

## Introduction

### a. What this book is about

Text portions and exercises

The “Trombonist’s Toolkit” was conceived as exactly that: a resource for troubleshooting one’s playing, for working out problems, for advancing one’s playing skills. It is NOT a method in the traditional sense – no weekly lessons, no planned schedule for arriving at a certain point after a year, two years, etc. The player [you, the reader] can search the topic list for specific problems in need of solution. Most of the topics are organized by general subject areas: air, embouchure, range building, etc. The source for most of what I write is my own personal experience as student, teacher, freelancer and orchestral performer.

I owe a great debt of gratitude to teachers, mentors, colleagues and students past and present, for listening to my playing, trying out my concepts, putting up with my questions and so forth. Some of those people are present, some are far away, and sadly, some are no longer living. To all of them I say “Thank you, and I hope those of you who read this can recognize what you told me!”

A word about the organization of the book: most of the concepts requiring practice and/or a physical approach are written out in a special manner; explanatory text is interspersed with exercises detailing a gradual approach to the topic at hand. The appendix contains a number of exercises all together, most of which were developed for my class at Mahidol University College of Music in Thailand.

## Chapter 1 – Air System

### 1. Air System

*Diaphragm*

*Throat*

*Mouth*

*Dynamics*

*Phrasing*

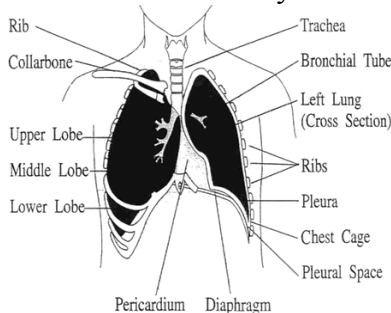
*Avoidance of unnecessary tension*

### 2. Air System

Since the trombone is a WIND instrument, we must concern ourselves with the exact manner in which air is used in producing the sound of the instrument, as well as with the quality of that sound. The use of the air must be broken down into several components for pedagogical clarity. The following is a breakdown of those components.

#### a. Diaphragm

The diaphragm is a membrane separating the chest cavity from the abdominal cavity. Teachers often speak of “playing from the diaphragm” or “exercising the diaphragm:” scientifically, these phrases are in error, but when Chapter it is pedagogically convenient, I will use such terms myself.



Here is the problem: We naturally [naïvely] think that to breathe we only need to expand the chest and the lungs will fill with air for playing. While this is true to a certain extent, there is a big limitation on the “chest expansion” method of breathing for trombone playing: The lungs are enclosed by the protective cage of the ribs – to expand the chest gives us a very small range of expansion, and no support at all. So how can we breathe freely and with a full quantity of air?

[See <http://www.bretpimentel.com/breath-support/>] Pimentel gives a detailed description of the work of the diaphragm. The approach stated below is easier to understand from the perspective of the player, but perhaps not as anatomically accurate.

This is where the use of the diaphragm is important. While the diaphragm itself is passive and has no muscles or control, it is connected to the rest of the body by many small muscles. Put simply, these muscles have the following effects: one set, attached to the diaphragm, pulls the diaphragm down flat from its normal domed position, and the intercostal muscles and others in the area return the diaphragm to the domed position. For purposes of instruction to students, I refer to these sets of muscles inelegantly as the “air-in” and the “air-out” muscles.

A good first step in explaining breath support is to have the student imagine tensing the stomach muscles as though resisting a blow. This sensation is only in error in that it is much too strong a response. Most of the time, in regular playing, the diaphragm, or more correctly, the abdominal muscles associated with it, are in a state of slight flexing [sets of muscles pushing against each other], which gives rise to the phenomenon we call breath

adapt this to other patterns. This sort of exercise will help establish a firm key sense grounded in the patterns of slide movement trained in such a manner.

### **Repertoire and/or excerpts**

**Warming up/Cooling down** Today's discussion will be about the usual things: sound, articulation, phrasing [NOT the same thing], breathing, tension, preparation... You see, the problem is, where to start! I have included an article by Jay Friedman in my email "handout" to you from a few weeks back. This article, entitled, "It is fundamental," covers an important concern; how to sound warmed up when you are not warmed up. If you think about it, this covers many situations in playing. My favorite example lies in the orchestral repertoire. In music of Brahms [Symphonies #1 and #4], Schumann [Symphony #3, Rhenish], Berlioz [Symphonie Fantastique] and others, the trombone section sits quietly during the majority of the symphony, then plays, sometimes very demanding music with no "warm-up" time. Now, I would love to give you a special "how to" session on my magical "no-warm-up" technique for handling such passages, but the truth is that there is no magic to it! To play with limited or no warm up time, you have to practice doing just that. Sometimes, when you pick up the horn at the beginning of the practice day, in place of your usual routine, play some part of your jury piece or a Rochut... anything you would normally feel the need to warm up for, just to see what can be done.

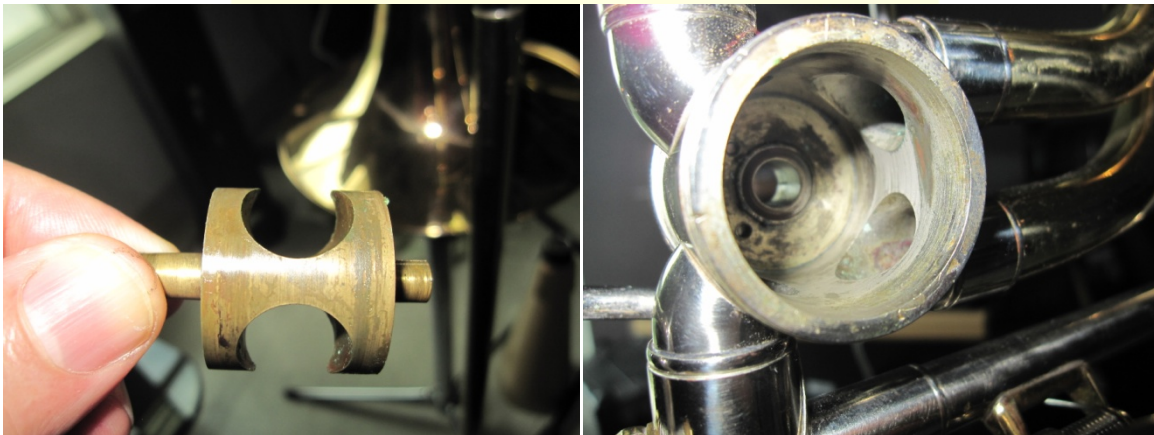
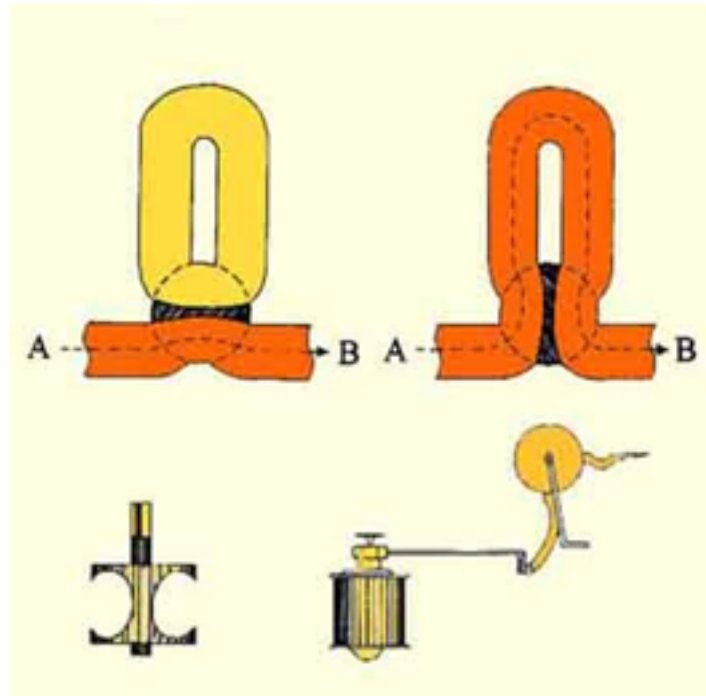
Many years ago I asked my teacher, Mr. Crisafulli, about warm-ups and how he handled the need to get warmed up. His reply was classic – "Look, I played a long concert last night with the Chicago Symphony, then I went home to sleep. The truth is, I am still warmed up – we NEVER really cool down!" That is not a solution most of us can handle at this stage, but it is interesting to note. Being warmed up for playing is partly physical, but MOSTLY mental, in nature.

More about Jeff Nelsen: [Check out <https://www.jeffnelsen.com/>] I have a question for you – how many of you are ready to start your "simulation of performance?" This means, have you learned all the notes? Are you ready to play the notes with a piano [whether or not you will use one on your jury]? When you **are** ready, you must play an imagination game: simulate the waiting in front of the door to the room you will play in, walking in to stand in front of the piano, telling the jurors what you are playing, tuning, taking a moment to think about what you will do, and finally playing the piece. It is a good idea to record at least some of these run-throughs, and listen to them to see how close to the performance you have in your mind the recording is. Now, I know that this is hard – as I have said to many of you, I HATE recording! I do it because it is a great way to know HOW and WHERE you are in your preparation for performance. If you have a friend who is willing to listen to you do this, so much the better. You can return the favor by listening to him in turn. Remember that 50 times through a piece like the Stojowski, or the Ewazen is a lot of playing, but if you do this twice in a day without skipping a day, you will have done 50 simulations well before the 18<sup>th</sup> of September – best way I know of to build confidence!

Since I mentioned recording, I want to remind you WHY we record. When you are busy playing a piece, of whatever level of difficulty, you have to keep several things in mind: sound, intonation, slide movement, legato/staccato, phrasing, dynamics, and so forth. With all these distractions it is very hard to focus on... how you're doing! When you have recorded something, it is a simple matter to sit down with the score and a pencil, put on your earphones and play back the performance. You have nothing to focus on now but the final result. You have, in essence, taken my chair and have begun to act as your own teacher – something I want you to do anyway...

A better illustration...

## Rotary Valves:



The essential problem with the traditional rotary valve can be seen [with a little imagination] in these photos. The cuts taken from the valve core [plug, as the British term it] fit alongside the bores in the walls of the valve casing in the right hand photo. If you think about it, the ideal for any valve is the maintenance of a straight [or almost straight] tube through whatever tubing is used, a tube that furthermore stays round all the way along. The “tube” [a courtesy title] of the rotary valve bends very sharply several times and does not maintain the desired round shape – it even turns back on itself and reverses the normal curve and flattens itself... no wonder the valve has limitations!

Axial-flow valve [Thayer valve]

The **Thayer Axial-Flow Valve** is a replacement for the traditional rotary valve found on [trombones](#) with F attachments. Invented by Orla Ed Thayer (with assistance from Zig Kanstul) in 1976, it was the biggest advance in the design of the trombone since the [rotary valve](#) was added (creating the F attachment) in the mid-19th century. The valve was the subject of a protracted legal battle between Orla Ed Thayer and James Nydigger, an

## Appendix

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### Practice approaches that work!

Besides all the technical material you have received from me over these last several weeks, I have tried to give you all an approach to HOW TO PRACTICE that is very helpful... I would almost say infallible! It has come to my attention that not everyone has the same understanding of how to do this; hence, this document.

Here is an example of the approach I use:

1. Play through your piece, excerpt, etude, whatever;
2. Note down **every** instance of a difficulty, whether a missed note, a sloppy passage, a note that's out of reach or doesn't speak, anything – make a mark or circle the passage;
3. In subsequent practice sessions, start with the first of your marked passages [obviously, the next “session” might be a later time in the present one...];
4. Play the passage [or whatever] in the following different manners;
  - A Slow the passage down, and/or change the articulation... just make it different;
  - B Buzz it on the mouthpiece;
  - C Free buzz the passage;
  - D SING the passage;
  - E Play the passage again on the instrument, noting where there has [or hasn't] been improvement – if it is “fixed,” erase the mark you made in step 2;
  - F Go to the next passage and repeat step 4.
5. If this process is used carefully, there is no piece that you will not be able to play.
6. If you subsequently play through the piece under discussion, and note some of the same or NEW difficulties, simply return to step 1 and repeat. In this manner [some would say it is obsessive, but hey – we're trombonists, right?] you will fix just about any difficulty.

Even technical hurdles that are seemingly too difficult to “fix” can be worked on this way. If a note in a passage is much too high and beyond our playing range, there are workarounds that will take care of them. Free buzzing is such a strengthening process that you will probably find your range increasing without other special effort. If you still have trouble, that's what I am here for!

This all fits into my paradigm of a “three-step” practice approach, which works as follows;

1. Playing through the piece, noting and marking the problem spots;
2. Attacking those problem spots as outlined above;
3. When all the problems have been dealt with and corrected, play through the piece to learn the parts NOT in the individual notes and/or passages – the phrasing, style, and larger musical concept of the piece.

Use this approach – it does work, believe me. The ONLY difficulties you will encounter are being perceptive enough and critical enough to really FIND the difficulties and work on them, and then the fortitude to actually work on them. The kind of practice I am advocating can be boring and take a long time to see results, but you WILL see results if you work at it long enough.

# Appendix

## New exercises for trombone and lower brass

1) 01/03

2)

3)

4) VII (or FII) VI (or FI)

5)

6)

7) Minor - all keys 8) Diminished seventh - all keys

9) Staccato and legato also extend upwards for high range all the way to

10) Tone Builders (best done with practice mute)  
  
*p*  $\blacktriangleleft$  *ff*  $\blacktriangleright$  *p*  $\blacktriangleleft$  *ff*  $\blacktriangleright$  *p*  $\blacktriangleleft$  *ff*  $\blacktriangleright$

11) Breath control - play SLOW!  
  
continue adding notes up to an octave.

12) "Harmonic glissando"

The above exercises have a history going back several years, to my teaching in the US. They cover articulation, lip slurs, arpeggios, tone building, breath control [this one is particularly useful] and a lip slur strengthener using a glissando across the harmonics.

# Appendix

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## Fast warm-ups and technique builders

1. Blowing out the birthday candle: learn how to focus and direct a concentrated stream of air and test with your hand or piece of paper how far you can project the stream.
2. Blow to buzz: “pushing” the air with the midriff/diaphragm, place mouthpiece over the embouchure and test the readiness of the buzzing response.
3. Mouthpiece buzzing: a central part of good playing on brass instruments, the use of the mouthpiece alone can lead to real hearing of the notes and intervals played on the trombone. Practice melodies you can “hear,” i.e., folk songs, pop songs, National Anthem or America, etc. Work from there to the music you need to play [band, orchestra, solos, etc.]
4. Experiments in freedom: Try removing the mouthpiece from the embouchure while buzzing – often you can reinforce the embouchure “set,” and continue to buzz without the use of the mouthpiece – free buzzing. This is VERY strengthening to the embouchure.
5. Chops muscle building: Use of a long, un-sharpened pencil held ONLY between the lips can strengthen the lip muscles in ways helpful to good buzzing and good tone/flexibility/volume.