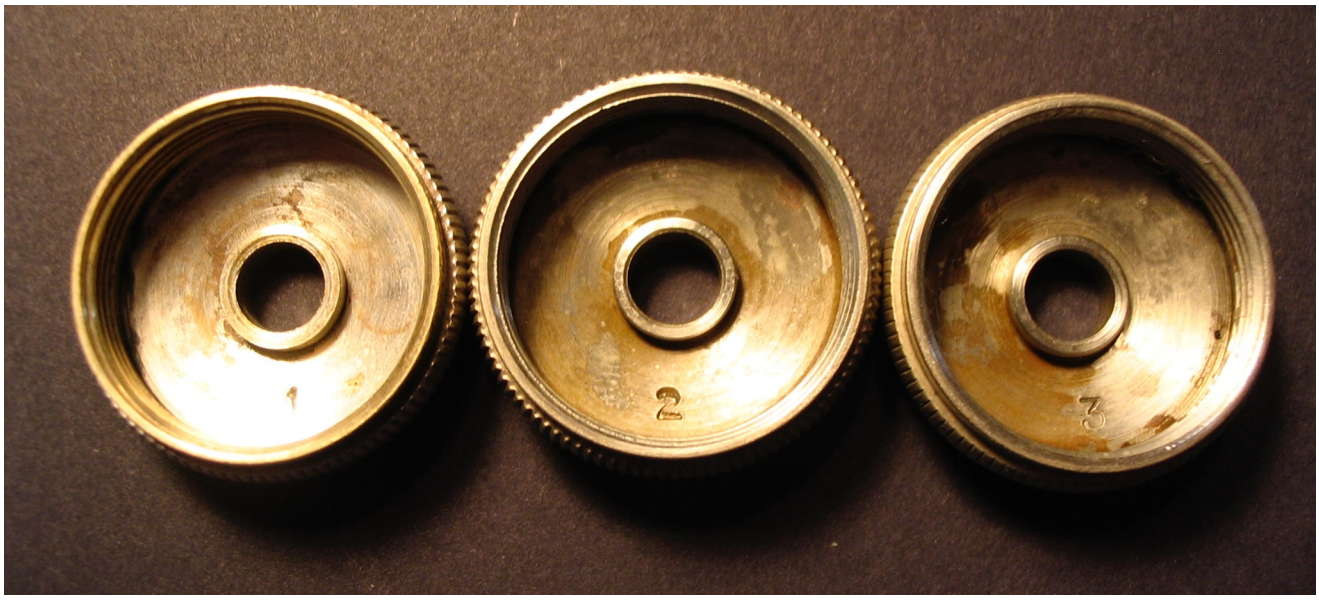
TRUMPET DIATONICS

a poetic training in Music Literacy

A Daily Practice

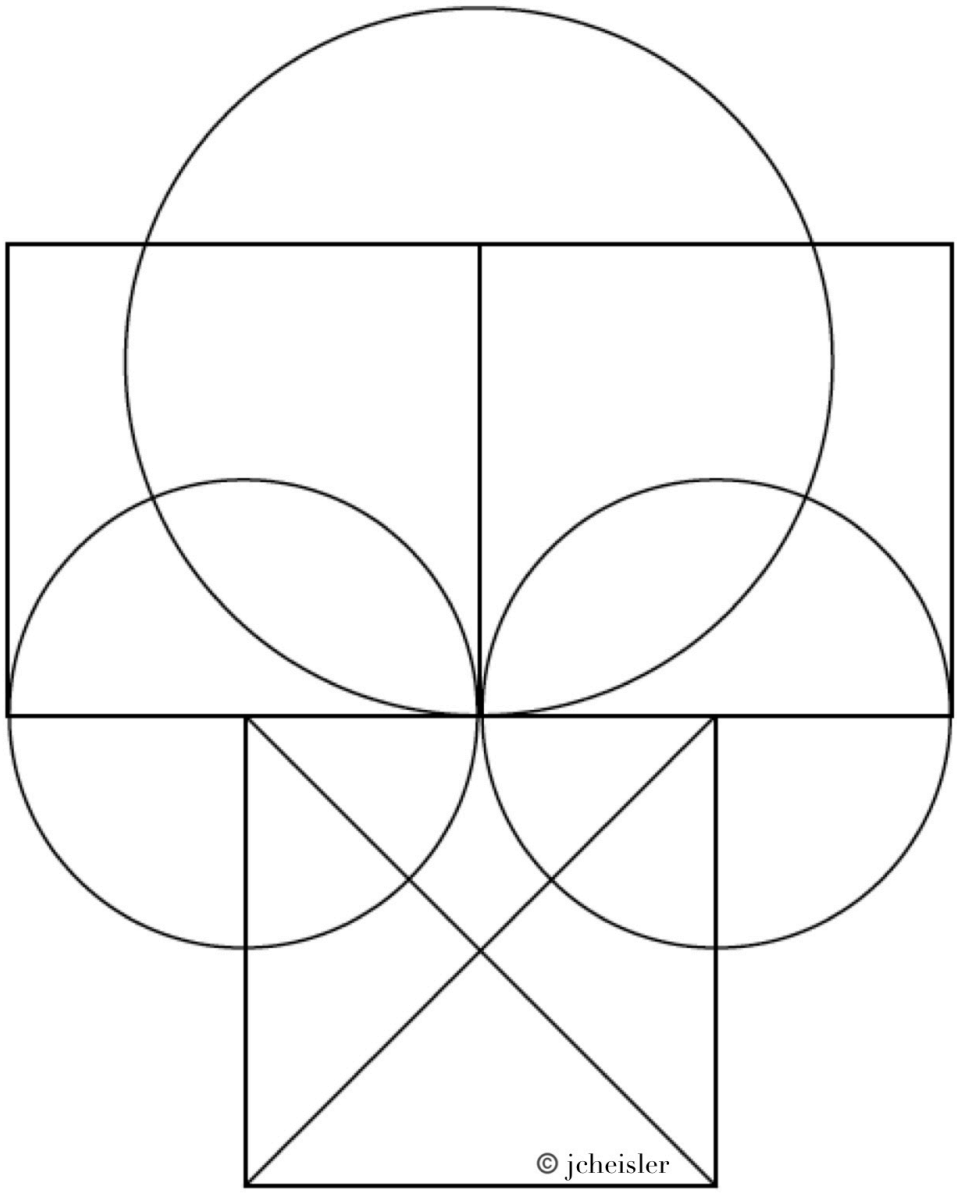


JC HEISLER

A Daily Practice

Trumpet Diatonics ©

By JC Heisler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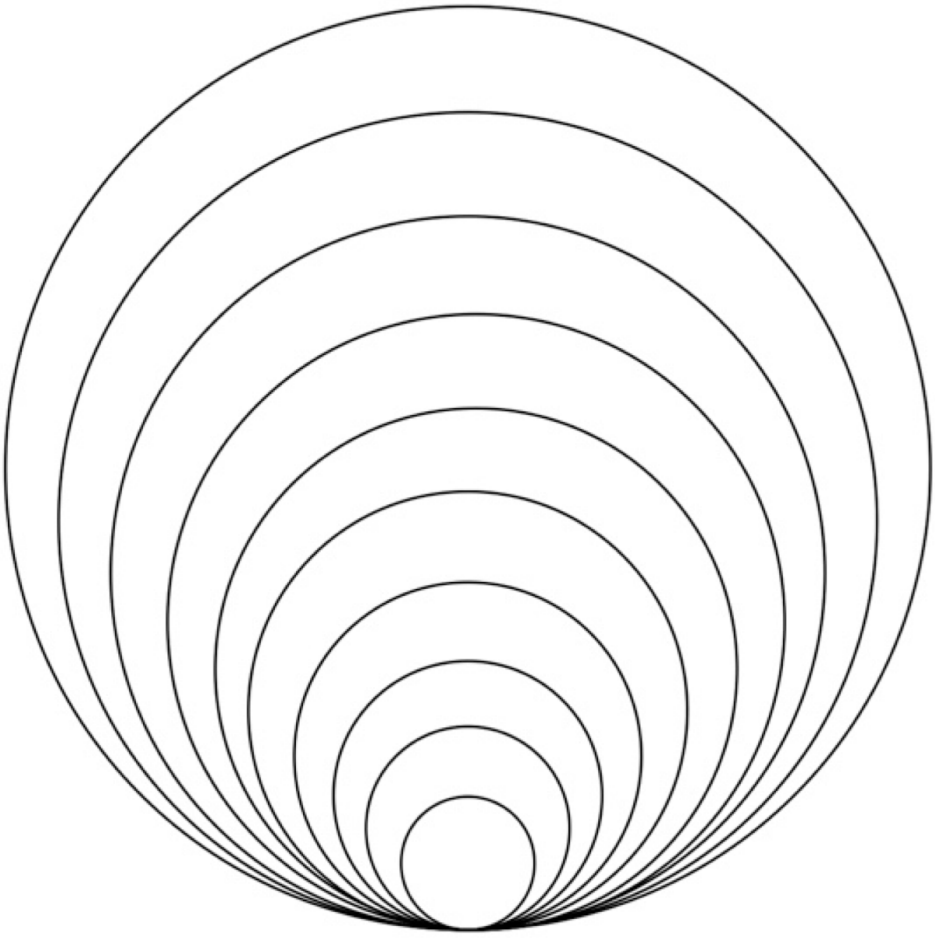
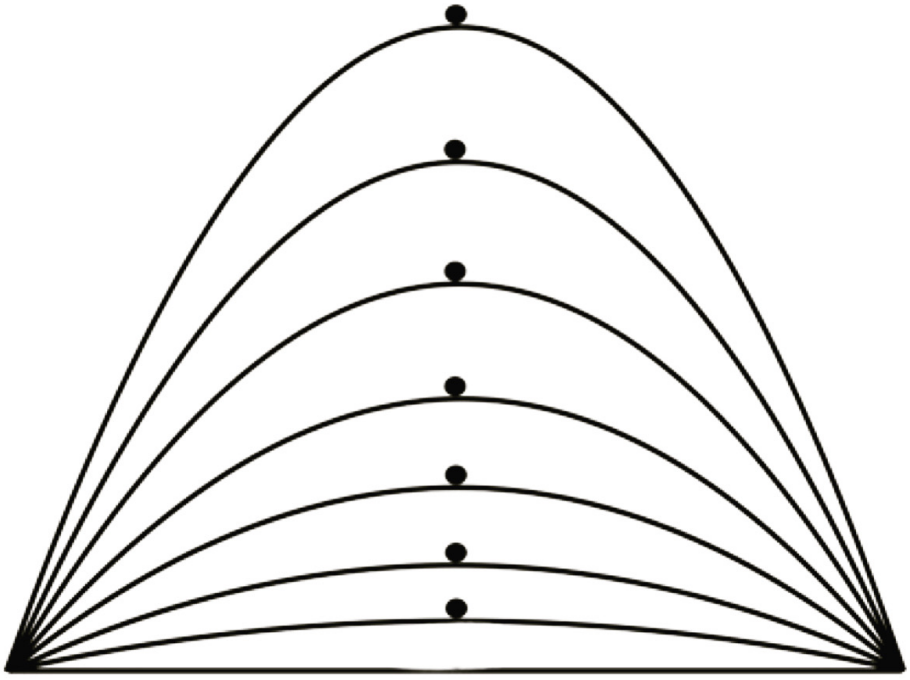
Trumpet Diatonics



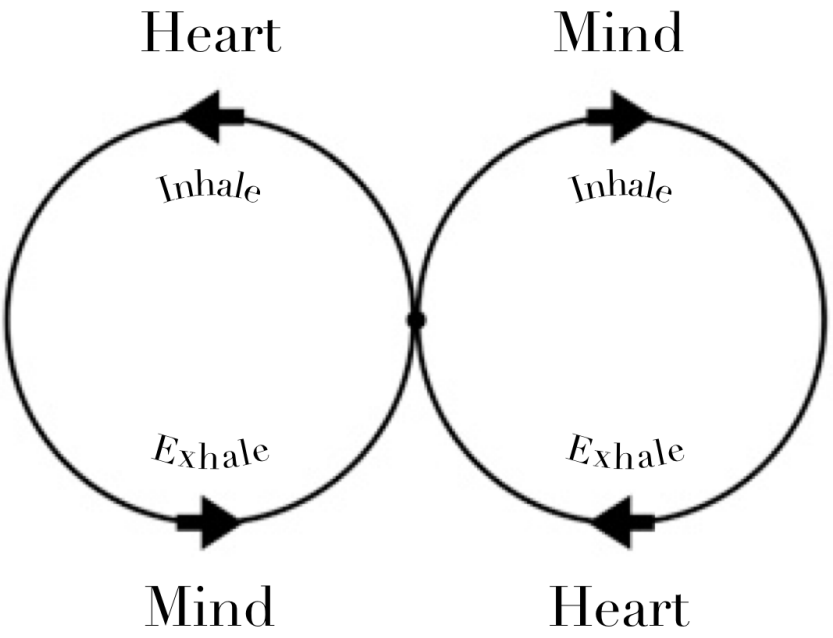
Harmonic Series

Trumpet Diatonics



Skill Development
Execution Probabilities

TRUMPET DIATONICS



HEART MIND BELL

Trumpet Diatonics©

a poetic training in coordination

Trumpet Diatonics© orders technical advancement, while maintaining a prodigious emphasis on developing a clear and consistent aural literacy.

Trumpet Diatonics© develops combined literacy and technique through the following "*Four Pillars*".

The Four Pillars of Trumpet Diatonics©

Pillar One: *Ear, Air, Horn, Lips, Tongue, Fingers*

1. Ear
The song must exist in your mind's ear before you play it. The ear incites, evokes, and summons the aperture to posture, as it coordinates the entire physical body.

2. Air
The air should enter and exit the body naturally and smoothly with the goal of creating flow velocity. The optimum inhale and exhale contain no hesitation. The breath should not be held. Air capacity must serve a comfortable feeling in the body so as to facilitate the release of natural air flow momentum at the tip of the lip, within the timing of performance.

3. Horn
The aerodynamic properties of both the mouthpiece and the trumpet as one unit are acoustically designed to stabilize air flow velocity, thus creating a standing wave of equilibrium within the horn. This standing wave oscillates at frequency and initiates the aperture into sympathetic vibration.

4. Lips
The aperture is formed by the air flow just as the sail on a boat becomes taut when wind passes by. The engaged aperture slightly compresses the release of the breath thereby accelerating the air flow. The engaged aperture also vibrates sympathetically with the standing wave inside of the horn.

5. Tongue
The tongue subtly effects the velocity of the air flow. It works congruently with the aperture to facilitate a simple and efficient change of pitch. The tongue is responsible for articulation and defines rhythm as well.

6. Fingers
The fingers must move the valves firmly with impeccable precision and timing. The coordination of the fingers with the articulating tongue and changing pitches must be a response to the commands of the mind's ear. It is extremely important to develop the independent coordination of the fingers. Never lift the fingers above the valves; keep them resting in a neutral readiness on top of the valve button.

"Air, Horn. ; Lips, Tongue."

Pillar Two: *"He" - "Who"*

The phonetics of the syllables *"He"* and *"Who"* shape the embouchure and the oral cavity with specific postures. The *"He"-"Who"* placements and shapes of the tongue in the mouth share similar phonetic postures.

The inhale is to be drawn with *"He";* the exhale is released with *"Who"*.

Concerning the Diaphragm & Lungs:
Two respiratory muscular systems within the thoracic cavity are responsible for the inflation and deflation of the lungs.

The lungs do not breath, the diaphragm does. The lungs have elasticity but do not contain musculature. The ***diaphragm*** is the ***contracting muscle of inhalation***. "Supporting" with the ***diaphragm*** while exhaling or "blowing" is ***anatomically impossible***. The ***function of the diaphragm*** is to ***relax on the exhalation***. ***Contracting intercostal muscles engage during the exhale***, ***supporting in the expulsion of air*** while the ***diaphragm relaxes upward*** toward the lungs. The ***intercostal muscles relax during the inhalation***, allowing for ***full expansion, elasticity, and flexibility of the thoracic cavity***.

The notion that the body should exhibit no tension while breathing is a misinterpretation of fundamental physiology. The mere act of inhaling, by its very nature, creates high pressure inside the body by way of the contracting diaphragm and expanding lungs. This collection of energy is required in order to release air into the horn with free momentum and efficient velocity.

Consider the following distinct attributes of the *"He"* and the *"Who"*. See how these postures work together to create effortless tone.

1. "He" on the Inhale
The posture in the oral cavity of *"He"*:

- creates the sensation of cool air in the back of the throat signaling a relaxed "open throat" for smooth, unrestricted movement of air. This enhances a natural expansion of air throughout the thorax.
- prepares a smooth release of the air as well as an efficient posture of readiness within the oral cavity to begin the tone and initiate articulation.

2. *"Who" on the Exhale*
The posture in the oral cavity of *"Who"*:

- is fixed in order to form a supported aperture so as to maintain a consistent velocity of wind energy entering the horn.
- enforces the aperture to stay engaged for proper and consistent response enabling flexibility throughout the range of musical expression.
- promotes proper posture of the embouchure ie. cheeks against teeth
- defines the natural distance between the upper and lower teeth, establishing a relaxed jaw posture and effective mouthpiece placement.
- posture's the tongue for efficient articulation.
- posture's the aperture and tongue to whistle.

To engage the diaphragm in a productive and natural manner, inhale the second half of the breath through the nose. ***"Inhale: "He" - Nose; Exhale: Who"*** The resistance created from breathing through the nasal passages activates the contraction of the diaphragm, while the nose moistens the air as the mouth closes to posture the *"Who"* attack, releasing the air.

Pillar Three: *Whistle*

There are two flexibilities of the aperture; they are frequency and amplitude.

Whistling coordinates the postures of the oral cavity within the mouth, created by the tongue, along with with the posture of a forward aperture by which the air is delivered at the tip of the lip. The singing ear compels this coordination.

"If you whistle, it will work."

Pillar Four: *Articulation*

The "attack" occurs the instant the lips begin to vibrate without the tongue. The tongue does not begin the tone. It is with the addition of the tongue that the tone is *characterized*. This is known as articulation. Articulation defines the language and dialect of personal expression.

The technique of articulation is properly executed through phonetics by the French pronunciation of the words *'dú'* or *'tú'*.

In applying articulation, do not say 'tee', 'tah', 'dee', 'dah', 'tuh', 'duh', 'toe', or 'too', as these create inconsistencies in embouchure formation, aperture formation, and oral cavity shape. The application of these improper syllables, (especially related to range) perpetuate obtuse jaw movements, inconsistent mouthpiece pressure/placement, and chaotic/spastic air movement. All of these irregularities severely debilitate the "attack", thereby inhibiting consistency, stability, resonance, tone quality, intonation, endurance, range, and flexibility.

To ensure a pure articulation, simply apply mouthpiece pressure to the lips at the instant the breath is released. Practice the precision and timing of articulation through the simultaneous coordination of the following three movements: 1. The release of the air at the outer tip of the lip, with 2. The placement pressure of the mouthpiece on the embouchure and around the engaged aperture, at 3. The rapid gentle attack of the floating tongue (*dú'* or *'tú)*.

This fundamental timing ***defines*** *the ease and quality of a player's ability to develop all technique and perform with consistent accuracy and freedom of expression.*

"He" - Nose; "Who" - Dú

Concerning Mouthpiece Playing

Mouthpiece playing coordinates the *feeling of the vibration* of the lips *with the mind's ear.* It conditions the engaged aperture to be more readily responsive and congruent with the energy of the standing wave created inside the horn.

The mouthpiece is engineered to:

1. Facilitate comfort and support of the lips and teeth; as well as to seal the aperture by way of the design of the mouthpiece. ie. size, shape, contour of the rim, and bite etc.
2. Receive and further compress the turbulence of the air delivered by the aperture in the form of velocity. The designs of the cup shape, throat size, and back-bore taper, all together contribute to this further compression of the flow, thus energizing the air as it enters the trumpet lead pipe for further acoustical organization. (standing wave)

The mouthpiece provides very little physical resistance compared to that of the trumpet. It is for this reason, detailed attention must be given to clarify the proper way to play the mouthpiece in order to establish and experience the benefits of this practice consistently.

Learning to play the mouthpiece in congruence with the subtle resistance it provides will teach the player a refinement of aperture technique as it is further coordinated with the performer's musical singing ear. This efficiency is acquired through developing the essential relationships of:

1. Timing the lip's contact, as well as proper mouthpiece placement and pressure in coordination with the release of the aperture vibration and embouchure engagement.
2. Training the vibration of the aperture to respond to the singing ear in conjunction with the subtle physical and acoustical support the mouthpiece provides.

Many students needlessly suffer from playing the mouthpiece. They play the mouthpiece inaccurately because of poor instruction they may have received, as well as having been fitted improperly. This may result in lip discomfort, loss of aperture control and flexibility, and in extreme cases, undetected bruising and perpetual injury.

The main reasons for these detriments are over blowing and "over buzzing" the resistance of the mouthpiece in order to recreate a "big resonant trumpet sound" on the mouthpiece. This inevitably stifles consistent healthy aperture development, thus negatively affecting all other techniques of playing the trumpet. It is for this reason that I consider mouthpiece playing to be an *essential, but advanced refining technique to be applied with great care, attention, and patience.*

Concerning the Lip-Tone

In performing the lip-tone, the required posture for the outside (embouchure) and inside (oral cavity) of the mouth is established. Once coordinated, these two postures form an engaged support for the engaged aperture, facilitating a balanced and efficient freedom of vibration, tone, and flexibility.

The execution of the lip-tone may be a challenge, as all acoustic energy in the form of resistance must be created by the player. It is for this reason the tessitura of the lip-tone is limited and varied, contingent upon the unique physical attributes of each individual player. The the buccinators and the orbicularis oris (embouchure) will acquire and develop the engagement needed to support a flexible and responsive aperture through conditioning countless, brief repetitions of lip-tones. In this way the embouchure is conditioned to be ready for the application of the mouthpiece, while the aperture is trained to produce a balanced and supported vibration, all the while deepening coordination with the commands of the singing ear.

This is a very small gesture for the tip of the lip only. Pitch may be developed over time. The lip-tone must be executed without jaw manipulation/tension or lip stretching/thinning. Wet the aperture with saliva.

Attitude
Learning a new skill requires an attitude of courage. Courage requires a persistent devotion to a defined goal, consistent discipline, inspired curiosity, knowledgable creativity, and unwavering faith in your abilities. Courage is exciting because it attests to a hope in an unknown. Courageous repetitions manifest exponential growth, realize deep understanding, and awaken lasting confidence.

Develop Skill
Trumpet Diatonics© builds skill. Skill is coordination. Coordination is acquired through repetition. Without a thorough concept of the sounds to be performed, developing motor-skills will be disorganized and executed in uncertainty. Trumpet Diatonics© specifies "Views to Mastery" that stimulate the mind, command attention, focus the ears, and coordinate the body through deliberate repetition. These twelve different perspectives offer a thorough practice guide to musical cognition and physical response.

Tonality
Each and every person shares a common relationship to tonality. Musical communication could never be possible otherwise. It is our very nature to hear within a diatonic tonal reference. All the repertoire contained within Trumpet Diatonics© has been composed to develop technical skill, coordinating freedom through a robust tonal aural literacy.

Artistic Conceptualization and Imitation
To create is to act on an inspiration and desire to imitate. Imitation *might* inform conceptualization. Imitation may also help to develop the necessary skills required to facilitate expression. *However,* ***Artistic Performance*** is ordered to this integral end; to express *your own Personal Art and Aesthetic Conceptualization,* ***not*** an imitative technique or artifact replica.

Practice
Does it sound the way I hear it? Is it easier? Would I want to hear myself play this, again and again?

Rules
Play what you clearly hear.
Always play by ear.
Perform; do not practice.
Practice; do not perform.
Tonality is gravity; it forms all technique.
Have a goal; Make a plan.
Perform "practice cell" without stopping.
Express a meter; not a tempo.
Rest as much as you play.
Express music on every repetition.
To repeat is not to fail.
Play the way that works for you; Solve.
Develop through habits of ease.
Be consistent in your effort, persist.
Think for yourself.
Do not be afraid.
Love what you are doing.

Trumpet Diatonics© Book of Motions Lessons 1-28

These lessons were composed in an effort to accomplish two goals. To develop the proper techniques of: tone production, flexibility, articulation, and finger coordination, without strain; as well as to facilitate music literacy through cultivating fundamental musicianship skills defined within the Western European Classical Music Tradition.

Motions for Practice

The following 28 Lessons make for their theme the three Motions. The Motions consist of Direct Motion, Oblique Motion, and Contrary Motion. In understanding and performing these Motions, the musician will learn to communicate with an effective literacy.

Tonality

It is our very nature to hear within a diatonic tonal reference. These 28 Lessons have been composed in order to build technical skill directed by the pupil's powerful natural fluency of aural cognition; where the entire body is coordinated by the innate vividness of the musician's aural imagination. These Lessons address the Major, Natural Minor, Harmonic Minor, Melodic Minor, Chromatic and Whole Tone tonalities.

Practice

It is suggested that the pupil memorize Lessons 1-6, as they define the specific Tonalities and Motions for making music. These first six lessons lay the foundation for study of the remaining 22 lessons.

Adequate space has been given between the staves to pencil in instruction, notate variations, and express the different Views to Mastery defined in Trumpet Diatonics©. (ie. solfeggio)

These exercises have been purposefully composed without any specific meter, tempi, rhythm, articulation, or dynamics.

I suggest the pupil learn how to slur the entirety of each Tonality and Motion. After this is accomplished articulation may be added. Variations of articulation and style should be applied at the inclination of the artist's curiosity, need, and creativity.

I suggest the pupil learn how to play these Tonalities and Motions at intentional dynamic levels that are most useful, natural, and pleasing. This is how freedom of sound through resonance is learned. The tempo must be defined by the pupil through a severely honest assessment of one's own ability. It is suggested that the pupil never play faster than their ability to hear two notes at a time. Tempi should be varied often.

It is suggested that meter (how the notes are grouped and emphasized) at first, is defined by how the pupil hears the relationship of the pitches in the moment. In the beginning, the meter should be determined by the natural inclinations of the pupil to hear and execute the different Tonalities and Motions. Once the coordination to perform these exercises consistently has been developed, the artist may vary the meter so as to challenge themselves in hearing new variations inspired by their own creativity.

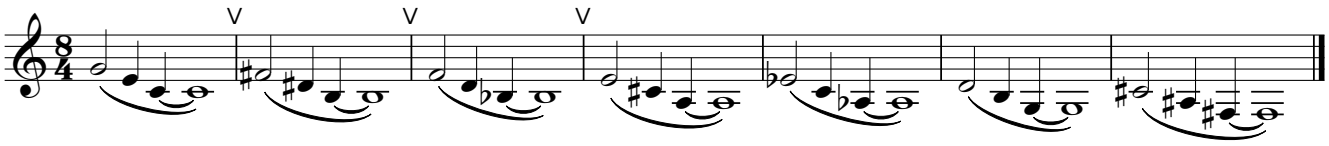
Rhythm is to be applied and varied as liberally as the pupil is capable.

All 28 Lessons should be performed in every tonality.

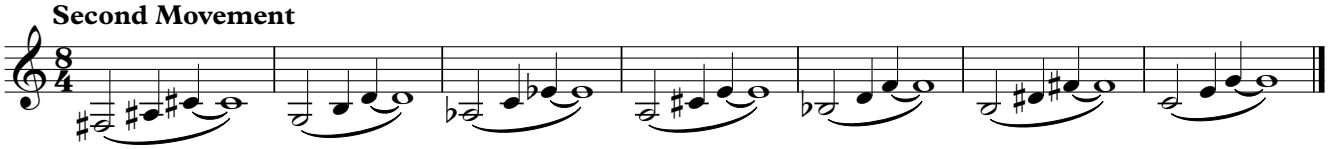
A Daily Practice 1

JC Heisler

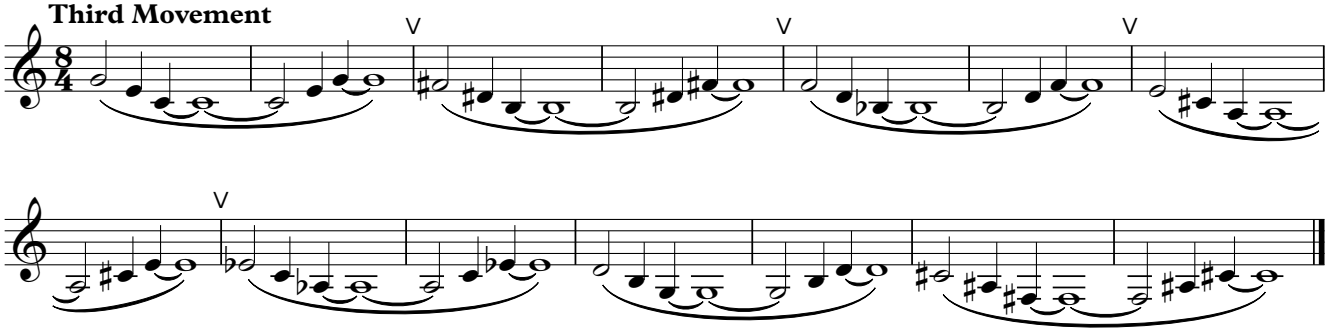
First Movement



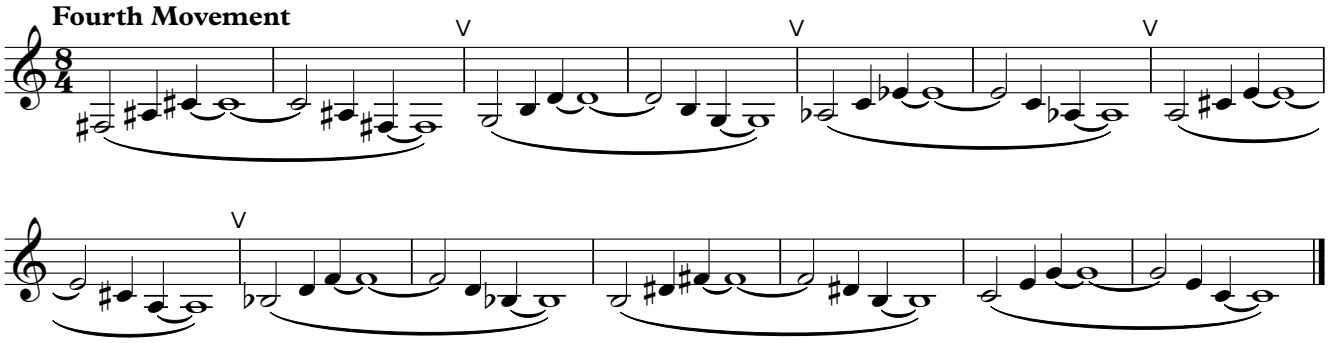
Second Movement



Third Movement

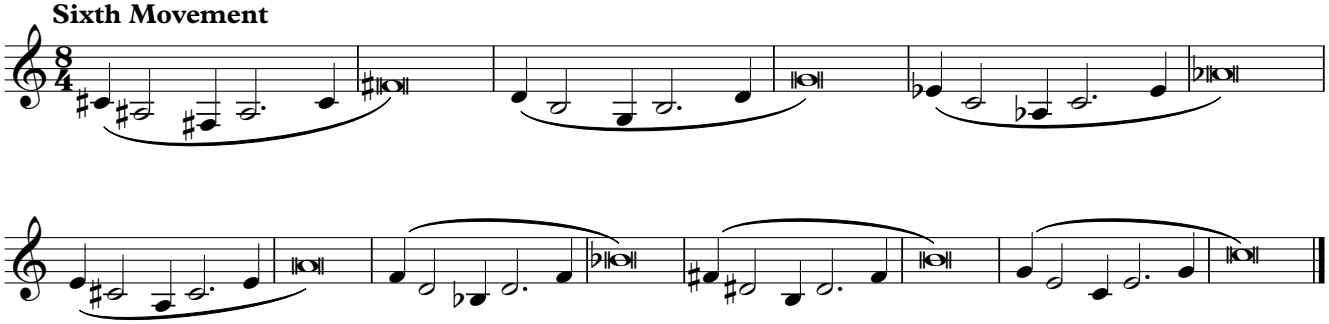


Fourth Movement



Fifth Movement

Sixth Movement



Play the Following Melodies Through All Four Movements

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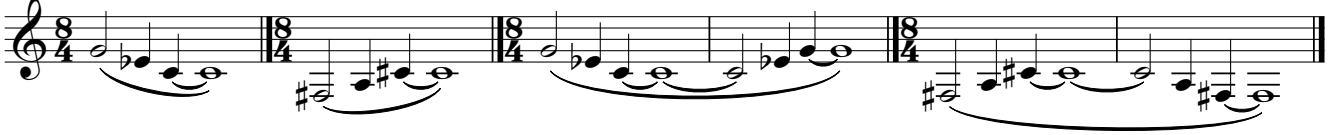
First Movement *Second Movement* *Third Movement* *Fourth Movement*



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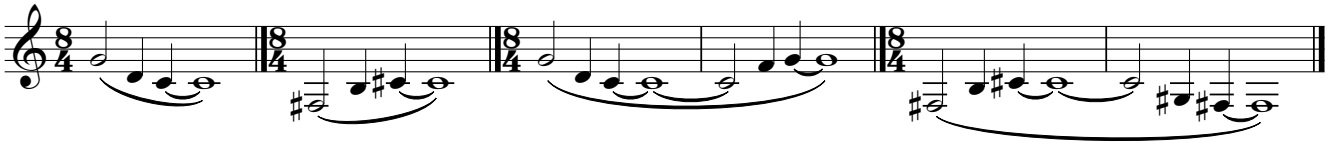

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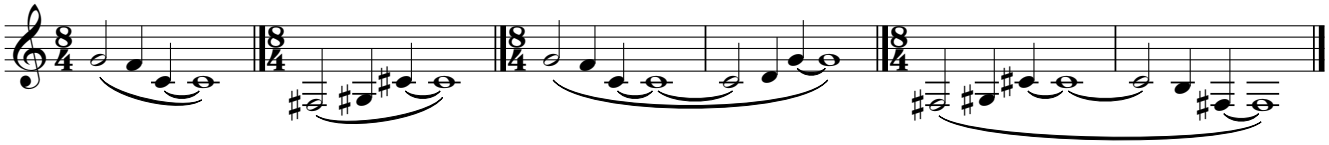

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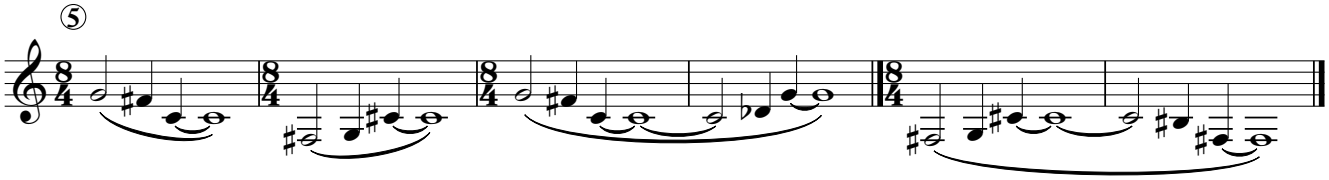

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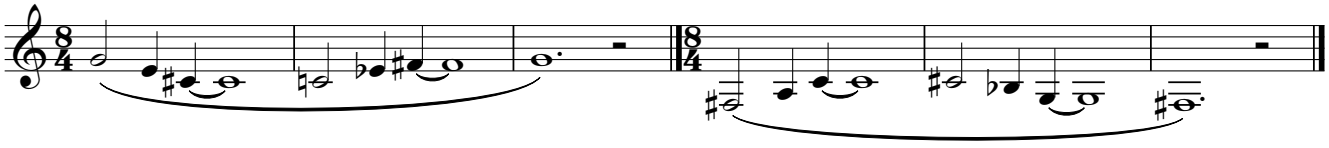

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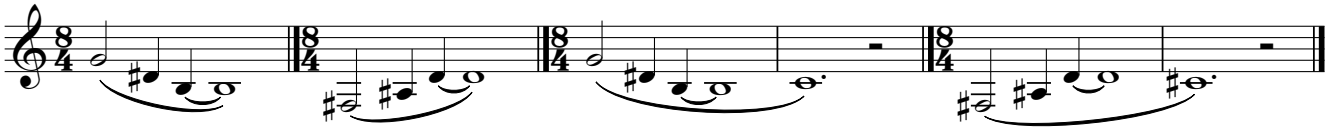
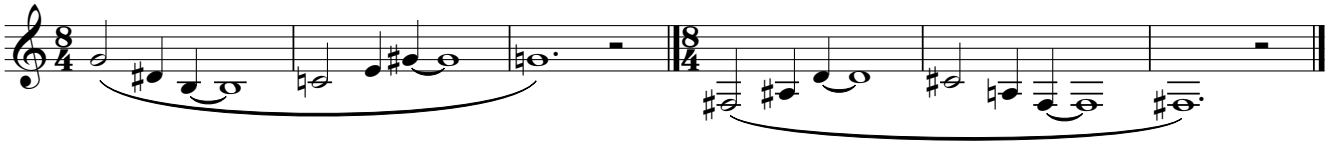
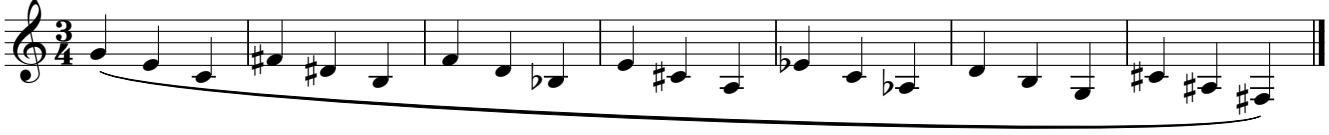




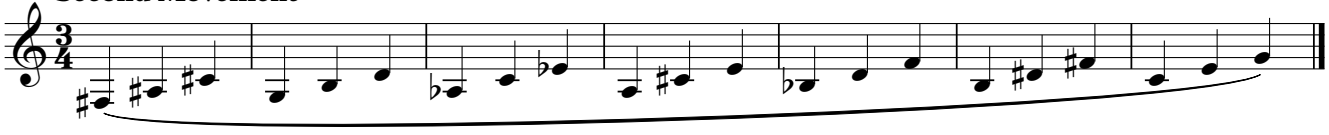
A Daily Practice 2

JC Heisler

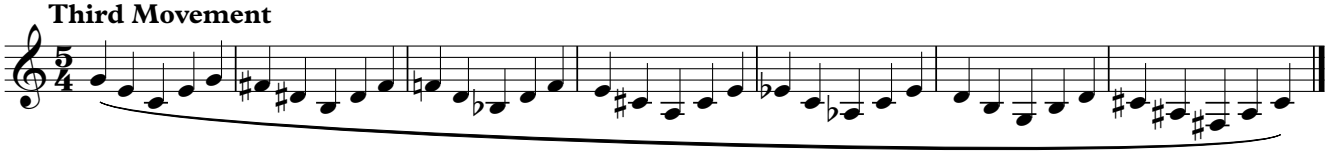
First Movement



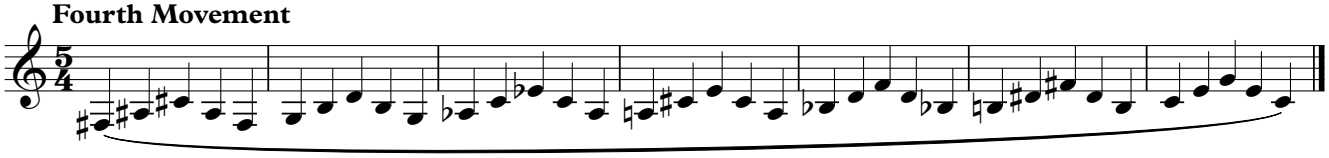
Second Movement



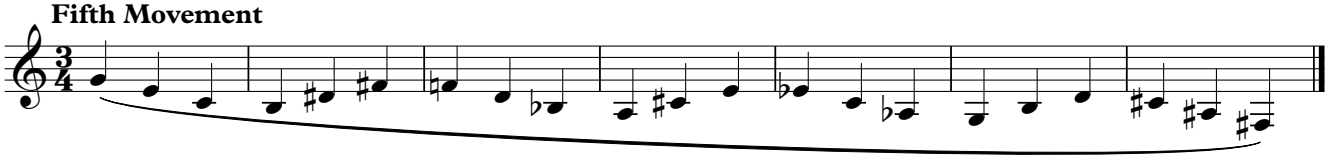
Third Movement



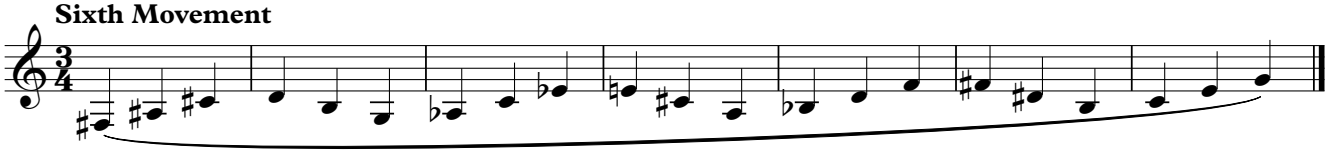
Fourth Movement



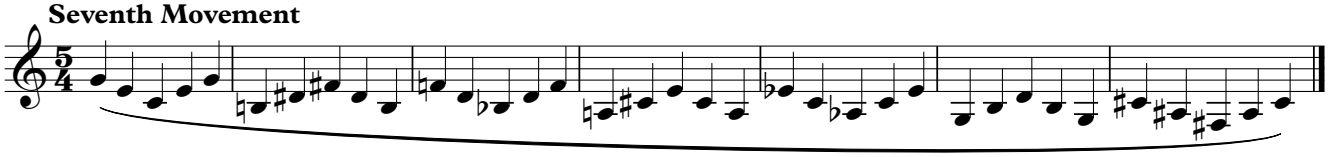
Fifth Movement



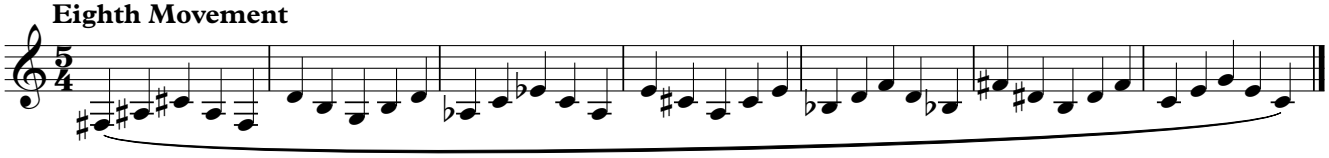
Sixth Movement



Seventh Movement



Eighth Movement



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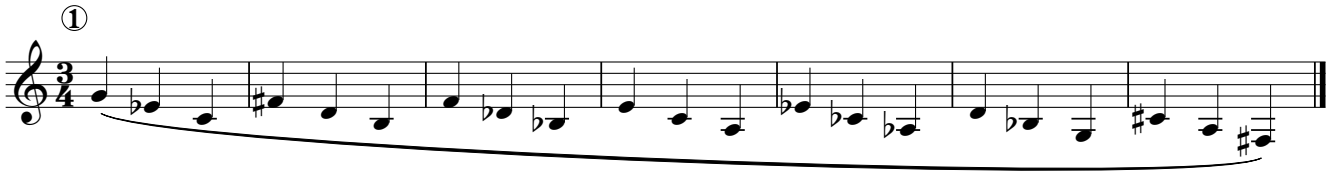

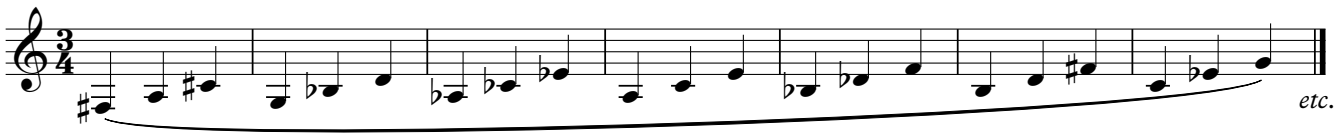

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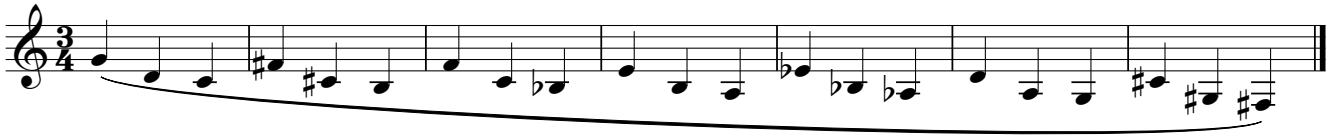

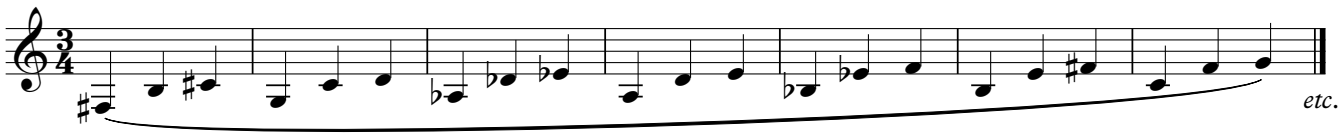

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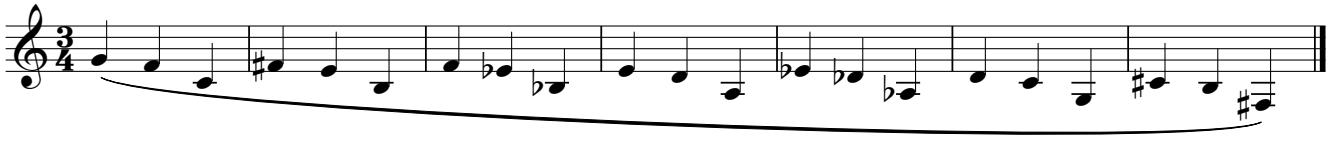

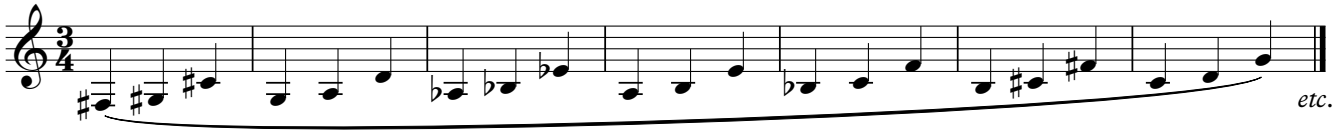

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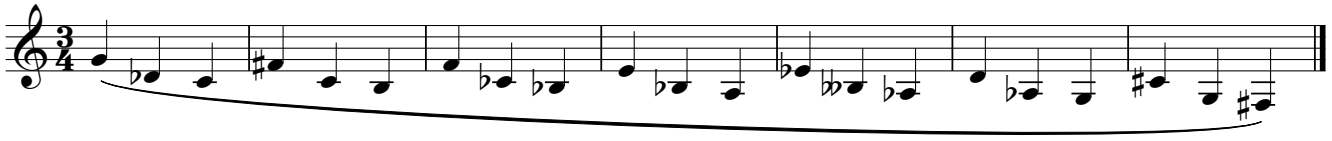

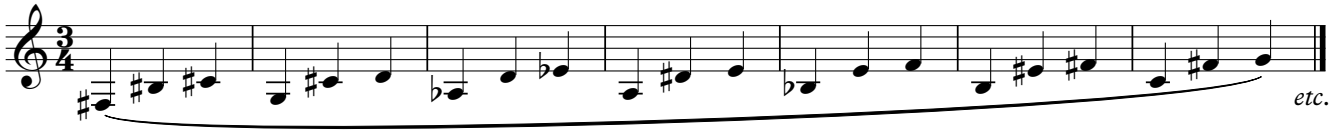

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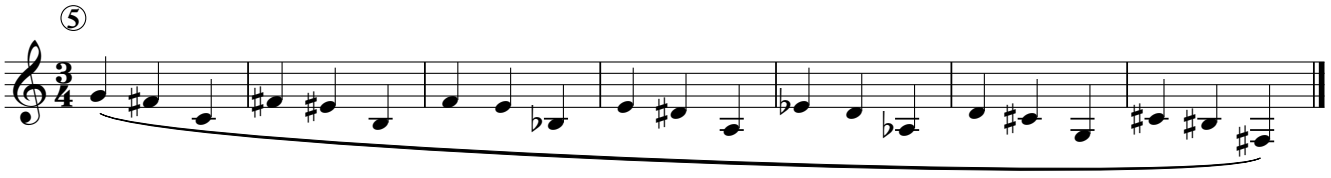

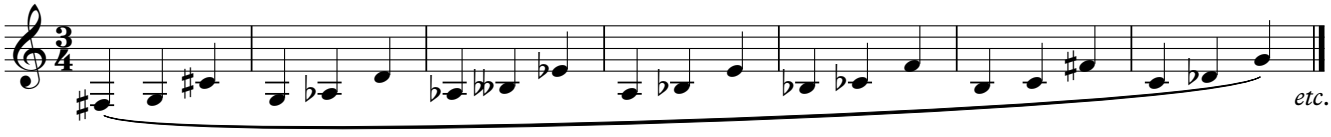

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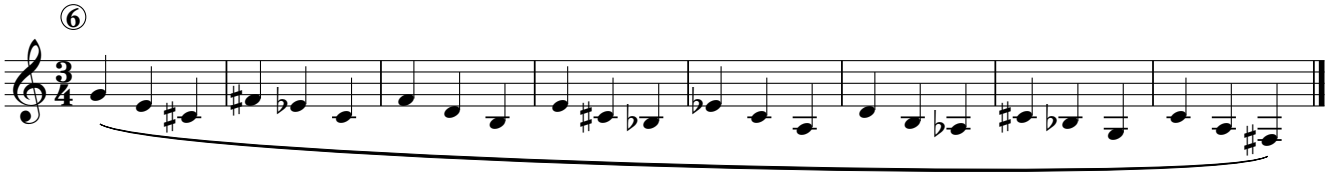

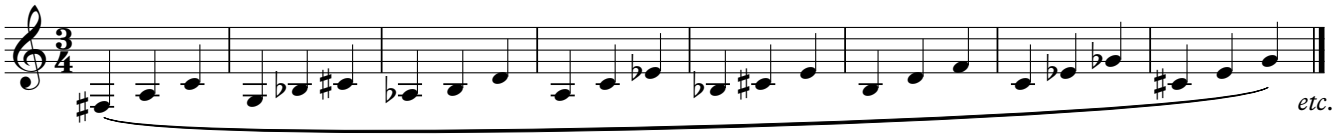

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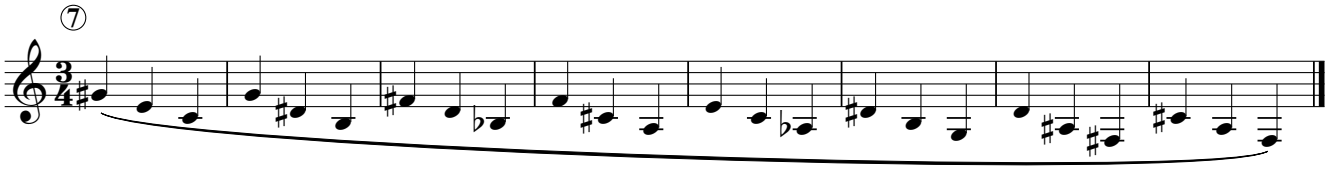
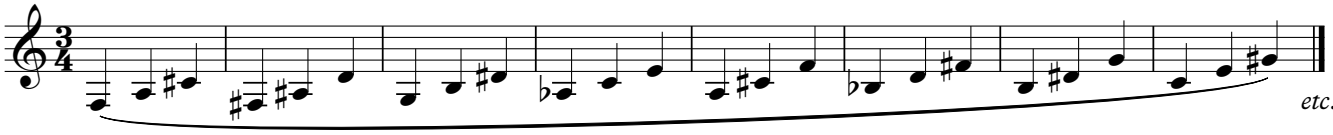
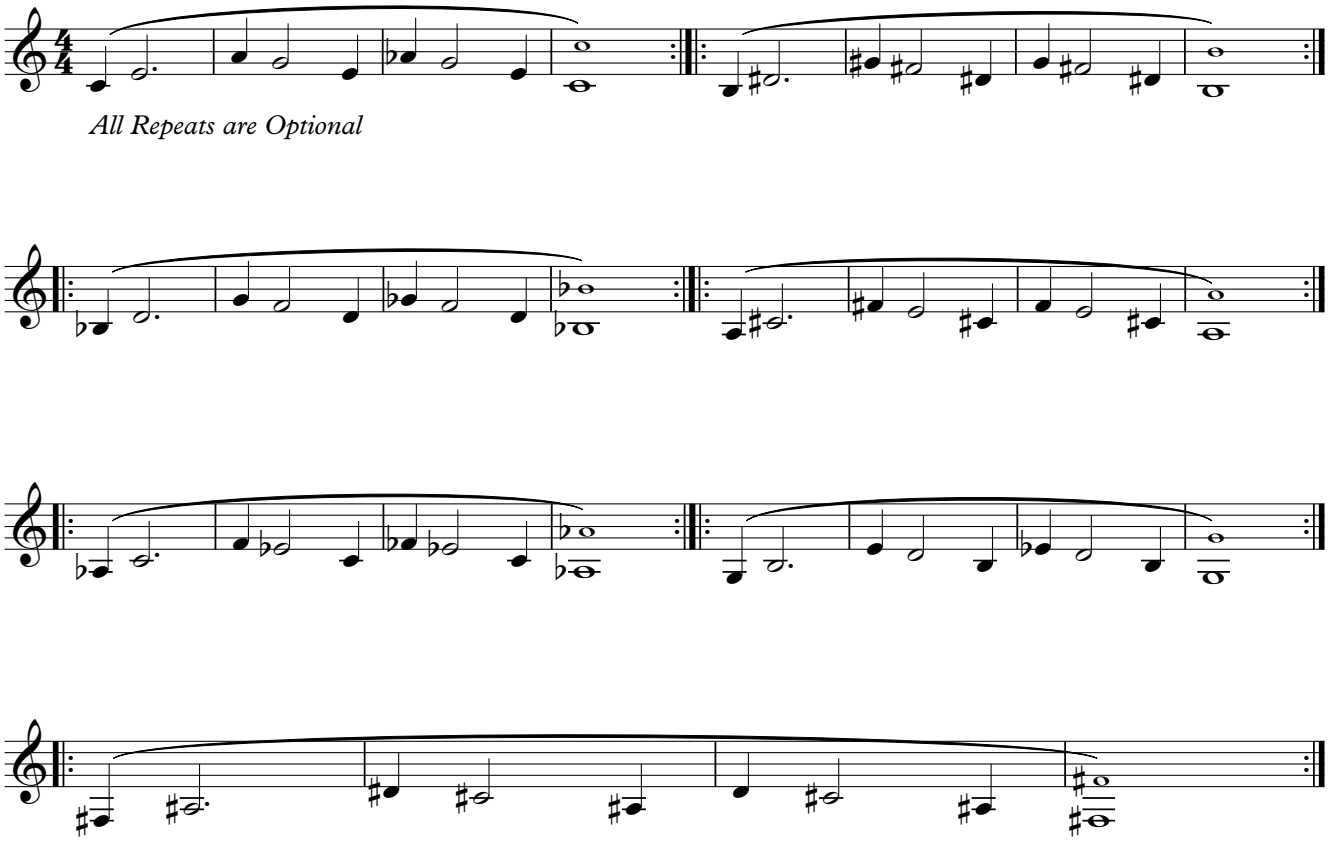




A Daily Practice 3

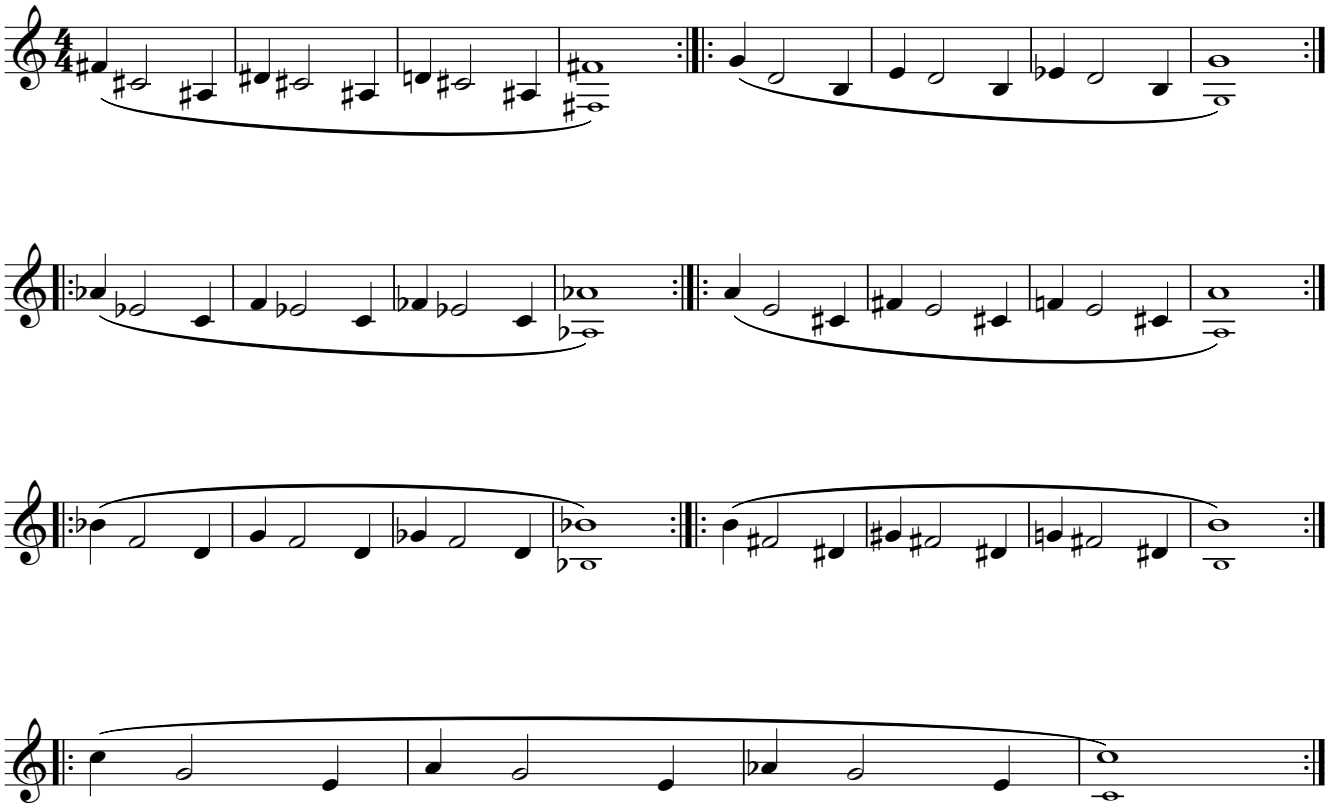
JC Heisler

First Movement

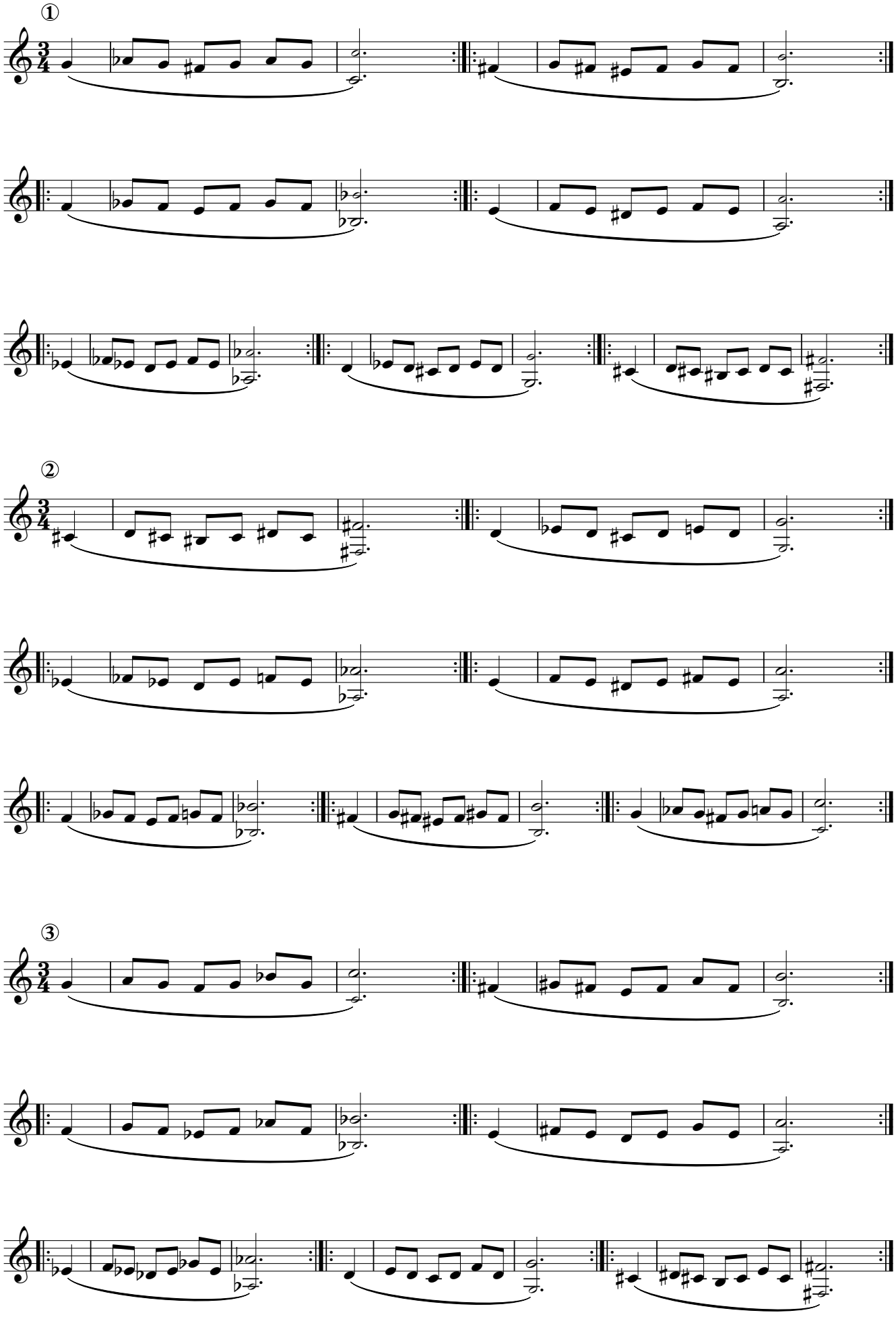


All Repeats are Optional

Second Movement



Play Previous Movements in Minor as well.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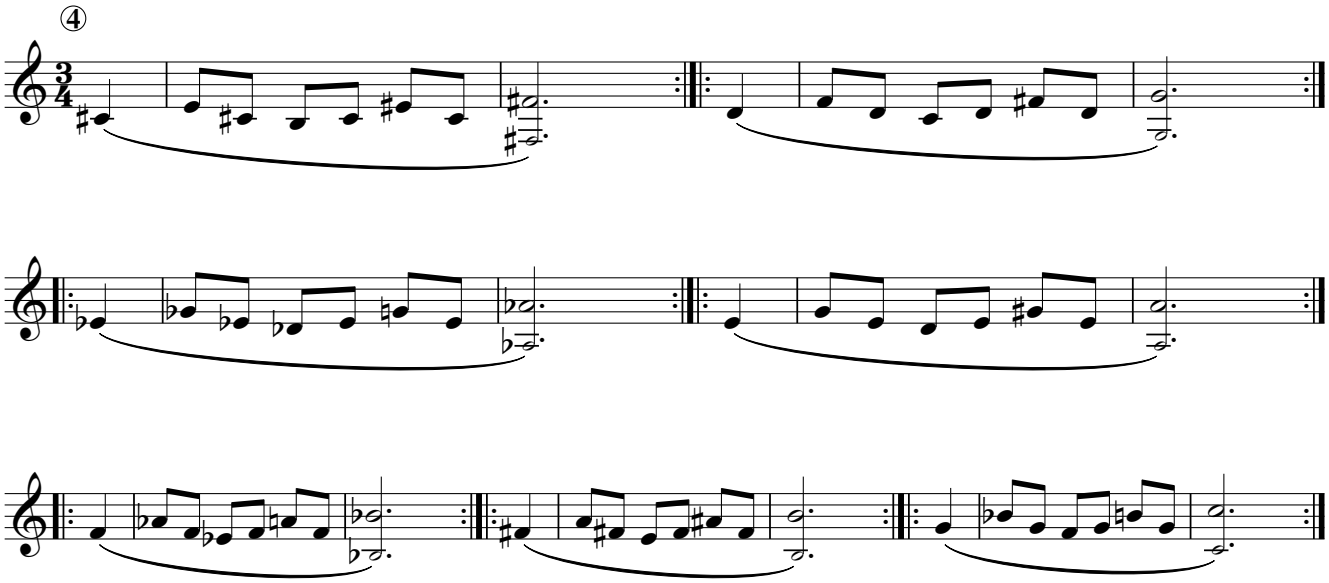


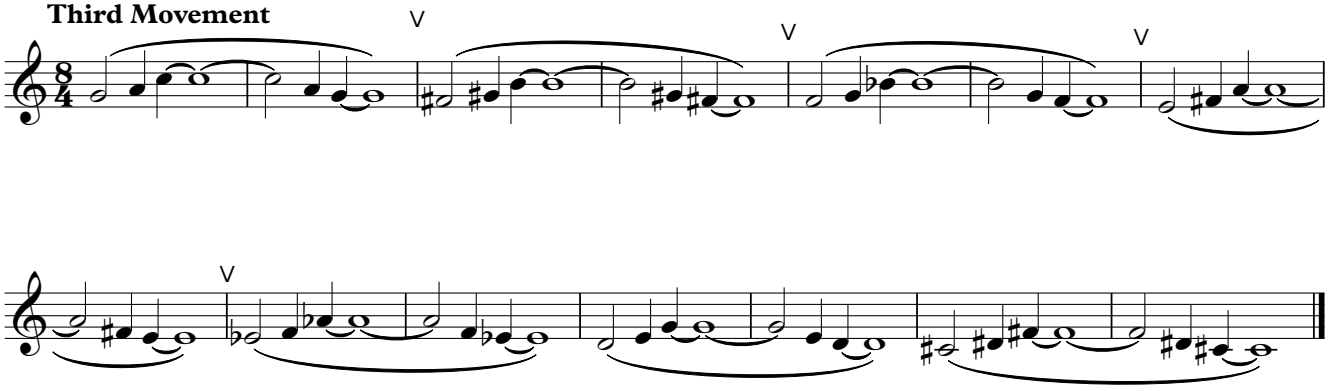
A Daily Practice 4

JC Heisler

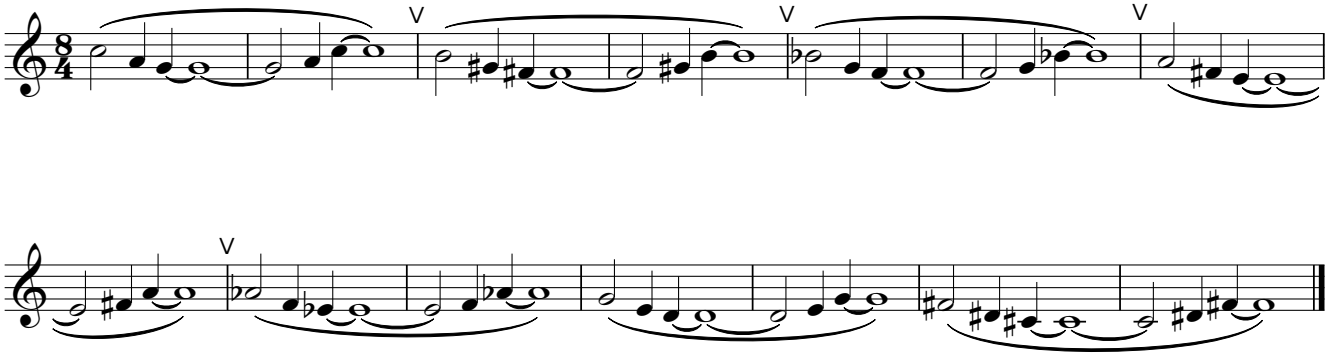
First Movement

Second Movement

Third Movement



Fourth Movement



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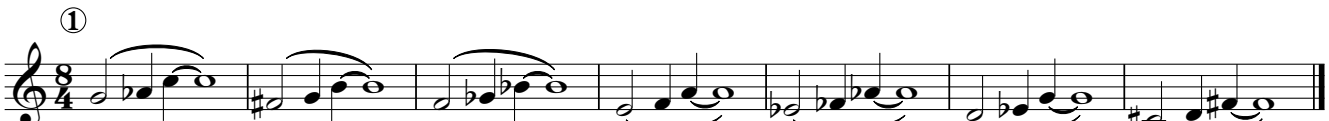

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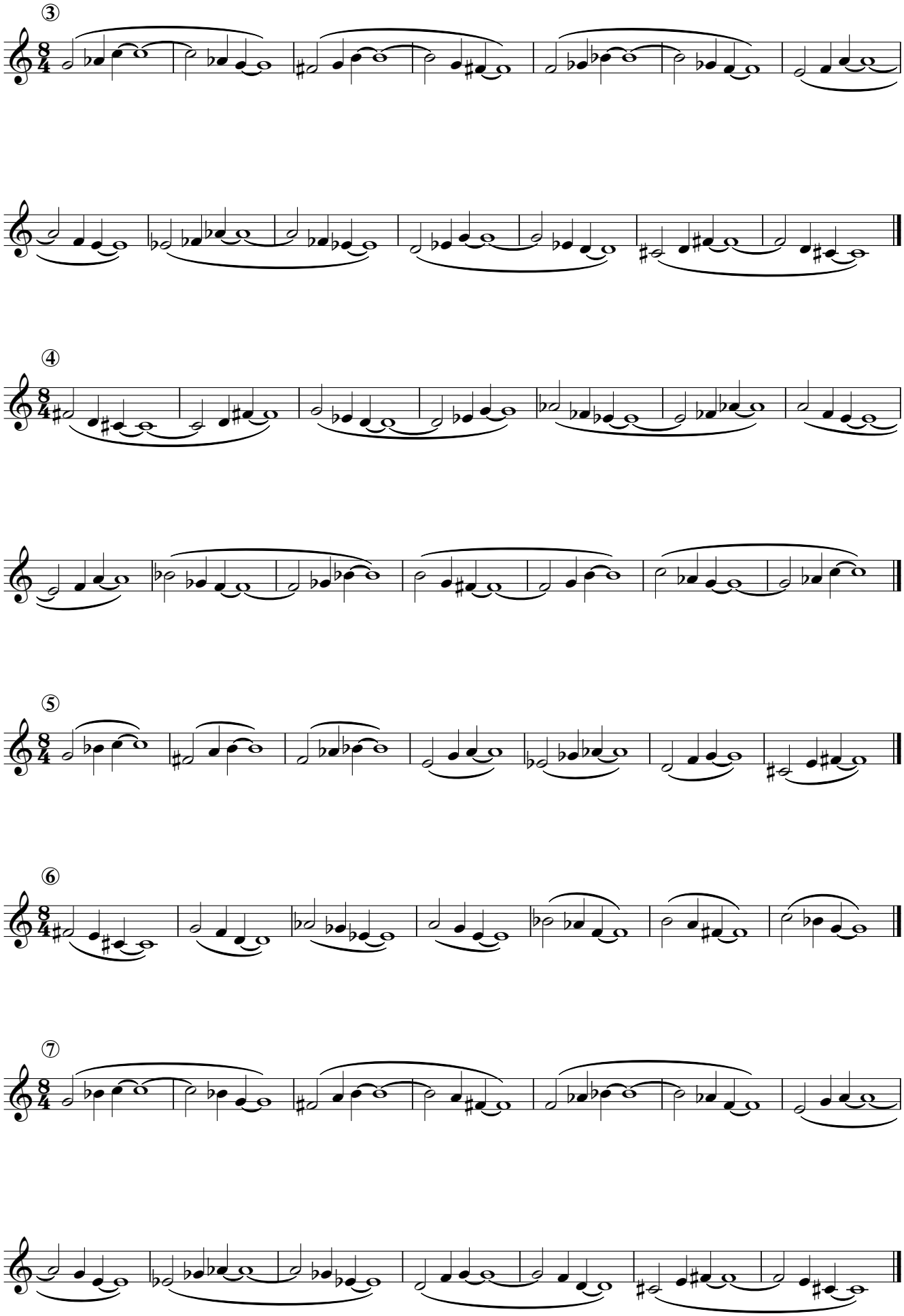
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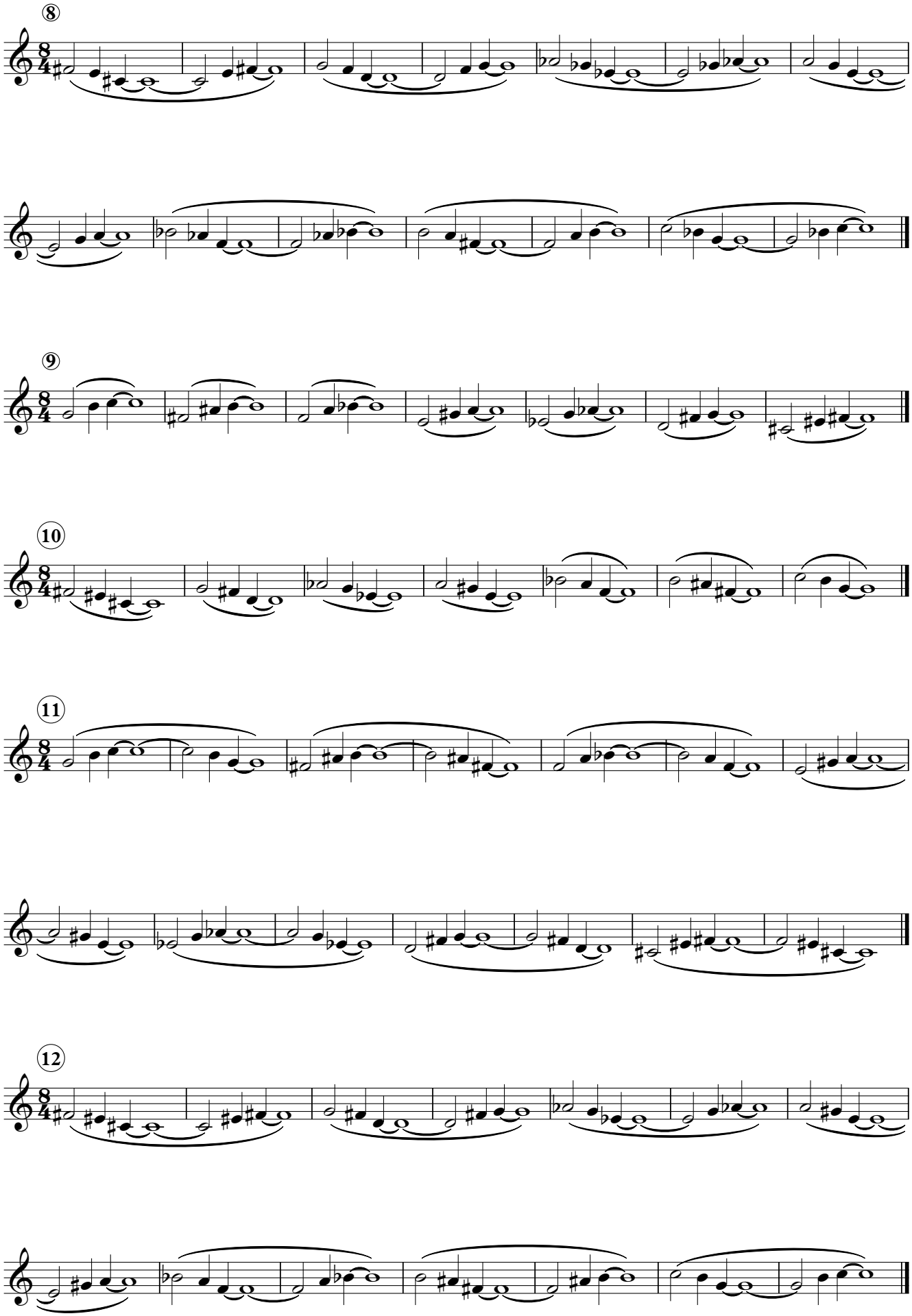
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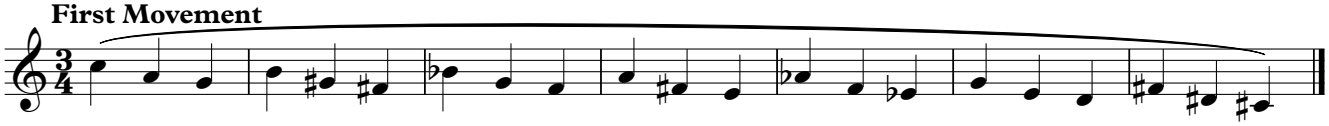
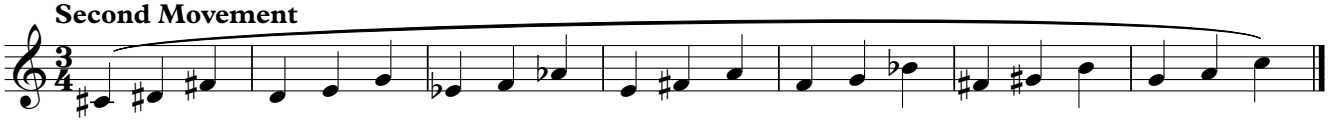
A Daily Practice 4a

JC Heisler

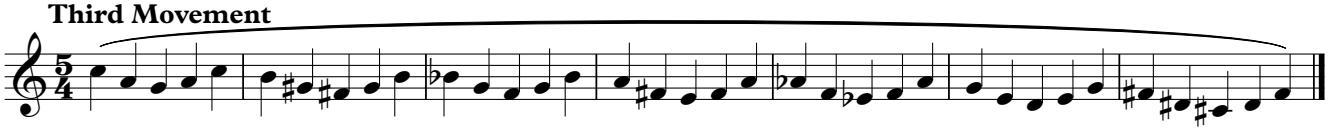
First Movement



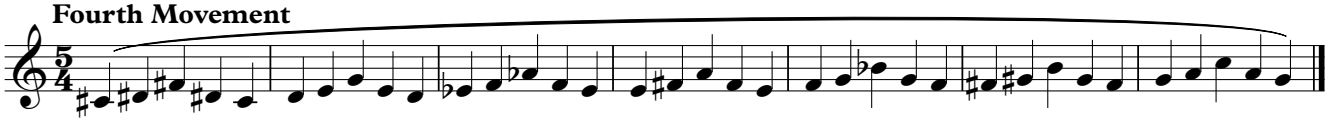
Second Movement



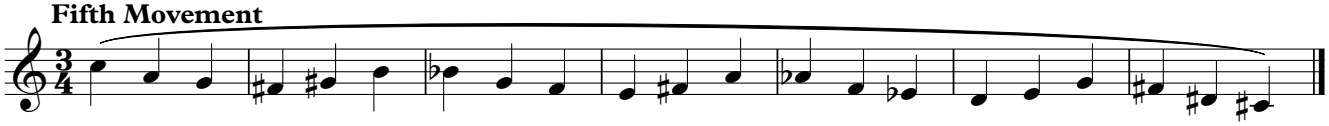
Third Movement



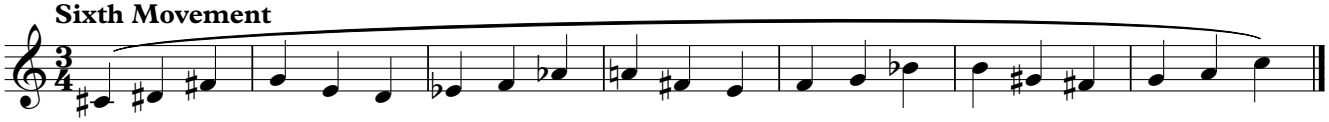
Fourth Movement



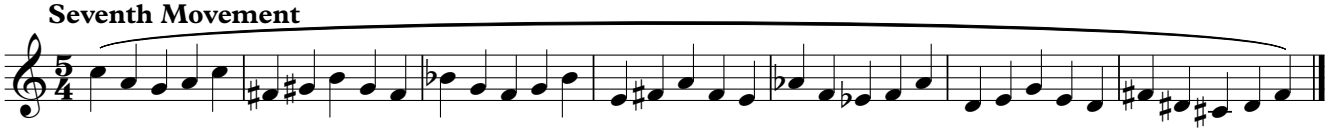
Fifth Movement



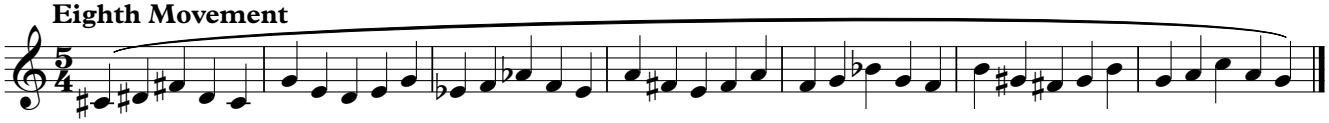
Sixth Movement



Seventh Movement



Eighth Movement



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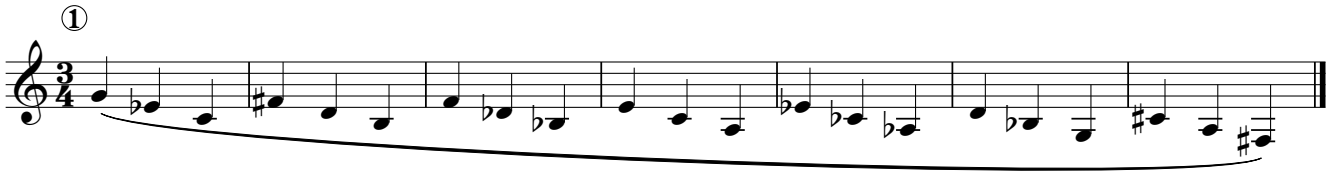

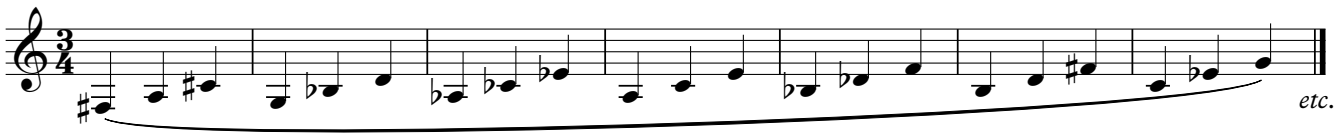

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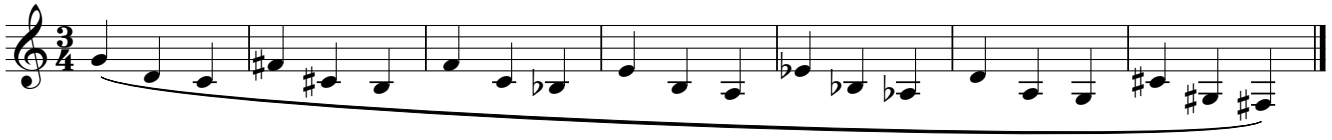

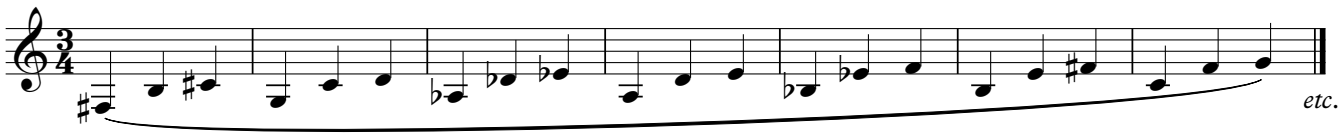

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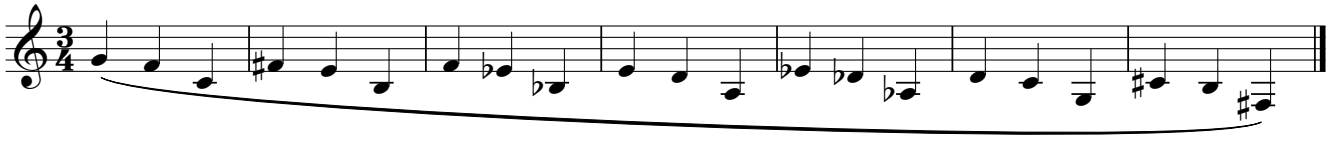

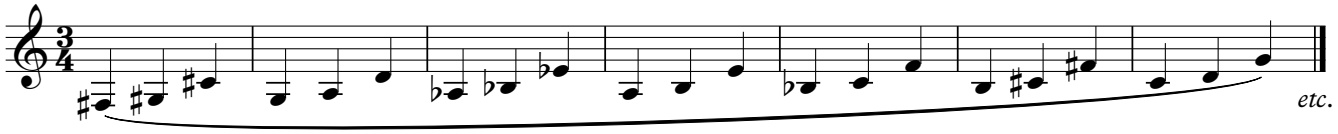

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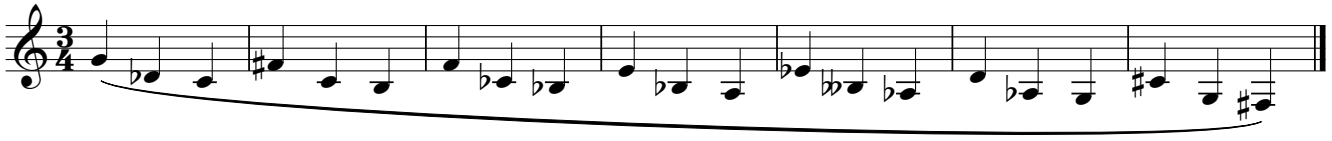

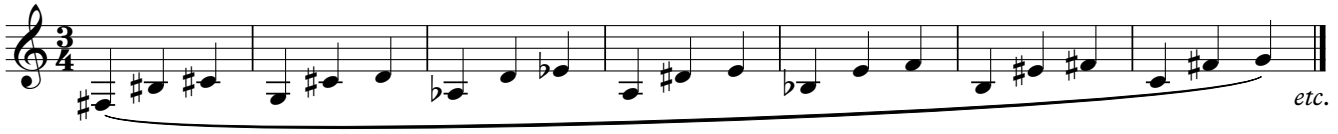

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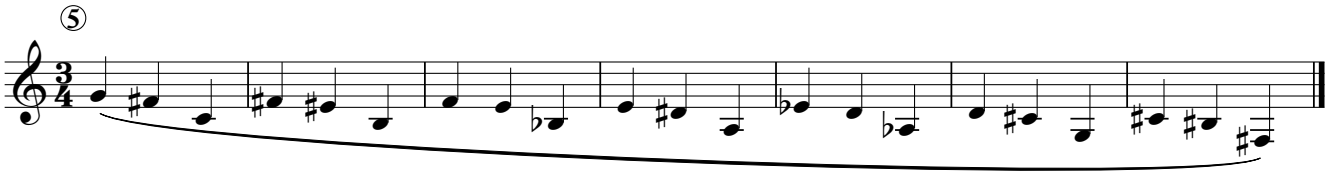

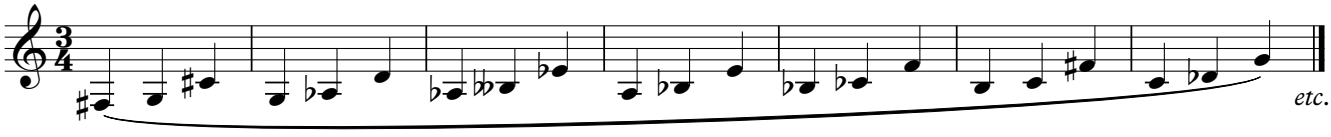

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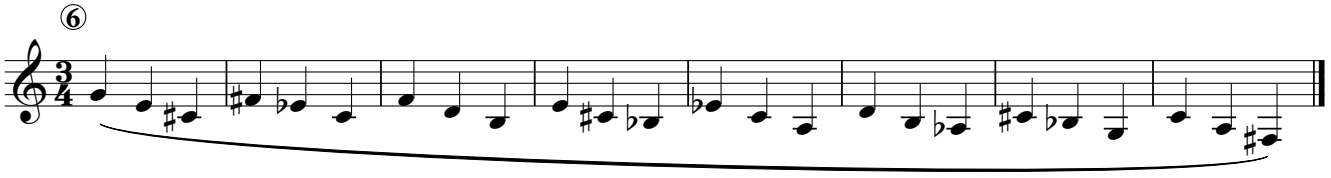

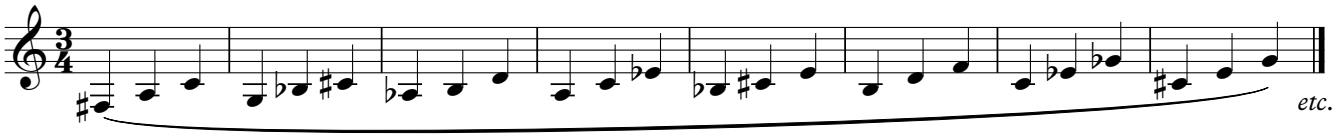

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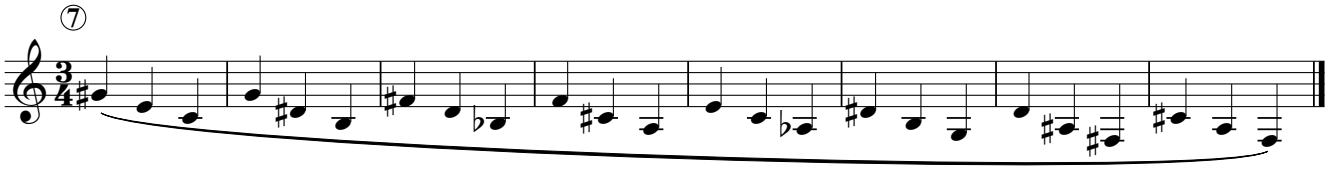

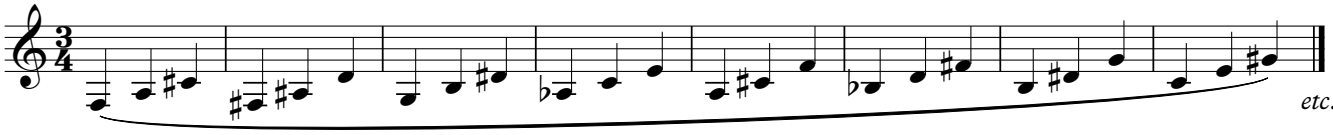

A Daily Practice 5

JC Heisler

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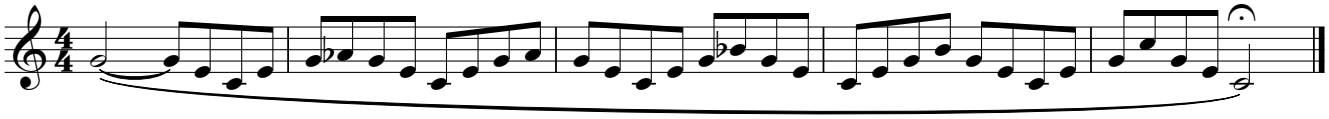

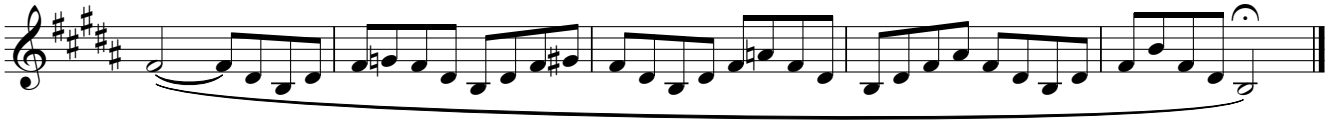

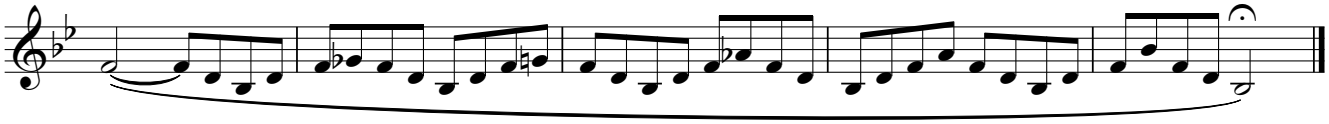

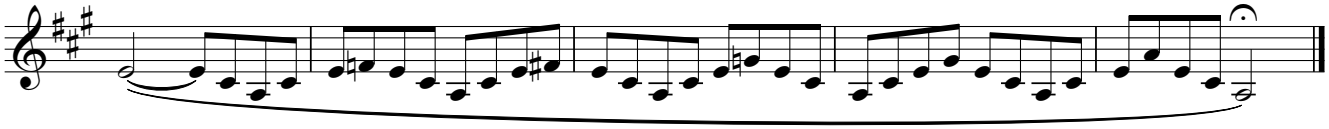

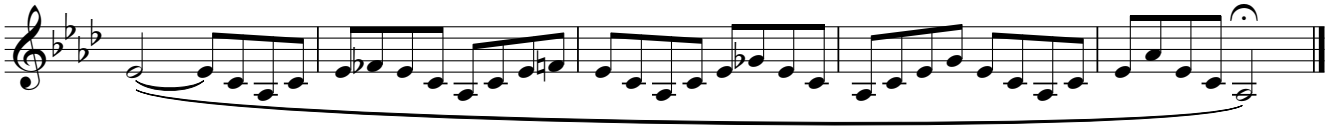

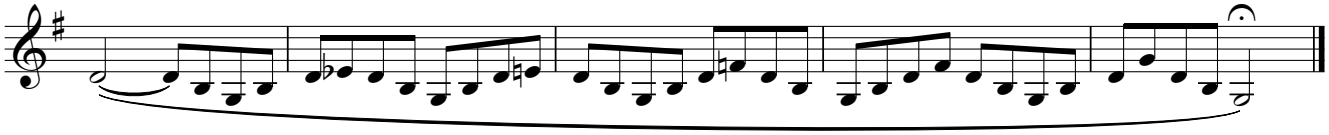

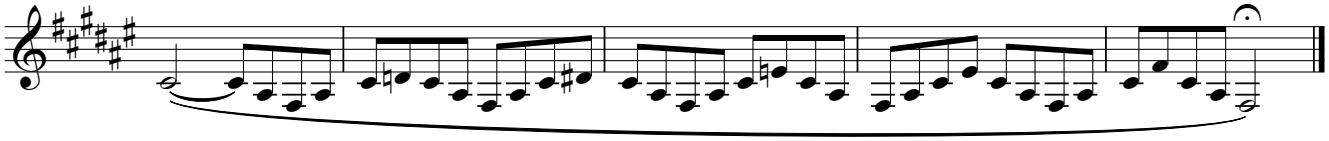

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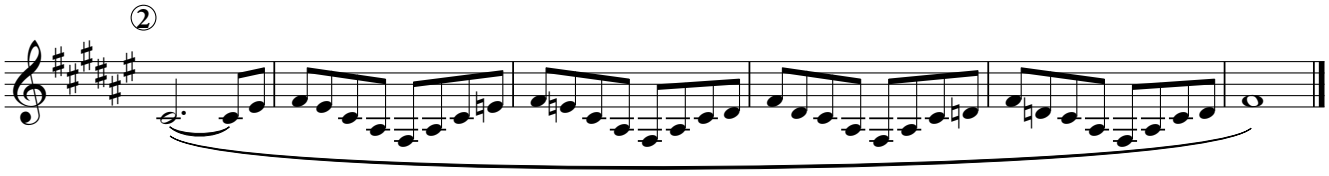
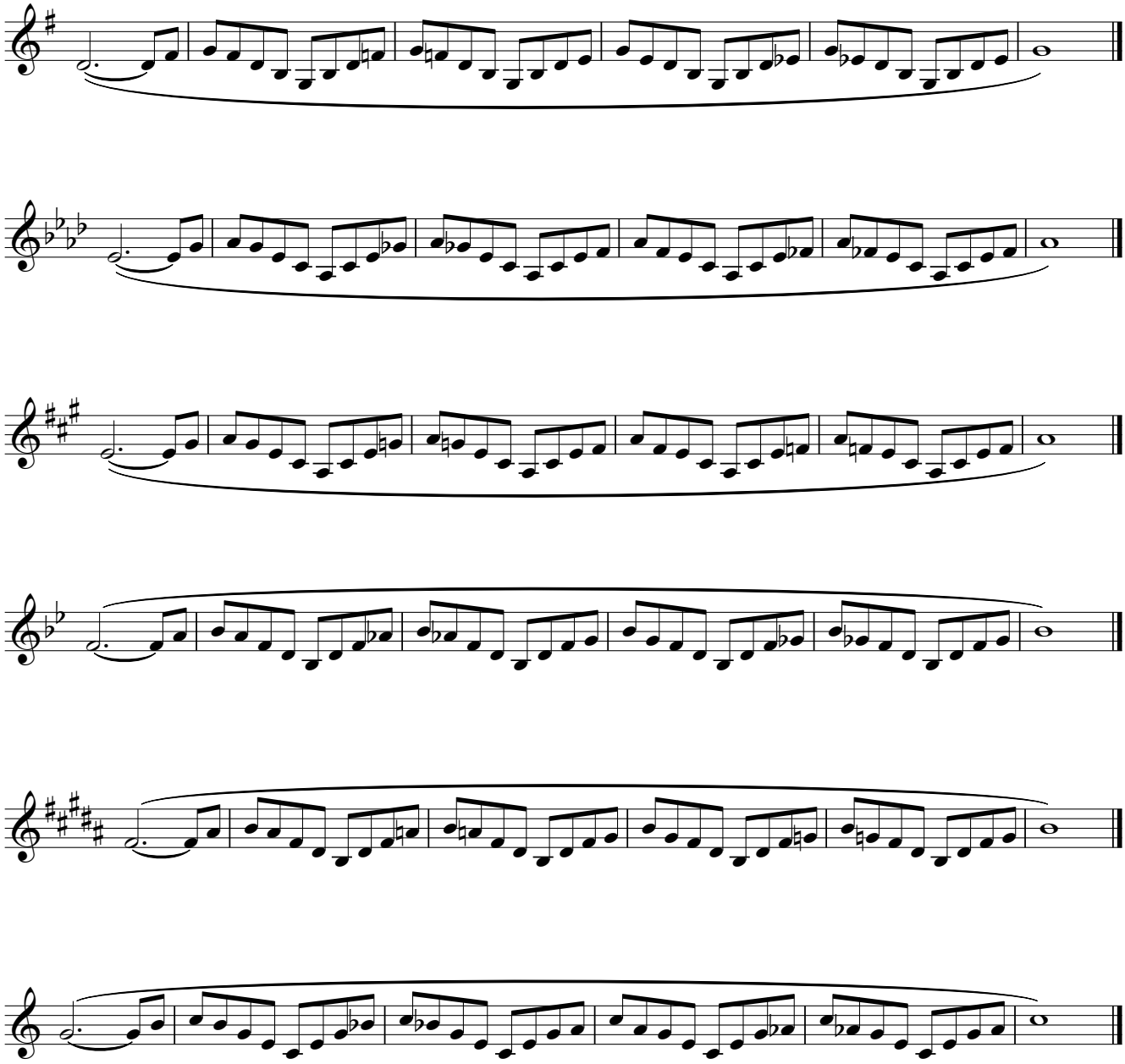
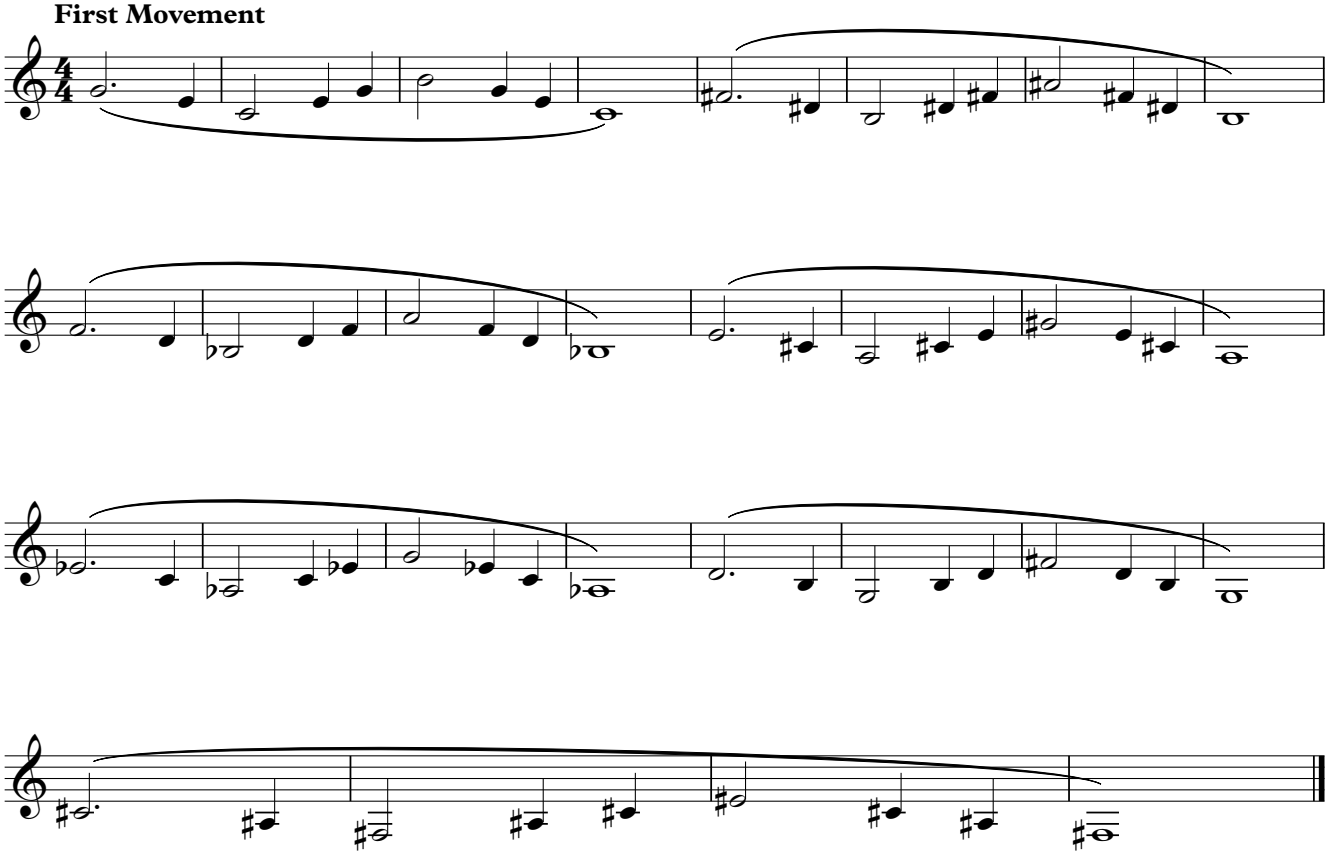




A Daily Practice 6

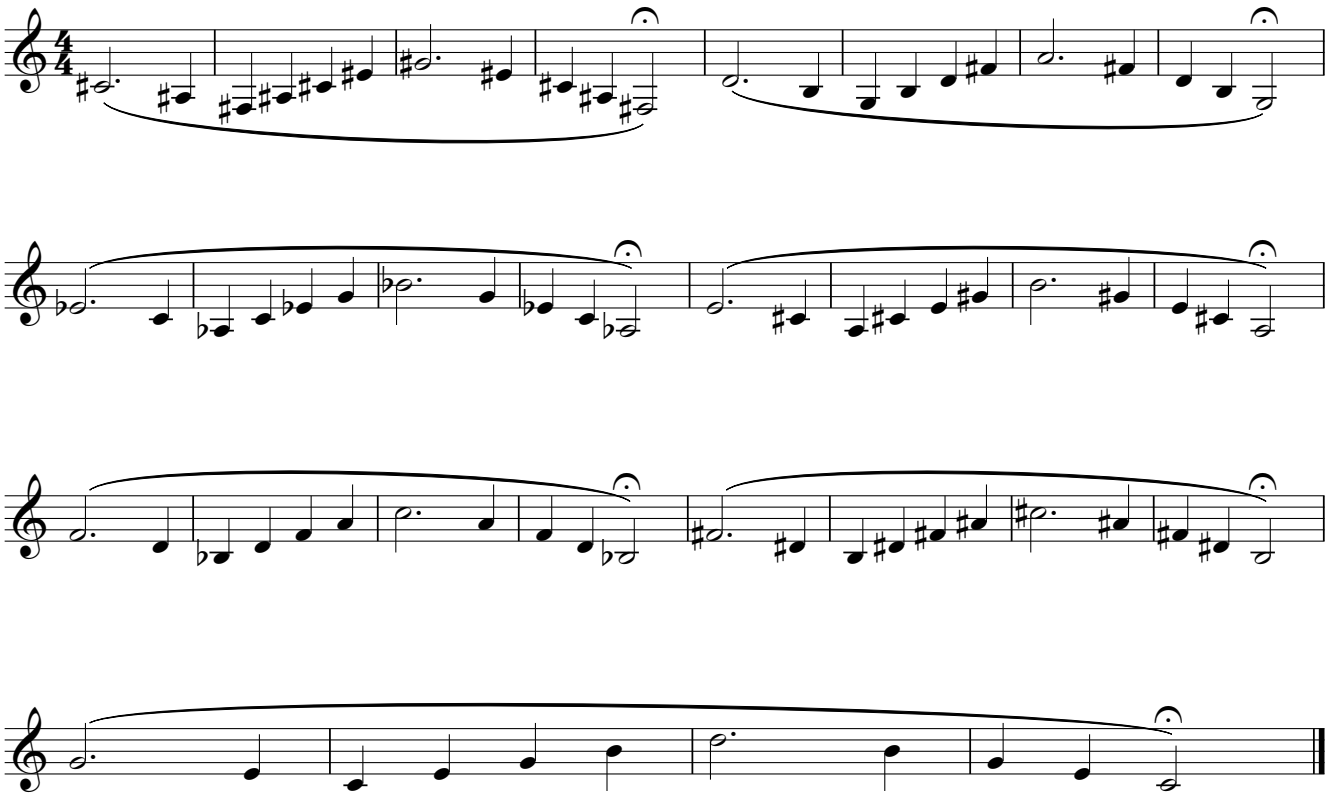
JC Heisler

First Movement



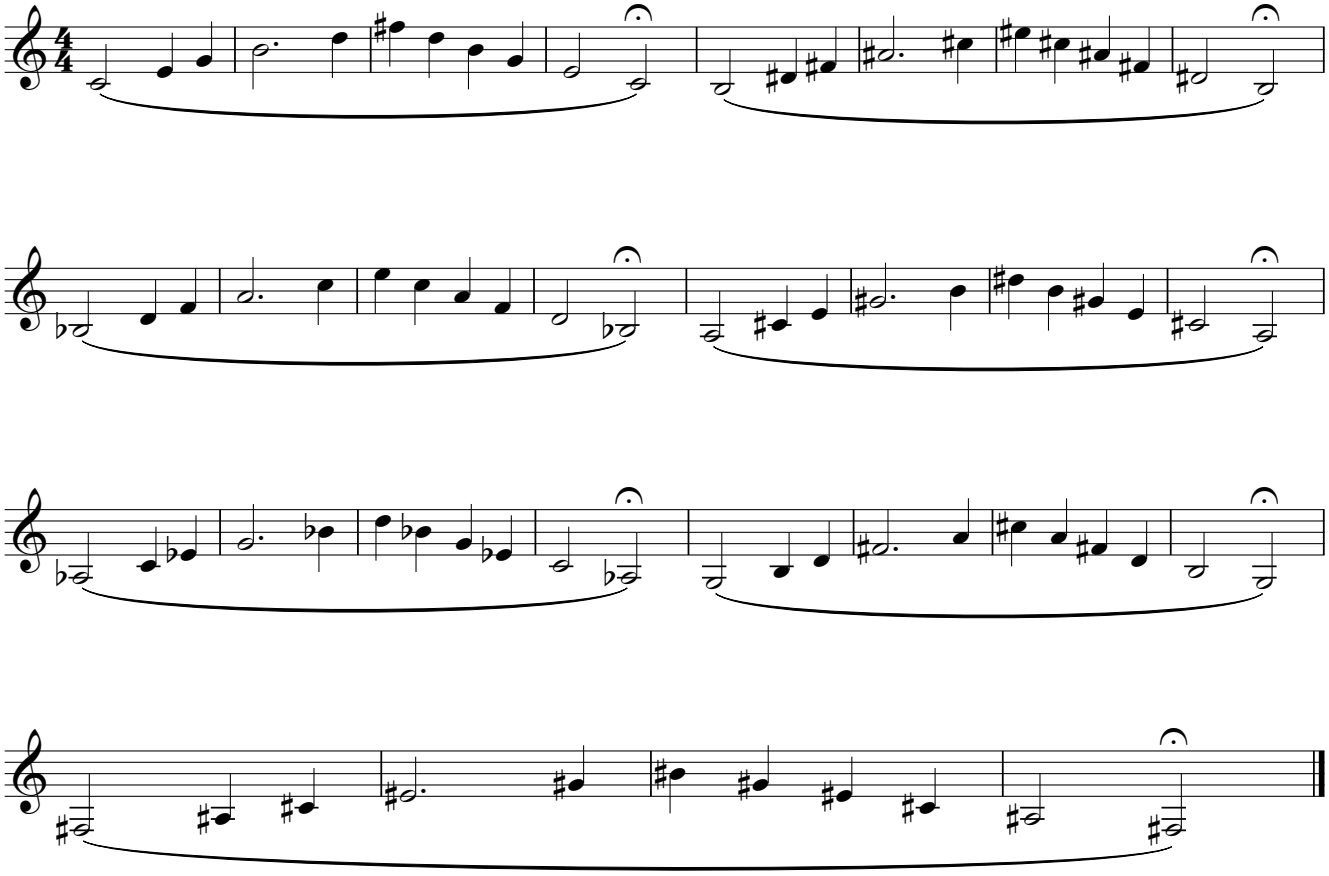
Play Previous Movements in All Qualities.

Second Movement



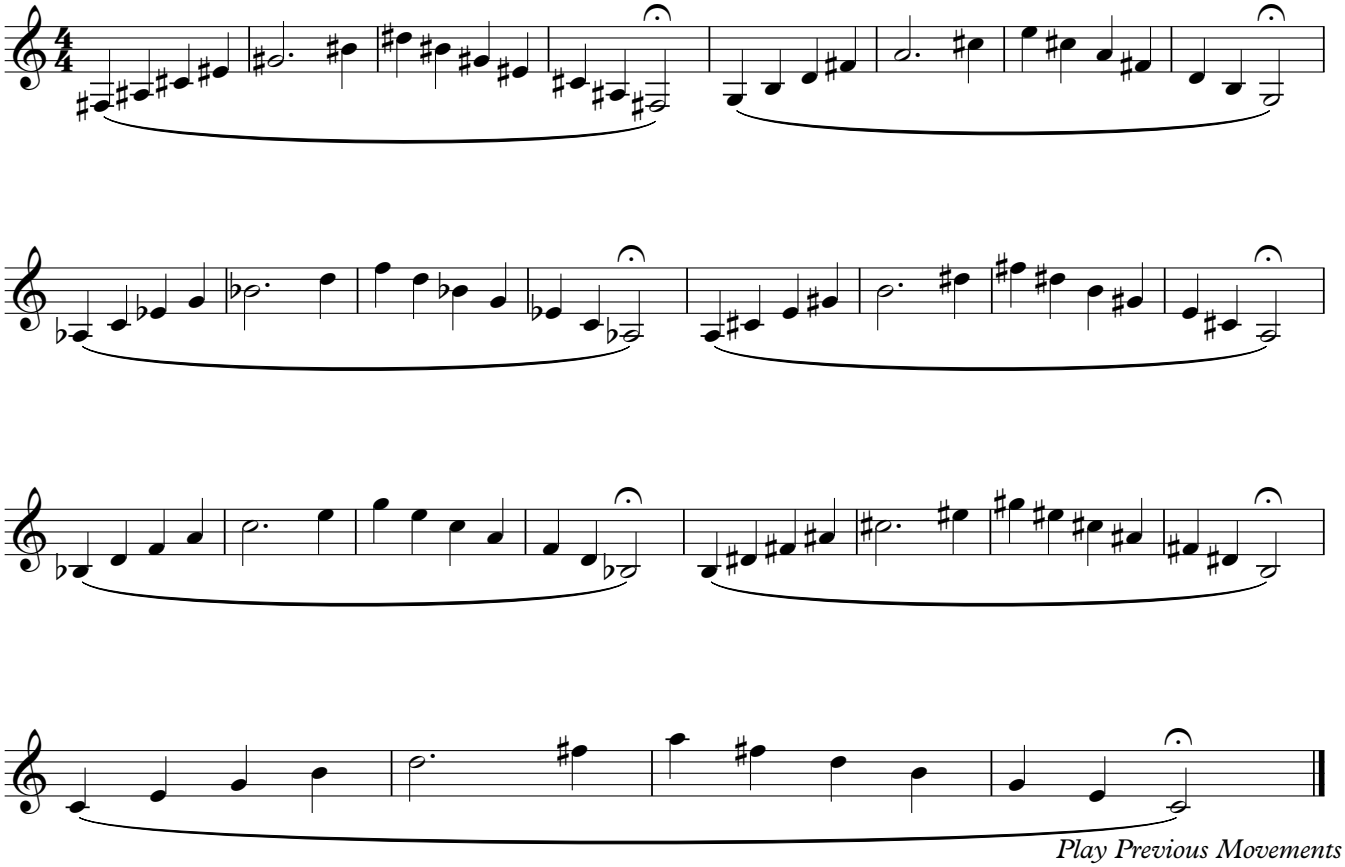
Play Previous Movements in All Qualities.

Third Movement



Play Previous Movements in All Qualities.

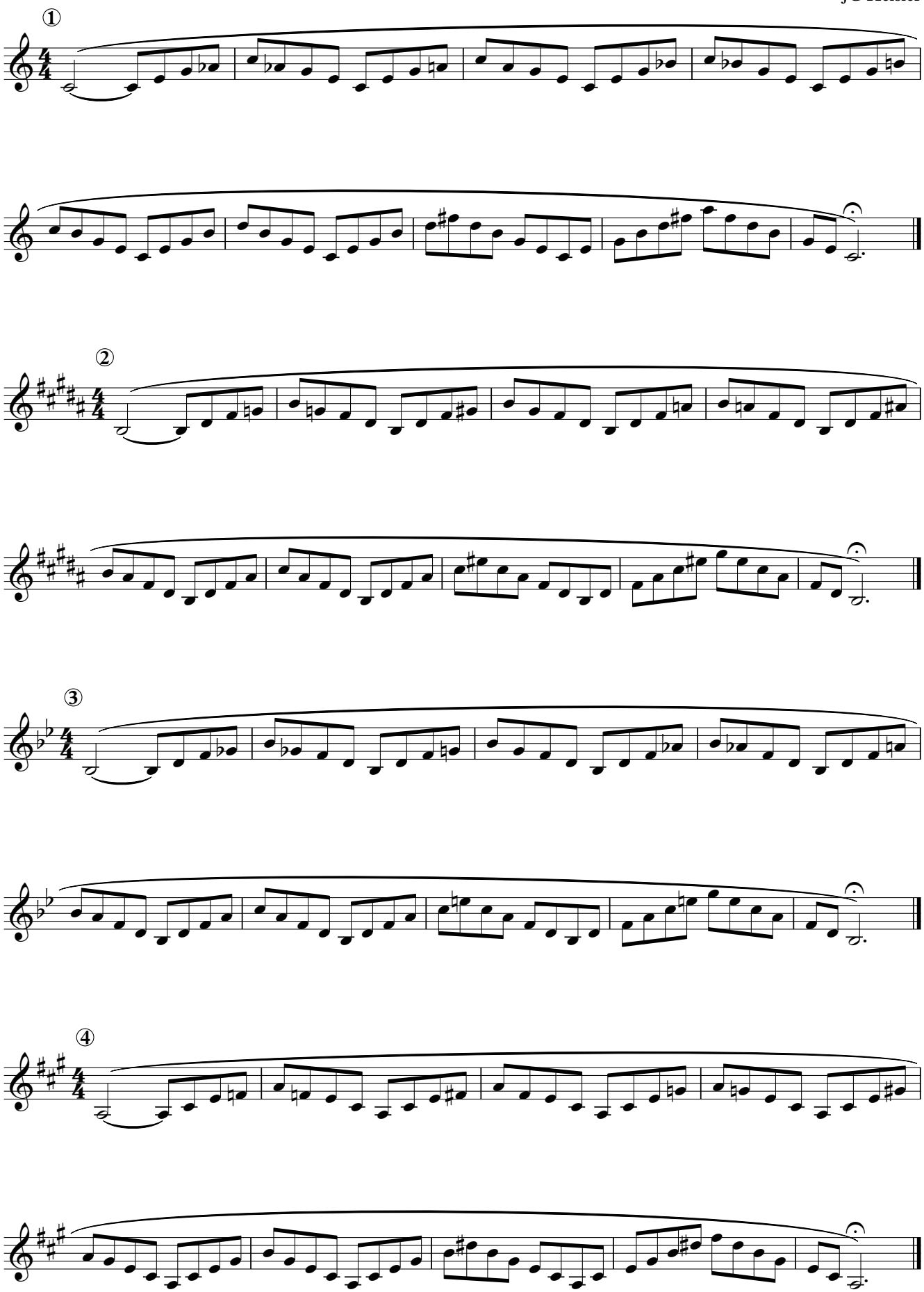
Fourth Movement

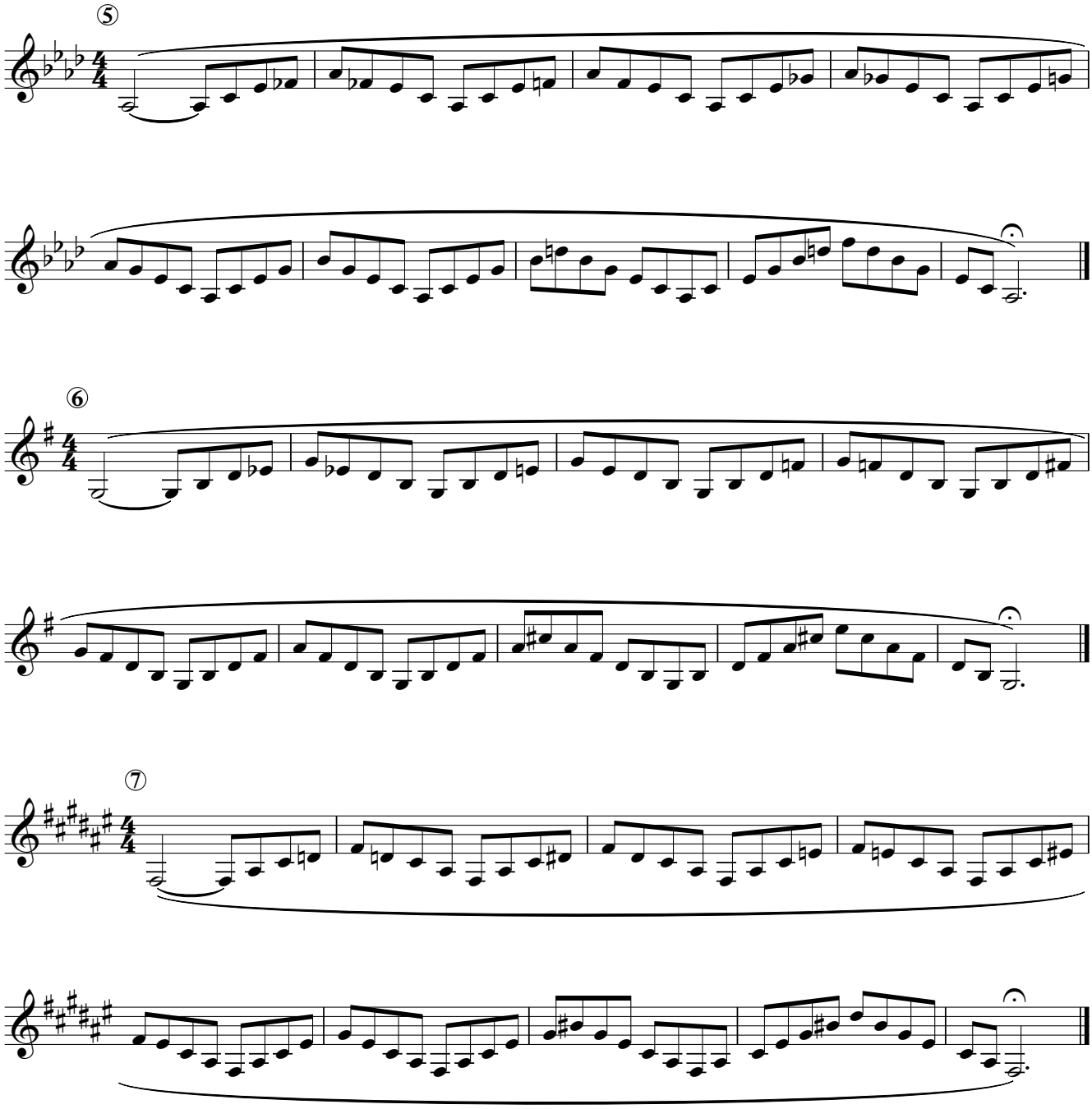


Play Previous Movements in All Qualities.

A Daily Practice 7

JC Heisler

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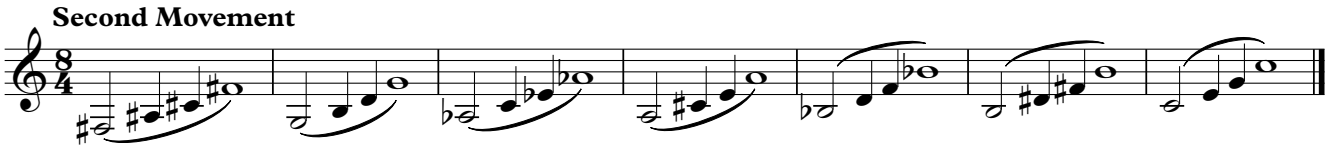
A Daily Practice 8

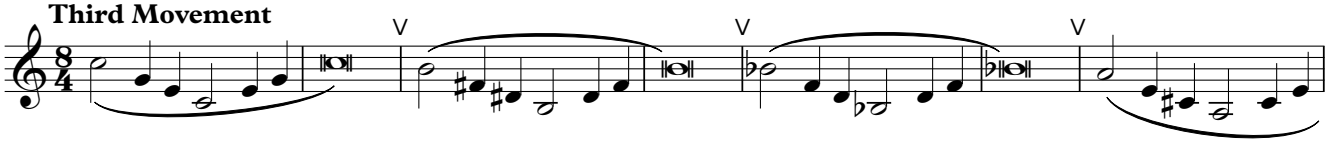
JC Heisler

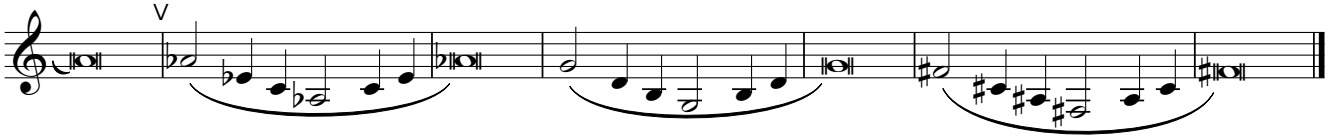
First Movement

Second Movement

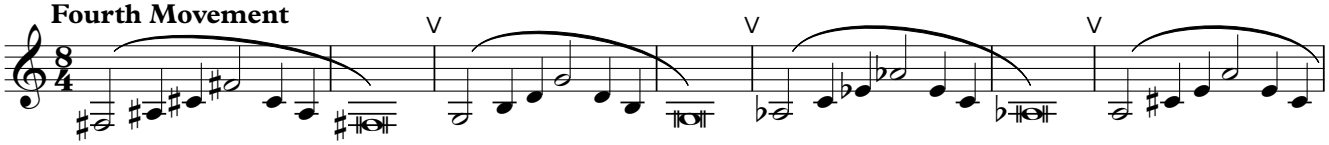


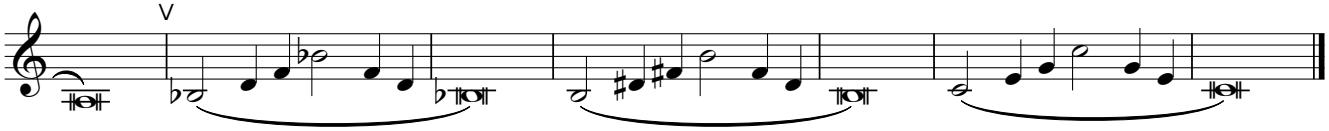
Third Movement





Fourth Movement

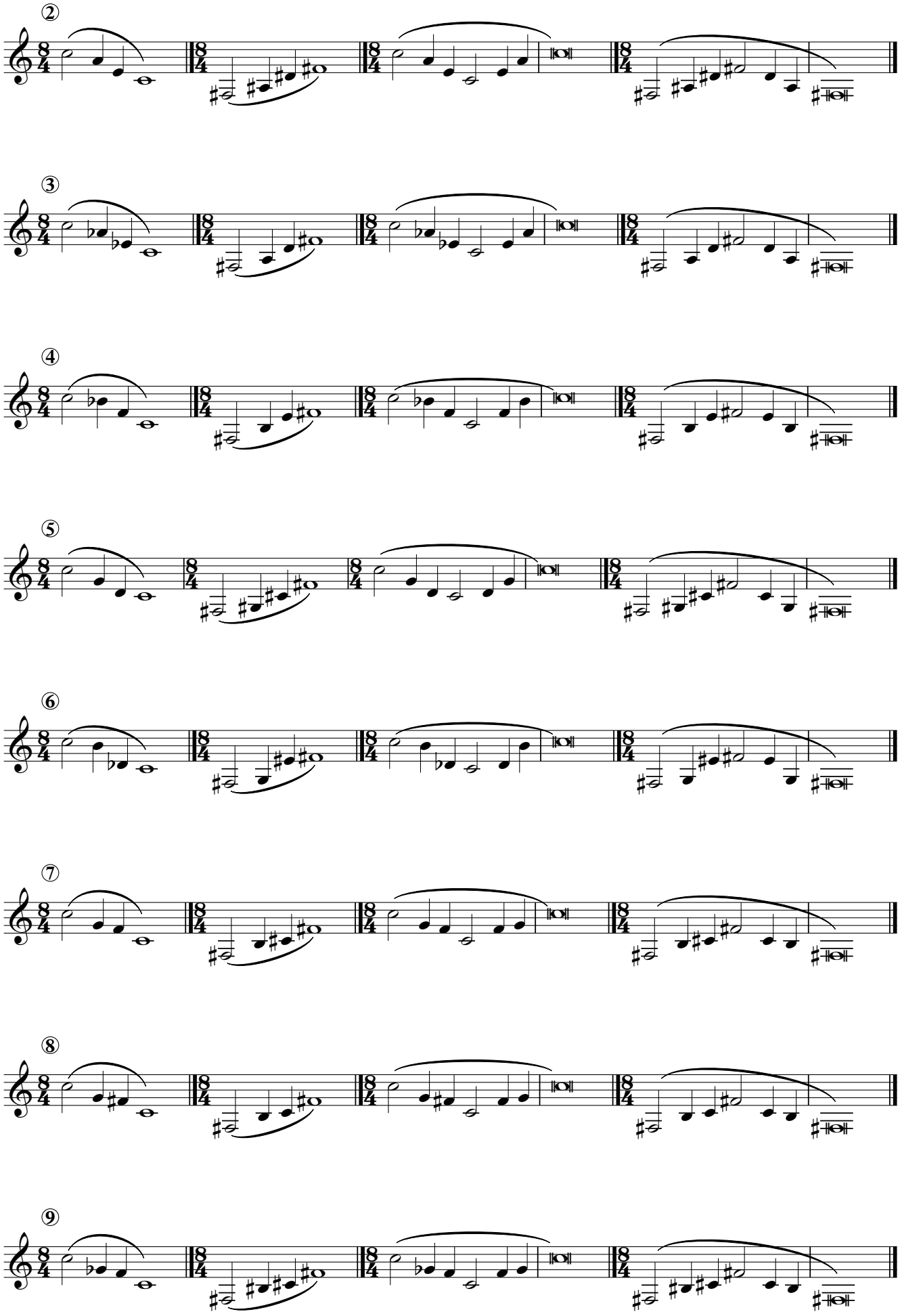




Play the Following Melodies Through All Four Movements

①

First Movement *Second Movement* *Third Movement* *Fourth Movement*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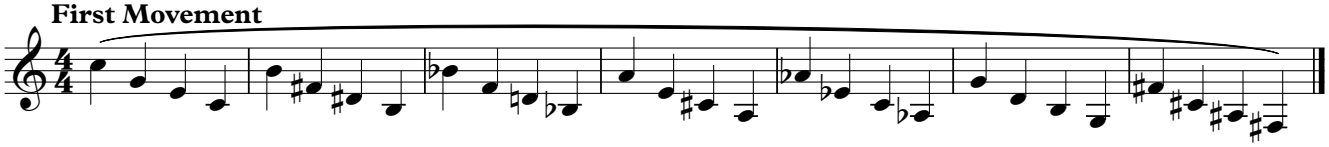
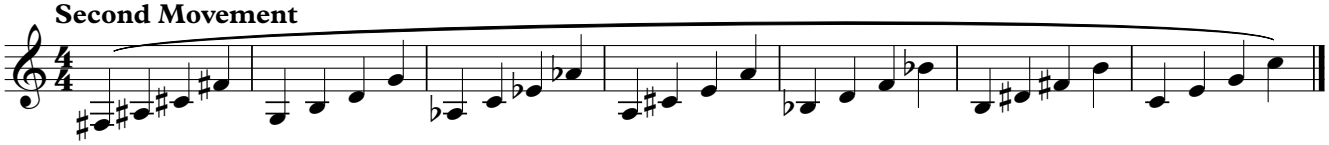
A Daily Practice 9

JC Heisler

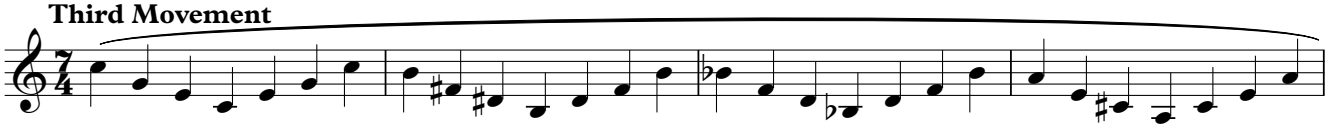
First Movement

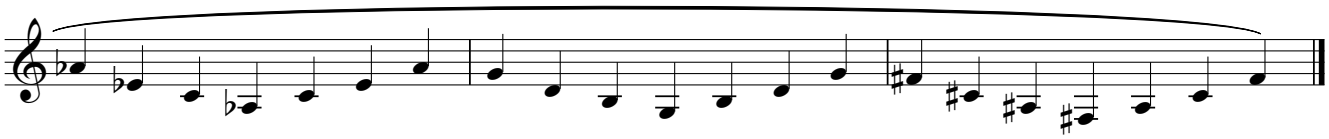


Second Movement

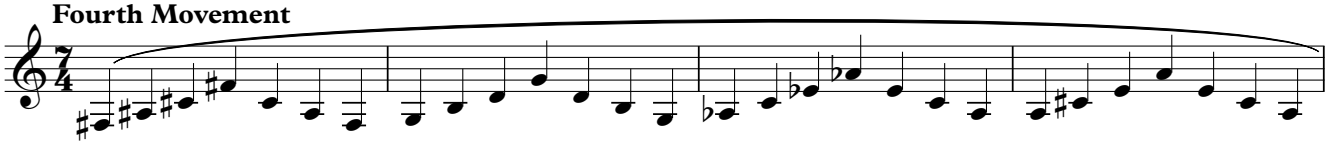


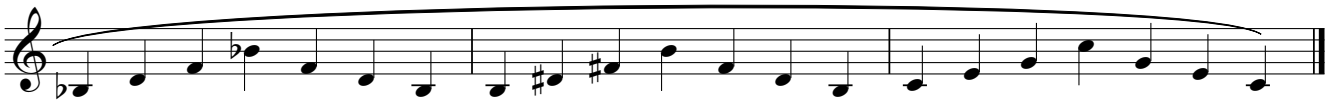
Third Movement



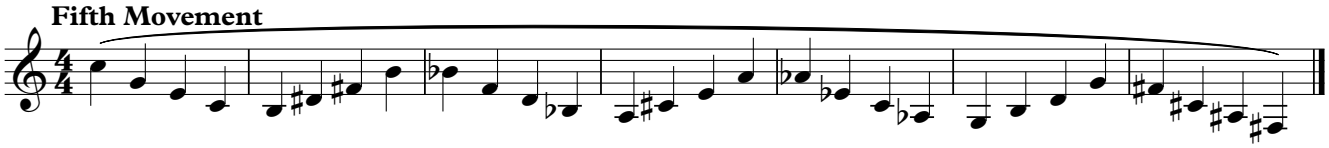


Fourth Movement

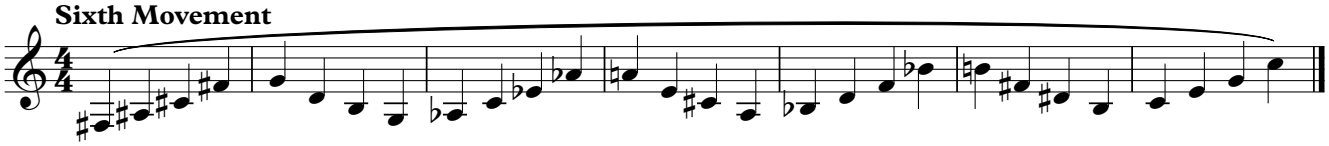




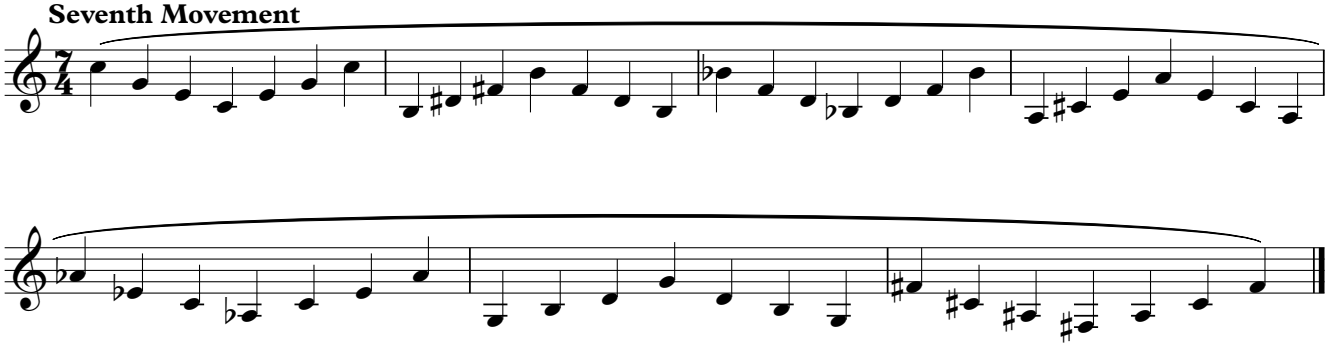
Fifth Movement



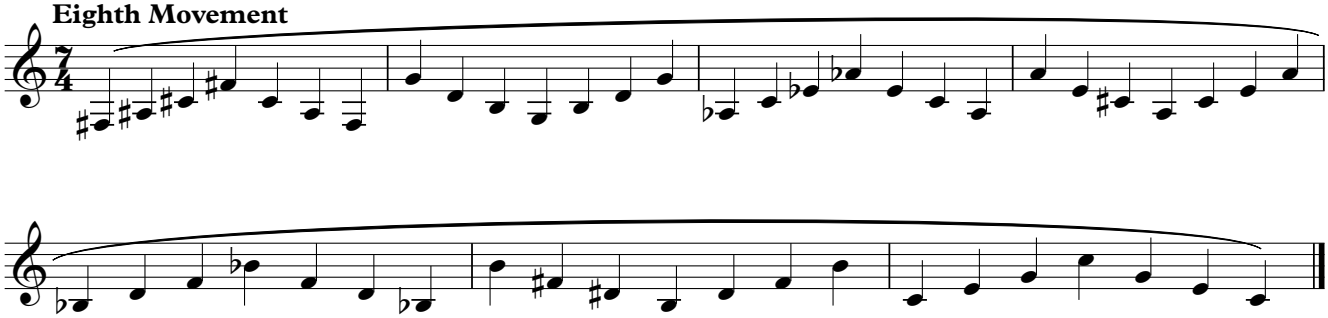
Sixth Movement



Seventh Movement



Eighth Movement



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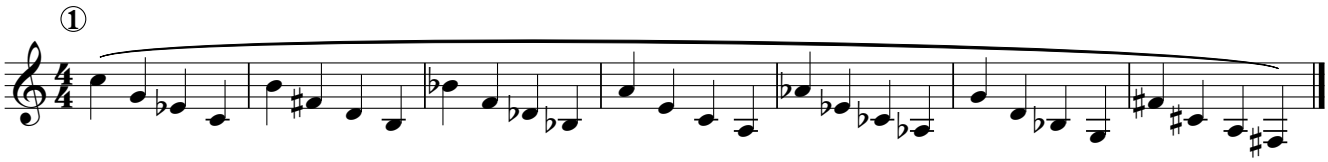
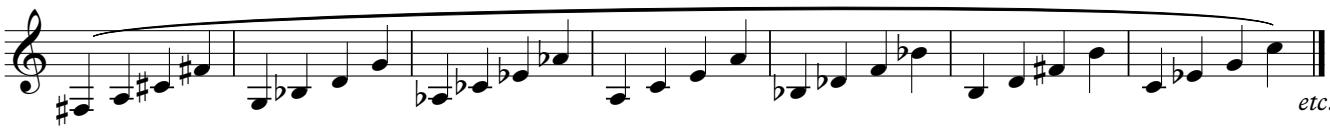
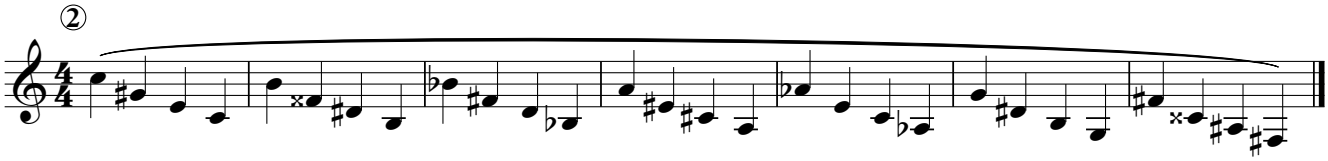
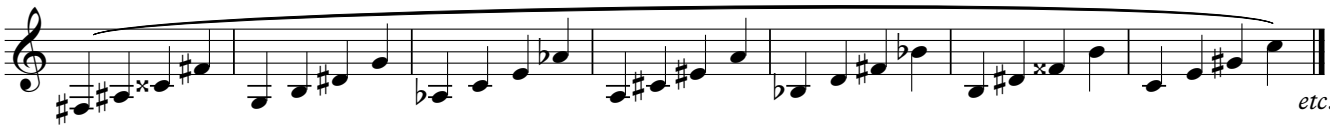




etc.

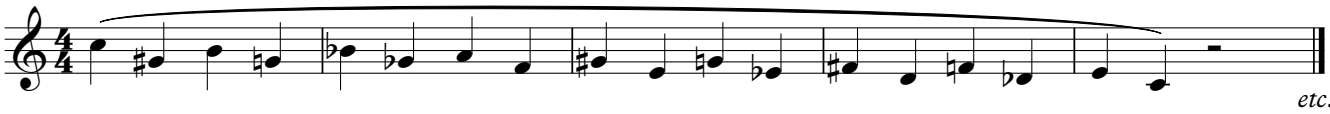
②





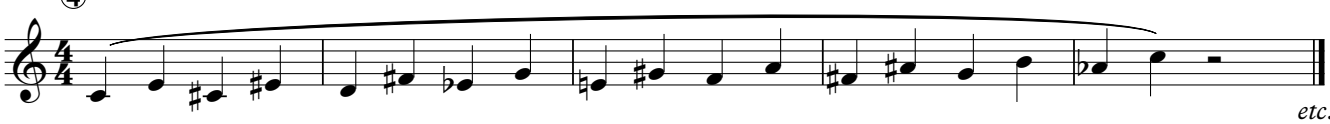
etc.

③



etc.

④

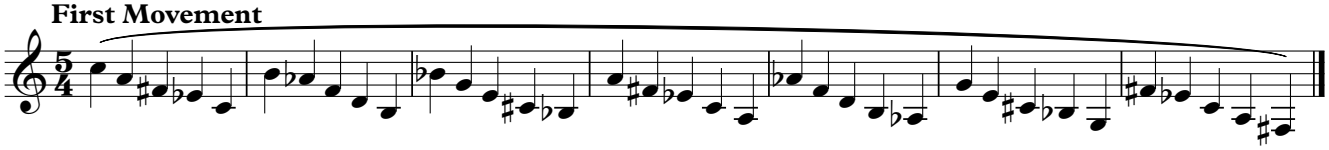


etc.

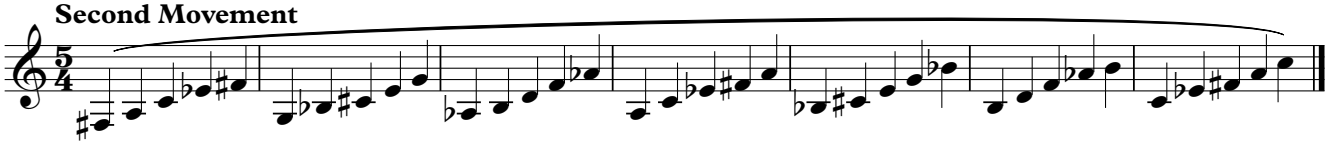
A Daily Practice 10

JC Heisler

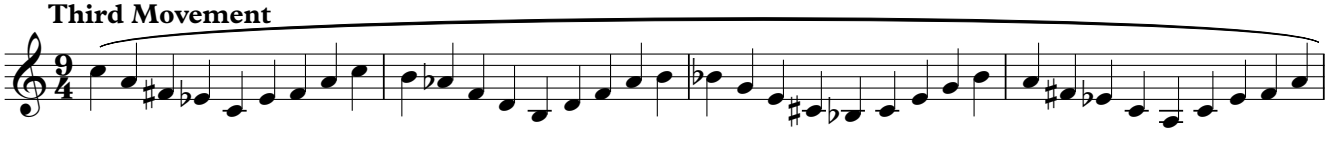
First Movement

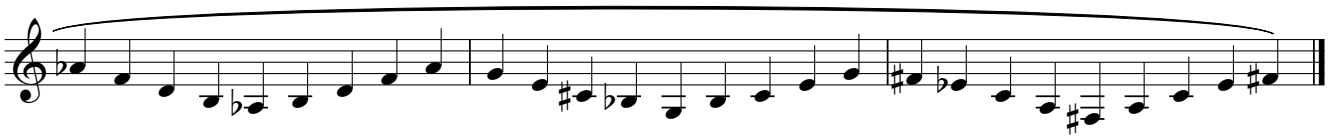


Second Movement

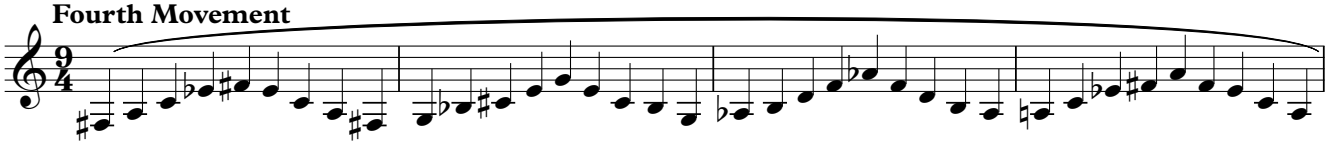


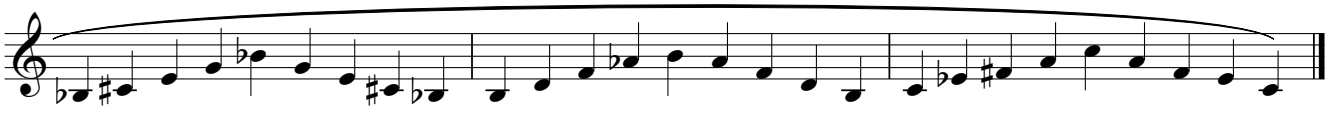
Third Movement



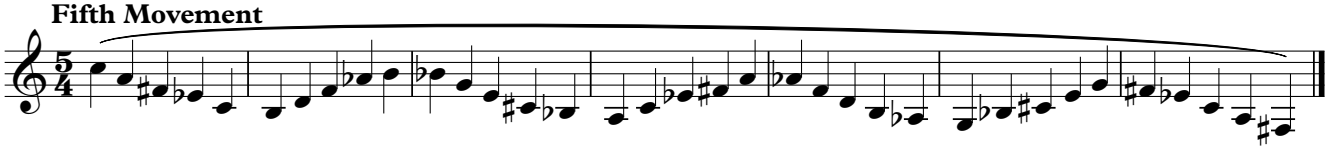


Fourth Movement

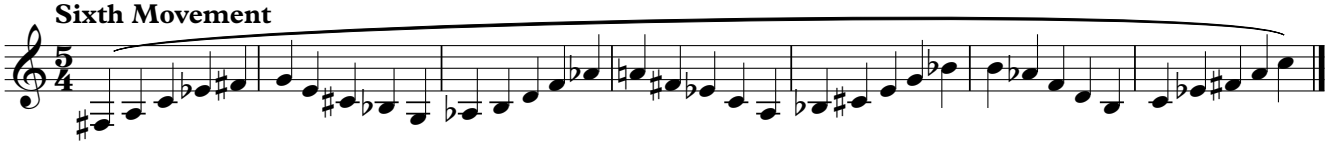




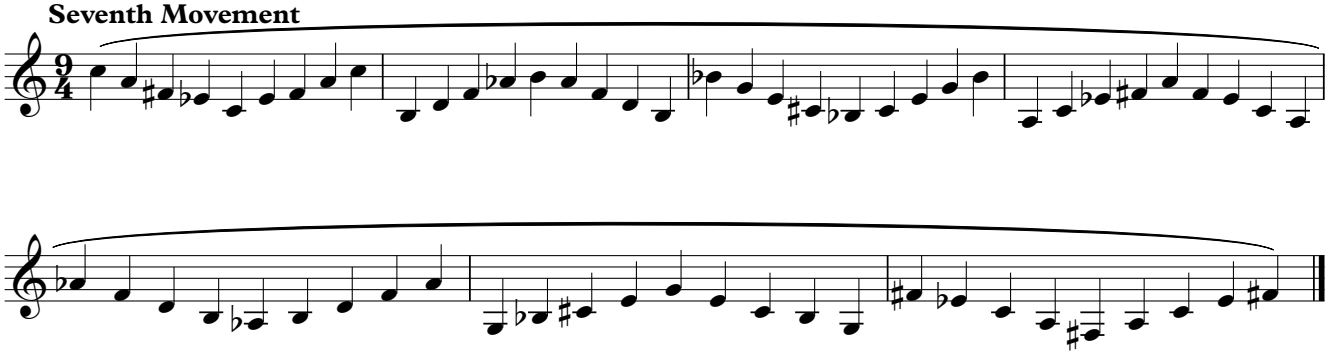
Fifth Movement



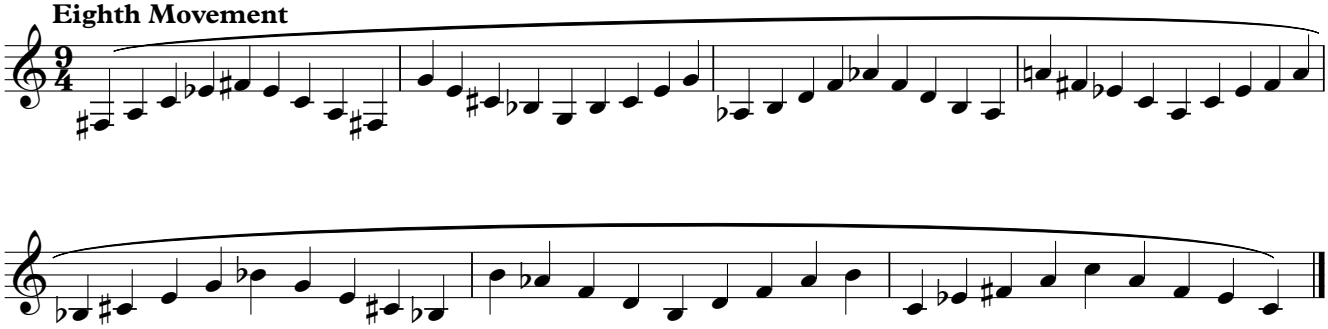
Sixth Movement



Seventh Movement



Eighth Movement



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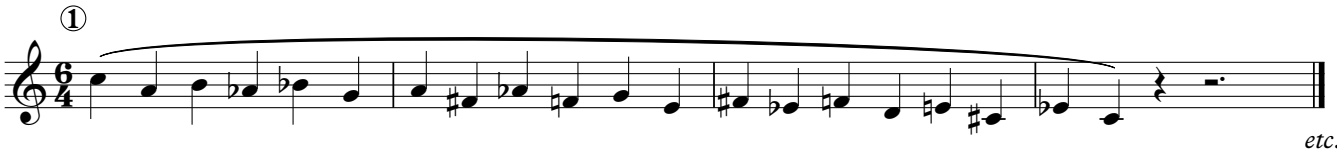
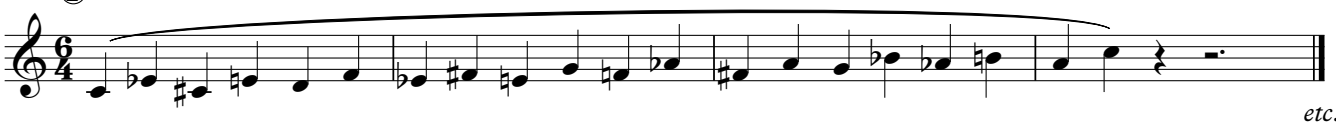


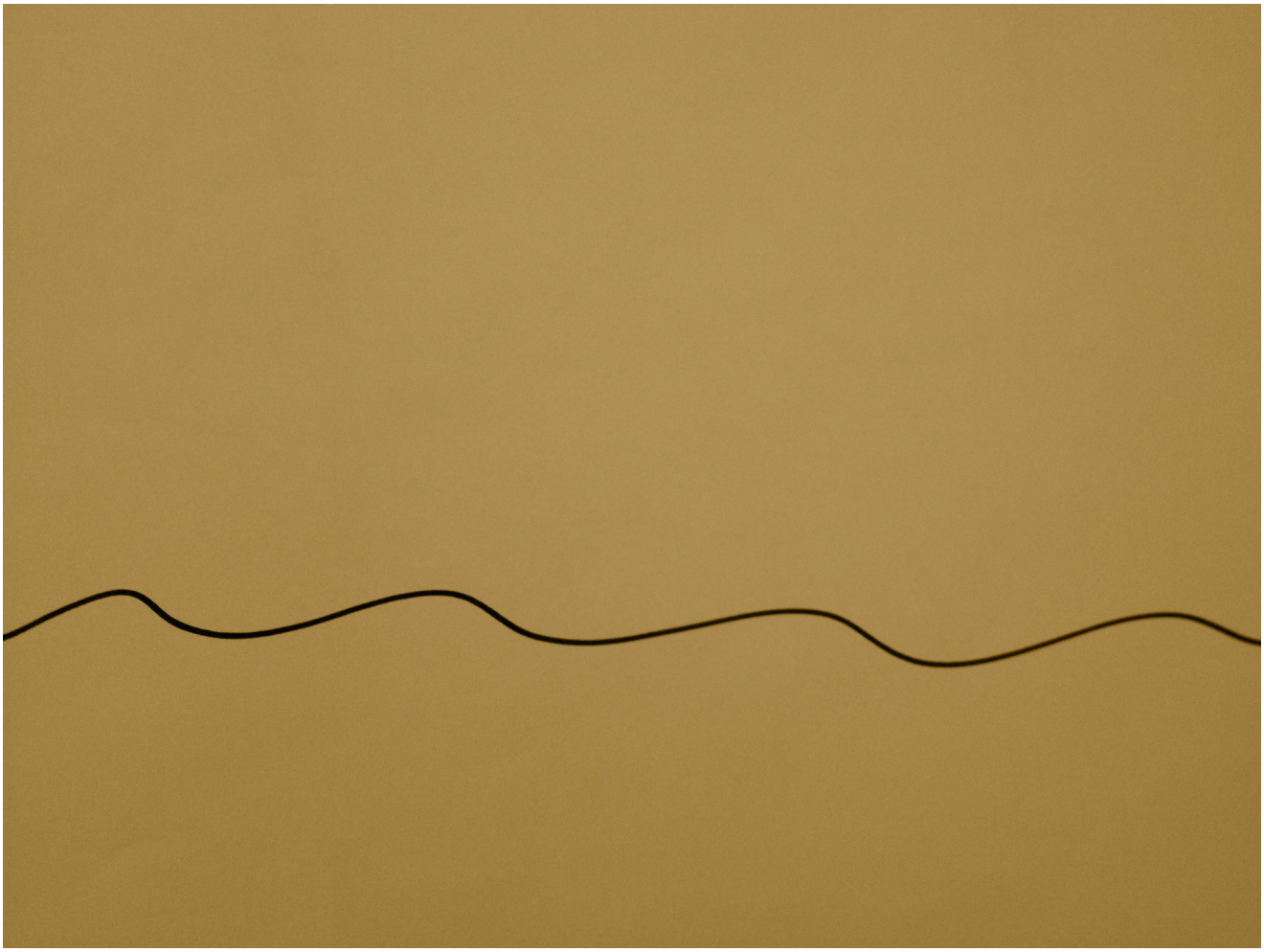
etc.

②



etc.

TRUMPET DIATONICS



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