THE DEVELOPMENT OF A STANDARD FOR CREDITING THE
STUDY OF TROMBONE AT COLLEGE LEVEL

A Thesis Presented for the
Degree of Master of Arts

by

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Approved by:

[Signature]
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CHAPTER I

INTRODUCTION

The Problem

This thesis is concerned with the development of standards for the grading and crediting of Applied Music at the university level. It is specifically concerned with that portion of Applied Music which is devoted to the study of trombone, and consists of such factors as materials and music literature, performance technique, and the application of principles of music theory. There is a definite need for such standards, as shown by examining the various phases of Applied Music and their values at the present time.

The main purpose of applied study is to provide laboratory experience for the theoretical knowledge of a field of learning. In music, ear-training and harmony are included in theory, and applied study or laboratory work includes the principles of theory as experienced through the media of the voice or a musical instrument, or through performance. However, it is questionable to what degree applied study has a specific purpose. In chemistry the student must test and prove a required number of projects, whereas in Applied Music the general practice is for the student to advance as the teacher deems proper, without specific objectives and aims or detailed requirements. Applied study should have a specific purpose, in music as well as in all fields of study.

There is little if any standard for the grading of any student of Applied Music in any year of study. One student
may have studied more material than another, or one may have thoroughly studied a small amount of material. This is partly due to the different backgrounds and abilities of the students, but it is questionable whether or not the differences in backgrounds and abilities are reason enough to give one student an "A" and one a "B". In the study of a language such as French, the standard for grading does not depend upon the background of a student but upon his successful completion of the required material of study. Though we cannot control the ability of an accepted student, we can control (1), the amount of material to be studied as a requirement; (2), the length of time in which a certain amount of material should be covered; and (3), the new problems which the student should encounter and the proper time for attacking these problems. On this basis a standard could be developed for competently grading any student in any period of study.

The criterion used in selecting the materials for study in Applied Music is considerably important, and should be examined for its efficiency and thoroughness. In some institutions a committee outlines the material to be used; invariably, the choice of material is allotted to the instructor or teacher, and he selects the materials which, to him, cover the various problems and techniques most adequately. More commonly, the teacher selects the material to be studied from (1), the materials he studied, (2), his teachers' choice of materials, or (3), from popular use of
materials. Few teachers have analyzed all available material noting the best exercises and studies which adequately fulfill technical problems on instruments, or the results would have been in evidence.

The need for standards is greatly clarified by contrasting the study of Applied Music with another college subject. In an analysis of numerous college bulletins, it was discovered that courses in Physics in the different institutions are closely allied in content at any level of study. Nearly all of the colleges require the pre-requisite of two or three courses in mathematics, usually Algebra and Geometry. The primary courses offered are practically identical in content, beginning with the topics of mechanics, heat, sound, light, magnetism and electricity. In numerous music bulletins examined, it was found that few colleges and universities listed minimum entrance requirements or the expected standard pre-requisite to study on applied instruments. The Eastman School of Music, which lists in its bulletin the required study of technique, methods, and etudes in Applied Music, is one of the few exceptions, yet this bulletin is most vague with regard to examinations.

The problems of the transfer student and the accredited graduate student in Applied Music would be minimized if a standard were developed for Applied Music. Their problems exist mainly because of widely separated entrance requirements among the music schools, variations in the class of musical literature studied in the different schools, and the
divergent methods employed in teaching Applied Music. The requirements and courses would be parallel at any level of study if standards were adopted.

The aims and objectives for teachers in Applied Music should be noted in order to organize course materials adequately and fully in the development of a standard. The first and main objective is to give thorough instruction in Applied Music, offering the student the maximum knowledge of all available material and a study of all technical problems which the student may encounter. Recent investigations show that instrumental teaching is often attempted without the knowledge of a logical structural basis from which artistic playing can be developed.¹ The second objective is to fulfill the purpose of applied study, which is to provide laboratory experience for the principles taught in theory. The third objective is to present the best available material and literature for study to the students, and fourth, to organize a standard or system of grading with which the teacher can positively defend his grading policy. To assure accomplishment of these aims and objectives, the minimum entrance requirements, specific materials of study and examinations should be published in the music bulletin of an institution, so that both the student and the teacher may have a knowledge of the expected course of study, and prospective students could be prepared for the college level.

of study.

Raising the objectives and values of Applied Music by the integration of musical theory and Applied Music is one method of placing Applied Music on a level with other subjects, thereby creating adequate reason for colleges to offer credit for Applied Music. "The interrelationship of the study of Applied Music and the study of Theory is one reason for the teaching of Applied Music in college."¹ The establishment of college credit for Applied Music has caused or encouraged a great many students to begin, advance, or perfect their performing technique.

Definitions

Applied Music is the name given to the branch of musical study which is devoted to performance, and in this thesis refers specifically to performance on the trombone. It consists of the technical control of the trombone which enables one to perform music with ease and accuracy, and the interpretative knowledge which enables one to render the music with intelligence and feeling. The type of Applied Music study in this research is that of individual instruction, but could be easily adapted to group or class instruction.

The College or University Level is defined as the level of study following that of secondary education, attended by students in various colleges, universities, and other

¹Randall Thompson, College Music, p. 47.
institutions seeking higher education.

Musical Theory as used in this thesis designates any sort of subject matter which seeks to explain technically the elements or processes of music, and includes such musical studies as sight-singing, ear-training, harmony, history and appreciation of music, and methods courses.

The Standard as developed for the course of study is a unit of instruction for the trombone, and contains the subject matter and minimum requirements of study for each year of the course, and is outlined for students pursuing the Bachelor of Science or Arts degree and the Bachelor of Music degree.

The Approach

The purpose of this thesis being the development of a standard for crediting the study of trombone at the college level, a standard must be developed which can be used efficiently and advantageously in any institution offering Applied Music as a major field of study.

The problem was approached by discussions, readings, and analysis. Little reading material was found available on the subject, but by discussions with teachers and several graduate students concerning the phases of Applied Music noted above, it was decided to analyze (1) technical requirements of the trombone, and (2) principles taught in theory courses, and to integrate the technical requirements with theoretical study as much as possible at the same time as points were presented in theory classes. Finally, an
analysis of all available music materials and literature for the trombone was conducted to determine what specific exercises in the materials of study would most adequately and completely cover the combined points of technique and theory requirements. The results would then become a course of study for the trombone and a standard for crediting the study of trombone on the college level.

The standard has been divided into years as a means of determining minimum progress in a given period of time, and (1), to ascertain that all details of technique and theory are covered in the total years of college study, and are covered thoroughly and completely; (2), to create a basis for examining and comparing students; (3), to create a basis for the grading of students in any year of study. A member of the examining committee of Applied Music not having a thorough knowledge of the trombone will have some basis for grading the student of trombone if he is equipped with this standard which dictates minimum requirements for a defined period of time.

It must be remembered that the details of technique and theory as organized in this thesis resulted from discussions of this particular problem among several graduate students and teachers. The order of presentation of technical problems, the degree of advancement required or the amount of material presented in the period of a year may be open to question. However, some standard must dictate minimum requirements for the average student so that he will study all necessary details of technique and theory which are
pertinent to excelling as a teacher or a professional player.

This is one approach to the solution for accurately teaching, grading and crediting the study of trombone on the college level. Other systems and methods may be entirely feasible and more practical; it is suggested that this work be examined for its basic idea and approach, and not be committed as the only solution for obtaining credit for study of the trombone at college level.
CHAPTER II

TECHNIQUE

Technique of the trombone is the physical method or the details of procedure essential to becoming an expert performer on the trombone. It consists of physical actions of the lips, the tongue, and the arm, which are conditioned by motor impulses and muscular responses, as distinguished from the mental actions which consist of knowledge of theoretical principles, and musicianship or artistry.

The usual description of the physical actions of technique necessarily begins with tone production—how to blow into the mouthpiece of the instrument and produce a tone. To approach the level of study concerned herein, students should have passed an entrance examination which preordains that they have a minimum amount of expertness and ability on their instruments. Music schools and institutions will vary in their prescribed entrance requirements, depending upon the size and status of respective schools. Unless the status of a school is extremely low, a prospective student should be able to meet the following requirements:

(1). The demonstration of tone quality which is characteristic of the instrument.

(2). The demonstration of ability to sight-read and perform simple rhythmic patterns in 2/4, 3/4, and 4/4 meters.

(3). The demonstration of some knowledge and feeling for phrasing.

(4). The performance of a solo on his major instrument from the high school festival audition list, from
memory.¹ (This requirement is more at the discretion of the institution, but can be advantageously applied to test the background and ability of the student.)

(5). The performance of a simple song "by ear".

By this criteria, the student must know how to produce a good tone, and has had some experience in playing his instrument. Therefore, the primary details will not be entered in this research; the standard as developed herein will begin at that level immediately following the entrance requirements.

Learning to perform on the trombone involves certain kinds of muscular training, and the parts of the body which are specifically called into action are the lips, the tongue, the arm, and the lungs or the diaphragm. The lungs are used as bellows to furnish the breath, but the lips, tongue and arm are used to manipulate the instrument.² The embouchure (that part of the lips covered by the mouthpiece) controls the size of the aperture between the lips through which the column of air passes from the lungs into the instrument.³ The office of the tongue is to come and go between the air-column and the embouchure, and release the breath into the instrument.⁴ The function of the arm is to lengthen or shorten the tubing (the slide) through which the vibrating

¹School Music Competition-Festivals Manual, 1942.
³Ibid., p. 1
⁴Ibid., p. 2-3.
air-column passes; this action changes the pitch being sounded.

The coordination of the physical actions of the body used in playing the trombone can be grouped into mechanics of tone production, action of the tongue, and slide manipulation. These mechanics cover all phases of muscular training, but are entirely independent of musical intelligence. They demand the daily repetition of certain exercises with the instrument.

**Tone Production**

Tone production on the trombone involves the correct training and execution of the initial attack, sustaining the tone, the release of the tone, and the movement from one tone to another.

**Attack of the tone**

The two main types of attack concerned here are the legato and the detached attacks. The legato attack is controlled by the embouchure contracting and expanding to change the size of the aperture for high or low tones when the air-column is continuously flowing. The detached attack is controlled by the embouchure contracting and expanding to set the size of the aperture for a given tone of a definite pitch before the air-column enters the instrument. Thus, it can be seen that the first requirement in studying the trombone is the correct execution of attack, and the first classes should be devoted to this practice.

The legato is one of the most difficult styles of
playing on the trombone. Other instruments are all provided with some almost mechanical means of obtaining the legato, as in the cornet, where the column of air is self-articulated, while passing from one tube to another by the movement of the valves.\textsuperscript{1} Owing to the structure of the trombone itself, legato playing is very difficult. Lafosse states the following concerning legato playing:

> When the movement of the slide is parallel to the design of the musical phrase—that is to say when an ascending phrase necessitates an upward movement of the slide or vice versa when a descending phrase requires a downward movement of the slide, if only the first note is attacked, a "glissando" of the most unpleasant character is the result.

> When the movement of the slide is contrary to the design of the musical phrase, that is to say when an ascending phrase necessitates a downward movement of the slide or vice versa when a descending phrase necessitates an upward movement of the slide, or again when it is a case of notes belonging to the same position, the passage from one harmonic to the other causes in the air-column a shock which, if it is not in bad taste, contrasts singularly with the glissandos of the first example.\textsuperscript{2}

The player must lightly tongue and articulate the air-column, but not completely stop the air-column, and approach the "legato" obtained with a flute, an oboe, or a cello. Many teachers prefer to name this style of playing on the trombone the "super-legato," since it is distinguished from the legato on another instrument by virtue of its different mechanics.

For the precise control of the legato and detached

\textsuperscript{1}Andre Lafosse, \textit{Complete Method for the Slide-Trombone}, p.32.

\textsuperscript{2}Ibid, pp. 32-33.
attacks, practice on repeated notes, both static and scale-wise, in all degrees of dynamics from "pp" to "ff," is essential. Such practice should progress in all ranges of the instrument which the student has developed, at a speed of M.M. $\text{= } 120$. The study of other attacks are covered in Styles, Chapter III, and these should be practiced in the manner delegated to the legato and detached attacks.

**Sustaining the tone**

The sustaining of the tone is controlled by the air-column flowing from the lungs, the force which is exerted behind the air-column, and the continuing flow of the air, or, the breath support of a tone. This support can best be developed by practicing long tones, devoting practice to the crescendo and decrescendo of sustained tones, and mastering control of the muscles which exert the force of air. The tones should be practiced at all degrees of dynamics and in all ranges of the instrument which the student has developed, along with the method of practicing for the attack.

The posture of the body is of primary importance in the development of breath support. "Correct posture is the very foundation of correct breathing; a fast, relaxed tongue and an open throat."\(^1\) One of the greatest assets gained from playing with correct posture is the confidence it creates in the player. It is an absolutely vital point for acquiring and maintaining correct breathing.\(^2\)

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1 Donald Reinhardt, *Pivot System for Trombone*, p. 4.
2 Ibid, pp. 4-5.
Release of the tone

Playing the trombone correctly demands almost perfect coordination of the diaphragm, which creates and controls air pressure; the tongue level, which properly directs and governs the size of the stream of air against the embouchure formation; and the embouchure formation, which produces the necessary resistance to affect the proper vibrations for the tone being played.¹ These parts govern the attack and the release of a tone by first emitting a sound and then stopping the sound. The tone can be released by stopping the flow of air from the diaphragm, striving to eliminate the effect which sounds "toot, toot". This sound is caused by shutting off the air-column with a forward motion of the tongue, and eventually retards the progress of acceleration of the tongue.

Differences in note values and rests necessarily create differences in the release of a tone, and determine whether a tone shall have a short and quick release, or a long and slow release. In passages of short note values such as eighth and sixteenth notes, the releases will naturally need to be quicker and shorter than the releases in a passage of half-notes and half-rests.

The release of tones should be practiced in conjunction with attack and the sustaining of tones, and can be practiced at the same time.

¹Donald Reinhardt, Pivot System for Trombone, p.5.
Movement from one tone to another

The distance between two different tones is called an interval, and the manner of moving from one tone to another can be accomplished by two processes involving adjustments of the embouchure, the tongue, and the arm. One process is the movement between two tones with the same unbroken air-column, which we call the slurring of tones; the other process is the movement between two tones with a broken air-column, which is defined as the detached playing of tones.

"If we play two or more tones with the same unbroken air-column passing over the lips, without further action of the tongue to restart the vibrating, we call it slurring."¹ Under such conditions the lips must contract and expand, that is, alter the rate of vibrations by enlarging or diminishing the aperture without any assistance from the tongue or the arm, and furthermore, every change from tone to tone is affected by the lips alone.² If we play two or more tones with a broken air-column, the tongue must start the vibration of each tone and we call it detached playing.

The contracting and expanding of the aperture is called flexibility of the embouchure. To develop this, intelligent advanced practice of slurred and detached intervals should be studied in the first year. The slurring can be adequately practiced on the harmonics of each position without moving the slide but with the lips, proper tongue level, and

²Ibid., p. 52.
the diaphragm control, and should be developed to a speed of M.M. \( \cdot \) \( = \) 72, at all degrees of dynamics, and in the range developed by the student. Later, the slurring can be practiced on all intervals of diminishing note values, and involving coordination of the slide manipulation with the slurring of tones. The detached playing can be practiced in the tones which occur in each position, and then through the seven positions of the trombone. It can be adequately practiced in intervals ranging from a minor second to an octave, a tenth or twelfth, and in scales and arpeggios, in all degrees of dynamics and in the range as developed. This practice involves slide manipulation. By executing the exercises in notes of diminishing values starting with the half-note, acceleration of speed and faster coordination will occur. Gradations of the detached and slurring practice should be extended until the student acquires the technical command in all keys, ranges, and note values of theory principles as presented in the college level of study.

Tongue

As was stated before, the office of the tongue is to come and go between the air-column and the embouchure, and release the breath into the instrument. "The character of the tongue's action determines the difference between legato and staccato, dependent upon the movement of the tongue, whether gentle and soft, or hard and quick. The motion of the tongue is to and fro, and is purely muscular activity, so it grows strong like any other muscle by getting tired
and resting."¹

The different kinds of tonguing are the single staccato, the double staccato, the triple staccato, and less frequently, the quadruple staccato. The single staccato is a single stroke using the extreme tip of the tongue, and is the first mechanic of tonguing practiced by the student. "The activities of the tongue in single staccato can be divided into three sections: first, on a single tone; second, with a change of tone and arm; third, with uneven strokes or dotted rhythms."² The single staccato should be practiced in the first year of college study at ever-increasing speeds, with a minimum of M.M. = 120 for the year, and should be practiced first on static notes, then with changes of tones and slide positions.

In the execution of the double and triple staccato, the tip of the tongue uses the syllable "tu" and the back of the tongue uses the syllable "ku." The activities of the tongue in the double and triple staccato can be divided into the three sections listed under the single staccato, and should be practiced in that manner. The double and triple staccato study should be prepared by intense practice of the "ku," which in most cases is weak and not as clearly pronounced as the "tu." For this reason, it is advisable to begin the study of the "ku" during the latter part of the first year; the second year should be devoted to the study of the double

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²Ibid., p. 3.
staccato, and the third year can be devoted to the study of the triple staccato. During the latter part of the third year, or in the fourth year of study, practice should be devoted to the "quadruple" staccato (tu-tu-tu-ku), in the same manner as in the other staccato. Serious effort should be expended in the study of all the staccato to surpass minimum requirements, and to achieve ever-increasing speeds with the tongue.

**Slide Manipulation**

"The arm moves the slide of the trombone, which lengthens or shortens the tubing through which the vibrating air-column passes; this action changes the pitch of the tones. The arm must be trained to obey the thought of the player automatically and to act in perfect unison with the tongue."¹ "By the introduction of the slide, it is obvious that the trombone, alone of all the wind-family, has the accuracy and modulative power of string instruments. Its notes are not fixed, but made by ear and judgment."²

There are seven positions for the movable slide of the trombone, and each position produces its own harmonic series. They are comparable with the fingerings of a trumpet which lengthen and shorten the air-column, and, therefore, can produce all the tones and semi-tones in the range of the instrument.


Slide manipulation involves correct intonation, the use of alternate positions, and the correct intonation between the alternate and the natural positions, as well as fast movement of the slide from one position to another. Alternate positions in this case are those positions lying in different harmonic series of the fundamental tones, and by lengthening or shortening the tubing of the instrument a player can produce many tones in other than the natural positions.

The main problem of intonation is the playing of alternate positions in tune. The student should learn all the alternate positions in the first year of study, since the knowledge of them will create more patterns of slide manipulation, and awkward slide movements can be eliminated by playing many passages. Several tones can be played in one slide movement, such as ascending from middle B\textsuperscript{b}; B\textsuperscript{b}-C-D-E-F can be played by the positions of 1-3-4-5-6, instead of positions 1-3-4-2-1, or 1-3-1-2-1, remembering that each position lies in a different harmonic series and must be tempered for accurate intonation. The general rule of correct slide movement is to play as many notes as possible with the slide moving in one direction, eliminating short jerky slide movements.

It is recommended that all the feasible alternate positions in the student's range be divided into problems for the three quarters, or two semesters of the first year. The preliminary studies should consist of playing the same tone, such as fourth line F, in the natural position, which is 1;
and then in the alternate position of 6, in whole note values, half-notes, quarter and eighth-notes, having the student develop a conscientious attitude of listening for perfect intonation between the two tones. Following this study, the alternate positions should be used in slow scales, and later developed in chords and arpeggios, as these points of musicianship are encountered in other courses.


<table>
<thead>
<tr>
<th>Notes of Bass Staff</th>
<th>Natural Positions</th>
<th>Alternate Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 4 5 6 7 8 9 10</td>
<td>3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>E  third space</td>
<td>2 7</td>
<td></td>
</tr>
<tr>
<td>F  fourth space</td>
<td>1 6</td>
<td></td>
</tr>
<tr>
<td>G&lt;sup&gt;#/4&lt;/sup&gt;, Ab</td>
<td>third space</td>
<td>3 7</td>
</tr>
<tr>
<td>A  fifth line</td>
<td>2 6</td>
<td></td>
</tr>
<tr>
<td>A&lt;sup&gt;#/4&lt;/sup&gt;, Bb</td>
<td>top of staff</td>
<td>1 5</td>
</tr>
<tr>
<td>B, C&lt;sub&gt;b&lt;/sub&gt;</td>
<td>above staff</td>
<td>4 7</td>
</tr>
<tr>
<td>C&lt;sup&gt;#/4&lt;/sup&gt;, D&lt;sub&gt;b&lt;/sub&gt;</td>
<td>one line above staff</td>
<td>3 6</td>
</tr>
<tr>
<td>D&lt;sup&gt;#/4&lt;/sup&gt;, D&lt;sub&gt;b&lt;/sub&gt;</td>
<td>directly above staff</td>
<td>1 2 5</td>
</tr>
<tr>
<td>D&lt;sup&gt;#/4&lt;/sup&gt;, E&lt;sub&gt;b&lt;/sub&gt;</td>
<td>directly above staff</td>
<td>2 5 7</td>
</tr>
<tr>
<td>E  directly above staff</td>
<td>2 6 4 7 2 6</td>
<td></td>
</tr>
<tr>
<td>E&lt;sup&gt;#/4&lt;/sup&gt;, F&lt;sub&gt;b&lt;/sub&gt;</td>
<td>directly above staff</td>
<td>1 2 5 7</td>
</tr>
<tr>
<td>E&lt;sup&gt;#/4&lt;/sup&gt;, G&lt;sub&gt;b&lt;/sub&gt;</td>
<td>directly above staff</td>
<td>4 7 2 6</td>
</tr>
<tr>
<td>G  directly above staff</td>
<td>5 7 4 6</td>
<td></td>
</tr>
<tr>
<td>G&lt;sup&gt;#/4&lt;/sup&gt;, A&lt;sub&gt;b&lt;/sub&gt;</td>
<td>above staff</td>
<td>3 5 7</td>
</tr>
<tr>
<td>A  above staff</td>
<td>2 4 6</td>
<td></td>
</tr>
<tr>
<td>A&lt;sup&gt;#/4&lt;/sup&gt;, B&lt;sub&gt;b&lt;/sub&gt;</td>
<td>octave above staff</td>
<td>1 3 5 7</td>
</tr>
<tr>
<td>B, C&lt;sub&gt;b&lt;/sub&gt;</td>
<td>octave above staff</td>
<td>4 2 7 6</td>
</tr>
<tr>
<td>C  octave above staff</td>
<td>3 1 6 5</td>
<td></td>
</tr>
<tr>
<td>C&lt;sup&gt;#/4&lt;/sup&gt;, D&lt;sub&gt;b&lt;/sub&gt;</td>
<td>octave above staff</td>
<td>2 5</td>
</tr>
</tbody>
</table>

The positions in overtone series far removed from the fundamental tones are less in tune, according to the natural overtone series of the instrument, and must be tempered by slight movement of the slide; for good intonation these tones can best be played in the closer positions. Alternate positions are used to approach perfect intonation and to reduce slide movement.
Range

The following table denotes the minimum range as established in this thesis. Some students entering college will have a much wider range than others, yet it is necessary for the average student of trombone to concentrate within this defined range to assure good tone and control of all tones in the various dynamics.

**TABLE 2**

**MINIMUM REQUIREMENTS OF TROMBONE RANGE, BY YEARS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Dynamics</th>
<th>Range</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>all</td>
<td>F below staff to F above staff</td>
</tr>
<tr>
<td>2</td>
<td>all</td>
<td>E below staff to B♭, octave above staff</td>
</tr>
<tr>
<td>3</td>
<td>all</td>
<td>E below staff to D, octave above staff</td>
</tr>
<tr>
<td>4</td>
<td>all</td>
<td>E below staff to highest possible tones</td>
</tr>
</tbody>
</table>

**SUMMARY**

With the coordination of the lips, the tongue, the arm and the lungs, the player is able to produce tones and play the trombone. The technical problems involved are the attack of the tone, sustaining the tone, the release of the tone, moving from one tone to another, the tongue action, and slide manipulation. The details consist of the detached and the legato attacks; slurring tones in one position, then tones in all positions; attacking tones in one position, then tones in all positions; the proper tongue placement and diaphragm control for each tone produced, and the coordination of the arm moving the slide while sounding tones. Thus, the student should practice the attacks, lip slurs, and super-
legato, and position changes for intonation.

The coordination of these techniques enables the student to play a trombone; the correct and proper execution of these techniques demands constant practice and study, but enables the student to perform with flexibility, ease, and precision.

The techniques as outlined above should be practiced from the beginning of the trombone study, in order for the student to advance and become proficient on the instrument. The gradations of further study and practice of technical problems will be covered by other materials and literature which the student normally studies in the course of learning the instrument.
CHAPTER III

THEORY

As stated in Chapter I, one purpose of applied study is to provide laboratory experience for the theoretical knowledge of a field of study. "In most colleges where Applied Music is taught, a belief in the value of Theory to the student of Applied Music is reflected in the existing prerequisites or co-requirements in Theory."¹

The principles of theory with which we are concerned are those that are applicable to the expression of music on a musical instrument and in this specific case, the trombone. They are, mainly, fundamentals of music, musical terms, tonal problems, styles, rhythms, forms in music, and any materials covered in the history and appreciation courses which are applicable to playing the trombone. This theory pertains to the musicianship and artistic capabilities as known and conceived in the mind, and are to be distinguished from technical problems involving purely muscular action of the body.

Very few theoretical principles are knowingly used in Applied Music or are taught as such at the present time, and are obviously lacking in the daily practice of the average student studying an instrument. During the first two years of study of Applied Music, few students can correctly denote tempo markings or interpretative terms, and in some extreme instances, rhythm; even junior and senior students are often

¹Randall Thompson, College Music, p. 47.
erroneous and inaccurate as to musical terms and expressive markings. Notation as such provides some feeling for interpretation; other markings are of little value to the student, even though he has previously studied them in ear-training and has seen the terms many times in history and appreciation courses. To go further into the problem, students should be able to play chords and arpeggios easily on their instruments, after having studied such details in harmony and theory courses. When several students were asked to play chords as an experiment, they hesitantly and graspingly produced the notes; even third and fourth-year students had difficulty with the simpler chords. The students had the same difficulty when asked to play scales; they had studied all scales—major, harmonic, melodic, and natural minor—yet it was a difficult task to play these on their instruments.

The conclusion must be drawn that students of Applied Music do not integrate principles learned in one music course to those of another. This problem can be partially answered by listing minimum requirements of terms and details such as pertain to the study of Applied Music, and to the trombone. At the end of each year, examinations should be given which cover not only techniques of the instrument, but also correct interpretation of materials and literature studied during the year. To that end, the materials and literature used during any one year should be chosen to fulfill the requirements of theory as well as to fulfill the requirements of technique. The problem of technique has been ana-
lyzed and discussed above; in this chapter, the principles of theory which can be used effectively in the study of the trombone will be analyzed and listed in the same order as they appear in the students' course of study.

Musical Terms

First on the list are musical terms—words denoting the tempo of the music, the dynamic markings, and its style of playing. Included in tempo terms will be the actual figures of speed for notes as quoted on the standard metronome. For instance, under Allegro will be the following: \( \text{ allegro } = \frac{d}{4} = 69-112; \frac{d}{4} = 72-132; \text{ and } \frac{d}{4} = 84-144. \) Some of the terms may be acquired in earlier periods than designated; perhaps all may be learned in one or two quarters of study, which would be advantageous to the student.

The musical terms in the first column were selected as those the average student will need to play the simpler etudes and exercises which are required in the first year of study; the second column for the second year, and the third column for the third year of study. The student must know the correct tempo for an exercise, and he should recognize the markings designating the loudness or softness of a tone and whether to increase or decrease the loudness of the tone. It is probable that the student will need to know the terms in the second column during the first year; it is to be hoped that he will learn the terms as he experiences them. The terms were chosen from White's *Melodic Dictation*,\(^1\)Grove's

\(^1\)Bernice White, *Melodic Dictation*,

26
Dictionary of Music and Musicians,¹ and Professor E. J. Weigel's unpublished Lexicon of Musical Terms,² a manual for his course of conducting.

¹Grove's Dictionary of Music and Musicians.
²Prof. E. J. Weigel, Lexicon of Musical Terms.
#### Minimum Vocabulary of Musical Terms

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>largo <em>=42-66</em></td>
<td>mezzo piano-mp</td>
<td>largogetto</td>
</tr>
<tr>
<td><em>=43-92</em></td>
<td>mezzo forte-mf</td>
<td>adagissimo</td>
</tr>
<tr>
<td><em>=50-76</em></td>
<td>forte <em>-f</em></td>
<td>grave</td>
</tr>
<tr>
<td><em>=58-96</em></td>
<td>fortissimo -ff</td>
<td>stringendo</td>
</tr>
<tr>
<td><em>=56-68</em></td>
<td>sostenuto</td>
<td>cantabile</td>
</tr>
<tr>
<td><em>=48-92</em></td>
<td>tenuto</td>
<td>animato</td>
</tr>
<tr>
<td><em>=50-69</em></td>
<td>dolce</td>
<td>amore soso</td>
</tr>
<tr>
<td><em>=40-72</em></td>
<td>molto</td>
<td>assai</td>
</tr>
<tr>
<td><em>=52-108</em></td>
<td>vivo</td>
<td>con</td>
</tr>
<tr>
<td><em>=56-88</em></td>
<td>andantino</td>
<td>senza</td>
</tr>
<tr>
<td><em>=80-126</em></td>
<td><em>=72-92</em></td>
<td>tempo rubato</td>
</tr>
<tr>
<td>andantino</td>
<td>vivace <em>=76-112</em></td>
<td>agitato</td>
</tr>
<tr>
<td><em>=60-80</em></td>
<td>con moto</td>
<td>con sordine</td>
</tr>
<tr>
<td><em>=66-126</em></td>
<td>meno mosso</td>
<td>sempre</td>
</tr>
<tr>
<td><em>=69-112</em></td>
<td>risoluto</td>
<td>pompato</td>
</tr>
<tr>
<td><em>=72-132</em></td>
<td>presto <em>=88-132</em></td>
<td>furioso</td>
</tr>
<tr>
<td>allegro</td>
<td>maestoso</td>
<td>larghissimo</td>
</tr>
<tr>
<td><em>=74-144</em></td>
<td>expressivo</td>
<td>largando</td>
</tr>
<tr>
<td>allegretto</td>
<td>de capo</td>
<td>più lento</td>
</tr>
<tr>
<td>accelerando</td>
<td>dal segno</td>
<td>più allegro</td>
</tr>
<tr>
<td>ritardando</td>
<td>simile</td>
<td>con fuoco</td>
</tr>
<tr>
<td>rallentando</td>
<td>ad libitum</td>
<td>con brio</td>
</tr>
<tr>
<td>ritenuto</td>
<td>poca a poca</td>
<td>ma non troppo</td>
</tr>
<tr>
<td>a tempo</td>
<td>forzando</td>
<td>subito</td>
</tr>
<tr>
<td>crescendo</td>
<td></td>
<td>tutti</td>
</tr>
<tr>
<td>decrescendo</td>
<td></td>
<td>recitativo</td>
</tr>
<tr>
<td>diminuendo</td>
<td></td>
<td>a piacere</td>
</tr>
<tr>
<td>piano - p</td>
<td></td>
<td>grazioso</td>
</tr>
<tr>
<td>pianissimo-pp</td>
<td></td>
<td>energico</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alla marcia</td>
</tr>
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</table>
Tonal Problems

Tonal problems consists of intervals, scales, chords and arpeggios, clefs, chromatics and accidentals, and the various embellishment patterns which appear in musical literature. They are studied in sight-singing and ear-training courses, in harmony courses, and also in the natural order of learning on the trombone.

The tonal problems are listed by years in the order that they should be studied. For example, after the student acquires facility and dexterity in major scales, he then learns the melodic and harmonic scales; the major and minor chords are presented after the student has thoroughly practiced all the basic intervals, followed by the study of the dominant and diminished-seventh chords. The tenor clef is presented before the alto clef, mainly because through experience it has been found that most students acquire reading ability in the tenor clef with less difficulty, partly due perhaps to the similarity to the treble clef which they studied in the ear-training and harmony courses.

The tonal problems presented here were compiled from the material in the following references; Alchin and Jones, Applied Harmony, White, Melodic Dictation, Lafosse, Complete Method for Slide-Trombone.

---

1 Alchin and Jones, Applied Harmony.
2 Bernice White, Melodic Dictation.
3 Andre Lafosse, Complete Method for Slide-Trombone.
Tonal Problem Requirements

I

1. Knowledge of all intervals from a minor second to octaves, tenths, and twelfths.
2. Knowledge of all scales in the major, relative minor, and chromatic.
3. Development of facility in reading chromatics and accidentals.
4. Development of reading in the treble clef.

II

1. Knowledge of all melodic and harmonic scales.
2. Knowledge of major and minor chords in all keys covered, built on all degrees of the scales.
3. Development of reading in the tenor clef.
4. Knowledge of execution of the trill, the mordant, and the appoggiatura embellishments.

III

1. Knowledge and development of whole-tone scales.
2. Knowledge of dominant and diminished-seventh chords in all keys.
3. Development of reading in the alto clef.
4. Knowledge of execution of the grupetti.

IV

1. Development of facility in reading studies with changing clefs.
2. Development of facility in reading wide-interval skips.

Styles

Style is concerned with the distinctive manner or mode of playing music on an instrument, and shall consist of such factors as the attack and release of notes, the forte-piano
and the sforzando, the marcato, detache, legato, and staccato attacks, the dynamic levels of playing an instrument, and the types of attack used in the Classic, the Romantic, and the Contemporary periods.

The student should learn the proper execution of the single attack at the beginning of his study, in order to play correctly his daily exercises and drills. If the problems of marcato, legato, detache, and staccato were not learned in the first year, the student would not have a clear and precise conception necessary to perform music on his instrument. By the same token, dynamics should be studied in the first year; the exploration of types of attacks used in the various periods should be covered in the third year of study, so that the student may have sufficient time to experience the different styles of the many composers in actual performance. Study should be devoted to the styles for concert band, symphony orchestra, and dance orchestra, if the student has not experienced such music in his playing of the instrument, in order to completely and fully round out his musicianship and artistry.

Requirements

1. Proper execution of all dynamics from "pp" to "ff" in whole of range.

2. Proper knowledge of the marcato attack, staccato, sforzando and forte-piano attacks in all registers and dynamics.

3. Knowledge of the correct execution of the detached and legato attacks.
II

1. Knowledge of the correct development of the attacks in extreme changes of dynamics and registers.

2. Knowledge of the correct execution of the single stac­
cato in groups of 2, 3, 4, 5, and 6.

III

1. Exploration of types of attacks used in the Classic, the Romantic, and the Contemporary eras, including the proper attacks of each era.

2. Exploration of styles used for concert band, symphonic orchestra, dance orchestra, and solo playing.

Rhythms

The simpler rhythms presented here were taken from White's Melodic Dictation\(^1\) and accompanying sight-reading books which are used in sight-singing and ear-training courses at Ohio State University. The more advanced rhythms were taken from Alchin and Jones Applied Harmony,\(^2\) and the Blazewitch Trombone Sequences.\(^3\)

The basic meters of \(2/4, 3/4, 4/4, 6/8, 2/2, 3/8,\) and \(3/2,\) are studied in the first quarter of ear-training; hence, it is entirely feasible to expect the trombone student to play in those rhythms during his first quarter of study. Duplets, triplets, and quadruplets, as well as dotted values and anacrusic measures are studied in the first quarter of ear-training, and the same integration should be applied in the trombone study. From the fifth quarter on, however, the

\(^1\)Bernice White, Melodic Dictation.

\(^2\)Alchin and Jones, Applied Harmony.

\(^3\)V. Blazewitch, Sequences, 26 Melodic Studies for Trombone.
student receives little study in rhythms from theory courses; he possibly sees the rhythms in numerous scores read, and hears the rhythms in records, at recitals and concerts, but actually knows little about them until experiencing them on his instrument, as in trying to play three, four, and five notes on each successive beat, or playing difficult syncopations and sub-divided triplets. These advanced rhythms are necessary for a well-rounded musician, and they are included to furnish ample material of study in rhythms during the last two years of trombone study.

I


2. Develop quick recognition of two, three, and four-part measures.

3. Anacrusis measures; duplets (two sounds to one beat); triplets; dotted values; quadruplets; six-eight measure; all simple rhythmic patterns. M.M. J, J, J = 115

4. Play simple syncopated rhythms such as eighth-quarter-eighth notes in 2/4 meter. M.M. J = 120

5. New six-eight rhythms such as a dotted-eighth followed by a sixteenth and an eighth note; the division of eight notes into sixteenth notes. M.M. J, J, J = 60

II

1. More difficult syncopated rhythms:

\[
\begin{align*}
3/4 & \quad J J J J J J J J \\
4/4 & \quad J J J J J J J J \\
4/4 & \quad J J J J J J J J \\
6/8 & \quad J J J J J J J J
\end{align*}
\]

2. Scotch snap; double dotted note values: 2/4 . . . . . . .

3. 9/8 and 12/8 meter; duplets in 6/8 and 6/4 meter.

4. Changing measures: 3/4 to 2/4; 4/4 to 3/4; 5/4 to 3/4, etc.; five-four measures; cross rhythms of 2 to 3, 3 to 4, 6 to 8.
III and IV

1. Triple dotted values: \( \ldots \cdot \cdot \cdot . \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \b
Form

Form is the structural design in musical composition and the art of combining musical ideas into a unified whole. It interrelates the various factors of structural design and molds them into a homogeneous whole. ¹

The forms presented here are those occurring most frequently in etudes, studies, and materials of the trombone literature. The terms were taken from the text of White's Melodic Dictation,² and Finney's History of Music.³ As the student covers these forms in theory courses, so should he study the forms on his applied instrument, and create an actual case of integration between the two subjects. Not all the forms will be covered in the applied study, yet there should be a minimum number of terms which the student should learn to further his musical knowledge.

I

polka, waltz, march, ballad, barcarolle, serenade, nocturne, chanconne, berceuse, bolero, Mazurka, gavotte, romance, trio, sonata form

II

overture, coda, impromptu, rondo, cavatina, prelude, pastoral, polonaise, complete sonata, duo, trio, quartet, galop, tarantella, capriccio, schottische, tango, the concerto, symphony, sym-

¹Oscar Thompson, The International Cyclopedia of Music and Musicians, pp. 609-610.

²Bernice White, Melodic Dictation.

phony, symphonic poem

III

saraband, saltarello, canon, interlude, intermezzo, bagatelle, Czardos, Landler, rhapsody, scherzo, invention, arabesque, toccata, fugue, suite form, Variation, passacaglia

Integration Elements of History and Appreciation Courses

From the following outline of history and appreciation courses as taken from the texts History of Music by Finney, Introduction to Music by Bernstein, and Discovering Music by McKinney and Anderson, it is not to be expected that students will retain many details which could be integrated into Applied Music. The best which educators could hope for would be a vague memory of the simpler forms of music such as inventions, concertos, sonatas, modal scales, the development of intelligent listening to music, and a clear conception of the art of music by the students. Few if any students will be able to discern readily the styles of the many composers, unless they are particularly interested in certain composers and certain compositions. If certain music remains in their minds, they will probably be able to identify the composer throughout most of his works, but still it is doubtful whether or not they can specify the details of how the music is written or played. It is not until students have actually played and experienced music of the various composers are they able to name immediately the composer and his exact style. Therefore, the student will not be
expected to integrate many principles of appreciation with Applied Music until the actual experience of playing music of the various composers. This should be done not later than the third year of Applied Music study, at which time the student should be technically proficient to advance to playing the styles of the many composers. The outline remains for examination and its contribution to the whole of this problem of integration.
History and Appreciation

I

Development of intelligent listening to various periods and styles of music, by the identifying steps of rhythms, melodies, timbre, harmony, dynamics, tempo, and polyphony.

Development of scale from one and two notes to the present tempered scale; overtone series.

Development of music in the early Christian Church; a survey of the history of the art, covering such phases as the Greek tetrachord, the modal scales, chants and hymns. Knowledge of the earlier forms of music.

II

Knowledge of all forms of music, including the following:

Vocal: opera, oratorio, passion, mass, cantata, motet, anthem, choral, aria.
Instrumental: overture, suite, sonata, concerto, canon, invention, prelude, choral-prelude, toccata, variation.

Knowledge of the works of the following composers, and the periods thereof:

Palestrina
The Netherlands, French and Venetian Schools: 1550-1600
Early Instrumental Music
Music of the 16th Century; 17th Century Music
The 18th Century Music
Bach

Classic Period

Haydn and Mozart, Handel, Beethoven-transition to

Romantic Period

Schubert, Mendelssohn
Program Music: Schuman and Chopin
Realism: Berlioz, Liszt, Wagner
Brahms

Nationalism

Grieg, Elgar, Smetana, Dvorak
Sibelius, Saint-Saens
Franck
Borodin, Rimsky-Korsakov
Moussorgsky, Tschaikowsky
Modernism

Hindemith, Debussy

Impressionism

Ravel, Delius, Dukas; Stravinsky

American Music

Secular, Folk, and Jazz
Harris, Hanson, Copland, Thompson, Sowerby, MacDowell, Carpenter

Summary

The average student of Applied Music learns the principles and elements of music in sight-singing and ear-training courses, in harmony, counterpoint and analytical courses, and in history and appreciation courses.

The hypothesis is offered that if the student of Applied Music can integrate the knowledge learned in theory courses to the actual study of his instrument, all points will remain more clearly pronounced in his mind, and the possibilities for achieving higher levels of musicianship will undoubtedly be favorable. Therefore, the points of theory should be integrated with technical problems of the instrument wherever possible, to offer the student the fullest advantages in his musical education and in his performance with an instrument.
CHAPTER IV

THE INTEGRATION OF TECHNICAL PROBLEMS WITH THEORETICAL PRINCIPLES

The integration of technical problems with theoretical principles constitutes the complete study course of the trombone as offered on the college level, and contains all principles set forth in the preceding pages. The integration of the two phases will be outlined by each year's minimum requirements of study on the trombone, attended by the materials and literature which will cover the specific problems.

The coordination of the physical actions of the lips, the tongue, the arm and lungs is directed to playing first, repeated notes, then static, and later, any other notes, sounding the legato and the detached attacks, first on one note, then on several notes in one position, and finally on different notes in the seven positions. This coordination further controls the sustaining of the tone, releasing the tone, and the development of flexibility and precision in playing the trombone.

From the principles of theory, these practices are incorporated by playing repeated notes, notes in intervals, in scales, and in chords and arpeggios; played in all dynamics from "pp" to "ff" in the entire range of the instrument prescribed for the first year; played in the basic meters of 2/4, 3/4, 4/4, 6/8, 2/2, 3/8, and 3/2; played at a minimum speed of M.M. $\text{♩} = 120$ for the first year, and also employing the styles of the marcato, staccato, sforzando and forte-piano attacks.
The study progresses through the bass, treble, tenor and alto clefs. It includes the knowledge and execution of embellishments such as the trill, the mordant, the appoggiatura, the gruppetti, and glissando, and covers the knowledge and practice of all rhythmic problems, form, and musical terms. The study culminates in the performance of music written for the trombone embracing the Classic, the Romantic, and Contemporary periods, and the exploration of styles used in the concert band, the symphonic orchestra, the dance orchestra, and solo playing.

The materials listed under each problem are designated as the materials which were found to cover all requirements and problems most completely, thoroughly, and satisfactorily for the average trombone student in the experience of the writer. The specific pages of the materials are listed for convenience in consulting specific problems and appropriate exercises. Following each year of requirements is a list of song and solo literature which is recommended for study and performance. This material has been graded into numbers from I to VIII, I representing the easier and simpler material, and VIII representing the material containing the most advanced problems and exercises for the trombone student.

The key to the publishers is listed at the conclusion of the course of study.
Minimum Requirements for the Study of Trombone, With the Integrated Principles of Theory and Technique

I

Theory

1. Knowledge of all intervals from minor seconds to tenths and twelfths.

2. Knowledge of all scales—major, relative minor, and chromatic.


5. Development of facility in reading chromatics and accidentals.

6. Knowledge of a minimum list of terms such as those pertaining to metronomic markings, tempo, and interpretation which are listed.

7. Knowledge of a minimum number of forms of music which are listed.


Technical Problems

1. Proper execution of the single tongue, the legato and detached attacks.

2. Development of the tongue on static notes and in scales and all intervals, M.M. $\frac{\text{d}}{\text{M}} = 120$.

3. Development of lip slurs, in intervals of thirds, fourths, fifths, sixths, and octaves.

4. Proper use of all alternate positions in all exercises.

5. The beginning of the development of the vibrato on static notes in the middle register of the trombone, at a speed of six vibrations per beat.

6. Exercises practiced should be concentrated in the range of low F to F above the bass staff.
Integrated Requirements

Range: low F to F above bass staff.

1. Proper execution of all lip slurs in intervals of thirds, fourths, fifths, sixths, and octaves. M.M \( \cdot = 96 \)

Material:

- **Arban**
- **Lafosse**
  - *Complete Method for Slide-Trombone*, pp. 36-47.
- **Mueller**
- **Shuebruk**

2. Knowledge and performance of major, relative minor and chromatic scales, using the single staccato, detached and legato attacks, at all dynamics from "pp" to "ff". M.M \( \cdot = 120 \)

Material:

- **Arban**
- **Blume**
- **Lafosse**
- **Mueller**
- **Pares**
- **Ronka**

3. Development of the single staccato on static notes, and in scales and all intervals. M.M \( \cdot = 120 \). (See No's 1 and 2 above.)

Material:

- **Ronka**
  - *Daily Lip Drills and Studies*, pp. 6-7
- **Shuebruk**

Material:

- **Blume**
  - 36 Studies for Trombone, Bk. I, pp. 3-6.
- **Lafosse**
  - Complete Method for Slide-Trombone, pp. 1-14. (See No's. 2 and 3 above.)

5. Knowledge and correct execution of the marcato, detached, staccato, legato, sforzando, and forte-piano attacks.

Material:

- **Lafosse**
- **Reinhardt**
  - Pivot System, all exercises.
- **Reinhardt**
  - Concone Studies, all exercises.
- **Shuebruk**
  - Graded Lip Trainers, Bk. II, pp. 7-11.
- **Shuebruk**
- **Slama**
  - 66 Etudes in all Major and Minor Keys, all exercises.

6. Development of the vibrato on static notes in the middle register of the trombone, at a speed of six vibrations per beat.

7. Knowledge and application of such terms as appear in the materials used, and the following:

<table>
<thead>
<tr>
<th>Term</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largo</td>
<td>( \frac{d}{4} = 42-66 )</td>
</tr>
<tr>
<td>Adagio</td>
<td>( \frac{d}{4} = 50-76 )</td>
</tr>
<tr>
<td>Lento</td>
<td>( \frac{d}{4} = 50-69 )</td>
</tr>
<tr>
<td>Allegretto</td>
<td>( \frac{d}{4} = 52-108 )</td>
</tr>
<tr>
<td>Accelerando</td>
<td>( \frac{d}{4} = 40-72 )</td>
</tr>
<tr>
<td>Ritardando</td>
<td>( \frac{d}{4} = 56-88 )</td>
</tr>
<tr>
<td>Rallentando</td>
<td>( \frac{d}{4} = 60-80 )</td>
</tr>
<tr>
<td>Ritenuto</td>
<td>( \frac{d}{4} = 66-132 )</td>
</tr>
<tr>
<td>A tempo</td>
<td>( \frac{d}{4} = 72-132 )</td>
</tr>
<tr>
<td>Crescendo</td>
<td>( \frac{d}{4} = 74-144 )</td>
</tr>
<tr>
<td>Decrescendo</td>
<td>( \frac{d}{4} = 76-144 )</td>
</tr>
<tr>
<td>Diminuendo</td>
<td>( \frac{d}{4} = 78-144 )</td>
</tr>
<tr>
<td>Piano - p</td>
<td>( \frac{d}{4} = 80-144 )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vivace</td>
<td>( \frac{d}{4} = 72-92 )</td>
</tr>
<tr>
<td>Con moto</td>
<td>( \frac{d}{4} = 80-160 )</td>
</tr>
<tr>
<td>Meno mosso</td>
<td>( \frac{d}{4} = 88-132 )</td>
</tr>
<tr>
<td>Risoluto</td>
<td>( \frac{d}{4} = 96-144 )</td>
</tr>
<tr>
<td>Maestoso</td>
<td>( \frac{d}{4} = 100-152 )</td>
</tr>
<tr>
<td>Expressivo</td>
<td>( \frac{d}{4} = )</td>
</tr>
<tr>
<td>Da capo</td>
<td>( \frac{d}{4} = )</td>
</tr>
<tr>
<td>Dal segno</td>
<td>( \frac{d}{4} = )</td>
</tr>
<tr>
<td>Simile</td>
<td>( \frac{d}{4} = )</td>
</tr>
<tr>
<td>Ad libitum</td>
<td>( \frac{d}{4} = )</td>
</tr>
<tr>
<td>Poca a poca</td>
<td>( \frac{d}{4} = )</td>
</tr>
<tr>
<td>Sforzando</td>
<td>( \frac{d}{4} = )</td>
</tr>
<tr>
<td>Tenuto</td>
<td>( \frac{d}{4} = )</td>
</tr>
</tbody>
</table>
8. Knowledge of the following forms of music, and any that appear in the materials used:

- polka
- serenade
- bolero
- waltz
- nocturne
- Mazurka
- march
- sonata form
- gavotte
- ballad
- chaconne
- romance
- barcarolle
- berceuse
- trio

9. The materials above to be played in all dynamics from "pp" to "ff."


Material:


11. Performance of songs and solo literature.

Literature recommended for study:

<table>
<thead>
<tr>
<th>Composer</th>
<th>Composition</th>
<th>Publisher</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bohme</td>
<td>Berceuse</td>
<td>CB</td>
<td>III</td>
</tr>
<tr>
<td>Bohme</td>
<td>Liebeslied</td>
<td>CB</td>
<td>II-III</td>
</tr>
<tr>
<td>Cords</td>
<td>Concert Fantasie</td>
<td>CB</td>
<td>III</td>
</tr>
<tr>
<td>Grafe</td>
<td>Grand Concerto</td>
<td>CB</td>
<td>IV</td>
</tr>
<tr>
<td>Donizetti</td>
<td>Romanza</td>
<td>GS</td>
<td>III</td>
</tr>
<tr>
<td>Giordani</td>
<td>Caro Mio Ben</td>
<td>GS</td>
<td>III</td>
</tr>
<tr>
<td>Handel</td>
<td>Where'er You Walk</td>
<td>GS</td>
<td>III</td>
</tr>
<tr>
<td>Pergolesi</td>
<td>Canzonetta</td>
<td>GS</td>
<td>III</td>
</tr>
<tr>
<td>Tschaikowsky</td>
<td>Valse Melancholique</td>
<td>BHB</td>
<td>II</td>
</tr>
<tr>
<td>Haydn (Shuman)</td>
<td>Adagio</td>
<td>Wit</td>
<td>III,IV</td>
</tr>
<tr>
<td>Llewellyn</td>
<td>Waltz, My Regards</td>
<td>CF</td>
<td>III</td>
</tr>
<tr>
<td>Martin</td>
<td>Elegy</td>
<td>CF</td>
<td>III</td>
</tr>
<tr>
<td>Martin</td>
<td>Novelette</td>
<td>CF</td>
<td>III</td>
</tr>
<tr>
<td>Pryor</td>
<td>The Supervisor</td>
<td>CF</td>
<td>III</td>
</tr>
<tr>
<td>Pryor</td>
<td>Tip-Topper</td>
<td>CF</td>
<td>IV</td>
</tr>
<tr>
<td>Pryor</td>
<td>La Petite Suzanne</td>
<td>CF</td>
<td>IV</td>
</tr>
<tr>
<td>Simons</td>
<td>Gondolier</td>
<td>CF</td>
<td>IV</td>
</tr>
<tr>
<td>Simons</td>
<td>The Volunteer</td>
<td>CF</td>
<td>IV</td>
</tr>
<tr>
<td>Smith</td>
<td>From Day to Day</td>
<td>CF</td>
<td>III</td>
</tr>
</tbody>
</table>
II

Theory

1. Knowledge of all melodic and harmonic minor scales.

2. Knowledge of all major and minor chords in all keys studied, and built on all degrees of the scale.

3. Development of reading in the tenor clef.

4. Knowledge of the trill, the mordant, and the appoggiatura.

5. Knowledge and performance of the rhythms of the Scotch snap, the double-dotted note values, 9/8 and 12/8 measures, the duplet in 6/8 and 6/4 meters, the 5/4 measure, and changing meters.

6. Knowledge of a minimum number of forms and musical terms which are listed.

Technical Problems

1. Proper execution of the double staccato.

2. Development of the super-legato in all intervals and scales.

3. Continued study of alternate positions.


5. Development of intervals of octaves, tenths, and twelfths.
Integrated Requirements

Range: low E to B♭, octave above staff.

1. Knowledge and performance of all melodic and harmonic scales, using the single staccato. M.M. $\boxed{\text{J}} = 130$

Material:

- Arban Arban's Complete Method, pp. 79.
- Mueller Technical Studies for Trombone, Bk. I, pp. 8-34.
- Ronka Daily Lip Drills and Studies, pp. 8-20.

2. Knowledge and performance of all major and minor chords in all keys studied, and built on all degrees of the scale, slurred and tongued. M.M. $\boxed{\text{J}} = 72$

Material:

- Arban Arban's Complete Method, pp. 151-152.
- Mueller Technical Studies for Trombone, pp. 6-7, 38-47.

3. Proper execution of the double staccato, first developed on repeated notes, then used in scales covered, and in chords and arpeggios.

Material:


4. Development of the super-legato in all intervals and scales.

Material:

5. The playing of exercises in the tenor clef.

Material:

Lafosse Complete Method for Slide-Trombone, pp. 68-86.
Tyrrell 40 Progressive Studies for Trombone, all exercises.

6. Performance of the trill, the mordant, and the appoggiatura.

Material:

Arban Arban's Complete Method, pp. 106-123.
Lafosse Complete Method for Slide-Trombone, pp. 104-123.
Stacy Technical Studies for the Slide-Trombone, p. 11.

7. Development of intervals of octaves, tenths, and twelfths.

Material:

Shuebruk Graded Lip Drills, Bk. II, pp. 7-11.
Stacy Technical Studies for the Slide-Trombone, pp. 11-19.

8. Continued use of all alternate positions; development of the vibrato in scales and songs.

Material: See No. 6 in 1st year.

9. Knowledge and application of all terms and forms as appear in the material studied, and the following:

Terms

larghetto senza larghissimo subito
g rave tempo rubato largando tutti
stringendo agitato piu lento recitative
cantabile con sordine piu allegro a piacere
animato sempre con fuoco grazioso
amoroso pomposo con brio energico
assai furioso ma non troppo alla marcia
con

48
<table>
<thead>
<tr>
<th>Composer</th>
<th>Composition</th>
<th>Publisher</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hassler</td>
<td>Concerto (Allegro)</td>
<td>CB</td>
<td>IV</td>
</tr>
<tr>
<td>Hoch</td>
<td>Fantasie Concertante</td>
<td>CF</td>
<td>IV, V</td>
</tr>
<tr>
<td>Morel</td>
<td>Piece in F minor</td>
<td>MB</td>
<td>IV, V</td>
</tr>
<tr>
<td>Muhlfeld</td>
<td>Concertstück</td>
<td>BHB</td>
<td>V</td>
</tr>
<tr>
<td>Nowakowsky</td>
<td>Concertino</td>
<td>CB</td>
<td>V</td>
</tr>
<tr>
<td>Pfeiffer</td>
<td>Solo de Trombone</td>
<td>And</td>
<td>V</td>
</tr>
<tr>
<td>Rousseau</td>
<td>Piece Concertante</td>
<td>CB</td>
<td>IV</td>
</tr>
<tr>
<td>Sachse</td>
<td>Concertino</td>
<td>CB</td>
<td>V</td>
</tr>
<tr>
<td>Cimera</td>
<td>Eolian Collection of Trombone Solos</td>
<td>CMPH</td>
<td>III-VII</td>
</tr>
<tr>
<td>Gaubert</td>
<td>Cantabile et Scherzetto</td>
<td>CB</td>
<td>V</td>
</tr>
<tr>
<td>Gaubert</td>
<td>Morceau Symphonique</td>
<td>And</td>
<td>V</td>
</tr>
<tr>
<td>Guilmant</td>
<td>Morceau Symphonique</td>
<td>GHM</td>
<td>IV</td>
</tr>
<tr>
<td>Niverd</td>
<td>Legende</td>
<td>And</td>
<td>IV</td>
</tr>
<tr>
<td>Pryor</td>
<td>Thoughts of Love</td>
<td>CF</td>
<td>V</td>
</tr>
<tr>
<td>Pryor</td>
<td>The Patriot, Polka</td>
<td>CF</td>
<td>V</td>
</tr>
<tr>
<td>Pryor</td>
<td>Fantastic Polka</td>
<td>CF</td>
<td>V</td>
</tr>
<tr>
<td>Pryor</td>
<td>The Little Chief</td>
<td>CF</td>
<td>VI</td>
</tr>
<tr>
<td>Pryor</td>
<td>Blue Bells of Scotland</td>
<td>CF</td>
<td>VI</td>
</tr>
<tr>
<td>Rollinson</td>
<td>Columbia, Fantasia Polka, Op. 345</td>
<td>OD</td>
<td>V</td>
</tr>
<tr>
<td>Saint-Saens</td>
<td>Cavatine</td>
<td>And</td>
<td>IV, V</td>
</tr>
<tr>
<td>Simons</td>
<td>Atlantic Zephyrs</td>
<td>CF</td>
<td>V</td>
</tr>
<tr>
<td>Blazewitch</td>
<td>Concerto No. 2</td>
<td>CB</td>
<td>V</td>
</tr>
<tr>
<td>Duclos</td>
<td>Doubles sur un Choral</td>
<td>And</td>
<td>V</td>
</tr>
<tr>
<td>Leclercq</td>
<td>First Concertino</td>
<td>And</td>
<td>V</td>
</tr>
<tr>
<td>Vobaron</td>
<td>Solo with Piano</td>
<td>MB</td>
<td>V, VI</td>
</tr>
<tr>
<td>Busser</td>
<td>Concert Etude</td>
<td>MB</td>
<td>V, VI</td>
</tr>
<tr>
<td>Busser</td>
<td>Phoebus, Variations</td>
<td>MB</td>
<td>V, VI</td>
</tr>
<tr>
<td>Barat</td>
<td>Piece in B♭</td>
<td>MB</td>
<td>V</td>
</tr>
</tbody>
</table>
III

Theory

1. Knowledge of dominant seventh and diminished seventh chords.
2. Development of reading in the alto clef.
3. Knowledge and reading ability of the whole-tone scales.
4. Knowledge of the grupetti.
5. Knowledge of a minimum number of forms and interpretative terms, including those currently used in the materials of study.
6. Knowledge and performance of rhythms of the following: changing measure meters, grouping of 2, 4, 5, 6, and 7 notes per beat, cross rhythms, sub-divided triplets, and more difficult groupings of notes per beat.
7. Exploration of attacks and styles used in Classic, Romantic, and Contemporary periods.

Technical Problems

1. Proper execution of the triple staccato.
2. Continued development of the super-legato and the vibrato.
3. The use of all alternate positions.
4. Execution of pedal notes and glissandos.

Integrated Requirements

Range: low E to D♭, octave above staff.


Material:

<table>
<thead>
<tr>
<th>Author</th>
<th>Book Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arban</td>
<td>Arban's Complete Method</td>
<td>156-160</td>
</tr>
<tr>
<td>Lafosse</td>
<td>Complete Method for Slide-Trombone</td>
<td>87-92, 168-173</td>
</tr>
<tr>
<td>Mueller</td>
<td>Technical Studies for Trombone, Bk. I</td>
<td>38-52</td>
</tr>
<tr>
<td>Shuebruk</td>
<td>Daily Technical Exercises</td>
<td>38-41</td>
</tr>
</tbody>
</table>
2. Proper execution of the triple staccato on repeated notes, in scales, and in chords and arpeggios.

Material:


4. Knowledge and performance of the grupetti, pedal notes, and glissandos.

Material:

Arban Arban's Complete Method, pp. 91-105.

5. Study of exercises in the alto clef.

Material:

Mantia The Trombone Virtuoso, pp. 95-113.
Blazewitch Sequences for Trombone, all exercises.

6. Performance of rhythms of the following: changing measure meters, the groupings of 3, 4, 5, 6, and 7 notes per beat, cross rhythms, and sub-divided triplets.

Material:

Blazewitch Sequences for Trombone, all exercises
Blazewitch Concert Duets, all exercises
Mantia The Trombone Virtuoso, pp. 106-113.

7. Knowledge and application of forms and terms as appear in the materials studied, and the following:

<table>
<thead>
<tr>
<th>Terms</th>
<th>Terms</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>adagissimo</td>
<td>adagietto</td>
<td>allegrissimo</td>
</tr>
<tr>
<td>lentissimo</td>
<td>prestissimo</td>
<td>vivacissimo</td>
</tr>
<tr>
<td>affrettando</td>
<td>obbligato</td>
<td>calore</td>
</tr>
<tr>
<td>slentando</td>
<td>allargando</td>
<td>caloroso</td>
</tr>
<tr>
<td>lentando</td>
<td>morendo</td>
<td>dolcissimo</td>
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<tr>
<td>calando</td>
<td></td>
<td>c almato</td>
</tr>
</tbody>
</table>
8. Exploration of attacks and styles used in the Classic, the Romantic, and the Contemporary periods.


Literature recommended for study:

<table>
<thead>
<tr>
<th>Composer</th>
<th>Composition</th>
<th>Publisher</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>David</td>
<td>Concertino, Op. 4</td>
<td>CB</td>
<td>V</td>
</tr>
<tr>
<td>Magnan</td>
<td>Concerto</td>
<td>CB</td>
<td>V</td>
</tr>
<tr>
<td>Reiche</td>
<td>Concert Piece No. 2</td>
<td>BHB</td>
<td>VI</td>
</tr>
<tr>
<td>Arndt</td>
<td>Nola</td>
<td>SF</td>
<td>V, VI</td>
</tr>
<tr>
<td>Stojowski</td>
<td>Fantasie</td>
<td>MB</td>
<td>VI</td>
</tr>
<tr>
<td>Barat</td>
<td>Andante et Allegro</td>
<td>CB</td>
<td>V, VI</td>
</tr>
<tr>
<td>Bibaut</td>
<td>Le Carnabalde Venice</td>
<td>And</td>
<td>V</td>
</tr>
<tr>
<td>Bonneau</td>
<td>Concert Piece</td>
<td>MB</td>
<td>VI</td>
</tr>
</tbody>
</table>

IV

Theory

1. Development of facility in reading studies in changing clefs.

2. Exploration of styles used for concert band, symphonic orchestra, and dance orchestra.

3. Knowledge of forms and musical terms currently used in the materials of study.

4. Knowledge of the more difficult syncopations and compound measures, and changing rhythms.

Technical Problems

1. Proper execution of the quadruple staccato.

2. Further development of playing wide intervals, and changing staccato tonguing.
Integrated Requirements

1. Proper execution of the quadruple staccato on repeated notes, in scales and arpeggios.

2. Development of facility in playing studies in changing clefs, and changing rhythms.

Material:

Blazewitch
Sequences for Trombone, all exercises.

Blazewitch
Concert Duets for Two Trombones, all exercises.

Lafosse
Suites de J. S. Bach, adapted for Tenor Trombone, all exercises.

Mantia
The Trombone Virtuoso, pp. 105-113.

3. Further development of playing wide intervals and changing staccato.

4. Exploration of styles used for concert band, symphonic orchestra, and dance orchestra.

5. Performance of songs and solo literature.

Literature recommended for study:

<table>
<thead>
<tr>
<th>Composer</th>
<th>Composition</th>
<th>Publisher</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ciméa</td>
<td>Eolian Collection of Trombone Solos</td>
<td>CMPH</td>
<td>III-VII</td>
</tr>
<tr>
<td>Glover</td>
<td>Solo Books No. 1 &amp; 2</td>
<td>BHB</td>
<td>III-VII</td>
</tr>
<tr>
<td>Bachelet</td>
<td>Concours Solo</td>
<td>MB</td>
<td>VI, VII</td>
</tr>
<tr>
<td>Barthe</td>
<td>Solo de Concours (1894)</td>
<td>MB</td>
<td>VI, VII</td>
</tr>
<tr>
<td>Bigot</td>
<td>Impromptu Concours Solo</td>
<td>MB</td>
<td>VI, VII</td>
</tr>
<tr>
<td>Bozza</td>
<td>Ballade</td>
<td>MB</td>
<td>VI</td>
</tr>
<tr>
<td>Delcroix</td>
<td>Piece Romantique, Op. 53</td>
<td>MB</td>
<td>VI</td>
</tr>
<tr>
<td>Desportes</td>
<td>Fantasie in Bb</td>
<td>CB</td>
<td>VI</td>
</tr>
<tr>
<td>Hindemith</td>
<td>Sonata for Trombone and Piano</td>
<td>AMP</td>
<td>VII, VIII</td>
</tr>
<tr>
<td>Mazellier</td>
<td>Concours Solo</td>
<td>MB</td>
<td>VI</td>
</tr>
<tr>
<td>De la Nux</td>
<td>Sur le lac, Barcarolle</td>
<td>MB</td>
<td>VI</td>
</tr>
<tr>
<td>Vidal</td>
<td>Second Concert Solo</td>
<td>MB</td>
<td>VI</td>
</tr>
<tr>
<td>Composer</td>
<td>Composition</td>
<td>Publisher</td>
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CHAPTER V

SUMMARY

An investigation was made of the present status of Applied Music in colleges, revealing that colleges in general lacked standards which justify the grading, examination, and crediting of students in Applied Music. The writer decided to analyze the contents of courses in theory, history, and performance, which constitutes music training and contains the essentials, both technical and theoretical, of artistic performance. The next step was to develop a standard for the crediting of one instrument—the trombone—at college level, with the supposition that similar standards could be efficiently organized for any and all instruments.

The raison d'être for such a standard is manifest: first, the student of Applied Music encounters the various techniques of an instrument in a chronological order progressing from the easiest to the most difficult of technical problems. Second, the student of Applied Music encounters problems of musicianship in playing an instrument, and encounters them either simultaneously with his theoretical instruction or at a time when his musical background is sufficient to understand them. These points of musicianship, or principles of theory, are offered in other music courses which the student of music is required to study. By thoroughly analyzing and then integrating the applied and theoretical study, we are enabled to organize a complete course of study for the trombone, including all technical
problems, theoretical instruction, and musical literature, which pertain to the expression of music on the trombone. The presence of these factors in courses offered in definite periods of the college curricula further enable us to organize the standard into yearly minimum requirements, which create a basis for adequately examining, grading, and crediting the student of trombone at college level.

The creation of similar standards for all instruments, adopted by all colleges and universities offering courses in Applied Music, would help to raise the standard of Applied Music to the level of other college subjects, by offering students complete, scientifically organized standards for instrumental study. The result would be higher educational values in music, and a higher level of performance by the students.

The course of study outlined in Chapter IV is the summary of this problem.
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