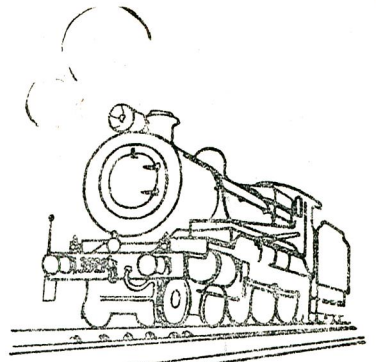


Sydney Live Steam Locomotive Society
Anthony Road, West Ryde, N.S.W.



Newsletter
Correspondence,
The Editor,
P.O. Box 124
West Ryde, N.S.W.
2114.

'Newsletter'

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Editorial.

The new year, 1978, started well for the S.L.S.L.S. coop. ltd. with an exhibition at the AMP Building, Circular Quay, as part of the Festival of Sydney. The publicity gained from this venture resulted in much improved gate takings for our January running day.

This augers well for the year as we have a number of important projects on hand. The duplication of the ground level track has begun with earth works at the southern end of the ground and many sections of track prepared. At our meeting in February we saw the plans of the signal box, we hope a start can be made soon.

At their next meeting, the Directors will decide if the Club House project is to continue.

In all we can look forward to an eventful year and perhaps should all resolve to do whatever we can to help the Society with its continued growth.

John. A. Lyons.

Safety First. Something to think about.

At the February meeting of the Society the matter of derailments and / or displacement of passengers was raised by Alan MacKellar. In catering for the general public it seems that we must try to provide an almost fool proof type of riding truck. Can the present trucks be improved? Do we need to consider new concepts of design? What is the answer?

We were saddened to hear that, after a short illness, NORMAN POTTER passed away early in February. To Barry, his Mother and their families we offer our sincere condolences.

A number of members were able to be present at the Service.

R.I.P.

Christmas Party.

This was a hot, windy day on which a total fire ban had been imposed. B.B.Q. fires were not allowed but a number of locomotives were under way. The children enjoyed their Christmas Party and showed the usual excitement when Santa and his off-sider Tony Eyre arrived hauled by Ted Esdaile's "Ajax".

We must thank Elizabeth Tulloch and the ladies who assisted with the party and Bill Edgecombe for his part as the days V.I.P.

Colo Vale 10th and 11th December 1977.

In all 16 members and several families (totalling 32 eg., mini convention) visited Windy Ridge in December to provide a service for the Mittagong R.S.L. children's Christmas Party on the Saturday and a public open day on the Sunday.

As usual a fantastic weekend was had by all who attended and additional work to the track eg., colour light signals, power operated points and signal box, was much appreciated by the drivers. Running started at 11.00 am Saturday and finished at 11.30 pm. After a few hours break we were at it again for another hard but enjoyable days passenger hauling. Other rides were provided by trailers attached to the various traction engines, steam rollers etc., and the 2 foot tramway was in operation with diesel pushup. Several radio controlled boats were on display on the dam but owing to the low water level they did not have much room to operate in.

The highlight of the day for the kids was the arrival of Santa riding a fire engine from which he proceeded to hand out presents and sweets to all present.

cont. over.

Colo Vale. cont.

Dave Thurlow wished to thank all those who helped make the weekend a success and special thanks again go to Les Thompson and Brian Bourke for transportation of the passenger trucks.

The Founding of Conventions in Australia. (Live steam.) by Alan MacKellar.

When the S.L.S.L.S. was founded in 1948 one of the objects was to organise annual meets with kindred Societies through out Australia. This information is contained in a document drafted by the late C.S. MacKellar, one of the co-founders of the Society. (The said document is in the possession of the writer.) It was not till late 1955 that the Society felt it was in a position to hold such an event. At this point it was decided to hold a convention over the Easter weekend of 1956. The format was to follow along the line of the live steam meets organised in the U.S.A. which were inaugurated by a Mr. C.A. Puriton at his home track in October 1933. (This was the outcome of a suggestion by the late L.B.S.C. in the Model Engineer of April 21th 1932.)

Having made the decision to hold the convention invitations were sent to kindred societies through Australia. The following enthusiasts attended, Melbourne Society of Model Engineers, Bert Kirby, no locomotive, Surrey Hills Live Steamers, Bill Newman 3½ in. Atlantic, Dave Hemphill 3½ in. "Mathew Flinders", Fred Pascoe no locomotive, Kel Sherry 3½ in. Bantam Cock, Bill Johnson 3½ in. Bantam Cock, in all 6 visitors and 4 locomotives.

Who would have thought at that time that conventions would have grown to what they are today. (1978, time of writing.)

There was no convention organised for 1957. In 1958 the Victorian Societies organised the 2nd. Convention, the venue being a Captain James' private track at Beaumaris. Visits were made to other private tracks on the weekend. At this time Moorabbin was still a dream for the future. In 1958 the S.L.S. of Victoria still had its headquarters at the late Stan Milligans private track at Surrey Hills. The society was known as the Surrey Hills Steam Locomotive Society.

In 1959 S.A.S.M.E.E. conducted the 3rd. Convention. Quite a large contingent from the S.L.S.L.S. attended. They were, Cec. Gunning 3½ in. coronation, C.S. MacKellar 3½ in. C 34 class, John Hurst 3½ in. King, John Austin 3½ in. C 38 class, John Mann 2½ in. "Annie Boddie" 4-4-0, Alan MacKellar 2½ in. Dutchess and Ross Styles (on his honey moon, not much time to run locomotives).

The 4th. Convention, 1960, was hosted again by the S.L.S.L.S. at West Ryde.

Convention 1978.

Your registration should be in by the end of this month. Contact Mike Tyson for any details.

Smokey Mountains and Grizley Flats Railway Visit.

A group of 20 to 30 members thoroughly enjoyed their trip to this railway at Warnervale on Sunday 5th. February. Two locomotives, the 0-6-0 and the 2-6-2 were seen in steam. Although the last official train ran at 4.45 pm. things were still under way well into the evening.

(I was not able to attend on this day but having visited the track twice during the school holidays I can recommend a visit as well worth while. Ed.)

1978 Locomotive Efficiency Trials.

This year the event is to be hosted by the S.S.M.E. at Model Park, Luddenham Rd., St. Marys on Sunday 23rd. April and starting at 8.30am. Our Secretary, Mike Tyson has entry forms.

Inter-club Invitation Day.

Saturday 29th. of April has been set aside for the first inter-club day for 1978. The grounds of the S.L.S.L.S. at West Ryde will be open for running from 9.00am. till you want to go home. The Society looks forward to a big roll up to make this day a success.

Charity Day.

Charity Day.

Saturday the 3rd. of June has been set aside for our first Charity Day for 1978. This day will be in aid of the Lantern Club.

Live Steam in Northern Queensland.

written by Neil Campbell.

Whilst Patricia and I were staying in Townsville, we heard of a miniature steam railway out at a seaside suburb of Townsville called Pallarenda. On investigation, the railway was found to be a loop of 12 inch gauge track which runs on Sundays of each week as a commercial operation. The loco is a 2 - 4 - 0 with a four-wheeled tender and is owned by a Mr. Aubry Eiggins who is only too happy to meet up with any live steamers wandering up this way.

The loco was built for Aubry by Jim Jackson of Brisbane about 4½ years ago and spent its first three years of life in South Australia where Aubry was living at the time. He told me that whilst he was in S.A., many of the S.A.S.M.E. and Prospect boys we all know, drove the loco. About 18 months ago he decided to make Northern Queensland his home and shifted up to Townsville.

The engine has much the same appearance as the "RARITAN", a design that was published in the "Live Steam Magazine" some years ago, also for those who may have read about it, the design is a very close copy of the "Cricket" a 2 - 4 - 0 that runs at "TILDEN PARK", BERKELEY, CALIFORNIA, U.S.A., an article on this layout appeared in the book "Little Railways of the World", published some years ago. The engine pulls 3 trucks at the moment but Aubry has another truck under construction.

Aubry put me in touch with another live steamer, a Mr. Bernard King who has a 5 inch 4 - 4 - 2 which he bought second hand. The loco is a freelance design built many years ago, the design has a likeness to "IRON DUKE" of the old M.E. in Australia and N.Z. magazine published before the second world war, the loco George Farkas runs on our tracks. At the moment, Mr. King has only a short up and down track in his back yard to run on, but both Bernard and Aubry are investigating the possibility of some publicity in the local Townsville paper with the idea of gauging what support they may get from the local public interested enough to form a model engineering club in Townsville. One hopes that such a scheme comes into being. Aubry and his wife Pam arranged a barbecue for Patricia and I whilst staying in Townsville which was an enjoyable night.

There are two full size locos on display in Townsville, one a Queensland Railways 4 - 8 - 0 C16 class which is enclosed in a shelter shed on The Strand near Tobruk Swimming Pool. It is in a reasonable state of repair considering the children can climb all over it and it is right on the sea edge of the harbour. Out at the Bush Children's Home is a 2 foot gauge 4 - 6 - 0 Hunslet. This loco was built for originally working on the R.O.D. Light Railway Division during the first world war in France, when after the war it found its way to Australia for working on the sugar cane tramways. Up at Innisfail is a 0 - 6 - 0 Hudswell Clarke tender loco, 2 foot gauge which worked on the sugar tramways, but very much in need of a fresh coat of blue paint. Perhaps if Ray Lee ever gets up that way he may take a pot of blue paint with him, as he is, I am told, a specialist painter of blue Hudswell Clarke locos.

Whilst at Ingham, we were pulled up in the main street while a sugar tram crossed over a level crossing. It was hauled by a Baldwin (Castle Hill make) 0 - 6 - 0 loco and behind it were coupled 156 of the new four-wheeled sugar bins going out to the plantations to be filled. At the very back of the wagons was another 0 - 6 - 0 slave loco. These locos are radio controlled as far as operation goes from the locomotive on the front of the train. They seem to be a Clyde Engineering product. We also saw another of these loco, slave loco controlled trains on a bulk refined sugar train going to the Sugar Terminal at Lucinda where it is loaded into ships for transport elsewhere. The wagons this train was hauling was composed of neat bogie flat cars upon which two bulk sugar containers are mounted. It was a very long train also, but I cannot tell you just how long as I did not count the wagons.

Well, this is a brief account of our stay in Northern Queensland, if any members are heading north at some time or other and want information, I may be able to help them with, I shall be only too happy to oblige.

Neil Campbell.

Piston valve adjustments can be readily made, whilst under steam, by easing a locknut at the valve rod crosshead, and then rotating the valve rod right or left by a socket-driver applied to the hexagon-valve rod, which extends from the front end of the valve chest and is normally hidden by a movable screwed cover. The final adjustments were made by Mr. Max Croft of N.S.W.R.

Cylinder drains are of the Oakadee pattern and were made in accordance with the article Jim Ranford published M.E. 1960. They work well, but need regular cleaning in $3\frac{1}{2}$ " gauge. Ern Sweet uses discs of Neoprene in the drains on his "Speedy", and speaks highly of them.

Steam chest pressures can be read on a gauge in the cab; during running tests made with full regulator opening and with cut-off varying from maximum to 35%, both gauges showed the same pressure, i.e. boiler pressure. Tests made with partial regulator opening with a B.P. of 35 p.s.i. with engine in full gear, gave a steam chest pressure of 10 p.s.i. During recent tests I found that a chest pressure of 30 p.s.i. drove the engine at a good speed, on partial regulator when in full gear, hauling a load of approximately 400 pounds. Crossheads were made from $\frac{3}{8}$ " thk. cheeses parted off from $1\frac{1}{4}$ " sq. bar and machined from the solid, after abortive attempts at trying to assemble by silver-brazing as suggested by L.B.S.C. All coupling rods and connecting rods were made on the vertical slide. Both eccentric rods were made in one piece with the big ends together and then separated. Likewise the buffers and buffer stocks were made in pairs and then parted for finishing. This method is an old one, but it is still worth while.

The slots in the expansion links were also milled out in the lathe and the link brackets were made up from G.M. castings, silver-brazed together. All castings were obtained from A. J. Reeves of Birmingham U.K. and were found to be first-class and very easy to machine. Bushes for the link brackets were made from G. M. bar as per instructions, but when final assembly was attempted, the link brackets refused to accept the links, even before the bushes were in position. This problem was submitted to several of our Club members for a solution; but it could not be solved without re-design. Thus, one lug on each bracket was cut off and removable ones of angle section were made and fitted. This feature is of great value when maintenance is required.

BOILER: When the boilermaking stage was reached, I drew it out full size first and then set about re-designing it in the light of latest practices in the hope of being able to compare performances with other builders like Stan McEwan, and our ex member, Harry Ball, who now has "ESTAR" started by Reg Wood. The first alteration was to set the front tubeplate back $\frac{3}{4}$ " in lieu of $\frac{1}{2}$ ", so that a large studed flange could be fitted to it for the $\frac{1}{2}$ " o/d. main steam pipe, from the regulator. Next, the dome ring was enlarged to take a Stanier-type flat slide valve regulator. Then the combustion chamber was reduced in length by 2" and the water tubes omitted. The top of this chamber was supported by screwed stays from the outer wrapper plate. This reduction of the chamber was done because I had often seen how the comb. chambers, after a day's run, were half-full of ash and fairly large cinders which must have reduced the heat transfer quite a bit. Of course, I am speaking of engines which have not been fitted with a fire-arch and where it is quite easy to push unburnt fuel into the comb. chamber when working the fire. The watertubes were omitted, because they make cleaning nearly impossible or at least difficult.

Therefore, to make up for the heating surface so cut off, I used two Thermic Syphons, which would have a greater steam production per sq. inch due to firebox temperature. Radiant heat transfer rate is always based on the difference between the fourth power of the absolute temperature of the flame and the peak temperature: for example, let us suppose the comb. chamb. temp. to be 1900 F. is the base for comparison say 1.0, then $2200^{\circ}\text{F} = 1.614$, $2500\text{ F} = 2.475$, and $2600\text{ F} = 2.826$ times the heat transfer at 1900 F. This illustrates the vital importance high firebox temperature and heating surfaces exposed to radiation.

A steel plate fire arch is secured, by screws, to an extension of the firebox throat plate, which also carries the rear sliding support of the boiler. The front end of the boiler barrel is supported and gripped by the smokebox split joint; therefore the boiler expansion of approx. 1/16" is rearward. A gap is made between the backhead and the footplate to allow for it.

(TO BE CONTINUED.)

Rostered Train Day.

On Saturday the 4th. of March Mike Tyson and associates are organising a rostered train day. This will start at 9.00am and will use the ground level track. The idea is to run 10 rostered trains to a time table. This will include, express passenger, express goods, pick up goods, local passenger, yard shunter, etc.,. The venture will be run as a railway should be run.

The roster clerk / chargeman Les Thompson would like the names of members who would like to act as station master, guard, flagmen, shunters, signal men. (No previous railway experience is necessary.)

Mike hopes to have the details worked out on the evening of Friday 24th February.

East West Express.

Cec. Gunning is hoping to run this train on the first Saturday in May, ie., May 6th. The object is to move a given load (1200 lb. to 1500 lb.) a distance of 30 miles. The run will begin at 9.30am and an average speed of 5 mph. is to be maintained. Locomotives will be rostered to run the train in 12 divisions, 6 clockwise and 6 anti-clockwise. A locomotive will be required in steam to carry out push up duties if needed. Single 5in. gauge locomotives, medium or larger type, should manage unassisted while 3½ in. gauge locomotives will need to double or triple head.

The positions of station master, guard, yard attendants, shunter, signal men and possibly passengers will need to be filled. This will be a test of time keeping ability. So that complete changeability of locomotives can be assured couplings should comply with Drawing 001 Type 1, standard bar couplings, as approved by the 1974 Convention. Contact Cec. Gunning for more details.

Duty Roster.

- Mar. '78. G. Sharp, B. Kilgour, R. Larkin, P. Hinkley, J. B. Hurst, P. Shiels, J. Singline.
- Apr. '78. M. Haynes, J. Sorenson, B. Potter, E. Sweet, W. Hamilton, P. Dunn, J. Lyons.
- May '78. J. L. Hurst, J. Davies, R. Lee, N. Campbell, K. Capes, A. MacKellar, M. Tyson, B. Peake.
- June '78. B. Hurst, B. Tulloch, A. Eyre, L. Thompson, J. Hyde, C. Wear, M. Yule.

Gate roster. The President will contact the members involved.

Directors Meetings.

Members may attend Directors meetings on application to the Secretary and the invitation of the President.

For Sale.

Horizontal mill / boring machine, mounted on floor cabinet with 240 V. AC motor. Swivel table 20in. X 6in. with 9in. travel, max. spindle height above table 11in. 2 and 3 jaw self centring chucks. \$ 325. ono.
Contact Barry Potter. 639 1140

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Special Note.

The S.L.S.L.S. will visit the Lake Macquarie Live Steamers at Edgeworth on the last weekend in May, ie., May 27th. and 28th.