

# Mills Demystified

## Learning Movement-based Writing

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Most people, even penmen, write entirely with their fingers. The small muscles in the hand are used to both grip the pen (often very tightly) and create letters. Not only does this lead to hand fatigue or cramps, but it limits the smoothness of our writing. In business penmanship we must learn to use the large muscles of the shoulder and arm instead. Understanding the basic principles of this movement is essential to write with the fluidity and grace of past masters.

Before discussing any of these principles, I'll outline what you can expect from these next 12 pages. It will not be the Carlini Method to Business Writing. That is, I won't be providing you with my version of an old business penmanship book. (*See the last page for instructional books*).

Reading this will provide you with techniques/methods that are either not included in other books, or are hardly written down. I will try to explain the tips and tricks that have been very useful to me, serving as *supplementary* material to an instructional book (such as the Palmer Method).

Hopefully with this information, you'll have a basis on how to approach learning muscular movement writing.

### **Intro**

Regardless of what script you're interested in, muscular movement is a good skill to have. Personally, I have incorporated this style of movement into all of my writing, from Engrosser's Script to broad edge calligraphy. Having more tools available is always good.

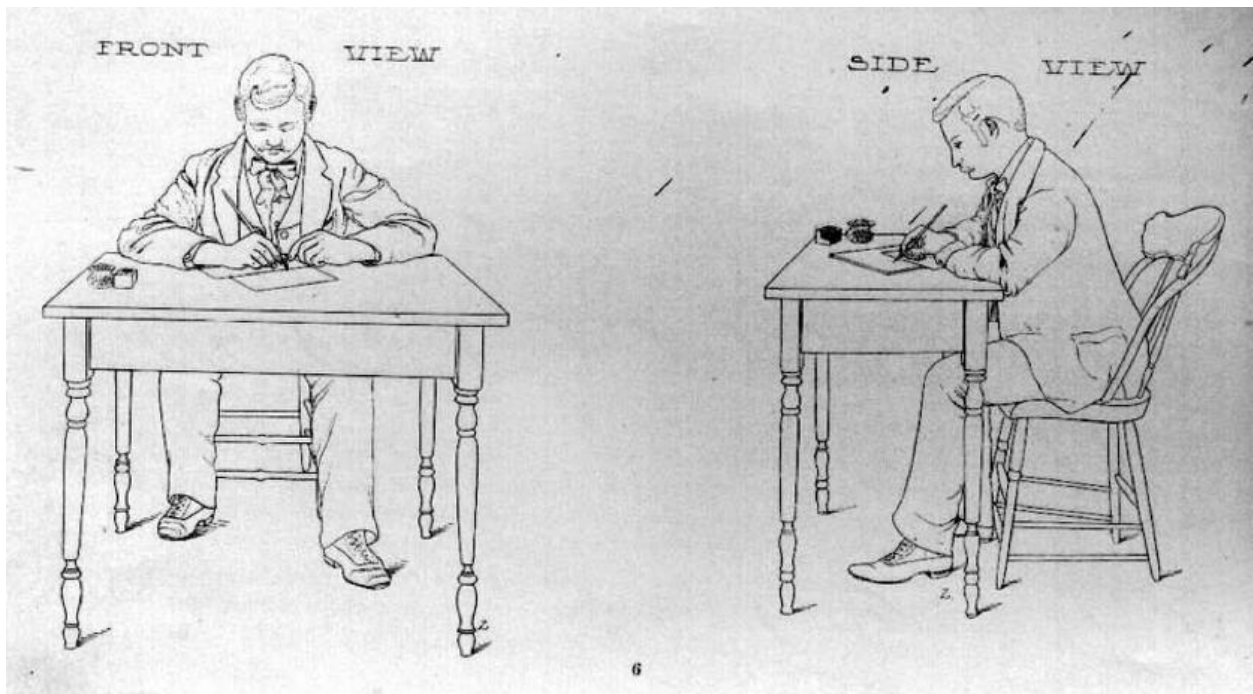
In this writeup, and in class, I will attempt to explain *why* things are done. From sitting position and pen grip, to the structure of the letters themselves. Information does not help if you don't know the context.

### **Posture**

How we sit is informed by how we must move. Everything ties back to ease of movement. Study the illustration on the next page as you read the following.

Sit square to the desk. Have your back straight, shoulders back, and bend forwards from the hips. It will reduce pain in your back, neck, and shoulders. This also takes pressure off of your forearms, allowing your movement to be lighter and more free.

Have around a fist width of space between yourself and the desk. Too close, and your movement will become cramped. Too far, and it's difficult to rest your forearms naturally on the desk.

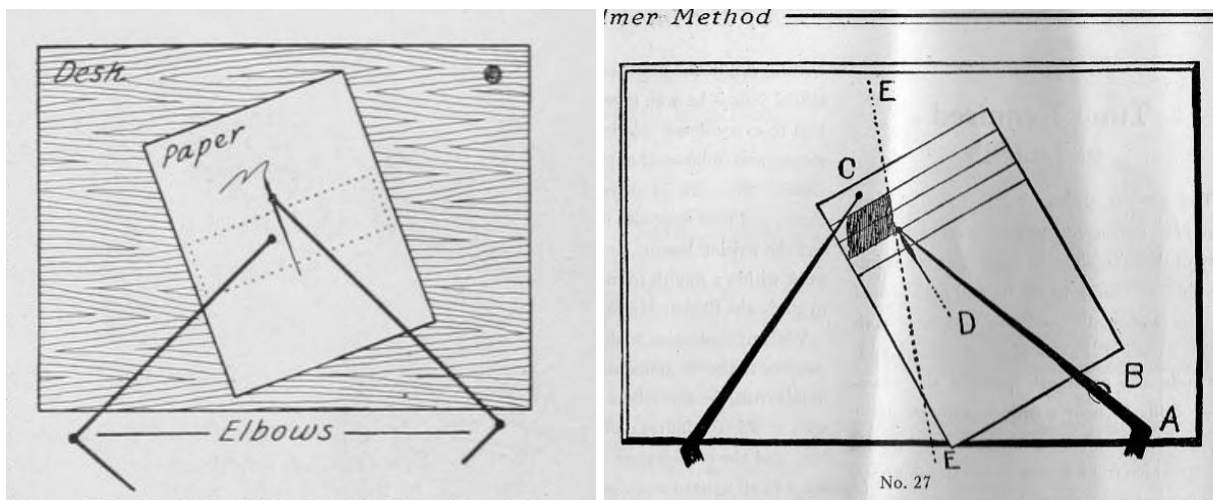


(Source: Lessons in Ornamental Penmanship, Zaner & Bloser)

Have both feet flat on the floor, the left slid slightly forwards and the right further back. This allows you to shift some weight *slightly* towards your left side, off the right forearm. The left foot is in a position to better accommodate the shift in weight. Rest slightly more onto your left forearm than your right. Less weight bearing down on your right forearm facilitates a better movement.

Rest your arm with the bone of the elbow *just* off the table, and the weight of your arm resting on the largest part of your forearm (see picture on next page). If you rest further forward more of your forearm will contact the desk, restricting your movement. Think of your arm as a lever. The pivot point should be as far back as possible to allow for the largest distance the endpoint can swing.

*Only 3 places touch the table. The penpoint, the pinky rest, and the largest part of the forearm.*



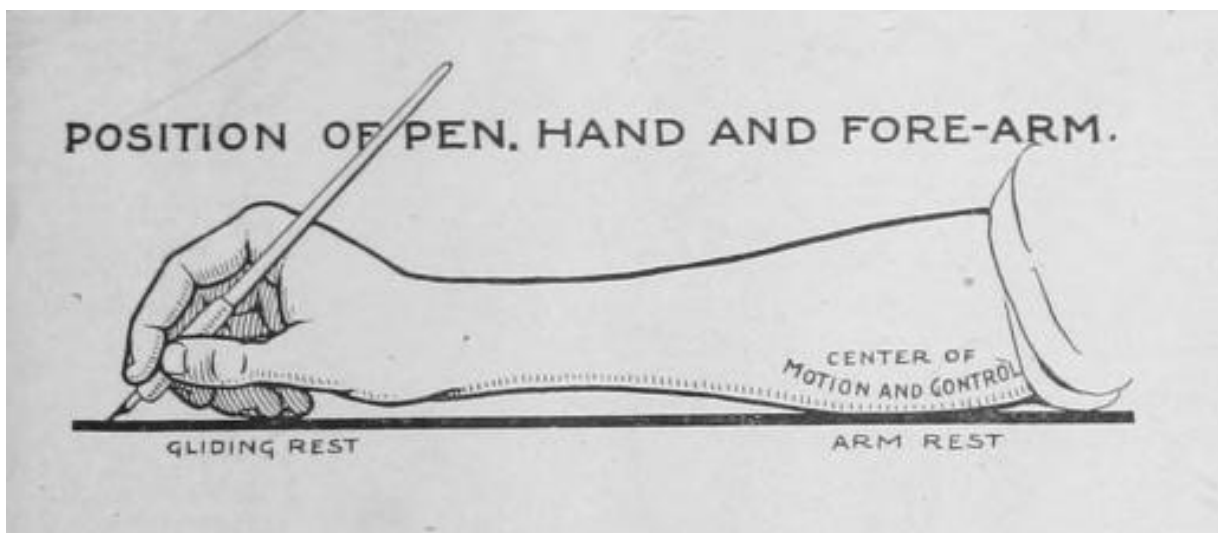
(source: The Arm Movement Method of Rapid Writing / The Palmer Method)

The elbows should be bent at 90 degrees, and forearms crossing the table at about 45. This allows the arm to swing in a large arc, covering the length of the page.

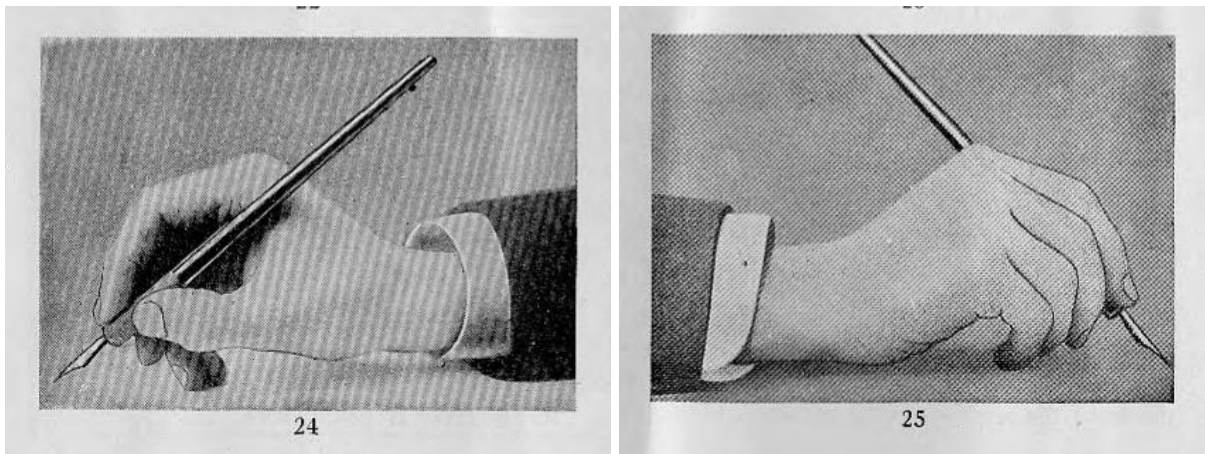
Everyone's body is built differently. You may need to make minor adjustments to your posture to achieve the best results. Don't take that as an endorsement to ignore everything - slouching will never yield as good results.

### Pen Grip

The pen grip is equally important to allowing a smooth and controlled arm movement. Study the images below.



(source: Arm Movement Method of Rapid Writing)



(source: The Palmer Method)

As stated before, the wrist does not *ever* rest upon the paper. It is not possible to have a free and fluid movement. Resting your wrist impedes your ability to glide across the page, and limits the "writing zone" you can work within.

The pen should be held in a wrist-down position. The wrist should not be directly flat against the desk, a ~10 degree outward cant is good. But do not allow the side of your hand to touch the paper. You should be able to place a quarter flat on the back of your wrist without it sliding off. This allows the fingers to contact the page correctly, so they may slide freely.

Curl all your fingers, as in the diagram. Every finger should be touching the ones next to it. This allows you to have a light grip on the pen, as your whole hand is supporting it. It also ensures that the 3rd and 4th fingers are under the hand, in the proper position to glide upon.

Hold the pen lightly. It should rest on the 2nd finger, crossing near the top of the nail, and be supported by the thumb. The first finger sits on top. The three fingers should form a triangular shape around the pen staff. You do not want to grip the pen any harder than necessary to stabilize it. A light grip will prevent any hand fatigue or cramping. It is also essential for a light and graceful script.

From the side, the angle of the pen should be approximately 45 degrees, sitting just below the large knuckle of your 1st finger. This is the best angle for the nib to flow freely.

The hand should be supported by the 3rd and 4th fingers, curled underneath the hand. Where you rest is up to you. There are three accepted places.

1. On the nails of your 3rd and 4th fingers.
2. On the the corner of your 4th fingernail, and the fleshy part between the nail and the joint.
3. On the joint of the 4th finger.

I would recommend these three options in the order presented. Number 1 is considered the “textbook” method of resting the fingers on the page. It allows you a great deal of movement, as the fingernails glide readily on the page. Number 2 is also great for movement, but it requires more care. You must have a lighter touch and be more aware of your motion. It is easy for your skin to catch on the page, ruining your motion. Number 3 is least recommended for business writing. It has applications in Ornamental Penmanship, however I find it too inconsistent for a fluid writing system.

Below is a picture of my hand. Hopefully it will help as a reference to visualize the above information.



(source: my hand)

## How to Practice

Effectively structuring your practice sessions will have a huge impact on the rate you will improve.

It is better to do more shorter sessions than one huge one. Most people find it difficult to focus critically on their work for a solid hour at a time. Two fifteen minute chunks may yield better results than one hour long block.

Always start with a couple minutes of warm-ups. It is critical that your arm is warm enough to begin doing drills. (See next section for specifics).

Once your arm is warm, think of a *specific* technique, letter, or movement to practice this session. Maybe the roundness of your exit strokes or the form of your “n”.

Practice using drills that emphasize what you’re trying to learn. I’ll go into more later about how to structure this practice.

Stop every five minutes to sit back, and critically look at your work. Are you improving what you set out to?

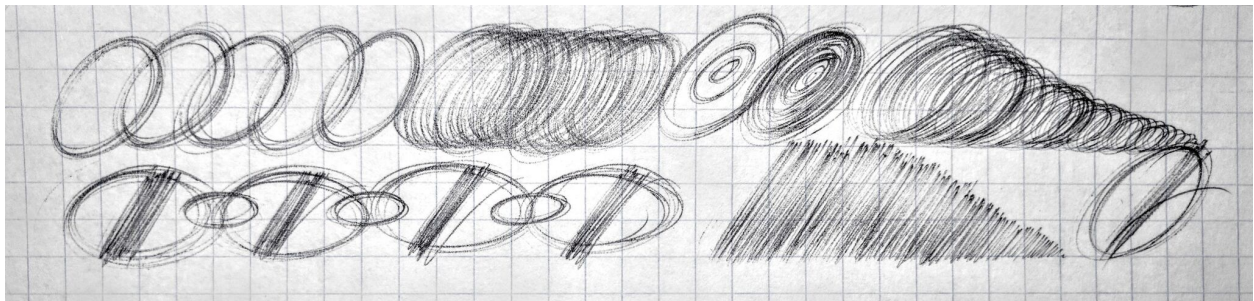
Continue that drill until progress is made. You want to train your muscle memory to have good forms. Think “practice makes permanent”. Poor, haphazard practice will internalize poor, haphazard writing.

After fifteen or twenty minutes put down your pen. Focus on something *\*not\** writing for at least five minutes. If you’re going to sit back down and continue, re-starting with warm-ups won’t be necessary. Come up with another plan of what to focus on next.

## Warm-ups

“Warm-ups” differ from “drills” in both form and intent. Warm-ups should be movement based exercises intended to ready your arm to write. Focus on larger shapes, and a smooth motion. Attempt to avoid kinks in your movement, as well as an unnatural or jerky rhythm. Try to be as steady as possible.

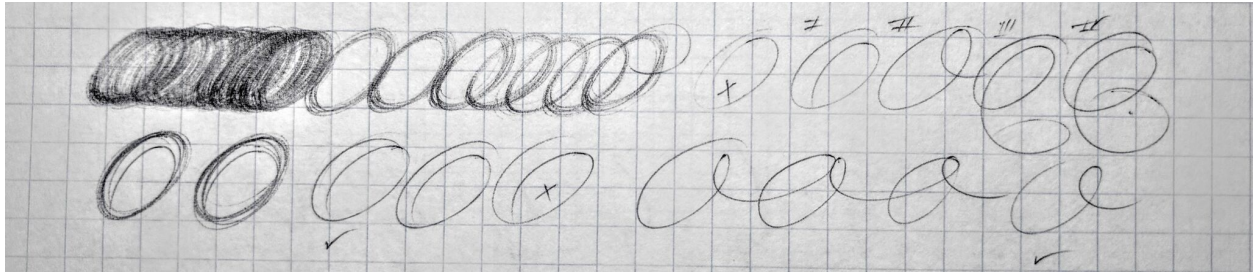
For example, I start each practice session with several lines of large movement drills. Consider below:



Note that they are done at a tall x-height, and a higher rate of speed. I am moving at a constant rate of speed. Do not be faster on the upstrokes than down, or vice versa. Nor should you have slight pauses at the top or bottom. Shoot for 200 downstrokes per minute. Form is *not* my primary concern. This is a contrast to “drills”.

## Drills

Drills have a very clear and direct application to the script itself. Your movement should be slightly slower and more deliberate. The aim is to drill a basic shape into you muscle memory. For example, study these oval drills below:



Note the similarity in the oval drills from the previous warm-up exercises. The form of the ovals is more precise, and there is a clear goal in mind - the capital “O”.

## Getting Started

I’m writing this in bold because it is of vital importance. **The slant lines should point directly towards you.** When you are pulling downstrokes, they go towards your body. It is much easier to maintain a slant that is easier to see. It is easy to maintain a slant when all of your downstrokes appear vertical. This is the same for every script. If I want to write at a 45 degree angle for a heavily slanted Ornamental script, I merely rotate my page more. If I’m writing Italic with a broad nib, I rotate my page less. Downstrokes are always towards your body.

## Overall Drills

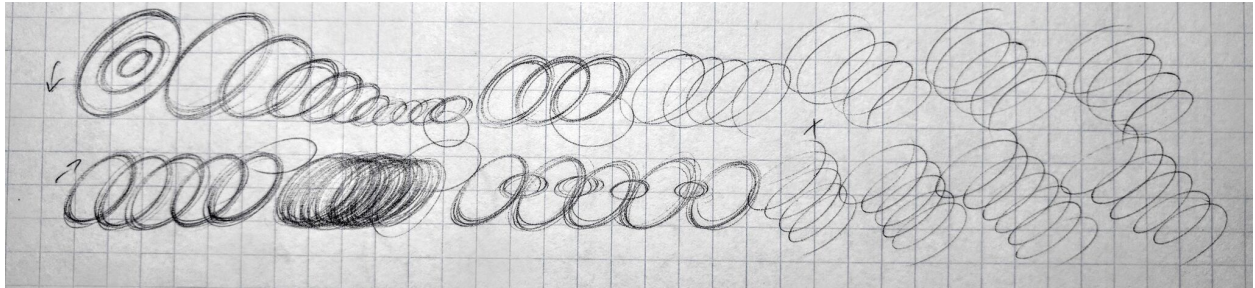
Now that all of the prerequisite material is done, we can write. In this section I will discuss and analyze some of the most important drills to securing a fluid and *controlled* movement.

You should attempt to do a variety of movement exercises. The goal is not to become good at drills, but to become a good penman. Do not think that mastering three drills will lead to a mastery of business writing. I personally wasted hundreds of hours trying to perfect basic drills while making no progress towards my penmanship.

You must strike a balance. Movement drills will increase the control and fluidity you have with the pen, but they won’t necessarily teach you to write letters. Ensure your drills have specific applications to the script.

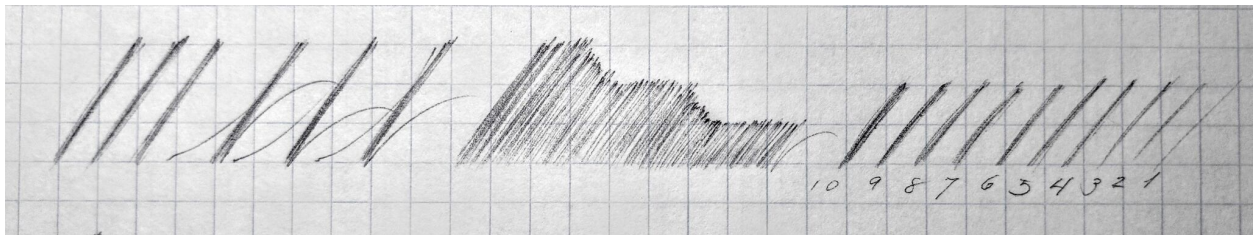
### *The Oval*

One of the most iconic drills. There are many types of oval drills, see below for some of my favourites. Oval drills help to develop a smooth and fluid movement. Many shapes in business writing have a rounded structure. Ensure you practice this both directions, clockwise and counterclockwise.



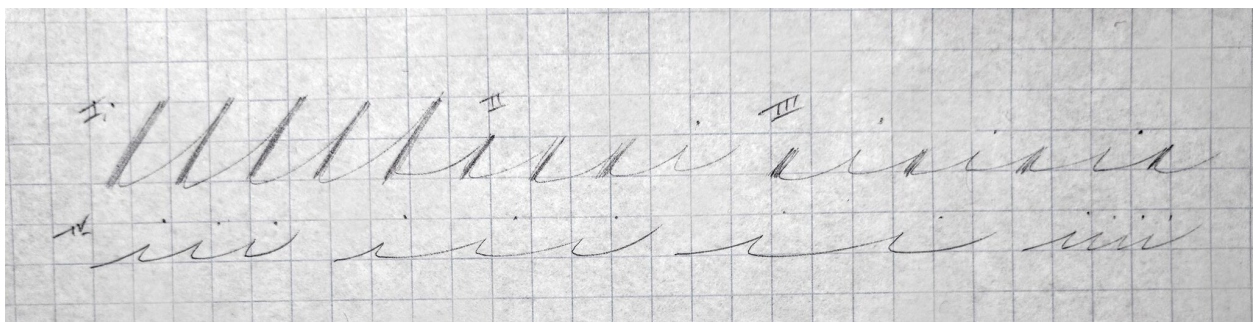
### *Push Pulls*

Another iconic drill. The aim is to solidify straight strokes along the slant. Ensure that your pen is going perfectly along the slant lines, and it remains consistent across the page. Try this at different sizes.



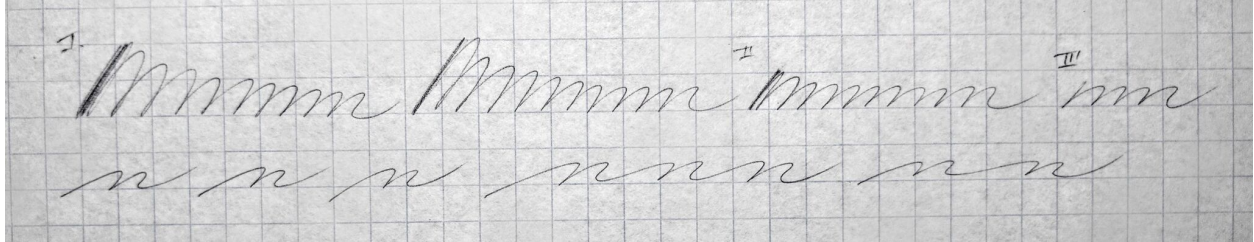
### *The "i"*

The most fundamental letter in the alphabet. Nearly every other letter ties back to the "i" in some capacity. This is great to practice at different widths. Try a more spaced runninghand style to work on your arm movement across the page. Then work on a tighter style to practice your spacing.



### *The “n”*

Remember not to get ahead of yourself. Rhythm is very important. Refer to the next section for a detailed write-up on this. Same as with the “i”, try to make these with varying amounts of space. Try to chain 3 together, than try 4, then 5. See the limit of your reach.



### **Rhythm and Speed**

Rhythm is an extremely important concept in business writing. Rhythm refers to where in the strokes emphasis is placed (see page 10 for more detail). I had discounted it for a number of years. Not paying more attention to the rhythm of my writing set me back significantly. Starting early with a concept of proper rhythm and speed is vital.

When you are beginning, there is a lot to learn, and it is overwhelming. A new pen grip, posture, movement, alphabet, rhythm, and speed. Do not try to learn all of these at once. There are many concepts you are not expected to fully grasp until you have more experience. Rhythm is one of them. Keep it in the back of your mind. Initially most people find it hard enough to write with even a modicum of control using their arm.

I've often said, in movement writing, you'll first develop smoothness, then fluidity, and lastly control. "Smoothness" comes when your lines are no longer kinked and janky. "Fluidity" is the ability to glide across the page, from one form to the next. "Control" is the ability to make these fluid shapes into definite letterforms.

Once you feel your lines are smoother - it's time to look at rhythm.

All of the writing books say ovals should be made at the pace of 200 downstrokes per minute. This is a great speed to practice your movement, but a spectacularly poor speed to write. It's far too quick to get accurate letterforms. Tamblyn wrote that you should learn to write quickly, developing speed and smoothness first, then learn to produce accurate forms. I agree wholeheartedly with this sentiment. It's nearly impossible to start with slow, drawn forms, then add speed.

Many people have a severe misunderstanding of the pace of business writing. Below is a specimen taken from the Business Educator, It is penned at 22 words per minute. That's pretty fast.



Gentlemen: I reply to your favor of the 10 inst. by informing you that we can not accept your proposition. Mr. James, my partner, is out of the city and when he returns I will submit the matter to him, and, if your proposition can be considered, we will, at that time, be glad to do so.

Specimen of speed writing by W. W. Fry, DeLand, Fla. Written and composed in two minutes. Reckoning five letters to the word, it represents twenty-two words a minute. This is the good work. Can you beat it?

Note the description. "This is good work". The forms are nowhere near textbook precise letters. They are haphazard, they are rushed. This is what quick penmanship looks like. Do not expect your fast writing to look like the pristine forms in a writing manual.

Below are two samples of my writing. The first is written at around 14 words per minute. The bottom is written nearly 24 words per minute. This is not my best work, please excuse the letterforms and spacing. The intent was to show the difference that speed makes.

My penmanship  
is improving

vs.

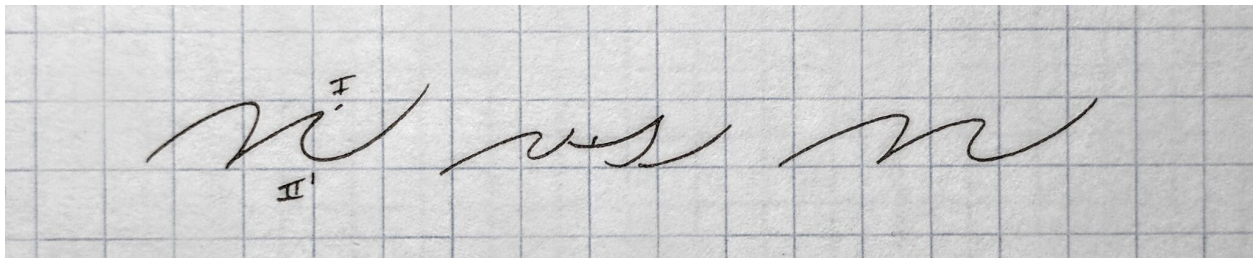
My penmanship is  
improving

Rhythm refers to where the emphasis is placed in the stroke. When making an “m”, do you think “down, down, down” or maybe “over, over, over, exit”. There are many places you can put tiny pauses, generally not stopping entirely but slowing to ~30% speed. Where you place these pauses will determine the rhythm of your writing.

In writing that “m”, we can place a tiny pause every time we hit the baseline, every time we hit the x-height, or maybe only at the baseline before the exit-stroke.

Try setting up a metronome when you write. Set it to a steady pace, around 140-150 beats per minute. Set each tick to a downstroke. Some letters may be harder. The “r” for example, you may need to allow a full tick for the “dot” at the top. Same with “b”. Then try setting the tick to reaching the x-height. Play around with these rhythms to find one that suits you.

Rhythm is very important to the quality of our letterforms. Considering the following picture:

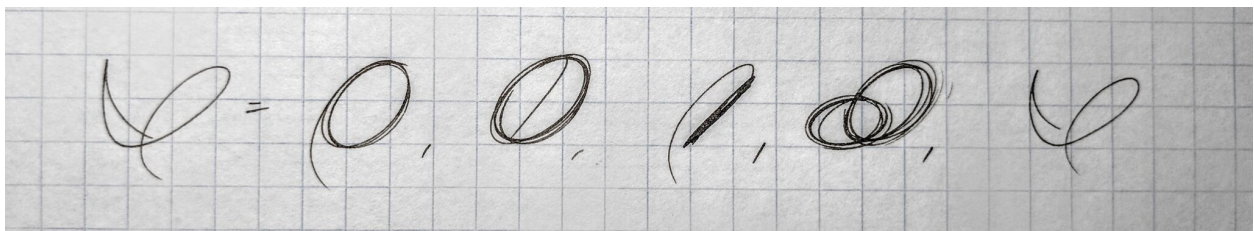


In the first example, the top right (I.) is too pointy, and the bottom (II.) is far too rounded. This resulted from rushing through the letter. My mind was ahead of the pen. If your mind is already on the exit stroke, but your pen is half-way through the letter, your forms will suffer. Practice with rhythm.

### Specific Drills

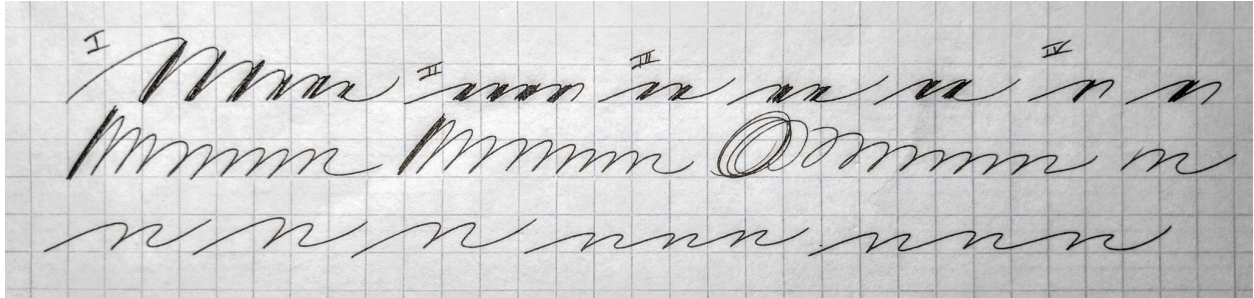
There are too many drills, and too many variations for me to show you all of them. If you’d like to see a ton of letter exercises, flip through a business penmanship book. I’d like to show you *how* to create and use specific drills for letters or strokes you’re struggling with. Due to limited space, I’ll only analyze two in particular that have given me a lot of trouble. The capital “I”, and the “n”.

“I” is deceptively challenging. There are many curves. The best way to understand them is to deconstruct the letter into pieces.



In the beginning we have the “I”, followed by the progression of strokes to make it. By breaking up letters into their parts, and mastering those parts, we can reassemble them into a good form. The beauty of the business alphabet is the relatively few number of fundamental forms. This allows you to effectively learn 26 letters by mastering five or six forms.

The same holds true for the “n”. The form is slowly built up from smaller steps. The specific exercises you chose will depend on which part of the letter you struggle with.



These specific drills were created for me to work on maintaining a consistent slant, and even spacing. If there are different problems you struggle with, you’ll need different drills to solve them.

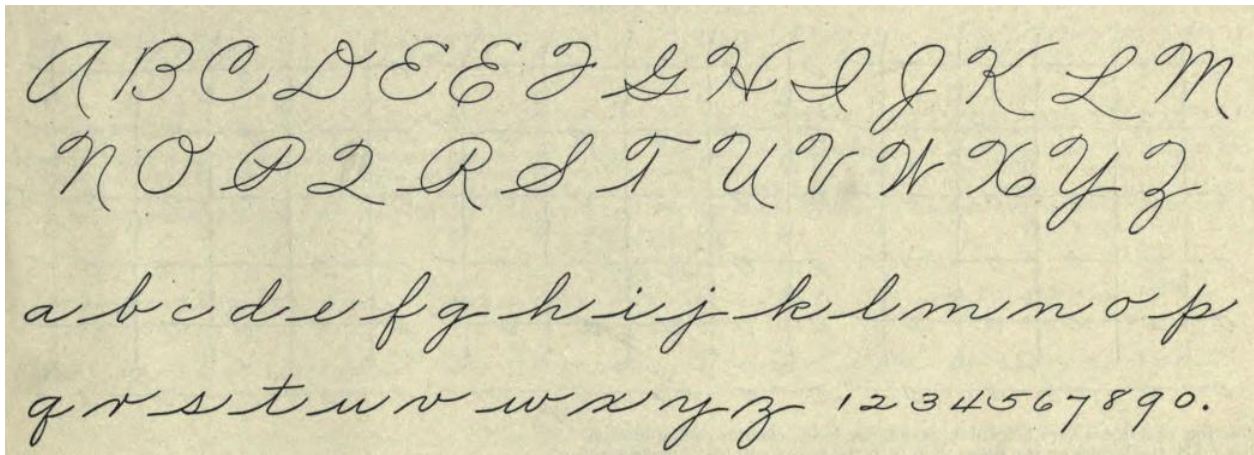
### Why Study Business Writing?

Smooth lines, and a light touch. Muscular movement writing will lessen the fatigue from finger-writing, and allow your lines to be free-flowing and delicate.

Aesthetics. Business writing is a classic style. Many people admire it with nostalgia. It reminds them of what they learned in school. Or letters from your parents and grandparents.

Practicality. Engrosser’s Script can’t be used as your daily writing. Business penmanship can.

Applications. The movement and skills you learn from a proficient business hand can carry over to any other style. It allows for effortless writing, and develops a trained eye for form and structure.



### **References and Further Study**

Archive.org is the single best resource for looking up most any old book. All the books I reference below can be found there for free.

Modern Business Penmanship, E C Mills

The Champion Method Of Practical Business Writing, Mary Champion

Lessons in Practical Penmanship, H P Behrensmeyer

Arm Movement Method of Rapid Writing, Zaner & Bloser

The Palmer Method of Business Writing, A N Palmer

It is strongly suggested that you skim through a number of the above references. They all have a slightly different approach to the letterforms and instruction. For example, Behrensmeyers letters are much more angular, while Mills has a classic rounded style. The Arm Movement Method contains a significant amount of information at the beginning of the book on the psychology and physiology of penmanship, while EC Mills jumps into things with a cut and dry style.

In addition to these books, Archive.org has a large collection of Business Educator magazines. Most of these have lessons in business writing. It's not a bad idea to flip through them for lessons that look interesting.

And finally,

[carlinigraphy@gmail.com](mailto:carlinigraphy@gmail.com)

Feel free to email me with any questions or comments you have about writing. I check my email frequently, and am glad to help out in any way I can. From providing feedback and analyzing letterforms, to answering questions about anything that is confusing you.