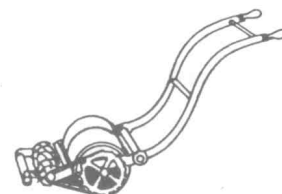


# Grassbox

The magazine of The Old Lawnmower Club

Number 13

Summer 1995



## 200 MEMBERS

There are now more than 200 Members in the Old Lawnmower Club, a sure sign of the growing popularity of the vintage grass cutting machine.

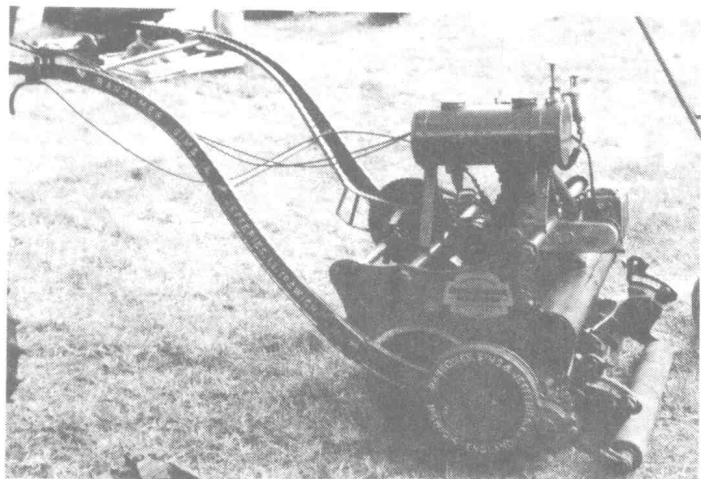
The Annual Rally at Milton Keynes in May marked the fifth anniversary of the formation of the Club, and was just six years after the first lawnmower get together there. The Club has come a long way since then, and two things really stand out.

First, the continued improvement in the standard of the exhibits at events and rallies. This is not just in terms of the preservation or restoration, but also in the type of mowers on show and the additional displays of posters, leaflets and advertisements that now appear.

Second, the continued and growing interest in the Club and the subject of old lawn mowers as a whole. There is a steady stream of letters to the Club from prospective new Members, people with old mowers and those wishing to sell their machines. The media still seems to be interested too. Andrew Hall recently recorded a piece for Radio 4 (for transmission in August), I have just done a piece for Radio 2, and Christopher Proudfoot was on The Big Breakfast in May.

One thing that seems to make the Club different from many others is that all old lawn mowers are welcome, so whatever a Member chooses to collect and/or display is fine. There must be many thousands of old mowers to be found, and prices are still very reasonable, even at big auctions. I hope that this continues so that the subject is still accessible to as many people as possible.

Finally, I would urge Members to support events and rallies that welcome lawn mowers as well as events organised by the Club. Some events are reluctant to invite mowers for the first time, but by putting on a good show we can ensure that we are asked back again. On top of this, they are great fun and of course bringing mowers to a show means free entry for the exhibitor. It would be great to see a few new faces at the remaining events of the year. *Keith Wootton.*



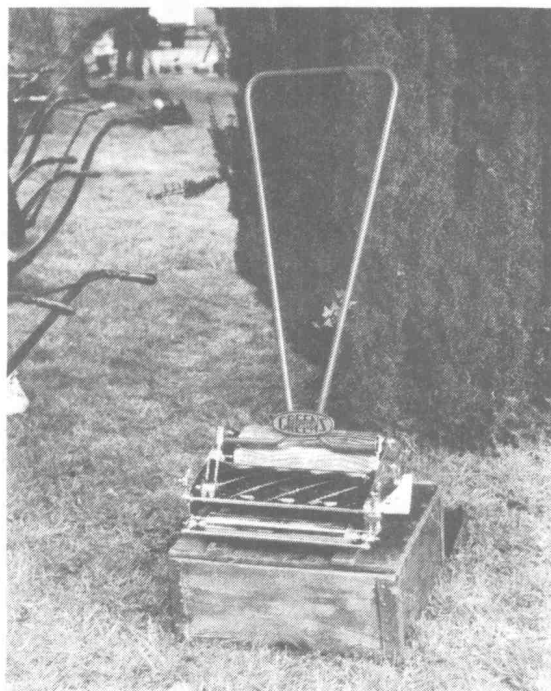
*This early Automower, from the Hall & Duck Collection, was a Ransomes pony mower fitted with a JAP four stroke engine. It dates from between 1920 and 1925, after which Automower produced machines to their own design. Over 4000 Automowers were made up to 1946.*

## RANSOMES SPARK PLUGS

I recently received a telephone call from Michael Murphy who is helping Les Weir to add to his large collection of spark plugs. Les, who is well known amongst vintage machinery enthusiasts, is now over 80 years old, and has been collecting spark plugs since the second world war when he served in the Navy and was a prisoner of war.

He has over 2300 plugs in his collection, but has never managed to find a special Ransomes plug, which he believes was made before the first world war for use in lawnmowers.

A few phone calls revealed a potential source, and hopefully progress will be made on finding a Ransomes plug for Les. However, at the time of writing it is unclear whether the first source was able to help, so if any Member of the Club can help, please call Keith Wootton on 01604 31192.



*This unique 14" Greens Zephyr dates from 1959 and was specially prepared for use at the Great Yorkshire Show the same year. The entire machine is chrome plated to show off the engineering. It can now be seen at The British Lawnmower Museum in Southport, which is run by Brian Radam.*

## e-mail

If anyone in the Club uses electronic mail, they might like to send a message direct to Club Chairperson, Keith Wootton. His address is 100425,1004 on Compuserve or 100425.1004@compuserve.com.

## MEMBERSHIP RENEWAL

Please remember to return membership renewal requests as soon as possible so that you continue to receive copies of Grassbox and other information from the Club. Every Member for the year 1994/5 has received this Grassbox, bringing the number issued for the year's Membership to four. Four more Grassboxes will be published during the 1995/6 Membership period.

# Rally News

## Annual Rally, Milton Keynes Museum - 13/14 May

As always, the Annual Rally was well attended by Members, particularly on the Sunday, when over 20 exhibitors were present. More than 60 mowers were on show during the day, and everyone present said that the standard of presentation had increased dramatically over previous years. It would be unfair to pick out any machines for special mention because the variety of those on show was so wide, with a good selection of push and motor mowers.

The Saturday had been more relaxed, with around ten Members present. The evening was spent in two local pubs because the service in the first had been so poor. One Member commented that it was the first time he had eaten main course in one place and sweet in another.

The weather on both days was a bit cool, although this did not seem to matter and everyone had a really good time.



*Some of the Club Members assembled at Milton Keynes Museum for the Annual Rally.*

## Aldham Olde Tyme Rally - 10/11 June

The rally held at Aldham, near Colchester, on 10/11 June 1995 saw a good and varied collection of lawnmowers, with nearly 30 machines on display. Club Members Andrew MacMorland, Tony Houghton and myself were exhibiting machines, with Andrew being awarded Best Mower in Show for his 1922 650cc Shanks. Local collectors 'Wag' Waskett and Pete Dare were also there with machines from their collections. It is pleasant to go to a show where mower exhibitors are not only welcomed but encouraged to take part in the ring parade. Not all shows do this by any means, and many collectors seem reluctant to participate. However, on this occasion the MacMorland Shanks and the Thompson Mayfield gave the crowds a demonstration of machinery from days gone by. The Aldham Rally is in its 19th year and certainly event which East Anglian mower enthusiasts should not miss. The mowers have an enclosure of their own at Aldham; unlike so many of the local shows where we get a corner of the stationary engine enclosure if we are lucky.

*By Chris Thompson.*

## Other Events

Reports on the Banbury, Hatfield and Trerice Rallies will be included in the next edition.

## LLOYDS AUTOSCYTHE, OR NOT?

Gordon Davenport, Andrew Gates and Chris Thompson spotted that Robin Hills' long grass cutter featured in the last Grassbox was a Lloyds Autoscythe. Chris adds:

The long grass mower owned by Robin Hills, illustrated in Spring Grassbox presented something of a puzzle. My immediate reaction was that it was Lloyd's Autoscythe similar to my own model. If so, it would have had the Villiers Mar-vil (or Century) engine with the small pear shaped exhaust. Clearly then, if the forward facing projection to the left of the wheel is an exhaust, it is not the one normally fitted. Also, if it is a Lloyds machine, the round brass plate which normally carried the manufacturer's name and was riveted to the frame directly above the drive to the cutter bar, is missing. My other guess is that it could be an Atcoscythe from roughly the same period, as both Lloyds and Atco seem to have both the same frame and indulged in a little 'badge engineering'. Both were using the Mar-vil engine in the 1930s, although after 1946 Lloyds switched to using a JAP four stroke instead of the Mar-vil with its temperamental Vacturi carburettor.



*Andrew MacMorland's 24" Shanks from 1922 has a 650cc Blackburn engine. The mower spent its working life in Perthshire.*

## DIARY DATES

### Erewash Museum, Ilkeston - 19 August

The Club has arranged to hold a one day rally at Erewash Museum, Ilkeston, Derbyshire on Saturday 19 August. Last year, the event was popular with local people, and attended by a small group of Club Members. This year, it would be great to see more of the Members from the area coming along to take part. The venue, the garden of the museum, which is a converted Victorian town house, is excellent. We are not getting involved with any forms or paperwork for this event, so just turn up on the day and see what all the fuss is about. Even better, bring a mower or two to show as well. The event starts at 11am. More details can be obtained from Keith Wootton on 01604 31192 (Northampton), otherwise see you there!

### County Of Salop Steam Rally - 27/28 August

The Club is still planning to attend County of Salop Steam Rally in Shrewsbury over the August Bank Holiday weekend (27/28 August). If anyone should like further information, please contact BA Robinson on 01865 68682 (Oxford).

### Otnoor Show, Oxford, 9/10 September

Details of this Rally from Robbie Robinson, 01865 68682 (Oxford).

### Shefford Steam & Country Fayre - 16/17 September

The organisers of this show have asked if the Old Lawnmower Club would display here again this year. Last year, several members kindly took part and attracted a fair bit of attention. If anyone would like to take part this year, please contact Dick or Alan Hardwick on 01462 816018 (Shefford) for more details.



*A 6" Greens Multim In Parvo, which means 'Much From Little', from Christopher Proudfoot's collection.*

## CAST IRONS

Cast iron has been used to make lawn mowers since the very first machines 160 years ago. Cast iron was plentiful, inexpensive and easy to use, making it an attractive material for all types of machinery in the 19th century.

In the Victorian era, lawn mowers were slow running and non-motorised. The stresses and strains encountered in the components were low. Cast iron was adequate for the job, and did not need much machining to ensure components fitted together. In fact, virtually the whole mower could be made from castings and this is certainly the case with early gear driven hand mowers. However, severe knocks could lead to breakages, as illustrated by the common site of broken handles or side frames on long-lost machines.

When production technology progressed in the early years of the 20th century, manufacturers needed materials which could be machined more easily and which could resist the stresses and strains associated with their new designs, particularly on motor mowers. Malleable cast iron, although more costly, was a more attractive material because it offered resilience, flexibility and strength, which could cope with the higher vibrations encountered on motorised mowers.

Nevertheless, conventional cast iron continued to be used for a wide range of components, including bearing mountings, deflector plates, rollers and so on for many years, eventually being largely replaced by alloy components in the 1950s.

### CONVENTIONAL CAST IRONS

In general, cast iron is ferrous metal containing more than 1.7% carbon. The behaviour of the cast depends largely on the interaction between the iron and carbon, and the size and form of the carbon particles.

Slow cooling of casts generally results in coarse grains of ferrite (an iron based ceramic compound) and large flakes of graphite (carbon). Faster cooling results in both ferrite and another iron based compound known as pearlite being present together with finer and more uniformly dispersed flakes of graphite, resulting in stronger, tougher and harder cast iron. Rapid cooling results in very fine flakes of graphite, further strengthening and hardening the cast. These casts appear to be grey when broken and are known as grey cast irons.

Very rapid cooling and a reduction in silicon content results in all of the carbon remaining combined with iron. Since no grey carbon is visible in the fractured surface, these cast irons are known as white cast iron. It is too hard and brittle to be used as it is, but it does form the basis of malleable cast irons.

It is often useful for castings to include other materials. *Silicon* softens castings by encouraging graphite formation. Small castings are given a slightly higher silicon content to promote the formation of ferrite and pearlite. *Phosphorus* causes brittleness and hardness, but is added in low concentrations to castings of small items because it increases molten metal fluidity and shock resistance of cold castings. *Sulphur* is a residual impurity which stabilises cementite (iron carbide) and prevents flake graphite formation, hardening the iron. Small quantities of *manganese* neutralise the effects of sulphur and refine the grain of the cast iron, increasing its strength.

### MALLEABLE CAST IRONS

Malleable castings are used for lawn mower frames, such as on the Atco Standard, because they can resist vibration and impacts much better than conventional cast iron. There are three main ways of making malleable castings. In the *Black Heart Process*, white iron castings are heated away from air at 850 to 950°C for periods of up to 170 hours. This disperses the graphite throughout the iron and leads to increased malleability, ductility, tensile strength and toughness. The *White Heart Process*, involves white iron castings being heated in air at about 1000°C for up to 100 hours. Carbon is drawn out of the castings and oxidised, leaving the castings with a ferritic structure at the surface and a pearlitic structure near the core. Castings like these behave more like steel but have a lower melting point and a greater fluidity at the time of casting. The *Pearlitic Process* is like the blackheart process but is followed by rapid cooling to prevent formation of ferrite and flake graphite. Clusters of graphite appear throughout the pearlite, leading to castings which are harder, tougher and with a higher tensile strength, but with reduced malleability and ductility.



*This unusual sidewalk mower is a Granite City Capitol, made in Peoria, Illinois, USA. The date is unknown, but it is likely to be from about 1910-1930. The machine is designed to trim lawn edges and work up close to a wall or pathway. The cutting width is just five and a half inches. The mower can be seen at Milton Keynes Museum.*

## CASTROL OILS

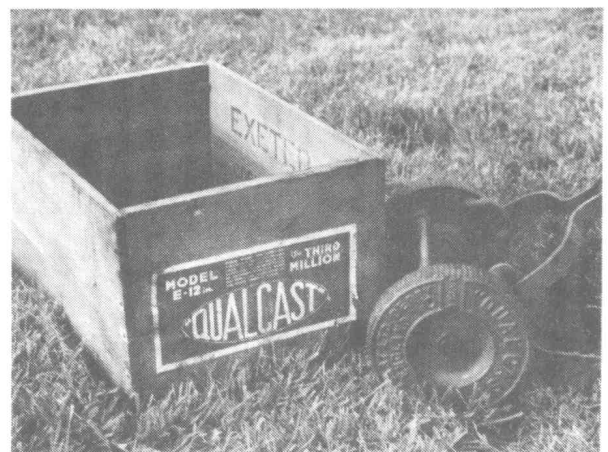
Following the article on oils and fuels in the last two Grassboxes, the Club has learned that Castrol has relaunched a range of traditional lubricants. A number of manufacturers in the 1920s, 1930s and later, recommended Castrol XL for use with their machines. A number of XL products are now available again, and can be obtained from specialist suppliers.

## INFORMATION SERVICE

The Club keeps a copy of the information that is sent, as well as any photos (unless expressly asked to be returned), so that it can build an archive of information.

## Qualcast Packing

During and after the Second World War, there was a general shortage of raw materials. Once lawn mower production resumed, manufacturers increased demand for iron, steel and wood, with wood in particular being in short supply (mainly due to the demands of the construction industry). In addition to being used for rollers, handles and grass boxes, wood was needed for the crates used to deliver and transport the new machines. Qualcast used second hand wood for making some of these crates, such as this one for a Model E, but made sure to apologise to its customers for doing so on a special label. It is difficult to believe that any company today would make the same remarks when recycling a precious commodity.



*Qualcast Model E, post WW2, with apologetic packing crate.*



# AGM REPORT

The AGM at Milton Keynes Museum was attended by almost 20 Members, many of whom had travelled many miles.

Club Chairperson, Keith Wootton, reported that the year had been very successful for the Club, with more new Members and a great deal of interest in the Club from collectors, the media and the general public.

He thanked everyone who had helped with the Club, including committee members, those that attended rallies and events, and everyone who had contributed to Club activities.

The Club had attended a number of events in 1994 and was expecting to attend even more in the coming year. He said that it was a shame that more Members did not attend events, particularly those in Erewash and County of Salop, hoped that more would come to this year's events. Keith also presented a revised constitution for the Club, with the idea that this be accepted at the 1996 AGM.

Bernard Robinson, Secretary, reported that there were now almost 200 Members and that the figure looked set to rise further. A high proportion of Members had renewed Membership in the last year. Robbie also announced that the 1995/96 subscriptions were now due.

Martin Stephenson, Treasurer, presented the Club's accounts for the year ending 30 April 1995. The Club income had been £1526.82 during the year, with expenditure reaching £970.94. This left a bank balance of £1068.86. Keith Wootton said that some of this money was already allocated to projects in hand, and that the figure available for use was around £600, and that this could be used for new projects. He also pointed out that the cost of running the Club was around about £5 per member each year.

The election of Committee Members, with positions, was as follows:

Keith Wootton, Chairperson  
Bernard Robinson, Secretary  
Martin Stephenson, Treasurer  
John Barnard  
Andrew Grout  
Alec Hillyar

A general discussion on the activities of the Club followed, with suggestions including the preparation of special Club banners and display material for Members to use at events and rallies. Further details of the AGM and copies of the Accounts can be obtained from Keith Wootton or Bernard Robinson.

## SILENS MESSOR UPDATE

More information has come to light on the history and development of the Greens Silens Messor.

The Silens Messor was in production from 1859 until 1935, although some machines were still available after the end of the Second World War. Advertisements from 1930 suggest that over one million had been sold up to that time, so it is not surprising that there are so many around. However, the exact number made is not known.

Although the design changed very little between the first and last machines made, there are some differences that help with dating. The most noticeable feature of the early machines was that they had curved handles, rather than the straight ones used on machines made after 1895. The earlier Silens Messors are generally known as the S handle model.

A second feature which changed noticeably was the scraper plate. On models made before about 1900 this was simply a straight casting positioned at the bottom of the handles, behind the roller. On later models, the scraper also served as a name plate for the mower, with a profile like a hump-back bridge.

On early machines, the handles were attached to the side frames by a single bolt which also served to hold the scraper plate. This arrangement did not allow much adjustment of the handles and later models incorporated two bolts on either side to allow some room for adjustments. The change was made at some time between 1890 and 1900.

One further feature which can be used to date machines is the deflector plate. On machines before 1900 this was a cast component which formed part of the frame assembly. On later models, the deflector was made from a thin piece of concave sheet steel which slotted into grooves in the side frames. Support for the frame was given by a cross spar which was positioned above the deflector plate.



*This line-up of three different 10" Silens Messors shows some of the design changes. At the rear, an S handled machine from before 1895, in the middle pre 1900 machine with straight handles, single handle bolt and basic scraper. The mower at the front is from after 1900.*

This can all be summarised as:

1859-1895	S handles
1895-1939	straight handles
1859-1900	straight scraper plate
1900-1939	hump-back scraper
1859-c1900	one bolt handles
c1900-1939	two bolt handles
1859-c1900	cast deflector
c1900-1939	sheet deflector

It should be remembered that these dates are approximate and may need revision.

## Road Run Latest

Martin Seymour has postponed the proposed road run until 28 March 1996. This gives Martin more time to make the necessary arrangements, and means that the run will now take place exactly 40 years after the original event. Martin has already secured sponsorship from a number of sources, and hopes to gain even more. Anyone who would like to assist Martin with the organising of the event in any way can call him on 01206 761012 (Stowmarket).

**Next Edition**  
**Aug/Sep 1995**

**Grassbox**  
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