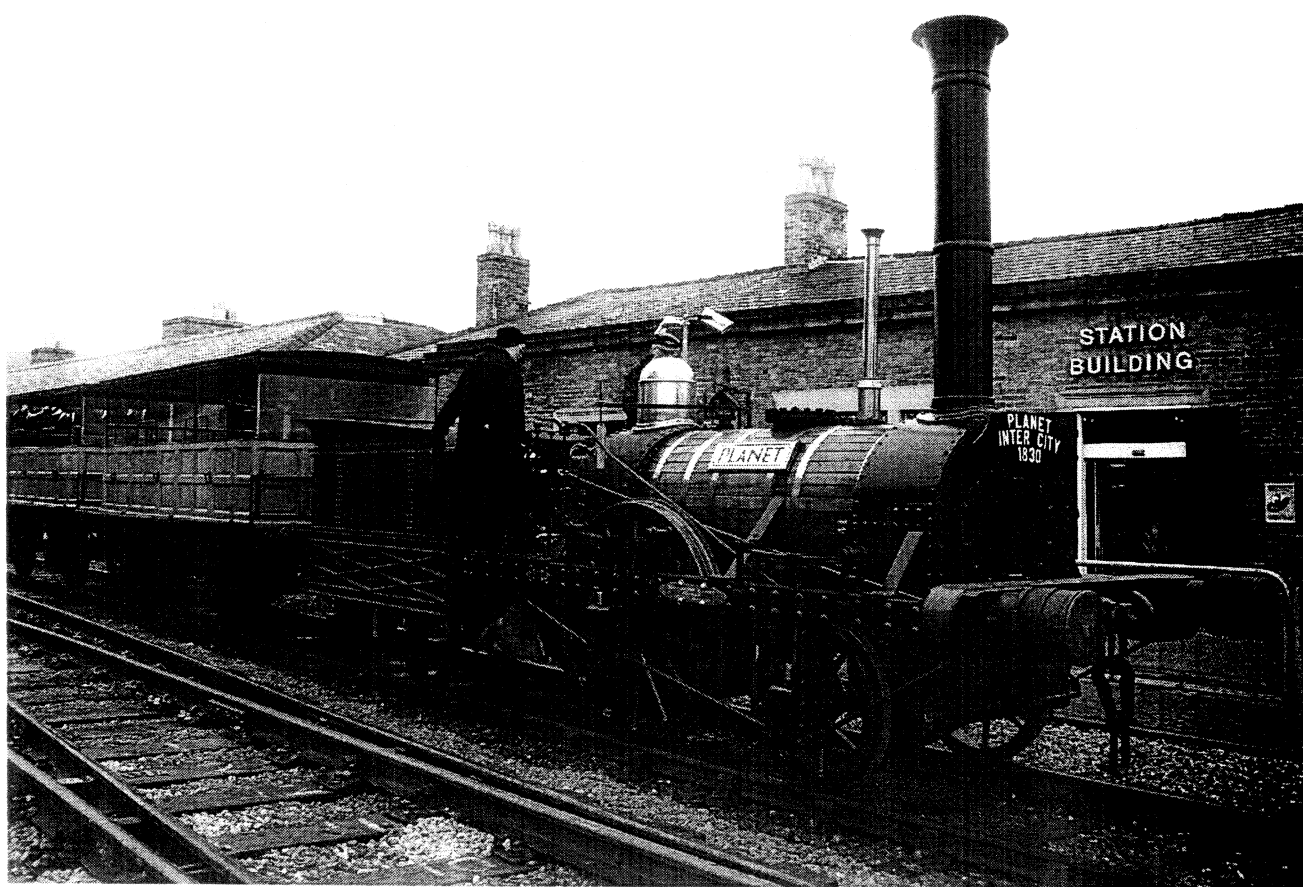


LIONSHEART

Number 63

April 2006

ANNUAL GENERAL MEETING 2006 NEARS



The 'Planet' replica is scheduled to give public rides on the day of the A.G.M.

Once again, the Museum of Science and Industry in Manchester is the venue for the Annual General Meeting on Saturday 20th May. This allows members to re-acquaint themselves with the real 'Lion' and the more domesticated to participate in the 'Lion' cleaning

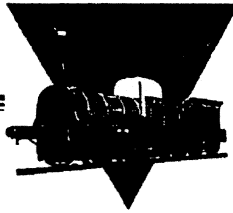
session. The bonus is being in one of the finest industrial museums in the country and at the very starting point of the 'Inter City' railway – the original terminus of the Liverpool and Manchester Railway.

continued ...

Issue 63 Contents

Annual General Meeting 2006	1	Winter Steam	13
Liverpool Museum News	3	Editor's Piece by Jan Ford	14
Lion at Tyseley	5	Letters to the Editor	15
Lion 150	5	The European Union	17
Book Review	13	View from the Chair by John Hawley	18

OLCO



OLD LOCOMOTIVE
COMMITTEE

From: PETER MOUNTFORD
63 GROVE ROAD
BIRKENHEAD
CH42 3XT
FEBRUARY 2006

Dear OLCO Member

OLCO ANNUAL GENERAL MEETING – SATURDAY 20th MAY 2006

The next Annual General Meeting of OLCO is to be held at the same venue as last year (see Agenda below). The day's activities will commence at 11.00 am for those who can make it for a cleaning session on LION. The Museum will provide cleaning materials but members may want to bring overalls or similar protective clothing. The AGM will start at 2.30pm. The Museum operates a restaurant where members may purchase meals/snacks.

As this is an industrial working area please exercise the proper care to avoid accidents.

On arrival please advise Museum staff that you are attending the OLCO AGM or cleaning session. If you show this letter/Agenda it will allow free parking on site.

Please try and delay your departure after the AGM so we can enjoy a meal together and have some association.

Sincerely

Peter Mountford
for Jon Swindlehurst
Secretary

AGENDA

TWENTY-SECOND ANNUAL GENERAL MEETING OF THE OLD LOCOMOTIVE COMMITTEE TO BE HELD IN THE GOLDSTONE ROOM, MAIN BUILDING, MUSEUM OF SCIENCE AND INDUSTRY, MANCHESTER, AT 2.30 pm ON 20th MAY 2006 .

1. WELCOME BY THE CHAIRMAN
2. APOLOGIES
3. MINUTES OF THE 21st ANNUAL GENERAL MEETING (circulated with LIONSHEART)
4. MATTERS ARISING
5. CHAIRMAN'S REPORT
6. TREASURER'S REPORT
7. ELECTION OF OFFICERS.

The retiring committee is as follows :

Chairman – John Hawley – not available for re-election
Treasurer – Jon Swindlehurst – available for re-election
Secretary – Jon Swindlehurst – not available for re-election
LIONSHEART Editor – Jan Ford – not available for re-election
LIONSMEET Co-ordinator – Alan Bibby – available for re-election

8. LIONSMEET
9. ANY OTHER BUSINESS

LIVERPOOL MUSEUM NEWS

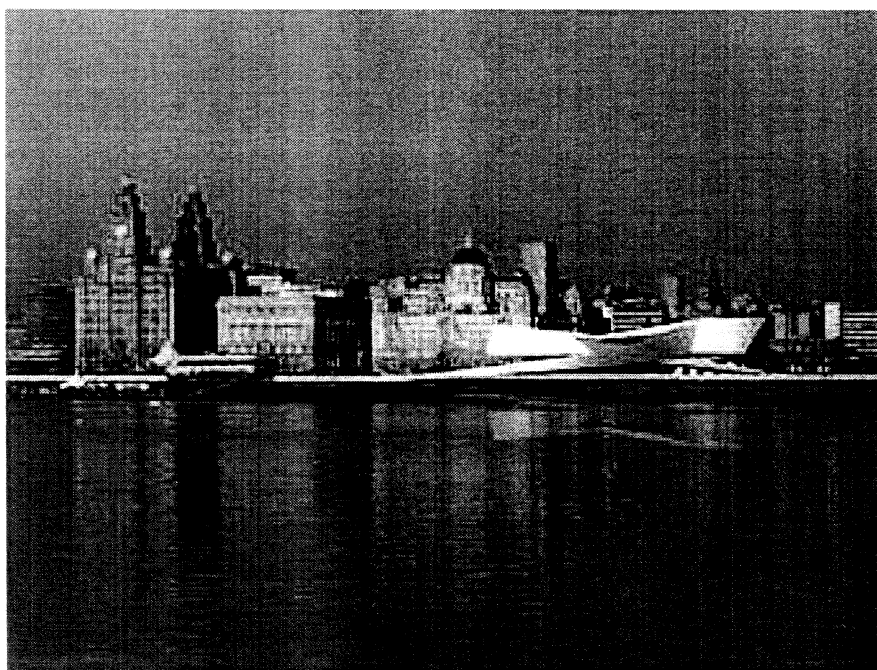


Image of the proposed museum by architects 3XN

As we previously reported, when the Museum announced that 'Lion' would not steam again, they explained that curatorial ethics precluded further use since the artefact, modified as it was from original condition, was far too important historically for anything other than conservation in its present state. However, they invited OLCO to participate in the 'interpretation' of 'Lion' once on display in her new home in the proposed Museum of Liverpool.

Well, news of this exciting project is now emerging and we are sure OLCO members will wish to keep up to date with developments.

On 4th June 2003, Secretary of State Tessa Jowell M.P. announced that Liverpool had won the prestigious title of European Capital of Culture 2008, calling Liverpool a "worthy winner" and praising the vision, passion and enthusiasm which had won the title.

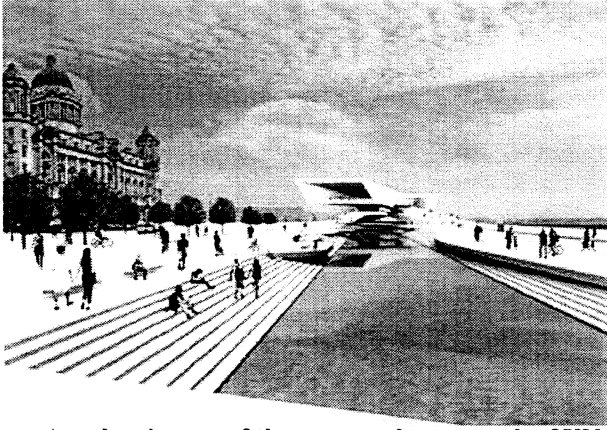
On 2nd July 2004, UNESCO's World Heritage Committee announced that Liverpool would become a World Heritage Site. The area, including Pier Head with world-famous buildings and historic docks now ranks alongside Stonehenge, Durham, Bath and Hadrian's Wall as one of Britain's 20 World Heritage Sites. Heritage Minister Lord McIntosh declared the decision "wonderful news for Liverpool" and hoped that these developments lead to "considerable economic benefits by both encouraging more people to visit the city to see its wonderful heritage of architecture and by industry to invest in a city that offers so many attractions". Council Leader Mike Storey commented at the time "This is the news we have been waiting for. Combined with becoming European Capital of Culture in 2008, Liverpool is rapidly becoming a city of world significance again".

So, the challenge to the Museum of Liverpool team was to produce a new museum which not only allowed them to fully discharge their curatorial ethics in the

context of a World Heritage Site but to meet the aspirations of all parties in Liverpool. The group of early 20th century buildings behind Pier Head (Royal Liver Building, Cunard Building and former Mersey Docks and Harbour Board offices) are known as the 'Three Graces'. A design by Will Alsop for a modern 'Fourth Grace' foundered. So, in 2005, the Museum chose a design by Danish architects 3XN to occupy the space between the Three Graces and the acclaimed Albert Dock Conservation Area. David Fleming, director of National Museums Liverpool, called the design "Liverpool's first 21st century architectural masterpiece".

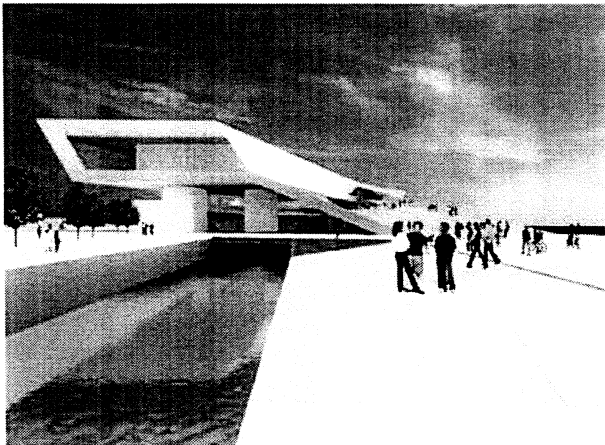
More unkindly, the design has been called "a sort of dented shoe box on stilts lurching diagonally across Pierhead" or simply "the Sunlounger". Defending this planned addition to a World Heritage Site, council leader Warren Bradley is reported as saying "It may look a bit different, but isn't that what architecture's about? Let's be more inventive and modern. It's about learning to live with change and modernisation. We are living in the 21st century, after all". With the support of the CABA (Commission for Architecture and the Built Environment) and English Heritage, it is understood that planning consent has been granted.

Unimpressed, ICOMOS-UK (part of the International Council on Monuments and Sites, which advises UNESCO on World Heritage sites) has damned the proposed Museum of Liverpool as "undermining and diminishing" the historic location. The Sunday Times reports Susan Denyer, secretary of ICOMOS as saying "To seek to erect a fourth building of such architectural pretension shows a fundamental misreading of the precious nature of the existing group of buildings and the rationale for the inscription of the World Heritage site".



Another image of the proposed museum by 3XN

The Museum applied to the HLF (Heritage Lottery Fund) for 11.4 million pounds to equip the museum. A further 40 million pounds construction funds from the NWDA (North West Development Agency) and the EU (European Union) depends upon this initial funding. Although the HLF funds were widely regarded as a certainty, in a surprise move funding has recently been declined, giving rise to a further period of uncertainty.



Lion's Ideal Home?

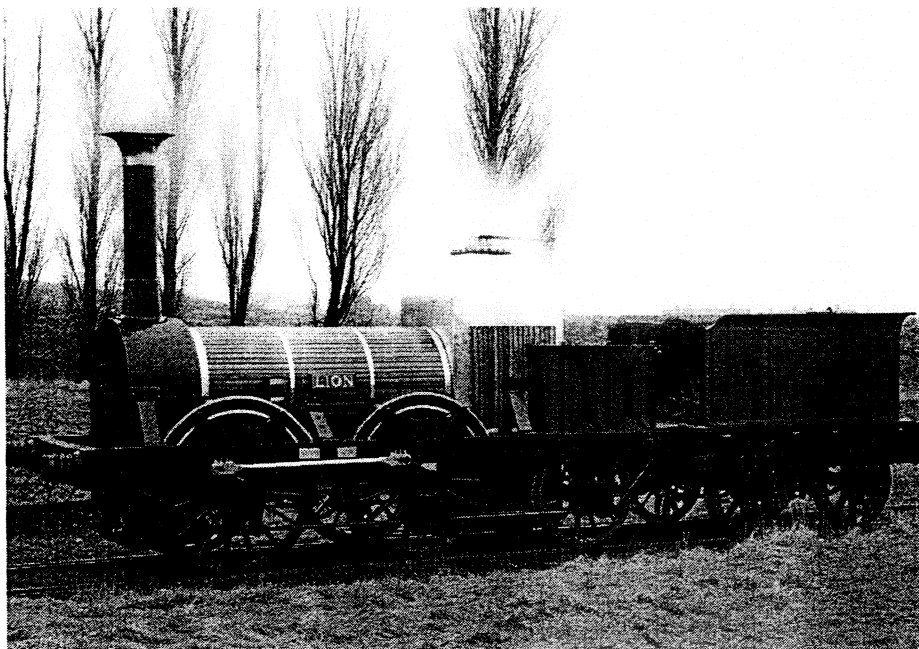
The new Museum of Liverpool is not the only proposed development to grace this World Heritage Site. The Mann Island site is also planned for regeneration. The architectural correspondent of 'Private Eye' comments:

"Not content with spoiling Pierhead utterly, Liverpool is now ready to grant planning permission for a commercial development of three new buildings which will block the dramatic view of the Three Graces from the Albert Dock. These residential blocks will not be boringly rectangular but will have exciting sloping sides and awkward angles to harmonise with the dented shoebox next door. Such is 'iconic' architecture."

This scheme comes from Neptune Developments and Countryside Properties. An image of the re-developed area has been produced by the developers. Our methods of reproduction do not do justice to these computer-generated visions of the future but it is to be hoped that our members can extract some flavour of what is planned.



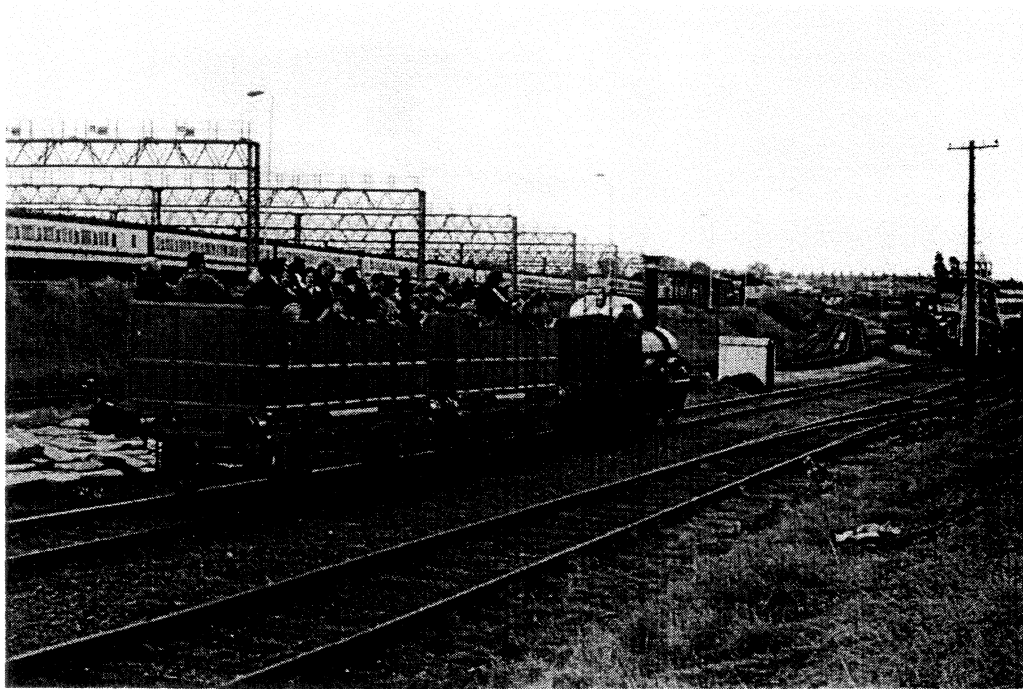
Image of the proposed Mann Island development



'Lion' after restoration for her 150th birthday in more prosaic surroundings

LION AT TYSELEY

After 'Lion' appeared at the Rainhill Cavalcade in 1980, she appeared at a number of venues. These pictures were taken by John Allen at Tyseley in 1981 and E.F. Clark has obtained his permission to use them. Photocopying a scanned image does not do the original justice, but members might like to be reminded of a time prior to the re-formation of our present Old Locomotive Committee.



LION 150

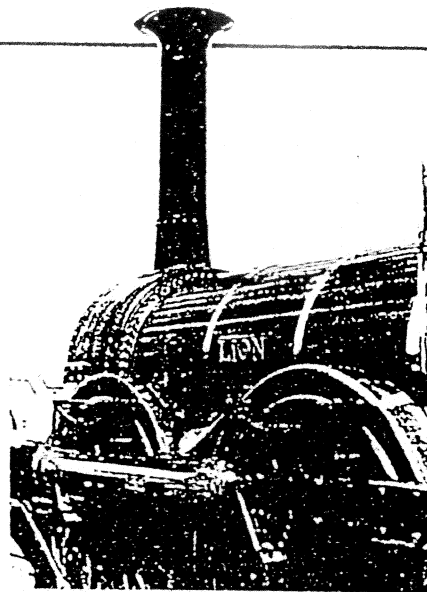
In 1988, of course, 'Lion' reached her 150th birthday. Dr. Adrian Jarvis who, at the time, was Keeper of Social and Industrial History at the National Museum on Merseyside produced a history of 'Lion' which was published in 'Railway World'. For the benefit of more recent members, we are reproducing this history, with grateful thanks to the author and publisher, starting on the next page.

IN JULY THIS YEAR the National Museums & Galleries on Merseyside will be organising a party to celebrate the 150th birthday of their most famous transport specimen, *Lion*. The exact nature of the ceremony has yet to be determined, but readers may rest assured that it will undoubtedly involve her re-appearance fully restored to health, strength and steam.

Lion, for the benefit of any unfortunates still floundering in the slough of ignorance, is locomotive No 57 of the Liverpool & Manchester Railway, and is the only complete survivor from that pioneer venture. It is arguable that she is the oldest working locomotive in the world, though it must be admitted that such a claim involves some careful nit-picking at the expense of the Smithsonian's *John Bull*, which is undoubtedly older and equally undoubtedly capable of being made to work. The distinction, if there really is one, is that *Lion* will work just as she normally stands in her galley and pretty much 'as built', whereas *John Bull* requires the temporary fitting of some modern components, notably an injector.

Very little is known of *Lion's* service with the L&MR or its successors, and her history between 1859, when she was sold to the Mersey Docks & Harbour Board, and 1923 when she was 'discovered' and publicised is even vaguer. No evidence has yet come to light to reveal when or how she came to be adapted as a stationary pump at Princes Graving Dock. As found in 1923 she had suffered the amputation of her hind axle and various other parts, but detail of the means of driving the pump is absent. The dock had been opened in 1873 and it seems reasonable to suppose that *Lion* had worked on dock construction until that date, when she was 'converted'. Reasonable to suppose perhaps, but nothing is as yet proven. In a sense it does not matter, for the real significance of *Lion's* undignified mutilation and confinement was that it enabled enough of her to survive a long period of time when she was just another obsolete locomotive and still to be capable of restoration when she was recognised as being rather important. The Liverpool Engineering Society established an 'Old Locomotive Committee' to organise her rescue and restoration. This work was undertaken at Crewe Works, and *Lion* emerged in full working order to become a principal attraction at the Railway Centenary Celebrations of September 1930. A circular track was laid in Wavertree Playground, and *Lion* ran round (and round, and round . . .) it pulling an 'Old Time Train' of replica L&MR stock built for the purpose at Derby.

It was envisaged that, when the celebra-



LION 150

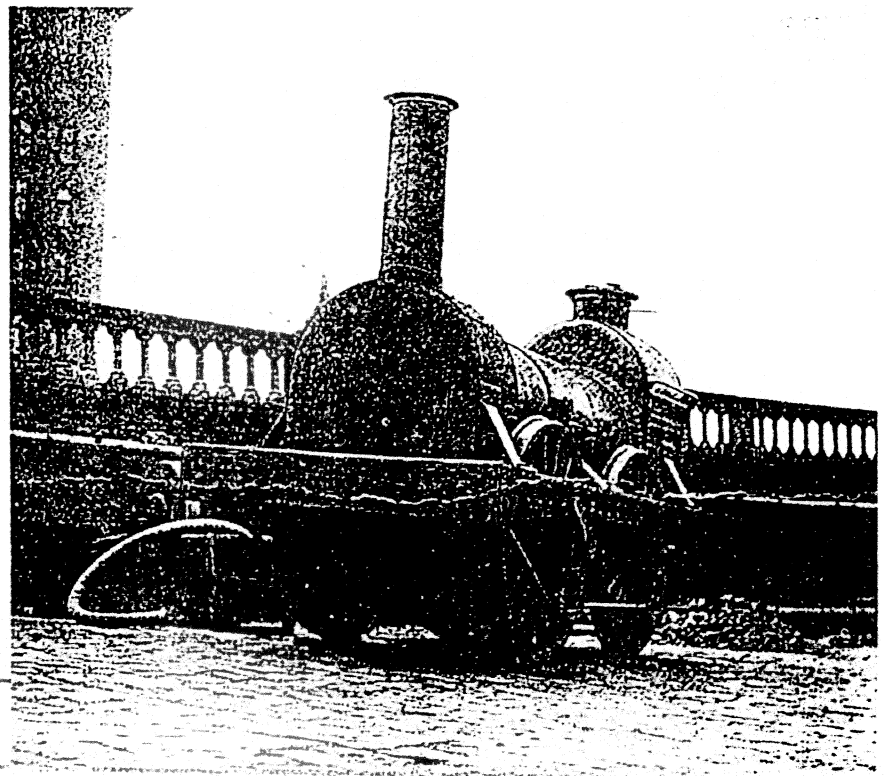
Adrian Jarvis

tions were over, *Lion* would go, as other such relics had gone, to an honourable and dusty retirement on a station platform, and

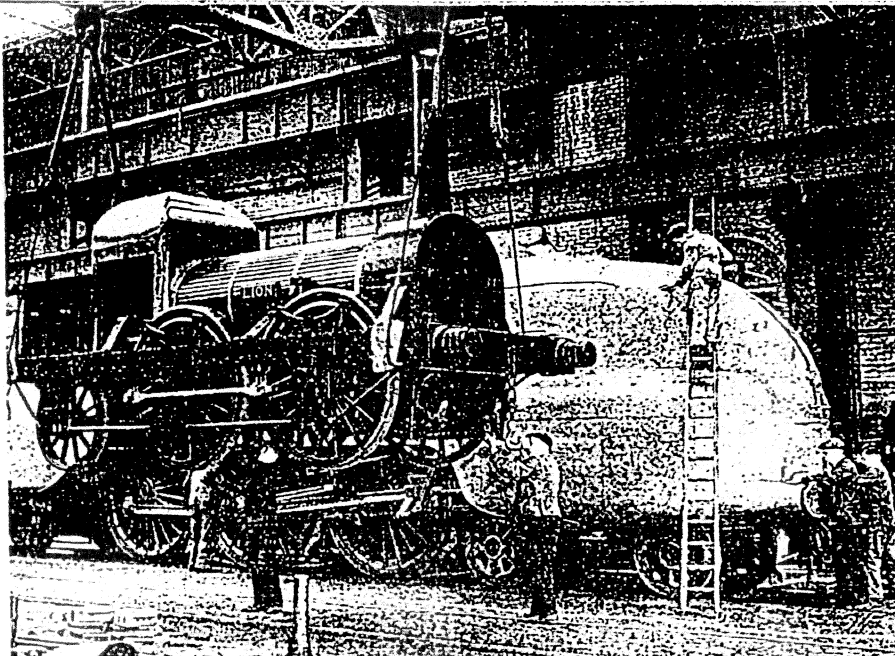
she was duly installed on a suitable plinth at Liverpool Lime Street. It was not to prove a very permanent resting place, for *Lion* was rather a special locomotive. She was possessed of a striking and shiny brass 'haystack' cover over her upper firebox and also of a tall and shapely chimney. In short she looked older and 'quainter' than the majority of locomotives then preserved in working order. More important, she was by far the oldest locomotive which could not only run under its own power but was capable of doing real work — hauling passengers — in a reliable and fuss-free manner. The result was that her presence was often sought, and sometimes granted, for railway anniversaries and like celebrations. She was also in demand for filming, her best-known part being as the star of the 1952 film *The Tufeld Thunderbolt*.

In 1941, *Lion* had been removed from Lime Street lest she be destroyed in an air raid, and when the war was over, the Engineering Society had no success in trying to get her returned there. They therefore received sympathetically a request for the long-term loan of the locomotive to the then City of Liverpool Museums for inclusion in the new transport gallery they were planning. *Lion* returned to Liverpool and lived in a small running shed at Princes Half-Tide Dock to undergo a thorough cosmetic restoration before being placed on display in the new gallery in May 1970. There, for the time being, the matter and the locomotive, rested, for the general museum view at that date was that locomotives should be kept nice and shiny — and still.

At the time the gallery was opened, the climate was already changing. Private owners and preservation societies already had numerous locomotives in steam, and the road vehicle preservation movement was well established with popular and successful traction engine rallies all over the country. The case of a locomotive like



Right: 'An old locomotive discovered in Liverpool . . . *Lion* after being liberated from pumping duties, waits for transport to a new life. Real Photographs



Left: Back to Crewe for her 100th birthday, *Lion* was given a check-up before joining in the London & Birmingham Centenary events. The LMS did not waste the chance of a publicity shot, now redolent with irony. Fox Photos

Bottom left: Possibly *Lion's* finest hour? Filming for the *Titfield Thunderbolt* in July 1952; the film probably brought her to the attention of more people than anything before or since. R. E. Toop

Lion, which was unique and indeed without even any close parallel, was obviously different, but it was always likely that, sooner or later, consideration would be given to the possibility of steaming her. The arguments against were quite simple, namely that deterioration would occur, and there was even the possibility of an accident causing really serious damage. However, machines which do not work also deteriorate, and some of *Lion's* bearing journals show one of the ways this can happen — there is quite deep pitting on one side only. The cause must have been her standing still for a long time in a place which was not quite dry enough.

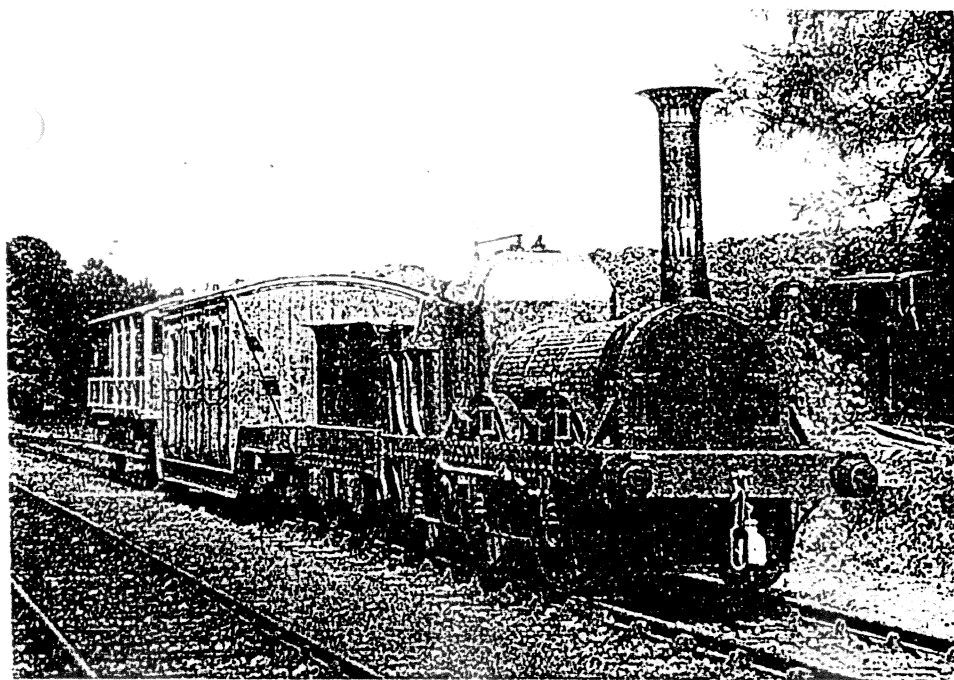
So it came about that, during the planning of the celebrations of the 150th anniversary of the L&MR, the suggestion was made that *Lion* might be returned to working order. The records kept of the work done during 1968-70 revealed that no mechanical parts of any consequence were

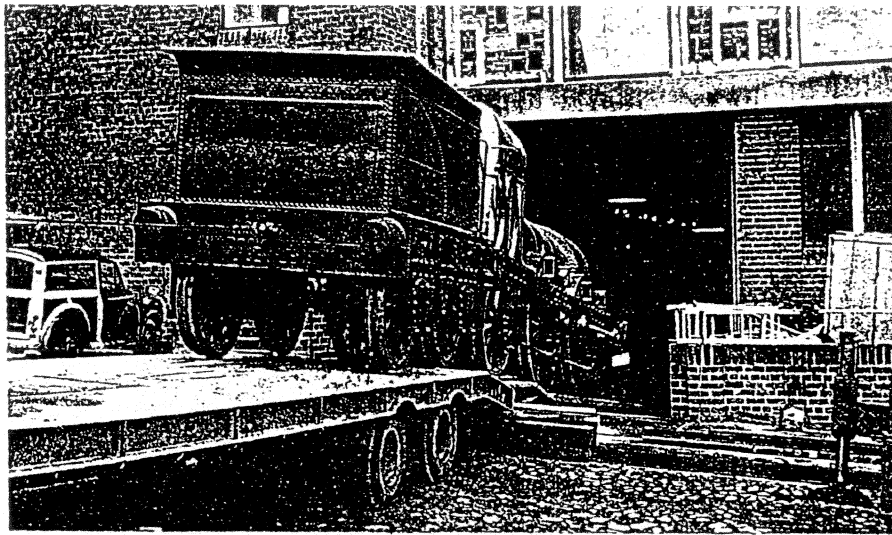
missing or known to be in bad shape. A quick amateur inspection of the boiler revealed that it was certainly worth asking a professional to look at it, and with only minor exceptions all the fittings and accessories seemed in at least fair condition. The boiler would need to be re-tubed to comply with BR's 'life expiry' requirements, and quotations for this work had already been sought when Ruston Diesels Ltd made the very generous offer that they would undertake the entire project of restoring her to steam, including all necessary mechanical and cosmetic work in addition to the re-tubing. In April 1979 *Lion* arrived by road at Ruston Diesels' historic Vulcan Works, Newton-le-Willows, where she was re-railed, pushed into a suitable shed, and left there for a thick coat of thought and project planning. When work eventually commenced under the supervision of Len Morris, a team of management trainees

and apprentices made rapid progress according to well-formed plans. A few unexpected problems materialised, mostly concerning the requirements of the BR inspectors, all but one of which were successfully resolved by the Vulcan team. The one which was not was a little gem of a steam restorer's problem: the museum's insurance inspector announced that he would not pass the boiler unless it had an acid wash, while the BR boiler inspectors were equally adamant that they would not pass it if it *did*. After much argument, the museum changed its insurer.

The first steam trial took place on 13 December 1979, and revealed an almost perfect job. Apart from a slight leak from the regulator flange, everything was as tight as a drum, and the mechanical work was flawless. Given that it was almost 25 years since the last steam locomotive was built at Vulcan, this was a remarkable achievement. A number of trials were run over the following weeks and some very minor adjustments made ready for the official 'handing back' which took place on 21 February 1980. During this trial period, she received a number of VIP visitors for whom she was demonstrated. At this stage, *Lion* had not yet been fitted with an ashpan damper, and the normal practice when leaving her with steam on was to place a dustbin lid in her chimney top, which slowed things down a bit and helped prevent her blowing off for hours at a time. One VIP was fortunate to witness the consequences of moving off in a spirit of forgetfulness, when 81% cut-off and a big handful of regulator propelled the bin lid to a considerable height. In future, it was not forgotten!

Lion's distinguished performance at 'Rocket 150' is now a matter of historical record. Perhaps sufficient time has now elapsed to allow of its being revealed that Museum staff felt at times that the distinction between replica and original was being fudged, and not necessarily by accident. From our partisan viewpoint the events of the Saturday Calvalcade made the distinction clear: our locomotive worked when all three replicas were variously indisposed. This is not just a tribute to the work carried out by Ruston's, still less a sneer directed at the builders of the replicas. It is an indication of the difference between a locomotive built by people whose everyday business it was to do so and one built on the basis of reconstruction not only of design but also of workshop practice.





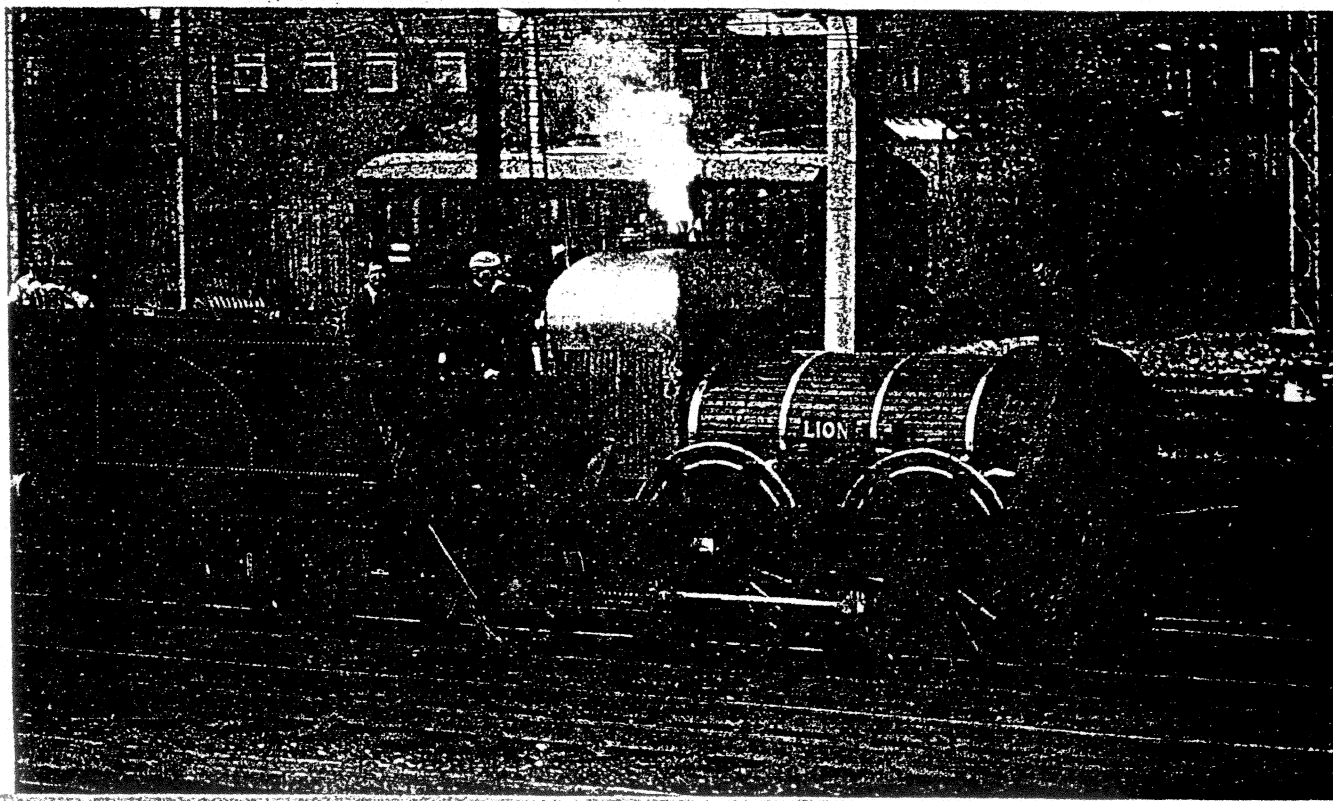
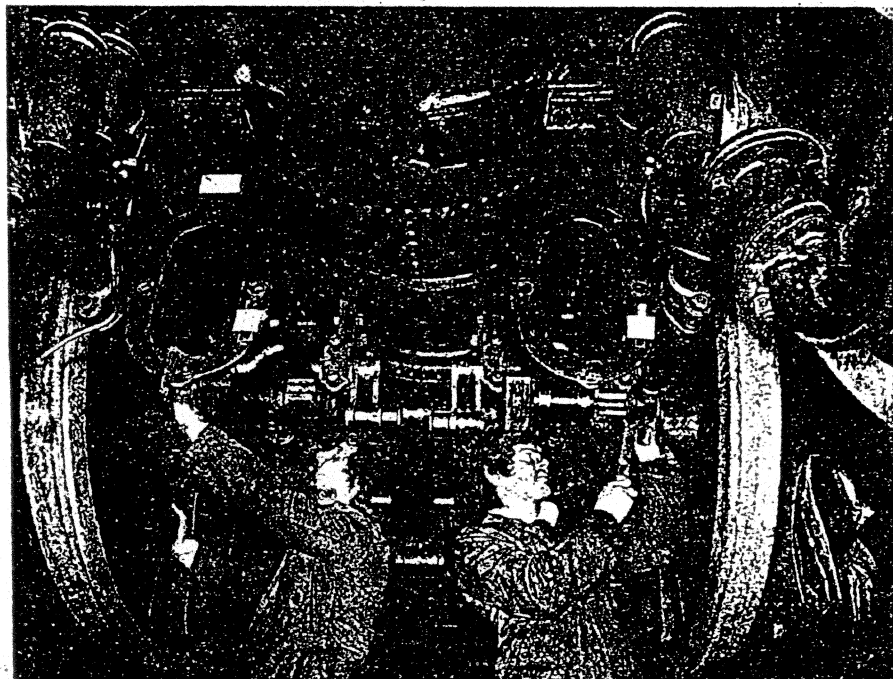
There followed a short tour of railway preservation centres, at each of which *Lion* showed her now-customary reliability. There were occasional problems, as there had been with BR crews, when people tried to treat her like other engines. She does have a number of eccentricities, notably in the fact that she has no blower, which has a definite bearing on the best way of lighting her up. If an incompetent lighter-up gets her to the situation where the fire is too thick and too dull, the only remedy, apart from throwing most of it out and starting again; is to tow her along with the regulator wide open. All this is totally unnecessary if you light up right in the first place, when her chimney will issue ten-foot column of black smoke with straight sides. The usual problem is not too little steam, but too much, so that when operating on a short demonstration track the damper is usually tight shut, and if the coal is good a small hole needs to be left in the fire. For short-run venues 'rubbish' coal is preferable, as it gives a quick response to change in demand and avoids lengthy periods of blowing off.

It had originally been assumed that there would be insuperable problems in the way of hauling passengers with *Lion*, but in fact we were able to meet the requirements of the Railway Inspectorate and of our insurers fairly easily. The result was that *Lion* regularly hauled anything from one to three of the open second class carriages

Above left:
How to move an old engine. *Lion* leaves the Merseyside Museum for Vulcan Works on 6 April 1979. Ian Allan Library

Left:
Reassembly of the valve gear at Ruston's. Ruston Diesels Ltd

Below:
Lion makes her own way from Southport to Bold Colliery for 'Rocket 150' on 18 May 1980. Bob Avery



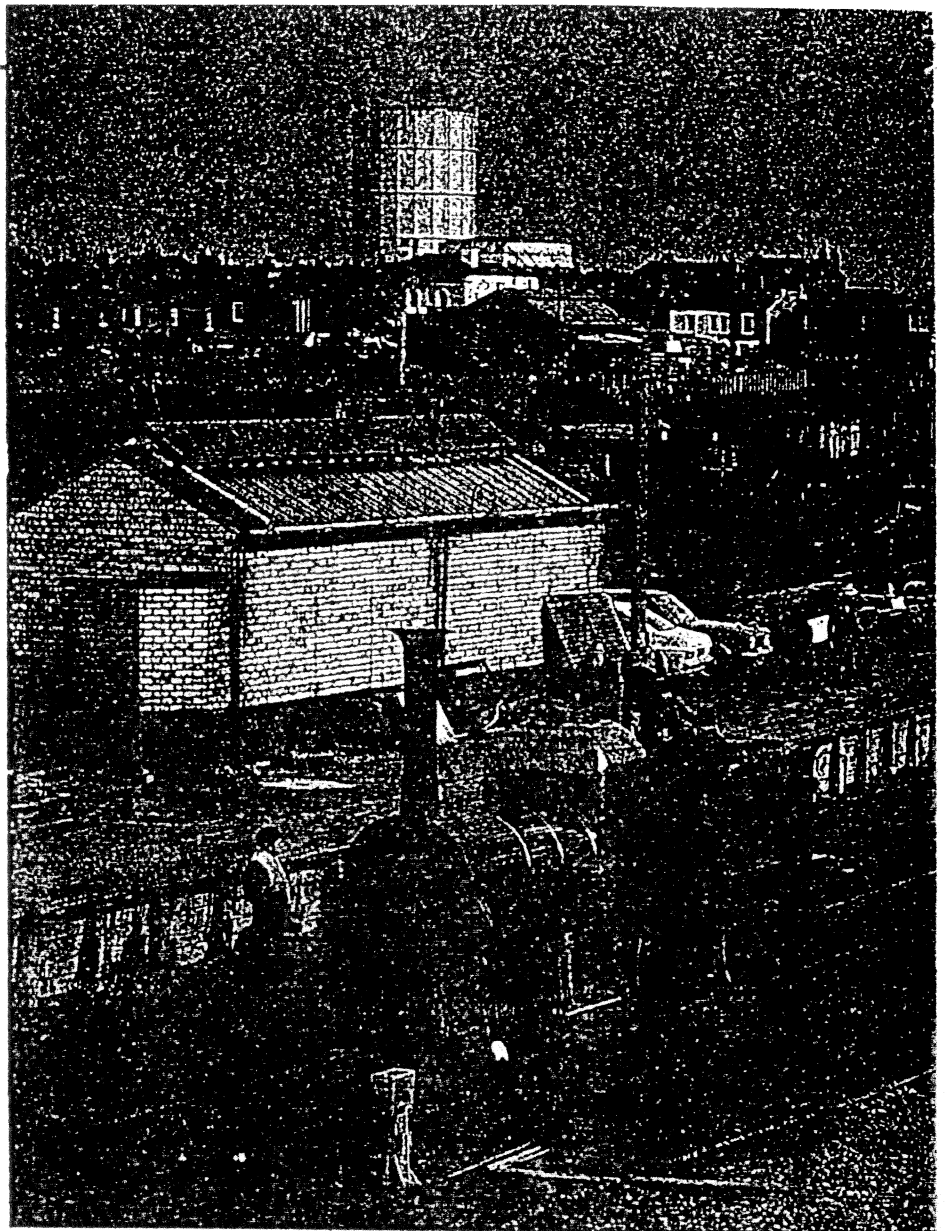
Right:
Lion stands in Southport station after her publicity run from Wigan on 24 March 1980.
Bob Avery

which had been built at Derby in 1929 for the 'Old Time Train', by courtesy of the NRM, whose property they are. It was interesting to compare the way in which they were made (when the skills of the 1830's were obviously still largely extant) with the construction of more recent replicas. The only problem encountered with them was the adjustment of the new air brakes, which had been devised to avoid the need for any drilling or welding to the 'original' 1929 parts. The solution adopted had the brakes suspended from a sprung part, which meant that the correct adjustment varied according to the spring deflection. The brakes had, therefore, to be adjusted each time that any significant variation in load occurred, and mishaps at each end of the scale took place before professional railwaymen would believe that it was *not* just a question of idiots from the museum making a fuss about nothing. On one occasion a train ground to a halt through brakes binding while on another a brake shoe went bouncing up the ballast through the brakes not being readjusted after a large number of bodies had alighted.

A further tour in 1981 brought a number of minor troubles. There were problems with the locomotive itself, and with its movement around the country, and the message was received and understood that it was not a good idea to operate her too much, both from the point of view of wear and tear and also because it caused her to lose the respect which was her due, through over-exposure. The result was a decision to leave her in her nice warm gallery until the time came to celebrate her birthday in 1988.

The best laid plans of curators and lions full off . . . for in 1984 we received a request from the Science Museum, to whom we owed more than one favour, to take *Lion* down to run at the annual open day held at their Wroughton outpost. This apparently simple exercise came close to disaster when a winch rope failed at a fraction of its safe working load (never mind its supposed breaking strain), delaying *Lion's* departure from Liverpool by some eight hours spent in the frantic mustering of alternative kit, in repairing the damage done to the loading ramp when the cable failed, and in jacking *Lion* back into line for a second attempt. The view, happily shared by our haulage contractors, was that we had said that *Lion* would be at Wroughton, and so she would, even if it took all night. It did, and she was.

The following morning she stood undaunted on the demonstration track at Wroughton, awaiting the arrival of the boiler surveyor. She was duly passed fit for work, and again showed the quality of the work done at Vulcan. Despite some fairly hard work during 1980-81 followed by a couple of years' total idleness, she worked



perfectly apart from a slight sticking of one of the feed pump clacks, which was rapidly cured by the application of 'Tool Special No. 1' (also known as hammer, 2lb, curators for the use of).

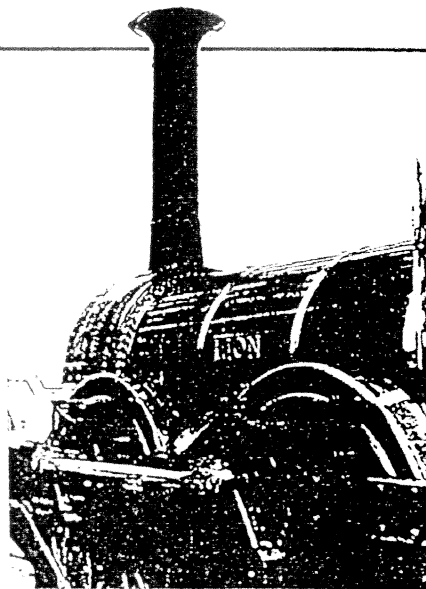
The event at Wroughton was also marked by the first public appearance of the body known as OLCO. While *Lion* was still at Ruston's there had been suggestions that a body of 'Friends of the *Lion*' should be formed, and over the intervening years various meetings had been held to bring together an assortment of people who had some special interest in the locomotive. Some had personal or family connections, some were building models of her (she now boasts the only model locomotive efficiency trial where all the contestants are of the same prototype) or who were simply interested in early locomotives. These people formed themselves into a society, which they decided to call OLCO, in honour of the Old Locomotive Committee who had been responsible for the rescue and restoration of *Lion* in the 1920s. To get the Society away to a reasonable financial start it was (slightly rashly) agreed that at a

time when the site was closed, members would be allowed to set their unworthy paws upon the sacred regulator and drive *Lion* up the demonstration track, in consideration of the donation of a 'river' to OLCO funds. Engine, track and museum staff all survived unscathed, even if members' wallets did not. The really significant part of this bit of silliness was that it proved to be the incentive to bring virtually all the OLCO members together at one time and place where the locomotive was in steam, and the result was not only a good social occasion, but the proof that OLCO was capable of doing an absolutely first class job of guarding, stewarding, oiling, polishing, selling publications, going out for chips for the footplate crew and all the other duties which accumulate around the running of a locomotive. They proved so good at this that they have been invited back to Wroughton each year since, to act in support for the running of other locomotives. This year they will have the pleasure of ministering to *Lion* again.

(To be continued in the May issue)

In part 1 of this article (April Railway World) the author covered the history of *Lion* from her 'discovery' at Liverpool in 1923 to her appearance at the Science Museum's open day at its Wroughton outstation in 1984 and the formation of the supporter's group, 'OLCO'.

BY THAT TIME, thought was already being given to ways in which the 150th birthday of the old lady might be celebrated. If she were to have a proper party it would clearly be necessary for her to be in steam and hauling passengers. BR's rules on life expiry of boiler tubes meant that we should either have to re-tube her again, or confine her activities to private track, and an early decision was made that the costs of BR running did not offer any great advantage for a locomotive of her size and age. It was considered important that the event should be held in Liverpool. The Liverpool & Manchester Railway had been promoted and funded almost entirely from Liverpool, and the Liverpool Party responsible for it had gone on to finance many of the other 'pre-mania' lines. They had laid down many of the basic ground rules of railway practice in everything from setting all their clocks to GMT instead of local time, to signalling practice, to management methods. They had, for example, been responsible for such radical ideas as the one which substituted recognised railway refreshment rooms for the coaching practice of stopping at some convenient inn along the route. These were the men who



LION 150

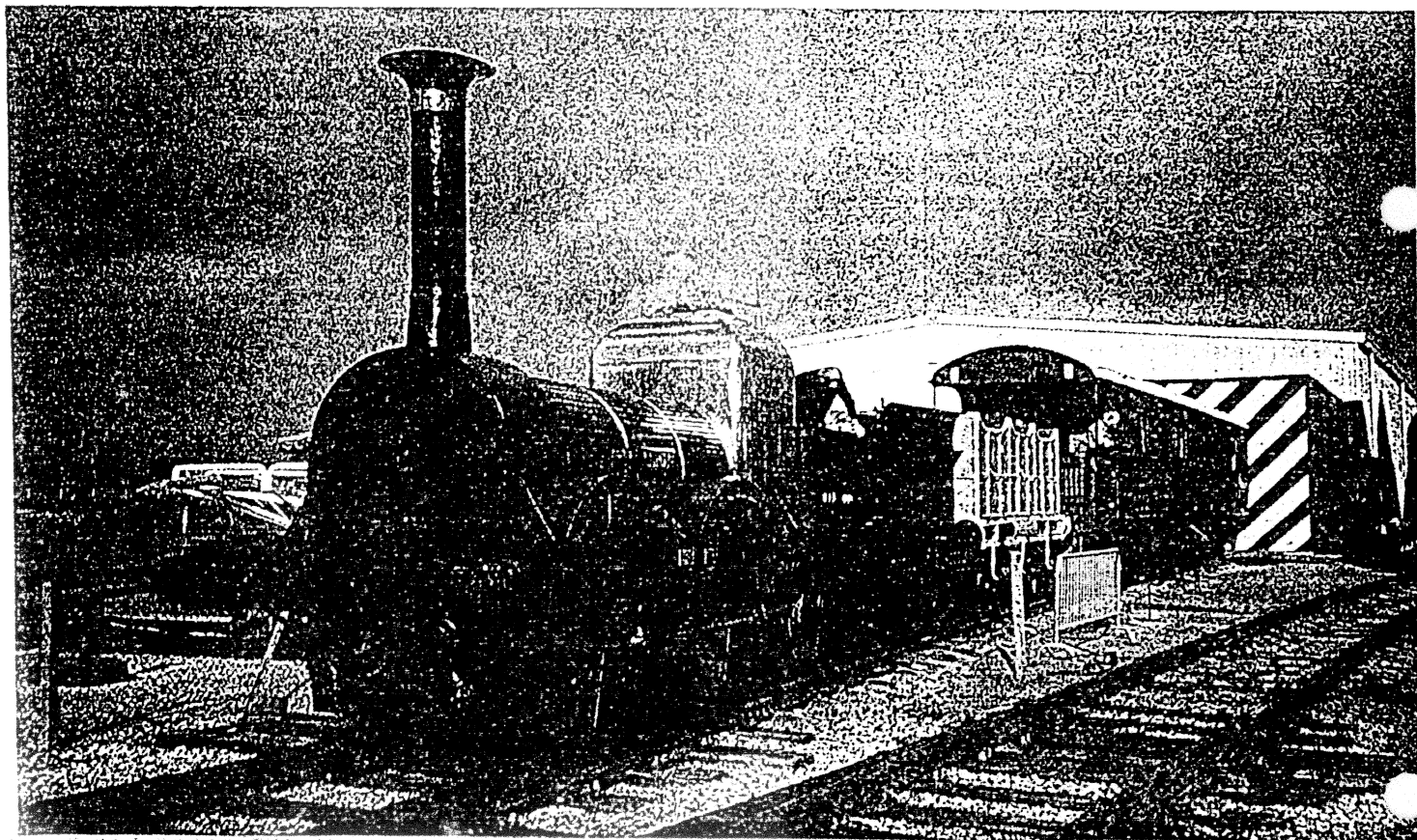
Adrian Jarvis

mattered, and the celebration was to be almost as much a celebration of them as of the railway or the locomotive. In addition, *Lion* herself had spent more than a century in Liverpool, and had been discovered, researched, acquired and preserved by a group of Liverpool men who had subsequently repelled two attempts to remove her to distant museums.

Unfortunately, all of the considerable amount of private track in Liverpool fell into one of two categories. Much of it was so remote from the city centre that it was questionable whether it would attract the number of visitors necessary to fund an expensive exercise. The rest was in areas which were subject to redevelopment proposals. Some of these stretches were a particularly sad loss, being ideally located, but their owners, understandably, could not commit themselves to an event which would have to be planned so far ahead. They would admit, in private, that the tracks would probably still be there when we wished to use them, but they could not promise it. Such were the costs of erecting stands and temporary buildings, or even of the printing involved, that only a firm promise was good enough.

Eventually and reluctantly it was accepted that *Lion* could not celebrate her anniversary in what we regarded as her rightful home, and that the celebrations must take the form of another tour. A number of requests for her presence had already been received, most pressingly from Tyseley, where plans were well

Below:
Lion stands outside the main hall of the Crowe Heritage Centre, with a replica L&M coach and the preserved GER No 1 saloon on 25 July 1987. Eddie Belliss



advanced for the coincidental celebration of the sesquicentenary of another brain-child of the Liverpool Party, namely the London and Birmingham Railway. *Lion* had appeared in steam for the centenary of this well-known branch of the L&MR at Euston in 1938, and was now set to become involved again.

There was, however, some work to be done before such a tour could be undertaken, most of it trivial but some not. When *Lion* had hauled her 'Old Time Train' in 1930, she had done so on a circular track in a clockwise direction and for quite a long time. Despite her small size, her rigid wheelbase is not all that short, at 144½ in, and the leading nearside flange had suffered accordingly. During her 1980-81 tours it had been decided that this tyre definitely needed attention, and since the tyre was of wrought iron that could only mean renewal. The second defect was a crack in the lug on the offside rear cylinder cover to which the guide bars are attached, which had been the subject of a first-aid repair and now needed doing properly on the bench. Discussions therefore took place with the Dinting Railcentre with a view to its undertaking the dismantling and reassembly work on behalf of the Museum. Once that decision had been taken, the first stage of the tour obviously was to be an appearance in steam at Dinting. It was at this fairly late stage that a request reached us which was to bring about a rather busy summer in 1987. The request came from Nantwich and Crewe District Council, which was converting the Crewe North signalbox and some of the derelict site of the works immediately adjoining into a Heritage Centre. A wet and windswept visit to the site confirmed that these people were obviously lunatics to consider any such thing possible, with particular reference to the preparation of the site and buildings in time for the celebrations they were planning for July (it was, of course their sesquicentenary as well), so there was no harm at all in agreeing that *Lion* could stop off there for static display on her way to Dinting. Subsequent events proved just how wrong one can be when cold and wet, for Peter Barnard, Tony Moseley and the rest of the team transformed the site with a speed and completeness to rival the reclamation job done for the International Garden Festival in Liverpool in 1984. As the place became first changed and then unrecognisable, news reached Liverpool that Her Majesty the Queen was to visit the Centre, and it was at this point that serious thought was given to the possibility of having *Lion* appear not static but in steam. The crack in the cylinder cover was scrutinised and appeared not to have moved since bodged in 1981, and consideration of the track plan showed that the worn flange need never meet a facing point except when heading gently for the shed.

Once it was established that the trackwork would be to a high standard, the risks were deemed to be minimal, and it was also felt that it would be churlish to deny Her Majesty the opportunity of viewing *Lion* in steam.

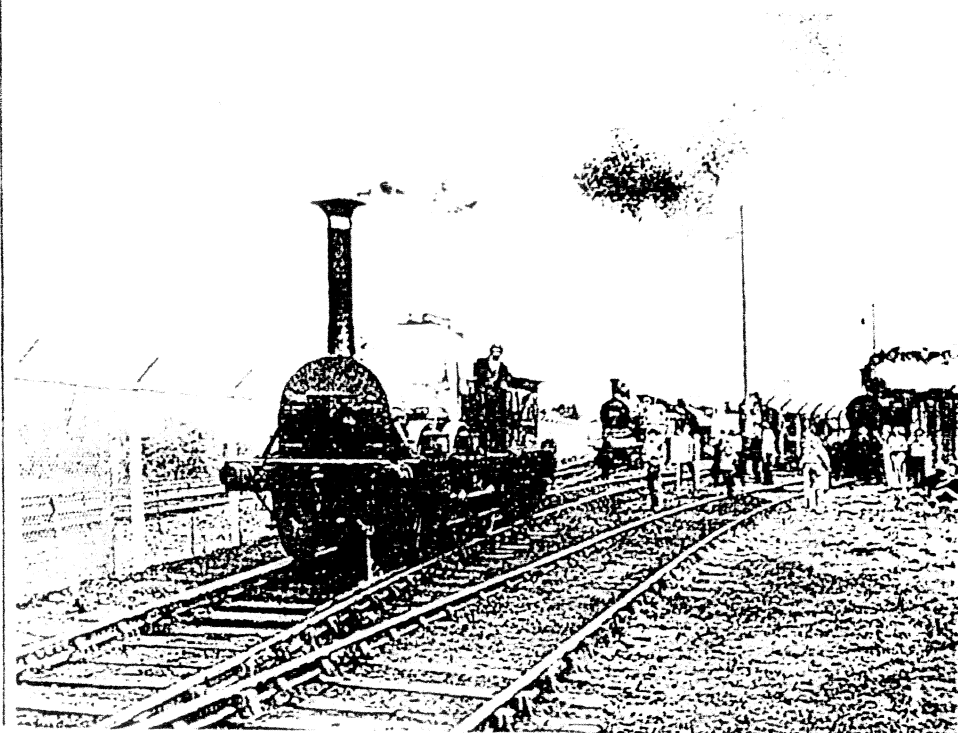
The Transport Gallery in Liverpool Museum was not designed for working on specimens, which meant that it would be preferable to carry out the work for the boiler survey at Crewe. *Lion* was winched on to a beaver tail wagon as usual and arrived at Crewe in a scene of some of the most frantic activity I have ever witnessed. Most of the hardstanding had yet to be surfaced, none of the turf was laid, nor the shrubs planted, and the exhibitions were far from finished. We, for our part, did not know whether *Lion* would pass her survey, especially if we failed to conceal from the surveyor the fact that he would be the man who had promised that *Lion* would not blow up while the Queen was watching! The work for the survey began on Monday 29 June, with the removal of the 'haystack' and the gagging of safety valves, blanking of clacks and regulator etc for the hydraulic test. A practice pump-up on the Monday evening not only revealed an absence of serious leaks but tempted us to leave pressure on overnight, a surprisingly large proportion of which remained in the morning. There were only a few drips on the floor, and *Lion* duly passed her examination, the next couple of days being spent in fastening her back together again ready for the steam test on 2 July. Once again, members of OLCO were on hand to render a great deal of valuable assistance, and by the time of the steam test she was even looking quite shiny as well.

Steam raising proceeded without a hitch, and everything went on in the thoroughly amiable manner we have come to expect of this most obliging of locomotives. She did all that was required of her, passed her

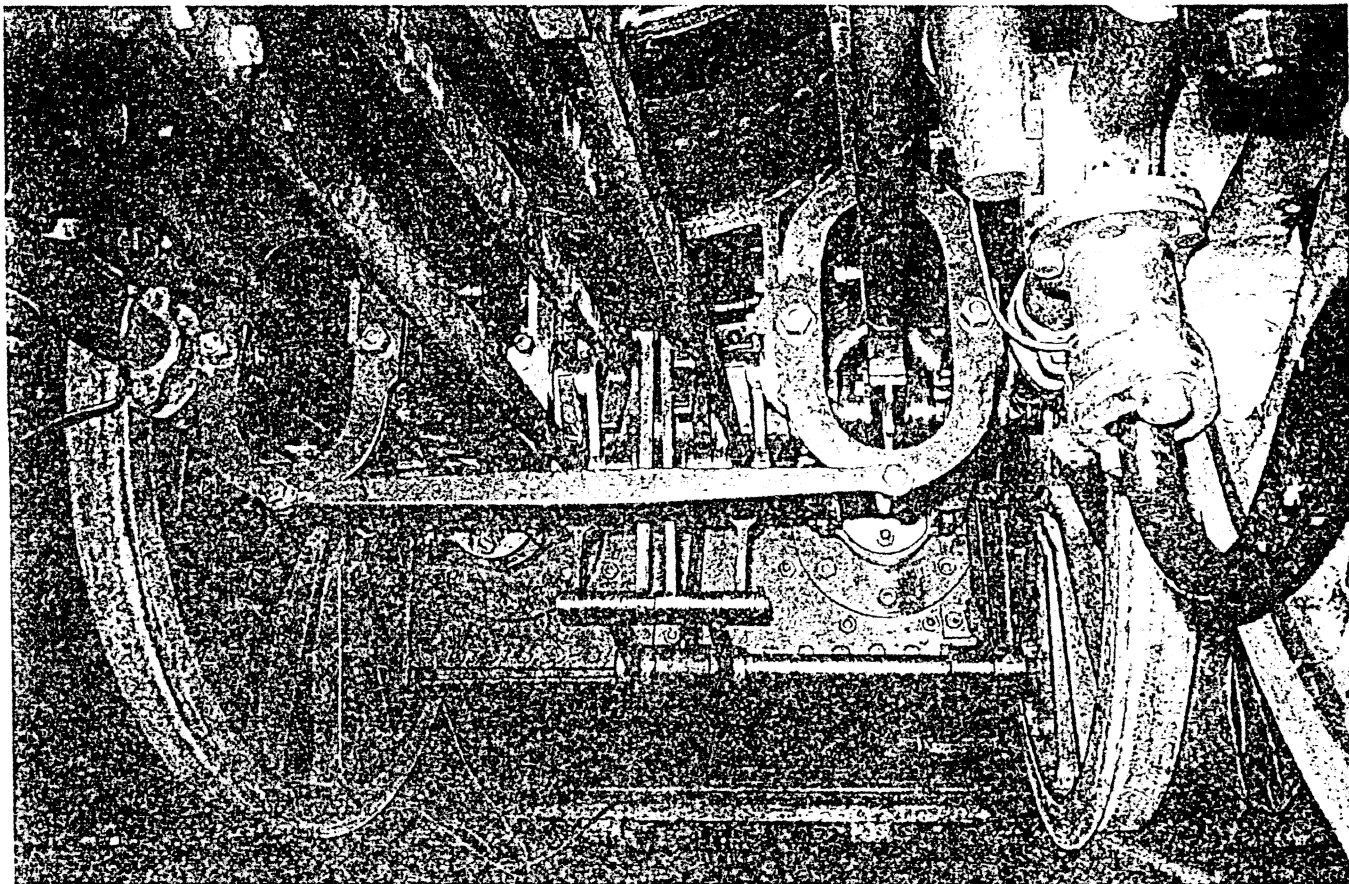
survey, ran a few trial trips up and down the track and was left to cool down before returning to the shed, or exhibition building as by now it deserved to be called. Once cooled, a few minor adjustments were made, and the process of catching up on long arrears of regular polishing continued.

At about lunchtime that day *Lion* had been joined by a rather less august old vehicle, namely *Lionbus*, an ex-Liverpool Atlantean, which had been equipped with a small display and sales counter downstairs and a mess room and changing room upstairs. This was to be OLCO's HQ, from which they organised normal volunteer services as well as a profitable little shop, and also maintained their own appearances in period costume, which did much to enhance the scene, especially on the platform. *Lionbus* also got more than one OLCO member out of trouble by serving as an impromptu doss-house, and generally proved to be such a good idea that it is being upgraded for continued use this season. Friday 3 July was spent in final preparation and yet more polishing, a great deal of organising of how things would work when we were open, sweeping the tubes and generally lying about moaning that it was too hot to do any work. (One of two such days last year, I recall.) Saturday saw us up quite early to light up in time for the start of public service at 10.00, and *Lion* put in a busy and successful morning's work, with constant queues for rides. For the rest of her visit there were always queues, except on the last day, when a serious downpour deterred all but a handful of the hardiest visitors.

While we were completing our preparations, the work on the site had continued with astonishing speed, many of the Council staff working twelve hours and more every day. The results were striking, producing a pleasant area which looked as



Right
Lion loads off the first 'Rocket 150' cavalcade in lieu of the derailed replica *Rocket*
Eddie Bellars



Above:
How *Lion* works. Detail of the motion, looking forward towards the cylinder block, showing the gab valve gear and (extreme left and right) the water pumps that supply the boiler.
Eddie Belliss

Bottom:
Dr Adrian Jarvis (left) keeps a supervisory eye on OLCO members disposing *Lion* after her final steaming at Dinting, 20 September 1987, before overhaul commenced.
Eddie Belliss

Industry, and Wroughton. At each venue she will haul at least one carriage in which visitors may ride, thus entitling themselves to purchase one of our highly sought-after 'I've ridden behind the *Lion*' badges. More to the point, they will have shared to some

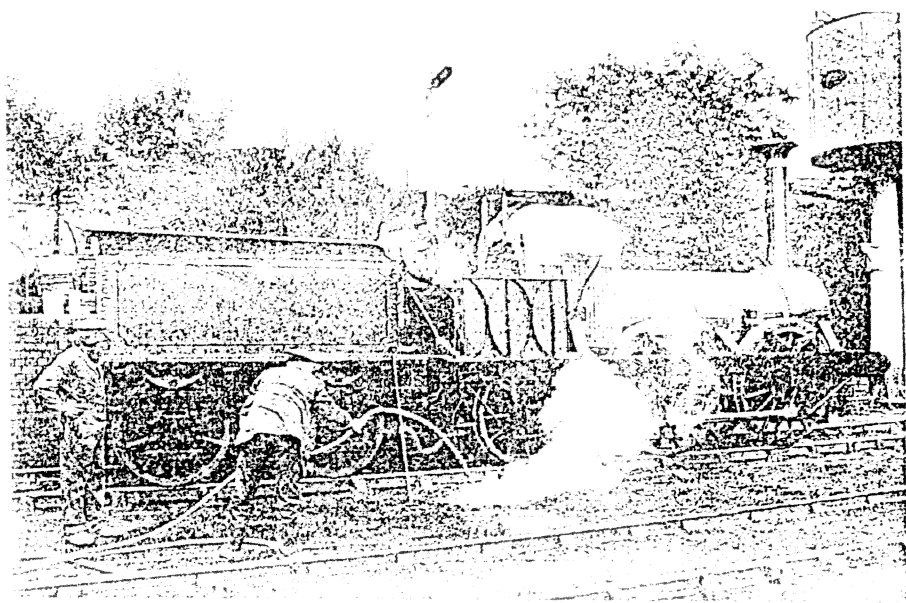
extent in what has really been a research project. As custodians of the locomotive, we were, until 1980, distinctly ignorant about this very important specimen. How fast does it go? How much coal does it use? How much water? Could it stop safely with no brakes? (Er, dunno.) So it would go on for a very long list of questions. What are the wheels made of? How old is the boiler? Hundreds, if not thousands, of questions have been answered since 1980 by the simple expedient of making the thing work. Answers have been found during mechanical overhaul, while stripping off old paint and filler, on the track, and while carrying out first-aid adjustments. So little is recorded of the details of the anatomy of such early locomotives — if you find a

small scale general arrangement drawing you are doing very well — that most of the knowledge of *Lion* which is now available has been learned from the locomotive itself, from working on it and from using it.

Obviously we cannot allow visitors to dismantle *Lion*, but they can answer for themselves the basic questions about what it was like to travel by train 150 years ago. Did you get showered in sparks and cinders? Only on steep gradients or with heavy trains. Smuts? Probably, depending on the quality of the coal and the malice of the driver. Coal dust? Depends on the direction of the wind. Rain? Oh yes, you get very very wet. Simple questions, by ones which we enable people to answer from personal experience rather than from a book written by someone who has almost certainly not experienced that which he describes. The pink-handed railway historians have been known to denounce us for treating *Lion* like a fairground ride. Perhaps what worries them is that *Lion* is demonstrably responsible for people enjoying themselves, but we would no more accept that enjoyment guarantees worthlessness than that history need necessarily be boring. *Lion* is a piece of living history, doing the job she was built to do as nearly as can be contrived under present circumstances. Given that she was built the year after Queen Victoria came to the throne, and before she attained the age of 21, this makes her a rather remarkable machine.

Adrian Jarvis is the Keeper of Social and Industrial History at the National Museum of Mercevale.

RAILWAY WORK



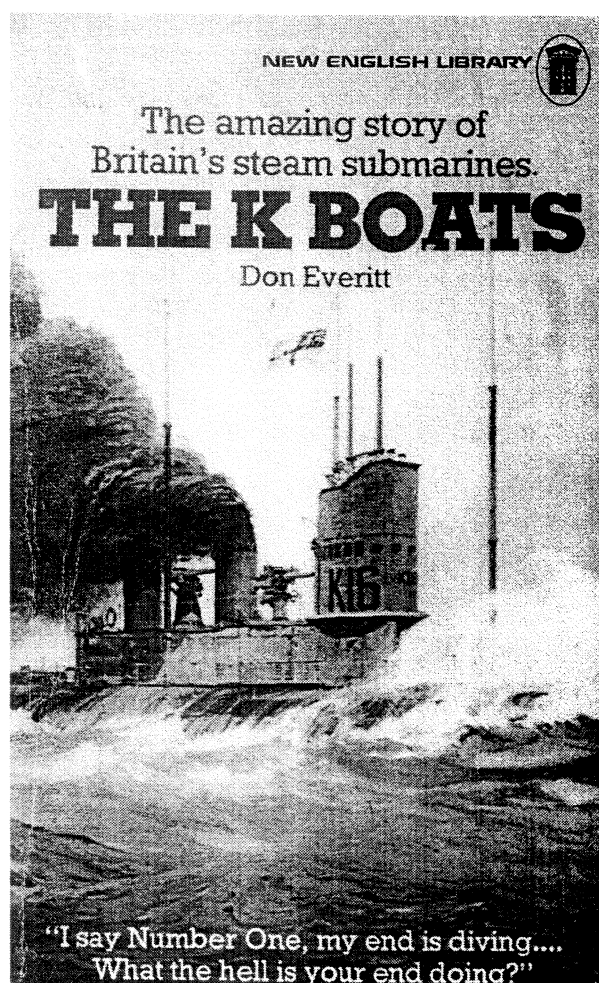
BOOK REVIEW

by our occasional book critic, Jan Ford

No, there's not been much call for a book critic in OLCO, either. Certainly not books on submarines. So why does one creep in now? Two reasons, the K Boats were steam-powered and E. F. Clark has an interest in the class since his father served on one. E. F. told me of a Newcomen Lecture on the class to be given in Birmingham which he intended to attend and I accompanied him for a fascinating evening on the history of an improbable era of naval warfare. The lecture is sure to be repeated and I commend it to members.

With my interest aroused, I determined to follow up by obtaining a copy of the paperback 'The K Boats' which, whilst out of print, is obtainable on the second hand market (the internet is wonderful for tasks like that). It's a tale by turns of farce, tragedy and heroism and, again, I can thoroughly recommend it to those wishing to learn more.

The book was written by Don Everitt, and first published by George Harrap & Co. Ltd in 1963. The paperback edition shown on the left was brought out by the New English Library in 1972.



Winter Steam

This study was recently submitted by E.F. Clark. It shows 'Lion' during one of her soujourns at Tyseley.

Most of the pictures we publish of 'Lion' are simple record shots to either commemorate an event or elucidate some aspect of 'Lion's' construction.

Inspired by this example, perhaps we should demonstrate our aesthetic sensibilities by having a competition for art studies of 'Lion'. What do you think?



Editor's Piece by Jan Ford

It's perhaps appropriate that this issue appears in April. I suppose it's inevitable that, as one gets older, one becomes more cynical but I can't avoid noticing the 'April Fool' nature of some of our stories – for instance, 'Liverpool Museum News' and 'The European Union'. Truly, the inmates are in charge of the asylum. So it's also appropriate that I stand down as editor, before my jaundiced views affect the general membership.

In February, I enjoyed a splendid foreign holiday which re-kindled my sense of wonder at our world and its history. It wasn't a railway holiday but, nonetheless, I managed to travel on 3 underground metro systems, 5 main-line railways, 1 tram system and the Kalka-Shimla narrow gauge railway, as well as getting a footplate ride on a preserved line and visiting 2 railway museums.

One of the railway museums was Santiago, home to the improbable-looking 0-8-0 + 0-6-0T Kitson-Meyer. This locomotive, illustrated below, was built by Kitson's in 1909 for the Ferrocarril Transandino, working between Los Andes in Chile and Mendoza in Argentina. Two of the 9 locos are preserved.

The other museum was Delhi. India is a country which still takes its railways seriously. In 1992 I made my first visit to the National Railway Museum in Delhi and I returned this February. This time 'Fairy Queen' was missing – involved on a special trip to Alwar as mentioned in E. F. Clark's letter below. The Museum displays the 'Guinness Book of Records' confirmation of the previous trip to Alwar by 'Fairy Queen' in 1997.

Built in 1855 by Kitson Thompson and Hewitson, she now must surely be the oldest working steam locomotive in the world – a title 'Lion' once held. If the accolade cannot be ours, and if 'Lion' is condemned to life in the "dented shoebox" or whatever imaginative design replaces it, I can think of no worthier host country than India, where the values exemplified by railwaymen, of which we were once so proud, still seem to be alive.

Jan Ford's railway photographs (including Santiago, Delhi and a collection devoted to 'Lion') can be found at:-

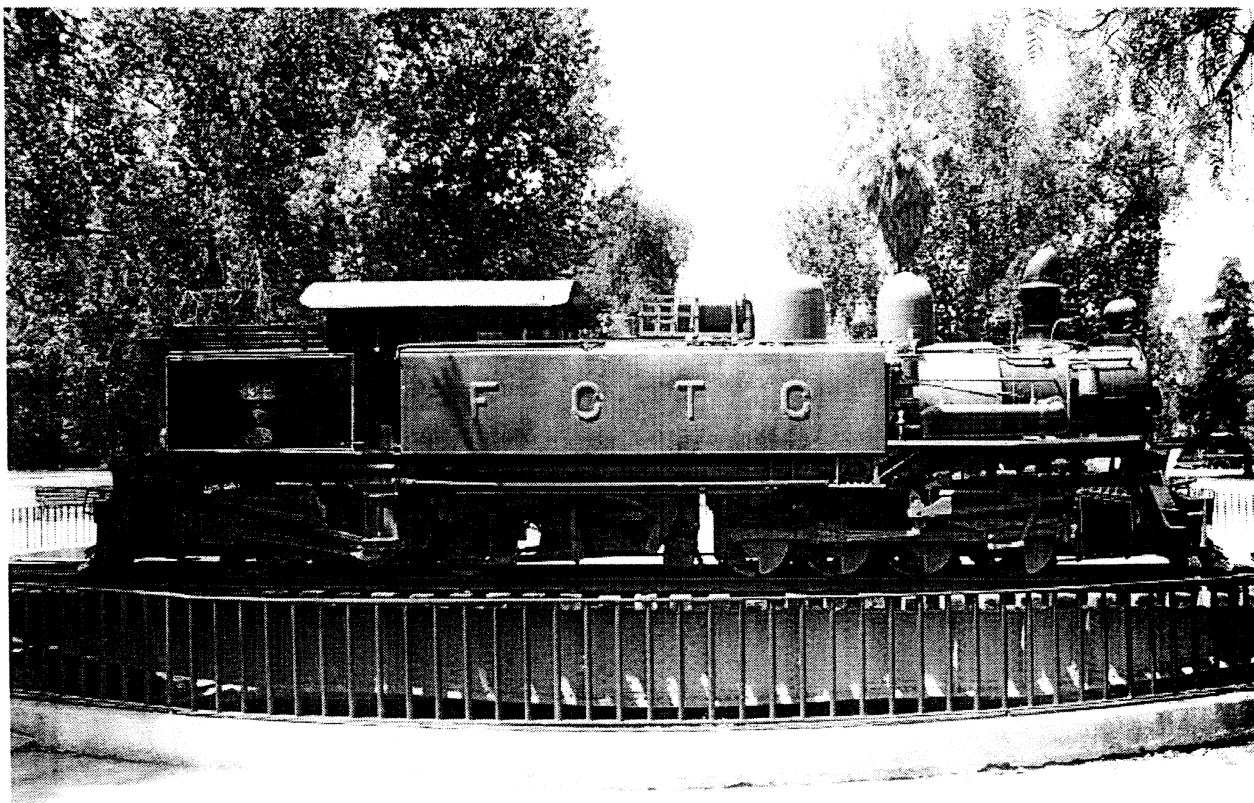
<http://janford.fpic.co.uk>

Contact details for the editor:-

Ms. Jan Ford
The Old Locomotive Committee
Brewood Hall
Brewood
Stafford
ST19 9DB

Telephone: 01902 850095 (evenings)
e-mail: jan@fordelectronics.co.uk

Following the next A.G.M. there should be revised contact details for the new Editor. However, correspondents are welcome to continue to use the above details at present and all communications will be forwarded.



Letters to the Editor

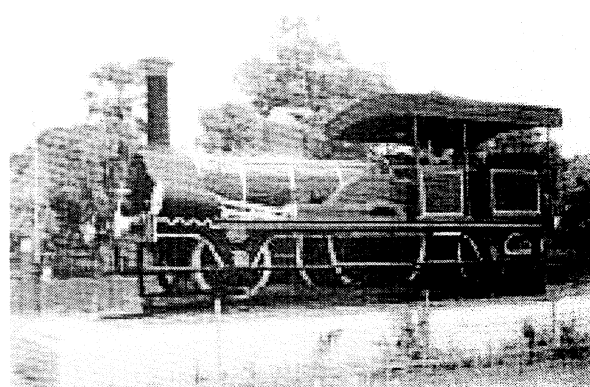
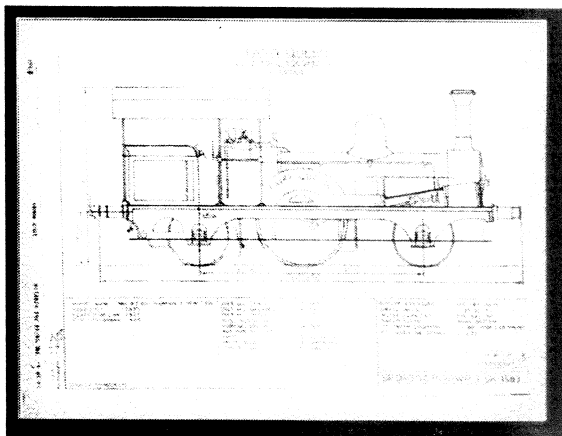
We eavesdrop on further correspondence between E. F. Clark and John Hawley. E. F. Clark writes:-

Mike Satow

While we were in India, I got to know Mike Satow who was head of ICI in India. We made an expedition in the ICI private plane to inspect the last of the Garratts still in use, which were rapidly being supplanted by electrification. When the Indian Government decided to set up the now-famous Delhi Railway Museum, they invited Mike Satow to assist with the setting up – a task he entered into very wholeheartedly – even rummaging up and making work again a steam monorail. The locos outdoors were specially aligned so that they were at the best angle for photography with the sun in the afternoon – an aspect many Museums don't or cannot consider. But the Tourists do appreciate such features – or, on the other hand, don't, simply taking them for granted!

I told him about a Barsi Light Railway tank engine built at Kitsons in 1915, which he was able to secure. He was also very pleased to have found a suitable shunter for the Museum – one of a pair of 2-2-2 well tanks (broad gauge) which Kitsons supplied to a railway in eastern India in 1851. The one for the Museum, *Fairy Queen*, was still in working order, but had been more modified than its sister *Express* which had been preserved on a plinth many years before at the loco works at Jamalpur. There were three shots of *Express* (reproduced below) given to me by Mike Satow himself. He told me she still had the endearing feature which *Lion* has – that you have to push the reversing lever forwards to put the machine into reverse; though I am pretty sure she has link valve gear rather than *Lion's* gabs ['Steam in India' in Lionsheart 1992 issue 4 illustrates the link motion – Ed.] *Fairy Queen* has what we now consider the "proper" arrangement.

Just bear in mind that 1851 was no more than 13 years after *Lion* was delivered – a shorter period than has now elapsed since *Lion* last steamed! Yet, a tour company is offering a commercial trip hauled by the *Fairy Queen* from Alwar to Delhi. [A distance of around 160km – Ed.]

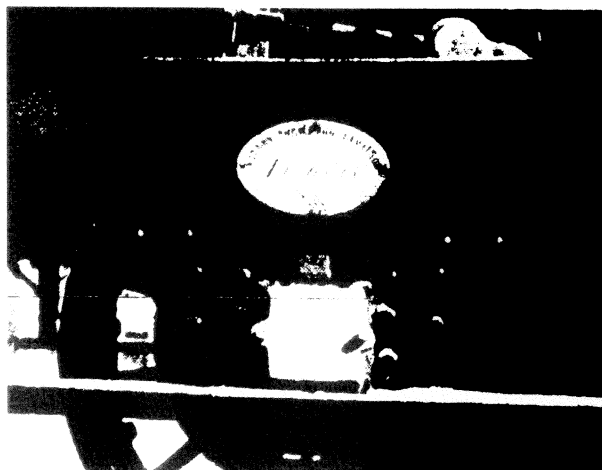


This picture of the plinthed 'Express' is from the Jamalpur works web page - <http://railindia.tripod.com/jamalpur.html>

Kitson nameplates

This is a much-enlarged copy of a nameplate in one of the plates in my Grandfather's book *Kitsons of Leeds*. It gives a good idea of the style of early Kitson nameplates. The names in the partnership (circa 1851) were Kitson Thompson and Hewitson. I am pretty sure that the nameplate *Lion* now carries was produced in 1930 and not the original (if indeed there was one). If one was fitted then, I would guess it to have been similar to the one in the photo.

E. F. Clark



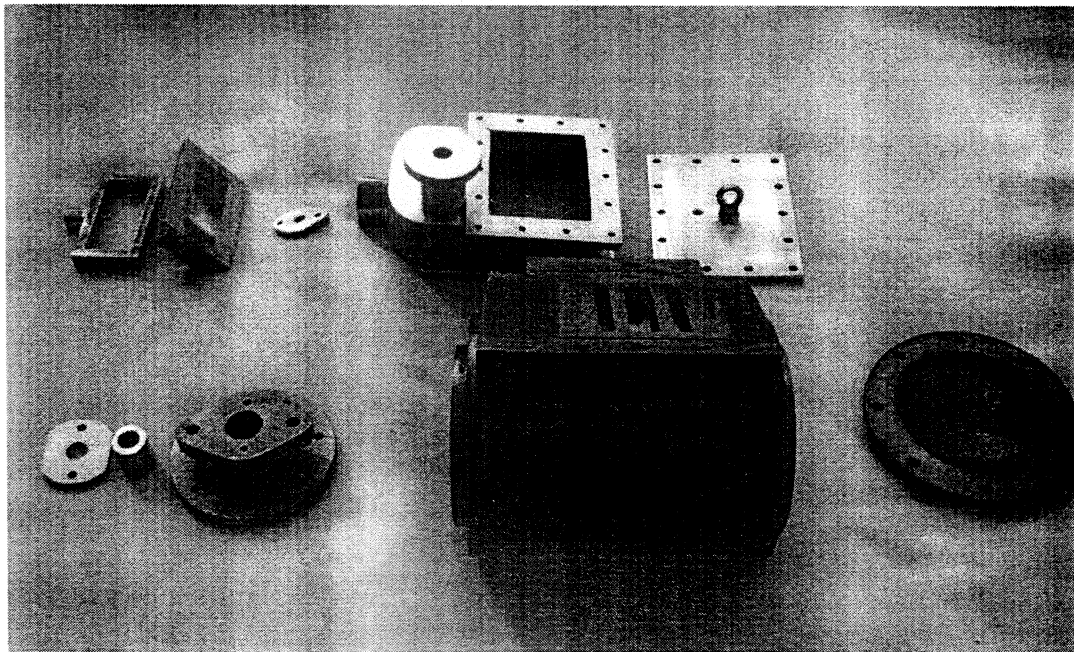
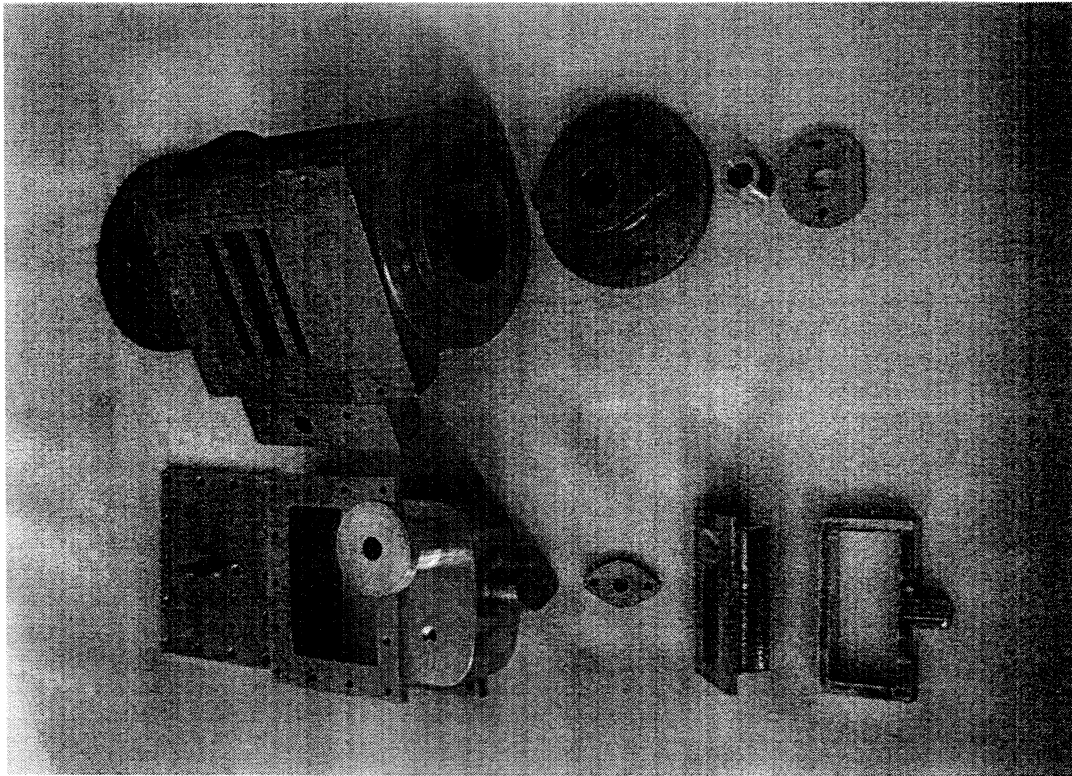
Lion Cylinder Details

I enclose photos of *Lion's* cylinder parts [see next page – Ed.] which you may wish to include in your next news letter. Hope to see you at the A.G.M.

Harrye Frowen

LION resources

Mr John B Coop. British Columbia, Canada. is completing a 5" Royal Scot, prior to starting a 5" *Lion*. He has AutoCAD 14 and says that "If (OLCO) maintains a list of resources, (we) may put him down as a possible source of drawings."



Lionsmeet 2005

I write to make a couple of comments regarding the reporting of 'Lionsmeet 2005'.

First: 'work done' is, as you know, the product (strictly, the scalar product) of force applied x distance moved and hence its unit (in 'old money, good enough for IKB, good enough for me) is 1 foot x 1 pound (weight), commonly known as 1 foot-pound, which may be abbreviated, according to preference, as 1 ft lb, 1 ft.lb. or 1 ft.lb, all of which imply a multiplication, but NEVER as 1ft/lb, which implies division and would be correctly read out as "foot per pound" – suitable, perhaps, for measuring spring extension, but not work. . Unfortunately, "ft/lb" is used in many places on pp. 2, 6 & 7. Let's get the engineering right!

Secondly, I spotted the deliberate mistake, put there I'm sure to see how many of your readers are numerically aware*: p2 reports David Wainwright's work done as 13.920 "ft/lb" but the table on p.7 gives it as "unofficially" 43140; the latter seems more appropriate to the load and distance run. Perhaps you should set the record straight.

John Fraser

* The answer is, of course, "All those who were weaned on slide-rules".

[We applaud the pursuit of accuracy and apologise for the confusion which the errors have caused – Ed.]

THE EUROPEAN UNION

Jan Ford reports

Much of the legislation currently being put in place in this country flows directly from our membership of the European Union. It seems that there is no aspect of our lives which cannot benefit from a modern approach to regulation and rail transport is no exception.

Two aims for railways appear to be to achieve a 'level playing field' commercially and to ensure Interoperability – trains approved in one part of Europe being able to travel seamlessly throughout Europe with a minimum of hinderance.

The introduction of the 'first railway package' a few years ago caused a certain amount of consternation to the railway industry in this country. A number of high-profile accidents had brought railways under public scrutiny and TPWS was being installed as a stop-gap safety measure and, at the same time, Railtrack was being succeeded by Network Rail. The Directives forming the 'first railway package' were given effect in this country by the creation of a number of Statutory Instruments – Regulations issued by the Secretary of State with often minimal parliamentary scrutiny.

Now, we are dealing with the consequences of the 'second railway package.' There is the Railway Safety Directive, a new Interoperability Directive, the creation of the European Railway Agency, amendments to liberalise the domestic rail freight market and the EU takes over member states' role as representatives on the Convention concerning International Carriage by Rail.

Once again, the Directives have been 'transposed' into UK Statutory Instruments. At the same time, the Office of Rail Regulation, in addition to regulating railways, assumes responsibilities for safety from the Health and Safety Executive. The Railway Safety Directive has been transposed into the Railways and Other Guided Systems (Safety) Regulations 2006, which came into force on 10-Apr-2006 (with certain provisions deferred) after a period of consultation with the industry. Certain of the provisions were vigorously opposed by the Heritage Railways Association (HRA) and others because of the adverse impact on the preservation movement in this country since the UK legislation did not implement the exemption for heritage railways in the original Directive.

The 'Daily Telegraph' carried this letter from David Morgan, Chairman of HRA:-

"Sir - My member railways, which operate nearly 100 lines in this country, principally with steam locomotives, have suffered from the results of excessive regulation imposed by the Health and Safety Executive.

In fact, many of us have the feeling that nothing would make safety authorities happier than to see us all closed down, if only because the safest railway must be one on which a train never moves.

The latest burden placed on my members is the Railways and Other Guided Transport Systems (Safety) Regulations, setting out requirements for the approval of new plant, equipment and works. The HSE is trying to push this through before April, when it loses control of HM Railway Inspectorate to the Office

of Rail Regulation, but is arguing with ministers that this is required because of new European directives on rail safety and inter-operability.

No mention is made of the right to exemptions and derogations provided for in the directives and, as is often the case, Brussels is used as the excuse for gold-plating requirements."

This letter produced the following rebuttal from Geoffret Podger, Chief Executive of HSE:-

"Dear Sir

David Morgan's letter on new regulations for railways does not provide an accurate picture of HSE's proposals. The new regulations are streamlined rather than excessive. Indeed, they consolidate the existing framework and in many areas *reduce* bureaucracy.

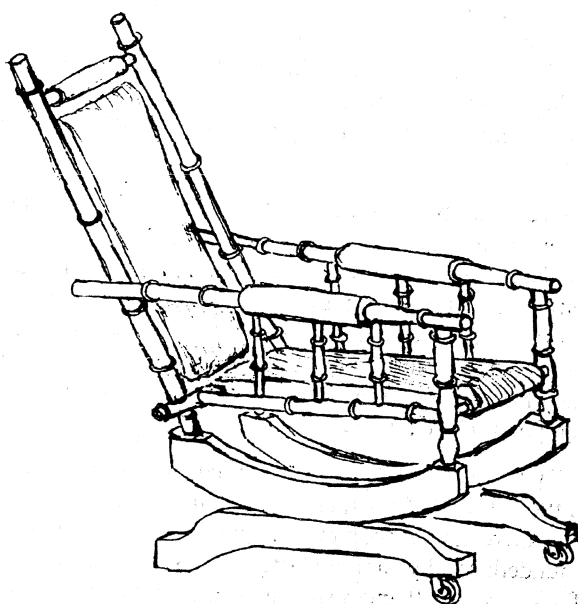
The current regime where Her Majesty's Railway Inspectorate (HMRI) examines and formally approves new works, plant and equipment is being changed to one where railway operators take responsibility to manage the risks they generate through independent verification of new equipment. Operators benefit from greater flexibility and HMRI can concentrate on providing more effective advice, support and proportionate enforcement for all railway companies, focusing on areas of greatest risk to passengers and railway workers.

The package does implement European requirements, but without 'gold-plating'. For example lower risk heritage operators, particularly those that operate at 25 mph and under, are exempted from the EC certification processes for mainline railways.

HSE worked with the Office of Rail Regulation (ORR, the new regulator for rail safety) and industry to develop the final package of regulations for transport systems, which are designed to ensure that risks to health and safety are controlled, in a proportionate way."

There are claims that the principal objections of HRA have been addressed and that, at least in the short term, little or no change will apply to heritage railways. From a study of the regulations as currently in force, I am not so certain. We shall see.

View from the Chair by John Hawley



Good day to you all and may I take this belated opportunity to wish everyone a Happy New Year. We seem to have put the worst of the winter behind us at last. I think the early forecasters were right – this has been a ‘bad’ winter, compared to those of recent years, but not if compared to some that we older members have lived through.

Harrye's Bits

I am pleased to receive regular updates from Harrye Frowen regarding progress on his 7 ¼" Lion. The latest included an emailed photo via his granddaughter, showing cylinder and covers, valve ports, slide valve and valve chest. The front cover was particularly pleasing, with its dished face and the boss for the tallow ‘lubricator’. Harrye has been chasing me for information and I have been able to help in several cases, but where I have not, he has forged (‘cast’?) ahead, producing things like cylinder blocks, valve details and so on. Some parts are ideal for manufacture by laser cutting. Is Harrye the only one brave enough to get on with a new generation of Lion in this gauge?

Geoff Wright

I was asked recently about the fate of the late Geoff Wright's 7 ¼" Lion. Geoff died in early 2005, as far as I can gather, but does anyone have any more details? Reading back through the pages of recent Lionshearts, I've not even come across a mention of Geoff's passing. No obituary. Nothing. And yet, by all accounts, he was a popular OLCO member. He was our Treasurer from July 1992 until May 1997, won Lionsmeet at Swansea in August 1999 (on David Neish's 5") and was a rare OLCO member in that he built a 7 ¼" Lion, admittedly a scaled up LBSC in parts, but he did incorporate a more realistic, non LBSC boiler. I understand that he was a pretty prolific modeller too – Lion was just another string to his very busy bow. He described the construction of the engine in Lionsheart no 31, of September 1993. There were also two photos of the completed loco in Lionsheart no 36, of March 1995.

Press Cuttings

I was a bit dismayed at the report, on page 55 of the November issue of The Railway Magazine, on the Museum of Science and Industry in Manchester's ‘Riot of steam’. Not a mention of Lion, the only genuine ‘old locomotive’ on display, even though she was just a static exhibit.

I note that the United Nations has been sounding off about plans for the proposed new museum in Liverpool. Does this mean that the building will be delayed, or perhaps redesigned? Whatever happens, presumably this means that the return of Lion to Liverpool may be delayed.

The Health and Safety Executive has been throwing its weight around again, by suggesting that an EU directive be applied to Britain's 100 odd heritage railway societies. The future financial security of these groups is threatened by the possibility that they may have to employ (and pay, at £200 per hour!) safety inspectors. Under the headline ‘Steam trains run into safety rule buffers’, the Daily Telegraph of 13th February 2006 states that ‘Safety has been the responsibility of the Railway Inspectorate which, acting on behalf of the executive, inspected new rolling stock, track and signalling.’ The paper goes on to quote David Morgan, Chairman of the Heritage Railway Association, as saying that ‘the executive had tried introducing new arrangements requiring the heritage societies to employ an inspector themselves.’ “This work was done free by the inspectorate...” he said. Mr Morgan writes for The Railway Magazine and is also an OLCO member.

But hold on a minute. We can't blame the HSE, surely? They are only interpreting an EU directive on rail safety and we all want safe railways. However, applying high standards to national railways, whose trains run for hundreds of miles at very high speeds, is one thing. Do the same rules have to apply to those railways whose running lines are generally very short and whose speeds are severely restricted? These railways are run on the whole by volunteers, to whom the job is of great interest. They don't seem to me to be the type of people who have to be cajoled by inspectors constantly looking over their shoulders. And another thing. This very EU directive has ‘get out’ clauses, which would enable the HSE to opt out of the requirements – if it so wished. I just wonder what we would see if we compared the accident rate per passenger mile between the two systems.

(continued ...)

Model Boiler Tests.

While on the subject of safety, I have just received from my local (Bristol) Model Engineering Society a booklet entitled *The Examination & Testing Of Miniature Steam Boilers*, published by the Midlands Federation of Model Engineering Societies, the Northern Association of Model Engineers, the 7 ¼" Gauge Society Ltd and the Southern Federation of Model Engineering Societies. Gosh, what a mouthful! Even more groups were consulted in the drafting of this document. Still, it looks as though, finally, we are all pulling together towards a national standard of boiler safety and that has to be welcomed. I note that boilers with a capacity of not more than 1.5 bar-litres (presumably Mamod type boilers, etc) are exempt. Just as a matter of interest, I measured my own (7 ¼" gauge Lion) boiler and it works out as having a capacity of 9.33 pints (5.3 litres). Multiply that by the working pressure of 6.205 bar (90 psi) and we have a bar-litre figure of 33. Quite modest really.

Help Requested

In a nightmare scenario, a ne'er-do-well broke into the Power Hall at the Museum of Science and Industry in Manchester just before Christmas and stole various rare and valuable artefacts, including, oddly, both crosshead and small-end assemblies from Lion. As is the way nowadays, all sorts of authorities have got involved and most of the remedial work will have to be sub-contracted. The museum, together with Lion's owners and the insurance authorities have enlisted the help of various learned bodies, including consultants, designers and engineering companies in order that the missing parts may be remade and replaced. Tenders have been submitted in response to enquiries and from these a short list has been drawn up, including French engineering consultants Jenny Saypa, and Spanish detail designers AVNA-Clew. Manufacture and final assembly will be by Fitton Hope. Financial management will be exercised by accountants Gessan Addabitt.

Now, the big problem is that they don't have the original items to use as a basis for making the replacement parts. They have contacted me in the hope that I have all the information on my drawings and sadly, I don't. I do have the general assembly of the area concerned. (See sketch on page 20). This shows the main components – the piston rod, the crosshead and connecting rod, together with various tapered keys, bearing brasses and so on, but I have no idea how all the keys do their job. Can anyone help please? There must be engineers amongst our membership who have a good idea, or perhaps Dorothea, who last assembled these parts, or the museums, can help. The big problem is where the various tapered keys make tight contact with their mating parts and where there should be clearances.

This is a serious request and I really do need answers. I have my own views on where clearances should be, but would welcome some expert advice. Is there a correct way? Are there theories on how the dynamic forces should be transmitted through the various components? Answers to me please. Then I can update my drawings.

The Film

Did you sit and watch the *Titfield Thunderbolt* on Channel 4 on Friday, 10th March. I know I had better things to do, but it was a chance to put my feet up and it's always worth another viewing. Of course, I 'owe' the film a look see anyway, since I did so badly in the quiz set on page 8 of *Lionsheart* no 57. (I've just had another go and scored the same dismal mark, so perhaps I should watch again). Mind you, I think that giving only one mark for questions 8 to 10 was a bit tight.

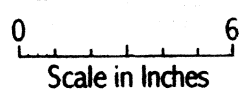
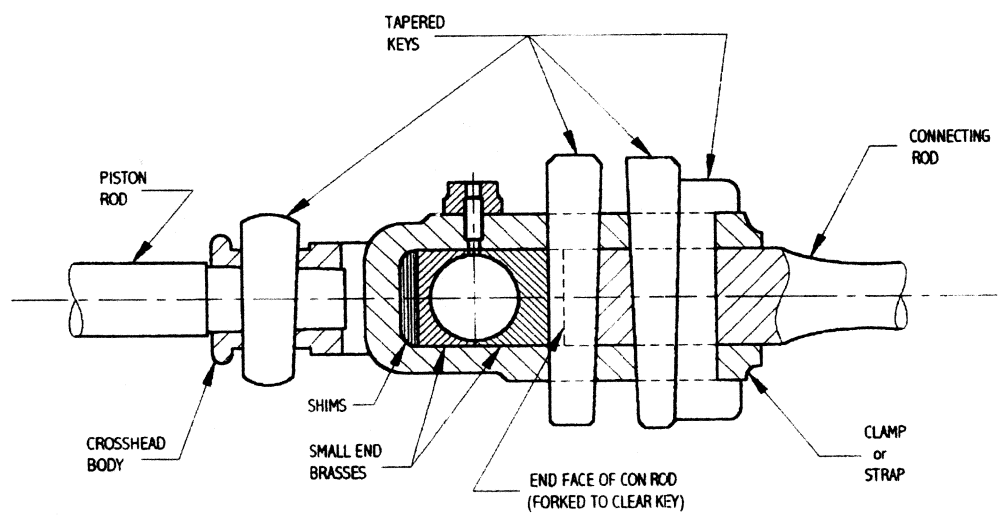
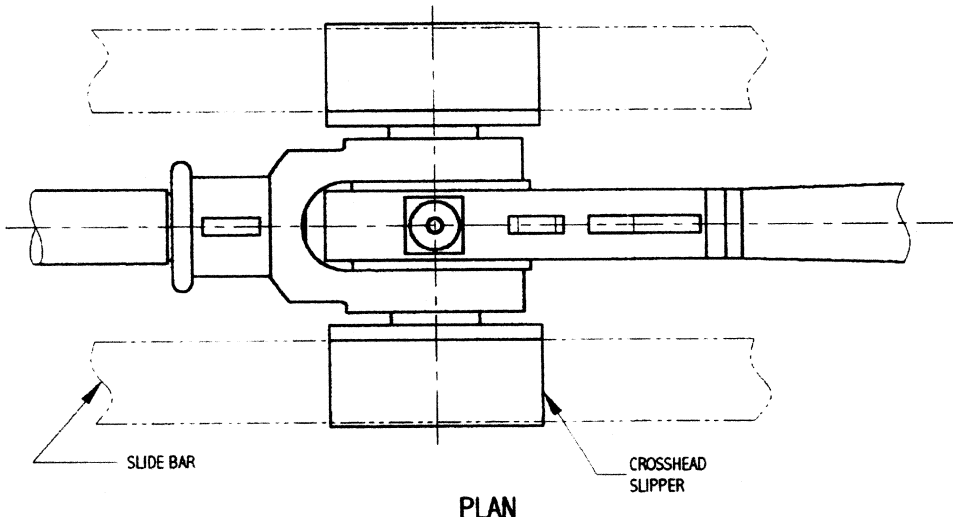
I've long been intrigued by one bit in the film. About four minutes in, Dan is helping the squire to manhandle his trailer over the tracks, prior to the train setting off for Mallingford. The camera switches briefly to the two porters as they lower the ramp to roll the trailer into the goods van. Does the ramp fall on one of the porter's toes? He makes a very funny face at that point. Have a look.

By the way, readers may be interested to know that in the list of OLCO stock [printed in an earlier issue – Ed.] there is the booklet '*On the Trail of the Titfield Thunderbolt*', by Simon Castens. This is a 'must have' if you are at all interested in some of the goings on during filming. If anyone would like a copy, or any other item for that matter, please let me know, so that I can bring it to the AGM. Which leads us on nicely to....

The AGM and OLCO Officers

I write this piece with some fears for the future of OLCO, because we face a change of at least three Officers at the AGM in May. Jan, our Editor, is having to step down due to pressures from other areas, mainly her need to get on with running her business. Also, she feels that, since she is not a modeller, she cannot ably represent our modelling side when producing *Lionsheart*. Jon, our Treasurer, was reluctantly pressed into taking on the post of Secretary at last year's AGM, since no-one else appeared willing to fill this post. Jon also manages the Membership list, so he already had two jobs. I too have done various OLCO jobs since I joined back in about '89, so I now feel that some one else should take over my current position as Chairman. It's not an onerous job – most of you have seen me in action presenting the prize(s) at *Lionsmeet* and chairing the AGM, so you can see how little is involved.

I must be perfectly clear on this – we three are standing down at the forthcoming AGM. We have done our fair share of helping to run OLCO and now it's up to someone else. If these positions are not filled at the meeting, then there will be no newsletter. There will be no minutes of meetings – no meetings in fact, since there will be no communication. If that situation comes to pass, then we might as well wind up OLCO. So, please, it's your organisation. You should help to run it. See you at the AGM!



QUESTION REGARDING TAPERED KEYS:
 WHERE SHOULD THE KEYS MAKE CONTACT?
 WHERE SHOULD THERE BE CLEARANCES?

LION - CROSSHEAD AND SMALL END ASSEMBLIES