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# TEXT-BOOK of <br> SIMPLE AND DOUBLE <br> COUNTERPOINT 

## INCLUDING IMITATION OR CANON

 BYProf. Dr. HUGO RIEMANN

TRANSLATED FROM THE GERMAN
BY
S. HARRISON LOVEWELL director of music, Whitman college, walla walla, washington u.s.a.


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BREITKOPF \& HÄRTEL

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## PREFACE.

THE present treatise on counterpoint must not be regarded as a more developed exposition of the ideas contained in my book, "New School of Melody*", a work, which unfortunately, I erroneously entitled, "A Sketch of Counterpoint by a New Method".

While that text-book - which treated particularly of the subjects, figuration and analysis, and therefore an advanced course in harmony - was in the press, the thoughts embodied in the present volume were being formulated and matured, as may be seen verified in the preface of my "Musikalische Dynamik und Agogik".

The warning, so justly given by Prof. Dr. Bernhard Scholz, not to let counterpoint degenerate into harmonic figuration, I believe I have sufficiently considered. Harmonic figuration, as now taught, is an independent course coming between harmony and counterpoint; counterpoint, as it must always be, is the theory of the free invention of melody.

[^0]Hence, by the changed appearance which the real theory of counterpoint wins for itself in my system of teaching, I hope I am offering something acceptable to those who are intimately acquainted with my pedagogical method, knowing that for them the gap, which has hitherto existed in theoretical instruction, is now filled. I also hope to attract new friends and to convince them that nothing is further from my intention than to doubt old truths and to produce something new for the sake of novelty.

Hamburg, March 16, 1888.

## Dr. Hugo Riemann.

## PREFATORY NOTE OF THE TRANSLATOR.

IT has been my chief endeavor to produce a translation from the German original text into English simple enough to be readily intelligible to the average student of music. The translation could be more literal, but it is doubtful if there would be a proportionate gain in simplicity of expression.

My thanks are due to Rev. Julius von Gumppenberg of Walla Walla, and to President Stephen B. L. Penrose, D. D., of Whitman College, for their invaluable assistance as revisers of the text.

> Walla Walla, Washington, U.S. A.
> June $16,1902$.

S. Harrison Lovewell.

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## DIRECTIONS FOR THE USE OF THE B00K.

From among the numerous cantus firmi in the Appendix, the student should select a limited number for his contrapuntal exercises that, upon the basis of a few cantus, he may solve all the problems of the three chapters. The exercises should be marked in accord with the numbers of the single paragraphs, and also so as to agree with the figures which indicate problems $1-82$; this is necessary because later, reference is made to the exercises in the first paragraphs, either the counterpoint being used as cantus for other new exercises, or a third or fourth voice is to be added to the exercises already written. Since all the model examples are developed from only seven cantus, a strict compliance with the teachings of the book must be insisted upon; the continual erolving of new forms from the one germ is of great benefit to the student and very stimulating to musical fancy. But before the study of counterpoint is begun, not only plain fourpart harmony* must have been completed, but sufficient discipline must also have been attained in figuration and analysis**.

Modulation + can be studied as auxiliary to the exercises in counterpoint. The nature of rhythmical construction is made intelligible by my book, "Musikalische Dynamik und Agogik t广".

* "Handbuch der Harmonielehre", Leipzig, 1888; Breitkopf \& Härtel.
** "Neue Schule der Melodik", Hamburg, 1883, Grädener \& Richter.
+ "Systematische Modulationslehre", Hamburg, 1887; J. F. Richter.
t† Hamburg, 1884; D. Rahter. Translator's Note. To the abore textbooks may be added: "Simplified Harmony", London, 1896; Augener \& Co. "Katechismus des Musik-Dictats", Leipzig, 1890; Max Hesse, "Grosse, Kompositionslehre", Berlin und Stuttgart, 1902, 1903, W. Spemann and "System der musikalischen Rhythmik und Metrik", Leipzig, 1903, by the same author.


## CHAPTER I.

## SIMPLE COUNTERPOINT.

## § 1. THE HARMONIC AND RHYTHMICAL ANALYSIS OF THE CANTUS FIRMUS.

THROUGH the discarding of the thorough-bass figures usually accompanying a cantus firmus, as found in harmony methods, greater artistic freedom is granted to the student, and an important step is taken toward independent musical creativeness. But that is not saying that everything in the earlier exercises was predetermined, for indeed, even in those exercises in fourpart harmony in which the chord construction* was determined beforehand, one's fancy had a reasonable amount of scope, namely: as regards agreeableness in the formation of melody, and also, in spite of restrictions, in the making of progressions of intrinsic merit in the bass. Harmonic figuration increased these possibilities quite materially. The harmonies are now nearly free, but not wholly, because, to a certain degree, the cantus firmus still determines the proper chords. However, it is possible to harmonize a couple of notes in many ways; yet the more nearly perfect, the more positive, the more symbolical, yea, the more convincing a short cantus is as regards force of conception, the more authoritatively will it command a particular harmonization, such a harmonization as will blend into its own essence, and was already decided before the other voices were added.

Nothing will give falser results than to demand of students that they produce many differing counterpoints upon the same

[^1]cantus firmus, each new counterpoint bringing to the cantus a harmonically different interpretation; but rather their efforts should be so directed, that, through repeated correcting and refining, a counterpoint is conceived which can be looked upon as the matchless one, standing alone in place of many inferior and valueless contrapuntal melodies, as the one of beauty, natural, artistic, perfect.

The teacher, who has not preceded the writing of two-part counterpoint with the study of harmony and with exercises having predetermined chords, cannot do better than to instruct pupils in the writing and constant rewriting of exercises in the hope that among many false efforts the desired counterpoint may be found.

The not already deadened natural musical instinct will invariably tell the gifted pupil when the contrapuntal melodies are good or bad, and also whether they are written in conformity with the rules; but if with those less talented the musical instinct is weak, so that in spite of earnest effort he only succeeds in producing an aimless groping about amid his bungling work, art suffers no loss. Meanwhile the method has the power of training those of small talents in a way by which they learn to write counterpoint correctly - that is, rationally and logically - even though composers are not produced from among this class of students, there is still the satisfaction of having trained listeners and performers with sound musical judgment. For it is not to be forgotten that only a few of those who enter upon the study of theory with zeal and ambition are called upon to emrich musical literature with their creations; nevertheless the study of the technic of composition is an indispensable requirement for the full development of the art-understanding.

To instruct a Mozart or a Mendelssoln in counterpoint is easy; genius knows so well how to soar beyond umatural fetters!

An apparently serious objection which the adherents to the old method of counterpoint (without previous study of harmony) adrocate against the new is, that this new methorl hinders the spontancity of melodic inrention, and figuration (whether with or without predeternined harmonies) displaces the free forming of melody. It would be difficult to defend the new method arainst the old, if it were not for the fact that the objection
does an injustice in two directions: praise is undeservedly bestowed upon the old, and blame without justification is given to the new, because:

1) It is very doubtful whether the strict rules of the old method are adapted for the development and advancement of this spontaneity.
2) By the new method this is not more difficult of attainment.

1a) The rulings of the old method concerning admissibility and inadmissibility of certain successions of intervals are surely just as much a fetter as are the predetermined harmonies of the new method.

2a) These predetermined harmonies are a support and a guide to the musical fancy preventing any relapse into chaos.

It must not be forgotten that so long as the harmonic principles were unfathomed, the old method was the only possible one; and also, that the theory of counterpoint, as formerly taught by Fux, and to-day by Bellermann, was already fully developed before Zarlino (1558) recognized the major and minor chord as two principal factors in harmony. About 150 years ago Rameau called attention to the logical order in harmony progressions, and gradually the theory of harmony was developed to completion. If the polyphonic wonderworks of Bach or Handel are examined in the light of the new method, no rigid conformity to old theories will be discovered, but with astonishment it will be seen how clearly those immortals (and also other great masters) intuitively discerned, or had knowledge of the nature of harmony, moving with such freedom and perfect naturalness, that it would be incomprehensible to believe that they had created under the restrictions of "rules".

We will now make clearer our present point of view.
By means of many years' practice in the writing of plain and figured exercises with given harmonies, the student has gained an understanding of the regularity or wonderful simplicity, of harmonic construction, and has mastered the principles of the functions of tonic, dominants and various dissonant forms; not only has he memorized many formulæ, but also, through experience, has embodied his own musical ideas in those musical forms within which the harmonic development is
held. He has grasped more or less clearly the rhythmical conditions controlling cadential effects and modulations. The cantus firmus gives him, as it were, an outline of a picture drawn with a few sharp strokes which he must bring to full life by means of his fancy.

It is a sketch - indeed, only the principal figure is sketched - and the task consists in the bringing of this principal figure to full value by means of the antithesis of contrasting figures, or simply through the aid of a foreground which brings the principal figure into relief. The counterpoint should make clear whatever is hidden in the cantus firmus, its true character is to be made manifest; the counterpoint should not suppress the cantus firmus nor be subordinate to it. It is not one's duty to conceive a melody in conjunction with a cantus firmus by which the given voice is rendered insignificant and unintelligible*; but rather, the aim should be to make the cantus firmus gain greater significance through the counterpoint. The comerterpoint must interpret the cantus firmus.

If we examine Bach's fugues, it will be clearly demonstrated that not once in the modulatory part does the theme receive a different meaning through the counterpoint than that which the first counter-subject gave it. A theme which can be interpreted first one way and then another must appear characterless. To what fine point the sense of a theme can be specialized will be seen soon enough; the essential thing, the solid foundation, must remain standing.

What is this foundation, and of what does it consist?
Two things are to be understood at the same time: Harmony and Rhythm, and both in their more general application; it is required that the key, or tonality, of the cantus firmms

[^2]be established, and also, at the same time, the positions of the rhythmical stress points, or ictus.

In short themes of few notes there not only can be uncertainty, but in reality a double manner of comprehending the rhythm may be possible, as, for example, the following cantus firmus shows:

which can be just as well understood in major $\left(c^{+}\right)$as in minor ("e) sense; while the rhythmical articulation, as shown by the brackets, and the position of the accented measures, as shown by the fork ( $v$ ) over the bar-lines, is indisputable. But, on the contrary, a cantus firmus:

occasions no doubt in regard to the key ( $a$ minor, in so far at least, as one considers the signature, although a major is also possible); but the rhythmical construction can waver between

$$
\| \widehat{a g^{*} a} \text { and } \widetilde{a \mid b} \|_{g^{*} \mid a}
$$

When such doubts arise, the best thing for the student to do is to make two exercises out of the one; that is, consider the one cantus firmus, which is understood in two ways, as two cantus firmi and then work each one separately. A mixing of the two is wrong and hinders the complete intelligibility of the technical routine. Consequently we consider it a chief duty of the pupil to have a full understanding of the cantus firmus, and are convinced that only then is it possible to write counterpoint in a sensible manner. It is only when the cantus firmus as a whole is comprehended, that is, when one feels (to say nothing about "knowing") how it is articulated in accord with harmony and rhythm, that a counter-voice can be written which adjusts itself to it and discloses its inner meaning; binding itself to it, while independent in character and yet accompanying, so that the two come into a higher unity.

I do not know how many fetters attach themselves thereby to the freedom of conception; at any rate, when an objective point and the principal stress-points are recognized, inventiveness unfolds itself more freely than it could groping from note to note of the cantus firmus.

The old method has occupied our attention sufficiently long, so we again return to the work self-evidently joined to previous steps in theory ( $I$. the writing of four-part exercises note-against-note; II. figuration and analysis). The following cantus firmus illustrates the work:


Key: c major or a minor; we decide in faror of the first. Rhythm: the second and fourth measures are accented, that is, cadential effects are upon the first $e$ and the final $c$. Another way of understanding the rhythm (first and third measures as accented) must be rejected as being artificial. A plain fourpart writing appears thus:


The three-part writing:

or thus:

and finally in two-part writing:


For the present there is nothing to be said about the exercises in four-part and three-part writing. If it is clearly understood that the second measure forms the first stress-point, concludes the first symmetry, then it is evident that $d-e$ in the counterpoint is conceived within the harmonic progression $g^{+}-c^{+}$; also the treating of $f$ as 1 of the sub-dominant, and $e$ as the sixth of the super-dominant $\binom{6}{4}$ is evident to anyone who has not been too thoughtless in the writing of harmony exercises.

## § 2. TWO-PART WRITING: NOTE-AGAINST-NOTE.

If now, first of all, we turn aside from the four-part, threepart and more than four-part treatment of a cantus firmus, and confine our efforts for considerable time to strictly twopart writing, it is only because the largest possible freedom of movement is thereby granted to the counter-voice or counterpoint, which is not written contradictory to the cantus firmus, but brings out its meaning the more clearly. A free movement of the individual voices is also possible in three-part and fourpart writing, but since recourse must be made to an occasional crossing of the parts, or to a progression in intervals in which the voices are too far apart, this manner of writing shows too great a deviation from the simple two-part writing to which we are accustomed, and therefore we would be unable to join the free writing in four parts to a style of four-part writing in which the voices would preserve throughout their proper position against one another and represent harmonies which most naturally bind themselves to one another. For the figuration of a voice-part, and also alternate or simultaneous figuration of several voices in simple part-writing, is only a further completing of the theory of the harmonic meaning of the tones (passing-notes, auxiliary notes and anticipations), permitting within moderate bounds an unfolding of the faculty for forming
melody. These then are the reasons why (being fully equipped with a positive feeling for the logic of harmony and metrical forms [symmetry]) we must first begin with a given voice placed in antithesis to another voice, which has been invented as a free melody, fulfilling the requirements of harmonic clearness. When sufficient skill therein has been attained, the next task is to add a third roice-part to the two voice-parts already finished; after that, comes the adding of a fourth voice-part, and finally - as the highest of school tasks - the student is to produce, at the same time, several melodically independent roice-parts, or counterpoints, to a cantus firmus.

From the begimning, aroid the error of presupposing that a contrapuntal melody is correct when written in contrary movement to the cantus firmus; the inversion therely arising is rather a form of imitation. Two roice-parts are the more characteristic the less they seem to concern themselves about one another; they must not appear to progress in either contrary or parallel motion!

As regards two-part writing, attention is called to what has been said in the book, "Neue Schule der Melodik". page 93, concerning clear harmonic substitution by means of two tones, namely:

For all harmonies good two-voiced substitutions are: ${ }_{1}^{3}, \frac{\mathrm{III}}{\mathrm{V}}$, ${ }_{3}^{5}$, III moreover for the natural (minor) seventh chords : ${ }_{3}^{7}$ or VIII, and also, indeed: ${ }_{5}^{7}$ and chiefly ( $\left.\begin{array}{c}\mathrm{V} \\ \mathrm{VII}\end{array}\right)$;
and for the sixth chords: ${ }_{1}^{6}, \stackrel{\mathrm{VI}}{\mathrm{VI}},{ }_{3}^{6}, \mathrm{JI}$, and finally for the minor


The entrance of a new harmony must make these substitutions clearer. The old and common rule in two-part counterpoint that the unison must be used at the beginning and close of an excreise, we cannot acknowledge as ralid; however, the unison is of good effect not alone at the begiming, but also at the close of an exercise, indeed eren at the melodic interpunctions (points of repose, breathing places and cadential effects in the cantus firmus), if fundamental tones are used (and also in minor if it takes the prime of the tonie). But if, on the contrary, the cantus firmus begins with the third, to begin the
counterpoint in unison with this note would be a doubling of the third and must be rejected; it is impossible for the ear to perceive the key of $c$ major in an unprepared doubled $e$; in such a case, the counterpoint should unreservedly begin on $c$ or $g$.

If in an exercise in a major key, the cantus firmus begins with the fifth of the tonic, the counterpoint would rather take the fundamental tone even though the usually avoided empty fifth ${ }_{1}^{5}$ substitution ensues thereby. There is nothing wrong in the counterpoint beginning with the third.

The frequent beginnings with the fundamental tone of the dominant upon the up-beat:

## 8. <br> 

are not to be mistaken for this, because the unison counterpoint of the dominant is the natural one.

Beginnings with tones foreign to the tonic harmony are not excluded, although infrequently used. A cantus firmus:

is equally understood in $c$ major or $a$ minor. In the first case, the initial note $a$ would naturally be the third of the subdominant, and the right counterpoint would be $f$ :
10.


Judging the matter from our point of view (harmony and figuration having been completed), a beginning with a dissonance on the accented part of the measure is not excluded, and so a cantus firmus:
11.

permits $f$ to appear in the counterpoint as the fourth of the tonic:
12.


In general it may be said that along with ${ }_{1}^{3}\binom{\mathrm{III}}{\mathrm{V}}$ and ${ }_{3}^{5}\binom{\mathrm{I}}{\mathrm{II}}$, the following chord-substitutions are of equal ralue, although more rarely used; and being less easily understood must be employed with care:
${ }_{1}^{4}$ whenever the fourth is suspended before the third;
${ }_{3}^{7 \times}$ whenever the major seventh is suspended before the octave;
${ }_{3}^{6}$ the sixth used as a suspension before the fifth;
$\mathrm{II}_{\mathrm{V}}$ the under-second as a suspension before the third;
VII- the major under-serenth as a suspension before the under-octare; and finally:
IV the major under-fourth as a suspension before the under-third.
All these cases (to which ${ }_{23}^{5}$ and VI VI may be added) have one thing in common in that they sound apparently like empty fifths and fourths, which, not only by the old methods of teaching, but also by the principles we have expounded, are poor harmonic substitutions; they are undoubtedly bad and are to be rejected when considered in the sense of $\begin{gathered}5 \\ 1\end{gathered}\binom{\mathrm{I}}{\mathrm{v}}$; but when through their connection with other chords they have dissonant meaning, they are wholly correct.

A peculiar charm belongs to those dissonances which appear as "feigning consonances", for example:
13.


The augmented second on account of its resemblance to the minor third, and the augmented fifth through its resemblance to the minor sixtly are good harmonic substitutions:


These are not recommended, and are only mentioned that such cases may be understood.

Poor harmonic substitutions in two-part writing are those presenting major seconds or minor sevenths; also those representing the natural (minor) seventh chord and major sixth chord; ${ }_{1}^{7}\binom{\mathrm{I}}{\mathrm{VII}}$ and ${ }_{5}^{6}\binom{\mathrm{~V}}{\mathrm{VI}}$, and those signifying a suspension ${ }_{1}^{2}\left(\frac{\mathrm{II}}{\mathrm{III}}\right)$ or ${ }_{2}^{3}\left(\frac{I}{\text { III }}\right)$. But still worse are the minor seconds and major se-


Since we undertake the study of counterpoint after the nature of figuration is understood, there is no reason why we should not regard the tones of the cantus firmus as passingnotes, and so gain a large number of cases where incidental chords arise in two-part writing, which would be unsatisfactory as harmonic substitutions.

If the conceiving of a tone as a passing-note is subject to the condition that it appear at a rhythmically less important place, then in general we would say that when the tones of a cantus firmus enter and progress further diatonically upon the upbeat of a measure, then the proper counterpoint should be broken chord-tones, the particular ones being of little importance. It is necessary, however, that the real harmony substitutions on the accented part of the measure be satisfactory. Consequently the following formations arise:



The opposite can also be true, that is, the counterpoint can have a passing-note when the cantus firmus brings upon the upbeat a tone which can be understood as a second chord-tone of the preceding harmony (the same examples). Finally, it is possible also that passing-notes appear simultaneously in both the cantus firmus and the counterpoint (a); or that second chordtones appear in the same way in both the cantus firmus and the counterpoint (b).

It is of no consequence what intervals arise thereby; at least neither empty octaves, unisons, fifths or fourths, nor even seconds and sevenths are objectionable:


In addition to the permissible octaves which arise through beginning with the fundamental tone (also I) of the tonic or dominants and the closing upon the fundamental tome of the tonic, we have won a large number of octaves, which for twopart writing are faultless. Tlo these must be added an especially significant one, namely, that one which represents the six-
four chord. But it may remain an open question whether we are able to understand the six-four chord when it appears in the form $\frac{1}{1}$, or under certain conditions, whether the octave $\binom{8}{1}$ can give the effect of a suspension; at any rate, nothing is to be said against the following progressions:
17.


In such cases I would decide that the octave belonged to the category of dissonances in the cloak of consonances* ("feigning consonances").

If all these varied possibilities in the comprehension of the tones of a cantus firmus and of the progression of a counterpoint have been so absorbed into the student's consciousness as always to be present and imaginable without effort, nobody will wish to say that counterpoint written by such a method is a mechanical manipulation, a figuration of preconceived harmonies and a hindrance to the spontaneity of melodic invention.

Fancy has many ways open for its free development. The learning of the harmonic significance of tonic, super-dominant and sub-dominant could just as well be considered damaging to the creative activity of the fancy; nevertheless, the student, who, at the threshold of free counterpoint just begins to understand the technical terms, passing-tones, suspensions and chordtones, would make poor progress. The fullness of possibilities would confuse him, and the attempt at writing - whatever his desire - a couple of good counterpoints would hardly reward him for his expended efforts. Again it may emphatically be

[^3]said that the present introduction to free counterpoint can be of ralue only to those who have mastered harmony and figuration. But for those who have attained this mastery progress is both easy and rapid, since the writing of counterpoint with one or more notes against one note is in reality hardly more than a repetition of the excrcises in figuration (but with the emphasized distinction that the harmonies are not predetermined and a far freer development of melodic forms is possible than in the course in figuration). It will be perceived that there is little to be outlined and explained, as nearly all is an affair of individual work and practice, so that the teacher's activity is limited to that of correction only. The following explanations accompanying the paradigms have the particular object of showing the teacher the points of view from which the work of the pupil is to be examined and the way to progress which has to be pointed out. It is self-evident that they will also be of service to the student, inasmuch as they indicate the principles by which the proper method of working the exercises is achieved. We now are prepared for the arranging and solving of the first problem.

## Problem 1. To write a second voice-part, note-againstnote, against the cantus firmus.

The given voice-part may be the following:
19.


The cantus firmus - considered as uppermost roice - has but one meaning harmonically and rhythmically. The key is $f$ minor; the rhythm shows the typical two-measure metre, beginning on the maccented measure the long notes in measures 4 and 8 being points of repose; since in both cases the fundamental tone of the scale forms the points of repose, we can consider them as perfect cadences $\left(c^{7}-{ }^{0} c\right)$, which are readily possible as judged from the preceding tones ( $y-f, c-f$ ).

The $a$ in the fifth measure, leading to $b$, is remarkable as it indicates that a turning to the key of $b$; minor is close at haid. The student already knows through his studies in modulation that $f^{7}$ in $f$ minor is an intermediate harmony in the transition to the sub-dominant.

Thereby the cadences for the final four measures are almost fixed:
20.


For the first four measures a further dividing up seems desirable, for it is already known that $1+1+2+4$ is the normal type of thematic organization. Our cantus firmus joins itself to this form most naturally when a perfect close is effected on the second measure; the second and third measures permit a two-measure cadence:
21.


If the nature of the theme is now understood, then the counterpoint may begin. The beginning with the unison is excluded because the cantus firmus begins on the third; the choice therefore is between the prime $(c)$ of the minor and the fundamental tone ( $f$ ). If $f$ is chosen the beginning is not satisfactory in its relation to the next following tone, since the cantus firmus approaches too near, and taking the rery same note twice itself would hamper the counterpoint. We decide upon $f$ an octave lower. The principles for the forming of melody, clearly expounded in the text-book of harmony, are now of value, especially that part which treats of the further developing of the melodic possibilities; that is, a melodic voicepart, claiming independence, must not grope hither and thither upon a few degrees of the scale, but must determine with decision upon a definite purpose, and progress to a climax (which can be negative, that is, lower instead of higher). The attainment of the goal can be its conclusion (for instance, where our cantus firmus works upward to the octave); or it can return to the position it had at first. As an additional hint, leaps must be filled up whenever possible.

We now attempt in the first half of this problem to progress from the lower $f$ toward the middle:

and a counterpoint results which makes the passage in a characteristic manner and corresponds perfectly, both harmonically and rhythmically, with the cantus firmus. The unison close (fourth measure) upon $f$ is faultless; the first cadence (in the second measure) with the third in the lower voice-part is excellent, since the punctuation of the phrase is not too sharply defined; the sub-dominant in the fourth measure and the sixfour chord in the fifth measure fittingly prepare the cadence.

The empty octave (at $a$ ) and the empty fifth (at $b$ ) are worthy of censure since they should represent new harmonies. The lower $g$ could be thought of as a passing-note, but the upper voice-part leaps at the same moment; instead of this, $c$ could follow $f$ with good effect and with the same harmonic meaning; but in order that the octave may not sound too empty we would intensify the impression of $c^{7}$ by the choice of $b^{b}$ instead of $g$. The representation of the chord of by $b^{\zeta} f$ is wrong. It is possible to consider $b^{b}$ as a passing-note, and then the cantus firmus with $f$ as a chord-tone coming after the beat makes this meaning more evident.

But an objection could be made since the cantus firmus for two measures is only a figuration of the tonic chord, and the six-four chord in the third measure loses its significance. If in the second chord we were obliged to choose $b^{b}$ in place of $g$, the repetition of $b^{b}$ for the counterpoint is disagreeable. The difficulty is surmounted if we make use of $d^{b}$ instead of $l b^{b}$. Now the counterpoint no longer moves diatonically, but proceeds toward its goal by energetic steps of fourths with the desired turnings-back after each leap by the principles already familiar to us:
23.


After such earnest efforts it is our desire to conduct the counterpoint back to its starting-point. That does not seem
impossible, even if, on account of the strong ascent of the cantus firmus, the two voices happen to pass far apart:


The first three notes of the cantus firmus present the familiar portion of the ascending minor scale: Dorian sixth, lead-ing-tone and octave; that is, the writing of $e^{\gamma}$ as a counterpoint to $g$ is logical and corresponds to the harmony of the succeeding $g^{+}$, since $g^{\natural}$ is only a chromatically altered $g^{b}\left(\Pi^{<}\right.$in $\left.{ }^{0} b^{b}\right)$. The rest is easily understood and of excellent effect. An objection could be made to the two voice-parts remaining stationary upon $f$ throughout measure four; the prevailing movement being in half notes, at least one voice-part should continue the same. An interposed chord-tone (the low $f$, the $c$ lying there between, or indeed, the repetition of the upper $f$ ) would help matters; but it would be even better if the counterpoint should begin its return passage. As a matter of fact, that is practicable; it can progress at once to $e^{b}$ and thereby cause ${ }^{0} c$ to be changed into $f^{7}$ (to which it may be remarked that such a latent chromatic alteration [ $a^{\emptyset}$ becomes $a^{\natural}$ without $a^{\natural}$ sounding] is very common and understood immediately), then $d^{b}$. is the next note of the progression, whereby the $g$ in the upper voicepart becomes the natural seventh (VШ") of the tonic, the familiar second species of chords with Dorian sixth. Everything else could remain as it is. Thus, in spite of particular difficulties, we have produced the counterpoint for the second half of our exercise, and find the problem solved with a satisfactory melody throughout, having a character of its own:


This cantus firmus is most satisfactory when considered as an upper voice-part. When used as a lower voice-part, the beginning upon the third weakens it; the $c$ in the second measure requires a different harmonization, the leap upon $c$ as I causes a misconception and it would be preferable to give to ${ }_{c}^{a^{p}}$ the meaning of $a^{b+}$, that is, to have $e^{b+}$ come before it:


The unity of key is considerably shattered thereby. The rest of the contrapuntal voice-part is adapted for inversion against the cantus firmus.

A second cantus firmus may be:


Key, e major. Rhythm, the second measure is accented (hecause only then does the very apparent cadence come upon the accented measure). It is evident that the sub-dominant chord comes in the second measure, and the super-dominant chord appears in the third measure; since the sub-dominant chord again appears in measures $5-6$, and in measure 7 passes across the super-dominant chord, it will be necessary to consider $b$ as the chord of the tonic ( $e^{+}$). If we now employ the familiar figures and signs by which we indicate harmonic interrals, the sense of the cantus firmus is as follows:

$$
11^{e}|65| 35\left|55^{-}\right| 32\left|17^{-}\right| 53 \mid 1
$$

The long standstill upon the sub-dominant chord (32|17*) is best replaced by an interposed and masked introduction of the same (Modulationslelıre, p. 42): $c^{\# 7}-{ }^{0} c^{\#}$, in which case, $l^{=}$is changed into the meaning of $g^{\text {关 }}$, therefore:


The counterpoint (the cantus firmus being the upper voicepart) appears:


Nothing more in the way of exposition is necessary other than that the succession of four thirds in measures 5-7 should be discarded, while the third should be the chord-tone to the $f^{\#}$ in the sixth measure instead of the fifth:
C. f.


Another good counterpoint of the same harmonic meaning, but differently articulated melodically would be:


Consider well the strong motives in fourths and in fifths (made prominent by the brackets) replacing the diatonic steps by seconds in the counterpoint first constructed; and at the same time, also take notice, that in spite of repeated leaps, the melodic demands regarding diatonic progressions in the cadences are fully satisfied, since the second note constantly joins itself to the note previously left:


The exercise is well adapted for inversion (a shifting of the voice-parts so that one replaces the other) in spite of the harsh
diminished octave $\binom{8}{1^{-}}$which is difficult to understand (up)on inversion it becomes an augmented interval):


The first counterpoint which we invented is even smoother than this one when inverted:


Surely nobody would consider the progression of the lower voice-part ( $d^{⿻} f^{\#} b$ ) in measures 3 to 4 as anything amiss, if the task imposed had been to invent a free counterpoint against this present counterpoint employed as a cantus firmus. Since double counterpoint is not now our principal task it is as a pastime that we examine our exercises to see if inversion is possible; and so, as a secondary matter, we anticipate the subject of double counterpoint in the octave, putting off its real practice until later, when the subject will be treated in the text-book.

## § 3. UNEQUAL COUNTERPONT LN LONGER NOTES (ONE NOTE AGAINST TWO OR THREE.

Since, by our high conception of principles, we thoroughly understand and have practical knowledge of the true nature of harmony, figuration and modulation, it is unnecessary to spend much time upon exercises written note-against-note (the first order of counterpoint in older methods); but constantly kecping in mind those forms of figuration in notes of lesser value made familiar to us by our studies in figuration, it is better to pass on and master the various linds of unequal counterpoint. First of all, an entirely new possibility must be
understood, namely, the writing of a counterpoint in longer instead of shorter notes (one note against two or three), or invention of a contrapuntal voice in time units of the next higher value. If, in connection with this new manner of writing, we examine the two model examples in the previous paragraphs, it is evident, that if the number of notes in the counterpoiut be reduced, there will likewise be a decrease of chord substitutions and cadences, when this species of writing is compared with the exercises written note-against-note. The counterpoint to the first cantus firmus, as finally written, showed three cadences:

$$
\underbrace{0^{0} c c^{7}{ }^{0} c} f^{\mathrm{VII}}{ }^{6 / 8}{ }_{c}^{6>} \div{ }^{0} c f^{7}{ }^{0} f^{\mathrm{VII}}{ }^{0} c\left[\begin{array}{l}
{ }^{6-} \\
= \\
c^{6}
\end{array}\right] c^{7}{ }^{0} c
$$

but now only two are possible:
Problem 2: Two-part writing, one note against two.


Although by itself, the counterpoint here progresses excellently, there is much to be censured. In the first place, it is not clear how $g$, at the beginning of the cantus firmus, is to be understood: as a substitution for $c: g, c^{+}$is unsatisfactory and insufficient; and the succeeding substitution for ${ }^{0} c$ by $V I{ }^{n}$, does not correspond to our principles. It is better to consider $g$ as a passing-note (as in No. 22 at a), so that the harmony ${ }^{0} c$ remains throughout measures $1-2$; the $d^{h}$ in the bass also being a passing-note. The only unpleasant feature then remaining is the syncopated effect caused by the harmony belonging to the accented measure beginning upon the unaccented measure, and thus hindering the intelligibility of the progression. Nothing prevents our understanding $a^{b}$ as a suspension of $6^{-}$ before $g$ the 5 , and therefore, the chord at the beginning has the meaning of $c^{7}$; the effect of an empty fifth, as a chordsubstitution, disappears when disguised as a suspension: $\underline{c}: a^{\text {b }}$,
therefore, is a dissonance in the cloak of a consonance. But $d^{h}$, as seventh to the prime $c$, because it appears in place of the stationary $c$, may be overlooked; and as a proof of this, consider the passage as written in three parts:


Perhaps it is preferable to conceive of $a^{b} g$ as sub-dominant chord, the $a^{\text {b }}$ being a suspension of the VI before VH, and in that way we obtain a six-four chord for the second measure:


The passing-note $g$, which appears in the fifth measure on the accented beat, has an excellent effect as a dissonance in the cloak of a consonance, $\left({ }_{7}^{2}\right.$ as third $)$. Perhaps the substitutions for $c^{7}$ by means of $\frac{1}{7}$, in the measure next to the last, is questionable, although the harshness of the sound of the ninth is made milder, since the cantus firmus with its $l^{b}$, in union with the counterpoint, only appears as an exchange of voices, thus:


It may be disregarded, because in practical composition the completive voice-parts will often be of assistance in overcoming just such difficultics. The value and necessity of writing counterpoint in longer notes is self-evident; it is not only the natural preparatory school for the writing, later on, of a counterpoint to a theme and its augmentation, but also it is indispensable
in the ordinary polyphonic composition in which the bass voice, as also certain middle voices (as the horns in symphonic movements), which readily progress in notes of longer value, would have a disagreeable effect unless well thought out by counterpoint.

To write a counterpoint in whole notes against the second cantus firmus ( $B$ ) is easy, since the half notes on the up-beats are mostly harmonic chord-tones and passing-notes:


In spite of the empty fifths, perhaps, in the next to the last measure, $b$ would be preferable to $a$; and at the close, it might be better to go to $e$ instead of $g^{\#}$. If we were considering free composition and not an exercise, an alteration in the upper voice (the theme) would cause a more excellent progression of the counterpoint in the cadence:

40.


This counterpoint readily inverts:


Problem 3: Two-part writing, one note against three.
For this purpose, an example in triple measure is necessary, and without explanations we add a counterpoint note-againstnote:


A counterpoint in dotted half notes would only slightly (change the harmonies $e^{7}$ instead of $a \mathrm{VII}$, in the second measure):

(vi)

Another problem related to this one, and of similar preparatory value for more complicated contrapuntal work, consists of writing one note against two in triple ( $3 / 4$ ) measure. Although such a counterpoint, being partly syncopated, will be made more intelligible by exercises further on, nevertheless an example showing how it may be accomplished in connection with the present cantus firmus may now follow, because our study of figuration has already made us familiar with syncopation:

Problem 4: One note against two in triple $(3 / 4)$ measure.
C. f.


As in all syncopations, so also in this, it may be seen that the syncopation inserts, wherever possible, a consonant tone upon the unaccented and a dissonant tone upon the accented part of the measure, as follows:


The Dorian sixth ( $f^{\approx}=\Pi^{*}$ ) could be written as a counterpoint to $e$ in the next to the last measure regardless of the false-relation $f^{1} \backslash f^{*}$.

## § 4. TWO, THREE, FOUR AND SIX NOTES AGANST ONE.

A counterpoint in double, triple or quadruple movement, that is, written in two or three notes of the next smaller value (the second and third order of older text-books) does not appear to be different from the invention of a counter-voice in figuration; we must bear in mind, however, that the harmonies are not predetermined, and that as the figurative values increase, there is also a gradual increase of cadential possibilities, just as in the contrapuntal work with longer notes, the cadential possibilities and harmony substitutions were reduced in number. In a counterpoint using shorter note values, a note may be given two or three harmonic meanings in succession. As these figurative values increase, it becomes more necessary to make motives from notes of lesser value (subdivision motives) when writing the melody, for thereby we gain a number of new possibilities which may be best employed as the principal object of the exercises. Consequently, to simply take the counterpoint already sketched note-against-note, and work it out by a figuration, which would superficially entwine it in the following manner, is insufficient:

Problem 5: Two-part writing, two notes against one.
C. f.


Cpt.
46.



An exercise for such a purpose is unnecessary because a means of varying a theme in close bounds formerly practised ("Neue Schule der Melodik") was made use of in this case. Our object now is to invent a free roice-part in quarter notes against another voice-part in half notes.

We must therefore be fully conscious of the increased flexibility of progression and out of this consciousness invent the new roice, producing at the same time, that contrast which ensued when we wrote a counterpoint in equal notes and also in that in notes twice as long, but with a further removal of fetters rather than with increased restrictions. After these suggestions of richer means, we can solve the problem in better style:
C. f.


We have given a structure to the counterpoint which, in this case, is easily understood (in the $1-4$ measures an ascent from $f-f^{1}$, and a return to $f$ in measures $5-8$ ). The quarter. note movement is not an arbitrarily vacillating one but the fundamental motive:

For a second example, we will employ the counterpoint written note-against-note to cantus firmus A (see No. 25), and write an upper voice in quarter notes against it:


A glance at the old cantus firmus (No. 19) teaches us that this is a newly-invented voice-part and not a mechanical figuration. The characteristic motive is: and its inversion:


And also for the first time we have made use of rests, both at the beginning of the sentence and also at the beginning of the second section. They represent measure-motives in both cases. No further explanations are necessary; however, observe the many dissonances in the cloak of consonances:
49.


Our second cantus firmus (B) may serve as an illustration of the method of writing a counterpoint three notes against one:

Problem 6: Two-part writing, three notes against one.
C. f.
50.

Cpt.



Here also the counterpoint progresses by a harmonious plan. The principal motive is: and its inversion; the voice-part begins on a high pitch, descends to the lower octare $(f \approx-A)$ by means of two-measure imitations and then projects itself upward.

In order to write an example of counterpoint with four notes against one, we select the counterpoint - the strong one from No. 31 - which was written note-against-note, and let it be the lower voice-part:

Problem 7: Two-part writing, four notes against one.



Finally, we will give an example of six notes against one, and the counterpoint in its improved form (Nos. 39-40), which we wrote to cantus firmus $B$ in the sentence note-against-note, will serve us as a cantus firmus:

Problem 8: Two-part writing, six notes against one.


About this there is nothing special to be said; only let it be remarked that when the cantus firmus is a sequence, the counterpoint can be written sequentially, but is not recommended because this manner of treatment is too stereotyped. It could be sketched so as to have an up-beat before the cantus firmus begins, thus:


## § ธ. SYNCOPATION. COUNTERPOLNT USING TRLPLETS, DUOLETS, QUATOLETS AND QUINTOLETS.

As is well-known, syncopation arises from irregular contraction of notes of lesser ralue. That counterpoint which in particular is called syncopated (the fourth order by the older terminology) places a counterpoint moring in notes of equal value - but with delayed entrance - in antithesis to a cantus firmus written in notes of equal value. Since dissonant tones require diatonic progression (by seconds) only two kinds of harmonic relationships are possible in syncopated counterpoint contrappunto alla zoppa, "hobbling counterpoint"); the note tied over must either be a dissonance with a diatonic progression as its resolution, or it is a consonance which can then progress by leap to another consonant tone (harmonic chord-tone). One willingly adheres to a syncopated form of counterpoint for a time, and in short exercises maintains the idea of syncopation with strictness and persistency. It is, therefore, a mannerism. The principle involved being a rhythmical one, it is better in cases of necessity to make use of available syncopated noterepetitions than to give up the syncopations entirely. We join these exercises to the cantus firmi we have already used; and now to each cantus firmus in the Appendix, the student must add, in similar manner, a large number of exercises in this form of mriting as a foundation for his future work. The first cantus firmus (A, No. 19), when a counterpoint written by syncopation contraction of the unaccented-accented motives through subdivisions of the first degree), is added to it, would appear thus:

Problem 9: Two-part writing, syncopated.



At all the places where dissonance-resolution was impossible for the syncopation, the chord-tones were shortened by means of rests, and to good effect, because all places marked* fall upon the natural crsura (motive articulation, partition). Notice the dissonances in the cloak of consonances!


The empty fifth ${ }_{1}^{5}\binom{\mathrm{I}}{\mathrm{V}}$ as a harmony substitution in syncopated forms of writing, is neither of so offensive, nor of so empty an effect as when it occurs in simple contrapuntal writing note-against-note; or when there is no syncopation upon the accented part of the measure; a completion of the harmonic effect is always expected upon the unaccented beat:

乞5.


To syncopated forms of counterpoint belong apparently also those in which three notes are written against two notes, or with two notes written against three notes; the second note of the triplet always enters before the second note of the duolet and progresses further after that one enters:


The true meaning of the triplet would be contradicted if it should be conceived as arising from syncopation and the counter-
point be treated in a corresponding manner. As shown in the book "Dynamik and Agogik" (p. 122), it is unjustifiable to measure the three members which form the triplet by the two members of the duolet; or to measure the two members which form the duolet by the three members of the triplet, understanding the same as rhythmical deviations; but on the contrary, a return should be made to the next unit, and with this as a starting-point, conceive of both as simultaneously existing and equally justifiable divisions into two and three parts. From this amended definition there results a new conception for this form of counterpoint, namely, that the second note of the triplet need not be so carefully prepared as a dissonance, but for the sake of a smoother flowing counterpoint, one places the introduction of passing-notes, dissonant resolutions or harmonic chordtones upon the second beat. A practical effort will make it clear. For a cantus firmus we will use the counterpoint from 47) written to our first cantus firmus (A) two notes against one:

Problem 10: Two-part writing, three notes against two.


Since all the motives have masculine endings, we gain the two maccented quarter notes of the triplet for the up-beat; in most cases the second quarter note is a passing-note to the chord-tone (a) brought in by the third quarter note; sometimes hoth quarter notes are chord-tones (b) only three times is the thiird one a passing-note (c); and once the first note is an accented
passing-note, the second one overlaps, the third one is a resolution (d):


The opposite, the writing of a duolet against a triplet is similar to the counterpoint in longer values written to the above exercise (No. 44) in ó notes in triple measure, but is distinguished from that by the fact that it is not really syncopated. This distinction is more clearly seen when we use the same cantus firmus as a foundation for an example:

Problem 11: Two-part writing, two notes against three. C.
C. f.


In this example passing-notes are possible and of excellent effect, while in that one they had to be avoided, since to remain stationary would be foreign to their nature; in this one there is a new tone at the beginning of each measure, while in that one there was a syncopation at the beginning of each second measure. Although there is little demand in practical writing, nevertheless for the sake of greater completeness, exercises in counterpoint with four notes against three, three notes against four, and five notes against two, three or four notes may be
attempted. We select for our model-example the cantus firmi and the counterpoints, respectively, of former exercises, but first of all the counterpoint of the cantus firmus (A) which belongs to No. 57, to be written four notes against three:

Problem 12: Two-part writing, four notes against three.
C. f.


It would be going too much into detail to make clear theoretically in each particular instance the tonal combinations which occur in all such formations, as for example, the counterpoint in the first measure brings $g$ as a passing-note while $a^{p}$ remains stationary as a chord-tone, and the $a^{b}$ below, as a chordtone, already enters during the duration of the passing-tone $g$; it is sufficient that there be no doubt concerning the clear exemplification of the harmony, and particularly regarding the entrances of the voices in conjunction with the principles we found in our exercises written note-against-note (avoidance of $\left.\left.\begin{array}{ll}5 \\ 1 & {\left[\begin{array}{l}\mathrm{V} \\ \mathrm{V}\end{array}\right] \text { and }{ }_{1}^{7}}\end{array} \right\rvert\, \begin{array}{c}\mathrm{I} \\ \mathrm{VHI}\end{array}\right]$ etc. upon the entrance of new harmonies); we likewise ought to consider each of the two roices as though the other voice were fixed, that is, the exercise written four notes against three appears at the same time as though written three
notes against one and four notes against one. If everything at the entrance of new harmonies is rightly arranged (the harmony being clearly shown), whatever is produced by the two voices (whether in the form of feminine endings or as up-beats to the next following) is chiefly to be considered for the voices individually (all the possibilities developed in "Neue Schule der Melodik", such as: plain, accented, leaping, false or deceptive passing-notes, syncopations and anticipations are at one's disposal). Forbidden octaves and fifths are strictly to be avoided; and in addition to those faulty parallels which are clearly seen, one must be upon one's guard lest hidden parallets slip in by means of the chord figuration (chord-like splitting-up of a melodically developed voice-part). Formations that are really faulty should be distinguished from those that might be looked upon as only doctrinally hyper-formations; for example: some pedant might storm against the octave parallels in the last measure of our last exercise:


That is a great mistake; the three against four might be arranged thus:

or also in this way:

but however written, it always presents the fact that the two es belong to different motives; in the first case, the under voice is a resolution of the suspension upon $f\binom{43}{c}$; and the upper voice appears as an anticipation in the second case. But since such a syncopated splitting-up as this does not rightly belong to the conception of this form of counterpoint, it is settled that
the under $e$ is to be understood as a counterpoint of $c^{\prime}$, and the upper $e^{\prime}$ as a counterpoint to $g$, and, as a matter of fact, would naturally only be conceived in this meaning.

The contrapuntal writing three notes against four may be attempted upon the basis of the counterpoint (No. 51) belonging to our second cantus firmus $(B)$ which was invented for the problem four notes against one:

Problem 13: Two-part writing, three notes against four.


There is nothing of importance to be said except that at N. B. by means of a suspension of $f^{\#}$ before $g^{\#}$ (third $d^{\#}: f^{*}$, as dissonance in the cloak of consonance), the empty effect of the chord substitution $g^{\ddagger 7}$ by means of $\frac{1}{5}$ is taken away. Also the two insertions, respectively, of $c^{シ 7}$ and $b^{7}$ upon the eighth rests with their fundamentals in the bass, and the immediately following fifths and octaves, are absolutely faultless, because naturally the fundamental note of a chord represents the chord the most clearly. As a cantus firmus for an exercise five notes
against two, we choose the counterpoint (No. 59), which we wrote for the problem, two notes against three, upon our third cantus firmus (C):

Problem 14: Two-part writing, five notes against two.


For an exercise in five notes against three we will use the original third cantus firmus (C):

Problem 15: Two-part writing, five notes against three.
C. f.



And finally, for a countrapuntal exercise five notes against four, we select the counterpoint developed upon the first cantus firmus (A) for the exercise (No. 60) four notes against three:

Problem 16: Two-part writing, five notes against four.


## § 6. RHITHMICAL FORMS OF COUNTERPOINT.

The various kinds of counterpoint we have studied hitherto, place in antithesis to a given voice-part developed in notes of equal length, another voice-part flowing smoothly either in notes of equal length, or in notes longer or shorter in value than those of the first. The mastery of the writing of these "smoothly flowing" voices is of extraordinary value and of great practical significance, but leads to a one-sided development of the powers of formation so long as the voices conceived in this manner are almost rhythmically indifferent. (Syncopation, however, is a rhythmical formation.) If we now digress in order to bring to full value in our contrapuntal work those manifold effects induced by the mixing of long and short note values - in which, indeed, the essence of rhythm consists - we must distinguish three chief forms for such exercises:
a) The cantus firmus in notes of equal value while the counterpoint develops rhythmical motives.
b) The cantus firmus has characteristic rhythm but the counterpoint is in notes of equal value.
c) Both the cantus firmus and the counterpoint are rhythmically developed but each in a different manner.

The first combination is the simplest, and particularly so, if the counterpoint develops a rhythmical motive of such a kind, that upon each stress-point only, the cantus firmus always brings a new tone.

According as the motive contains two, three or several tones, this form of counterpoint hardly differs from the second or third species (two, three or more notes of equal length against one); but the charm in this new means of effect shows itself to be so great, that even the simple note repetition being rhythmical itself, possesses a livelier interest. The following are the most important formations adapted for rhythmical development:
A. In duple measure:

1) Iambic dotted rhythm, $\uparrow \mid!$
2) Anapaest (division of the unaccented quarter note into two parts), . 1 !
3) Syncopated rhythm, \& N

## B. In triple measure:

4) Iumbus (contraction of the first and second beats), $\mid=$, or resolved into an anapæstic form, $\sqrt{\circ}$
5) Anapaestic dotted rhythm, ‼!! also in resolved form, $\uparrow \cdot \square!$
6) Syncopated rhythm, ! ! ! $\dagger$, or, ! ! !

As already said, these are only the most important forms; their number is considerably increased by those having feminine endings (e. g. ${ }_{4}^{3} \mathrm{~N}!\mid$ ! $\mathrm{C}_{\text {or }}{ }_{4}^{2} \mathrm{~N} \mid$ ! © etc.); or by further subdivisions and contractions (e. g. ${ }_{4}^{2}$...| | or f $\mid$... etc. A thorough examination and practice of the principal forms will be sufficient, at least, to stimulate the faculty of imagination for rhythmical possibilities. In addition to that which chiefly concerns the dotted rhythm in the duple measure ( $\left.{ }_{0}{ }^{\circ} \mid \varrho_{0} \cdot\right)^{\prime}$, and the iambus in the triple measure, it is necessary to say, that in comparison with the counterpoint in equal notes written 2:1, that feminine endings (resolutions of suspensions, accented passing-notes etc.) are more difficult to be understood because they deviate from the fundamental rhythm; unaccented, leaping and false passing-notes, as also anticipations, are more easily understood than the writing in equal notes, because the up-beat relationship of the unaccented note is made clearer by the lengthened accented note.

Making use of the counterpoint (No. 31) invented note-againstnote upon our sccond cantus firmus (B), we write an exercise exemplifying two rhythms:

Problem 17: Two-part writing, counterpoint with exemplification of iambic motives.

Cpt.a.



We will also test the two anapæstic rhythms (2. | ! and 3 ! ! !) by giving an example in which the counterpoint (No. 25), which was written note-against-note upon the first cantus firmus (A) is used as a foundation:

Problem 18: Two-part writing, counterpoint employing anapæstic motives.


Also an example of syncopated counterpoint having three and four notes against one may now be given using the counterpoint (Nos. 39-40) written to the second cantus firmus (B) as a basis:

Problem 19: Two-part writing, counterpoint in syncopated motives.

Cpt.a.


Only one thing is to be particularly observed, which is, that diatonic movement, as far as possible, is to be adopted by the motive, because then the syncopation unfolds its whole charm, and the individual tone passes from the meaning of a resolution into that of a suspension, while the leaps are judiciously divided between the motives. But, of course, syncopation within the figuration of a chord is also possible, as all the rhythms themselves which we have examined are capable of being developerl as mere tone-repetitions of the counterpoint written note-againstnote:



In case such rhythmical effects sound monotonous whenerer they take the up-beat from the preceding point-of-stress (a and b), there will be more charming formations occasioned whenever the up-beat shows the next succeeding larmony by anticipation (c). One's efforts are amply repaid, if these thoughts being carefully considered one writes an entire example in which anticipations shall occur in the counterpoint; instead of thrice repeating the same tone, we add an auxiliary note:

Problem 20: Two-part writing, counterpoint with continued employment of anticipations.


Our exercises gain another appearance and an increased interest when we do not write the rhythm of the counterpoint opposite each note of the cantus firmus, but in antithesis to it we place a motive in equal notes, consisting of two or three notes, respectively, of the cantus firmus. Of course a cantus firmus adapted for this kind of contrapuntal work must be
somewhat animated beforehand, for it is no longer possible to regard any one note of the same as the point-of-stress of the motive. We choose our third cantus firmus (C) as an example of a counterpoint with the motive $\quad . \quad \mid \quad!$ :

Problem 21: Two-part writing, a counterpoint bringing a rhythmical motive against each measure-motive of the cantus firmus.


For another example, we select the counterpoint developed upon the first cantus firmus (A) in the exercise (No. 48) written two notes against one, and the rhythm is if:

§ 7. RHYTHMICAL FORMS OF THE CANTUS FIRMUS.
We now reverse our problem, and to a cantus firmus which contains a positive rhythm we write a counter-voice in notes of equal value, in such a manner that the counterpoint brings a new note upon the point-of-stress of each motive of the cantus firmus. For this purpose new cantus firmi are required.

Problem 22: Two-part writing. Counterpoint in notes of equal value placed in antithesis to each motive of the cantus firmus written in rhythmical form.

and:


After solving the preceding problems, these new ones possess no difficulties for the correct writing of a smoothly flowing counterpoint, whether with two, three or four notes against each motive of a cantus firmus rhythmically constructed:

Problem 23: Two-part writing. Counterpoint in notes of equal value; two, three or four notes against each motive of the cantus firmus, which is rhythmically constructed.



Throughout these exercises there is nothing to be explained but there is much that must be practised. The natural musical instinct can here display its whole faculty in the avoidance of faulty parallels and ugly tonal effects.

## § 8. CANTUS FIRMUS AND COUNTERPOINT DEVELOPED RHYTHMICALLY THROUGHOUT.

Before we can give the most unconstrained rhythmical forms to the counterpoint, we must busy ourselves with those which are stercotyped and similar to those in our previous practice, namely, the development of a pregnant rhythm in both the cantus firmus and the counterpoint. The most of the rhythmical pairs thus amalgamated are complemental in character, that
is, they usually supplement one another in such a manner that their union produces a smooth, continuous motion in notes of lesser value. The simplest complemental rhythms* of this kind are:


Our fourth cantus firmus (D) could have a counterpoint written with a complemental form of rhythm as follows:

Problem 24: Two-part writing. A counterpoint developing a complemental rhythm throughout:

or without rests:


[^4]

The fifth cantus firmus ( E ) is also adapted for similar treatment in triple $\binom{3}{4}$ measure:


## § 9. FLORLD COUNTERPOINT.

If we now strip off the burdensome fetter of a monotonous and perfunctory development of a fixed rhythmical form and give the greatest possible freedom of rhythmical development to the counterpoint, which may now be written in notes of equal value or partly in notes of longer or shorter value, while also introducing the most manifold forms of rhythm, rests being scattered here and there, such a counterpoint grants an inexhaustible fullness of tonal effect to the cantus firmus. Some of the counterpoints written note-against-note (No. 25) against the counterpoint to our first cantus firmus (A) may give an idea of this:

Problem 25: Two-part writing. A florid counterpoint in antithesis to a cantus firmus in equal note values.
a) Allegro moderato.

b) Adagio.


Riemans, Counterpoint.

A. d) Scherzando.


Also the counterpoint, written one note against two notes of cantus firmus $B$, will answer for other contrapuntal modelexamples:
§ 9. FLORID COUNTERPOINT.




B. f) Scherzando.

B. g) Cantabile.



The foregoing model-examples were quite sufficient to show the pupil that his musical fancy can have the greatest freedom. But the student's judgment must decide the matter of an initial up-beat to the contrapuntal voice-part. The greater the rhythmical animation of a counterpoint in antithesis to a cantus firmus, the more decidedly will the notes of which it is composed be forced into the meaning of units of higher order, that is, on the one hand they produce a voice-part progressing melodically, and on the other hand they bring to account the above (§2) mentioned typical form of symmetrical construction in notes of lesser value. That then is the reason why we attributed in the last model-example the value of a measure to each note of the cantus firmus. Therefore, the genuine measures to which the law of symmetrical construction with manifold exceptions (elision of unaccented beats and measures, change of accented to unaccented, etc.) is applicable, are the duple and triple measures, those having two or three time-units (which pend somewhere between 60 and 120 metronomic beats per second). False measures - too often indicated by the time signatures - are those which are either too small, having only one time-unit to a measure $\int_{4}^{3}$ when $d .,{ }_{8}^{3}$ when d., $\frac{2}{4}$ when $o d$ are time-units), or those which are too large and are therefore compound, apparently contracting the accented measure with the unaccented one which properly belongs to it, so that the bar-line represents the point-of-stress of the accented measure ( ${ }_{4}^{4}$ when $d,{ }_{8}^{12}$ when $d .,{ }_{4}^{6}$ when $!,{ }_{8}^{6}$ when of are time-units). Consequently, there remain as real measures: ${ }_{4}^{2}$ when $!, \frac{3}{4}$ when $d, \notin$ when $d,{ }_{4}^{6}$ when d., ${ }_{8}^{6}$ when d. and $_{8}^{3}$ when ${ }_{8}^{\circ}$ are timeunits. It is presupposed that the student always will keep the symmetrical structure in mind, and that the teacher in all cases controls in these matters. All uncertainty relative to a conception of the symmetries is to be severely censured. The cantus firmus must be so clearly understood before the counterpoint
is sketched, that the position of the accented measure may be fixed upon; it is only then that the musical fancy can work infallibly and join a counterpoint to a cantus firmus in a homogeneous manner.
§ 10. THE GREATEST FREEDON OF INVENTION. CANTUS FIRIIUS INTRODUCING A LARGE NUMBER OF MOTIVES, AND THE COUNTERPOINT DEVELOPED WITHOUT RESTRICTION.
Something that strongly reminded us of the school-room clung to the preceding exercises; the continuous motion in notes of equal length, as also the persistent maintenance of a single rhythm, are always restrictions, eren though they are of common occurrence in free composition and do not alone belong to school-tasks. For instance, consider the last movement of the "Eroica" symphony in which the counterpoint, now flowing smoothly in notes of equal value, or again dereloping a persistently maintained rhythm, is written in antithesis to the simple theme, the first quarter of which is in notes of equal length. Everywhere there are such compositions (e.g. the last movement of the fourth symphony by Brahms) "worked" in such a manner, that if the laity takes no particular interest in the "making" (facture), it is equally certain that the technicallytrained musician does not; consequently, we are again reminded of the school-room!

At last we have reached the point where the last fetter can be stripped off, and pass onward to a cantus firmus rhythmically formed with the greatest freedom, and therefore to florid counterpoint. If when writing a counterpoint note-againstnote, a warning regarding contrary motion as the most independent form of writing was necessary, it must now be said emphatically as a warning to the student that the counterpoint must not degenerate into a simple, rhythmical, complemental voice against the cantus firmus. The counterpoint should be independent of the cantus firmus and go its own way within the imposed harmonic and melodic conditions induced by the cantus firmus; on the one hand, not joining the melodic and rhythmical motion of the cantus firmus, nor, on the other hand, anxiously fearing to move in melodic and rhythmical union with the cantus firmus. It is assured that the counterpoint need not
be syncopated when the cantus firmus is syncopated, nor need it be silent when the cantus firmus pauses, or, in other words, gasps; because the proper use of these opportunities strongly develops the counter voices, and causes them to stand out independently. In order to give the greatest pedagogical value to the exercises, we proceed to work upon the basis of the previous cantus firmus.

For this purpose, counterpoint $c$ from page 50 is selected as the cantus firmus. Since a rest appears at the beginning of the first phrase, it could not be omitted without increasing the difficulty of intelligibility; as a matter of course, it must be made perceptible, and so it is the duty of the counterpoint to express the first measure:

Problem 26: Two-part writing. A free rhythmical form for both voice-parts.


Perhaps the second phrase could be improved; the counterpoint revolves strikingly about $a^{11}$. In free composition, in which the cantus firmus need not be kept inviolate, a slight change would make the work simpler, viz. a lengthening of $f^{2}$ :


It ought to be emphatically said that there is a possibility by which the theme can be improved in order that as a result the counterpoint may seem to be freer. The counterpoint, by retaining the note values of the cantus firmus, can also be improved:

which calls for the observation that then the rhythmical motive of this phrase ( $N$ ) . . ) agrees with that of the last one, and the counterpoint gains in unity as a consequence. This counterpoint, which we have now invented, is adapted for inversion (shifting of the higher voice to the lower octave and vice versa):


We now make use of counterpoint $g$, page 51, developed to cantus firmus B , as the basis of a second exercise:


This counterpoint is rather weak but nevertheless it preserves the character (cantalile) of the cantus firmus. In three places, two voices happen to make suspensions simultaneously; they are more intelligible because one voice resolves upon the second eighth note. This counterpoint is adapted for inversion in the octave:
C. f.


These exercises are to be reckoned among the most important ones, but lack of room causes us to forego the working-out of further exercises in this manner; however, we advise the
student to remain at this point for a long time, and to utilize as cantus firmi all the manifold counterpoints invented according to the directions given in the preceding paragraphs.

## § 11. THREE-PART COUNTERPOINT.

Quickness in the invention of rhythmically independent voices, which shall unfold themselves well melodically, can only be acquired by long-continued practice in the writing of two contrapuntal parts, which means that one voice must be written and after its completion the second voice is to be added. Of course one reserves for one's self the privilege of making such alterations in the first roice-part as will favor the better development of the second voice-part. To the two-part exercises already written, we add a third voice and thus construct threepart counterpoint; we begin by adding a new contrapuntal part written note-against-note, to the two-part exercises which were also written note-against-note:

Problem 27: To write a third voice-part, note-againstnote, and add it to our first exercise in two-part writing, note-against-note.
97.
C. f.


NB.

1. Cpt.


A slight alteration ( $b$ in place of $d^{b}$ ), in the counterpoint (at NB.) in the third measure from the end, would enhance the effect of the whole exercise. The new part has not the naturalness of the two others but nevertheless is practicable as an upper voice: 98.
2. Cpt.
C. f.

1. Cpt.


The tied note $f^{2}$ (measures $6-7$ ), which would have been avoided in two-part writing note-against-note, is of no consequence; counterpoint, however, does not desire these ties, which were fundamental in harmony, but tries to avoid them in order to give life to the individual voices. We now make use of the second cantus firmus and its counterpoint:
99.
C. f.


Criticism is needless; the parts are adapted for inversion;


Another inversion:


To the excreises written one note against two or three, we may add another part in longer notes:

Problem 28: To write a third contrapuntal part to the exercises written note-against-note belonging to problem 2. 102.
C. f.


Or, with inversion of the voice-parts:
103. 1. Copt. 2. Opt.


The three voices cross one another several times, which is not recommended because the individuality of the voices becomes obscured. This manner of writing is faultless when there is a difference of tone-color, el. when two clarinets play the contrapuntal parts and the cantus firmus is played by an oboe or a violin. There could be a greater distance between the parts, viz. the cantus firmus and the second counterpoint an octave deeper: 104.
2. Opt.


The third voice-part, when added in long notes to our $e$ major model-example, would appear thus:
105.

1. Opt.
2. Opt.
C. f.

with inversion of the voices:


The second counterpoint, note-against-note, to our third cantus firmus (C) could be written thus:
107.
C.


The two upper voices cannot be inverted, because then the parallel fourths in measures 2-4 become parallel fifths. Several other inversions are practicable:
108.
C. f.



With one note against three in two voice-parts (to No. 43):
Problem 29: To write a third voice-part as a counterpoint, note-against-note, to the exercises under problem 3.
109.
C. f.

inverted:
110.
C.

1. Cpt.
2. Cpt.


Also the exercise in $2 / 4$ notes in $3 / 4$ measure can be written similarly with a second contrapuntal part in $d$. notes.

Problem 30: To write a third voice-part in $3 / 4$ notes to the exercises belonging to problem 4. 111.
2. Cpt.
C. f.

1. Cpt.


To the exercises in two parts, written two notes against one (p. 26), we may add a third voice written, as far as possible, in quarter notes by syncopation:

Problem 31: To write a third voice-part by syncopation to the exercises belonging to problem 5. 112.
2. Cpt.

C. f .


1. Cpt.


At NB. $c$ can take the place of $e^{b}$ in the first counterpoint, because $e^{j}$ is somewhat of a false-relation against $e$ of the second counterpoint. The following is a practical inversion:


Also our second exercise ( p .27 ) may be made three-voiced:


In the first counterpoint we have altered two notes: in the fourth measure $a^{\prime}$ in place of $a^{b^{\prime}}$, in order to gain more naturalness, while in the next to the last measure, a more effective cadence is obtained by having $e^{\prime}$ instead of $c^{\prime}$. A practical inversion would be:


In similar manner, we write a third contrapuntal voice-part to the exercise (No. 49) three notes against one:

Problem 32: To write a third voice by syncopation as a counterpoint to the exercises under problem 6.

and its practical inversion:


To the exercise (No. 51.) written with four notes against one, we add a third voice-part having two notes against one:

Problem 33: To write a third voice-part as a counterpoint to the exercises belonging to problem 7, two notes against one and four:

a practical inversion:
119.

1. Cpt.
2. Cpt.
C. f.



The exercise (from No. 52), written with 6 notes against one, grants a third voice as its associate, written four notes against one.

Problem 34: To write a third voice-part with 4 notes against 1 and 6 , to the exercises belonging to problem 8: 120.


The same with inversion of the voices:
121.
2. Cpt.


We now add a floridly written third voice-part, that is, a counterpoint with enlivened, unrestricted rhythm, admitting rests also, and similar to the relationships we found in our two-part combinations. In this way we are able not only to bestow an increased interest to our exercises, but also to prevent any decrease of agreeable development, in case increased complications occuring in the exercises make impossibilities for the third voicepart. We proceed to the example in syncopated counterpoint:

Problem 35: To add a florid third voice-part to the exercises belonging to problem 9.



Also the inversion:


We have no intention of increasing the difficulties of the counterpoint by making use of triplets, duolets, quatolets and quintolets, or other complications (such as 5 notes against 2 and 3,4 notes against 3 and 5 , etc.), but it is our purpose, by means of the third voice-part, to mark effectively the higher rhythmical units, in whose meaning the sub-divisions of various kinds are to be understood:

Problem 36: To write a third voice in longer notes to the exercises under problems $10-16$.



It is a difficult matter to write a voice-part in half-notes to the elaboration $4: 3(\mathrm{No} .60)$ of our $f$ minor exercise:


A compression of the voice-parts as occurs in measure 5

would only be practical when there are different tone colors; the following inversion is preferable:


The inversion of the upper voice-part against the middle voice would call for an alteration in the first counterpoint, because parallel fifths occured in measure 2. No. 64 is written thus in three parts:
129.
2. Cpt.
C. f.



This exercise can be inverted with all the parts as one may wish. The examples 5 notes against 2 , and 5 against 3 could retain the same third voice-part, which we wrote for the exercise $2: 3$ (p. 33); to increase interest in these inversions we give the example:

(Also it is the same with the counterpoint [No. 69] in turnlike figures placed beneath it). No. 66 is developed thus:


The harsh combination $g^{\sharp} f^{1} e^{2}$ could be set aside by substituting $b^{1}$ for $e^{2}$; it would also be better to change the first notes in measures 2 and 4 to $f^{2}$ and $e^{2}$.

Our exercise 5:4 (No.67) permits the addition of the third voice which we wrote for the exercise $3: 4$ (No. 128), but requires a change in the second counterpoint in the next to the last measure:



Here there are several compressions of the voice-parts, but they are faultless when the second counterpoint is sung, or played by a wind instrument, while stringed instruments play the two other voices.

We have now come to examples where the first counterpoint is rhythmical throughout; the three-part exercise becomes most characteristic, and presents a new task, if the third voice-part performs a persistent rhythm.

Problem 37: To write a contrapuntal third voice-part, rhythmically developed throughout, to the exercises belonging to problems 17-20.
133.
2. Cpt.


1. Cpt.
C. f.


In measure 4 , in the first counterpoint, $b^{7}$ is better than $c^{1}$. Because our second counterpoint is not adapted for counter-
point $b$ of the same example, a second working-out, which harmonizes with it, may follow:
134.
B.


1. Opt.

C. f.


We have reached the anapæstic rhythms, against which we write a complemental second counterpoint:
135.
C. f.
A.




To the syncopated counterpoints we add another voice-part to make clear the syncopation: 137.

and:



We may change the exercise (No. 72), having anticipating tonerepetitions, into a three-part exercise, by the addition of a third voice-part written in notes of the same value as those of the cantus firmus:

§ 12. INCREASE OF VOICE-PARTS BY MEANS OF PARALLEL THIRDS.

A convenient means, but one that must not be used too often, by which the roice-parts may be readily increased is accomplished by adding parallel thirds to the cantus firmus, to the counterpoint, or to both simultaneously. We have
made it a point until now to avoid more than three thirds in succession in two-part writing, and have also held fast to the same restriction in our three-part exercises; but at this time we call attention to the fact that parallel motion must, from necessity, be of assistance in three-part writing, while persistent contrary motion belongs to that in two parts. It is a favorite and effective form of three and four-part writing to strengthen by means of parallel thirds the two antithetically written voices, whose motives are composed of material of particular value or of that already used; this, however, is not, strictly speaking, three or four-part writing, but only a strengthened writing in two parts.

But since the effect in this manner of writing is largely due to this persistent parallel form of motion, from the very first, the two voice-parts must be so constructed that parallel octaves and fifths may not arise from the addition of the parallel thirds; but that is possible only when parallel thirds and sixths are scrupulously avoided.

The exercise from No. 73, for example, appears somewhat as follows when adapted for the addition of the parallel thirds, the parallel thirds and sixths having been removed from the original:

and when transformed into three-part writing by the added thirds appears thus:
141.
2. Cpt.
C. f.



The disagreeable tonal effects (at $b$ ) and the violation of the rules (the doubling of the third in the sub-dominant chord in minor at $a$ ) are characteristic of this whole species of contrapuntal writing; mechanical addition of parallel roices involuntarily brings this result. They prove that the rules, as usually made, are insufficient to prevent these irregularities. Their strict enforcement would hinder the musical fancy. In twopart writing the substitutions $\underset{\mathrm{V}}{\mathrm{III}}$ in the sub-dominant minor chord, and ${ }_{1}^{3}$ in the major super-dominant chord, should be used; but the diminished seventh chord must be absolutely avoided (in the latter there is produced the wretched tonal effect of two or three seconds). The old method of teaching, although it produced a poorer two-part writing through the use of the unison and empty fifths, occasionally produced better three and four-part writing; but it must be acknowledged that not all the forms it developed were practicable. The more artificial double counterpoints will bring us many such unpleasant experiences - if mechanical manipulations are to be available a part of the sovereign domination over harmonic forms will be conceded. It is evident also that other harmonies than those intended or expressed in the two-part writing can arise from the inverted thirds. The lower third of the triad $\left(\begin{array}{l}3 \\ 1\end{array}\right.$ and $\left.\underset{\mathrm{V}}{\mathrm{II}}\right)$ we must avoid for the sub-dominant minor and super-dominant major, because they cause bad third-doublings; and the upper third, at least in the tonic chord, must be avoided, because the harmony becomes disturbed and disordered:
142.


We attempt, by means of sharply defined rules, to im prove the above two-part exercise, which is well adapted fothe purpose of being accompanied by over thirds:

$$
143 .
$$



There is much even here that is not gratifying; we must not overlook the fact that $g$, in the next to the last measure in the second counterpoint, is a real difficulty, but we are unable to overcome this without changing the cantus firmus. Other exercises bring easier work; especially is this true, if, while writing the cantus firmus, the future accompaniment in over-thirds is considered. We shall be obliged to return to this form of three and four-part writing; but at present, having knowledge of its nature, we extract the advantage that we need not fear to let a third voice-part occasionally go a stretch in parallels without binding one's self to a persistent parallel motion. We will now write a third voice-part in thirds and sixths, respectively, to the cantus firmus, or also to the counterpoint. Our last exercise may again serve us for this purpose, and in its unaltered form.

Problem 38: To write a third voice-part to the exercises belonging to problem 21, which shall join the cantus firmus
and counterpoint, respectively, in parallel thirds and parallel sixths.
143 a .
C. f.


Not until now did we feel ourselves to be in full possession of our artistic freedom. The three and four-roiced counterpoint developed throughout in parallel thirds, we must certainly not lose from sight; but it is less important because little use is made of it in polyphonic writing. In our contrapuntal exercises, we might examine the theme and see if it permits super-imposed thirds, and also try to invent such a counterpoint as will be adapted for a fourth voice-part when the parallel thirds are added; likewise it is practical - if counterpoint is to be written by all kinds of chicanery - to invent a theme conceived in thirds throughout, and a counterpoint in parallel thirds to go along with it, for example:
144.



This example was conceived in parallel thirds, the counterpoint imitates the cantus firmus, canonically in the octare and these inversions are possible:

or:
146.


It is self-evident that instead of thirds only, the original parallel voice-part can be written with an inter-mixture of thirds and sixths:


An inversion:

§ 13. THREE AND FOUR-PART COUNTERPOINT WITH A FREER USE OF PARALLEL THIRDS AND SIXTHS.

We proceed to the addition of a third voice-part to our practice exercises, and not only with lessened fear before parallel leadings in connection with the cantus firmus and first counterpoint, but we may also skip about more freely in parallel thirds and sixths, or develop our third voice-part independently in any such way as may be preferable.

Problem 39: To add third and fourth voice-parts to the exercises belonging to problems 21-24, granting parallel thirds and sixths in a predominating degree to the first two voice-parts.
149.
2. Cpt.



The exercise will invert. It may be transformed into four parts, even though the first counterpoint thereby becomes a secondary voice using the same rhythm and progressing predominatingly in thirds and sixths:



More than three voice-parts developed independently, and having independent rhythm and melody (without writing in parallels to one another for longer or shorter distances) are rare, and usually are not to be striven for, because they easily make a musical sentence turbulent and over-ladened. Only a smoothly-flowing voice-part allows itself to be thus added to at any time, and in two-part writing, only when such a voice-part is in longer note-values, but not when in shorter ones. The fourth voice-part may freely associate with itself one of three parts, now this one and now that one, when it does not, renouncing its own independence, become a mere completive-part filling the gaps in the harmony. In practical composition the latter is the more usual, but naturally requires no modelexample, because four-part harmony exercises, note-against-note, have made this idea sufficiently clear.

The model-example from $\S 7$ we now construct in three voice-parts, and afterwards transform it into a four-voiced exercise by the addition of a fourth voice-part joining itself at will to one of the three other voices:
151.
D.



The same as a four-voiced exercise the one in three parts inverted):




Model-example 76 might be written thus:
153.


The same four-voiced (the three voices inverted): 154.
C. f.


The remaining two-part exercises belonging to § 7 upon these cantus firmi (Nos. 77-80), also promise a new species of three and four-voiced contrapuntal writing:
155.
D.

1. Cpt


The same four-voiced with the voice-parts inverted:


157.

1. Cpt.
C. f.
2. Cpt.


In measure 4, we must change the $c=\left(6\right.$ in $\left.e^{+}\right)$in the first counterpoint into $g_{\pi}^{k}$, because it is too obscure. As an example of four-voiced writing, it appears:

or likewise inverted:


No. 79 would appear:


The same four-voiced with inversion of the three voice-parts:

and finally model-example No. 80:


Four-roiced with inversion of the roices:


We come to the exercises from $\S 8$ (complemental rhythms), and in like manner we give them three and four-voiced settings. As auxiliary to these, the student may write a third voice-part developed in longer notes (therefore in half notes for the following example); no explanation is necessary. We go directly to the writing in four voice-parts:

and (82):

and (83):


In the three and four-voiced working-out of the exercises under $\S 9$ (counterpoint invented freely throughout), we again restrict the parallel forms of writing and place a voice-part, florid throughout, in antithesis to a cantus firmus; only we concede to the added fourth voice-part the privilege of leaning upon any one of the three, or alternating between them ad libitum:

Problem 40: To write a florid voice-part to the exercises belonging to problem 25 ; the fourth voice-part leaning upon any of the three others as necessity requires. 167.
A.
2. Cpt.



The same four-voiced and inverted:



Lack of room causes us to forego the three and fourvoiced elaborations of the three other counterpoints to the same cantus firmus; and from cantus firmus $B$ we produce only one example, the others being left to the zealous, ambitious student to develop:
169. B. Adagio.

C. f.


[^5]

The same four-voiced with inversion of the voices:
170.
C. f.

1. Cpt.
2. Cpt.
3. Cpt.


At last we come to those problems by which all the voiceparts move in a rhythmically free manner (§ 10); and to thẹm we add, as far as possible, rhythmically-enlivened third and fourth voice-parts:
171.
A. (Compare Nos. 91-93.)


The same four-voiced with inversion of the roice-parts:
172.

2. Cpt.


1. Cpt.

$9:-2-0:$

In conclusion, let us make three and four-voiced workingsout of our e major example (No. 95)):

and four-voiced with inversion of the voice-parts:
174.
C. f.


1. Cpt.

2. Cpt.



## CHAPTER II.

## DOUBLE COUNTERPOINT.

## § 14. DOUBLE COUNTERPOINT IN THE OCTAVE.

When an exercise is sketched so that the roice-parts may exchange positions with one another, the relationship of above and below being reversed, the upper voice becoming under roice and rice-versa (other permutations also being possible in the exercises in three-part writing), without there occuring errors of composition or unpleasant tonal effects, then such an exercise is said to be written by "double counterpoint".

We repeatedly tested our preceding exercises and frequently discovered that they were capable of inversion; it was accomplished by that species called double comnterpoint in the octave, which is the translocation of one voice-part an octave higher or lower, respectively, while the other remains stationary (as for example, in the first exercise under problem 29 , where upon inversion the cantus firmus was removed downward an octave, while the second counterpoint retained its position) or
by remoring the one roice-part an octave higher and the other an octave lower (as in most of our exercises). We now systematically investigate the conditions under which an exercise can be written so that inversions are available not only in the octave, but in other intervals as well. It may be emphatically stated, that of the rurious species of double counterpoint, the one in the octave has the highest value for the technic of composition. At any rate, we will examine the other possibilities, and write several exercises, which at least can do no harm as they force one's genius to conquer the greatest difficulties. Double cornterpoint in the octare is distinguished from the other species chiefly by the fact that inversion does not bring a new tone to the counterpoint, but only the octave position of the written note is changed. Octave inversions, therefore, do not alter the original meaning of the harmony substitutions. Often enough some bad tonal effects result with which one must contend unless occasional surprises are to be experienced. These are:

1) Parallel fifths, which always result when before inversion there were parallel fourths.
2) Faulty progressions in the bass, which often arise when a serviceable upper or middle voice-part becomes the bass.
3) Compression of the tones, which are only intelligible and of good effect when the interrals are sufficiently wide.

1a) Parallel fourths are possible and of good effect in simple two-part counterpoint, e. g.


At $a$ the exercise is faultless, but of no value in double counterpoint, as is shown (at b) by the inversion of the upper roice-part into the lower octare. Parallels are common in three and four-voiced counterpoint:


Faulty parallel fifths would result at $a$, if the upper roice were placed below the middle voice, or the middle roice were placed above the upper voice; but also the inversion of the under voice into the higher octave (176d) produces a wholly unsatisfactory result, viz:

2a) Several six-four chords (by thorough-bass terminology) in succession; a dminor chord with $a$ as bass-note, an aminor chord with $e$ as bass-note, and a gmajor chord with $d$ as the bass-note. Even though the two minor chords are not what they seem to be (rather $f^{6}$ and $c^{63}$, so that the bass-notes are the thirds of the chords), the succession of such questionable forms as these three chords is of poor effect. Consider the rules for bass progressions detailed in the book, "Harmonielehre", and construct the voice-parts with due regard for these rules. Likewise, in more than two-part writing, the bass often takes no share in the inversion; but if a theme is constructed to be developed through all the voice-parts, then the bass-part must be so written that it may prevent unsteadiness and uncertainty in the whole exercise. A fugue theme while in embryo should be regarded as a bass to two or more other roice-parts in order to test its practicability for this unaroidable role. Finally, the third point,

3a) treats of suspensions, and foremost, of those formations in which a chord-tone appears close to its representative in the chord; therefore of ninth chords, suspensions of fourths before the third, etc.


While the chords at $a, c$ and $e$ are faultless - under certain circumstances, are ceren very effective - the chords arising from inversion, as at $b, d$ and $f$, are impossible.

Meanwhile - it here concerns itself less about the avoidance of certain voicc-part progressions in the original form of the exercises than about certain foults in the imersions - not all the possible inversions in four-part writing are practicable, and one or another permutation even in three-part writing must be
renounced. But that is not to be regretted, because three-part writing permits 5 permutations, and four-part uriting allous as many as 23 permutations:

$=24$ possible positions of the voices.
Seeing there is such a fulness of possibilities, one or another permutation is readily sacrificed, for example: the 6 cases where voice 2 becomes the under-voice. In two-part writing there are only two permutations:

$$
\begin{array}{ll}
1 & 2 \\
2 & 1
\end{array}=2 \text { possible positions of the voices. }
$$

There is a real difference in the musical effect, and also for contrapuntal technic, whether the two positions of the voices arise through inversion from only one, or from both voice-parts. We shall make a separate use of the two cases. In this second chapter, that a new charm may be added to the exercises, we use new themes as the foundation of our work, and first of all, the first two strophes of the chorale, "Ein' feste Burg ist unser Gott": 178. F.


As is known, the two strophes are repeated when the chorale is sung; consider then that a changed musical effect arising from inversion may be reckoned upon for this reprise. The position of the cantus firmus must not be changed, but the second voice, and, later on, the third and fourth roices, must change their positions relative to the cantus firmus. From this instruction, there particularly results the forbidden crossing of the voices; that is - first of all, we only have in mind the addition of one voice-part, therefore two-part writing - we
will not let the counterpoint cross the cantus firmus because inversion produces only a slightly different tonal effect. We must provide that a crossing of roices does not occur through inversion, which is the case when the counterpoint goes ton far from the cantus firmus. But "too far from" is only a relative term. According as one places the roice-part intended for inversion oric or two octares higher or lower, is me or two octaves the maximum distance apart of the voicc-parts, an overstepping of which produces the faulty crossing of the parts. We will make use of each indiridually; the counterpoint is florid and free from restraint:

Problem 41. Two-part writing; the counterpoint to be written so as to invert in the octave, the cantus firmus to remain stationary.
179.

Cpt.



Two places must be corrected, namely, at NB. in measures 3 and 4 ; in both cases the counterpoint (if the upper one was the one sketched first) exceeds the distance of an octave from the cantus firmus, and runs through the octave, producing the disagreeable effect of seconds resolving upon the unison, when inverted:


The passages are easily changed:


We proceed to the working-out of a third voice-part for this exercise, which, in antithesis to the counterpoint first invented, will permit of inversion. It may be sketched as an upper voice-part:

Problem 42: To write a third voice-part to the exercise under problem 41. 182. F.



The first and second counterpoints hardly require correction in order to be a representative two-part exercise without the cantus firmus; to which it may be said, that an exercise to which a cantus firmus - be it a choral, or some other familiar melody - is to be added later on, should be sketched so that this combination is worked-out and afterwards the voice-parts, whose faculty of combining has been tested, should enter alone; but not so that later on force must be used to weld the principal voice-part to the other voices. Sharply distinguish the chief voice-part, while keeping within the path of the successive composition of several contrapuntal parts. In simple fugues the theme itself is naturally the leading voice-part, and strikes the key-note of the entire movement; the counterpoint, which is afterwards to be added to it, need not be more significant - perhaps it would even be false to make it so. In a double fugue it is different, especially if the second theme is not independently developed before the themes are combined; from necessity, the second subject is more significant than the first when an imposing climax is to be attained.

Which is the same as saying, that we reserve the principal thoughts for this effect, and in adiance work out a particularly good counterpoint as a first subject.

Let us see how the inversion of our three-part exercise appears: the under voice-part we place an octave higher, and the upper voice-part an octave lower, so that, in fact, the two voice-parts are inverted about two octaves. This is readily seen, when by means of the inversion of only one of the two parts while the other remains stationary, one attempts to attain
the same position, which the two voice-parts occupy after inversion:


At $a$ and $c$, we sec that the inversion by only one octare so compressed the two voice-parts that they were compelled repeatedly to cross one another, while the inversion by two octaves ( $b$ and $d$ ) brought the proper relationships. It is to be noticed how both voice-parts (because each voice-part is an octave removed from the cantus firmus) suffice for the determining of the greatest interval for the inversion of about two octaves (viz: two octaves), and also how they approach one another in the interval of a second. Therefore the exercise is sketched as an example of double comterpoint adapted for inversion in the interval of two octaves:
184.

1. Cpt.
c. f.



But even after the exercise has been sketched in conformity with all the given requirements, it would be possible to assume that the counterpoint had been written to one or the other of the voices and not to the cantus firmus. The cantus firmus, therefore, can be inverted an octave against each of the two voices without the parts crossing one another; thereby the two counterpoints enter together and produce an essentially different tonal effect:
18 ว.
C. $f$.

1. Cpt.
2. Cpt.


and:
3. 
4. Opt.
5. Opt.
C. 1 .



For another practice exercise, we choose a secular cantabile theme, such an one as would be suitable for an adagio movement in a string quartette:


The counterpoint is sketched so that the two voices can exchange places; an inversion in the double octave is also possidle. In that case, the counterpoint would be distant two octaves from the cantus firmus:

Problem 43: To write a counterpoint which will invert in the double octave.
188.

Copt.


If we invert the cantus firmus an octave higher, and the counterpoint an octave lower, there ensues the tonal effect:


As far as possible, we will write the third voice-part as a middle part, adapted for inversion either an octave higher or lower, thereby becoming upper or lower voice-part. We seek to avoid the exceeding of the interval of an octave from each of the two other voice-parts, in order that the inversion may not produce crossings of the parts, and unpleasant compressions:

Problem 44: To write a third voice-part to the exercise under problem 43, capable of inversion an octave higher or lower against the other two voices.


One of the possible inversions follows, namely, that one in which the new voice-part becomes the bass, and the other two voice-parts exchange positions:


We now add a fourth roice-part to the three-part exercise; in order that the new part may be capable of inversion (the task is not new, but identical with problem 40), it must be sketched so as to appear closely united to the other three voices, cither
as upper or middle voice, and so that the inversion produces crossings of the parts as little as possible.

Problem 45: To write a fourth voice-part to the exercises under problems 42 and 44.
192.
F.



In the fourth measure there are accent-octaves between the soprano and the bass:


These are permissible, because the lower voice chooses the major second close $d e$ etc. instead of the minor second close $f e$. The new voice is distant two octaves from the tenor, but is adapted for inversion, for example:



although it crosses two of the voice-parts.
We proceed to add a fourth voice-part, capable of inversion, to our second exercise in three parts, written by double counterpoint in the octave:



The close of all the voices upon $g$ could easily be altered in order to obtain a full-toned chord; this ending upon $g$ is caused, as can be seen, by the changing about of the single voice-parts.

We give only one of the possible inversions:



Exercises which have four or more contrapantally independent voice-parts easily become overladen; it therefore happens, not so much from fear of doing difficult work, but rather in the interest of better tonal effect and increased intelligibilit $j$; that even composers generally prefer a manner of writing in three or four parts, which could be correctly called two-part writing with one or two other parts added for completeness of effect. The bass is often supplementary, but not so much in the sense of a completive as a supporting voice; that is, it is to be considered in the sense of a real bass, which, as we learned in plain four-part writing, makes clear the harmonic structure, and which camot be omitted nor be replaced b!y any purely melodic (contrapuntal) voice-part. Again we emphasize this frequent renunciation of practice in favor of practicability of inversion of the bass and particularly warn the amateur composer against the writing of exercises with too many independent voice-parts (three or four contrapuntal voices will almost always permit the rhythm as a whole to degenerate into a succession of short notes of equal value, and therefore rob the individual rhythms of much of their energy); and we also strongly emphasize the high cducational value of these tasks, which, at any rate are occasionally of the greatest value in practice, and especially in development sections, where it concerns less the perfection of the single thoughts, than the artificial entwinings and measurings of strength of motives with other motives. We
now turn our attention more to those peculiar pair-like progressions of the voice-parts, on which in simple counterpoint we already bestowed particular thought for the three and four-part writing. While we keep in mind the difficulties which we met in the increase of the successive voice-parts to single notes of the cantus firmus or of the counterpoint, we recognize as necessary for a beneficial furtherance of the development of our exercises, the simultaneous invention of several voice-parts, or - because that is a difficult task - the invention of voice-parts with regard for those afterwards to be added. There appears as the simplest form, the accompaniment by means of thirds or sixths, although not necessarily continued throughout in the same manner (as advocated in Cherubini's text-book upon counterpoint), that is, always with the accompaniment of upper thirds - whereby an unnecessary fetter would be placed upon the musical fancy, and also many cantus firmi would be impracticable for this method of writing but alternating, ad libitum, between parallel thirds and sixths, which scrupulously avoid any crossings of voice-parts and particularly those which are the most closely united. We now transform our example $G$ into a four-part exercise by means of parallel pairs of voices, which by the rules of double counterpoint may be inverted in the octave; then for example $F$ we similarly invent two pairs of voices, that is, we make it fiveroiced in such a manner that four voices, which will invert, moving freely, may group themselves about the cantus firmus:

Problem 46: Association of a parallel voice-part with the cantus firmus, and the writing of a counterpoint in antithesis, which likewise has a parallel voice-part.
196.
C. f.

1. Cpt.
2. Cpt.
3. Cpt.



Inversion:
197.
2. Cpt.

1. Cpt.
2. Cpt.



Another inversion:

$$
198 .
$$

3. Cpt.
4. Cpt.


We come to our $F$-major example, and write a counterpoint with parallel voices in antithesis to the cantus firmus; and then afterwards we add the second counterpoint with its parallel voices:

Problem 47: The writing of one, and then a second counterpoint, accompanied by thirds and sixths in antithesis to a cantus firmus.


If we let the under voices exchange places with the upper voices, and also at the same time invert each pair of voices, we obtain the following tonal effect:


Although four and five-voiced exercises written thus always have a certain punctiliousness and stiffness peculiar to them, they are of value in polyphonic composition. An easier style, as employed by Haydn, Mozart, Beethoven and modern composers, prefers to restrict itself mostly to two real voices capable of inversion, while the others are supplemental and completive when the harmony changes, or they write only a single voice, melodiously conceived, while the others are composed harmonically, but not like exercises in harmony, progressing continously in long notes, but variously interrupted by rests, and sometimes rhythmically enlivened. Also this freer treatment of the voices can be so sketched, that they may be inverted, that is, any of the voices can exchange roles and retain the character of accompanying parts. An exercise in this manner of writing upon cantus firmus $G$ forms the conclusion of this section:

Problem 48: To write a four-voiced exercise capable of free inversion, and enlivened by rests in one or all voices, ad libitum.
201.
${ }^{+}$.
C. f.

1. Opt.
2. Opt.
3. Opt.


Inversion with the melody in the tenor:


Inversion with the melody in the bass (in practical composition, transposition and also modulation attend such inversions, the latter often being the cause of the inversion):


It is necessary to point out to the student, who enters upon this kind of work, that not until after the completion of school studies, will he attain full freedom of musical fancy; and it will be impossible for him to produce anything noteworthy without a mastery of the preceding exercises in the increase of voice-parts. He must place a high value upon his artistic freedom before he can make the right use of it. The various practised forms of contrapuntal writing will appear important and desirable according to kind and occasion, and must not be lightly esteemed. Even the driest, most schematic combination, as a logical result, as a means for the increase of thematic work, can be of great importance, while the mathematically calculated and unemotional, as a foil for that which springs from the soul and in which are propagated the most beautiful flowers for musical composition, can be of direct service in the arousing of the lighest intensity of musical expression.

## § 15. DOUBLE COUNTERPOINT IN THE TENTH.

As already shown in detail, the octave inversion is the only one which does not change the meaning of the harmony (the six-four chord as a possible exception); double counterpoint in the octave is therefore the only species of double comernoint which permits more than two-part uriting. There are exercises, however - as we shall see directly - written in three or more voices by the rules of double counterpoint in the tenth or twelfth, but they only contain two roice-parts which can be inverted in the tenth or twelfth; if there are further inversions, they are in the octave, that is, we have before us simply double counterpoint in the octare. The terms triple and quadruple counterpoint have been used by others, but because they are superfluous, we shall do nothing to preserve them; they only serve to make contrapuntal teachings more complicated than they really are. We do not speak of double, triple and quadruple counterpoint in the octave, but of three, four and five-part writing in which two, three, or all the roices can be inverted; and at last we come to the form of writing in which two voices can be inverted in the interval of a tenth.
the exercises being sketched by the rules of double counterpoint in the tenth. Three or more voices camnot invert a tenth ad libitum, therefore, there does not exist a three or fourvoiced counterpoint in that interval, but only a two-voiced writing in which the additional parts invert by an entirely different principle.

The inversion of a voice a tenth upwards or downwards signifies a widening of the interval by a third which the voice forms to the cantus firmus, therefore the third becomes a fifth and the sixth becomes an octave; it is evident then that a counterpoint adapted for inversion in the tenth, while the cantus firmus remains fixed, can nerer progress in parallel thirds and sixths with the cantus firmus, because inversion brings parallel fifths and octaves, the worst error possible. But it is impossible to win parallel thirds (tenths) and parallel sixths for the inversion because parallel unisons (octaves) are tabooed for the original; but parallel fourths, which are only occasional, are practicable. The results of inversion are made clear by the following:


Because parallel seconds and sevenths are neither possible before or after inversion (they are changed into parallel fourths and ninths), these parallels are excluded in double counterpoint in the tenth, and are only available for oblique and contrary motion. But if we recall our experiences relative to the changing of the harmony by the addition of a third (§ 12), we are in a position to acknowledge the utility of double counterpoint in the tenth, because, the lower voice can be inverted a tenth higher or the upper voice a tenth lower ad libitum, providing one is careful in the oblique and contrary motions to exclude the parallels. On the contrary, if we proceed so schematically the harmonies will change to a greater or lesser extent against our wish. In other words, we will direct attention anew to the construction henceforth (according to inversion) of the counterpoint to be directly
represented by the sketch; we must sketch the double counterpoint in the tenth, as also the three and four-voiced writing, in just the same manner as we directly conceived the double counterpoints in the octare with parallel thirds and sixths as four-voiced, but with this difference, that the intended tworoiced use and the strict schematic inversion by a tenth exclude the intermixing of thirds and sixths. Because the tenth becomes unison and the unison a tenth, to prevent crossings of the parts upon inversion, the cantus firmus and the counterpoint ought not to exceed a tenth apart (if the cantus firmus remains fixed) or a seventeenth (if the cantus firmus is to be inverted an octave in the opposite direction). We give our cantus firmus $F$, accompanied throughout by over and underthirds (a cantus firmus which does not admit of at least one of these forms being impracticable for double counterpoint in the tenth:)


To these we write a counterpoint running in thirds throughout, for example, to the cantus firmus with over-thirds:

Problem 49: (Double counterpoint in the tenth). Invention of a double counterpoint, with added thirds, to a cantus firmus, with added thirds.
206.
C. f.



Thereby we obtain the following two-voiced exercise, which inverts in the tenth by the principles of this kind of double counterpoint.
207.
F.



This counterpoint insufficiently meets the requirements of our aesthetic experience regarding clearness of harmony sub-
stitutions and will not conform to these claims, but for the sake of interesting combinations we make proper concessions and dispense with the harmony substitutions indicated by the figures. The first inversion is a tenth downwards, and this inverted counterpoint becomes the under voice-part:
208.
C. f.

c..


The second inversion is that of the cantus firmus a tenth upwards, so that it is now the upper voice-part:



Just as the first exercise sketched in four-part writing produced this exercise in two voices, so several three and four-voiced exercises are produced if we combine the original cantus firmus and counterpoint with the inverted forms. The third and fourth voices, respectively, could no longer be inverted by the principles of double counterpoint in the tenth, but by double counterpoint in the octave. A few examples will make this clear: 210. F.
C. f.

211. F.

Cpt.


136 II. DOUBLE COUNTERPOINT.


and four-voiced, the original sketch being inverted:


If, in the sketch, one adds under-thirds to the cantus firmus, the counterpoint must first of all be considered as the under-voice, that is, occasionally the cantus firmus is brought not a tenth higher but a tenth lower; therefore, if the four-part writing is to appear:
213.

the sketch should be written in this manner:
214. F.


and inverted:
215.

Cpu.
C. f.

then place the cantus firmus a tenth lower and below the counterpoint:
216.
F.

Cut. $\int$ 冎 $2=$
C. f.


and finally three-voiced and four-voiced:


The student must not be afraid of a few unsuccessful attempts at wresting benefit from double counterpoint in the tenth. We do not need to give examples of double counterpoint of this species with an independent bass-part (which does not invert), or with completive middle voices. It may be remarked that there is no reason for retaining voices not intended for inversion; the same can be modified at any time, ad libitum, so that they may help to conceal weaknesses arising from inversion.

## § 16. DOUBLE COUNTERPOINT IN THE TWELFTH.

The relationships are wholly different in this species of counterpoint; the inversion in the twelfth implies the addition of a fifth, or what is the same thing, two thirds to the intervals of the cantus firmus and the counterpoint. Double counterpoint in the twelfth changes the under-third into an over-third,
and the over-third into an under-third; parallel thirds remain parallel thirds; consequently, parallel motion is not excluded as it was in double counterpoint in the tenth. All the other parallel progressions are impracticable (under-sixth becomes over-seventh), as shown by the following:


That an inversion by two thirds changes the harmony more than by one third (in the tenth) is self-evident; to a certain degree, the meaning of the whole composition is changed by the inversion, so that the composer's fancy is entirely disregarded, because it is impossible, as in double counterpoint in the tenth, to represent simultaneously the original and the inverted writing. A useful suggestion is the pointing out of the identity of the harmonic meaning of the third-change chords, as may be seen when as much as possible one gives to the voice to be inverted upwards the lower pair of the four tones (e.g. $\widehat{d f a c}$ ), and the uppermost pair to the voice to be inverted downwards. To prevent crossings of the parts, the greatest distance apart that is allowable is a twelfth.

We employ cantus firmus $F$ as the basis of our work.
Problem 50: (Double counterpoint in the twelfth.) The invention of a counterpoint, which inverts a twelfth higher without the cantus firmus being changed.



First inversion: the placing of the counterpoint a twelfth above the cantus firmus:


NB. Upon inversion one employs or ignores, ad libitum, the accidentals ( $\#, b, \hbar, \& c$.) which bring the modulation into the desired track. Other liberties, such as the choice of a step of a third in place of a fourth, or similar steps, are permissible for these exercises.

Second inversion: placing of the cantus firmus a twelfth below the counterpoint:


We disregard the insufficiences of the two cadential formations (ending in the fifth) because application of double counterpoint, and particularly in the tenth and in the twelfth, occur constantly only as thematic work in the middle of compositions, and voluntarily return to simpler formations. If then, the inversions shall yield more satisfactory cadence intervals (thirds), these are easily obtained when the counterpoint is being sketched fhere, where the counterpoint progresses after $d$ instead of after $f$ ). Double counterpoint in the twelfth, as already said, cannot be written in more than two voices, but free voice-parts may be added (the roices thus added as supplementary may be modified at will after inversion); or also parallel voices in thirds, which may remain fixed or inverted one or two octares (but not a twelfth). As we bave already had occasion several times to make distinction, the addition of a voice developed in parallel thirds excludes parallel thirds between the cantus firmus and the counterpoint, because, from necessity, there arise parallel fifths and octaves (unisons). Like double counterpoint in the tenth with parallel roices, that in the tuelfth with parallel roices absolutely demands contrary or oblique motion. In what manner the parallel voices are to be written is self-evident, if one considers that they must form thirds both before and after inversion, that is, if the voice intended for inversion in the twelfth be moved upwards the parallel voice must form overthirds to the original voice and under-thirds to the part to be inverted (that octave inversion causes the thirds to become sixths may be ignored). If we had intended the above development of cantus firmus $F$ for third-doublings, the parallel voice should have associated itself in over-thirds with the original counterpoint, which upon inversion would then have become underthirds to the parallel voice:
222.


Faulty parallels appear in the third measure in both cases. We correct the counterpoint so that it meets the requirements, that is, we sketch the exercise in four voices with under-thirds to the cantus firmus and over-thirds to the counterpoint:

Problem 51: (Double counterpoint in the twelfth.) Sketch of a counterpoint in thirds as an under-voice to a cantus firmus accompanied by under-thirds.


We can disregard the impracticable close; in concrete cases such an ending would have to be rectified. This exercise would make its debut in two roices:



The first inversion (the counterpoint in the over-twelfth) would appear: 225.

and the second inversion (the cantus firmus in the undertwelfth) appears thus:


An example (we change the under-thirds of the counterpoint into over-sixths to prevent crossings of the parts - an octave inversion is always possible) of three-part writing:
 Cpt. c.
C. f. a.


Four-part writing (the cantus firmus $a$ inverts in the under-twelfth, while the other voices, in part, make octave inversions):



## § 17. DOUBLE COUNTERPOLNT IN THE SIXTH AND THE ELEVENTH.

There can be little interest in the writing of a double counterpoint which inverts in the seventh or ninth; these two intervals are in every way so much the absolute negation of the harmonic meaning of the prime, that such a combination would appear forced unless particular means were employed. Nothing need be said about these forms, either of the original or of the inversion, as in the case of double counterpoint in the tenth (consider Hauptmann's definition of dissonance, "a melodic succession conceived of as a chord"). The inversion in the sixth is unfruitful, because the fourth becomes a third, and neither the third nor the fourth preserves good barmony substitutions; the reciprocal compensation of the unisons or octaves and the sixths is insufficient, even though the exercises are not directly impracticable:


Inversion (translocation of the counterpoint to the oversixth and of the cantus firmus to the under-octave to avoid crossings of the roice-parts):
230.
F.


Double counterpoint in the eleventh requires more attention, because the sixth remains a sixth. This species is similar to that in the twelfth, in as much as the third remains a third when inrerted. We will understand it more readily, if we write a counterpoint, which repeatedly forms sixths to the cantus firmus. Examine the following for the other intervals:

that is, practical value could be drawn from the inversion relationships of the fourth and octave.

Problem 52: Double counterpoint in the eleventh.


The inversion:
233. F.

Cpt.
C. f.


After all, the profit to be gotten from this species is only moderate; the translocations of the voices from one octare position to another are alone significant; indeed, one can say unimpassioned, there is hardly to be found a single movement in sonata, quartette or symphony in which octave inversions and translocations do not occur - double counterpoint in the octave is indispensable to the composer! Double counterpoint in the tenth or twelfth, as also that in the eleventh or sixth, requires particular preparatory work, that is, it must appear in an environment that awakens interest in artificial combinations, as in variations, for instance, in which there will appear fluent double counterpoint in the octare, or some canonic work and the like. For example, in order to acquire a taste for two-part writing similar to our last form of work (problem 52), it is not only necessary that the cantus firmus as such be
thoroughly understood from previous practice in counterpoint, but also that a certain blunting of interest in the cantus firmus itself has already been developed, so that the chief interest centres in the counterpoint and its inversions.

Although perhaps the pleasure which such combinations may possess for the not wholly technically schooled listener may be little, it is certain that the master musician will adopt these contrapuntal forms with enthusiasm; the composer himself finds a high artistic joy, if, in spite of the greatest restrictions, his fancy produces the beautiful.

## CHAPTER III.

## IMITATIVE COUNTERPOINT (CANON).

## § 18. PLAIN CANON IN THE UNISON AND THE OCTAVE.

The particular interest attached to all the various double counterpoints consists in the fact that in spite of the altered position of the voices in relation to one another, or changed tone-region by which each species is represented, their identity is understood and the same musical thoughts appear in another light. Only one change of tone-color is granted to double counterpoint in the octave, because the harmonic meaning of the combinations (with a few unimportant exceptions) remains the same; but in the other species harmonic complications take place and therein exists the increased charm of the same in antithesis to that in the octave, although in themselves they possess little intrinsic merit. A melody, which no longer has the same harmonic meaning is, in fact, no longer the same melody. Therefore, only when a composer is able to succeed in keeping the meaning of the cantus firmus intact in all the inversions - at least in the main - is a high value to be attributed to double counterpoint in the tentl, twelfth or eleventh.

The same joy of recognition offered by the double counterpoints is also peculiar to canonic counterpoints, that is, those
in which the counterpoint imitates the cantus firmus - in cases where the cantus firmus in long notes is entwined by an enlivened counterpoint - or those in which the second (third or fourth) counterpoint imitates the first counterpoint.

A former century was devoted to the particular cultivation of imitative counterpoint; the Netherland School in the $14^{\text {th }}-16^{\text {th }}$ centuries, developed the art of imitation into a wonderful variety; now, although the special advantage, or the exclusive cultivation of such artifices, is long out-of-date, a lively interest is still preserved for the occasional and momentary introduction of the same, and it is therefore necessary that the youthful composer acquire their mastery. The so-called free imitation, the occasional imitation of the melodic contours of the prominent parts of themes by the accompanying voices, or also - in polyphonic movements - the unconstrained derelopment of melodic-rhythmic motives through several roices, makes especial claim upon the interest of the theoretically unschooled listener in a similar manner as upon the musician; but after all it is perhaps only a substitute for the genuinely strict imitation to which it seems analagous. If a student should begin his work in imitative counterpoint with free imitation, the fullness of possibilities, both here and elsewhere, would not mean a liberty, but something inexpedient and untencule; first he must have practised all, or a great number of the forms of strict imitation before he can think of deriving at will now this and now that for his flight of fancy. The strict imitations, aside from the fact that they are adapted for the awakening of high aesthetic interest, possess this particular value in that they make familiar more complicated combinations of tone-representation than otherwise would be presented to the fancy.

We begin with the simplest forms, the imitation of a melorly at the same pitch and in notes of the same length, so that only the later entrance of the second voice distinguishes it from the first, therefore with canon* in the octare. There is

[^6]little or no pedagogical value in giving a student a fragment of one or two measures to be developed by imitation in some casual or hap-hazard way. This would be unworthy of a student who has solved the previous problems. But on the other hand, it would be expecting too much if we demanded that a pupil immediately develop a canon in two voices upon a fixed cantus firmus. Therefore, we enter upon a way, which perhaps is not generally used, but nevertheless one that certainly should be recommended, when we give the exercises a kind of variationform, and the formation of the voices being wholly free in detail, we require the student to produce a canonic writing corresponding to the thematic content of a definite cantus firmus. Examples will make this clearer:

Problem 53: Plain two-voiced canon in the unison to be written as a variation to the exercise under problem 1.


This little canon, however insignificant it may seem, fulfills its task and reflects the principal contents of cantus firmus $A$ (and the original form under problem 1), being at the same time a real canon in the unison. It could be written as a single voice and then the sign § shows the entrance place of the second voice:

[^7]

In canon in the unison, voice-crossings are unaroidable unless the direction in which the voices go remains fixed from the beginning to the end (compare the second half of our canon and its prototype, cantus firmus $A$ ). If, to a certain degree, the danger of the voices sounding alike when crossing one another may be prevented by care in the development of the voice which goes before (compare No. 234, measures 3 and 4), this danger is the very best reason why imitation in the octave is preferred to that in the unison, inasmuch as it causes fewer crossings of the voices. Our canon appears to better advantage if the second roice follows the antecedent into the higher or lower octave (no parallel octaves occur) and therefore an inversion in the octave is practicable:

or inverted:


In regard to the phrasing of a canon, it may be said that, as a rule, the beginning voice retains the lead throughout and the symmetrical construction is controlled by it; there are cases, however, where the imitating voice interrupts this lead, especially if it imitates the first roice after two measures. We must now explain the technic of the production of such a canon more particularly, and what we say is applicable in the main to all imitative counterpoints.

Of course the first beginning and the entrance points for the imitating voice are wholly free*.

* A canon may be developed most easily when the imitating voice enters after several measures, because then the preceding voice has had the time and the opportunity to bring logical harmonic progressions to the whole. Our manner of writing canons, which take a pre-determined course of development (corresponding to the cantus firmus), makes it advisable to choose close succession for entrance of the voices. It may be remarked respecting phrasing, that in a canon like this where there is compression in the entrance of the voices, or displaced measure-motives, the diversity of tone-quality over-balances the equality of the roices. If the nature of canon is chiefly the diversity in the blending (counterpoint) with equality in succession, then this will be the distinguishing element in such cases where the positions of the motives is not perceived, that is, as a matter of fact, it strengthens considerably the canons bringing other motives.

We decide, for instance, that the consequent shall enter upon the third quarter note of the first measure, which for a beginning may be indulged: 238.

thus, first of all, it must be borne in mind that all that which the voice (the dux, proposta, antecedent, leader) which takes the lead has brought as far as the entrance of the imitating voice (comes, consequent, companion), must be imitated by the latter voice in the interval determined upon at its entrance, that is, therefore, the comes, or companion, appears now with the imitation of the first piece of the dux or leader or cantus firmus, and the dux makes its own counterpoint thereto (a):

## 239. a)

Cpt.?
b)


Occasionally, it is possible to have the dux proceed as in our first canon (see b); but thereby we have gained a new piece of cantus firmus, which precludes the further correct employment of our first canonic roice:


Therefore, for the third measure, instead of conformity to our first canon, we will strive for a firmer union with the theme (c. f. A) which must constantly hover before us in our work:

§ 18. PLAIN CANON IN THE UNISON AND THE OCTAVE. 155

or as canon in the octave:

or inverted by double counterpoint in the octave:
243.


Our cantus firmus $B$ is adapted for an entry of the second voice at a distance of two measures because the harmony intervals in the original are wholly different. Naturally, we must have recourse to accented auxiliary and passing-notes to give the roices double meaning:

that is, $d^{*} e$ is chiefly $7^{-} 8\left(e^{+}\right)$, and in the imitation $34\left(b^{i}\right)$, $g^{\#} f^{\ddagger}$ is $7^{-} 6\left(a^{6}\right)$ and in the imitation $32\left(e^{+}\right)$; we will now so discriminate according to the possibility of our counterpoint, that it may make possible the preservation of the turning, $c=i$ ${ }^{"} c^{\neq}$of the theme:

that is, $c^{\#} b$ first as $21\left(b^{i}\right)$ shall afterwards serve as $87\left(c^{=7}\right)$ and $b a$, first as $54\left(e^{+}\right)$shall become II III ( $\left.{ }^{0} c^{\sharp}\right)$, but the new counterpoint must comply with the cadence-turning, $a^{6} b^{7} e^{+}$:
246.

at length, we reach the end with its inevitable appendix or coda: 247.

NB.



Instead of a halting coda to the comes, it is the custom to make a direct close, while the comes ends immediately with the dux (at NB.), eventually with a freely chosen note, or else we let the dux assist the comes with a free coda even to the end:


Instead, a free coda is appended to both voices: $2 \not 29$.
Coda.

We place our second canon (an octare apart) in antithesis to its cantus firmus for comparison:

> B.


## § 19. PLAIN CANON IN THE UNDER-SECOND (OVER-SEVENTH).

While imitation in the unison, or octare, incurs the danger of remaining fixed in the same harmony, because the motives return again upon the same degree, the imitation in the under or over-second, or over or under-serenth, changes the harmonic sense of the motive wholly and completely, because the degrees lying close to one another never belong to the same harmony. But this alteration of the harmony can of course be paralyzed by the introduction of dissonances (suspensions, auxiliary-notes, passing-notes) for the cases where the alteration hinders the development of the theme intended for rariation. We again lay hold of our theme $A$; the dux could begin:
251.

and the comes will enter after half a measure:


The next progression is easy, because the cantus firmus, note-against-note, can be understood in the sense of another harmony:


We proceed:
Problem 54: Plain canon in the under-second and overseventh, respectively.



With octare-widening (canon in the under-ninth): 255. A.


With inversion of the voices (canon in the over-seventh): 256. A.



Nothing further need be remarked than that the harmonic meanings are not so easily intelligible, but anyhow are sufficiently intelligible so that the listener, not trained in counterpoint, would be able to comprehend them after several hearings. It is never desirable to strive after the obscure, but in cases of necessity, we must be satisfied.
§ 20. PLAIN CANON IN THE OVER-SECOND (UNDER-SEVENTH).
Naturally, the conditions are analogous to the preceding, that is, every returning motive will readily change its harmonic meaning. As a basis for our first work we use cantus firmus $C$, which we alter to meet requirements, striving to preserve the original thought:

Problem 55: Plain canon in the over-second (underseventh).


We use this unassuming exercise to show how one can interestingly construct a contrapuntal work by means of ornaments (figuration), without changing its real nature; and from this point, deductions and applications for the previous exercises, particularly for double counterpoints in the tenth, twelfth and eleventh may be made. Every counterpoint, written note-against-note, can always be regarded as a kind of rough sketch to be worked out later on. Without expenditure of new labor, our example, only somewhat adorned, is formed (for the sake of readier survey and greater flexibility in the motion of the voices, we increase the distance by an octave between the two voice-parts) as follows:
C.


Inversion (canon in the under-seventh):
259. С.


Rigmann, Counterpoint.


Another ornamentation of the same:

§ 21. PLAIN CANON IN THE UNDER-THIRD (OVER-SIXTH;
The imitations in the third and sixth favor such a choice of interval between the voices, that the motives (or slightly modified) retain their harmonic meaning. We call to mind the double counterpoints in the octave, tenth and twelfth, in which, in many cases, the harmonic meaning was unchanged when over or under-thirds were added. If we work upon the basis of our cantus firmus $A$, the comes enters at the distance of a measure, because at that interval the same harmonies return:

Problem 56: Plain canon in the under-third (over-sixth).



Placed an octave further apart:


Inversion (canon in the over-sixth):

$$
\text { 263. } \mathrm{A} .
$$




The last motive, not being imitated, is written an octave lower to prevent the crossing of the voices.
§ 22.` PLAIN CANON IIN THE OVER-THIRD (OVER-TENTH) AND UNDER-SIXTH.

The relationships are the same as in the preceding. We take our $e$ major cantus firmus $(B)$, or rather the counterpoint to it, note-against-note (problem 1):

Problem 57: Plain canon in the over-third (over-tenth) and in the under-sixth.



Inversion of the two roices:
265. B.



There are harmonies here which disturb the original conception of the theme ( $c^{* 7}$ in the sixth measure instead of the fifth measure); but nevertheless the sense of the whole is preserved and clearly perceived throughout.

## § 23. PLAIN CANON IN THE UNDER-FOURTH (OVER-FIFTH).

This is rightly one of the most popular canonic forms, because the fourth (fifth) is of double meaning and can be understood, as may be required, in the sense of the same or of harmonies related through their fifths; thus the canons in the over and under-fourth, or over and under-fifth, unite the peculiarities of those in the over and under-second and seventh (change of harmony), and of those in the orer and under-third and sixth (harmonies unchanged). We again use our cantus firmus $B$, and in its original form.

Problem 58: Plain canon in the under-fourth (over-fifth). B.



The close is formed in free style. The signs over the accented measures show that cadential confirmations disturb the symmetrical construction:

$$
\frac{1+1+2}{4}+\frac{1+1\left(+\frac{1}{2}+\frac{1}{2}\right)+2}{5 \text { instead of } 4}
$$

We invert the exercise:

§ 24. PLAIN CANON IN THE UNDER-FIFTH (OVER-FOURTH).
The relationships are similar. We again use cantus firmus $B$, which, perchance, makes canonic treatment possible at a distance of one measure, and almost without any change:

Problem 59: Plain canon in the under-fifth (over-fourth). 268. B

NB.


Only the next to the last measure is free. From this rough sketch a number of elaborated (ornamented, figured) formations are possible, for example:


Inverted (canon in the orer-fourth):



## § 25. SLMULTANEOUS ENTRY OF THE THEME LN DIRECT AND

 CONTRARY MOTION (ALSO WITH THIRD-DOUBLINGS).A particularly interesting form of imitation is the reversion, or imitation of the theme in contrary motion. Like imitation in direct motion, the same may be developed in all the intervals (as well in relation to the degrees of the scale, as in the period of entry) of the comes from the dux; indeed, occasionally it is possible, under certain circumstances, to have the dux and comes enter simultaneously, for example:

or also:
272. minor:


rarer:

still rarer:

iminor-prime remains minor-prime, (major-fifth remains major-fifth).

The first form with outer parallel thirds:


The second form with inner parallel thirds:


The third and fourth forms with inner and outer thirds:

and: 278.

so that of the two intervals of a third of the tonic chord $\left({ }_{1}^{3}, 5_{3}^{5}\right.$ and $\left.\frac{\mathrm{III}}{\mathrm{V}}, \mathrm{III}\right)$, either one is unchanged (forms the angle-point) or the two exchange places with one another. By inversion the thirds could be transformed into sixths:


Here there is little to be practised; but one should make clear respecting the possihility, in case any passing opportunity presents itself for the use of the introduction of a theme with doublings in contrary motion, or with parallel thirds to both forms, to be in a position to avail one's self thereof.

## § 26. CANON IN CONTRARY MOTION.

It is wholly rational to make a distinction between canonic imitations in contrary motion and the simultaneous progression of the canonic voices in contrary motion according to the degrees of the scale, as to what remains fixed, or the exchanges that may be effected; for error results if the canon is defined or named by the interval of the beginning tones of the dux and comes, because wholly identical combinations are distinguished from one another, and those entirely different are grouped together.

A number of examples may follow without comment, which shall serve as models for the student:

Problem 60: Canon in contrary motion (counter canon) retaining the third of the tonic.

Scheme:



The tonic chord again appears as such in the comes, and the diminished-seventh chord also remains the same; the two dominants exchange roles.

(Dux an octave higher ad libitum).


Inversion of the voices:


Problem 61: Canon in contrary motion retaining the second of the key.
283. Scheme:

284. B. (compare problem 4).


Only the interval of the under-third of the tonic chord, and of the diminished triad remain.

Inverted:



Problem 62: Canon in contrary motion retaining the fundamental tone of the key.
286.


Scheme:

(b) (b)
(b)
(b)
(b)

The superdominant harmony remains fixed; tonic and subdominant exchange roles.
287. A.


Inverted:


Problem 63: Canon in contrary motion retaining the fifth of the key.
Scheme:


The sub-dominant remains fixed; tonic and super-dominant chords exchange roles. 290. A.



Inverted:
291. A.


Problem 64: Canon in contrary motion retaining the fourth of the key.


The harmonies retain their meaning when the fundamental tones of the tonic and super-dominant are avoided.
293. B.


The voices inverted: 294. B.


Problem 65: Canon in contrary motion retaining the sixth of the key.


The subdominant retains its meaning; tonic and superdominant chords exchange roles.
296. A.


The voices inverted:
297.


Problem 66: Canon in contrary motion retaining the seventh of the key.
298.

Scheme:
(7) (0)

( 7 )

(b)

Only the super-dominant remains fixed; tonic and subdominant chords exchange roles.
299. B.


Inversion of the voices:


## § 27. CANON BY AUGMENTATION AND DIMINUTION.

Not only is an imitation recognizable as such when the melody is inverted, but also this is true when it is stretched into notes of double, or greater length, and when the notes are twice as quick, or even quicker. Canon by augmentation or by diminution may be in direct or contrary motion, and similar to those examined in paragraphs $18-25$, can be in direct motion in the
unison, second, third, fourth, \&c. entering either above or below, and like those in contrary motion (counter-canons) perceived in paragraph 26, can also retain any particular degree of the key, and invert. We give a few examples of canons by augmentation in direct and contrary motion, respectively, and also some canons by diminution in both direct and contrary motion. The student may add others to these.

Problem 67: Canon by augmentation in the under-sixth (over-third).


Inversion of the same (in the over-tenth): 302. A.


The comes and dux begin simultaneously, which is recommended for canons belonging to this category because the tonematerial of the dux too little controls the comes. If one permits the comes to begin sooner than the dux (which is nonsensical, because in that case the comes leads), canon by diminution results (p. 183).

Problem 68: Canon by augmentation in the under-second (over-seventh.)


Inversion of the voices (in the over-seventh):


Here the dux and comes do not begin at the same time. In model-example No. 303 the voices cross one another; the tonal-effects thus produced are taken into account and are well-considered, a possibility to which particular attention must be directed. Inversion in such cases produces a special charm because the more the voices unexpectedly loose themselves from antithetical entanglement, the freer they separate themselves from one another. Crossings of the voices which arise when the parts are inverted (therefore more or less outside of the conception), are rarely good; for which reason, one should so control the intervals between the voices, that these crossings may not occur; but on the other hand, one should be on one's guard in case there are crossings of the parts in the original contrapuntal writing, that one may not then confound the voices, that is, that in spite of the good effect arising from the employment of the crossing, the crossing must be fully realized as such and thus enable one to follow the involved melody threads!

Problem 69: Canon by augmentation, in contrary motion, retaining the third of the tonic.


Inversion of the voices:


In spite of triple measure, the comes imitates in notes of duple value, a form of imitation which makes difficult the intelligibility; but since a tripling of the note values is much more difficult to develop (at least if the dux is rhythmically enlivened), this is the more popular combination. Also occasional deviations from the strict multiplication of the duration values are granted to canon by augmentation.

Problem 70: Canon by augmentation, in contrary motion, retaining the second of the key.


Inversion of the same:


Problem 71: Canon in the unison by diminution.



Another example:
310. A.


Problem 72: Canon in the over-third by diminution.


Problem 73: Canon by diminution in contrary motion retaining the fundamental tone of the key.


Problem 74: Canon by diminution in contrary motion retaining the fifth of the key.
313. B.

§ 28. MIRROR CANON, CRAB CANON AND OTHER PECULIAR ARTIFICES.
Certain canonic artifices are not music for the ear but for the eye; these are found among the Netherlander composers of the $15^{\text {th }}-16^{\text {th }}$ centuries, and are at present imitated sporadically as curiosities; they are definite transformations of the principal voice by means of verbal directions, and have no especial meaning for the ear. Mirror canon is only a species of counterpoint by contrary motion (p. 169), especially in that simple form which prevents it becoming at once a crab canon. For example, hold this voice-part before a mirror:
314. C. (Mirror canon.) $\#$

and the following counterpoint is reflected:
315. C.


A crab canon (canon cancricans) results when a cantus firmus, read backwards, is used as a counterpoint, for example: 316. A. (contrapunctus cancricat.)


The counterpoint is as follows:
317. A.


A combination of mirror and crab canons, respectively, is the canon, which uses as a counterpoint a cantus firmus read from an inverted page, for example:
318. C.

when the page is inverted the following is the counterpoint: 319. C.


We only give these trifles that their names may be understood; they are of no practical use, since they are intended to be seen and not heard.
§ 29. TWO-PART CANON WITH INDEPENDENT THIRD AND FOURTH PARTS.

The simplest way in which to add a third, or third and fourth voices, to a two-voiced canon in order to supplement the harmony, is to make the third voice-part a completive, or a bass-part. Of course, the higher the contrapuntally conceived independent voice stands, the more difficult it is to write, because neither of the two canonic voices can yield aught to its own advantage. The student must add to a great number of the two-voiced canons in paragraphs 18-28, first a third roice, and then a fourth roice, respectively, of the most independent character.

Problem 75: To add a free third voice to the exercises belonging to problems 53-74. 320. A .

Cpt.

Comes.


321. B.

Dux.

322. A.

Comes.

Cpt.

Dux.

323. A.

Comes.

(comparc 312.)



Problem 76: To write a free fourth voice to the exercises belonging to problem 75.
324. A.


Comes.

$$
\text { Dux. } \begin{cases}\text { (compare 320.) } \\ \text { 2. } & \text { Cpt. } \\ 9-2 & 0\end{cases}
$$





§ 30. TWO-PART CANON UPON A CANTUS FIRMUS (CHORAL CANON); THREE AND FOUR-PART CANON AND ALSO DOUBLE CANON.

The canons, hitherto considered, sought, either in one voice, or by means of the co-operation of two canonically dereloped voices, to hold fast to the thematic content of a cantus firmus, and accordingly were variations of the same. A more difficult problem is to write two canonically invented roices to an unalterably fixed cantus firmus. The guide through the labyrinth of possibilities is then the sense of the cantus. This kind of canon forms the natural transition member to composition
having three or more canonically developed voice-parts. We use cantus firmus $F$ (choral motive) as a basis, and produce, therefore, a choral * canon:

Problem 77: Two-voiced canon, in direct motion, in the over-fourth (or also in another interval) to a choral strophe as a cantus firmus.
328. E.


[^8]Problem 78: Two-part canon in notes of equal value in contrary motion, retaining the third of the tonic, with a choral strophe as a cantus firmus.


Problem 79: Two-part canon by augmentation and inversion, retaining the seventh of the tonic, with a choral strophe as a cantus firmus.
330. F.

Dux.
C. f.

Comes.



Problem 80: Two-part canon by diminution and inversion, retaining the second of the tonic, and with a choral strophe as a cantus firmus.
331. A.

Comes.
C. f.


Three-voiced canon is worked out in the very same manner as two-voiced, that is, that portion of the piece which the dux has performed in advance of the entrance of the first comes is obligatory for this roice while the dux itself becomes a counterpoint. At the proper moment, the second comes begins and performs the same initial notes, while the first comes becomes a counterpoint to it with the imitations of the counterpoint introduced by the dux, and the dux now forms new material. The difficulty consists of the finding of a counterpoint which can be used in two ways, that is, as well for the preceding as for the succeeding, and adapts itself to simultancous performance with the two. Upon the basis of our $f$ minor example under problem 1, we attempt to invent a three-voiced canon, an eight-measure period in length, in notes of equal value, direct motion and in the octave; it may be sketched thus:

Problem 81: Plain three-voiced canon in the octave (or unison) upon the themes of problem 1.
332. A.

Dux.


By means of figurative embellishment, a number of interesting formations may be derived, for example: 333. A.

Dux.

1. Comes.



Since the exercise contains no parallel fourths, it can be inverted by the principles of double counterpoint in the octave, for example:



Instead of in the over and under-octave, the imitating voices could, of course, enter in any other desired interval; and, in the same way, the imitation can occur by inversion (or one roice by inversion and the other in direct motion), or by augmentation and diminution. In place of many that are possible, we only give one example, namely, a three-roiced canon in which the second voice is by augmentation and contrary motion, the first voice in direct motion retaining the second of the tonic, and the third roice by diminution in the over-third:

Problem 82 : Three-voiced counter-canon. The first comes by augmentation and contrary motion, retaining the second of the key, the second comes by diminution and in the over-third. 335. A.
2. Comes.

Dux.

1. Comes.



Inversion by double counterpoint in the octare, for example: 336. A. 1 . $\frac{0^{2}}{0^{b}-\frac{1}{2}}$

Dux.


It can easily be seen in what manner the combinations could be further increased; canons can be in four or more roices,
and each voice individually can imitate the dux in any of the ways we have examined; canon in three, four, and more roices, can also be developed upon a cantus firmus, and so forth. We will consider one possibility particularly, namely, double canon, the simultaneous imitation of two pairs of voices which can be done in manifold ways; and, like the single canon, can imitate in the unison, or other intervals, in direct or contrary motion, by augmentation or by diminution. An example of a double canon upon our cantus firmus $F$ will make this clear. Its upper pair of voices performs a parallel canon in the over-second, and the lower pair of voices performs a counter-canon, retaining the fifth of the key. It has little artistic value; meanwhile an example may serve as an illustration: 337. F.

1. Comes.

2. Dux.
C. f.
3. Dux.
4. Comes.


To those who delight in canonic work and would perfect themselves therein, I would recommend the second part of Anton André's "Lehrbuch der Tonsetzkunst". I cannot, however, advise anyone to follow his mechanical way of constructing canons, nevertheless, there is much of practical value in André; and those, who have mastered the foundation by my method, will not find themselves led astray in their writing, but rather will always have a settled program for the progression of the canon, whether one varies a theme, or works upon the basis of a fixed and unalterable cantus firmus.

Fugue, which usually is treated of in connection with canon, does not belong to a preparatory text-book, but to musical form. All that can be done in a fugue has been treated of in counterpoint, and the present volume is no exception.

APPENDIX.
cantus firnit for contrapuntal exercises.
A. Cantus fermi in equal notes (for problems 1-21).



立


B. Cantus firmi with persistent or fixed rhythm (for problems 22-25).
1.



4.






㢈閶市：

C．Choral－strophes for contrapuntal exercises（for problems 41 ff$)$ ． 1．Lobe den Herren．
EHi Hearay
2．Was Gott tut，das ist wohlgetan．
 3．Nun danket alle Gott．

4. O Haupt voll Blut und Wunden.

5. Mache dich, mein Geist bereit.

6. Wer nur den lieben Gott läßt walten.

EHo
D. Cantus firmi rhythmically free (for problems 26 ff ).
1.

2.

3.







(F)


(\%)


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11. $\ggg$ Fdur ( 2 V., Vc., Kl.).
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| 33. | * | , | , | , | . | G moll | (dgl.). |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 34. | , | * | , | , | , | A dur | (dgl.). |
| 35. | * | * | . | , | , | B dur | (dgl.). |
| 36. | * | * | * | , | , | Esdur | (dgl.). |
| 37. | * | , | , | - | * | F dur | (dgl.). |
| 38. | * | * | * | * | $\triangleright$ | Edur | (dgl.). |

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| MT | Riemann, Hugo |
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| 55 | Text-book of simple and |
| R555 | double counterpoint including <br> imitation of canon |

Music


[^0]:    * "Neue Schule der Melodik", Hamburg, 1883; Grädener \& Richter, publishers.

[^1]:    * By the author's "Handbuch der Harmonielehre", Leipzig, 1898, Breitkopf und Härtel; third edition of "Skizze einer neuen Methode der Harmonielehre" (1880).

[^2]:    * The following task can present itself to the musician, namely: the transformation of an ostinato chaconne, passaeaglia) in a great many different ways; however, that is a separate piece of work, somewhat comparable to the simultancous introduction of two principal themes. Just as such combined themes must be conceived together, so also an ostinato must. be sketehed so as to permit various ways of being interpreted. If such tasks have nothing to do with the ease under consideration, there is, on the contrary, no doubt that the truly progressive composer's first duty is to learn to muderstand and effectively to develop his thoughts polyphonieally in order to make their individuality of full value.

[^3]:    * When the octave enter's close to the sixth, such an effect cannot be denied, for example:
    

[^4]:    * Compare "Musikalische Dynamik und Agogik" pages 206-230.

[^5]:    Riemann, Counterpoint.

[^6]:    * The Netherlanders delighted in writing entire polyphonic compositions represented by a single voice-part, and they indicated, by more or less enigmatical directions, the entry of the second, third, or even more

[^7]:    voices, which had to be puzzled out from the one voice-part. These directions were called canon; but the strict form of imitation, or canon as we call it, they called fuga (flight or pursuit of the voices), consequen:a and other names.

[^8]:    * Another species of choral canon is produced when the choral is imitated line by line; exercises which correspond to previous paragraphs.

    Riemann, Counterpoint.

