



Ancient Iron
Official Newsletter of
Marlborough Vintage & Farm Machinery Society Inc.

Issue 10

September 2017



Daffodil Rally for Cancer

The Marlborough Vintage Car Club hosted a very well attended day at Brayshaw Park on Sunday 27th August. The park was full of vintage and classic cars on display to raise money for the local cancer society. Young and old enjoyed a day out among the cars with \$8700 being donated to this very worthwhile cause.

MVFMS was asked to add to the displays but with little room left for the usual tractor displays, most members enjoyed a relaxing day. Alison and Karen opened the kitchen which was a popular stop for a cuppa or a Devonshire tea. The pioneer cottage was also open with a steady stream of people through. A further \$362 was donated to the cancer society from our Club.



Left, the catering ladies and right, Karen McWha showing some of the fine china that was used to serve up the Devonshire Teas.



This fundraiser will be an annual event and if this year is anything to go by, this should be an excellent event to raise funds for the local society. Well done everyone.

Acquisitions



1924 Hart Parr This Hart Parr has been donated to MVFM by Gary Hebberd of Rarangi. It was originally bought by Tim and Frank Daken of Hakahaka Bay Port Underwood where they used it on their farm. After being left on the beach there for years Gary Hebberd retrieved it in the mid 1970's. Several members of MVFM are very keen to restore it because it is a very rare tractor.



Seresen Estate Ltd have donated their old roller which has been made from some old traction engine wheels. John Neal kindly towed it back to MVFM on a cold day near the end of May with the trusty old Fordson Major.



Gibson Carrot Cutter & Loader

These two machines have been donated to MVFM by the Marlborough District Council. Previously they belonged to the Marlborough Pest Destruction Board and were used to slice carrots, mix them with poison, before being loaded into aeroplanes and dropped on to large rabbit infested farms in the Marlborough area.

Siemens Brothers DC Generator



This DC Generator was Patented in 1910 by Siemens Brothers and was donated to MVFM by Don Todd of Nelson. Don is a retired electrician and with his wife Joan they ran an electrical and launch charter business from Havelock. This generator originates from Stephen's Island and Don thinks it may have been used as part of



the light house operation or to power the small settlement on the island. Don said "it does produce electricity when the armature is turned", so it would make for an interesting display if it was driven by a period engine powering some sort of appliance.

Joan has also passed on a large box of items for Shirley Shefford to sort through for the cottage.

Thanks to Don and Joan for donating these items and supporting MVFM.

Allis Chalmers Roto-Baler

The idea of the round baler was spawned around 1890 from an idea of rolling straw chaff into logs for fuel from the Luebben Family of Sutton, Nebraska. Hugh Luebben and his sons, Umno and Melchior, worked on a machine that made straw logs for prairie dwellers to burn as fuel in the winter. Melchior provided the financial aspect of the project, being a banker, and Umno was the creative force behind the baler. Melchior was caught up in a scandal at the bank that led to its closure around 1910, and he was sentenced to prison. Umno kept building and improving the round baler design. He applied for his patent in 1901 and was granted a patent to his "baling press" design on October 18, 1910. The original unit was a stationary machine mounted on a chassis. Material brought to the machine was fed in and rolled. Eventually the design was improved to be used on the go, and material was fed into the machine while in motion. Luebben continued to improve his rotary baler design until it resembled what would be the Allis-Chalmers Roto-Baler.



1930's Luebben Baler

In 1940 the Allis-Chalmers Tractor Division Manager Harry Merritt acquired the rights to Luebben's baler for the company to use. Engineers at Allis-Chalmers immediately began modifying and building a baler based off Luebben's model. The earliest patent granted to Allis Chalmers for their baler was in December 1945. From the illustrations in the patent application, it appears to be based on a chassis with a delivery system to the bale chamber. A patent granted to Allis Chalmers in 1946 illustrates and describes the bale forming chamber and tying mechanism. The company had to persuade sales people and farmers that round bales were a better alternative to square bales. They had to convince them that more leaves were left on the stems, the bales unrolled more easily when feeding cattle and could be left outside on the ground where they remained protected and still useful. The sales crew also had to argue that cattle liked rolled hay better because it didn't have sharp ends to jab their mouths. Within three years of production, more than 23,000 balers had been sold. Selling price in 1947 was \$935. The Roto-Baler could produce bale sizes from 14" to 22" in diameter, and, depending on the size, could weigh from 40 to 100 pounds. A double windrow was required to make an even, full-width round bale. One set back of the Roto-Baler had been that when the tying mechanism was engaged, the operator needed to stop forward travel but also keep the PTO running. The hay conveyor was also stopped as the tying mechanism was working. Once the bale was tied, the chamber would discharge the bale, then the conveyor would re-engage and the operator could continue forward motion until the next tying cycle.

Allis-Chalmers had a few options for the farmer that did not have a two-clutch tractor and wanted to have a Roto-Baler. One option was to buy an Allis-Chalmers tractor that did have a two-clutch mechanism. The other was to buy a power unit to mount on the Roto Baler. A third option, which was the Allis-Chalmers' solution, was to redesign and market a non-stopping Roto-Baler.

For whatever reason, Allis-Chalmers' called the non-stop baler the No. 10 Roto-Baler which was introduced in 1955. The redesigned baler featured a second conveyor that was a bypass conveyor. This second conveyor routed material back to the front and onto the pickup conveyor. This allowed for forward motion to continue while the bale was being tied. The material would continue to loop on the conveyors until the bale was tied and discharged.



Allis Chalmers No. 10 Roto-Baler

Another important improvement was the overdrive tying mechanism, which sped the tying cycle up (taking about 3 seconds). As amazing as this machine was, it never fully amounted to what Allis-Chalmers wanted. The No. 10 Roto-Baler was not efficient enough for baling up all materials in different conditions.

About 1,500 No.10 Roto-Balers were made, and most of them were eventually converted into standard balers. Although the non-stop Roto-Baler never worked out, some of the balers features improved the Roto-Balers functions. The overdrive tying mechanism was made an option for the Roto-Baler at an addition cost. The No. 10's wing-type rotary feeder was also standardized on Roto-Balers to allow for even, improved feeding into the bale chamber. The first run of Roto-Balers was from 1947 into 1964. The Persian Orange 1 paint scheme was used on balers built from 1947- 1959. Allis-Chalmers changed their paint scheme combination in 1960 to Persian Orange 2 and Cream. The Roto-Balers in the early 1960s and 1970s wore these colours (nicknamed the White-Tops for the white coloured roof over the baler). Allis-Chalmers reintroduced the Roto-Baler in the early 1970s and built 2,400 units from 1972 to 1974. Allis-Chalmers improved the operation and safety of the last run of Roto-Balers, adding more safety screens and improved mechanical operation. Allis-Chalmers built an estimated 78,700 Roto-Balers in its production time. Stories circulated that law suits from Roto-Baler accidents were a significant reason why Allis-Chalmers never built and marketed a big round baler.

This standard Roto Baler was donated to MVFM by Dave Wareing, a farmer from Rai Valley, after he contacted Ken Barr to ask if our club would be interested in it.



The serial number of this machine is 44198 and as you can see from the chart on the right it was one of 11,476 Roto-Balers produced in 1952. This machine was sold by WGG Cuddon Ltd, Blenheim.

ROTO-BALER SERIAL NUMBERS		
YEAR	SERIAL NUMBER - SERIAL NUMBER	TOTAL PRODUCTION
1947	101-3100	3,000
1948	3101-18048	9,948
1949	18049-23880	10,837
1950	23881-33700	9,820
1951	33701-42427	8,727
1952	42428-53903	11,476
1953	53904-61556	7,653
1954	61557-65161	3,605
1955	65162-68401	3,240
1956	68402-71401	3,000
1957	71402-72401	1,000
1958	72402-72701	300
1959	72702-73525	824
1960	73526-74501	1,076*
1961	---	0
1962	---	0
1963	74502-74901	400
1964	74902-75401	500 †
PRODUCTION REINSTATED 1971		
1972	74902-75700	799
1973	75701-76800	800
1974	76801-77300	500
NO. 10 ROTO-BALERS (NON-STOP UNIT)		
1958	0101-01600	1,500
* Includes 500 with Overdrive		
† Includes 250 with Overdrive		

Restorations

Kate the Steam Roller

The steam ticket for Kate the roller has been issued and the insulation and cladding is at present being fitted. Kate is in the big shed at present while the canopy is being reconstructed with new timber.

First photo : Cladding being fitted to the boiler.

Second : Surveyor Terry Reynolds tries his hand on the throttle after safety valve blow off test.

Photos and words supplied by Peter Tester



Caterpillar Fifteen

John Neal is making steady progress on the Cat 15 restoration. It is a time consuming job preparing it for painting and equally a time consuming job to reassemble it again. Ian Kerry of Marlborough Motor Trimmers has kindly offered to refurbish the seat cushions. It is looking good John and will make for another great exhibit once completed. Thanks for all your hard work and dedication.



Keith Worner and Jim Hammond

Jim Hammond has been busy as usual putting his skills to good use, this time repairing the charging system on this Massey Harris. Lending a hand is a new member to MVFM, Keith Worner.

Ransomes Plough When a farm at Marfell's Beach was sold last year the owner contacted MVFM to see if we were interested in some of the old items. Anything that we didn't want would go to the scrap dealer. Several of our members went and had a look and brought some items back to the Park. Amongst them was this Ransomes Plough.



We all know how keen Ted Hutchison is on restoring old ploughs and as Ted said himself, when he saw it, he and his crew "pounced on it". As you can see they have done a great job on the restoration. Ted also likes to enter local ploughing competitions and after receiving first prize at the last meeting he thought this one would also make for a good competition plough.

Ted said this model is very popular in the UK for competitions because of the long mould boards.

He is now looking forward to seeing how it performs. He intends on hitching it up to this Belarus tractor which he sold himself a long time ago to a farmer in Kaikoura. When the farmer, Owen Gray passed away, his family contacted Ted to see if MVFM would like the tractor.

All the best for the next ploughing competition Ted.



Massey Ferguson 175 has been the work horse around MVFM for a number of years now but recently it gave up and was in bad need of some restoration work itself. The engine was removed and sent to Hamilton where it received some much needed attention. The crankshaft was so worn it needed replacing, along with new pistons and liners, an overhauled fuel pump and injectors, lift pump, water pump, power steering pump, updated spin-on oil filter and housing, a new clutch, release bearing and a starter ring gear. The front axle also required some repair work where it pivots and mounts to the front of the engine. Brian Pinnell, Ken Barr and Ross Cooke have been busy with this project.



David Brown Knocking out some dents and straightening things out on this bonnet before a repaint is Alan McWha who puts in lots of hours and devotion to the many restorations he has been involved with at MVFM.

Potato Lifter



This 1936 W12 International tractor was converted into a potato lifter by Mr Barry Harper of Renwick. It had lay idle for 16 years and was in a very bad state when it came to MVFM.

About 2 years ago Graham Shefford, Brian Pinnell and Ken Barr started working on it as a spare time project to see if they could get it going again. At first they thought the engine was seized but after some close investigation and help from Jim Donald it was found that the magneto was seized. This would only allow the motor to turn about 180 degrees in either direction before it would lock up. Another magneto was soon found and fitted which allowed the motor to turn over but they could not crank it fast enough to get it to fire. The tractor couldn't be towed because it was too low geared.

To get the ground speed of the tractor slow enough for the

potato lifter to work efficiently it had two Austin gear boxes fitted in addition to its own gear box. This led to removing the sump to check things out in the bottom end. The oil pump pick up screen was nearly blocked and so was the oil filter when it was removed but other than that all was well. These items were cleaned and refitted. The carburettor was removed and cleaned. The fuel pump was bugged along with the fuel tank which was rusted out and needed replacing.

The next job was to remove the elevators. This turned out to be a big job as the chains and pulleys were all seized up. A lot of time was spent on them, first of all they were soaked in a Kero bath and after lots of hammering and swearing the chains were freed up said Ken. One of the gearboxes that drove one of the elevators was broken and the search was on to find another one. Ross Cooke had a spare one that was soon fitted. A new corrugated iron roof was built to replace the old rotten one.

The next job was to find a way to turn the motor over faster. These guys came up with the idea of using an electric drill. After a trial run and with a temporary fuel tank hanging from a fencing standard they managed to get a shot out of the motor. With a bit more tinkering and fine tuning they had the motor running like a clock which also resulted in it being a bit easier to start.

After a lot of work, Graham, Brian and Ken had the potato lifter ready to go on display for the end of August "Child Cancer Fundraiser" Day at the Park. Bernard Mason reported that this machine was also used to lift carrots and parsnips.

A seed potato planting machine, pictured below, also donated by Barry Harper, has been repaired by these guys and added to the display as well.



Nicholls Shed



The Nicholls shed has now been completed with Deane Nicholls, photo on the left, spreading out some base course before the old Cat grader, the two Aveling Barford rollers and the Fordson Major go to their final resting place.



New Members

Bill Miller's Fiat 513R's



If you use VTNZ for vehicle registration and WOF's you will probably recognise Bill Miller. These two Fiat 513R's belong to him. I had a quick catch up with him at VTNZ recently and he told me the tractors used to belong to his father. They have each clocked up about 14000 hours and Bill said he had contributed a fair chunk of those hours as a young man on his father's farm. Welcome to MVFM Bill, we hope to see you at the park when you have some spare time.

Keith Worner



Keith is currently employed by Airbus NZ (formerly Safe Air) as an aircraft technician but he has had some strong ties with the farming fraternity in Marlborough. Growing up in Canterbury on a farm and selling agricultural machines around our district, Keith has a lot of experience to offer our club. If you haven't already done so please make yourself known to him and offer him a warm welcome to MVFM.

Stan Brandish We would like to welcome Stan and Marian Brandish to MVFM. Already Stan has become involved in the saw mill display at the back of the park, has carried out various maintenance and repair jobs around MVFM and has offered his nomination for the Marlborough Historical Trust position.

He was born in a small English village during WW11, the youngest of four children, the family of six emigrating to Dunedin in late 1949. Tragically Stan's father was killed in a road accident six months later. Stan endured two years of secondary education at King Edward Technical College, Dunedin, in mechanical Engineering and then completed a five year apprenticeship as a carpenter/joiner. In 1964 Stan married and started a family but shortly after that a work place accident made a change of employment necessary and over the next ten years Stan would have a variety of jobs around Dunedin from truck driving where he was delivering new cars for Car Haulaway's to a job as a fitter/welder, Dunedin City Council as a Chainman/Roading Engineers assistant and then to Dunedin Drainage & Sewage Board where he worked his way up to the position of Chief Records/Draughtsman.



But in 1975 tragedy would strike again with the early death of his wife Gloria and being left with three children under the age of eight Stan resigned from the Dunedin Drainage & Sewage Board and became a sole parent earning an income from a home based auto mechanical business. After a planned Labour Weekend holiday in Hampden, North Otago in 1975, life was going to take another turn for Stan & his family. This holiday led to a ten year unplanned period of self employment while at the same time building a new house. Work would vary between being a building contractor, auto mechanical/electrical repairs, a fitter/welder, a plumber/electrician, a farm hand with plenty of general problem resolution/mediation, operating fishing boats out of Moeraki and not to mention his childcare and household duties. With such a portfolio of talent this soon led to "Stan Brandish Consultant Services". In 1984 Stan was asked by the Buller County Council to take up duties in Westport looking after sixteen different functions for the council including Building & Dangerous Goods Inspector. After several years of working in Westport Stan was off in another direction to revive a failing construction business in Queenstown. In 1989 after two years in Queenstown he accepted a job in Hokitika working for Westland County and Hokitika Borough Councils as Building/Dangerous Goods Inspector along with twelve other roles within the council. During this time Stan's work was moving away from practical trade work to administering & enforcing local Building Bylaws as well as Disputes resolution/Mediation. It was also during this time that he was commissioned by the same councils to assess all their buildings. This led to the Westland County Council office building and the Hokitika Council Library building being condemned just after the new librarian(Marian) had been appointed!! Stan said despite this somewhat inauspicious

beginning he and Marian were married in 1990 having endured months of West Coast humour because their courtship was occurring at the same time as local and county councils were amalgamating to become regional councils. Some of this humour was being published in the local newspaper with headings like "Altar Amalgamation between the building inspector and the librarian"!!

From 1990 Stan and Marian moved around as opportunities arose for the two of them.

Marian grew up in Dovedale, near Nelson and trained as a librarian with the National Library. She has been employed by several councils to manage Public libraries as well as working at school libraries. She has also developed a lasting interest in jewellery manufacture and while still working as a librarian she re-trained as a Silversmith with the Canterbury Silversmiths Guild in the 1990's. Marian also gained a diploma and a degree in Visual Arts in 2014.

In this same year Stan finally retired from full time council employment with the Selwyn District Council as Building Manager, while at the same time resigning from NZ Law Society and all other professional memberships. This was also the same year that his eldest son Keith died suddenly in Dunedin.

In September 2015 they moved to Blenheim and since the move Marian has continued with both library and OSCAR work combined with her main interest, Silversmithing!!

As you can see Stan has had a very interesting and varied career and with this comes so much knowledge and experience which he has already applied to some of the projects he has been involved with at MVFM.

On behalf of all the members of our club we hope you both enjoy your well earned retirement in Blenheim.

Saw Mill Display



Chris McKay is leading this project with some help from Stan Brandish, Jim Creswell, Brian Pinnell and Jeff Rowberry. The saw Doctors hut is nearly complete and the breaking down benches are ready to go into position.



This pile of timber from a local timber company are all off cuts that would normally be dumped as waste product but Chris and his team are making good use of it.

Cruise Ship - Ovation of the Seas

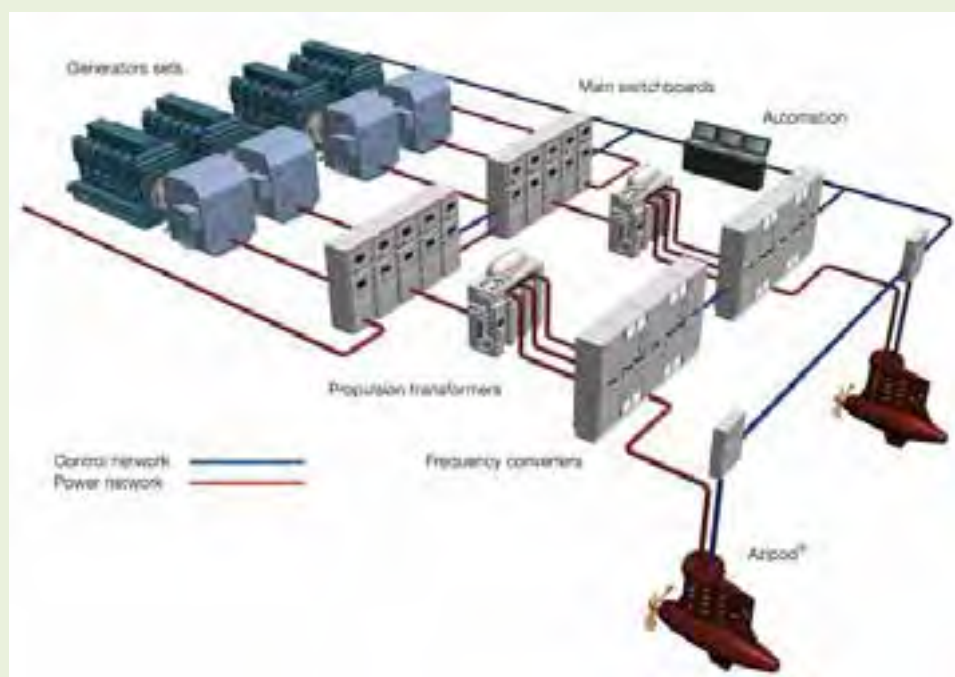


The cruise ship season is about to start again. Ken Barr photographed the “Ovation of the Seas” while it was berthed at Shakespeare Bay last season. There are at least 15 buses in this photo ready to take its passengers on tours around our district. This Quantum Class cruise ship can carry nearly 5,000 passengers, it weighs 168,666 tonnes, it is 348 metres long, has a 48.9 metre Beam, 18 Decks(16 accessible to passengers) and it has a very impressive propulsion system.



Ovation of the Seas is powered by two Wartsila V16(19,200kw ea) diesel generators for propulsion, and two V12(14,400kw ea) diesel generators for the ships electricity, two ABB Azipod propulsion pods with a 20.5 megawatt electric motor directly connected to each of the propellers, and four Brunvoll FU115 tunnel thrusters(bow thrusters) with a rated power of 3,500kw each. The cruise ship also integrates two Caterpillar 35 Series V16 emergency diesel generators producing 2,500kw each. The propulsion system provides a cruise speed of 22 knots. The propulsion pods are capable of rotating 360 degrees independently of each other. This along with the bow thrusters allows for incredible manoeuvrability.

These diagrams show how the propulsion system works. Note the human figure in the propeller pod standing on top of the electric motor(bottom right hand photo). These pods can be serviced in position and if necessary new thrust bearings and seals can be replaced in situ.



Mystery Item

One item of interest from the cottage that took everyone's attention at the Daffodil Rally can be seen below. We had a lot of varying suggestions as to what it was but no one seemed to know exactly the answer and what it was used for. We would be keen to hear from anyone with some more details.





1915 Calthorpe Scout Car

This vehicle was created as a response to the British Admiralty's concern over merchant shipping losses in the Mediterranean Sea, to the extensive land support of war, the submarine. "The Scout" has a legendary character in the British army and a great reputation of the scout vehicle in the theatre of war, and a small squad of these machines together. Their mission (trip secret) was to strike fast and light a burning battery with a small team of highly trained and skilled soldiers (probably motor) (communication S.A.S. and destroy an enemy communication center that was sending shipping details to the submarines). The mission must have been a total success, as shipping losses in the Med improved sharply following the October 1913 mission. The survival of this life vehicle is an amazing story, that was pieced together after the 2nd World War 30 years later.

Specifications

1913 Calthorpe running gear, very light, high inside chassis and wheels are all original, along with the radiator. A special high speed engine and transmission by Fowler of England made the vehicle lively, reliable and economical. The light weight body was a military design with steel and canvas used extensively for lightness and low heat absorption. Light armor plate was used on the fire-off and direction shield. The machine gun is a recently discovered genuine Vickers gun. Motor, fuel tank actually used at the time of the mission. It's condition is excellent. The chassis of this vehicle were found on a beach in the Southern Alps back in the 1940s.







E TYPE
COCKROACH



Some Humour

Farmer Jack once lived on a quiet rural highway, but as time went by, the traffic slowly built up and eventually got so heavy and so fast that his free range chickens were being run over, at a rate of three to six a week.

So Farmer Jack called the local police station to complain, "You've got to do something about all these people driving so fast and killing all my chickens," he said to the local police officer.

"What do you want me to do?" asked the policeman.

"I don't care, just do something about those crazy drivers!"

Three days later Farmer Jack called the policeman and said, "You've still got to do something about these drivers. The "school crossing" sign seems to make them go even faster!"

So again, they put up a new sign: SLOW: CHILDREN AT PLAY.

In order to get Farmer Jack off his back the policeman said "Sure. Put up your own sign." ;

The phone calls to the Police Station stopped, but curiosity got the better of the Officer, so he called Farmer Jack.

"How is the problem with the speeding drivers, and did you put up your sign?"

"Oh, I sure did and not one chicken has been killed."

The policeman was really curious and thought he'd better go out and take a look at the sign. He also thought the sign might be something the Police could use elsewhere, to slow drivers down.

So he drove out to Farmer Jack's house. His jaw dropped the moment he saw the sign.

'NUDIST COLONY - Slow down and watch for chicks!'



Supplied by Errol Hadfield

We hope you enjoy reading this edition of Ancient Iron. Our apologies for the delays with this issue but like everyone there is never enough hours in the day let alone the evenings.

A reminder that our annual Open Day will be held on Sunday 29th October, 10am- 3 pm.

Also, it is now time to pay your subs if you haven't already done so, either by internet banking or in an envelope directly to the treasurer, clearly labelled with your name, subs and the amount enclosed.

Bank Account : 03-1355-0701919-000

Reference : Your Name Clearly Shown.

Position	Person	Contact information
President	Jim Donald	donalds@ruralinzone.net
Vice President	Ross Cooke	rosco.hydraulics@ xtra.co.nz
Secretary	John Neal	njohnpam@gmail.com
Treasurer	Errol Hadfield	treasurer@marlboroughfarmingmuseum.nz
Editor	Jocelyn/John Burnett	burnett.family@xtra.co.nz

Upcoming Events:

Monthly meetings- first Monday of the month- 7:30pm Club Rooms, Brayshaw Park

Open Day : Sunday 29th October 2017.

Heritage Day : February 2018.