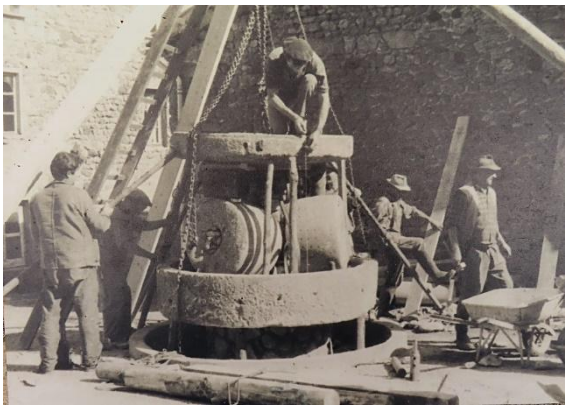
Mills in the Monts du Forez

Ruth Andrews
Photos by Keith and Ruth Andrews

We have just returned from 2½ weeks in the south of France. Our first gîte was in the little known district of Forez, with a wonderful panoramic view across the upper Loire valley: "on a clear day you can see Mont Blanc", although we never did due to the heat haze.



In the village of Sauvain, a few miles from the gîte, we were interested to see this **Fontaine des 5 Meules**. It is made up of 5 large millstones, 2 for milling, and 3 for crushing, which was built by the villagers in 1968. The meules (millstones) came from abandoned former mills in the locality. The same village also had an unusual iron waterwheel on display outside the museum (closed even though it was Sunday!). Just outside the village was this cross mounted on 2 millstones.

Moulin des Massons is very heavily advertised locally so we went there expecting something that was very commercialised. We dutifully joined a conducted tour – in French, of course: overlong at 2 hours as is the French way, but thankfully there was an leaflet in English as well. Anyway, we were rewarded with a really interesting visit.

The mill itself is one of a cluster of buildings which also include a farmhouse and sawmill. Various objects scattered about the grass outside included a clover mill, several disassembled turbines, and a Pelton wheel.

This mill is the last of almost 70 that were on the Vizezy river, and the site dates from about the 12th century, although the present mill building has been rebuilt several times due to flood damage. It has been used for flour milling, clover crushing, hemp processing, generating electricity, and as a sawmill, but now it demonstrates oil production.

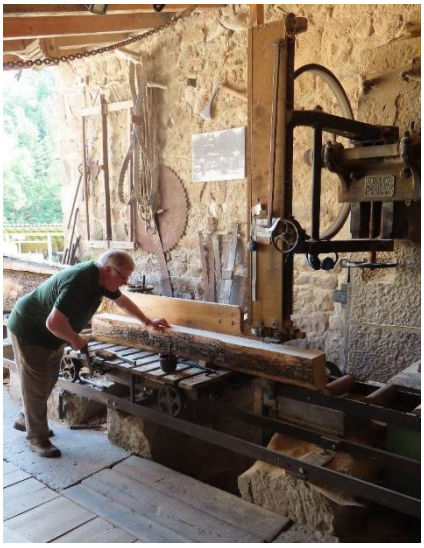
Colza (canola) is a natural hybrid of cabbage and turnip which was grown in Central Europe in the 17th century, but it had a 'bad reputation' because it caused heart damage! In the 1970s new varieties appeared which were safer, and the oil extracted from its seeds was a good source of omega 3 and 6. It is used as seasoning (not frying) and to make margarines and as a lubricant. I have to say that I really don't like its taste.

We were treated to a demonstration of its production, which was unfortunately not a slick performance.

First the seeds are crushed between a small pair of metal rollers, which jammed at first because the 'miller' put too much in. Then they are transferred to a large stone crushing mill with sweeps (*above right*). When ready, they are carried across to a large frying pan over a pinewood fire (*left*). The crushed seeds have to be continually stirred by hand and by sweeps to prevent them burning.

Once judged to be cooked they are scooped out into a cloth-lined oil press packed tightly and squeezed to release the oil into a bucket. (At first, the miller put the cloth lining in wrongly.) Power for the oil press came from a hydraulic piston some way away behind the viewing gallery where it sprayed lubricant onto the spectators. The rest of the processes were belt-driven from a horizontal wheel (a turbine?) below floor level, viewable in a mirror.

The oil is purified (elutriated: look it up!) before bottling. Keith staged a tactical retreat at this point but I dutifully sampled teaspoonfuls of noix (walnut), noisette (hazelnut), and colza (canola) oil, all of which are made on site. I then left rapidly to gulp tap water and suck a Werthers to get rid of the taste! Needless to say, we didn't buy any.



The same 'miller' also gave us a demonstration of the sawmill which operates alongside the oil mill. The band saw in use was completely unguarded and sprayed sawdust over the audience, while the miller didn't use goggles, or gloves, or any other protection.

We visited **Le Moulin de Vignal** at Apinac several days later. We knew it was not a day when it was open, but we struck lucky because a large party of primary school children were lining up to go inside. A second set were picnicking in the grounds and I think a third set were expected later. The second set had made their own bread hedgehogs and were all very enthusiastic. The other set were sitting attentively through a long explanation of the mill's workings and products: flour until 1940, canola until 1960, and then animal feed and clover seed. We were given a guide sheet in English and invited to look around on our own.

The mill was named after the family who have lived in the area since 1650. The main buildings were constructed in 1773 and 1860. When the last miller died in 1991 a group of villagers decided to rent the mill from the family in order to repair the buildings and mechanism, and then open it to visitors.

The mill has always relied on water power, with two working horizontal wheels inside (one wood, one metal) and a vertical overshot wheel on an outside wall. There are 4 sluice gates in the mill head which control the water supply from a dam some way upstream.

The overshot vertical wheel drives a pair of stones used for milling flour. The metal horizontal wheel (*left*) powers the meal mill for animal feed, while the oil mill uses belts and pulleys to connect it to the wooden horizontal wheel (*right*).

The oil milling machinery is virtually identical to that which we had seen being demonstrated at Moulin des Massons. The crushing mill (*left*) is driven by line-shafting and belts, which also drive the hydraulic pump which operates the press (*right*).

A separate open-fronted stone building further down the slope contains a circular trough and crushing stone for breaking clover pods. The seeds are used as animal feed but also planted: clover is a legume which has root nodules containing nitrogen-fixing bacteria, which add nitrates to the soil and are therefore natural fertilisers. The crushing process generates a lot of dust which is why the mill is situated in an open building.

See also *https://moulindesmassons.com/* and *https://www.moulindevignal.fr/*