

THE ADRIAN EMPIRE ARTS AND SCIENCES

<http://www.adrianempire.org/documents/forms/artsoaldoc.pdf> March 2002

DOCUMENTATION SUMMARY SHEET

This sheet should be filled out for each entry. Additional documentation is highly recommended. Each artisan should look at the Judges Guidelines to help determine the appropriate questions to answer for the type of entry.

Title of entry: Manuscript – Chapter 36 of The Apology by Sir Thomas More

Date: March 27, 2010 – Terre Neuve Crown War

Adrian name of artisan: Sir Callon Bryn Corey Mundane name: Jeffery M. Kout

Knight's List Journeyman's List Subdivision: Kingdom of Terre Neuve

Period/Date: 1533 Country of origin/Style: England

Description of entry: In 1533, after he had resigned as Chancellor of England, Sir Thomas More wrote an apology for the things he was reputed to have done. This is Chapter 36 (XXXVI) in which he talks about allegations that he tortured people.

Materials used (explain period materials used and substitutions used in your entry): _____

- Parchment Paper – Substitution for actual parchment.
- Steel nib Calligraphy Pen – Substitution for a feather quill pen
- Iron Gall Ink – Using a recipe from *A Booke of Secrets*
- Chapter XXXVI of the Apology of Sir Thomas More
- Time: All told, this manuscript took approximately 35 – 40 hours to complete, including all of the practicing, the start-overs and the research and documentation.

Processes/Techniques used (explain period techniques and substitutions used in your entry): _____

I bought the Parchment paper from Michaels. I made the Iron Gall Ink myself from period ingredients. I borrowed the calligraphy pen from Dame Gemma. I wrote the manuscript myself using all of the above items all the while attempting to use the same hand the original manuscript was written in. I do not know what hand the original manuscript is written with but it resembles a gothic rotunda hand that used evident on the calendar page from the book of hours that Baroness Babette has entered. For the capital letters, I used a hand based on Gothic Textura, which I think is an easier hand to discern, at least for the capital letters. It is depicted in *Medieval Calligraphy*.

References/Sources: _____

- *A Booke of Secrets* printed by Adam Islip, 1596. page 5
- *Medieval Calligraphy, It's History and Technique* by Mark Drogin
- Chapter 36 of *The Apology* by Sir Thomas More – downloaded from the Internet at: http://www.thomasmorestudies.org/1557Workes/library_1557Workes_Apology.html
- *The History of the Illuminated Manuscript*, Phaidon Press Limited, London, ©1994
- Luminarium website (jump point for documents on www.thomasmorestudies.org)
- Society for Georgia Archaeology website
- Pergamena website

Additional Notes (On presentation, history, etc): This manuscript is dated 1533, which is after Thomas More had resigned his position as Chancellor of England but before he was imprisoned by King Henry VIII for treason.

Iron Gall Ink

From the Society for Georgia Archaeology

(<http://thesga.org/2010/02/iron-gall-ink-on-parchment/>)

Iron gall ink is also called iron gall nut ink or oak gall ink. The name for this ink comes from the two main components, iron and galls.

Iron is easy—it's a metal, common to nails and other everyday items.

Galls are round swellings on plants that are abnormal growths that the plant makes in response to damage, often made by insects. Oak galls are caused by gall wasps, which in this case lay their eggs in tender buds of particular species of oaks. The oak reacts by growing a lot of tissue to encapsulate this invasion.

Iron gall ink was the standard writing and drawing liquid used for hundreds of years across Europe, and beyond. Iron gall ink was used by Leonardo Da Vinci (1452 – 1519), and for the Dead Sea Scrolls (circa First century); Van Gogh (1853 – 1890) used it, and so did Bach (1685 – 1750). Indeed, it was the standard for public documents in the Colonies at the time of the Revolution (circa 1776).

Iron gall ink was preferred because of its longevity. The ink would bond with the parchment, rather than merely sit on the surface, like some other pigmented liquids. Also, the ink reacts to oxygen and becomes darker over the next few days after it is used.

To make iron gall ink, you start with two different liquids. The chemistry of iron gall ink is rather complicated, and best left to experts. Briefly, one liquid is an iron solution, which can even be made by putting carpentry nails in vinegar. The other is an oak extraction, commonly made from oak marble galls, which have the high levels of tannin that are critical to the chemistry of the ink. When mixed, iron ions react with the tannic acid to make the ink. Other chemicals are added to make the liquid less acidic and more stable. Gum arabic has been commonly added to iron gall ink preparations to make the pigments stay in solution. It comes from the sap of acacia trees, native to northern Africa.

The recipe I used is from the *Booke of Secrets* published in 1596 by Adam Islip for Edward White. The actual recipe is located on page 5 of the provided copy and is also shown on the next page. The translation into modern English is:

Take a quart of strong wine, put it into a new pot, and set it on a soft fire till it be hot, but let it not see the (boil), then put into it four ounces of galls (oak galls), two ounces and a halfe of gum Arabike, and two ounces of victriall (ferrous sulfate), all beaten into a small powder, and sifted through a sieve, stir it with a wooden stick and it will be good ink.

Another.

Take a quart of strong wine, put it into a new pot, and set it on a soft fire till it be hote, but let it not seeth, then put into it foure ounces of gauls, two ounces and a halfe of gum Arabike, and two ounces of victriall, al beaten into smal powder, and sifted through a sine, stirre it with a wooden sticke, and it will be good inke.

Instead of using an entire quart of wine, I used one cup (¼ quart or about 250 ml). Therefore, I cut down the amounts of all other ingredients to ¼ as well. The wine was a cabernet sauvignon from Charles Shaw that I purchased from Trader Joe's.

I received 7 or 8 oak galls from Dame Gemma as she had several to spare. She offered to provide already ground galls, but I opted to grind them myself using a marble mortar and pestle that I purchased from Bed Bath and Beyond. It took approximately ½ hour to grind the galls into a powder that I considered to be fine. I didn't have a sieve, so I just dumped all of the gall powder, victriall and gum Arabic into the wine after heating it. Unfortunately, I needed all of the gall powder I ground, so I don't have any to show.

I heated the wine in a small metal pot over a low heat on our stove. It took around 5 minutes for the wine to be hot enough, but still not boiling. I dumped the rest of the ingredients into the wine and stirred it with a wooden skewer that we had lying around. I stirred it for two minutes or so with the heat still on making sure that the mixture did not boil. Then I took the pot off the heat and let it sit for a minute while I emptied the wine bottle so I could use it as an ink storage container. The result was a black liquid with a consistency close to that of milk. I took the wooden stick that I used to stir the mixture that still had some ink on it and drew some lines on a spare piece of paper to test the ink. They came out quite well.

Parchment

I used parchment paper that was purchased at Michaels in a pad of 20 sheets. The main reason for the substitution was that the cost of making my own parchment was too great and required chemicals, such as lime, that are too dangerous to have in a house. I also didn't purchase premade parchment because the cost was too great. Pergamena has parchment available for sale at a cost of \$25 for a 9" x 12" piece of parchment. Since I required four pieces (assuming no mistakes) that would be a cost of \$100, more if I wanted spare pieces.

Excerpted from Pergamena – A Modern Parchment manufacturer in New York.
<http://www.pergamena.net/>

How to make Parchment

Step One: Remove the Skin

The process of creating parchment often begins at the farm where the animal died, or at the butchery. Using a knife, the butcher removes the skin of the animal, cutting at the level of the hypodermis to separate the skin from the muscle. Care must be taken to avoid cutting or ripping the skin, while also leaving as little flesh on the skin as possible. After removal, the skin must be worked on immediately or preserved (by covering the flesh side generously with salt) until it is ready to be handled, or it will spoil.

Step Two: Remove the Hair

The first step performed to make parchment is the removal of the hair from the outside of the skin, using a lime (calcium hydroxide) bath. Lime is the traditional solvent, but hair removal can be done with other chemicals in addition to or instead of lime. The bath takes place in a rotating drum that moves the skin continually to ensure the chemicals' even distribution. When done correctly, the hair falls out or dissolves, and the skin swells noticeably.

Step Three: Flesh the Skin

Next, the skin is fleshed, which involves removing the remaining flesh and fat from the inside (or flesh side) of the skin. This step was traditionally done by hand with large "fleshing" knives. Afterwards, the skin is re-limed. Repeating the process creates a better final product.

Step Four: Neutralize the Skin

After fleshing, the lime is washed out and the skin is neutralized. Enzymes are added to further remove impurities, clean the skin, and improve its feel. At this point the skin can be stretched immediately, or else dried and stored for later.

Step Five: Stretch the Skin

If it has been dried, the skin is now rehydrated, simply by soaking in a tub of water. When it is hydrated and elastic once more, the skin is stretched using stretching frames. Stretched skins are de-fleshed once more by scraping with a lunarium or lunarium (an ancient style of blade, shaped like a crescent moon), and left to dry, after which they are prepared to the desired thickness and finish by sanding and buffing. This is the point at which the characteristics of each skin become evident.

The following page has a brief historical timeline of the evolution of parchment. This was also excerpted from Pergamena at <http://www.pergamena.net/resources/history/>



1452

The Gutenberg Bible, produced in Germany, becomes the first book printed on the printing press, ushering in the era of mass book production. Forty-five of the 180 copies were printed on parchment. Eleven of these are still known to exist today.



1215

The Magna Carta is written on calfskin parchment and signed by King John of Britain.



711

Cordoba, in Spain, becomes the global center of leather production when Moorish conquerers bring tanning methods with them. From this, we now have the terms "Cordovan leather" and "Spanish leather."



197-158 BC

During the reign of Eumenes II, the Kingdom of Pergamon (in Asia Minor) perfects the production of parchment as an alternative to papyrus. Pergamon is the namesake of parchment: "Pergamena" became "perkament," which translates to "parchment."



3100 BC

The papyrus plant is pioneered as a writing surface in Ancient Egypt. It's the writing surface of choice until around 800 AD.



5500-4500 BC

Cultures in modern-day Pakistan and Egypt leave behind evidence of tanning.



1603

William Shakespeare, the son of a glove leather tanner, published Hamlet, which includes the following exchange:

Hamlet: Is not parchment made of sheepskin?

Horatio: Aye, my lord, and calves' skins too.



1270

During his travels, Marco Polo documents Russia leather, which is tanned with birch bark, lending Russia leather its characteristic smell and beneficial archival qualities



1000

In North Africa, the Moors produce Moroccan leather using goatskins with vegetable matter as a tanning agent. This becomes the standard bookbinding leather several centuries later.



700 AD

The Lindisfarne Gospels, the oldest existing version of the biblical Gospels, were written and illuminated on parchment.



2600-2000 BC

Leather scrolls and parchment are used by Ancient Egyptians to record writings.



3300 BC

A Bronze Age hunter dies in the Alps. In 1991, when his body is discovered, this hunter still has leather items with him.



8000 BC

Tanned garments are rendered in cave paintings in Lerida, Spain.

Quills

Excerpted from *Medieval Calligraphy* by Mark Drogin page 175 and 176

Dip Pens:

Dip pens require constant refilling and some initial strokes must be made on a scrap to be certain that overloading has not increased the speed of flow. But they are handy when you are working briefly with different kinds or colors of ink.

Quills:

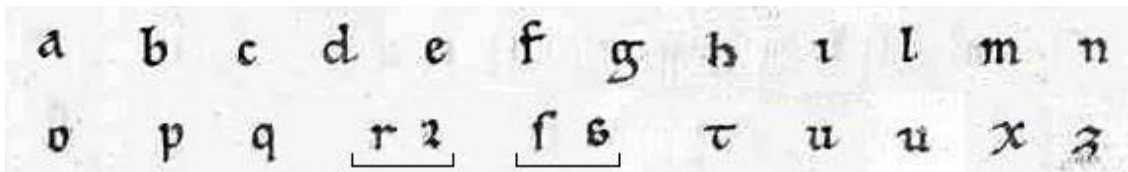
Quills cut from the wing feathers of geese or turkeys are authentically medieval, but they require care to prepare, maintain and use. They are *not* beginners instruments and many professional calligraphers pass them up for their modern equivalents.

I used a #5 metal-tip dip pen borrowed from Dame Gemma. I had purchased a set of calligraphy dip pens from Michaels a week or so previous to beginning this project, but they were either too big or too small. I then tried using one that Dame Gemma had previously loaned to us and I found that it worked the best because the width of the tip was small enough that it made reading the text the easiest for the size of lettering I was using and it was large enough so that it didn't bite into the paper and scatter drops of ink all over it.

The Manuscript

Baroness Babette and I have been watching The Tudors on DVD at home and Sir Thomas More was featured quite heavily. When I was searching on the Internet for medieval manuscripts, his name jumped out at me. I looked at a few of his poems on the Internet at <http://www.luminarium.org/renlit/morebib.htm> and one of the links was for The Apology. I was quite surprised when I found out that it was 83 pages long. Luckily, the text was in 4 separate pdf files for easy downloading. What swayed my mind to Chapter 36 was that the Luminarium website also had a translation for this section on his response to certain allegations of torture (<http://www.luminarium.org/renlit/moreapology1.htm>). I then looked for it in the pdf files and after searching for 30 minutes or so, found that it was Chapter 36 and was two pages of text. This was a perfect project for me.

The first thing I did was to print out the chapter so I could practice writing with the hand used by the calligrapher which resembles Gothic Rotunda, which was popular in the fifteenth



century according to Medieval Writing.com (medievalwriting.50megs.com). (The letters j, k, w and y did not have an example available. There are two versions of the 'r' and 's'.) It was during this time that I found that the two dip pens I was planning on using was a bit too small

and too large respectively. Once I had practiced the basic calligraphic hand, I then wrote a page worth of text thinking this would be my one and only attempt. This turned out to be an unmitigated disaster. The page was formatted in two columns with ¼" line spacing and was supposed to be Left and Right Justified. Well, you can see from the page titled **Practice #2** that it was far from Right Justified. I then determined to write out the whole entire chapter for practice. I used the actual parchment paper for the first page. For the rest of the chapter, I used a notebook that had 4-inch columns marked so I would know what the line lengths would be (see pages titled **Notebook Practice 2 – 7**). Even though I knew that the notebook line spacing wasn't ¼", I had thought that I could adjust the size of my lettering to account for it. Little did I realize that I couldn't adjust far enough and I was able to fit more words per line on the final draft than on the practice draft. This would throw off my margin justification on the final draft, but I think I mostly was able to figure it out (except for page 3, see below).

Anyway, I finished my practice sheets after about 10 hours, which translates to approximately 3 1/3 hours per page of parchment paper. During all of this time, I was using regular store-bought calligraphy ink. When the practice was done, I made the Iron Gall Ink detailed above.

The first page of the Final Draft went well enough. It was difficult to learn the different letters that were used during this time period and to figure out when they were used. For example, there are two different symbols for the letter 's'. The standard 's' shape is only used at the end of a word, never in the middle. For an 's' in the middle of a word, the symbol most resembles an 'f' without the middle crossbar. Additionally, there are different symbols in use for the letter 'r' as well as the letters 'u' and 'v'. The standard version of the 'r' is used the most. However, there is a second version of the 'r' that looks more like a modern capital 'R' without the upper vertical riser (see picture to the left). This second version of the letter 'r' was only used after certain other letters, these being: b, h, o and p. As for the 'u' and the 'v', it appears that these were used interchangeably. The 'u' was used at all times in the middle of a word for both the u-sound and the v-sound. The 'v' was used at all times at the beginning of a word for both sounds as well.

The second, third and fourth pages went according to schedule and I was able to complete the final draft with about 8 ½ hours of work. The total amount of work that I put into this project is in the neighborhood of 35 – 40 hours.

After looking at page 3 on Thursday, I decided to redo it. The right justification was off and there were several smudges that needed to be fixed. So, I set up a new piece of parchment paper with ¼" line spacing and set to. About 2.5 hours later, I was finished, but I had somehow managed to fit an additional line onto page 3, so I also had to redo page 4. Since Page 4 is approximately a half column, it only took 30 minutes or so. I have included the original Page 3 and 4 in my "Practice" documentation.

I have printed out a single copy of the entire manuscript of The Apology. It is on Page 1 of the full version that the manuscript is dated to 1533.

Ruled Parchment

According to *A History of the Illuminated Manuscript*, it was common practice to draw faint grid lines on the parchment so that the text would be straight and regular.

Before a scribe began to write, he had to measure out the page carefully and rule a grid of faint lines to keep the text straight and within a regular pattern. He would have to decide whether the text would be in one column or two: at the beginning of the twelfth century many books were still in a single column format, but by about 1170 manuscripts were generally larger and often in two columns.... By 1200 some small books were in double column.

The device used to make the rulings evolved into using a pencil-like item and possibly a graphite tip.

There is a difference too in the instrument used for ruling. Before the twelfth century the lines are almost always scored with an awl or possibly the back of a knife. By the mid-twelfth century, most English scribes ruled their guide-lines with an instrument which draws a line like a modern pencil. Perhaps the graphite mines at Borrowdale in Cumberland supplied this new substance, but sharpened silver and especially lead also produce very similar marks on a rough surface like vellum.

In fact, medieval scribe would even poke holes in the parchment leaves to facilitate making the rulings.

Actually ruling each leaf was tiresomely slow. The scribe would therefore measure up only the first page of a stack of unwritten leaves and with a sharp instrument he would prick the measurements in the extreme margins of a stack of leaves. When he came to each page, then, he simply had to join up the prickings in order to multiply the ruling pattern exactly throughout a quire. It is worth looking out for these pricked holes in a twelfth century book: if nothing else, they may indicate whether the three outer margins have been cropped much by the binder (PL. 74). In the earlier twelfth century the holes are in outer margins only and so had been ruled with the bifolium spread open. By about 1150 one notices the prickings in the extreme outer margins as well, and therefore the scribes must have folded their blank leaves before ruling them.

Skipping an 'M' or an 'N'

While talking about how to date a manuscript, *A History of the Illuminated Manuscript* also mentions the use of a contraction line to signify that an 'm' or an 'n' has been omitted. This is very prevalent in *The Apology* and I have even used this device a few times in my manuscript to ensure the column justification comes out correct. However, I also replaced the 'm' and 'n' on several occasions when space allowed or if I required it for column justification. FYI: *The Apology* uses a straight line to indicate a contracted 'm' or 'n'.

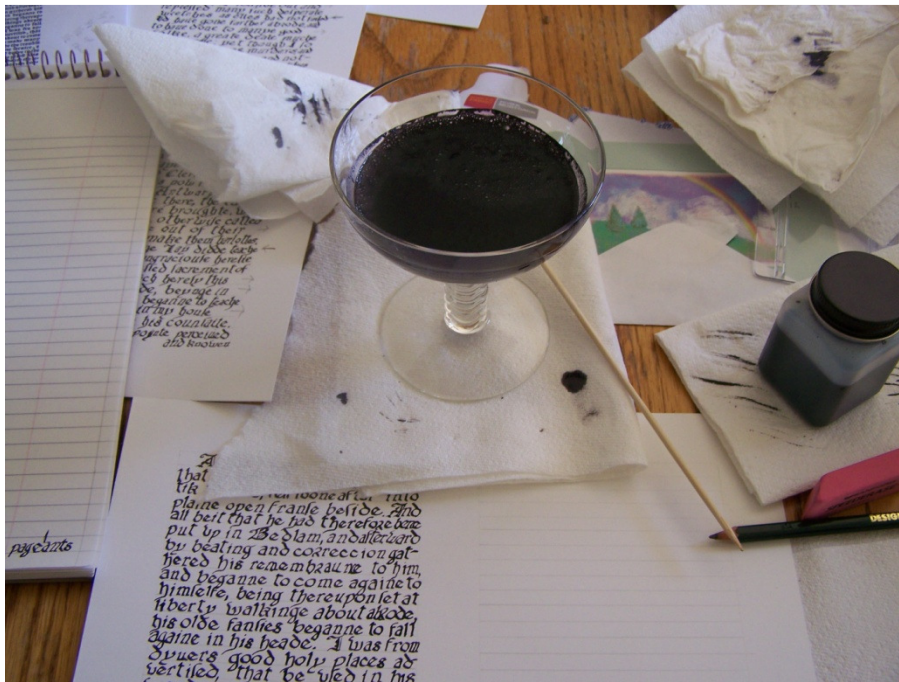
A wavy contraction line (written over a word to indicate that 'n' or 'm' has been omitted) is an early feature: a straight line usually belongs to the second half of the twelfth century or later.

Pictures

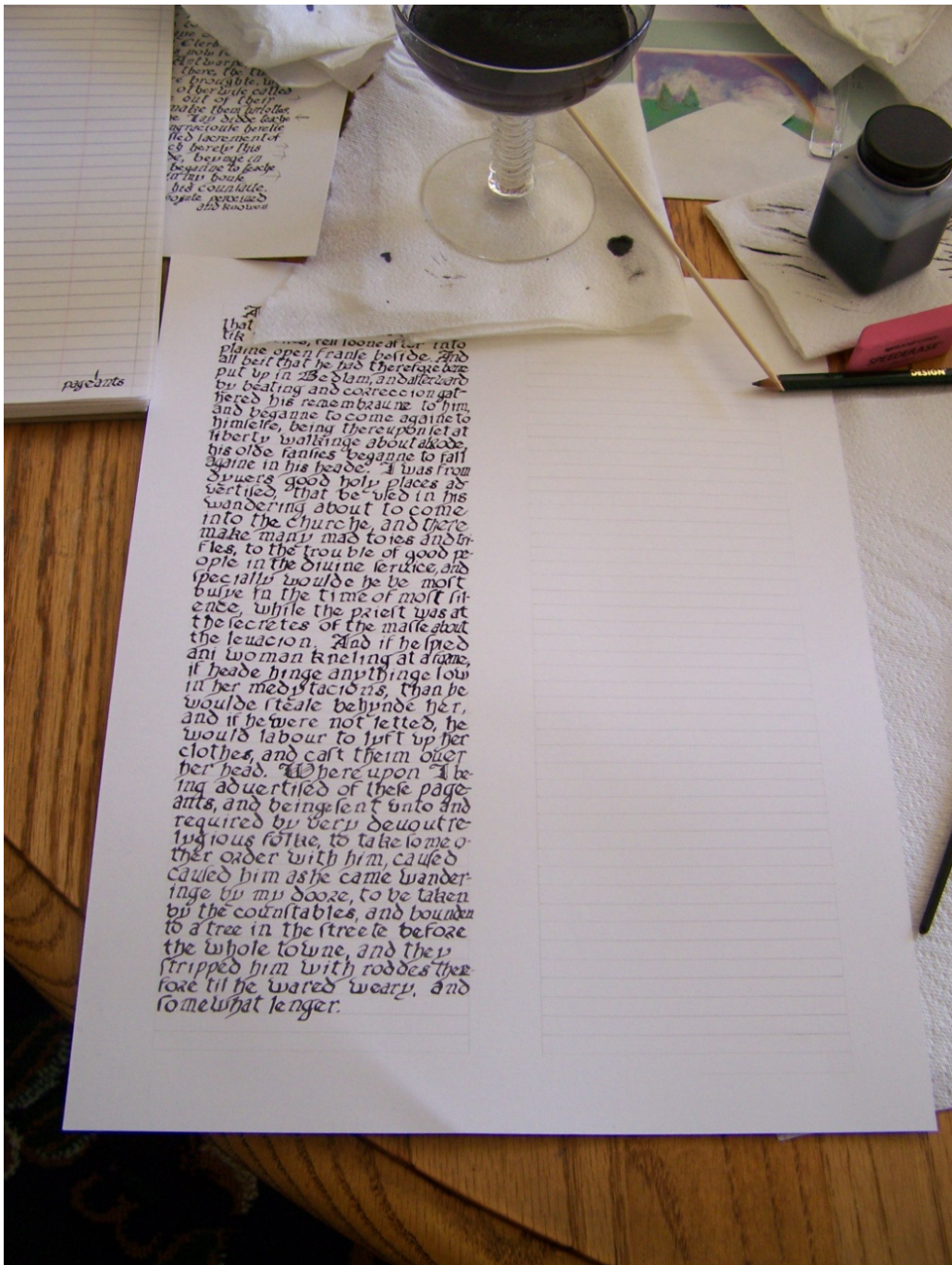
Here are three pictures I took during the creation process of the manuscript.



General Workspace



Close Up of the Iron Gall Ink Waiting to be Written With



that
lik
... ten loone at her into
plaine open fraise beside. And
all bet that he had theretofore
put up in Beblam, and alleward
by bealing and correccion gat-
hered his remembrance to him,
and beganne to come againe to
himselfe, being thereupon let at
liberty walkinge about alode,
his olde fanlies beganne to fall
daine in his heade. I was from
duety good holy places ad-
uertised that he vled in his
wandering about to come
into the church, and there
make many mad totes and tri-
ples, to the trouble of good pe-
ople in the diuine service, and
specially woulde he be most
busie in the time of most si-
ence, while the priest was at
the secretes of the masse at
the leuacion. And if he spied
any woman kneeling at a game,
if hee dinge anything low
in her medytacions, than he
woulde steale behynde her,
and if he were not letted, he
woulde labour to yft up her
clothes, and cast them ouer
her head. Where upon I be-
ing aduertised of these page-
ants, and beinge sent unto and
required by very deuout se-
luous folke, to take some o-
ther order with him, caused
him as he came wander-
inge by my doore, to be taken
by the countables, and bounden
to a tree in the streele before
the whole towne, and they
stripped him with roddees ther-
fore til he wared weary, and
some what longer.

Close Up of Page 2 in Progress with Pencil Lines