

# THE FRANCESTOWN HERITAGE MUSEUM

Newsletter



February 2021

## TANNERIES – PART I

### FRANCESTOWN TANNERIES . . .

Our December 2020 Newsletter included a supplement summarizing many of the mills and businesses that were located in Francestown in the 1800s. Included in that list were four tanneries. There was not a great deal of information concerning these manufacturing businesses but Cochrane noted in his History of Francestown that in total “they added considerable value to the town”, while the Gazette referred to them as “large tanneries”. As there were four of these tanneries and they were important to the town it seems appropriate to look into just what took place in these tanneries.

Merriam Webster defines a tannery as “a place where **tanning** is carried on” – now don’t you all just feel totally enlightened? Let’s see if the Francestown Heritage Museum can do a bit better. You should also know that the museum has a number of the tools used in this process for your viewing. Our tanneries took animal hides and converted them into leather used in the everyday life of the colonists. Hopefully you are just dying to know how this was accomplished because that is what we will do here. We’ll skip the gory preliminary details of how the animal came to give up its hide.

The process of tanning required that several preliminary processes took place prior to receiving the hide. Tanning in colonial days required a good deal of bark (as in tree bark). Other methods utilized vegetable matter but we will concern ourselves with the bark method which is what was used in Francestown. As you recall we have already established in the January Newsletter that Francestown had and has a lot of trees.

CONTINUED ON PAGE 2

### GENEVA HAND FLUTER -

Now some emperor was noted for having “no clothes” while others went to the opposite extreme.



Just how did you smooth those ruffles? Why with a Geneva Hand Fluter of course. You know that this newsletter would not mention this if the Heritage Museum did not have one for you to see during your next visit.



Made by the W.D. Howell Co., a leading sad **iron manufacturer**. They are called sad irons because “sad” is an obsolete term meaning heavy and solid. But equally likely is because they evoked the sad, hardscrabble lives of our great-grandmothers or housemaids during the Victorian era.

Mention tanneries to folks today and what often comes to mind is polluted ground and rivers, carcinogens, super fund sites and other negative images. For many tanneries in the 1900s these were valid issues. Such was not the case with our ancestors back in the 1800s. While it is true that even in the 1800s tanneries were not the best of neighbors, they were not associated with deadly pollutants. So why not? In a word chromium. The use of chromium was a more recent innovation and not used by our ancestors. Well then you may ask; “how did our ancestors tan leather”?

What they did was known as bark tanning – simply put, they used bark rather than chromium to tan leather. A very logical method as they had limited access to chromium salts and nearly unlimited access to trees for bark – especially oak trees. The process was involved and lengthy, taking up to many months to tan a single hide.

So settle back and the process will be detailed here – remember, you did ask.

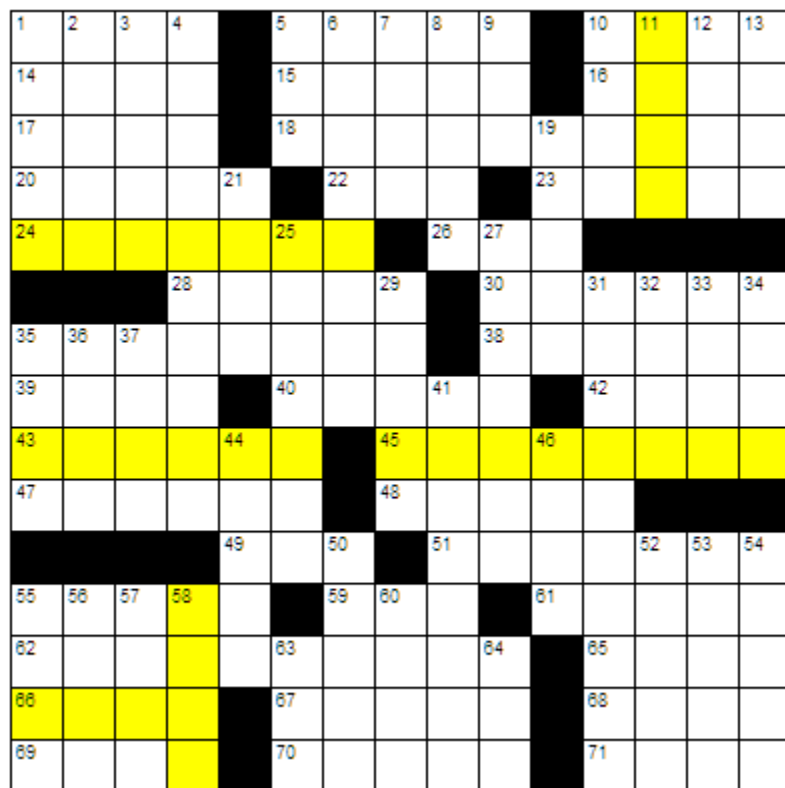
As we mentioned, we are going to skip the part where the animal was asked to give up its hide. But while that was happening other work needed to be done. Since your ancestors were doing bark tanning they needed bark. So while the animal was giving up its hide, so too were oak trees giving up their bark. The tree could be felled and then the bark removed or they could just take the bark from the live tree (which of course killed the tree) in a process known as girdling. This was done in the spring time as fresh bark was considered the best (it contained more tannins). Even this step required some forethought as you had to know what shade of leather you wanted in the end. White oak gave leather a yellowish shade, white chestnut oak gave leather a dark brown shade and hemlock (besides killing Socrates) gave leather a reddish brown color.

This of course gives rise to yet another question – how do you strip large quantities of bark from a live tree? A “Bark Spud” was the tool of choice. You know where I’m going with this – of course the Heritage Museum has a bark spud for your consideration.



# FEBRUARY THEME CROSSWORD

Yellow blocks contain the theme words all of which come from the text of the newsletter. The solution will appear in next month's newsletter.



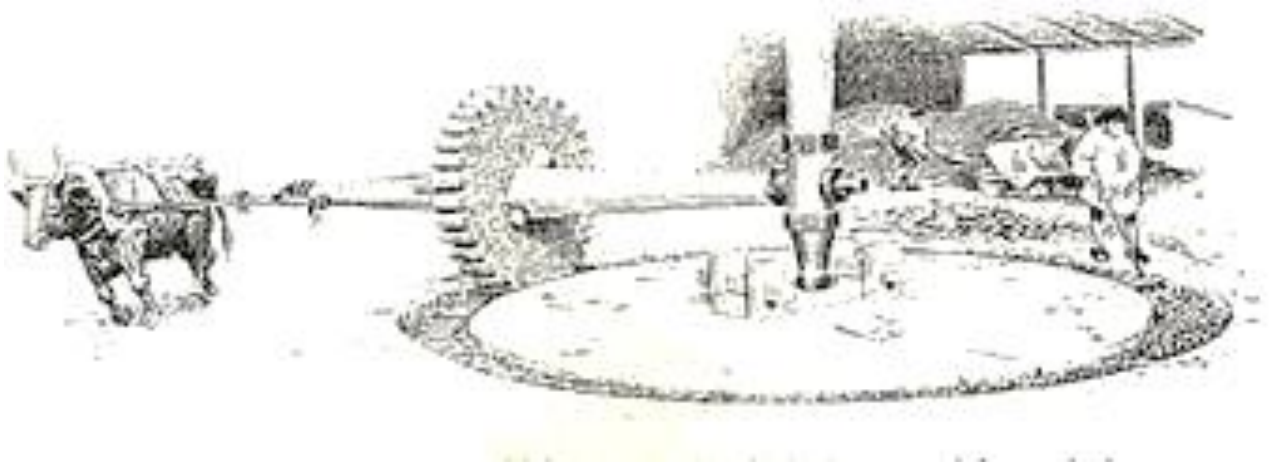
## Down

1. Brown ermine
2. Caterpillar, for one
3. Record holder?
4. Withdraw an investment
5. "Much \_\_\_ About Nothing"
6. Pan for making small cakes of minced food
7. Advil target
8. Bargain-basement
9. Ring bearer, maybe
10. Deerlike water buffalo
11. TANNING NEED
12. Bermuda, e.g.
13. Boys
19. Duration
21. Big game
25. Compunction
27. Piercing cry
29. Express contempt
31. Not less than
32. Women's garment
33. Scrape, as the knee
34. Burglar
35. Adroit
36. \_\_\_ podrida
37. Cloud
41. Fast sailing ships
44. Continental money
46. FedEx, say
50. "From the Earth to the Moon" writer
52. Andrea Bocelli, for one
53. Circumvent
54. Pass on
55. \_\_\_ line (major axis of an elliptical orbit)
56. Arctic native
57. "How \_\_\_!"
58. ITEM TO BE TANNED
60. Son of Ramses I
63. "Crikey!"
64. After expenses

## Across

1. Coaster
5. Rapidly
10. Not much
14. Checker, perhaps
15. Russian country house
16. Astronaut's insignia
17. Tolkien creatures
18. Afterlife
20. Bypass
22. Oolong, for one
23. Commercial food fish
24. PUZZLE THEME SITE
26. Telekinesis, e.g.
28. Vice presidents
30. Elegant
35. Fearless black dog
38. Second shot
39. Building additions
40. Chilled
42. H.S. math class
43. IRON FOR RUFFLES
45. A TYPE OF KNIFE
47. Bone cluster in foot
48. Short for microfiche
49. Gun, as an engine
51. A love potion
55. Even if, briefly
59. Sixth sense, for short
61. Annoyance
62. Toxic copper and arsenic salt
65. Obsessed
66. BARK REMOVAL TOOL
67. Cavern, in poetry
68. Fizzy drink
69. Blunted blade
70. Thomas Jefferson, religiously
71. Deuce topper

Now you have a pile of nice fresh spring bark. However, this bark will do you no good for tanning unless it is first ground. Now this can be a tedious task so let's get the horse or oxen and have them do the work. Spread the bark in a big circular trench around a central pole with a grind stone at the end of a radial arm. Hook up the horse or ox and let them walk around in a circle all day turning the grinding wheel. You have only to keep removing the ground bark and adding more unground bark.



So now fill a wooden barrel or tub with boiling water and bark and stir ①. Let this mixture sit for a few weeks (15-20 days) while the tannins leach out of the bark into the water. You'll probably have to repeat this step several times to get enough to tan your hide(s). Now pour this bark solution through a sack to separate out the bark chips – the drained solution is your concentrated bark liquor ②. Set this bark liquor aside.



Back to the business of tanning. The farmer has finished persuading his animal into giving up its hide and has completed an initial cleaning of the hide. Once cleaned it was often salted until the actual tanning process could begin. Having been salted the first step for the tanner was to shake off any excess salts. The hide was then hung over a stick and placed in a barrel or vat of water so that it was completely submerged and allowed to soak for 2-3 hours.

CONTINUED ON PAGE 5





The hide was then removed from the water and placed over a fleshing log and both sides rinsed off. The hide was then placed flesh side up on the fleshing log and any remaining flesh/blood/fat was removed.



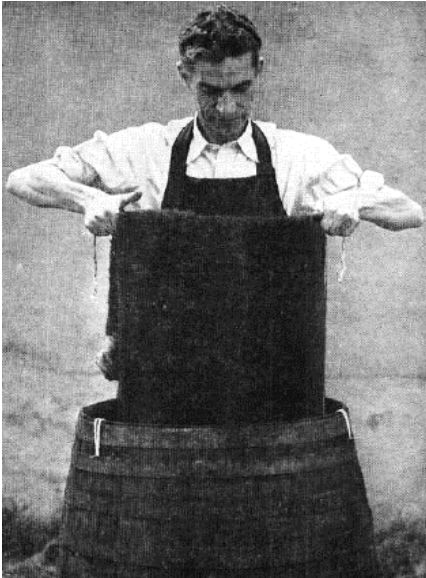
The tool of choice for this task was the fleshing knife. No doubt you have already surmised that the Heritage Museum has one of these knives for your viewing pleasure.



The fleshing knife has a dull blade to lessen the chance of cutting the hide. The hide is laid over the fleshing log or table and using the dull edge of the knife you work it over the hide pushing the knife down and away from your body. Again wash the hide and let it soak for about a day to soften.



CONTINUED ON PAGE 6



Next fill a barrel or vat with a mixture of lime and water. Take your defleshed hide and hang it over a stick hair side out. Place it in the barrel or vat of limewater so that it is completely submerged and allow to soak for 6 to 10 days (16 days in winter) stirring the limewater 4 times a day. Keep doing this until the hair can be rubbed off readily with your hand and then let it soak for another 3-5 days.

Then it is back to the fleshing log to dehair the hide. Place the hide on the fleshing log with the hair side up. Again, using the dull edge of the fleshing knife work it over the hide pushing the knife down and away from your body pushing the hair off all parts.



Once the defleshing and dehairing is completed, take the barrel or vat and clean it again. This time refilling with cold water and a few ounces of lactic acid or vinegar. Hang the hides back in the barrel and let them soak for a day stirring them frequently.

You may have noted that by now you have filled, emptied, cleaned and refilled your barrel or vat several times. The need for all this water usually meant that tanneries were located near a stream. Now of course the constant emptying and refilling of these barrels or vats meant a lot of waste water was dumped and being located near streams guess where a certain amount of this waste ended up? To be sure it was only water along with natural animal and vegetable waste but it was still waste and tanneries were often located downstream of your town. Hopefully the town located upstream from you did not have any tanneries.

So now that you have already spent a couple of months preparing your bark liquor and hide, you are ready to start the actual tanning process. But this newsletter is already entirely too long so we will save the actual tanning process part until next month's newsletter. In the interim, enjoy the crossword.