

UMUHIKA FLOUR MILL.

Mr T.Thorne Seccombe's account<sup>+</sup> of this Mill which was destroyed during the Maori Wars of the 1860's aroused considerable interest amongst the Council members of the Society and as a result a visit was paid to the site, in company with Mr Seccombe, on Feb.22.\*

This was followed up by excavation parties on March 30 and April 4 when all retrievable parts were salvaged and taken into the Society's custody. These comprised portions of the wheel itself, namely, the hub and some of the timbers which must have remained in the water of the "wheel-pit" for upwards of ninety years; various iron bolts, nails, cogs etc., a knapping-hammer used for flint dressing, and portions of the grinding stone - or stones.

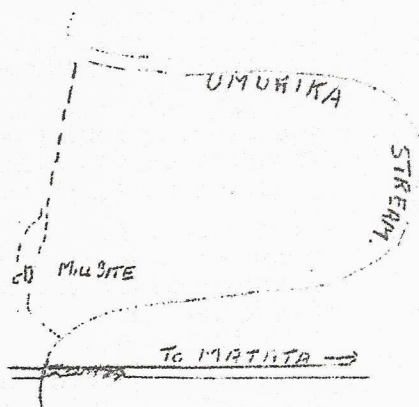
It was interesting to find that parts of the timber showed signs of fire thus confirming Mr Seccombe's statement that the mill had been burned. Tongue-and-grooved boards found would also tend to confirm that an attempt had been made at some stage to establish a flax-mill at the site, as Mr Seccombe further states.

The Society is indebted to various gentlemen for assistance and advice in retrieving the relics. Special thanks are due to Messrs John Perry, Peter Reid, J.Swapp, Vic Davies and to Mr Ivan Withy for services rendered or for equipment provided; also to Mr R.N.McKay for permission to carry out the excavations on his land.

The question of preserving and storing the various items is now a matter for the consideration of the Council.



Hub of water-wheel, 1935.



Location of mill-site.

*detached 1970*

OTHER FLOUR MILLS OF THE MAORI WAR PERIOD.

The other flour mills which existed in the Rangitaiki district at the time of the Maori Wars of the 1860's were located (a) at Otipa, a few miles up the Rangitaiki River from Te Teko, serving the Te Pahi-poto tribe and (b) at Te Poronu, on the Whakatane-Taneatua Highway, serving the Ngatipukeko tribe. *Basil Wallace*

Both were erected by Jean Guerrin who was to meet his end at Te Poronu in 1869.

It is assumed that when Guerrin left Otipa that mill was taken over by a man named Aubrey. Aubrey very nearly lost his life at the hands of Kereopa, the murderer of Rev.Volkner, as Kereopa is stated to have asked the Te Teko people to give him up but they refused to do so.

Kereopa then proceeded to Whakatane where he demanded the person of Father Grange, Roman Catholic priest, but once again his request was declined. This was in January or February, 1865.

The exact site of the Otipa mill is not known but it must have been somewhere in the vicinity of Waimangeo (Bitter Waters) Creek as there appears to have been a fairly large native community living on the opposite - eastern - bank of the Rangitaiki River in December, 1866

\* See "Historical Review", Vol. VI, No.3, pp 95-96



When the brothers Major Wm. and Capt. Gilbert Mair, visited the spot to witness the surrender of some rebel groups. Manuera Te Pohokotia was the chief and Guerrin married his daughter, Irihapeti. 20

- H.D. London.

TARAWERA SULPHUR MINE. *(suspect!)*

An industry that once flourished, then ceased because of war and finally had all trace of its existence obliterated by an "act of God" - that is the story behind that once volcanically-active spot at the sou-western corner of the Rangitaiki Plains known from time immemorial as Onepu.

Here it was that sulphur was mined in the latter 1850's and early 1860's, the product being taken down the Tarawera River by steam launch to Matata, whence it was shipped to Auckland by sailing boat, the ketch "Kate".

Quite a flourishing industry developed and its activity was augmented by the starting of the flour mill at Umuhika, some five miles or so down the Tarawera River. Previous to that time food rationing had occasionally to be resorted to because even though wild pigs and feathered game abounded in the vicinity, the exigencies of the weather often delayed the arrival of provisions at Matata.

The man-power for these operations was drawn from the local Maori settlements, and during the time they were current the workmen excavated quite a commodious swimming bath, using the natural hot water that was so readily available.

When the Maori War spread to that area, however, many of those employed at the mine who had sympathies with the rebels left in a hurry. As a result, when Capt. Gilbert Mair arrived there with his band of Arawas, after his forced march down the Tarawera River from Lake Tarawera, all but the loyal few had left. Capt. Mair stayed at Onepu that night, and he and his warriors bathed their tired limbs in the commodious swimming bath.

At that time the Captain's brother, Major Wm. Mair, was pursuing the fleeing rebels after defeating them at Omara-potiki, on the Tarawera below Umuhika, at the sand-hills between these and the junction of the Tarawera and Rangitaiki Rivers.

Capt. Mair was therefore pressing on to join forces with his brother in order to compel the rebels to capitulate. After being pursued across the Swamp they eventually made a stand at Te Teko, the two Mairs joined forces and in the ensuing fights the rebels were utterly routed.

The few loyal natives who had remained at the mine had joined Capt. Mair's band, thus leaving the mine totally devoid of man-power, so it was abandoned.

What buildings remained were dismantled and removed, and at the time of my acquaintance with the place, from 1900 till the area was overwhelmed by the bursting of Lake Tarawera on 31 October, 1904, the only evidences of the industry were the sulphur-pit and the above-mentioned bath.

Both were in a dilapidated state, and though the latter was still usable, and it was our practice to ride up there on a Sunday and have a bathe, tying our horses under the big manuka trees that grew beside the bath, while we had our swim.

These manuka trees were so big that we could ride right under their branches. But after the lake burst the vast quantities of pumice that the flood brought down completely obliterated the sulphur-pit and the bath, and so built up the terrain hereabouts that it was impossible to ride the horses under the big trees, as their branches were so near the ground level.

I am not positive at this distance, but if I remember right the mine was worked by a Cornishman named John Tregurdon (Hoani Tiri-katene, to the Maoris), and associate and partner with Mr Close who erected the flour mill at Umuhika. Both concerns being in operation during the same period and both suffering the same fate through the Maori War.

- T. Thorne Secombe.

+ Vide "A.A. Bulletin", October 1957. Republished in Trans. of Whaka. & Dist. Hist. Soc., Vol. V (1957), pp 61-62  
\* Possibly the same vessel that was captured by the Hauhau at Whakarewa on 21 July, 1865 when full of sulphur.



SOME NOTES ON THE INVESTIGATION OF THE FLOUR-MILL  
AT UMUHIKA.

The former flourmill situated on the western side of the Braemar Road - also known as Onepu Road - derived its power from a tributary of the Tarawera River flowing from the vicinity of Manawahe.

Water appears to have been diverted, probably by means of a sluice gate, at a bend in the course of the stream approximately 90 yards above the millsite into a well defined channel, now dry. Half of this channel at the entry end is not more than five yards wide, but the lower half is on an average 15 yards across, leading to the conclusion that this wider section formed the millpond, possibly with an earth or timber retaining barrage to provide a constant head of water on the same lines as the lake and dam at a hydro-electric station.

Since no tunnel existed to carry the water supply to the water wheel it is assumed that a wooden chute probably led the water to the lip of the wheel pit at the western end. The walling here is of a higher quality than the other retaining walls of the pit, and consisted of carefully squared sets of up to 3'6" x 2' the length being 8 feet and the depth 6'6". It is assumed that the perimeter of the wheel rotated close to this face, and as the paddles were driven downwards by the force of the feed, water would naturally spill out between the wheel and the wall. Lying on the floor of the pit along the base of the wall was a piece of timber 12 inches square in section and fitting the length of the wall. Its purpose is not known, but may have been to divert the spilled water back against the paddles lower down rather than to allow it to pond in a confused mass immediately in front of the wheel, which might have so been impeded to some extent.

The pit was stone-floored, and walled for at least 20 feet along the north and south sides, the eastern end being left open to form the tail-race to the stream. This egress has been closed by a large willow tree now growing there, and to drain the water for this investigation it was necessary to cut a trench through the south wall and leading to the stream. The south side of the pit had a second wall spaced one foot from the first, but this did not appear to have been repeated on the north side. The masonry was quite rough in these cases, and the stone had probably been brought from a point farther south along the road, where land at the foot of the hills is still littered with similar boulders.

The mill building stood on the south side of the wheel-pit, on top of the double walling, which may have had some connection with foundations for the machinery. Nothing of the original structure remained above ground, a layer of about a foot of soil covering what had been blue clay, probably laid as a floor. This had a black covering in places where it was excavated suggesting a fire at some time. A plumb line was found here, but an intensive search aided by the use of a mine detector failed to locate the main drive shaft which would also have been the axle of the wheel. No doubt as it would have been a useful piece of metal it had been removed at some stage for other purposes. Fragments of varying sizes from the grindstones were collected, the two stones appearing to be of different origin.

A number of wrought iron nails, square in section, were collected here, also the head of what appears to have been a knapping hammer used for stone dressing, a spanner, and a small piece of pottery. One feature which was difficult to explain was the use of a piece of 12-inch square timber some 20 feet long which took the place of a base course of the south wall. This was an integral part of the wall, not standing in front of it as in the case of the earlier timber at the base of the west wall.



The original purpose of the investigation was to collect portions of the water-wheel which were known to exist. The hub was lying on the ground north of the wheel pit, and was in fairly good condition except that it lacked the iron rings shown in the photograph taken in 1935. (See page ). As the water level in the pit was reduced a confused mass of circular sawn timber was recovered. Two sections of the wheel consisting of paddles and side plates were in good condition, resembling a staircase in appearance. Another notable find was a length of cast iron internal toothed cog-driving track which was bolted to the side plates of the wheel on the mill side and had evidently transmitted power to a cog or gear wheel, from which it would seem that the wheel operated a second drive shaft which would have turned at a higher speed than the axle. Its use in a flour mill is not obvious, but as it is said that the plant was afterwards used for flax dressing it may have been employed for this purpose. The track was obviously brought to the site in the form of casting about 3 feet long and bolted to each other and the wheel. Two complete castings and a broken piece were found bolted to side plates, and a further broken section was recovered from the mill site. Two metal flanges about 9 inches in diameter were also picked up.

The mill was apparently much on the same lines as one which I knew as a boy in England. This was on the bank of the River Wandle, a tributary of the Thames, and secured its head of water by means of a weir built across the stream, which in wet weather permitted the water to spill over the top. According to local report this mill had been used to bore cannon barrels in the Napoleonic wars. Water mills went out of use in England soon after that period with the adoption of steam-power, which had a number of important advantages such as greater power, freedom of site choice in locating a factory, performance unaffected by dry weather, and so on. Water power had to await the development of electricity to come back into its own with the hydro-electric plants of today.

- W.T.Parham, Whekatane.



SALVAGE OPERATIONS AT THE MILL SITE. Photo, W.T.Parham.

The Secretary expresses an opinion concerning an article retrieved.



ADDITIONAL INFORMATION CONCERNING UMUHIKA MILL.

I have contacted Mr T. S. Gee, of Milford, Auckland, who claims to have repaired the old mill soon after the Tarawera Eruption of 1886. The old man is nearly 90 years old but his mind is wonderfully clear.

He avers that the water-wheel hub was about 9 feet long and that the sets of spokes were about 6 feet apart and morticed into the hub. The paddles were about 4 feet x 2½ feet. He estimates that the wheel was about 15 feet in diameter.

Mr Gee remembers the construction of the wheel even better than I do and his description tallies with what the Society members found, in particular the internal-toothed driving track bolted to the side frames of the wheel which transmitted the power. He had the job of assembling it.

From what he told me I gained the impression that the mill was damaged by the eruption, the fall of ash had collapsed the roof or part of it and had got into the machinery, bearings, gears etc., and had also hindered the flow of the stream - probably by silting up the pond.

This is quite conceivable as the deposit in the area has been variously estimated as from 10 inches to 14 inches and I have often heard Mr McGarvey say that at Te Teko the deposit was a level 12 inches, though my own estimate where I have measured it, and where it had been consolidated and undisturbed, was 10½ inches.

But that is beside the point. Mr Gee was there to put the mill in working order again as the season's wheat was harvested and stored ready to be milled, and with the work completed he returned to Tauranga. He says he was there for about three months.

Though he never made mention of having a companion on the job, it occurs to me that he did as he would be just a youth in his 'teens in 1886 and hardly old enough to undertake a responsible job like that.

In answer to my direct question he told me that there were "about 500 people in the village there". He also remembers going out shooting ducks of a Sunday, but didn't remember meeting any pakehas while he was at Umuhika.

I knew a fine upstanding Maori named Rota, who lived at Umuhika about 1910 and have a hazy idea that he told me the mill was finally burned down about the middle of the 1890's - about 1894 - as at the time my rejoinder was, "Oh, I was only six then!"

Re the remark that it was used to drive a flax-mill, Mr Hallett proposed to use it for this purpose and assembled quite a lot of gear there but it was never put into operation.

I don't give any credence to the story about the water-wheel being turnable, or in one piece, in the 1920's. My first recollection of it was in the early 1900's and it was then overgrown with ti-tree, fern and tu-tu, up through the spokes and all over it. When Mr Hallett proposed to use it for his flax-mill he cleared the rubbish away and the wheel virtually fell to pieces. Thereafter, it stood with many of its paddles gone (that was about 1905) and the rubbish growing up through it again. I don't know when it eventually collapsed but I know it was gone in 1915, as I drove my wife-then a bride-down to see it and it was gone.

There seems to be an idea current that the rebels in the Maori War destroyed it - see last "Review", p.19 - but I have no cognisance of that. It would be a pity if that idea gained currency when, as far as I know, there is nothing to support it or even to indicate that such was the case. Quite the contrary.

Mr Gee did mention that the mill roof, as well as that of the grain store, was of split shingles and some had to be procured for the repair work as many of the original ones were broken when the collapse occurred. I think that covers all the details Mr Gee imparted to me, but as I hope to see him again I shall submit a further report after my next interview.



Transcript from Mr Seccombe's further Report of 1 August:-

Mr Gee was interviewed at Cheltenham Beach, Auckland, on 29 July, 1959. His daughter, Miss Gee, was present. Mr Gee had just suffered a slight stroke but had come through it alright and, excepting for a slight "thickness" in his speech, his memory was unimpaired. Passages from the "REVIEW" dealing with the mill were read over to him and he was able to clarify several points in the story.

Mr Gee, who lived at Tauranga between 1886 and 1894, was emphatic that the mill was <sup>not</sup> destroyed during the Hau Hau rising, and said it was probably the only one which was not. (It appears that the burning of Mr Close's home at Te Omeheu has been confused with the building at Umuhika, H.D.L.,)

After Mr Close left the district no further wheat was grown at Te Omeheu which the Maoris considered makutu (bewitched). The quantity grown at Umuhika was insufficient to keep the mill in continuous operation. This fact, combined with the large supply of flax in the swamp, interested Mr Harry Knowles, a Crimean War veteran and manager of the Chaytor Bros' flaxmills at Maketu. The Chaytors were thought to be sons of Colonel Chaytor of Maori War fame.

(One of that name had a farm up the valley at Otamarakau, the lines of poplar trees that grew from poplar fence posts are still to be seen from the road there. Mr Brian Chaytor, Matata, who drove Mr Thomas Hallett's dredge for some years, is a son. T.T.S.)

The Tarawera Eruption in June, 1886 caused the roof of the mill to collapse under the fall of ash. The previous harvest was waiting to be ground, so Arthur Matheson assisted by his two apprentices, Mr Gee and Mr Tiki White, carried out the repairs.

The new season's wheat was sown in the ash covering the soil, and although the seed germinated it died because the ash was sterile. As there was no early prospect of more wheat for the mill, Knowles leased it on the understanding that it would be modified to allow it to be used either for flour-milling or flax-dressing. He had a Maori wife, and became manager of the mill whilst another Crimean veteran, James Smith, was engineer, and a Mr Shepherd the storeman.

Mr Gee and his companions were recalled to add a lean-to and do other necessary work, which took them five months. The materials and stores were brought by sailing ship to Matata and, there being no road to Umuhika, they were taken in a punt up-river by Joseph Warbrick and a Maori crew. Night fell en route, when Mr Gee was left alone in the punt. No tarpaulin was provided, and as it rained during the night he tried to keep the sugar dry by stacking bags of flour over it, the value of the stores being about £300.

The new building housed the men, and provided a store. Two flax strippers, one scutcher and a flax press were installed. The flourmilling plant was left in situ, with the drive disconnected so that it could be used again when needed. The internal-toothed cog driving track was bolted to the waterwheel, and drove the flax strippers and scutcher, though there was insufficient power to drive all at once.

Other equipment included two wash tubs, 4 feet wide, 2 feet deep and 8 feet long, each fitted with two rows of rinsing staples for washing the flax after stripping; also a leaning rail for draining the green flax. This was a sapling cut in the adjacent swamp and brought to the mill by canoe. The conversion job was done in 1887.

During Mr Gee's stay of five months, quarrelling arose amongst the Maoris because not all could be employed on flax dressing. Knowles solved this by sending rival factions to opposite sides of the creek and drawing labour from each side alternately.



He says the stream was known then as the WAIKAME, and thinks that the flume that carried the water to the mill was lined with stone to prevent as far as possible the loose volcanic ash from fouling the waterway and interfering with the power plant.

No money was paid to the workers, wages being in the form of groceries, clothing and tobacco.

The dressed flax was sent by punt to Matata for shipment.

A Mr Wrigley leased the mill after Knowles, and it was burnt down soon after Christmas, 1893. Mr Gee was not sure of the actual date as he was in Tauranga when he received advice of this. News did not travel fast in those days. He had returned and passed through Umuhiko at the Christmas, when the mill was then intact, and it was shortly after the New Year that he learned of the fire.

Mr Gee quoted a nicely phrased passage as he added: "The water-wheel would undoubtedly have gone too only for the fact that in the confusion of the fire nobody turned off the water to stop the machinery, so the wheel continued the even tenor of its ways and kept itself adequately wetted throughout the conflagration."

This prompted Mr Gee to recount an amusing incident involving himself when he and Tiki White were working on the water-wheel, fitting the internal cog drive track. White, just for fun, turned the water on and set the wheel in motion. Mr Gee had to cling on for dear life when the wheel began to turn, and White laughed at his predicament. However, he suffered no more harm than a wetting, and later on he "took it out" on his companion - just for fun!

(Seeing that the mill was converted to a flax-mill it is the more understandable as to how it got burned down. Flax tow and much of its residue is highly inflammable, and when once a fire is started more than ordinary means are necessary to put it out. In my time I never knew of a flax-mill being insured, the risk was looked upon as being too great, and presumably the same applied here. T.T.S.,)

Questioned regarding the tongued-and-grooved timber, and also the heavy baulks, Mr Gee could throw no light on their use, though he did say there was a shute built of tongued- and-grooved timber that brought the wheat from the grain-store to the mill, but it was never in use in his time. Also a lot of T & G timber was used in flooring in the alterations and additions.

Mr Seccombe concludes the report with the following comments:- There you have the result of my effort to track down the historic facts about the mill, and I feel it is a pretty full account, though there is still the gap from Mr Close's time up until the Tarawera Eruption that we have no record of. So can only PRESUME that it was still grinding wheat during that interval.

To which we may add, that the salvaged parts of the wheel are now safely stored in a shed on Mr & Mrs E.R. Hunt's property here in Whakatane pending the day when they will be placed on view in the town's Museum in five years' time - just one hundred years after they were first brought into use.

Would that they could but tell their own story!

Writing in the "N.Z. Official Bulletin" (August, 1959) Mr Gee stated:-

There were at least five hundred Maoris there at that time (1887) in two pas: one of these belonged to the Arawas, if I remember correctly, but I cannot remember about the other. I can remember vividly the haka being performed with a vigour and realism which could hardly be repeated now. The country was open, except for peach trees, planted I believe, by the missionaries.