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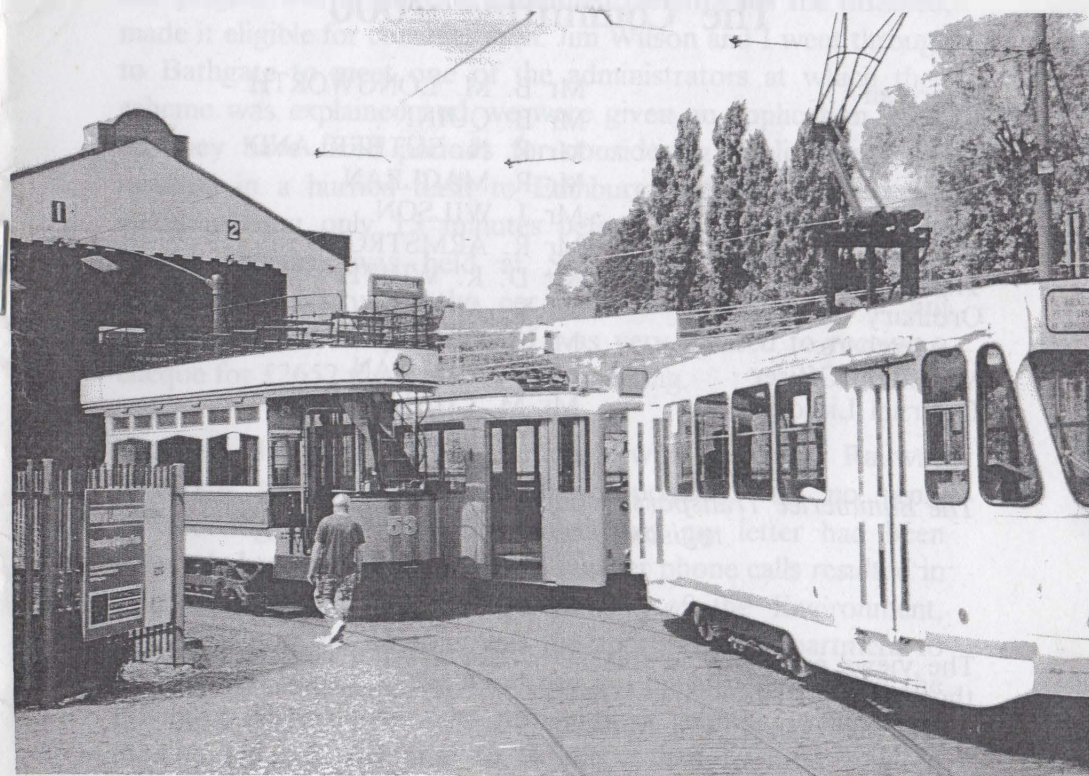
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TROLLEY

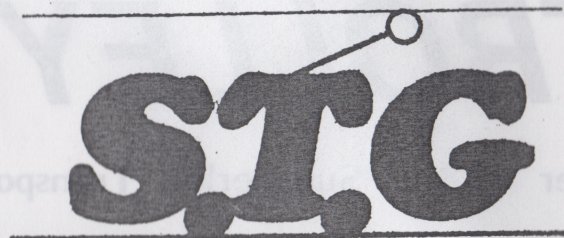
Newsletter of the Summerlee Transport Group

FEBRUARY 2001



THREE OF OUR FLEET

Lanarkshire 53 Dusseldorf 5232 Brussels 9062



The Committee 2000

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The Summerlee Transport Group is a voluntary group and is registered as a charity.

The views expressed in this newsletter are not necessarily those of the Editor, the Transport Group or Summerlee Museum.

**OPERATING SCOTLAND'S
ONLY WORKING TRAMWAY**

FROM THE CHAIRMAN

Since reporting in the last issue that the Museum was due to close for the winter at the end of October, I am delighted to report that this decision was rescinded and the Museum has remained open.

Having obtained the promise of a grant from ADAPT for half the cost of installing the wheelchair lift in 5232, the Museum suggested we could also apply for another grant from the Lloyds TSB Foundation. Although the Foundation does not normally consider grants for heritage or transport schemes, the fact that our project was to provide additional facilities for the disabled, made it eligible for consideration. Jim Wilson and I went through to Bathgate to meet one of the administrators at which their scheme was explained and we were given an application form. As they have fixed periods for considering applications, this resulted in a hurried dash to Edinburgh with the application form, arriving only 15 minutes before the office closed. A further meeting was held at Summerlee with one of the adjudicators who saw the car and was able to get a full appreciation of our proposals. I was very pleased to receive a cheque for £2652 the day after their meeting.

We had also tried to get in touch with the local Railway Inspector to notify him of our proposals. With no reply forthcoming, a phone call revealed that my letter had been forwarded to their London office. Further phone calls resulted in a letter advising that the Department of the Environment, Transport and the Regions was the appropriate Department to deal with it. However, the letter had not been passed on but the official in charge, John Adey proved most helpful. He explained that as the car was new to Britain it had to meet modern regulations which are totally unsuitable for a heritage vehicle, but we could seek exemptions by applying for a Statutory Order. He

came to Summerlee in the summer with his assistant and they went over the car and pointed out the items for which we would have to apply for exemption. This is now being processed. However the Railway Inspector still needs to be involved and steps have been taken to get approval for the operation of the car.

Contracts for the completion of 1017 were prepared and Peter Price was awarded those for painting, wiring and plumbing work. In order for him to plan ahead, he wanted the truck frame reassembled so that he see it under the car. As he had not spoken to any of the Group members direct, this caused some problems and delays as we were under the impression that he wanted the truck completed which took longer than was necessary. However the confusion was eventually resolved and he was able to prepare things while we were asked to make other adjustments to the truck.

Enquiries revealed that the Royal Scottish Museum was interested in acquiring the Edinburgh top deck in the Exhibition Hall so this would mean there was a good working area for 1017's restoration while 5232 could be moved to the Depot in order to have the benefit of the power supply. This was carried out in July.

Mike Chalton had been making some alterations to the Dusseldorf car and while Alan Taggart was building the pantograph tower, a jumper cable was made up which allowed power to be supplied to it. This also enable the car to run the whole length of the line and it proved very free running and comfortable. A false platform for one end was also fabricated by Alan and the wheelchair lift has now been ordered.

Because of the need to complete the truck for 1017, work on the Graz car had stopped for some time. 225's truck had been

completed and was re-united with the body. As one team was putting the finishing touches to 1017's truck another lead by George Broom started to re-assemble the parts removed from 225 and rebuilt the platform. Once the brakes have been re-connected the car can be tested.

1017's restoration is progressing satisfactorily with extremely high quality of finish. Unfortunately a number of items have still to be fabricated and with Peter's full diary, it is likely that the car may not be finished until the autumn.

An offer by Adam Gordon to donate 1245 to the Group was received in late summer and it is hoped that North Lanarkshire will take this over.

Late in December Jim Reilly failed to turn up for his shift. A phone call from his family explained that he had had a heart attack. He was visited that day by the Summerlee staff and was in good spirits with no apparent side effects, however that night he had a second fatal attack. His funeral was attended by members of the Group and Summerlee Staff.

Another death occurred at the end of August, that of Chris Ellis who was not a member but who had given us a number of film shows. He had been suffering from inoperable cancer and was 44.

He has left the bulk of his collection to me to be used for SITA funds. As only part of this has been received it has delayed the auction intended for last Summer. It is now hoped to hold the auction in the Autumn and donations have been received from George Broom. If any members have any items of transport interest which they are willing to donate to the Group, they should let me know. Alternatively if they wish to sell items these could be put in the auction with a reserve price and any surplus

going to the Group. Those members who have requested details of the lots have not been forgotten and will receive them in due course.

Following difficulties in dealing with the training of motormen, Bob Connor has been re-appointed instructor and Bob Sutherland has also been appointed. The Motor School now operates on Thursday nights and we hope to be able to take others from the waiting list shortly. Anyone else who is interested in training and who could operate the cars on a regular basis should get in touch with me.

We would still welcome any other members who would like to get involved, to come along to our Thursday worknights from 7.30 - 9.00 pm

Last March, as reported in the last edition of Trolley, four members visited Portugal and saw the tramways at Lisbon, Oporto and Sintra with a further visit in May with other members when we did some work on the Sintra Tramway. Yet another visit is arranged for the beginning of March and we also plan to go back with even more new people in the second half of September. If anyone else is interested in visiting the tramways, helping at Sintra and/or seeing ordinary tourist attractions they would be most welcome to join us. Please let me know if you are interested or if you have any suggestions about group visits to other tramway systems.

Brian Longworth

1017 Co-ordinator.

As we now approach the ninth anniversary of restoration work commencing on 1017, it gives me great pleasure to report that this will (hopefully) be my one and only report as co-ordinator.

Tenders for the car were put out last Spring. Peter Price of Bradford was awarded the contract for all of the paint work on the car, all electrical work and the design and installation of the air brake system. Peter himself has vast experience in these fields. He has worked at Beamish Museum for many years, his speciality being overhead. He has also worked on many other systems and museums including Birkenhead, Seaton, Isle of Man, Sintra in Portugal, Switzerland and of course Summerlee where he redid the overhead at the depot curve three years ago.

Work started in earnest in early October with the fitting of the air tanks under number one end platform along with the brake cylinder. With the cylinder not being compatible with our car, Peter arranged for the fabrication of a small seesaw bracket that he designed for the Birkenhead tramway where they had discovered the same problem.

Meanwhile the Group put all its efforts into the re-assembly of the re-gauged Lisbon truck. The truck was moved to the main exhibition hall in July, at the same time as the car was moved. A problem that was found on Lanarkshire 53 was that there were no lubrication points on any of the brake hangers. After consultation with Mike Chalton, we modified all four hangers to house grease nipples. The hangers were realigned to a precision finish by Bob Connor. The truck is currently nearing a completed state. It has received its several primers, undercoats and gloss coats and the side frames will be lined out by Peter Price once the truck is under the car. Modifications to the top plates are still being carried out to ensure a proper fastening to the body. Bob

Connor has been overseeing this with a most critical eye. We can be sure though that with Bob involved, it will be first class engineering to his usual high standard. Robin Loudon, Jim Wilson and I have carried out all of the cleaning down and painting of the truck.

Whilst all of this other work has carrying on at a steady pace, the contract for the wood work was given to All Woods, a cabinet making company based in Drumchapel. Since the departure of Rab Nocher five years ago we have really struggled to find anyone in the Group with wood working experience. For the lads from All Woods it was also a first for them. Well there are not many 1904 trams being rebuilt these days! Trying to get over exactly how the car should look and what should go where was quite frustrating at first, but over the past four months the lads have excelled themselves and have brought the car on by leaps and bounds.

At present 99% of the interior saloon woodwork was refitted to the car. Some of the small ceiling mouldings had to be remade due to a leaky roof letting water in and eating the others away. At great expense, the Museum purchased birds eye maple for the ceiling. This is an extremely difficult wood to get hold of and very expensive but completes the car to its authentic pattern. The exterior finishing mouldings have also been completed. This is not a difficult task but there are several shaped edges to be planed out. The vestibule windows at No 1. end were fitted to the car at the beginning of February. The new canopy bend was also delivered and fitted. We are now awaiting the fabrication of the droplight window for both ends to complete the platforms. Once both platforms are complete, the wood workers will get on with the building of the bow tower.

In-between all this woodwork and truck rebuilding Peter has been carrying out all interior and exterior painting. We decided

that the car should be repainted into a mid 1930's livery thus being able to have a bow collector and keep the more distinctive livery. This is now nearing a completed stage. The final coat was applied at the start of February and the lining out work has recently commenced. This will include the Greek key corners, large stock numbers, a lined out truck etc. . Peter's paint work is finished to an extremely high standard which a lot of people thought had been spray painted. They would not be saying that if we had let Jim Wilson loose on it. The saloon has now been varnished and we are awaiting the end bulkheads to complete it.

Another task that is almost complete is the car's wiring. It is currently in place with only the connecting up of lights, controllers, resistances etc. still to be completed.

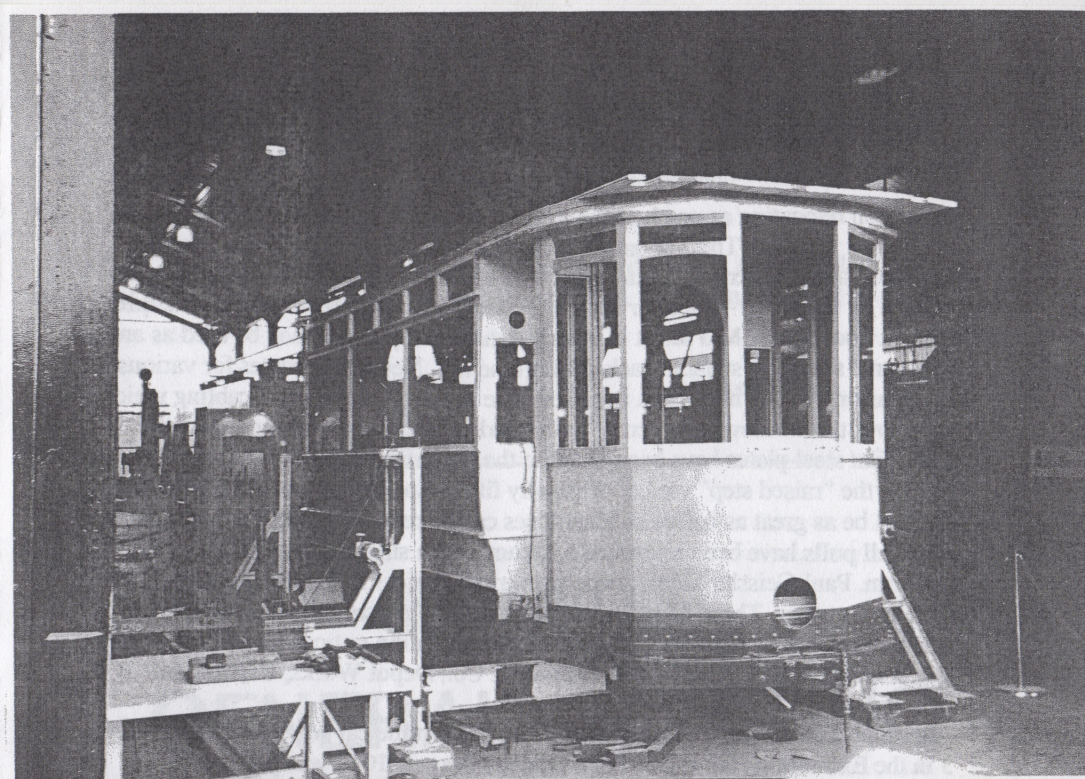
We still require some other parts of the car to be fabricated, (brass work) and are investigating the possibility of acquiring more authentic brake valves.

It is hoped that the car could be finished by November at the earliest. I would like to thank Bob Connor, George Broom, Ronnie Maclean and Mike Chalton who have all lent a hand over the past year. Thanks must also go to Bobby Armstrong who relinquished this post after five years due to work commitments. My biggest thanks go to my two sidekicks Robin Loudon and Jim Wilson for carrying out the bulk of all the other work on the car, without whom the car would not be at such an advanced stage.

Brian Quinn

MEMBERSHIP RENEWAL

Members are reminded that renewals are now due and should find a separate Renewal Form enclosed. New Membership Cards will be sent out after the A.G.M.



ABOVE:
1017
Looking
Good!

LEFT:
Brian Quinn and
Robin Loudon at
work with their
paint brushes

Last year work started on the initial assembly of the truck destined for 1017. A photograph taken during this operation compared to a picture taken around 1920 (see page 48 "Lanarkshire Trams") allows an interesting comparison of Lanarkshire tramway men separated by eighty years.

Although our generation of engineers do not have the works facilities and readily available supply of spare parts. The quality of the work done on our truck, which is undergoing final assembly in the main hall, would compare well with our predecessors.

Dusseldorf 5232 - Progress Report

Work on relocating as much of the interior electrical equipment as is possible has almost finished. The 24v batteries have moved across the car to a purpose made container under one of the seats. The space they vacated has in turn been utilised by the motor-generator set. Other items have also been relocated within the box housing the MG set. It is intended that the top of this box be used as an additional seat with suitable backrest/chrome rail. New cable routes for various low tension circuits have been installed. The exposed "works car" cabling which ran above the windows and across both bulkheads has been moved below the floor. Flat steel plates have been fitted to the floor directly above the wheelsets to replace the "raised step" variety originally fitted. Spring compression under load will not be as great as before so clearances can be reduced slightly. The original rope bell pulls have been reinstated together with a single strike bell on each platform. Paul Geissler kindly made up various notices in English to affix over the German ones. These mainly relate to emergency instructions within the saloon. Paul has also produced a fine set of destination notices for affixing to the slip boards manufactured by R.A. Connor & Co., Depot Works, Coatbridge!

An important milestone was passed in July, when the car was moved from Bay 3 in the Exhibition Hall to the Tram Depot. Glasgow 1017 was placed on temporary bogies and towed to Bay 3 in lieu. All electrical circuits could now be tested under load with the aid of a jumper cable used in place of the still to be fitted pantograph. At the appointed hour, the depot doors were opened, rubber gloved operatives hooked the jumper to the overhead, controller key forward, one notch of power and 5232 glided smoothly onto the depot fan! Sighs of relief all round.

Due to the difference in wire height, a pantograph tower had to be made. This was duly fitted to the car together with the panto. Many test runs have been made and to date the car has performed flawlessly!

Still to be done is the raised floor at "B" end. This forms the base for the wheelchair lift and provides a smooth surface from lift to saloon. Two wheelchair spaces will be provided. After an on-site visit by two gentlemen from the D.E.T.R. various exemptions will have to be applied for before fare-paying passengers can be carried. More of this in a later edition.

Various adjustments have been made to the overhead line at curves to make due allowance for the slightly narrower panto. head. At the time of writing, Peter Price is preparing the bodywork in readiness for re-painting. Slight damage was done to the roof curves, skirt bottoms and indicator clusters during the lifting of the car. Other minor defects in the bodywork are being attended to also.

The original livery is being reinstated ie. cream body with a grey stripe below the windows and a grey roof and panto. Our friends at the Rheinbahn have promised us the original style of lettering/transfers for application once painting is complete.

The official "launch" date has not yet been fixed but it is hoped that the car will be passed fit for service by spring/summer 2001. Watch this space!!!

Mike Chalton.

ANNUAL GENERAL MEETING

at Summerlee
on MONDAY 19TH MARCH 2001
at 7.30 p.m.

*Please make every effort to
attend*

Come and hear about the exciting new
developments at Summerlee

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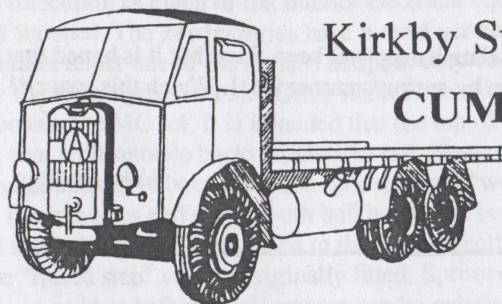
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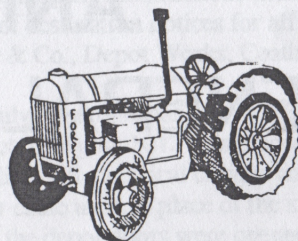
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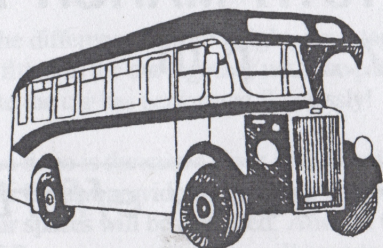
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COUPLERS – by Paul Geissler

The typical British tram could be described as a double deck vehicle running as a single unit on a two axle truck or, sometimes, on bogies (eg Aberdeen, Glasgow and Rothsay). The use of trailers, with a few exceptions, was not developed in Britain. There are several reasons that trailers were not used but the main one was objection by the police.

On the continent the use of double deck trams was the exception - admittedly they ran in Barcelona, Copenhagen, Dresden (horse cars) and were planned for Leipzig. Rather, single deck cars were utilised pulling one or more trailers. There were advantages with this approach: there was less strain on the bodywork, the number of trailers could be easily modified to suit the traffic, loading and unloading was quicker. (Is this why the concept of queueing is less developed on the continent?)

Summerlee now has two continental trams which pulled trailers, Graz 225 and Rheinbahn 5232, but those who have inspected the cars will realise each has a different coupling system. What are the different types of couplers?

The oldest type, as on 225 is the Socket Coupler. This has a socket to house the coupling bar which is held in place by a bolt dropped vertically through a hole in the socket housing. This engages into a corresponding hole in the separate coupling bar. Braking and lighting is by jumper leads or air tubes from motor car to trailer(s). This is a simple system and used extensively up to the 50s. It is not self acting and has only a single connecting bar, (Fig 1).

The Albert Coupler, named after the inventor, is stronger than the simple socket coupler having a double coupling with the coupling bar as part of the housing. It is therefore a double male-female coupling. Uncoupling is by lifting the uncoupling bolt which is integral to the housing, (Fig 2). It was developed between 1910 and 1920 and was widely used, again until the 50s. However, the Albert coupler is also not self acting.

In the 30s various experiments were undertaken in the tramways field, particularly in standardisation. At that time air brakes were being replaced by electric brakes. The problem with the air brake is that when it is applied the motor car begins to slow down but it takes time for the air to activate the trailer brakes, thus considerable jerking occurs. On the other hand, with an all electric tram, the motor car is braked using the rheostatic brake, this also generates power for the electro-magnetic brakes on all the trailers at the same time. The end result is a much smoother ride.

As part of this programme investigations were undertaken to develop a self acting coupler which also made the necessary electric connections.

The Scharfenberg Coupler (Fig 3) is the standard coupler fulfilling these requirements. The main housing has what are ball and socket locators. The ball has a coupling rod which engages into the socket. Sitting above the mechanical coupler are the electric connections, protected by a hood. When the mechanical connection occurs the hood is lifted and the electrical connections are automatically made. This is an excellent coupler, it is strong and easy to use and easy to uncouple. Scharfenberg couplers are to be seen on 5232. This was not original equipment when it was number 392 in the Rheinbahn fleet but was added when the car entered the works fleet as 5232 and was employed for shunting and for towing a salt car.

In Summerlee, however, if any of the other cars have to be rescued by 5232 it would be necessary to use a coupling adaptor. Thanks to the Rheinische Bahngesellschaft AG we have such an adaptor and so can deal with all eventualities.

Finally, it should be mentioned that in the former DDR (East Germany) a standard coupler was developed. It was very similar to the Scharfenberg but probably sufficiently different not to have to pay royalties (Fig 4).

Ref: Strassenbahn Archiv DDR Nr1 Geschichte-Technik-Betrieb, Verlag Ingrid Zeunert, DDR, 1983

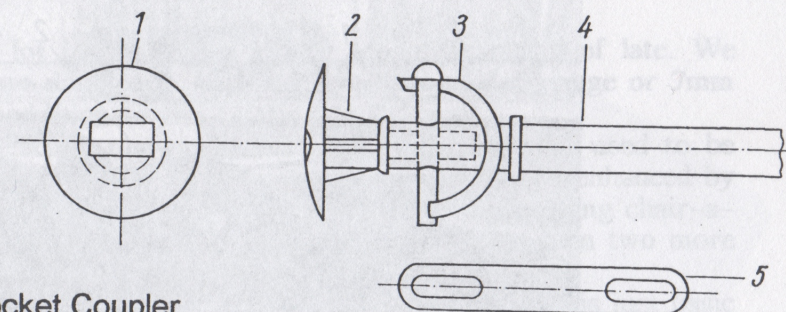


Fig 1. Socket Coupler

1. Coupler head with slot
2. Throat
3. Coupling bolt
4. Coupling beam (to car)
5. Coupling bar

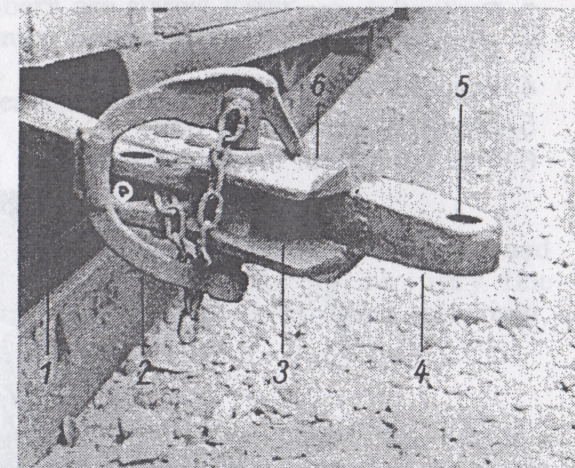


Fig 2 Albert Coupler

1. Coupler beam
2. Coupling bolt
3. Coupler mouth
4. Coupler bar
5. Hole for coupling bolt
6. Hand grip

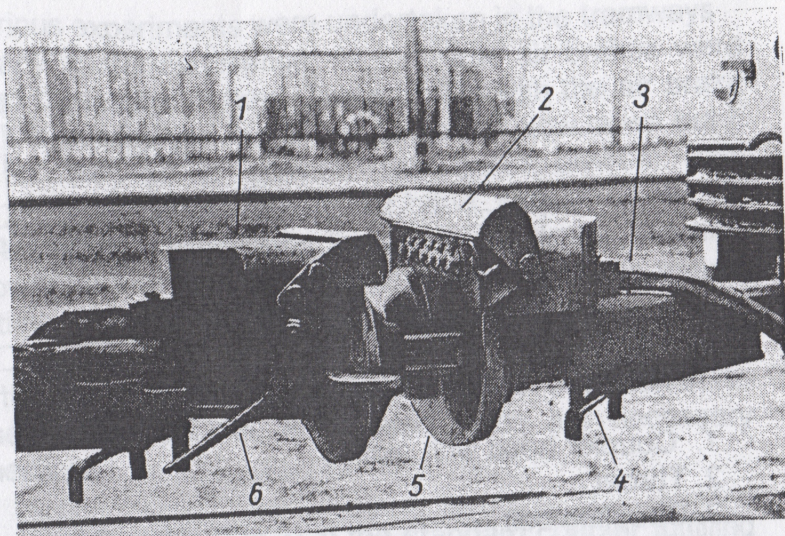


Fig 3 Scharfenberg Coupler

1. Electric coupling head
2. Protective cap
3. Cable
4. Spindle for height adjustment
5. Mechanical coupling head
6. Pull back lever for protective cap

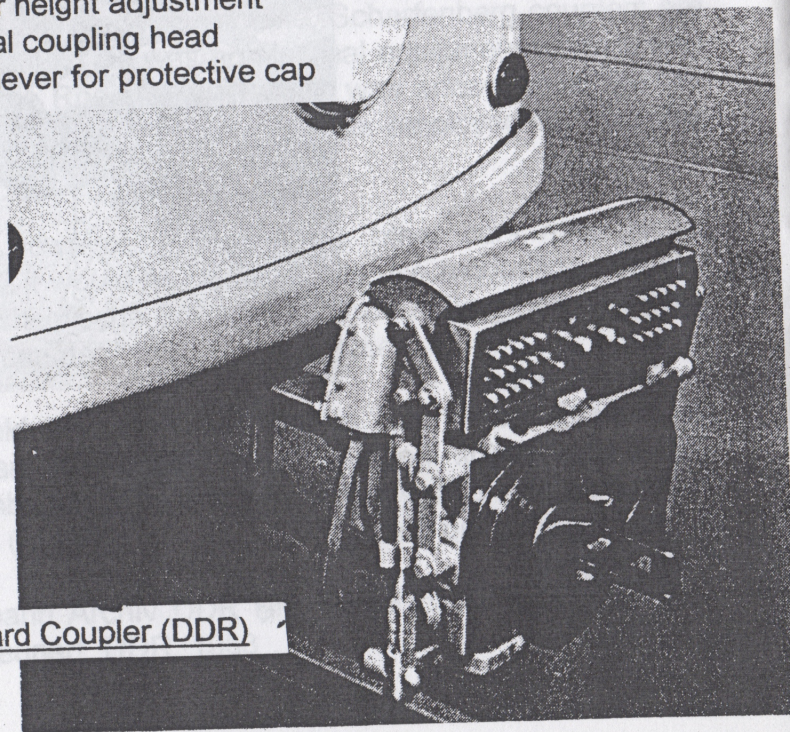


Fig 4 Standard Coupler (DDR)

MODEL CLUB

QUITE a lot has happened to the Model Tramway of late. We have in fact doubled in size and now have an "o" gauge or 7mm layout in addition to the existing "oo" layout.

The small scale tramway has been moved into what used to be the exhibition part of the Port-a-cabin and has been enhanced by adding a small fairground in the park area with working chair-a-planes and swingboats. The main street has been seen two more tenement buildings and a pub.

The new model tramway is 14ft x 4ft and at present is just basic track with no scenery, roads or backcloth - this will come when we build up some more money - at 10p admission it takes time. As with the other layout power is taken from the track, but shortly we shall erect overhead and run "real" trams.

Naturally it took some effort to re-arrange the Port-a-cabin to do all this but I am glad to say that we moved the "oo" gauge, built the "o" gauge, repainted the inside and repositioned the exhibits between both room in 3 weeks. There are still one or two minor items to tidy up, but we are open again, although in the winter visitors numbers are always lower.

As usual we are open most Saturdays from around 10 a.m. till 3.30 p.m.

If you are interested please come along.

Ronnie Maclean

REVIEWS

CARD KITS

DunRon Products have now produced a Glasgow Standard and Cunarder Tram in "O" gauge. These make up into very fine models and when stiffened up with heavier card and motorised, will grace any layout of that period.

THE WEARING OF THE GREEN

A book on the great days of the Glasgow Trams. The title is a play on words, and the reviewer has his own play on words when he describes the book as "All the Fun of the Fares". This is very much in character with the text, which not only bubbles with its own humour, but which constantly brings to the reader's recollection (a Glasgow reader, of course) humorous episodes within his own experience. The author is William M. Tollan, and priced at £14.00 the book is excellent value for money. We might even suggest that with "ting" echoing in our ears, we should call the book a "a snip"... (Readers who knew the Glasgow trams can work that one out).