raw nature quill

tempered, scraped, fresh cut

slit is made

first scooping cut

cut @ dotted line

bottom is flattened with shaving cuts

Top is beveled

nibbing cut

second scooping cut

‡ Between these operations, further shaping/sculpting would usually need to be done.

QUILL CUTTING
QUILL CUTTING

CROSS SECTION

QUILL KNIFE

Rounded on one side only to make scooping cuts.

CORRECT WAY TO HOLD KNIFE + QUILL TO MAKE SCOOping Cuts
KNIFE MAKING

Q U I L L K N I V E S can be made by refashioning the business end of store bought carving knives (for woodworkers).

Buy one that has a shorter blade, and a shape like this →

FIRST, using a common handyman's "bench grinder" (they have 2 abrasive wheels and a motor), reduce the shape of the blade to this:

ACTUALLY, a slowly turning grinder would be best (say ~ 1000 rpm).

see how much thinner 2 is than 4, and shorter (about 1 1/8" - 1¼" is good).

A: AFTER ROUGH (but very careful & accurate) SHAPING ON THE WHEEL,

you need to take the blade through a variety of abrasive materials & levels.

THE BEST, I THINK, is as follows:

1. coarse DIAMOND STONES - "DMT" brand, they need no lubricant, but blow away dust occasionally.

2. medium DIAMOND STONES - "DMT" brand

3. then CERAMIC waterstones

4. #1200 "Bester"

5. #8000 "Takenko"

6. then, finish on leather strap, with ROUGE "rubbed on"

maintain edge with strap for long-lasting razor sharp edge (every few quills)
Book with technical info on quill cutting:
CALL OF APITERS HANDBOOK
(get from Paper & Ink Books, or "Books in Print" any bookstore)

SUPPLIES

Swalef & Son Inc.
P. O. Box 3175
Pineville CA 93650
(209) 439-9602

The Japan Woodworker
www.japanwoodworker.com
1-800-537-7820

George Yamagita
9025 W. 31st St.
St. Louis Park 935-1327

Wood Carvers Store & School
3056 Excelsior Blvd
Mpls 927-7491

Feathers.
Order: "mature goose pointes", for calligraphy
[may have "jumbo" or "regular" sizes]
ceramic & Japanese
sharpening stones,
Diamond stones, etc.

Primo-quality quill knife

Paper & Ink Books
15309 A Sikes Bridge Rd.
Emmitsburg MD 21727
(301) 447-0487

Wood carving knife to
make into quill knife.
Rouge, for strap

Quills, cured & uncured & cut

seven corners Hardware
St. Paul MN
1-800-328-0457

Mail order hardware
wet & dry sandpapers, etc.

John Neal Bookseller
1-800-369-9598

cut quills, callig. books & supplies
Fig. 47. The Villard diagram. In our diagram of the page construction there is also a variation of the harmonical proportion canon of Villard de Honnecourt. Villard was an architect from Picardy who lived in the first half of the thirteenth century. His Sketchbook, a manuscript, is kept in the Paris National Library. With the aid of this canon, which is shown in the thicker lines, any distance can be divided exactly into any desired number of parts without other measurements.

Fig. 45. The secret canon which underlies many late medieval manuscripts and incunabula. Discovered by Jan Tschichold, 1953. Page proportion 2:3. Text and page area of the same proportions. Height of the text area equal to width of the page. Margin relationships: 2:3:4:6.
A SHORT SECTION ON ILLUMINATING:
FIRST, HOW TO GILD ON PARCHMENT.

If you want to do illuminating, you must start by drawing the figures, foliage ornaments, letters, or whatever you want, with a little lead on parchment, that is, in books; then you must crisp up your drawing carefully with a pen. Then you will need to have some of a color, or rather, a gesso, which is called size, and is made as follows: take a little gesso sottile, and a small amount of white lead, less than a third as much as of the gesso; then take a little sugar candy,² less than the white lead. Grind these things very fine with clear water. Then scrape it up; and let it dry without sun. When you want to use some for gilding, take a little of it, as much as you need; and temper it with white of egg, well beaten as I taught you before. And temper this mixture with it. Let it dry. Then take your gold: and you may lay it either with breathing or without breathing. And as you lay the gold on it, take your crook" and burnishing stone, and burnish it at once; and put" a solid little panel of good wood, nicely smoothed, under the parchment; and do the burnishing on that. And know that with this size you can write letters with a quill, and do grounds, or whatever you please; for it is most perfect. And before you gild it, see whether you need to scrape it, or level it, or clean it up at all, with a knife point; because your little brush sometimes lays more in one place than in another. Always look out for this.

HOW TO MAKE THE GESSO SOTTILE FOR GESSOING PANELS.
CHAPTER CXVI

Now you have to have a gesso which is called gesso sottile; and it is some of this same gesso, but it is purified for a whole month by being soaked in a bucket. Stir up the water every day, so that it practically rots away, and every ray of heat goes out of it, and it will come out as soft as silk. Then the water is poured off, and it is made up into loaves, and allowed to dry; and then this gesso is sold to us painters by the apothecaries. And this gesso is used for gessoing, for gilding, for doing reliefs, and making handsome things.
Essential process:
1. Mix/grind gesso ingredients
2. Dry the ground gesso in cakes
3. Reconstitute with H₂O, bit at a time, as needed
4. Apply gesso onto paper, allow to dry overnight
5. Apply gold leaf, burnish.

**GESSO RECIPE:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Volume/Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 parts SLAKED PLASTER (or reagent Calcium Sulfate)</td>
<td>40 gr.</td>
</tr>
<tr>
<td>3 parts WHITE LEAD (lead carbonate)</td>
<td>20 gr.</td>
</tr>
<tr>
<td>1 part TABLE SUGAR</td>
<td>5 gr.</td>
</tr>
<tr>
<td>½ to 1 part FISH GLUE (&quot;seccotine&quot;/brand name)</td>
<td>1 Tsp.</td>
</tr>
</tbody>
</table>

Grind ingredients all together (with water) on a glass plate with muller — surfaces prepared with 220 grit silicon carbide (with water). Grind in ½ teaspoon aliquots for 5 minutes.

Dry in drops/dollops on silicone release paper.

Reconstitute for use: crumble into small dish, add water, remove bubbles with small amt. of alcohol.

Add very small amount water/colours or dry pigments for color, as otherwise materials are stark, white + hard to see on white paper.
SUPPLIERS OF MATERIALS
FOR GILDING

Paper & Ink Books / mail order; general calligraphy supplies
1-800-736-7772

Daniel Smith / mail order; general artist's supplies
good muller, powder pigments, such as titanium white, etc.
1-800-426-6740

W. Habberley Meadows LTD.
5, Saxon Way
Chelmsley Wood
Birmingham B37 8A Y
ENGLAND
tel: 011-44-21-770-0103

24 ct.
"Fine Gold Extra Thick
Illuminating Loose Leaf"

Aldrich Chemical Co., Inc.
cust. service:
1-800-558-9160
calcium sulfate dihydrate
prod.# 255548

John Neal Booksellers / mail order calligraphy supplies
1-800-369-9598
gum ammonium, etc.

Bookbinders International
6701 B Lafayette Ave
Rivendale MD 20737
(301) 927-7787

mail order hand bookbinding supplies
including gold foil, colored foils

Swift & Sons
(203) 522-1181
-Hartford, Connecticut-
gold leaf ("surface" or "patent")
not always best quality on paper carrier sheets
GILDING BIBLIOGRAPHY

The Calligraphers Handbook / various editions
   - Donald Jackson's chapter on gilding - (editions before 1968 w/ Irene Bose's chapter on gilding)

The Craftsman's Handbook
   by Cennino Cennini, trans. by D.V. Thompson / 14th cen.
   today's understanding of materials and technique

The Arte of Limning
   A reproduction of the earliest English printed book on ms. illumination
   Society of S. Illuminators / 1573 edition

Gilded Wood
   Conservation + History / much info on gold+gesso for framers, but illuminators can gain much from it, I think
   1991 Sound View Press