complicated and difficult. Let no one be satisfied with the working out of *some* of those exercises; *every one* of them is formed in such a way as to make the pupil acquainted with the application of a rule in as many, and different cases as possible. Thorough and perfect knowledge of the chords and of their connections with each other, which is indispensable to the artist not only for his own free compositions, but also in extemporizing preludes and modulations, and for the correct and intelligent execution of the master-works, can be obtained only through

serious, assiduous and persevering work. Neither must the pupil be satisfied to regard these exercises for practice as dry school-exercises, and work them out merely from this point of view. Even here the talented student of Art finds opportunity to prove artistic qualities, such as delicacy, taste, and a striving after euphony and good melodious formation. For this reason it will often be well to work one and the same exercise several times, to carry it out in different positions, even where a definite position is indicated as being most agreeable and best adapted. Thus only will the pupil learn surely and perfectly to master that technique of chord-connections, which forms the basis of the contrapuntal studies, and of the whole technique of composition.

LEIPZIG, July 1883.

S. Jadassohn.

TABLE OF CONTENTS.

Chapter I. Pages 1—8.

§ 1. Principal and secondary tones. § 2. Intervals; diatonic major scale. § 3. Large and small half-steps. § 4. More definite designation of the intervals. § 5. Measurement of intervals upward. § 6. Table of intervals. § 7. The two kinds of keys. Enharmonic chromatic scale. § 8. Perfect and imperfect consonances, and dissonances.

Chapter II. Pages 9—11.

§ 9. Double measurement of the intervals.

Chapter III. Pages 11—21.

§ 10. Division of chords into triads (chords of three tones), and chords of four tones; independent and dependent chords. § 11. Major and minor triad; the primary triads in major. § 12. Connection of the primary triads in a mixed chorus; compass of the human voice in chorus. § 13. Representation of the triads in mixed chorus. § 14. Tones common to two chords. § 15. Connection of the primary triads of the fourth and fifth degrees. *Parallel octaves* and *fifths*. § 16. The three kinds of motion. § 17. Exercises; close and open position. § 18. Closing formation.

Chapter IV. Pages 21—31.

§ 19. The secondary triads of the scale. Dissonant, diminished triad. § 20. Connection of all the triads in major. § 21. *Concealed octaves* in the outer voices. § 22. Connection of two neighbouring triads by means of contrary motion. § 23. The leading tone. § 24. Examples. Exercises. § 25. Sequence.

Chapter V. Pages 31—39.

§ 26. The minor scale and its triads. § 27. The double formation of the minor scale. Augmented triad. § 28. The step of an *augmented second*. § 29. The connection of the triads of the fifth and sixth degrees in minor. § 30. Thorough-bass-notation. § 31. Examples. Exercises. Table of all the triads in major and minor.

Chapter VI. Pages 40—51.

§ 32. The inversions of the triads. § 33. Succession of two or more chords of the Sixth. § 34. Chord of the Sixth and Fourth Examples. Exercises.

Chapter VII. Pages 51—61.

§ 35. Chords of four tones, chords of the Seventh. The chord of the Dominant Seventh. § 36. The natural resolution of the chord of the Dominant Seventh. Concealed *fifths*. § 37. Principal Cadence. Examples. Exercises.

Chapter VIII. Pages 61—67.

§ 38. The inversions of the chord of the Dominant Seventh, and their natural resolutions. Examples. Exercises.

Chapter IX. Pages 67—75.

§ 39. The secondary chords of the Seventh in major and their natural resolutions. Tritonus. § 40. Preparation of the *seventh*. Exercises.

Chapter X. Pages 75—78.

§ 41. The connection with one another of the secondary chords of the Seventh in major, in the fundamental position; the inversions of these chords, and their connections. Exercises.

Chapter XI. Pages 78—85.

§ 42. The secondary chords of the Seventh in minor, and their inversion. § 43. The chord of the Diminished Seventh and its natural resolution. Exercises.

Chapter XII. Pages 86—94.

§ 44. Non-cadencing connections of the chords of the Seventh with chords of other degrees and keys Deceptive cadences. Modulation. Free progression of the *seventh*. § 45. Necessary progression of the *seventh* upward. Exercises.

Chapter XIII. Pages 94—101.

§ 46. Connection of secondary chords of the Seventh with chords of other degrees and keys. Allowable succession of a *perfect* and an *augmented fifth*. § 47. Free introduction of the *seventh* and the *fundamental* in contrary motion. Exercises.

Chapter XIV. Pages 102—111.

§ 48. Altered chords. Triads with altered *fifth*. Exercises. § 49. Chords of the Seventh with altered *fifth*. Open position. The old clefs. Examples. Exercises.

Chapter XV. Pages 111—123.

§ 50. The chord of the Augmented Sixth, the Sixth and Fourth, and the Sixth, Fifth and Third, and their resolutions in major and minor. Relation of the chord of the Augmented Sixth to two major and two minor keys. Exercises. § 51. Indirect resolutions of the chord of the Augmented Sixth and Fifth. Direct modulatory resolutions. Exercises. Leading of the voices by skips. Table of all the chords.

Chapter XVI. Pages 124—140.

§ 52. The Suspension. § 53. Introduction and resolution of the suspension. § 54. Suspension in the Bass. Figuring of the suspension. Examples. Exercises.

Chapter XVII. Pages 141—150.

§ 55. Suspensions in several voices. Upward resolution. § 56. Freer progressions of chords in connection with the suspension. So-called chords of the Ninth, the Eleventh, and the Thirteenth. Exercises.

Chapter XVIII. Pages 150—156.

§ 57. Passing notes, passing chords. Changing notes. The Organ-point. § 58. Organ-point on the Tonic, on the Dominant, on both Tonic and Dominant. Examples. Exercises.

Chapter XIX. Pages 156—166.

§ 59. *Concealed octaves and fifths*: the cross-relation. § 60. *Concealed fifths* over a whole-step.

Chapter XX. Pages 166—177.

§ 61. Application of chords to the accompaniment of a *cantus firmus* in four-voiced writing. Leading of the Bass. Middle voices. Examples. Exercises. § 62. *Cantus firmus* in the Alto, or in the Tenor. Melodic leading of the Soprano. Examples. Exercises.

Chapter XXI. Pages 177—187.

§ 63. Modulation. Means for modulation. Chord of the Dominant Seventh. § 64. The chord of the Augmented Sixth, Fifth and Third. The chord of the Sixth and Fourth on the accented part of a measure. § 65. The chord of the Diminished Seventh as principal means for modulation. § 66. The chord of the Augmented Sixth, and other means for modulation. More developed modulation.

Chapter XXII. Pages 187—198.

§ 67. Closing cadence. § 68. Chromatic alteration of the tones of the chord on the second degree, in the closing cadence. § 69. The chord of the Seventh on the second degree as introduction of

the closing cadence. The Triad, and the chord of the Seventh on the fourth degree, with chromatic alteration of the several tones, at the beginning of the closing cadence. § 70. Conclusion.

Chapter XXIII. Pages 198—204.

How to Listen to Music.

Chapter XXIV. Pages 204—209.

Substance and form.

Appendix. Pages 210—236.

60 Examples to the exercises in the text-book.

Explanatory Remarks and Suggestions 237—253.

Alphabetical Index. Pages 255—258.

PART FIRST.

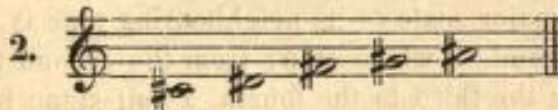
CHAPTER I.

Intervals.

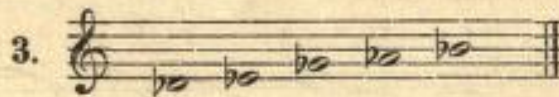
§ 1. All tone material which is used in music confines itself to seven principal tones from which are derived five secondary or intermediate tones. The seven principal tones in their natural progression form the Diatonic Major Scale.



By raising the first, second, fourth, fifth and sixth tones a chromatic half-step the intermediate tones are derived.



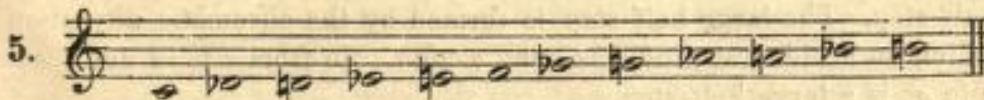
They may also be derived by lowering the second, third, fifth, sixth and seventh tones a half-step.



The twelve tones combined may therefore be represented in chromatic succession as follows:



or:



We take it for granted that the pupil already knows that other en-harmonic representations of the same tones are possible. They are not necessary to our immediate purpose.

§ 2. The distance from one tone to another is called an *Interval*. Within the compass of the diatonic major scale we find, by measuring from the lowest (first) tone, that the next tone above it is the second of the fundamental, and is called the *Second*. Just so the other intervals are named, according to the degree upon which they are situated, *Third, Fourth, Fifth, Sixth, Seventh* and *Octave*. The fundamental itself is called *Prime*.

6.

Prime, Second, Third, Fourth, Fifth, Sixth, Seventh, Octave.

Detailed description: A musical staff in treble clef showing the first seven intervals of the diatonic major scale. The notes are C, D, E, F, G, A, B, and C (octave). Each interval is labeled below the staff: Prime (C), Second (D), Third (E), Fourth (F), Fifth (G), Sixth (A), Seventh (B), and Octave (C).

An extension of our measurement gives us the *Ninth, Tenth, Eleventh* and *Twelfth* as the transposition of the *Second, Third, Fourth* and *Fifth* into the higher Octave.

7.

Ninth, Tenth, Eleventh, Twelfth.

Detailed description: A musical staff in treble clef showing the intervals from the Ninth to the Twelfth. The notes are C, D, E, and F, each appearing in two positions: one in the lower octave and one in the higher octave. The intervals are labeled below the staff: Ninth (C to D), Tenth (D to E), Eleventh (E to F), and Twelfth (F to C).

The *prime, fourth, fifth* and *octave* of the major scale are called *Perfect*; the *second, third, sixth* and *seventh, Major*. The distance from one tone of the major scale to its neighbouring tone is, from the first (*prime*) to the second, a whole-step; from the second to the third, a whole-step; from the third to the fourth, a half-step; from the fourth to the fifth, a whole-step; from the fifth to the sixth, a whole-step; from the sixth to the seventh, a whole-step; and from the seventh to the eighth (octave) a half-step.

8.

Prime, Second, Third, Fourth, Fifth, Sixth, Seventh, Octave.

Detailed description: A musical staff in treble clef showing the diatonic major scale with step intervals indicated by arrows above the notes. The notes are C, D, E, F, G, A, B, and C. The intervals are labeled with '1' for whole-steps and '1/2' for half-steps: C to D (1), D to E (1), E to F (1/2), F to G (1), G to A (1), A to B (1), and B to C (1/2). The intervals are also labeled below the staff: Prime, Second, Third, Fourth, Fifth, Sixth, Seventh, and Octave.

We call a whole-step that distance between two neighbouring tones of a scale between which (by a chromatic alteration of either the one or the other) another tone is found; the lesser distance between two tones is called a half-step.

§ 3. Among half-steps we distinguish between the *large* and *small* half-step. The large half-step is formed by the chromatic alteration which an accidental produces upon a note. So from *c* to *c♯* and from *g* to *g♯* is a large half-step.

Large half-steps.

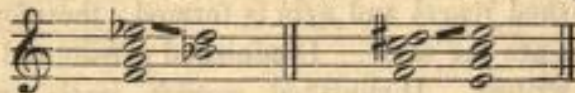


Just so from d to $d\sharp$, from e to $e\flat$, and from g to $g\flat$ are large half-steps.



The small half-step exists only between two neighbouring degrees. Therefore the distance from c to $d\flat$ above, from $c\sharp$ to the next d , from d to $e\flat$ etc. is a small half-step.

NOTE. How erroneous is the contrary view expressed in older text-books that the alteration of the natural tone produced by a chromatic sign forms a *small* half-step to that tone, and that the minor second, on the other hand, forms the *large* half-step, is readily made plain to the practical musician by the different resolutions of the like-sounding chords $f, a, c, e\flat$ and $f, a, c, d\sharp$.



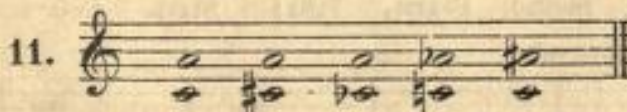
The $E\flat$, being nearer to D , inclines toward it; the $D\sharp$ inclines to E .

Louis Lohse in his treatise "Wider die Neuclaviatur" (*Musikalisches Wochenblatt* 1883, No. 2) clearly expresses himself concerning this point. He writes "Surely the view that $c-c\sharp$ is the small half-step and $c-d\flat$ the large half-step, does great injury. Really just the reverse is true. Taking c at 256 vibrations, the perfectly pure $D\flat$ has 268,04; the pure $C\sharp$, however, has $273\frac{2}{3}$.

The minor second is therefore essentially smaller than the augmented prime".

After what has been here said the natural progression of the leading tone, and also the natural resolution of all altered chords and of the chords of the Seventh is easily explained.

§ 4. Those intervals found within the compass of the major scale which, by measuring from the fundamental, we called *seconds*, *thirds*, *fourths*, *fifths*, *sixths*, *sevenths*, *octaves* and *ninths* change into entirely different intervals if, by means of a chromatic sign, we either raise or lower by a half-step one of the two tones forming the interval. Thus the sixth $C-A$, according as we change the c to $c\sharp$ or $c\flat$ or the a to $a\sharp$ or $a\flat$, becomes smaller or greater.



This changing of the tones of an interval by chromatically raising or lowering one or the other or both, necessitates a more definite designation of these intervals.

Measurement of intervals upward.

§ 5. We have already named the intervals of the major scale *perfect* and *major*. The raising of the upper tone of one of these inter-

vals by a *large* chromatic half-step makes the perfect or major an augmented interval. Thus the *prime* which in itself is not an interval, but a unison, when so raised becomes an augmented interval.



By lowering the upper tone of major intervals a *large* chromatic half-step, they become *minor* intervals.

By raising the lower tone of minor intervals a *large* chromatic half-step, they become *diminished* intervals.

By raising the lower tone of the perfect *fourth*, *fifth*, or *octave* a *large* chromatic half-step, the *perfect* becomes a *diminished* interval.

§ 6. Also by lowering the upper tone of the perfect *fourth* and *fifth*, the diminished *fourth* and *fifth* is formed; therefore the intervals $c-g\flat$ and $c\sharp-g$ are the same. Diminished *primes* and *octaves* do not occur in pure writing. Diminished *seconds*, *sixths* and *ninths*, and augmented *thirds* and *sevenths* are not used in the structure of chords.

Table of Intervals.

Perfect Intervals.

12. Prime (Unison). Fourth, Fifth, Octave.

Major Intervals.

13. Second, Third, Sixth, Seventh, Ninth.

Augmented Intervals.

14. Prime, Second, Fourth, Fifth, Sixth, Octave Ninth.

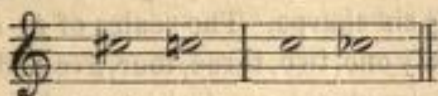
Minor Intervals.

15. Second, Third, Sixth, Seventh, Ninth.

Diminished Intervals.

16. Third, Fourth, Fifth, Seventh, Octave.

NOTE. In *melodic* progressions diminished primes also occur, viz.



Written in their regular order the intervals which may be used in the structure of chords and accidental chord-formations present themselves as follows:

17.

Primes perfect augmented			Seconds major, minor, augmented.		
Thirds major, minor, dimin.			Fourths perfect, augm., dimin., dimin.		
Fifths perf., augm., dimin., dimin.				Sixths major, minor, augm.	
Sevenths major, minor, dimin.			Octaves perfect, dimin.		Ninths major, minor.

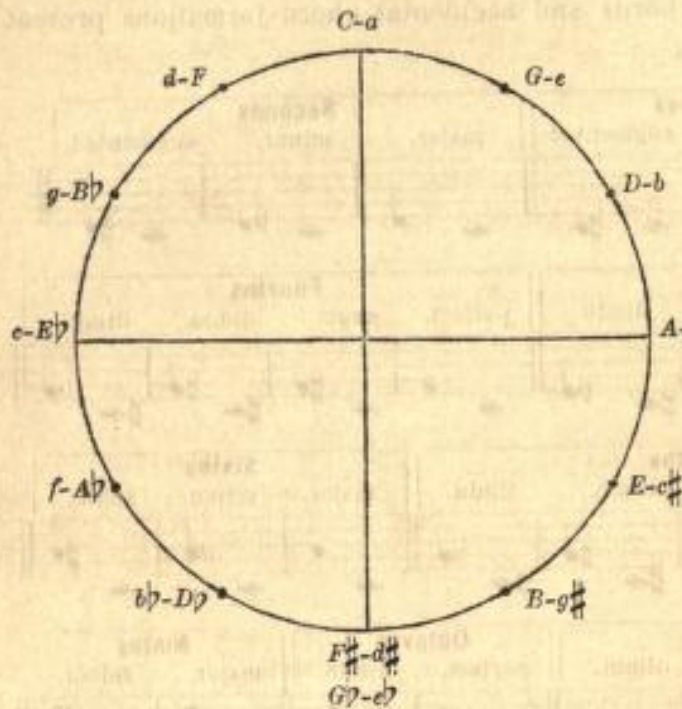
§ 7. We have now become acquainted with all the intervals necessary to the construction of chords and have measured them upwards from the tone *C*. For these measurements we have taken the diatonic *C* major scale as normal scale. If we wish to decide upon the intervals measuring from any other tone we shall have to establish the scale *beginning with that tone*. Although we may take it for granted that the pupil, as a student of music, has already a practical knowledge of *all* the scales, we will again explain that there are two kinds of keys, the *major* and the *minor*, and, consequently, two diatonic scales, the *major* and *minor*, which can be formed according to fixed laws, *from any tone* — always in the same relation as to the succession of intervals.

We have already become acquainted with these relations in the *C* major scale (see No. 8).*)

As soon as we take any other than the tone *C* as fundamental, we have to make use of transposition signs in the construction of the scale.

*) We shall explain the formation of the minor scale later on.

Thus the scale of *G* requires one sharp, (\sharp) that of *D*, two; *A*, three; *E*, four; *B*, five, and *F* \sharp six sharps. The scales of *F*, *B* \flat , *E* \flat , *A* \flat , *D* \flat , and *G* \flat require respectively one, two, three, four, five and six flats (\flat). Therefore the scales with signatures are to be regarded merely as transpositions of the scales



Large letters indicate the major, small letters their relative minor.

positions of the scales of *C* major and *A* minor. The perfect *fifth* above or below *C*, or *a*, requires one transposition sign in order to preserve the same relation of the tones of the scale belonging to that interval. Progressing further in fifths we must add another transposition sign with each progression in order to attain the same end. This, which is called the "circle of fifths", is illustrated in the adjoining figure.

If we wish to ascertain the major *sixth* (above) of *f* \sharp we find it to be sixth tone of the *F* \sharp major scale, which is *d* \sharp . Accordingly the *minor sixth* is *d*, and the *augmented sixth* *d* \times .

18.

major sixth, minor sixth, augmented sixth.

So the *major sixth* of *A* \flat is *F* the sixth tone of the *A* \flat major scale; the *minor sixth* is *F* \flat ; the *augmented sixth* *F* \sharp .

19.

major sixth, minor sixth, augmented sixth.

In determining all the intervals it is necessary to make use of all the transposition signs: flat (\flat), double flat ($\flat\flat$), sharp (\sharp), double sharp ($\sharp\sharp$), and natural (\natural), as they are needed in raising or lowering a tone. In order to make this clear to the pupil we present the following

table of intervals measured from $G\flat$ and $F\sharp$. It will be seen by the signature that the scales of $G\flat$ and $F\sharp$ are used as the basis of measurement.

Primes perfect, augm.			Seconds major, minor, augm.		
--------------------------------------	--	--	---	--	--

Thirds major, minor, dimin. *)			Fourths perfect, augm. dimin. *)		
--	--	--	--	--	--

Fifths perfect, augm., dimin. *)			Sixths major, minor, augm.		
--	--	--	--	--	--

Sevenths major, minor, dimin.			Octaves perfect, dimin.		
---	--	--	--	--	--

Primes perfect, augm.			Seconds major, minor, augm.		
--------------------------------------	--	--	---	--	--

Thirds major, minor, dimin.			Fourths perfect, augm., dimin., dimin.		
---	--	--	---	--	--

Fifths perfect, augm., dimin., dimin.				Sixths major, minor, augm.		
--	--	--	--	--	--	--

Sevenths major, minor, dimin., dimin.				Octaves perfect, dimin.		
--	--	--	--	--	--	--

*) The diminished fourth

and the diminished fifth

do not occur in practice. The same is true of these intervals measured from the

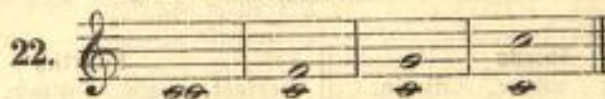
The pupil will now, as a first exercise, write all the intervals from all the tones and must be especially careful as to the correct notation of the enharmonic tones. For this purpose we refer to the following illustration which shows the true pitch of the tones in the enharmonic-chromatic scale.



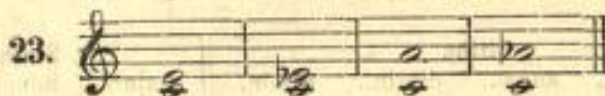
From this it will again be seen that the minor *second* is the smaller and the augmented *prime*, as compared to it, the larger interval. The same is true of the minor *third* *C* *e* ♭, the augmented *second* *C*—*d* ♯, the diminished *fourth*, the major *third* etc.

§ 8. In conclusion we would state that the intervals are classified as *perfect consonances*, *imperfect consonances*, and *dissonances*. The perfect consonances are the perfect *prime* (unison) the perfect *fourth*, the perfect *fifth* and the perfect *octave*. The imperfect consonances are the major and minor *third* and the major and minor *sixth*. The dissonances are the major and minor *second*, the major and minor *seventh*, the major and minor *ninth* and all the augmented and diminished intervals.

Perfect consonances.



Imperfect consonances.



Dissonances.



ones *B* ♭, *E* ♭, *A* ♭ and *D* ♭. (The diminished fifth *B* ♭ *F* ♭ may, however, occasionally occur.) Measured from all the remaining tones they are used in the construction of chords.