MAKING A QUILL PEN

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First, let us dispel a few myths.

The colonialists did not write on parchment or velum.

True, both did exist but they were far too expensive for general use.

Home made paper made from shredded cotton or silk rags were the norm.

Ink was imported from China and Europe but that also was terribly expensive.

Most colonialists made do with inks made from berries or nuts.
WRITING IMPLEMENTS

- Pencils had been invented in Germany but were not yet feasible for letter writing.
- Glass pens could write a full page letter with but a single dip of the pen in ink but at that time they were rare, expensive and extremely brittle.
- Feathers of all sizes and types were available from Europe but why pay good money for something you could find wandering around in your back yard?
HAND WRITING

- Cursive script, the writing of letters in a flowing manner was used with quill pens to reduce the number of times the pen was lifted from the paper.
- The lead-in of each word allowed the ink to start flowing before the main part of a letter.
- Also a slight increase of the pen on down strokes and the lessening of pressure for upstrokes prevented splattering of ink and damage to the nib.

Good King Wenceslas looked out,
On the Feast of Stephen,
When the snow lay round about,
Deep and crisp and even;

Brightly shone the moon that night,
Though the frost was cruel,
When a poor man came in sight,
Gathering winter fuel.
NIBBING THE PEN

- Pens were not typically sold in stores.
- From the middle ages to the Colonial period, the first thing anyone who wanted to write learned was to how to fashion his or her own pen.
- Nibs often had to be re-shaped with every page of writing.
- There were many different ways to do this but it was something that one simply had to learn.
SO HOW DID ONE MAKE A PEN?

- Well, first you found a bird.
- Yes, Turkey feathers were commonly used and worked quite well.
- Colonialists however considered goose feathers were far superior and sometimes kept geese solely for their feathers. Geese made good burglar alarms to.
- Swan, eagle or almost any large bird would also do.
- Peacock and other exotic feathers, however, made poor pens and were rarely used except for decorations and maybe feather dusters.
WHERE TO FIND THESE FEATHERS

- Geese were common in colonial life but if they weren’t around wild turkeys weren’t far away.
- Unfortunately there aren’t too many Domestic birds running around loose today however there are craft stores.
- Then again there is always Amazon, eBay and Google.
- Make sure you buy the full, unclipped quill 9” or longer.
- Do not buy dyed, imitation or broken feathers.
- Expect to pay from fifty cents to a dollar per feather for small quantities.

12” turkey feathers are readily available on the internet. Any 3” diameter mailing tubes come in handy for storage.
IN CASE YOU HAVE A BIRD HANDY

- Primary Feathers are numbered from the wing joint (or index) outward.
- Use one of the first five or six primary feathers from the LEFT wing for best results if you are RIGHT handed.
- The curve of these feathers will fit in the right hand best.
- Select feathers from the right wing if you are left handed.
FEATHER ANATOMY

- This diagram shows the main part of a feather.
- Notice the channel that runs along the rachis top from the tip to where the vanes end.
- The nib should be split in line with this channel either on the top or bottom.
OK, WHAT NEXT?

• Please understand that there is no single absolutely correct or wrong way to make a quill pen. There are so many ways to do so.

• Fashioning a pen varied greatly depending on the writing materials available, how often the user did writing and how important the letter was.

• The following is my own personal technique but one should experiment and see what seems to be best.

• Exacto knives didn’t exist in colonial times so it would be more authentic to use a penknife.

• One the practical side, an Exacto knife with a #11 blade might prove easier to use.

• A business man would shave the entire vane from the pen where a home owner might fancy saving that part of the vane that didn’t touch the hand.

• Please read through the resources listed at the end of this presentation to review several options to shaping quills.
WHAT YOU WILL NEED

• A flat surface to work on.
• Feathers (of course)
• A pan of fine, sifted sand.
• Cooking thermometer
• A cup of water
• A short piece of soft wire. A piece of coat hanger will do nicely
• An #11 Exacto or pen knife.
When most people think of a quill pen during colonial times this was what they picture, a full feather plume ready to dip in ink.

This, however, is closer to what most pens actually looked like in the world of business. The vanes were stripped from most if not all of the quill and the nib was sharpened.
TO BEGIN, TRIM THE VANES

- Select a feather that has a long, center quill.
- Tear off that part of the vanes that will not be required.
- Scrape the quill smooth with a knife in the area where the vanes were removed.
HOW FAR?

- Ladies at home did often leave some of the vanes as a decorations.
- Sometimes only a small bit at the tip was left intact.
- Otherwise the quill was stripped well clear of where the pen would be gripped.
- Store owners, bank clerks, those who traveled and professionals who did much writing would strip the vanes completely off.
NEXT, REMOVE MEMBRANE

- Quills may or may not have a membrane or skin at the nib end.
- This also should be gently scraped away before tempering.
Do this only if you plan to temper your pens.
Examine the feathers for flaws
Soak in water overnight.
This loosens any oil, dirt or crud that might be on the feathers.
This also softens the quill and prepares it for tempering.
Tempering is optional but I personally recommend it.
It dramatically increases the useful life of the nib if done properly.
TEMPERING

• This hardens the quill to prevent wear.
• Place a pan of clean, sifted, fine sand in a pan.
• Heat sand to 350 degrees for at least fifteen minutes in an oven.
• A small cooking thermometer can verify the correct temperature is reached.
• Do not heat sand in a metal pan if you use a microwave oven.
• Remove the can from the oven and shove any and all quills to be tempered as far as possible into sand.
• Let cool for at least 15 minutes and carefully examine tempering.
A WEKK-TEMPERED QUILL

• Quills turn white as shown in the top portion of this picture when tempering is done correctly.
• Lack of color change means too little heat while yellow means the sand was probably too hot. Try again.
• Once tempering has been completed the quill was ready for nibbing.

Raw and correctly tempered feathers.
REMOVE the QUICK

- The “quick” is the living part of a growing feather that carries blood in a live bird.
- It shrivels and becomes transparent once the feather matures.
- This cellular structure must be removed to allow the flowing of ink through the hollow of a quill.
- One way to remove the quick is to push a short length of soft wire back and forth up through the center.
- This should be done at some point while cutting the nib.
HOLLOW OUT THE QUILL

• Use an Exacto knife, a short stiff wire or a pair of long, thin tweezers can be used to remove the quick
• Not all the quick has to be removed but the point is to remove enough to allow the ink to wick and be absorbed with enough ink to write a few words.
CUTTING the NIB

1. Cut a quarter inch from the back of the quill.
2. Cut half an inch off the front.
3. Make a short slit in the center of the back of the quill.
4. Increase the slit. (Support the quill on a surface).
5. & 6. Cut away the front of the quill (cradle piece) to form the scoop.
7. Cut away the sides of the quill to form the point.
8. If the slit is too long, the pen tip will be too soft; If too short, the pin tip will be too hard. Cut away more from the side or lengthen the slit to solve these problems.
NIBBING the PEN

- To “nib” the pen, rest the underside of the point on a smooth, hard surface.
- Thin the top from the top side by scraping the blade forward at a shallow angle.
- Then make a vertical cut, either at right angles to the slit or obliquely.
- On a very strong feather the last cut can be repeated to remove a very fine sliver.
- Avoid a rough underside on the tip of the nib.
PEN USE

• A typical pen could write between two and five pages before requiring a new point if a very light touch was used.
• A pen could be re-nibbed about four or five times.
• This would mean keeping a supply of several pens handy for and long documents or multiple letters.
SPARE PENS

• Merchants, bankers and businessmen would always carry a supply of spare pens like these.
• This saved the time it would take to pause and have to re-nib (sharpen) a pen in use.
• Note the lack of plumes.
• Plumes were strictly for decoration.
PEN ACCESSORIES

• Pens and all that went with them were highly personal items.
• Most long-distance travelers carried their own supplies in some type of lap desk.
• These came in all sizes, some quite large and some smaller like this one designed to fit in a saddle bag.
• The contents varied also but the following is a sample of a few of the types of items that might be contained in either a portable desks or a regular desk at home.

The “modern” lap desk would be common before the civil war.
QUILL vs. PENKNIVES

- To be historically accurate this is the type quill or penknife that would be readily available in the Colonies.
- The blades would be sharp but of a slightly inferior grade steel that required constant sharpening.
- High grade Sheffield carbon steel and other advances in technology after 1830 made ‘so-called’ penknives like this available.
- Steel quills began to came into vogue about the same time eliminating the need to trim nibs.
- These were used more for trimming cigars than quill pens.
- BEWARE! *Stainless* Steel knives cannot hold an edge so are more suitable for decoration than anything else.
TRUE PENKNIFE

• There might not have been any rubber erasers back then but there was a way to correct Mistakes albeit a bit more time-consuming.
• The short curved section of a special sharp knife was used to carefully scrape away the ink.
• Pounce was used to smooth over the roughened area.
• The straight portion closer to the handle was used to cut or sharpen the pen’s nib.
• This was the original and true penknife.
CLEANUP

• Pounce powder was sprinkled on rough writing surfaces where ink had been “erased” to make them smooth enough for writing.

• It was certainly needed if the paper came "unsized", that is, lacking the thin gelatinous material used to fill the surface of the paper and make it smooth enough for writing with a quill or a steel nib.

This shaker was used to dust the paper with pounce.
CUTTLEBONE

- Cuttlebone was simply the bones of the cuttlefish.
- Cuttlebones were ground up to make a powder used to size paper.
- It was also used as a polishing powder, was added to toothpaste, used as an antacid or as an absorbent.
- Because cuttlebone is able to withstand high temperatures and is easily carved, it could serve as mold-making material for small metal jewelry castings and other small sculptural objects.

Cuttlefish, Black Walnuts, Gum Arabic and slaves could all be found in any or all of the trade ships between the East coast of Africa, America and England. Cuttlebone is often found in bird cages today.
INK WELLS

• If there was ever a “standard” inkwell during the colonial era this would be it.

• Any sizeable town would have a potter that could make these a hundred at a time and probably learned how as an apprentice.

• It had a small inner chamber that held ink surrounded by an outer chamber to hold quills.
END OF THE QUILL PEN

- Quill pens were popular throughout the civilized world from the middle ages until the 19th century.
- Steel nibs invented in 1822 soon surpassed quills as they were cheaper and didn’t need frequent sharpening.
- Fountain pens became popular before WW-II and ball-point pens invented shortly thereafter doomed the use of dip pens. Except for artwork.
For More Information...

Cursive Writing - https://en.wikipedia.org/wiki/Cursive

Cutting a Quill Pen - http://www.regia.org/research/church/quill2.htm

Cutting Quill Pens - http://www.flick.com/~liralen/quills/quills.html

Once Upon a Time - http://www.paperindustryweb.com/ oncetime.htm - A background history of paper making in the colonies
This presentation has been brought to you by the North River Railway

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THE END