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Jean Baptiste

# Arban

Complete Conservatory  
Method for CC Tuba

Revised for Tuba by Mike W. Roylance

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**Arban**  
Complete Conservatory  
Method for CC Tuba

Revised for Tuba by  
Mike W. Roylance

**Contains:**

Arban's Complete Method Revised for Tuba  
The Art of Phrasing (150 Songs and Operatic Airs)  
68 Duets for Two Tubas  
14 Characteristic Studies  
12 Celebrated Fantaisies and Airs Variés

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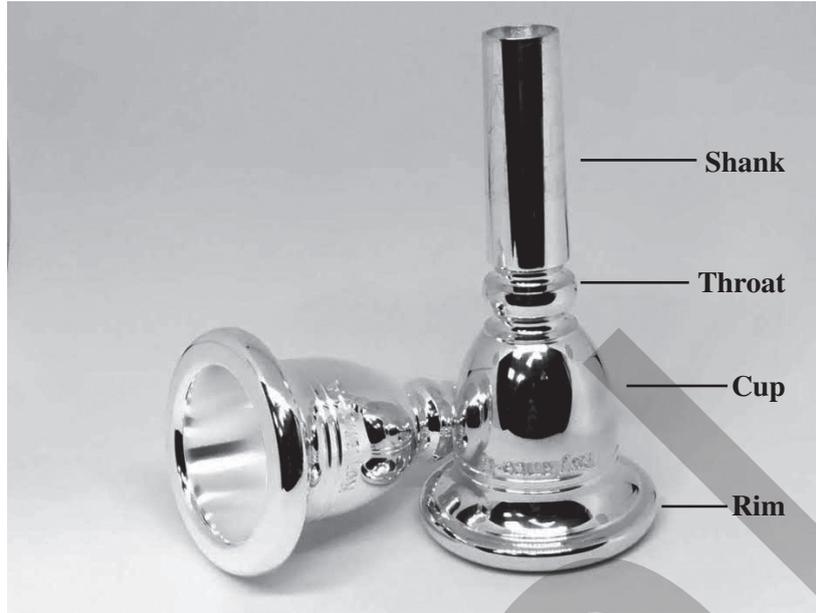
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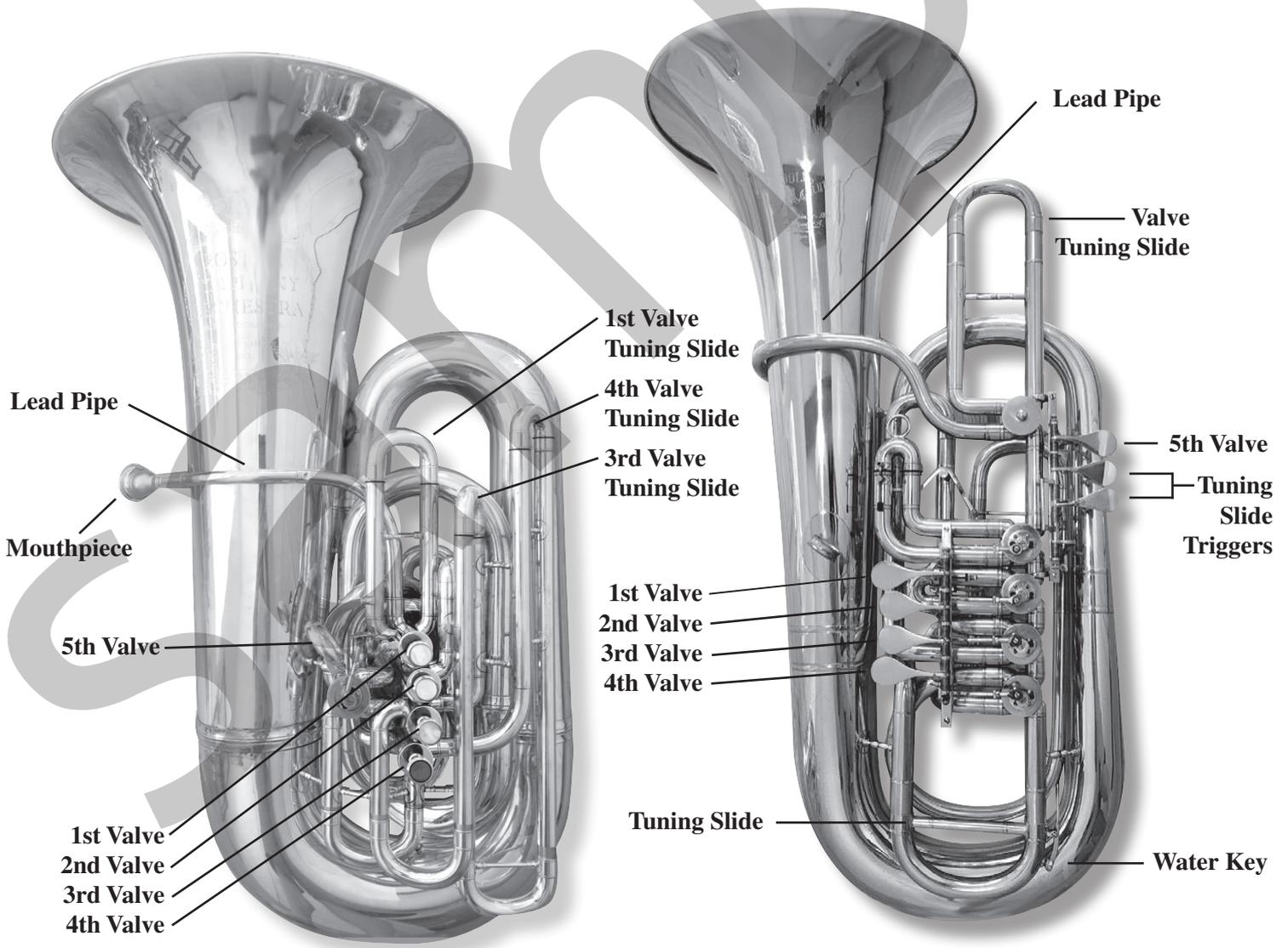
# Contrabass Tuba Fingering Chart

	B $\flat$ /A $\sharp$	B	C	C $\sharp$ /D $\flat$	D	E $\flat$ /D $\sharp$	E	F
CC Tuba	1	2	0	51234	5234-1234	534	234-514	54-124-513
BB $\flat$ Tuba	0	1234	1234	134	234	124-14	24-123	4-13
	F $\sharp$ /G $\flat$	G	G $\sharp$ /A $\flat$	A	B $\flat$ /A $\sharp$	B	C	C $\sharp$ /D $\flat$
CC Tuba	523-24	4-13	23	2	1	2	0	523-24
BB $\flat$ Tuba	23	12-3	1	2	0	24-123	4-13	23
	D	E $\flat$ /D $\sharp$	E	F	F $\sharp$ /G $\flat$	G	G $\sharp$ /A $\flat$	
CC Tuba	4-13	23	12-3	1	2	0	23	
BB $\flat$ Tuba	12-3	1	2	0	23	12-3	1	
	A	B $\flat$ /A $\sharp$	B	C	C $\sharp$ /D $\flat$	D	E $\flat$ /D $\sharp$	
CC Tuba	12-3	1	2	0	12	1-13-4	2-23	
BB $\flat$ Tuba	2	0	12	1-13-4	2-23	0-12	1	
	E	F	F $\sharp$ /G $\flat$	G	G $\sharp$ /A $\flat$	A	B $\flat$ /A $\sharp$	
CC Tuba	0-12	1	2	0	23	12-3	1	
BB $\flat$ Tuba	2	0	23	12-3	1	2	0	
	B	C	C $\sharp$ /D $\flat$	D	E $\flat$ /D $\sharp$	E	F	
CC Tuba	2	0	12	1-0	2	0	1	
BB $\flat$ Tuba	12	1-0	2	0	1	2	0	
	F $\sharp$ /G $\flat$	G	G $\sharp$ /A $\flat$	A	B $\flat$ /A $\sharp$	B	C	
CC Tuba	2	0	23	12	1	2	0	
BB $\flat$ Tuba	23	12	1	2	0	12-2	1-0	

# Diagrams of the Tuba



## Tuba Mouthpieces



5-Valve C-Tuba

5-Valve F-Tuba

# Overtone Chart

The chart displays the following partials and their characteristics:

- 12th Partial (Sharp; lower slightly)
- 11th Partial (Very flat; unusable)
- 10th Partial (Flat; raise slightly)
- 9th Partial (Sharp; lower slightly)
- 8th Partial (Normal)
- 7th Partial (Very flat; unusable)
- 6th Partial (Sharp; lower slightly)
- 5th Partial (Flat; raise slightly)
- 4th Partial (Normal)
- 3rd Partial (Sharp; lower slightly)
- 2nd Partial (Normal)
- Fundamental (Normal)

Fingering combinations listed at the bottom:

- 0
- 2
- 1
- 1-2, 3-5, 5-2
- 2-3, 5-1
- 4, 1-3, 5-1-2
- 2-4, 1-2-3, 5-2-3
- 5-4, 1-2-4, 1-4, 5-1-3
- 2-3-4, 5-1-4
- 5-3-4, 1-3-4
- 1-2-3-4, 5-2-3-4, 5-1-3-4
- 1-2-3-4-5, 5-1-2-3 \*

\* Not present on four-valve tubas. False tones only.

It may appear somewhat strange to undertake the defense of the cornet at a time when this instrument has given proof of its excellence, both in the orchestra and in solo performance, where it is no less indispensable to the composer, and no less liked by the public than the flute, the clarinet, and even the violin; where, in short, it has definitely won for itself the elevated position to which the beauty of its tone, the perfection of its mechanism and the immensity of its resources, so justly entitle it.

But this was not always the case; the cornet was far less successful when it first appeared; and, indeed, not many years ago, the masses treated the instrument with supreme indifference, while that time-honored antagonist—routine—contested its qualities, and strove hard to prohibit their application. This phenomenon, however, is of never-failing recurrence at the birth of every new invention, however excellent it may be, and of this fact the appearance of the saxhorn and the saxophone, instruments of still more recent date than the cornet, gave a new and striking proof.

The first musicians who played the cornet were, for the most part, either horn or trumpet players. Each imparted to his performance the peculiarities resulting from his tastes, his abilities and his habits, and I need scarcely add that the kind of performance which resulted from so many incomplete and heterogeneous elements was deficient in the extreme, and, for a long while, presented the lamentable spectacle of imperfections and failures of the most painful description.

Gradually, however, matters assumed a more favorable aspect. Performers really worthy of the name of artists began to make their appearance. However, regardless of the brilliant accomplishments of such performers, they could not deny the faults of their original training, viz., the total lack of qualifications necessary for ensemble playing, and decided musicianly tendencies. Some excited admiration for their extreme agility; others were applauded for the expression with which they played; one was remarkable for lip; another for the high tone to which he ascended; others for the brilliancy and volume of their tone. In my opinion, it was the reign of specialists, but it does not appear that a single one of the players then in vogue ever thought of realizing or of obtaining the sum total of qualities which alone can constitute a great artist.

This, then, is the point upon which I wish to insist, and to which I wish to call particular attention. At the present time, the incompleteness of the old school of performers is unanimously acknowledged, as is also the insufficiency of their instruction. That which is required is methodical execution and methodical instruction. It is not sufficient to phrase well or to execute difficult passages with skill. It is necessary that both these things should be equally well done. In a word, it is necessary that the cornet, as well as the flute, the clarinet, the violin, and the voice, should possess the pure style and the grand method of which a few professors, the Conservatory in particular, have conserved the precious secret and the salutary traditions.

This is the aim which I have incessantly kept in view throughout my long career; and if a numerous series of brilliant successes obtained in the presence of the most competent judges and the most critical audiences, give me the right to believe that I have, at any rate, approached the desired end, I shall not be laying myself open to the charge of presumption, in confidently entering upon the delicate mission of transmitting to others the results of my own thorough studies and assiduous practice.<sup>1</sup> I have long been a professor, and this work is to a certain extent merely the résumé of a long experience which each day has brought nearer to perfection.

My explanations will be found as short and clear as possible, for I wish to instruct and not to terrify the student. Long pages of “text” are not always read, and it is highly advantageous to replace the latter by exercises and examples. This is the wealth which I consider cannot be too lavishly accumulated; this is the source which can never be too plentifully drawn from. This, however, will be perceived from the extent of the present volume, in which, in my opinion, will be found the solution of all difficulties and of all problems.

I have endeavored throughout to compose studies of a melodic nature, and in general to render the study of instrument as agreeable as possible. In a word, I have endeavored to lead the pupil, without discouragement, to the highest limits of execution, sentiment and style, destined to characterize the new school.

—Jean Baptiste Arban

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<sup>1</sup> The results which I have obtained in France, Germany and England victoriously plead the cause of the cornet, and prove that the latter can compete with the most popular of instruments. In a concert given by the “Societe des Concerts du Conservatoire” in 1848, I played the famous air for the flute composed by Boehme on a Swiss theme, comprising, as is well known, an intentional combination of enormous difficulties. From that day forth I may say the cornet took its place among classic instruments. In the piece of music just alluded to, I performed the flute tonguing in double staccato, also the triple staccato, which I am the first to have applied to the cornet.

## Editor's Note

For generations, Arban's Complete Conservatory Method for Trumpet and Arban's Famous Method for Trombone have been imparting the compulsory skills needed to become proficient brass players and competent musicians. As the most widely used method books for trumpet and trombone, innumerable trumpet, horn, trombone and tuba players have spent countless hours studying and practicing from these method books. While Arban's trumpet method book was first published in 1864, and the trombone edition was launched in 1936, this is the first edition published by Carl Fischer specifically for the tuba.

My intent is to preserve the comprehensive material found in the Arban trumpet book and to augment and clarify this information so that it is applicable for the modern tubist. This book can be used for any keyed tuba, but is specifically set for the CC contrabass tuba. Throughout my career, I have utilized the Arban method book as a student, teacher, and as a problem solver. With exacting clarity, Arban brings to life the many fundamental aspects of playing a brass instrument through targeted exercises. These studies are the building blocks to a successful career as a tuba player; not only teaching the student the specific task at hand but also guiding the player to develop his or her own exercises in order to learn a new skill or to refine an old skill on their instrument.

Practice efficiently and astutely. Remember the three primary elements of music; time, pitch and rhythm, and never stop honing these elements, as they are essential to your success as a musician. These primary elements on your tuba are learned skills that will become better through slow,

purposeful practicing. Make constant use of a metronome to develop steady time and rhythm. Begin exercises at tempi that are not beyond your abilities. Wait until you are able to play them with proficiency and then slowly increase your speed. Sing, buzz and play with a drone to develop your sense of pitch, as well as tone quality. Paying close attention and actively listening to yourself while you are practicing will expose areas in need of practicing. If you feel fatigue or feel pain from your playing, take a break and rest. Practicing when you are tired will surely lead to injury and produce minimal, if not negative results.

Listen to and study as many types of music as you can. Today's successful tuba player needs to be competent in many styles of music. Find great musicians on different instruments and listen to them, preferably live, in concert. Actively listen for the very things that you are working on; time, pitch, rhythm and musicianship. Successful artists have all had to learn these same skills that you are working on in this Arban book. Realize that triumph comes with perseverance. Great musicians all have grit and staying power...never stop practicing, and never stop making music!

Thanks to the following people for their parts in bringing this edition of the Arban Book for Tuba to life: my wife, Amanda Roylance, an amazing teacher, musician and trumpet player. My teachers and colleagues: Gene Pokorny, Floyd Cooley, Sérgio Caolino, Claude Kashnig, Robert Carpenter, James Jenkins, Eli Newberger, Dennis Nulty, Zachary deVries and Kevin Bock. A huge thanks to my lifelong friend, Larry Clark, for asking me to bring this Arban Tuba Method book to life.

—Mike W. Roylance

## About Jean Baptiste Arban

Joseph Jean Baptiste Laurent Arban was born at Lyons, France, February 28, 1825. He entered the Conservatory at an early age, taking up the study of the trumpet under François Dauverné, and won first prize in 1845. His military term was spent in navy on board the “La Belle Poule,” whose chief musician, Paulus, became Chief Musician of the *Garde a Paris* during the reign of Napoleon III.

After having been professor of saxhorn at the Military School (1857), Arban was elected professor of cornet at the Conservatory in 1869. After attending to these duties for a period of five years, he left the Conservatory for six years, returning again in 1880.

He was the most brilliant cornet player of his time, and his astonishing performance and triumphant concert tours throughout Europe were the means of establishing the valve cornet as one of the most popular of all musical instruments. Arban’s artistic ideals, sound musicianship and invaluable instructive principles were perpetuated in his splendid *Method for the Cornet*, which has succeeded in maintaining the very highest position among similar instructive works and which has never been surpassed in point of practical superiority or artistic plan.

Arban died at Paris on April 9, 1889. He was an officer of the Académie, Knight of the Order of Leopold of Belgium, of Christ of Portugal, of Isabella the Catholic, and of the Cross of Russia.



Joseph Jean Baptiste Laurent Arban  
1825 - 1889

## About Mike W. Roylance

Mike W. Roylance is the principal tuba of the Boston Symphony Orchestra, joining in 2003. Previously, Mr. Roylance has performed with the Chicago Symphony Orchestra, Minnesota Orchestra and Seattle Symphony Orchestra. Prior to joining the Boston Symphony Orchestra, he was a member of Walt Disney World's "Future Corps" in Orlando, Florida. Being well-versed in many styles of music, Mr. Roylance also enjoyed a diverse and celebrated freelance career including performances and masterclasses throughout Europe, China and Japan.

He has been a featured soloist with the Boston Symphony Orchestra, the Boston Pops, the US Coast Guard Band and has ushered in many new works, including his critically acclaimed premiere of Gunther Schuller's Tuba Concerto No. 2. and his brilliant recording featuring tangos of Piazzolla and *Teutonic Tales*, a new work for tuba written for him by Robert W. Smith.

On faculties at Boston University and the New England Conservatory of Music as well as the Tanglewood Music Center, Mr. Roylance is an active teacher, coach and chamber musician. He has presented masterclasses and recitals at numerous locations around the United States and is often called upon as an audition coach. Additionally, he founded and directs the tuba/euphonium workshop at the Boston University Tanglewood Institute.

Mr. Roylance is on the advisory board of Kids 4 Harmony, an El Sistema-inspired program based in Pittsfield, Massachusetts, which transforms the lives of children by providing them with the opportunity to learn and play orchestral music at no cost to them. He received his Bachelor of Music degree from Rollins College in Winter Park, Florida and his Master of Music degree at DePaul University in Chicago. An avid pilot with an instrument rating and an active cyclist, Mike W. Roylance lives in Boston with his wife Amanda and their three daughters.



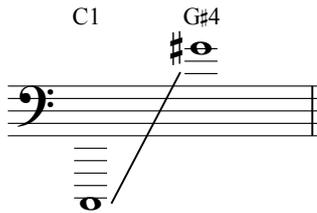
Mike W. Roylance

# Introduction

## by Mike W. Roylance

### Range

A modern tubist will be required to play from below pedal C (C1) all the way to Bydlo's famous G#4 above middle C (C4) from Mussorgsky's *Pictures at an Exhibition* (in the Ravel orchestration):



The majority of performance repertoire written for the instrument lies within a comfortable range from E#1 to E4 (found in Wagner's famous Overture to *Die Meistersinger*) just above middle C. With the advent of four-, five- and six-valve tubas alongside great improvements in the performer's abilities and repertoire, a college performer today would be expected to operate a three-and-a-half octave range, and a top professional is expected to maintain a four-and-a-half octave range. The high range and pedal ranges must be worked on daily as an integral component of your entire fundamental package.

### Alternate Fingerings

Referring to the Contrabass Tuba Fingering Chart on page 4, be prepared to try many different fingerings for the same note finding the best solution(s) for pitch, tone color and ease of play that suit you and your instrument the best.

### Tuning Slide

Most modern tubas have many slides that are in an easy position to adjust while playing. I am not referring to the main tuning slide, but to one or all of the valve slides available for fine tuning. These slides should be easy to move but not so slippery as to move back to their original position when your hand is removed. A bottom of the staff F played with the first valve may be in tune, but the D3, two partials up, will often be flat, requiring you to push this slide in only for that note. Take considerable time to learn your instrument's pitch tendencies so that you can fine-tune each and every note.

### Mouthpiece Position

The tubist's mouthpiece should be placed so that the embouchure formed inside the mouthpiece is approximately half top lip and half bottom lip. This may change as the player goes into extreme high and low ranges, but a good starting point is half top lip, half bottom lip, with the corners of the mouth pointing downward. With large leaps in range, it may be necessary to move slightly the position of your mouthpiece. As I play higher, I tend to use more upper lip in the mouthpiece, and the opposite is true as I go lower.

### Articulation

In addition to musical imagination, concept of sound and goals, there are three physical elements to starting a note on any brass instrument: wind, buzz and optionally the tongue. Learn how to dependably start notes with breath attacks first and then later add the tongue to the equation, making sure that tongue is the first of the three elements to start the note. For example, breath attack the following notes, making sure to synchronize the timing of the air and the buzz so that neither precedes the other:



Throughout this book, alternate starting notes with "toh," "tah," "doh," and "dah" to develop clarity of articulation balanced with great quality of sound.

I have always envisioned the act of articulating a note on any brass instrument as that of the striking of a ball-peen hammer. There is no "end-all" syllable to use in articulating although the desired result of the syllable you choose should be that the tongue remains down, back, and low inside your mouth. This is so that the tongue is least obstructive to the airflow as possible. I have found that using the vowel sounds "ahh" and "ohh" lowered tongue most effectively. Any tongue position that results in the rising up of the tongue (for example, "ee" or "I") will hinder the flow of air, resulting in a diminished sound quality. Placing the letter "T" as opposed to the letter "D" in front of these syllables will dramatically increase your clarity and immediacy of sound. "Toh" and "tah" can be supplemented by "doh" and "dah" for some legato passages:



Other great books to work on articulation are *Top Tones* by Walter Smith, as well as the Clarke studies.

### Breathing

Proper breathing technique is essential to all tubists regardless of their physical size or vital capacity. The most successful method for breathing effectively and efficiently is to breathe from the bottom first. Make sure that you are sitting or standing with good posture along with minimal muscular tension and initiate your breath. The diaphragm descends, and the abdominal wall should extend outward working to fill the lower portion of the lungs with air first. Continue to breathe filling the middle and then lastly the upper part of your lungs, allowing your chest cavity to expand. Be careful not to allow your shoulders to rise intentionally, decreasing your vital capacity. When you exhale, do so in the same order: bottom to top imagining wind rushing in and out, passing over your lips.

Always practice your tuba with full capacity breaths unless you have very soft passages of very short duration. A good example of proper breathing technique can be seen in babies, as they are breathing uninhibited by incorrect habits. As your excellent breathing process becomes a saved habit, you will expand and contract very quickly like a balloon. This will eventually happen without cognitive participation, becoming a natural part of your breathing process. A great source of information on the subject of breathing is the book *Science of Breath* by Yogi Ramacharaka. Try to never catch yourself in a position of negative returns by allowing your quantity of air to deplete to the point where you are unable to support the note effectively. Become very strategic when you take your breaths. Breathe musically so as not to interrupt a phrase, but also breathe often enough to stay ahead of entering the land of negative returns.

### Style and Tone

Take time to understand the importance of using a musical vibrato. On notes of significance, use appropriate amounts of vibrato by moving your jaw up and down while playing the tone. This will create a “woo-woo-woo-woo-woo” effect in your sound and can give you greater control over your vibrato.

Having a beautiful tone or color of your sound is a compulsory element in your development as a tuba player. Tuba players young and old should approach every note they play with great importance placed on the quality of their sound. A powerful way in which to develop good tone color is by systematic buzzing on your mouthpiece. I would suggest as you go through this book, first sing, then buzz each exercise on the mouthpiece with a piano or drone. While buzzing, check that the corners of your embouchure are downward while buzzing the exercise at a dynamic of *mf+*, striving for great vibrancy in your sound. Immediately follow this with playing the exercise on the instrument. Establishing this technique of buzzing the mouthpiece followed by playing the exercise on the instrument, all with the aid of a tone generator AND metronome, will quickly propel you in developing your tone color, musicianship skills and endurance.

# I. First Studies

## Explanatory Notes on the First Studies

In Study No. 1 start or “attack” the sound by pronouncing the syllable “tu;” keep it well sustained and at the same time give it all the strength and brilliancy possible. (See footnote no. 13.)

Under no circumstances should the cheeks ever be puffed out nor should the lips make noise in the mouthpiece even though many performers appear to think otherwise. The sound forms itself; it should be “struck” firmly using proper lip tension so as to be accurately in tune.

Studies nos. 7 and 8 deal with all of the notes produced by using the same valves. Studies nos. 9 and 10 take the student through all of the keys and so the required fingerings have been thoroughly indicated. These lessons should be practiced over a long period so that the student may become completely secure with the fingering of the instrument. From this point on it will not be necessary to mark the numbers of the valves under each note although fingerings will appear in passages throughout the book where it will facilitate a performance.

Throughout Studies nos. 1–50, be sure to strike each sound and give each note its full value.

## Syncopation

Syncopation occurs when the accent falls upon the light instead of the heavy beat of a measure. Always remember that the accented note must be sustained throughout its full value and, while the beginning of the note should be duly marked, the second half of the duration of a note should never be cut short.

Many students have great difficulty mastering syncopation. Study carefully the solution of the rhythm problem appearing over each study. A passage of this kind should be played as follows:

And not:

## Rhythmic Figure

In these studies the eighth note should be held for its full value. Be sure never to substitute a rest for the dot. The player should play:

And not as though it were written:

## Rhythmic Figure

In order to lend lightness to these studies, the first eighth note should be played in a shorter manner than its indicated value. It should be executed like a sixteenth note with a rest being introduced between it and the two sixteenths which follow it. The passage is written:

And should be played thus:

The same applies to an eighth note following, instead of preceding, the sixteenth.

Written:

Should be played thus:

Written:

Should be played thus:

## 6/8 Meter

In 6/8 time, the eighth notes should be well separated, and should have equal value allotted to each of them. Consequently, the third eighth note in each measure should never be dragged out as some players are inclined to do.

Dotted eighths, and eighths followed by sixteenths are played in this rhythm, by observing the same rules discussed above in 2/4 time.



7. *simile*

toh \* , , \* , , \* , , toh \* , , \* , , \* , , \*

toh \* , , \* , , \* , , toh \* , , \* , , \* , , \*

toh \* , , \* , , \* , , toh \* , , \* , , \* , , \*

toh \* , , \* , , \* , , toh \* , , \* , , \* , , \*

1 1/2 1 1/2 1 0

2

1 or 3

\* Notes marked with an asterisk are the roots of the chords. Take note of these roots and how other notes relate to them harmonically. (Roylance)

8. *simile*

toh toh *simile*

toh toh

1 1 1/2 1

2

1 or 3

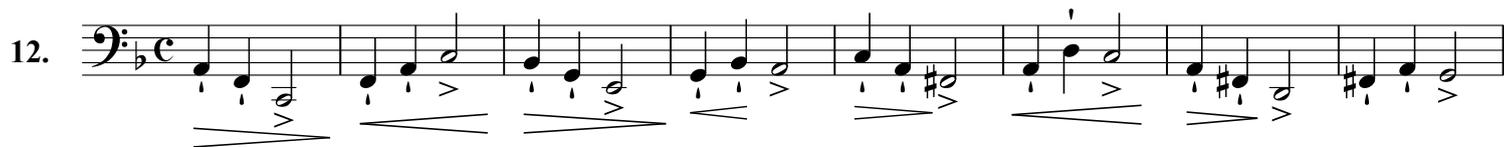
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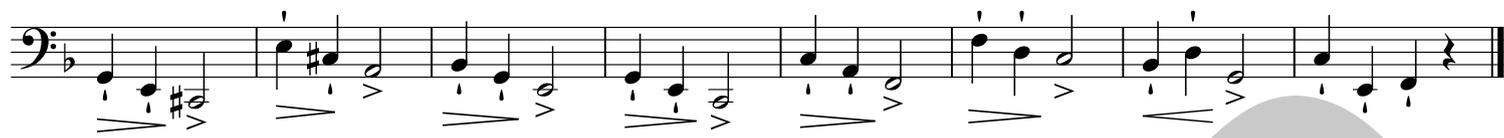
This page contains ten musical staves, each starting with a bass clef and a common time signature (C). The music consists of a sequence of notes, primarily quarter and eighth notes, with some slurs. Below each note, a number indicates the finger to be used (1, 2, 3, or 0 for the thumb). The staves are arranged vertically, and the key signature changes from one staff to the next. A large, semi-transparent watermark is overlaid diagonally across the page.

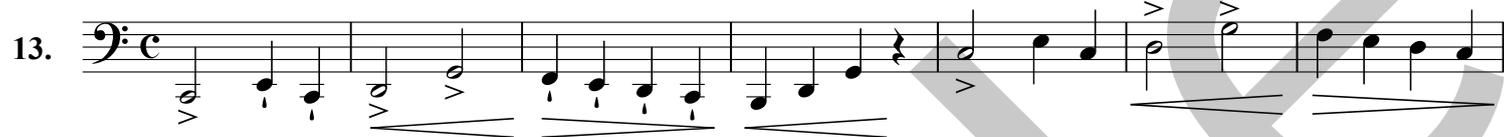
Fingerings for the ten staves:

- Staff 1: 0, 1/3, 1/2, 1, 1/2, 1
- Staff 2: 1/2/3, 2/3, 1, 2, 2/3, 1, 2/3, 2
- Staff 3: 1/3, 1/2, 2, 0, 1/2, 2, 1/2, 0
- Staff 4: 2/3, 1, 0, 2/3, 1, 0, 1, 2/3
- Staff 5: 1/2, 2, 2/3, 1/2, 2, 1/2, 2, 1/2
- Staff 6: 1, 0, 1/2, 1, 0, 1, 0, 1
- Staff 7: 2, 2/3, 1, 2, 1/2, 2, 1/2, 2
- Staff 8: 0, 1/2, 2, 0, 1, 0, 1, 0
- Staff 9: 2/3, 1, 0, 1/2, 2, 1, 2, 1/2
- Staff 10: 1/2, 2, 1/2, 1, 2, 1
- Staff 11: 1, 0, 1, 2, 1, 2
- Staff 12: 2, 1/2, 2, 0, 2, 2/3, 2

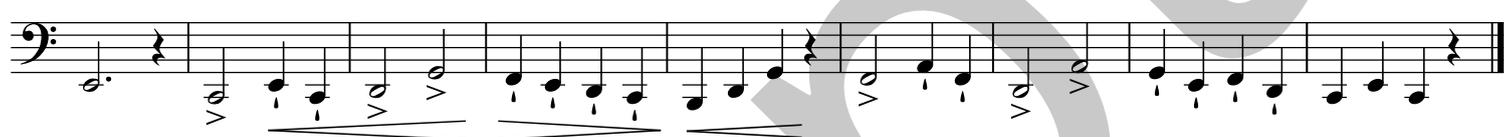


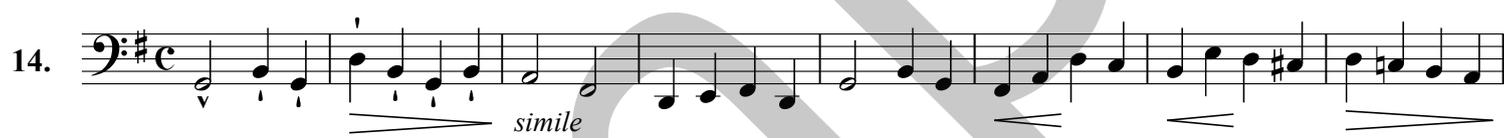
12. 



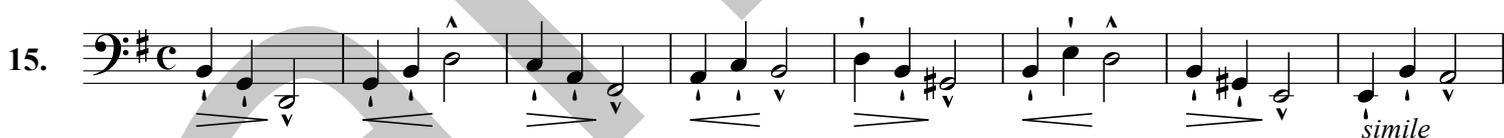
13. 





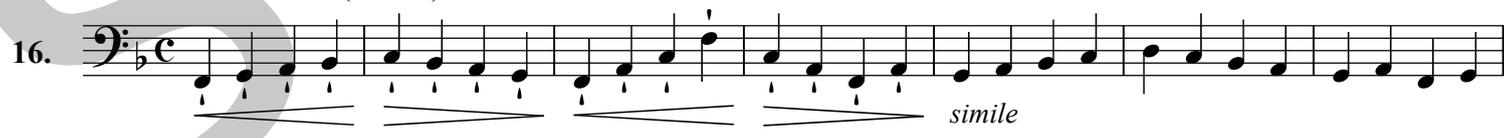
14. 



15. 

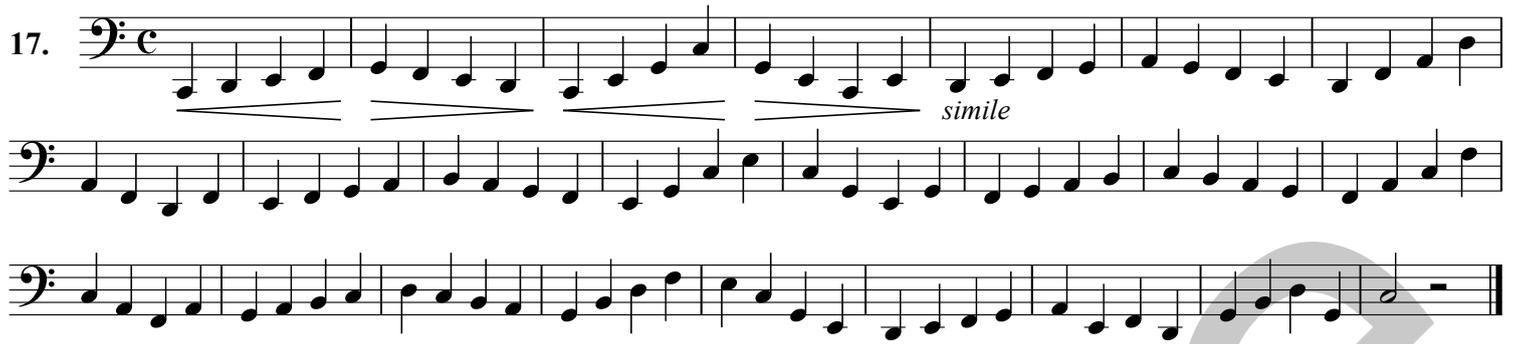


$\text{♩} = \text{c. } 76-132 \text{ (16-19)}$

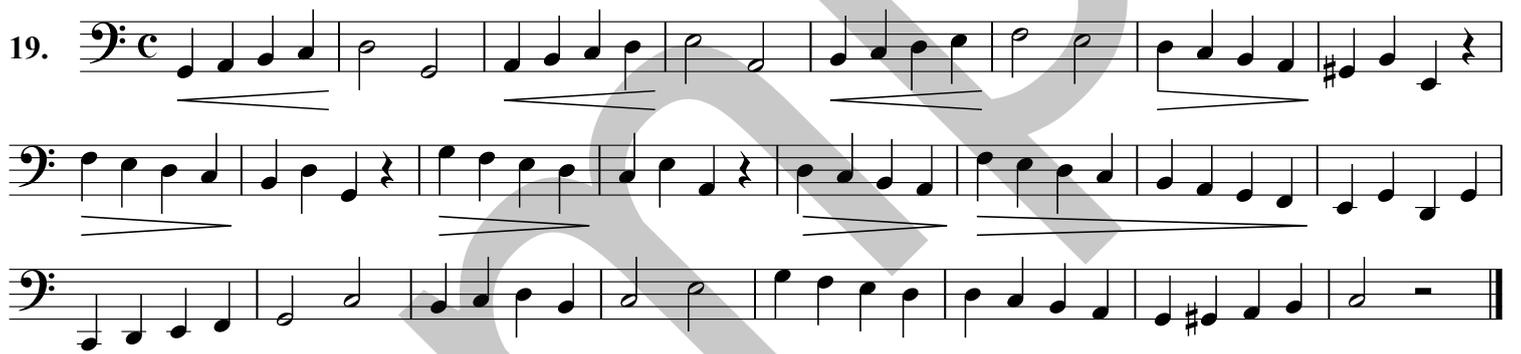
16. 



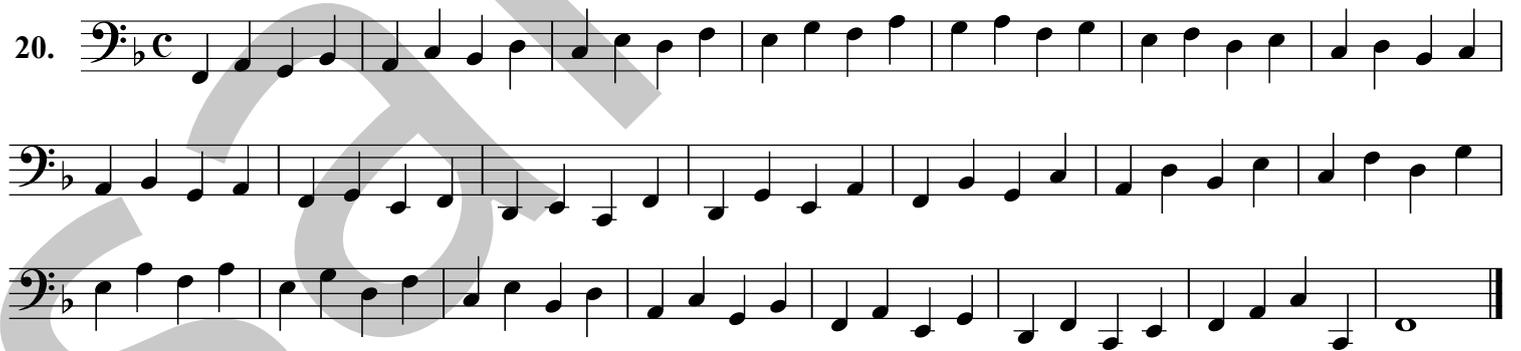


17. 

18. 

19. 

$\text{♩} = \text{c. } 92-140 \text{ (20-27)}$

20. 

21. 

22.  Musical staff 1 for exercise 22, bass clef, key signature of one sharp (F#), common time signature (C). The staff contains a sequence of notes: C2, D2, E2, F#2, G2, A2, B2, C3, D3, E3, F#3, G3, A3, B3, C4, D4, E4, F#4, G4, A4, B4, C5, D5, E5, F#5, G5, A5, B5, C6, D6, E6, F#6, G6, A6, B6, C7, D7, E7, F#7, G7, A7, B7, C8, D8, E8, F#8, G8, A8, B8, C9, D9, E9, F#9, G9, A9, B9, C10, D10, E10, F#10, G10, A10, B10, C11, D11, E11, F#11, G11, A11, B11, C12, D12, E12, F#12, G12, A12, B12, C13, D13, E13, F#13, G13, A13, B13, C14, D14, E14, F#14, G14, A14, B14, C15, D15, E15, F#15, G15, A15, B15, C16, D16, E16, F#16, G16, A16, B16, C17, D17, E17, F#17, G17, A17, B17, C18, D18, E18, F#18, G18, A18, B18, C19, D19, E19, F#19, G19, A19, B19, C20, D20, E20, F#20, G20, A20, B20, C21, D21, E21, F#21, G21, A21, B21, C22, D22, E22, F#22, G22, A22, B22, C23, D23, E23, F#23, G23, A23, B23, C24, D24, E24, F#24, G24, A24, B24, C25, D25, E25, F#25, G25, A25, B25, C26, D26, E26, F#26, G26, A26, B26, C27, D27, E27, F#27, G27, A27, B27, C28, D28, E28, F#28, G28, A28, B28, C29, D29, E29, F#29, G29, A29, B29, C30, D30, E30, F#30, G30, A30, B30, C31, D31, E31, F#31, G31, A31, B31, C32, D32, E32, F#32, G32, A32, B32, C33, D33, E33, F#33, G33, A33, B33, C34, D34, E34, F#34, G34, A34, B34, C35, D35, E35, F#35, G35, A35, B35, C36, D36, E36, F#36, G36, A36, B36, C37, D37, E37, F#37, G37, A37, B37, C38, D38, E38, F#38, G38, A38, B38, C39, D39, E39, F#39, G39, A39, B39, C40, D40, E40, F#40, G40, A40, B40, C41, D41, E41, F#41, G41, A41, B41, C42, D42, E42, F#42, G42, A42, B42, C43, D43, E43, F#43, G43, A43, B43, C44, D44, E44, F#44, G44, A44, B44, C45, D45, E45, F#45, G45, A45, B45, C46, D46, E46, F#46, G46, A46, B46, C47, D47, E47, F#47, G47, A47, B47, C48, D48, E48, F#48, G48, A48, B48, C49, D49, E49, F#49, G49, A49, B49, C50, D50, E50, F#50, G50, A50, B50, C51, D51, E51, F#51, G51, A51, B51, C52, D52, E52, F#52, G52, A52, B52, C53, D53, E53, F#53, G53, A53, B53, C54, D54, E54, F#54, G54, A54, B54, C55, D55, E55, F#55, G55, A55, B55, C56, D56, E56, F#56, G56, A56, B56, C57, D57, E57, F#57, G57, A57, 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