

Milling in Albury by Mick Ede

Albury History Society - Tuesday 19th November 2013

Presented to Chilworth History Society on 27th February 2007, with this summary

Botting's Mill by Mick Ede- 27 February 2007

The presentation started with a video, filmed at Albury Mill in December 1989, which was presented by John Botting.

The Botting family came up from Sussex in 1870 to take over the Flour Mill in the village of Albury, as the previous owner a Mr Cook had died.

As the business began to increase a larger mill was required. So in 1909 they began to build a new mill, about one mile further down the Tillingbourne. By 1911, they had moved from Albury village to the new mill in Chilworth, (at what is now Mill Reach) where the flour capacity was doubled.

The business still continued increasing and in 1926 a large flour warehouse was added. In 1939 a new animal feed mill was built and a further extension to the animal feed mill was added in 1962.

The Four Milling Process

This starts with the wheat going into the large silos. The silos had 13 bins, the largest of which would hold as much as 30 tonnes of wheat. When the silos were completed full they could hold up to 200 tonnes. The wheat would then have to leave the silos to be cleaned ready for milling. First it would go over a filter, then the scourer, then through indented cylinders. These processes would remove unwanted materials from the wheat, such as stones, straw, sand, broken grain, oats or barley which may have accidentally got in with the wheat. Then the grain or grist would then go through the damping plant and would pass into conditioning bins where it would remain for at least 12 hours, during this time the dampened wheat would begin to swell, ready for milling.

The wheat would then be released into the Mill and pass through a brush machine which would give the wheat a final dusting and polish prior to going through the first break set of rollers. At this point the wheat is now broken open for the first time, where it would return to the top of the mill by elevator and pass through a plan sifting machine and then this process would be repeated over the second, third and fourth break rollers. During this time the grist would go through the plan sifter where the bran and the fine wheat feed would be removed. The flour at this stage would be in a form of semolina, where it would pass through a purifying machine, which was under negative pressure to prevent the dust from escaping into the

Another one of the employees a Mr Bill Hammond, also lost part of his hand when cleaning the bottom of an Elevator.

The Mill Wright

The Mill never had a full time millwright. When one was required, Ernest May came down from Redhill by train. On one occasion he wanted to use the earth toilet round the back of the Mill, but it was quite full. He then asked Mr Gordon Dann, the mechanic at the Mill about emptying it. It was 'suggested' to the Mill Wright that he used the spade, which was hanging up at the side of the toilet and bury the contents in the field to which he replied 'There is no way, I am coming to Albury Mill to empty the toilet'. Instead of emptying the toilet he built himself an extension seat and hid it at the Mill and used it each time he came.

On another occasion a lorry driver, Cyril Avery was asked to go and get some malt cones out of the old stables around the back of the Mill, which was very close to the earth toilet, which stood on a concrete plinth about 9" high, because in winter, it was very wet and muddy in this area. The toilet was a wooden construction with an outside lining of galvanised tins, which was placed on this plinth. After the driver had loaded the malt cones, he then went to drive the lorry away, but caught the edge of one of the galvanised tins with the tailboard, which was down, pulling the toilet off the plinth onto its side in the mud. A short time afterwards one of the sack cleaners, Mr Sherlock who was stone deaf came crawling out. 'I wouldn't like to tell you what he called the driver.'

Mr Gordon Dann, the mechanic told me that just after the War, Botting were offered several tonnes of date stones for animal food production. There was so much oil in the stones that they clogged up the grinding machine. So they started to put them into the mixed corn. Every tonne of mixed corn they made they added approximately ½ cwt of date stones. The mixed corn was then sold to be fed to chickens. It was not long before they began to get complaints about the stones. Mr Charles Botting's reply was that there was nothing wrong with the date stones, but it was the chickens that were fussy.

Eventually they used up the date stones, by putting them through a maize kibbling machine, which was a very slow process, but broke the stones up into very small pieces where they were able to lose them in the animal food production.

Mill. The grist would then go through the first reduction rolls where again it would return to the top of the mill by elevator. Once there it would then go through a second purifier and once again return to the top of the mill where it would pass over to several more reduction rolls where it was finally ground into flour. Lastly it would pass through airtight agitators where gas could be added, for bleaching or other chemicals if required such as ascorbic acid. One of the gases, which was used up until the 1950's was Nitrogen Trichloride used to whiten and purify the flour. However it was found that this chemical administered in large doses caused hysteria in dogs and had to be withdrawn. Also chlorine-dioxide was used until the late 1970's when it was considered not to be a healthy additive. Before the Mill closed the only additive was Ascorbic Acid.

At the end of the Milling process the flour was put into paper sacks and weighed off at 32½kg. For each 100kgs of wheat that went through the plant, approximately 70kgs of flour (white) could be produced. The bags of flour were then sewn up with a label attached to say what was in them and then stacked in the flour warehouse. If the ground floor part of the warehouse was full, the bags of flour would then be hoisted up to the next floor. The chain hoist which elevated the flour up to the next floor was belt driven and operated by a single rope, which originated from the gunpowder factory. A complete pull on the rope would take the flour up and a slight pull would let it down.

There were mainly three types of flour produced at the mill; - white flour, brown flour and wholemeal. The wholemeal had nothing put in and nothing taken out. This would make a very dark coarse loaf.

Anecdotes

There were a small number of accidents at the Mill. Fortunately none of them were fatal. At the very top of the Mill there was a narrow walkway. The roller man at the time, a Mr Dick Edwards went along the walkway to clear the top of one of the elevators, which had been blocked. He slipped off the walkway onto a fast shaking plan sifter. It rotated so fast that there was no way he could get off. Luckily he was spotted and the machinery was stopped. Although he was very badly shaken up, he refused to go to hospital and he returned to work the next day.

The foreman at the Mill, Mr William Kindred also lost part of his hand in the mill rollers, but still managed to run the Flour Mill some months after his accident.

After that they never bought anymore date stones.

Mick Ede

Mick first started work at the Mill in 1953, just before the Mill had been renovated and slightly altered under the jurisdiction of the Ministry, after rationing.

The main alterations were the old low speed exhaust system was replaced with a new high speed exhaust system, which would keep the machines under negative pressure and also help with the cooling. Also the plan sifter was added which replaced several of the centrifugals. Apart from that virtually all the milling machinery dated back to the late 1800's.

The Types of Wheat

In the early 1950's when rationing finished the majority of wheat for milling was Canadian, Manitoba Ones or Twos. The Canadian wheat was far superior to any wheat produced in the UK. The grist would be made up of between 65% and 75% Canadian and the other percentage would be English, French or Russian.

As time went by the English wheat began to improve and by the 1980's the Canadian wheat was reduced to 25% plus 75% English and this flour would make a loaf top quality.

How the Mill was powered

In 1911, when the Mill first began production, the mill was powered by a gas engine and water turbine. By 1938 the gas engine had worn out and an 80 h.p. verity electric motor was installed, with an Ellison starter, with assistance from the original water turbine. About 5 years before production ceased at the Mill, the water turbine finally gave up. The Mill finally closed on 5 January 1990. If it was to continue after this date, it would require a substantial overhaul. Most of the machinery was well past its sell by date and would have required a lot of attention.