

*Ernest S. Williams*

# THE SECRET OF TECHNIQUE-PRESERVATION



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## *Preface*

The exercises in this volume were originally put together for my own personal use, when necessity forced me to curtail my practice-time even though it was imperative that I keep my skill. The routine became of immeasurable value when I was traveling, or on days when I had to attend a long rehearsal in the morning, make recordings in the afternoon, and play a concert at night.

Many years of teaching has brought me in contact with thousands of players and convinced me that more than half of all trumpeters or cornetists, whether they be busy professional orchestra- or band-players, soloists, teachers, or full-scheduled high-school students, seldom have time for more than half an hour's daily practice. The following exercises are intended for just such players.

Many of my most talented pupils have been using this routine for years. To mention a few

Leonard B. Smith, 1st Trumpet, Detroit Symphony Orchestra; Louis Davidson, 1st Trumpet, Cleveland Symphony Orchestra; Raymond Crisara, 1st Trumpet Metropolitan Opera House Orchestra, New York City; Sidney Beckerman, 1st Trumpet, Chicago Symphony Orchestra; James Burke, 1st Trumpet, Baltimore Symphony Orchestra; Seymour Rosenfeld, 1st Trumpet, St. Louis Symphony Orchestra; Gilbert Mitchell, 1st Trumpet, New Orleans Symphony Orchestra; Milton Davidson, 1st Trumpet, Dallas Symphony Orchestra; Harold Rehrig, Trumpeter, Philadelphia Symphony Orchestra; Herbert Eisenberg, Trumpeter, Dallas Symphony Orchestra; Ned Mahony, Cornet soloist and teacher, New York City; Frank Elsass, Teacher of Trumpet, State Teachers College, San José, California; Leonard Meretta, Teacher of Trumpet, State Teachers College, Kalamazoo, Michigan; Craig McHenry, Teacher of Trumpet, Ithaca College, Ithaca, New York; B. P. Causey, Teacher of Trumpet, Centenary College, Shreveport, Louisiana; Dale McMickel, New York City, formerly 1st Trumpet, Glen Miller's Band; Ray Wetzel, 1st Trumpet, Stan Kenton's Band; Donald Jacoby, 1st Trumpet, Les Brown's Band and many others.

These artists have repeatedly urged me to publish this compendium on the grounds that what it has done for them, as well as for me, should be within reach of all players.

It will take approximately 45 minutes to play all exercises and every variant in the book; even including the suggested short rests; but by playing only six of the twenty-four major and minor scales daily, and by omitting most of the variants, the practice period may be reduced to 30 minutes.

Every skill previously acquired through diligent practice can be retained by such a half hour's careful practice, and the performer's lips will also be kept in good condition.

I am confident that this book will fill a long felt need.

Saugerties, New York, 1946  
ERNEST S. WILLIAMS

## CONSERVATION OF LIP-STRENGTH

Short frequent rests are necessary during the practice period, if the lip-muscles are to retain their freshness and vigor. It is therefore suggested, that each double bar in the practice-material be considered equivalent to a short rest. The aim should always be to keep the lips feeling strong and well. The suggested rests will allow the blood to circulate freely, which will keep the lip-strength normal.

**DO NOT SQUANDER YOUR STRENGTH IN THE PRACTICE ROOM.** Plan your preparatory work so as to be at top-efficiency for the most difficult numbers at your engagement. If too much playing is done during the practice period and the frequent rests neglected, the player may abuse his lips to such an extent, that all playing will be more or less forced for the remainder of the day. If the practising has been done correctly, with a sufficient number of short rests interspersed, the performer should still feel fresh at the end of 30 or 40 minutes of playing.

## LIP- AND FINGER-LIMBERING

Some days the lips and fingers require considerable "warming up". On other days much less is necessary. The chromatic-, long-tone-, and slurring-exercises on pages 3 and 4 are good "warm-up" material. They should be followed by six scale-exercises (pages 5 to 9), after which some of the material on page 10 may be used as a finishing touch. If this procedure is followed, *all* the muscles used in playing the ordinary register of the instrument have been exercised, and the player should be in good form to continue practising.

## PRACTICE PROCEDURE

All practising should preferably be done when the performer is fresh and alert; but there should not be any "let-down" of the daily routine, even if some mental or physical fatigue is felt. Paganini, who had attained greater technical perfection than most performers, said: "Every day I have to find my technique anew", and this is true of the trumpeter and cornetist as well. We too must daily re-discover tone-production, ease, certainty, fluency, and range. When this is done at the beginning of each daily practice period, then, and then only, do we preserve our technique.

Good tone-production, certainty, and endurance, all depend on accurate lip-adjustments and correct breathing for every note attempted. Such a procedure eliminates all excessive pressure and the mashing of the lips into shape for the attainment of the desired tone.

Shallow breathing is ineffective, and each phrase should be begun with a breath deep enough to insure proper fullness throughout its length. For best results the following rules must be obeyed:

- 1) Take enough breath
- 2) Use it the right way
- 3) Turn all of it into pure tone.

Field-trumpeters (and many other performers who play loudly all the time) often use the diaphragm to such an extent, that their ability for delicate playing in varied ranges, so necessary for difficult solo-work and orchestral style, is greatly impaired.

Good symphonic conductors demand two distinct qualities of tone for orchestral work, namely, a martial "field"-quality for brilliant fanfare-effects, and a softer, mellower quality for less blatant and more song-like passages. This restrained, refined and singing quality—somewhat reminiscent of the horn-timbre—should be used in all practice and actual playing, except in passages where the louder and more brilliant military quality is necessary for "field"-effect.

The ability to play all different shades—from pianissimo to fortissimo—depends upon the quantity of breath and the power with which the breath makes the lips vibrate. The lips must be tensed and simultaneously shaped so as to form the proper vibrating surface necessary for the desired pitch. The technique is really in the lips, co-ordinated with accurate breath-management and proper fingering. The instrument is the intensifier and amplifier.

The breath should turn into pure tone at the vibrating surface formed by the lips and not be violently precipitated into the instrument.

Scales, chromatic-passages, and chords should be practised daily, so the player may acquire automatic control of his fingering and thus be able to devote most of his attention to lip- and breathing-technique.

How did trumpeters play scale-passages before the invention of valves? The answer is: By a precise application of lips and breath. We who play the modern valve-trumpet must also—consciously or subconsciously—apply the same precise lip- and breath-control, even while we synchronize it with the correct fingering.

Fine expression, good breath-control and accurate lip-technique may be developed by intelligent playing of the variants suggested in the scales and chromatic exercises. It should be kept in mind, that expression largely depends on the quantity of breath used, and that the physical action controlling it should be the same whether the passage is played softly or loudly, or with changing nuances. Crude, unrestrained guess-work can never yield the same results as intelligent and accurate playing. In fact, these two procedures are diametrically opposed to each other.

The first moments of the daily practice period must be devoted to "finding the technique anew"—to use Paganini's expression. One must first "get in stride" and then "stay in stride" throughout the practice.

The same attitude must be cultivated towards playing-engagements. The following saying contains much good advice: **PRACTISE WHEN YOU PLAY, AND PLAY CORRECTLY WHEN YOU PRACTISE!**

# Exercises for Limbering Lips and Fingers

Some performers "warm up" by playing long notes; others use slurring exercises for their first daily practice, while still others prefer the short chromatic passages and scales. Many have adopted the precise order in which the exercises occur in this book. The performer should use the material in the rotation which does most for him, and additional material should be included according to individual needs.

*Not too fast*

This exercise consists of four staves of music in 4/4 time. Each staff begins with a dynamic marking of *p* (piano). The first two staves are marked *p*, and the last two are marked *mp* (mezzo-piano). Each staff contains a chromatic scale of eighth notes, slurred together, with repeat signs at the end of each line.

This exercise consists of three staves of music in 4/4 time. The first staff has a tempo marking of  $\text{♩} = 128$  and dynamic markings of *p* and *f* (forte) alternating over long notes. The second staff also has *p* and *f* markings. The third staff has a tempo marking of  $\text{♩} = 112$  and a dynamic marking of *mp*.

Play these long notes without change in power or pitch, and try to improve the tone-quality. In fact, always strive to get the best possible quality in *each* tone of *every* exercise.

This exercise consists of six staves of music in 4/4 time. The first staff has a dynamic marking of *mp* and includes the syllables "Tah - e" and "ah - e" above the notes. The second staff has a dynamic marking of *mp* and a "1-3" marking above the notes. The third staff has a "2-3" marking above the notes. The fourth, fifth, and sixth staves have "1-2", "1", and "0" markings above the notes, respectively. The exercise features various rhythmic patterns and slurs.

Tah - e      ah - e

Make the necessary lip and breath adjustments—but no more—to maintain pure tone and good intonation.

Tah - e

VARIANT: Play this exercise using a half-staccato tongue, changing lips and breath in the same manner as when slurring.

# Major Scales

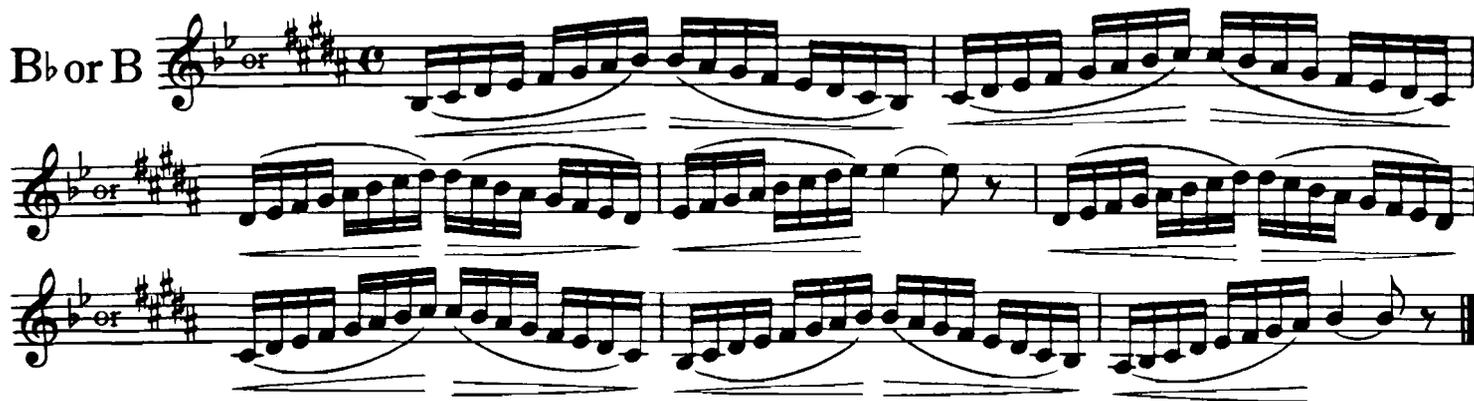
The scales should be played evenly and in three shades of expression *p*, *mf*, *f*. All tones should come prompt, clear and in tune.

C

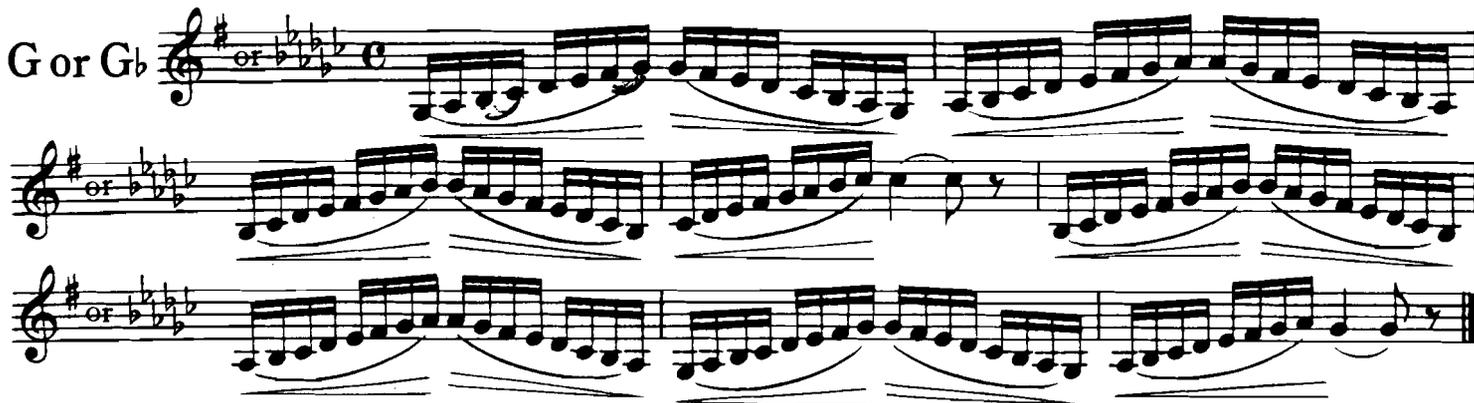
D or D $\flat$

E $\flat$  or E

F or F $\sharp$

B $\flat$  or B 

A or A $\flat$  

G or G $\flat$  

VARIANT 1: Play scales without change in nuance.

VARIANT 2: Play scales with *diminuendo* in ascending passages and *crescendo* in descending passages.

## Trills

A trill consists of a rapid alternating change between two notes, and, as it is difficult to synchronize the lip-change with the fast movement of the finger, it is practical to use lip and breath so as to favor the pitch of the *upper* note of the trill.

1st valve  
longa  
tr  
mp

2nd valve  
longa  
tr  
mp

3rd valve  
0-3  
2- $\frac{2}{3}$   
0-3  
2- $\frac{2}{3}$



# Minor Scales

Play in three shades: *p*, *mf*, *f*.

The musical score is organized into three main sections, each corresponding to a different scale. Each section contains three staves of music, representing the three dynamic markings: *p* (piano), *mf* (mezzo-forte), and *f* (forte). The scales are written in treble clef with a common time signature (C).  
1. The first section is for the E major scale (one sharp). It consists of three staves of music, each starting with a treble clef and a sharp sign for F#.  
2. The second section is for the F major scale (no sharps or flats). It consists of three staves of music, each starting with a treble clef and no key signature.  
3. The third section is for the G major scale (two sharps). It consists of three staves of music, each starting with a treble clef and sharp signs for F# and C#.  
Each staff contains a series of eighth notes, with some measures featuring beamed eighth notes. The music is divided into measures by vertical bar lines, and each section concludes with a double bar line.

c



Three staves of musical notation in C minor, measures 1-3. The first staff begins with a treble clef, a key signature of two flats, and a common time signature. The music consists of eighth-note patterns with slurs and ties.

c#



Three staves of musical notation in C major, measures 4-6. The key signature changes to two sharps. The notation continues with eighth-note patterns and slurs.

d



Three staves of musical notation in D minor, measures 7-9. The key signature changes to one flat. The notation continues with eighth-note patterns and slurs.

eb



Three staves of musical notation in E-flat major, measures 10-12. The key signature changes to three flats. The notation continues with eighth-note patterns and slurs.

g#

*p*

a

*p*

bb

*p*

b

*p*

VARIANT 1: Play scales without change in nuance.  
VARIANT 2: Play scales with *dim.* in ascending passages and *cresc.* in descending passages.

## Chromatics

*p cresc.* *dim.*

*p cresc.* *dim.*

*p cresc.* *dim.*

VARIANT 1: Play the above passages without change in nuance.

VARIANT 2: Play *diminuendo* while ascending and *crescendo* while descending.

VARIANT 3: Play these passages with single-tongue staccato.

VARIANT 4: Play the first line with single-tongue staccato and the other two lines with double-tongue staccato.

*p*

VARIANTS: Also use single, double, and triple-tongue staccato.

## Exercises for Lip-flexibility

*mp* *accel. ad lib.* *mp*

*mp*

1 2

1 2

2-3 1-3

1-2-3 1-3

2-3 1-2

1 2

# Studies in Attack

## SINGLE-TONGUE STACCATO

Lips and breath must be right for the note intended.

*mp*

VARIANT: The five first lines of the above exercise may be played an octave lower when the performer feels it is advisable.

*p simile*

For additional studies see:

"Six Staccato Studies" in SUPPLEMENTARY STUDIES by Ernest S. Williams

## Intervals

The page contains 12 staves of musical notation, each representing a different interval study. The staves are arranged vertically and are written in treble clef. The first staff begins with a dynamic marking of *mf*. The keys and time signatures for the staves are as follows:

- Staff 1: C major, common time (C)
- Staff 2: C major, common time (C)
- Staff 3: C major, common time (C)
- Staff 4: B-flat major, common time (C)
- Staff 5: B-flat major, common time (C)
- Staff 6: B-flat major, common time (C)
- Staff 7: D major, common time (C)
- Staff 8: D major, common time (C)
- Staff 9: D major, common time (C)
- Staff 10: D major, common time (C)
- Staff 11: D major, common time (C)
- Staff 12: D major, common time (C)

Each staff contains a sequence of notes and rests, illustrating various intervals and their combinations. The notation includes quarter notes, eighth notes, and dotted notes, with some staves featuring beamed eighth notes.

For additional studies see:

"Six Modern Interval Studies" in SUPPLEMENTARY STUDIES by Ernest S. Williams

# Double-tongue Staccato

The musical score consists of ten staves of music. The first staff is marked *mp* and includes the instruction "Tu kutuku". The second through sixth staves are also marked *mp*. The seventh staff is marked *p* and includes the instruction *simile*. The eighth staff is marked *cresc.* and ends with a *f* dynamic. The ninth staff is marked *poco a poco dim.*. The tenth staff is marked *p*, *cresc.*, and *f*. The music is written in treble clef with a key signature of one sharp (F#) and a time signature of 2/4. The piece features a double-tongue staccato technique throughout.

For additional studies see:

"Characteristic Study No. 3" in MODERN METHOD FOR TRANSPOSITION by Ernest S. Williams.

Also: "Etude de Concert No. 5" in THE ERNEST S. WILLIAMS MODERN METHOD FOR TRUMPET OR CORNET.

## Chords

Major

Tonic

Dominant-seventh

*p*

Also transpose *up* to:  
 Db, D, Eb, E, F, and F#  
 And *down* to:  
 B, Bb, A, Ab, and G

Minor

Tonic

Dominant-seventh

*p*

Also transpose *up* to:  
 c#, d, eb, e, f, and f#  
 And *down* to:  
 b, bb, a, g#, and g

## Diminished-seventh Chords

c#-minor

e-minor

g-minor

bb-minor

c-minor

a-minor

eb-minor

f#-minor

b-minor

d-minor

f-minor

g#-minor

*p*

It should be noted, that although *twelve different notations* of Diminished-seventh Chords are given above, only *three different fingerings* are employed, each fingering covering the enharmonic changes of four chords. This principal—thoroughly understood and applied—will facilitate the reading and execution of the Diminished-seventh Chords in all keys, even such as are commonly considered difficult.

# Triple-Tongue Staccato

The first section of the musical score consists of ten staves of music. It begins with a treble clef, a common time signature (C), and a dynamic marking of *p*. The music is characterized by rapid, staccato triplets of eighth notes. The key signature changes from C major to G major (one sharp) in the fifth staff, and then to D major (two sharps) in the sixth staff. The dynamic markings progress from *p* to *mp* and finally to *mf*. The piece concludes with a double bar line.

## FOR ENDURANCE + *SOUP*

The second section of the musical score consists of five staves of music. It begins with a treble clef, a common time signature (C), and a dynamic marking of *p*. The tempo is marked as 'Lively' with two accent marks (> >). The music continues with rapid, staccato triplets of eighth notes. The key signature changes from D major to B-flat major (two flats) in the second staff. The dynamic markings progress from *p* to *mp* and finally to *mf*. The piece concludes with a double bar line.

For additional studies see:

"Etude de Concert No. 3" and "Characteristic Study No. 5" in  
THE ERNEST S. WILLIAMS MODERN METHOD FOR TRUMPET OR CORNET.

# Whole-tone Scales

This section contains six staves of musical notation for whole-tone scales. The first four staves are in 3/4 time and feature ascending and descending scales in G major, F major, E major, and D major, respectively. The last two staves are in 4/4 time and feature ascending and descending scales in C major and B major. Each staff begins with a *mp* dynamic marking. The notation includes various accidentals (sharps and flats) and slurs to indicate the continuous flow of the scales.

# Augmented Chords

This section contains six staves of musical notation for augmented chords. The first three staves are in 3/4 time and feature ascending and descending scales of augmented triads in G major, F major, and E major. The last three staves are in 4/4 time and feature ascending and descending scales of augmented triads in C major, B major, and A major. Each staff begins with a *mp* dynamic marking. The notation includes various accidentals and slurs to indicate the continuous flow of the chords.