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.

With the passing of Easter we have seen another 6o Convention come and go. This year it was the turn of the Sydney Society of Model Engineers to host this event. It was obvious to see that the S.S.M.E. had put in a great effort to bring their running facilities to the extent they now control. The ground level track is now most complex, much has been done in the three years since I was last at their grounds. Goes to show what a dedicated group can do when they want to.

On another matter on the Friday of the Convention I met one of our own members who had prepared a story on his latest project, for the sake of the, your, Newsletter it would be good to get some more articles in the same way.

I feel that it was also good for the S.L.S.L.S. that two of the three Awards made at the Convention went to our members, well done.

John Lyons.

On show at the Convention was Jim Ranford's, not long finished, 2-2-2-0 " Jeanie Deans ". From Jim here is his story.

The Teutonic Class Locomotive.

I have frequently been asked why I chose to build a Webb Compound, or Teutonic Class, which is its correct designation, instead of a more conventional and popular type of locomotive, particularly as the popularly held view of their performance left a good deal to be desired. Well, there-in lies the reason; not as it may be imagined to proove or disproove anything, I have a completely open mind, but the unusual, the un-convential, the completely different has always held an appeal to me and a challenge I could not resist as far as building is concerned.

Only the bearest and minimum of information is available and the drawings required considerable alteration and modification to make things fit. A lot is left to the imagination. I've never seen a photo of the full size Teutonic Class, in fact I doubt if any exists, and only poor ones of three models. The only illustrations in either colour or black and white are those of the closest resemblance - the Precedents and Dreadnoughts. Webb reduced the diameter of the Precedent driving wheels without much success so he turned his ideas the other way around and built ten more with big 7ft.1in. driving wheels. the improvement was amazing and the Teutonics took their full share of express responsibilities with excellent results. They were Nos. 1301 Teutonic, 1303 Oceanic, 1303 Pacific, 1304 Jeanie Deans, 1305 Doric, 1306 Ionic, 1307 Coptic, 1308 Adriatic, 1309 Celtic and 1310 Gealic. (note that all except 1304 the spelling ends with "ic ")

No. 1304 Jeanie Deans was stationed at Camden Shed and put into regular service between Euston and Crew, working the 2 p.m. Scotch diner and returning on the corresponding Up Scotsman. This meant a daily run of 320 miles and the train, generaly 300 tons, called for an average speed of 50 m.p.h. down and 52½ m.p.h. up, overarather difficult road. She performed this splendid work for nearly nine years (from January 1891 to August 1899), establishing a world famous reputation covering 567,784 miles and burning an average of 32½ lbs. of coal per mile. On one occasion she ran from Nuneton to Willesdon, 91½ miles in just under 102 minutes, pulling 326 tons up the long 15 mile ascent to Tring in 17¾ minutes (av. 50.7 m.p.h.) No.1308 Adriatic, ran the trip from London to Crewe, on the record night of the 1895 Race-to - the - North in 148 minutes, whilst No. Ionic, on September 8 th 1895, ran the trip from Euston to Carlisle, 299¼ miles non-stop in 353 minutes. This is an average speed of 50.86 m.p.h. for nearly six hours. On this occasion the famous Ben Robinson was at the regulator. No.1301 Teutonic, the first of the class, did 88,000 miles before requiring an over-haul. The enthusiastic press of the time

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The Teutonic Class. cont.
claimed that it would not be long before the run between Euston and Aberdeen was done in as many minutes as there were miles. It has not been done yet.

In two of his books O.S.Nock has drawn specific attention to the loads hauled regularly and punctually, night after night, on the 8 p m. Tourist Express immediately prior to the 1895 races, mostly without pilotage. There is also the altogether outstanding achievement for that period, recorded by Mr.A.C.W.Lowe in 1893 of Gaelic climbing Shap with the 2 p m. Scotsman consisting of 10 bogie coaches of 277 tons tare and 295 tons full. This involved a mean effort of some 655 equivalent drawbar horsepower sustained for 45½ minutes between Carnforth and Shap Summit by a 45½ ton locomotive. Indeed as a feat of mountain weight haulage based on engine weight, it is in factgreater effort than that of the 106 ton Duchess of Abercorn in 1938 hauling 610 tons, although the Pacific's time was 33⅓ minutes. Gaelic's average total power output sustained for ¾ hr. was about 800 i.h p. which for a design of 1889 was quite exceptional. These few examples, and there are many more, are sound testimony to their reliability and these locomotives could, and did, put up performances that would have been brilliant a generation later They will stand comparison with any contemporary design.

Remember that these performances were by a 45½ ton locomotive with an adhesive weight of only 31 tons. They must have looked very impressive with the flashing up and down motion of the valve rods of the fascinating Joy Valve gear and as there were only 2 exhaust beats when running compound instead of the customary 4 they gave the impression that they were running much slower than they really were and it was not 'till they rushed by with a roar that their true speed was fully realised.

The to and fro motion at low speed caused by the large L.P. cylinder was the cause of many complaints by passengers. Starting was often a problem but became less so when the drivers became more aquainted with their peculiarities. The absence of coupling rods was often criticised, but having the inside slip eccentric, even with rods, the motion would have locked if the two valve gears were in opposite directions. Besides, it is estimated that coupling rods increase the resistance of an engine by 15% at the draw bar.

Webb's peculiar temperament, arbitrary disposition and completely closed mind to criticism and advice certainly contributed to his undoing as it were. The manner in which his successor, Whale, was appointed and the rapid and effective n manner in which his engines were either scraped or altered says little for the overall success or otherwise of them. According to Martin Evans, whose knowledge and access to sources of information on these matters would be almost indisputable, there is plenty of evidence in the technical press of the time that his last design, the " Bill Baileys " was an almost a complete failure. It is sad in a way that a great organiser and clever mechanical engineer as Webb certainly was, he did not grasp the basic principles of compounding as applied to locomotives and of course with his temperment nobody could possibly teach him.

The age old saying, " You can't scale nature " is particularly valid, mayby more so than usual, when it comes to heat transfer and losses which are exaggerated in a model by the increased surface to volume ratios. Everything gets especially outside the cylinder, slide bars,rods, crossheads, valve spindles and even the frames etc., provide an excellent heat sink. Virtually, the very reason for compounding, hardly exists in a model and it is more than likely that a model compound is less efficient than the equivalent simple especially with regards to heat transfer losses. Not with standing, the building of a Teutonic in ¾" scale has been an interesting and challenging project. The inverse square law applies with outstanding clarity here when you consider that although we refer to ¾" scale as 1/16th, which it is of course in the accepted sense, it is only in the linear dimension. Consider this---- if it were really 1/16th shouldn't it also weigh 1/16th. ? My 3½" gauge Teutonic would weigh 2.84 tons. Food for thought.

Jim Ranford.

That Great Train Puzzle. Here it is again with the solution.

On a train Smith, Robinson and Jones are the fireman, guard and driver, but not in that order. Also aboard the train are three businessmen who have the same names: a Mr. Smith, a Mr.Robinson and a Mr.Jones. 1. Mr.Robinson lives in Sydney. 2. The guard lives exactly halfway between Melbourne and Sydney. 3. Mr.Jones earns exactly $20,000 per year. 4. The guards nearest neighbour, one of the passengers, earns exactly three times as much as the guard. 5. Smith beats the fireman at billiards. The passenger whoes name is the same as the guard's lives in Melbourne.

Solution next page.

The Great Train Puzzle.

The guard, who lives half way between Melbourne and Sydney, also lives near Mr. _____ , who earns three times as much as he does. Mr. _____ can't be Mr. Robinson as Mr. Robinson lives in Sydney. He can't be Mr.Jones, as Mr.Jones's $20,000 a year isn't divisible by three. Therefore the guards neighbour must be Mr.Smith.

The passenger whoes name is the same as the guards lives in Melbourne. He cant be Mr.Robinson, as Mr.Robinson lives in Sydney. He can't be Mr.Smith as Mr. Smith is a neighbour of the guard, who lives halfway between Melbourne and Sydney. Therefore he must be Mr.Jones.

Therefore the guards name is Jones also. Smith beats the fireman at billiards, so the fireman must be Robinson.

So the drivers name is SMITH.

The 1981 Convention.

To give you a coverage of this years Convention I asked Ron Larkin and Maurie Haynes to let us have their impressions of the event, here then to start is Ron's account.

Friday 17th. April dawned to a glorious morning, setting the pattern for the whole of the Convention Weekend. Arriving about 9 a.m. the roundhouse was nearly full then, the engine count later that day was nearly seventy engines, with more to come on Saturday. Altogether over one hundred engines were registered for the Convention period.

The track at Luddenham is a credit to the S.S.M.E. the host club for the Convention. A lot of work has gone into the track, the trestle and tunnel really lend extra atmosphere to the layout and the pleasure derived from running on this multi gauge track.

Many varied engine forms were on view over the weekend from the 1903 Fowler traction engine driven to the grounds by owner Colin Wear to the small model traction engines, boats and cars and locomotives of all gauges , shapes and types.

Old aquaintainces were renewed, and new ones made as usual at these affairs. Thoes not running engines had plenty to do to occupy the time, with stories and experiences to swap with others the time just flew past.

From the S.L.S.L.S. there was a good roll up of engines plus owners to represent our Society. There were too many to mention, all seemed to be enjoying themselves in different ways.

One engine worth mentioning was that of Geoff Sorenson, it actually had its long awaited coat of paint, a very finely detailed locomotive that goes as well as it looks.

In all a good time was had by all, as the saying goes. Many thanks to the members of the host club for the tremendous effort put up in the organizing of this the 25th. Miniature Steam Convention.

From Maurie Haynes.

Arriving Saturday, just in time for morning tea after unloading 3075 and 42106 with the assistance of Mal McAulay. I do not know the actual locomotive count for the day but extra track was laid to take the overflow from the multi-gauge locomotive steaming bay. I thought, well, it will be a bit slow getting around with this amount of traffic on the track. Never less shortly after lunch Mal and myself were out in the thick of it. The peak of course was at about 2.30pm with the Official Opening and Grand Parade. I must say thanks to the track marshals and to Gordon who was in charge of loading and unloading in the steaming bay.

After tea we settled down to some steady night running. The traffic was still very heavy but moving well. The night run will be well remembered by all present. As the evening de drew on and the temperature dropped the air was very still, smoke and steam from the locomotives lay close to the ground and on leaving the station moving west towards the centre of the tracks was a sight I have never experienced before on a miniature railway. The ground flood lights shining through the smoke and steam with dots of red and amber signal lights, white head lights and red rear lights made a picture of real live steam.

All went well until my first derailment on locomotive 42106 and driving truck only. I was following another train through an amber light up the top end near the main signal box when half way through a set of points the signalman threw the

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1981 Convention cont.
points under me, to my horror, realising his mistake, he threw them back again this all happening in a split second. The effect of such action of course completely derailed the locomotive and truck, fortunately no damage to the loco.

The multi-gauge points have a very rapid change over action driven by one horsepower electric motors, they have to be seen to be believed. Having had this experience once was enough and made me very wary when approaching points from then on. First check the signal, then the signalman and then the points, never the less I did get caught again this time the last bogie of the passenger car was derailed. I did hear other drivers suffered the same fate over the week end.

How ever the night run was most enjoyable, some trains running until 2 a.m. or later, to mention a couple 3813 and 3142.

Congratulations to two of our members who took out two of the Trophies, Ray Lee's excellent 35 and Geoff Sorenson's 30T. All up a most enjoyable weekend was had by all.

The Club House. Report by Trevor Arney

With the major part of the brick work completed and windows installed the Club House continues to move towards lock up stage. Preparations for the concrete floor of the meeting room has commenced with the toilet and kitchen areas to follow when the drainage work has been completed under contract by our neighbour plumber.

Quotes have been accepted for the supply of roof structure and clading. The erection of the roof and covering will be carried out by ourselves and should begin about mid May.

I would like to take this opportunity to thank all members who have helped in getting this project to its present stage of construction.

Inter Club Running Day.

The first such day for this year will be hosted by the Sydney Society of Model Engineers at Luddenham on Saturday 30th. May.

Charity Day

There will be a Running Day held for the Crowle Home early in September. The date will be published in the August Newsletter.

Annual General Meeting.

This important event will be held at our usual meeting place on the first Tuesday in June, that is Tuesday 2nd June at 7.30 p.m.

New Members.

I would like to welcome the following provisional members to the Society. Ray Miles, Bruce James, Trevor Collett, Eric Holmes, John Pickup, Peter Shellshear and Jack Murray.

Duty Roster

June '81. W.Edgecombe,P.Brotchie,G.Esdaile, W.Allison, B.Donovan,B.Peake,J.Leishman.
July '81. T.Arney, G.Farkas, M.McAulay, M.Tyson, A.Mackellar, H.Ryan, D.Price.
Aug. '81. W.Richards,I.Ramsay,T.Geraghty,D.Jones,W.Sandberg,J.Hagen.
Sep. '81. G.Sharp, B.Kilgour, R.Larkin,P.Hinkley,J.B.Hurst,C.Wear,

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Cakes and other goodies to eat are always welcome by the Ladies who staff the canteen on our Public Running Days. Please keep it in mind.

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