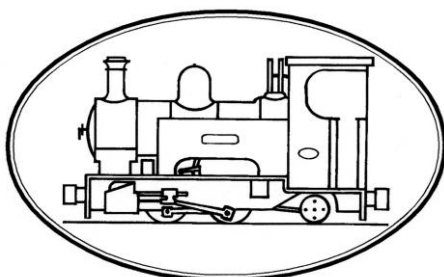


NEWSBRIEF

No.35



**October
2011**

**Newsletter of the Metropolitan Water Board Railway Society
(Supporting the Hampton & Kempton Waterworks Railway Project)**

www.hamptonkemptonrailway.org.uk

Edited by: Jim Hewett, 1, Lavender Vale, Wallington, Surrey, SM6 9QR

Published mid January, April, July & October. Press date 1st of same month

Special Open Weekend November 19/20th

This would be one of the normal KGE Steaming Weekends and the railway would be on view. However, we want to give everyone the opportunity to see what we have done so far with the Hanworth Loop. The plan is to have *Hounslow* and the Manrider in operation on the loop. Unfortunately, we can't offer rides to the public or even members but genuine workers can ride. At the time of going to press about half the loop is down but there could be more by November. Come and support us. There are plans for another, bigger, event next year.



The top end of the Paddock at the end of September – Main loop on left, loading siding on right.

Brief News in Newsbrief!

A lot has happened since you received Newsbrief 34. More track has been put down amounting now to half the Hanworth Loop and most of it has been brought up to decent standard. We had another visit from Major Poyntz. He thought we were doing OK and gave us some advice to keep us on the right track. A draft lease is being prepared for the rest of the line to the Upper Sunbury Road but at the moment we are just putting down on paper what exactly we want to do. It is still hoped we can get into Kempton Park station and under the A316 flyover but stage 2 will simply be to build from the South Field to Bunny Lane.

We are just starting to build our station in the Paddock and this will hold up track laying for a few weeks. If all goes well we are hoping to be open to carry passengers around the Hanworth Loop sometime next year but there is still a lot to do especially as far as rolling stock is concerned.

The Ransomes & Rapier crane is almost ready to use; see the article by Dave Pearce. I have not previously written much about this and the reason was that mostly it was worked on at weekends and I rarely saw anyone to ask about its progress. When I did eventually did see Dave I was able to persuade him to

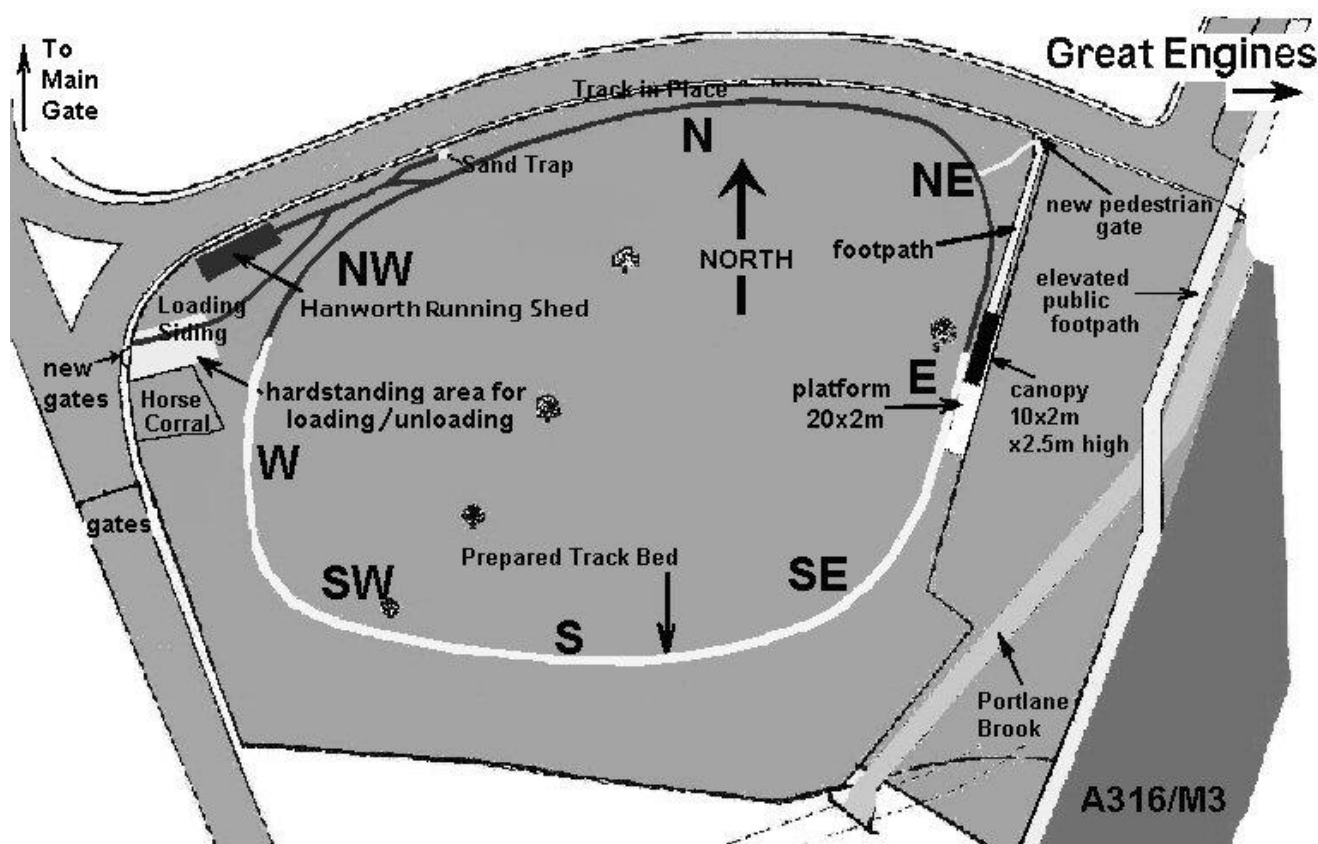
write about the work and so you can read that on p8.

There are moves afoot to bring the KGE and MWBRS closer together which we think would benefit both organisations. The current thinking is that the KGE Trust will have its remit expanded to cover the railway as well. This seems to be the best way forward as we really need have some charitable status and Thames Water really only want to deal with the Trust. However there are several options and you will hear more when we have decided the best way forward.

In the latest issue of "Triple News", the newsletter of KGE, it is stated that they have a multi-phase programme of improvements with Phase 7 being the building of the railway. I think that with continued effort from our members we can raise that up to about 3 or 4. Let's see what we can do!

Make another date in your diary, Saturday evening **26th October, 18:30**. We will be holding another Get-together at the Bell Inn, 8 Thames Street, TW122EA, 020 8941 9799. Come along hear what has been happening and ask a few questions.

Another date to note is June 16/17th next year when KGE will hold a Railway Open Day with us as the main feature.



The extent of track laying at the end of September

Working Parties

Tuesday July 19th It was not a promising day with mist and the possibility of rain. However, Douglas arrived early and unlocked everything including the main gate into the Paddock which is a bit tricky since the vandals wrecked it. It is now high on our priority list to fit a proper gate.

The main plan was to ballast the main line from a couple of lengths below the King point. The first job therefore was to refit the baulk of timber to the tipper wagon to stop the whole wagon tipping. The problem was that when loaded it rubbed on the track and fouled a point mechanism. Having chopped off what we thought was sufficient Tony loaded it with his digger only to find it still fouled the rails so the job had to be done again before the ballast could be tipped. One skip load seems a lot but only does about half a length if there is any lifting to be done. We did some adjusting of the track but needed more ballast. At that time Tony was digging out the area for the platform so while we were waiting we went for lunch.

After lunch we decided to move more rail down to the loop while we had everyone together; 8 people are needed to move rail from the storage area. This meant that no more sleepers were made so the total for the day was seven. We carefully selected 3 pairs of rails. The first were straight so little selection needed and these are to go at the east end of the station. The next pair



These were the tightest radius rails we have used and make quite a wide load

were tightly curved, probably about 17 metres radius and the tightest we have used so far but we knew that was about the radius needed for the next section of line beyond what we had laid already. They presented a problem on the trailer as they stuck out quite a lot. The final pair were intended to go between the straight and the tight curve so we selected a pair 25 metres radius. To make the move easier we took the rails into the Paddock via a temporary gate at the station. We can get the car and trailer almost up to the gate and it is only a short distance to carry the rail right to where it is wanted. Whilst we were doing all this it started to rain quite heavily, just like the last time we moved rail but

this time it did stop before we finished. It did however rain very hard later. In between all this and afterwards we managed to put down the second skip load of ballast and fit a good many "gauging spacers". Last week's sleepers (14) were also moved to the Paddock. A rough check on the number of sleepers produced so far seems to indicate that we have made just over half the number required for the Hanworth Loop.

Thursday July 21st Robert reports:- Arrived at about 10:00. Dick Scholefield at about the same time. John Fevyer arrived in passing to drop something off but got collared. Paul Newman arrived soon after. The job today was to move the Boxford lathe from the KGES engine house to "Hounslow Hall". With kind assistance



Lifting the Boxford lathe out of the Great Engine House Robert Leadbetter

from the KGES lads and the use of their crane we got it as far as the engine house loading bay. We managed to podge the lathe into an area that the crane could get to and then we had to lever it up to get wood underneath in order to fit the strops. The rest was easy until we got it into the bay. We had to sit the lathe on a five wheel trolley and manoeuvre it around as KGES had in the bay a large load on their fork lift trolley and that had to be removed and then relocated inside. On Sunday we will move it from the loading bay to "Hounslow Hall".

Sunday 24th July There was 9 people on site today (6 for the whole day). The main job was to get the lathe (ex KGET) from the main building side door across to 'Hounslow Hall' for safe storage.

With a bit of brute force, the electric pallet truck and various bits of wood, etc., it took about an hour to get it carefully positioned inside the container.

We had had some problems with maintaining the track to gauge, using the original 'brown' outside spacer plates. Four modified plates had been made and after drilling the holes out to size, we tried fitting them at various places along the track where there had been problems. They were much better in holding the rail to gauge (610mm +/-3mm), so we can now start to mass produce them (we need over 1000 of each of the two types just for the Hanworth Loop).

Robert had asked a builder friend of his to come along and give us some advice of the construction of

the station platform. After a detailed discussion, we now have a better idea of how we should proceed and the original drawings are being modified to incorporate the suggestions. Work on the station platform foundations will start in the near future.

More spacer plate blanks were cut to size and de-burred ready for drilling (40+ of each type).

More of the top of the coach chassis was de-rusted and 'red leaded'.

The sleepers that had been cast the previous Tuesday were removed from their moulds and finished off (there are various things that need to be done before they are taken over to the field for storage).

Tuesday 26th July Rather short of volunteers, several came and went, probably about 7 in total. The sleeper team took 3 and made 9 sleepers before they ran out of water. We don't have a direct mains supply but have to fill a tank from a fire hose. By the time they had done that it wasn't worth restarting.

The track gang set about upgrading the main line which was already down. Most of it was adjusted to get the cross levels right but then it was thought we ought to get it to the final alignment before we did anything else. It appeared that the track had moved quite a bit in the last couple of weeks probably due to expansion & contraction. The ballast is supposed to stop this but there was none around the sleepers just underneath. This is a good lesson to learn now as the movement would not have allowed passenger trains to run.

We did a lot of jacking to move the track into a reasonable curve but it was reluctant to stay there without plenty of ballast. The next job therefore to bring along some ballast. We loaded the skip 4 or 5 times which provided enough for all but the last length. By that time we were all thoroughly tired and as it was 3pm we decide to stop for the day. That part of the track probably still needs another day's work to get it right. It was just as well we stopped early as it takes a long time to secure the main "gate". Hopefully we will erect a proper gate soon and that will make it much easier. We also fitted more of the gauging plates, using all we had prepared.

Sunday 31st July We had 5 people working today plus Dave assisted Paul in welding up the spacer plates for the L & B rail. More spacer plate blanks were cut up and de-burred. Dick made some more checks on the fitting of the outside 'brown' spacer plates and then took the cut blanks home to drill the pilot holes.. Most of the various spacer plates that we had ready, had their first coat of 'red lead' applied.

The sleepers that were cast on Tuesday were removed from the moulds and 'finished off'. The moulds were then prepared for next Tuesday's batch. Another batch of rubber sleeper pads were started (some are completed on the bench).

Simon arrived after lunch and finished the last bit of painting on the skip wagon.

Tuesday 2nd August Quite a hot and humid day, not really conducive to doing too much. John Collis, Brian Turner & John Fevyer (the normal sleeper team)

managed 13 sleepers, almost a record and very good for such a day although they did have the advantage of being in the shade under the flyover.

The track team (3 all day plus a few for a shorter time) did not seem to do so well. However, without Tony's digger or tractor & trailer (or Tony for that matter) progress was slow. We really needed lots more ballast but we had to make do with what we could transport by wheelbarrow on a skate. We did try filling the tipping skip by hand but that really is hard work and we only managed to about quarter fill it which worked out at about 4½ barrow loads. There is a problem with not filling it; it is designed to be tipped full and as such most of the weight is in front of the pivot so it tips itself. When quarter full you have to tip it manually which required 3 people to achieve so we won't try that again. The ballast we did manage to move covered about another 10m of Terram which means we can get another length of rail in place. We did actually lay another length but the ballast extends a further length. Another two lengths (one curved & one straight will take us to the beginning of the platform).

We did have what appears to be another small success. Reprofilng the flanges of the skate wheels seems to help them stay on the track through points – see separate article.

Tuesday 9th August According to the signing on sheet we had 16 volunteers but some did not stay all day and others never appeared to work on the Hanworth Loop. However, there were about 8 or 9 working there at various times. No sleepers were made because we had almost run out of ballast and were awaiting delivery but John Collis & Brian Turner spent most of the day repairing the moulds and John Fevyer spent all day drilling "gauge plates".



Laying Terram at the Station, 9th August

Down in the Paddock we laid another 2 lengths of track (4 rails) which just took us into the station site. It might not actually be the station as that is going to be shorter than originally planned to save money – as we have only one coach it seems to make sense to only make it 20' long and it can be extended later if necessary. However, in order to lay those two lengths we had to put down Terram and ballast. Track laying with 6 people is so-o-o-o easy compared with trying

to do it with the usual 3! We were again without the use of Tony's digger so the tipping skip had to be filled by hand which is very hard work. We managed 4 half loads although the last one was not needed and was tipped elsewhere.

Last week's sleepers were taken down to the paddock and loaded onto one of the flat wagons ready to be moved to the trackbed next week.

One other job was to refit the wheels to the long rail skate. These had had the flanges bevelled; a quick trial seemed to indicate it did not derail – until it hit a section where the track was wide-of-gauge. We later increased the gauge of the wheels by about ¼" but there was no time to try in again. The wheels of the last skate were taken away for reprofiling.

Sunday 14th August We had 8 volunteers around the site at various times. Carried out repairs to some of the sleeper moulds and finished repairs to the damaged wheelbarrow (now useable). Did more de-rusting to the top of the coach chassis. Started de-greasing/cleaning up of the coach bogies.

Finished painting a large number of the 'blue' sleeper clamps. Once dry, the clamps were fitted to the 'Delivery' (loading dock) siding track using the torque wrench. There are only about 6 sleepers at the bottom end of the siding that do not have the correct fittings now. Another batch have been prepared and are ready for painting, together with a large batch of 'green' & 'brown' spacer (gauge) plates.

Tuesday 16th August It was a strange sort of day for weather, quite warm but not too hot. The sun came out at times but there were a few spots of rain. The first job was to refit the reprofiled wheels to the last rail skate. We then moved a batch of sleepers made two weeks ago down to the railhead followed by another batch which had been sitting on the *Warflat* for some months. That just reinforced the thought that the *Warflat* is not a very good vehicle for us; it is extremely heavy and the wheelbase is too long for our tighter curves. It does not run easily even downhill!

Some time was spent on further examination of the King point. The point blade movement is very stiff and it is obvious the trouble is caused by one of the tie-bars being bent. Bending it with crowbars did not work but we have other cunning plans! The point is quite wide of gauge at one point and to cure that the tie-bars will need to be cut. One of the ideas to free up the point blade also involves cutting the tie-bar so we might be able to "kill two birds with one stone". Most of the rest of the day was spent distributing ballast around the track and we virtually exhausted the pile in the road. Most of the rest of the day was spent distributing ballast around the track and we virtually exhausted the pile in the road. During this exercise most of the main line was packed to get the levels somewhere near right but it is a reiterative process and will probably need another session yet.

Tuesday 23rd August Without a doubt the worst day for weather since we started track laying. It poured down all morning with the drains from the flyover

overflowing into the aqueduct. It did ease off later.

However, we knew not much would get done as we



A leak from the flyover due to heavy rain.

were expecting a visit from Major Poyntz to further advise on how we were doing. He did come and it seems we are progressing OK although he did give us a few pointers as to how to proceed. One of the things we all spotted was that we still have flooding problems which will have to be dealt with; there is even a



The puddles show that we still have drainage work to do: during Major Poyntz visit

problem at the highest point!

Because there was no track work the sleeper team had some extra help which meant that they had made 13 sleepers before lunch. Unfortunately, there were no more moulds ready otherwise they could probably have done 20.

With the sleeper team now with nothing to do we managed a team of 8 to move rails. Before that we managed to measure the radius of a few rails so we could pick some more for the next section. Once the full team had assembled we started by tidying up the rail stack and moving the very tight radius ones out of the way. One of them was so tight it was off the end of our chart so must have been less than 15M; goodness knows where that one came from!

We moved 4 straights and 2 curved (about 35M radius) down to the Paddock to start laying back from the King point, probably next week. Fortunately, by this time the rain had decreased to a light drizzle.

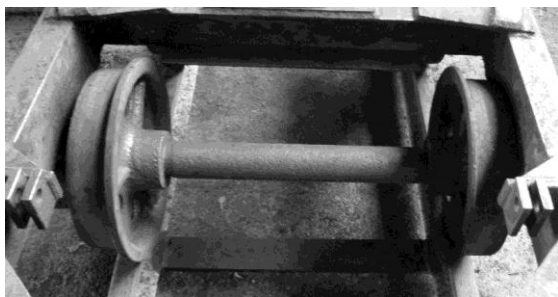


The end-tip skip as it arrived

One other job was to remove the actual skip from the "new" end tipper truck we acquired a couple of weeks ago. It just needed about 6 people to lift it. It can now be repaired by welding up some of the holes.

Sunday 28th August All the sleepers produced last Tuesday were removed from the moulds and 'Finished'. All the available sleeper spacing plates were painted to various stages but due to the paint not drying quickly, none were yet available for fitting (they will be finished off next Sunday for use on Tuesday 6 September). We need to produce a large batch of spacer plates (about 600 of each type) so we can get well ahead of the track laying requirements. This might have to be done on Tuesdays but we are looking into getting them made elsewhere.

Work progressed with the coach chassis. The worst of the grease and grim has been removed from both bogie's and the wheel sets have been removed from the



One set of wheels from the Devon coach; note the difference in flange wear between the two wheels caused by continually running round a circular track.

braked bogie. On one wheel, the side play thrust washer is very badly worn and must be replaced. All the other washers will have to be inspected for similar damage. The braked bogie frame has been partly de-rusted ready for painting.

We have made a start on the fitting of the 'steps' on the Manrider (rain stopped further progress for the day). The Manrider has been turned on its side for this work to be done.

The water supply hose was finished, so that the water tank near the workshop container can now be

filled with ease.

During the middle of the day, four Committee members carried out survey work on the proposed station area of Bunny Lane.

Tuesday 30th August Not much of a day for getting much done. We decided that as we are desperately in need of the "gauge" or spacer plates then we ought to get a team producing them – that was the sleeper team so no sleepers were made. They did not get very far with the plates either as the mechanical hacksaw broke and it does not look like a quick repair. We had a small version which someone had given us so we retrieved that from the Gauge House. That was found to work OK cutting one thickness of plate but when trying 2 it broke the blade. The big saw will cut 4 at a time. The small one will help as it is better than cutting it by hand. John Collis drilled all the plates available and Brian Turner de-burred them.

Down on the track another length was laid west from the King point with new sleepers made last week. We were short of the rubber pads but just found enough. In order to keep the rail joints staggered we found a half length and added that to the outer rail. It was rather more curved than we would have liked so will probably require attention from the Jim-crow. As there were now no rubber pads we had to prepare some. Other jobs were to tidy up the ballast in a few places.

All in all not a very satisfactory day; no sleepers, just a few spacer plates made and only a bit over one length of track laid.

Tuesday 6th September. The weather forecast was dreadful so we assumed no work could be done outside and did not even unlock the Paddock. It looked like a good day to get on with other jobs so the sleeper team started and made 13 sleepers.

All the previously primed spacer plates were painted although some still needed one side to be done.

Dick spent most of the day working on the mechanical hacksaw. It broke last week because a bearing had seized; that caused other damage so the repair is not straightforward. However, Dick managed to get all the offending parts out and it may well be that it can be put back in full working order without any expenditure – just some time and skill needed.

By lunch time the weather had improved to the point where outside work looked distinctly possible. After lunch it still looked OK so we used the jim crow to ease the radius on the last half length laid last week. We then laid a full length on the inner rail and barred the whole thing to a reasonable curve. There is still a nasty kink at the end of the 1st length from the point.

Some of our volunteers spend a while tidying up part of the ballasted track.

We had a new volunteer, Graeme Ross.

Tuesday 13th September. The 13 new sleepers, made last week were finished and transported to Hanworth loop for immediate use. This involved laying 3 lengths of rail up towards the horse corral on the end of the rails already laid from the King point. We are now as close as we can get to the horse corral without

modifying the fencing which must be done soon. Anyway, laying more track there would block access for the digger wanting to get to the station site. There will have to be a level crossing here also to allow vehicles into the centre of the field when necessary.

More spacers were prepared and those already prepared were installed on the main loop line.

The King point tie-bars were cut ready for re-gauging. This might prove difficult as the rail will need some bending and it is of much heavier weight than used on the rest of the loop. It needs a heavy duty welder, which we can borrow, but will need to hire a suitable generator to power it; ours do not have the necessary output.

We also improved the "temporary" gate at the end of the loading siding.

Tuesday 20th September We were rather unsure what to do as we were hoping that Tony would arrive with his digger but he didn't. If he had we could have done some ballasting and got the station footings dug. The sleeper team were sent off produce more and they managed 14 by just after lunch. Those left decided that we ought to see how easy it was to bend the rails of the King point to regauge it. Using just a couple of fairly lightweight sash cramps it bent quite easily and we were able to screw it down to the wooden sleepers. The screws are under a lot of pressure so we would not want to rely on that for too long but the plan is to weld it up very soon. We had almost finished when Ray Marie turned up with a pair of rather heavier sash cramps which had been donated to the KGE. These were much better and we had no fear that they might break as the others looked as though they might do.

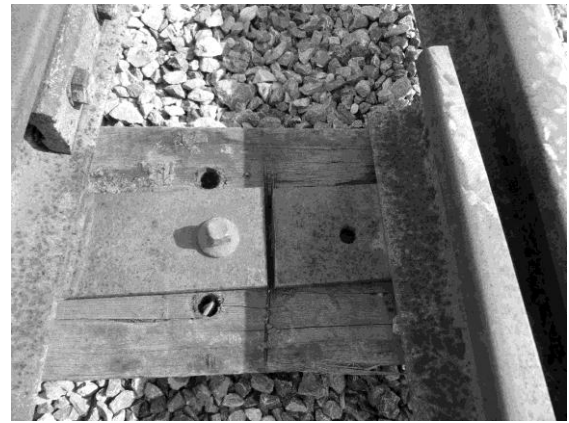
Whilst the point work was going on Douglas was running a pipe under the track near the running shed to take the wires for the horse fence. At the moment the battery which drives it sits in a box hidden in a hole in the ground. Moving the battery and HV generator to the running shed will be more convenient.

With those jobs progressed as far as it could go we spent a while tidying up whilst we waited for the sleeper team to finish so that they could help move more rail to the Paddock. Although about 10 people had signed on by the time we came to move the rail we had a job to find 6 which really is the minimum needed. We did two trips with the trailers and moved 4 rails although they won't be needed for a few weeks.

Tuesday 27th September A nice hot sunny day after a cloudy start. The day started by moving last week's sleepers down to the Paddock and placing them ready to lay across the horse corral.

Dick and John Collis went off to buy more cement for more sleepers.

Tony arrived with his digger so it was decided to dig out the foundations for the station platform. To cut costs for the time being the original plan has been changed to make the platform only one coach long rather than 20 metres. As we only have one coach that seems to make better sense and it can always be extended later if necessary. It did not take long to did it



A cut tie-bar on the King point ready for re-gauging

all out and so after lunch we started to put in shuttering for the concrete. We had not really expected to do that so soon so we had to use what we had in the way of plywood which was already cut. Next week we will



Pulling the point to gauge

have a circular saw ready.

Meanwhile the sleeper team had produced another 12 sleepers but they had run out of reinforcements so no more could be made.

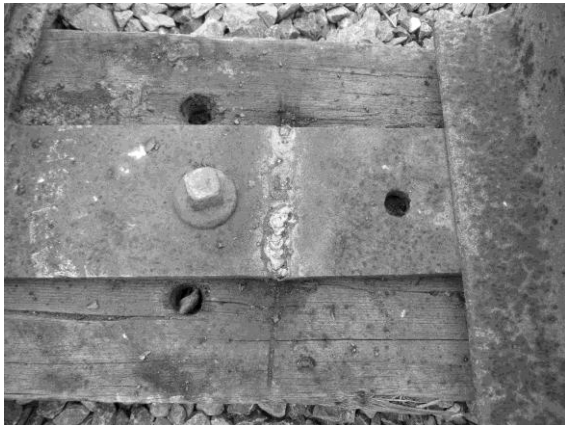
Brian Turner spent a lot of time cutting down undergrowth with a strimmer.

Dave & Andy worked on the crane. They greased the rope guide pulley and the jib pivots, jib and hoist brake bands were adjusted and pivot points lubricated. 220 grade oil was added to the rear steering box.

We have not yet mended the mechanical hacksaw (quite a complicated job) so production of spacer plates to keep the track to gauge had ground to a halt. However, David Dodman has set up another production line at his engineering works and they are coming off thick and fast. All we have to do is paint them (and fit them!).

Weekend October 1st / 2nd Robert reports:- We had previously discovered that the gauge on the King-point was out of tolerance. We had to cut the metal sleepers and close up the gauge from 626mm to our gauge of 610mm. Paul Newman had to cut through our metal sleepers and then cramped the rails to gauge then re-weld. It was decided by the track team that it would be

wise to hire a Petrol/Electric welder unit from HSS. This I ordered for Saturday morning so at 08:00 I was on site. It arrived at about 10:00 and soon afterwards Paul and Dick Scholefield arrived and got started. I had to depart for another appointment.



One of the re-welded tie-bars

On Sunday we were joined by John Morson and John Fevyer and our Vice Chairman Lionel Beer. The final weld was done at about lunchtime.

After lunch we tested the points by running the large tipper truck over the points as fast as we could push them. There were no derailments and even the longer wheelbase warflat gave no problems.

There was one minor snag in that is the back to back tolerance on the check rails is too close and the check rails will have to be opened up a shim. See picture attached of the back to back job; and one of a nice sunny day.

I spent four hours on Monday waiting for HSS to collect their welder but after many claims that they were coming they never did, so the gadget is still under the A316 waiting for collection on Tuesday.

Further to Douglas's trackwork job list above, David Dodson has produced another 30 sets of spacers and these will have to be painted.

Tuesday 4th October A cooler day than of late but still warm enough to comfortably work outside without a jumper. Quite a few volunteers turned up, more than for a while, probably about 12. This gave us the opportunity to split into three groups. The sleeper team seemed to be 4 rather than the usual 3 and they made another 11 sleepers.

The track team under Douglas deposited several skips of ballast on the track west of the King point and realigned the last length to be nearer what is required. It was not possible to get it to stay there as it still required more ballast. Some work then took place on the points to get them work better.

A third team of Dick, Jim & Peter Binns finished off the shuttering for the concrete base for the platform. This involved quite a bit of extra digging (by hand) to get it in the right place. This time we had a circular saw ready to cut the plywood.

Ransomes and Rapier 6 ton crane

Dave Pearce

This crane was made by Ransomes and Rapier of Ipswich and first registered (GXV 932) in London



As found in January 2010

between June 1939 and March 1944. As the number is near the end of that series was probably registered late 1943/early 1944. It was built as a petrol/electric but is now diesel/electric. The petrol engine was a flat head (side valve) four cylinder Ford, which was changed later to a Ford Cortina engine (so I'm told by Thames Water staff) and then changed again to the Perkins P4



The crane as we received it. Peter Binns is removing branches from the jib.

diesel engine that's in there now. The electrics are the original 200 volt dc where the main generator is driven directly off the flywheel of the diesel engine. There is a control box which has levers that control the up/down

of the hoist, up/down movement of the jib, and the forwards and backwards movement of the crane itself. There are separate electric motors for the hoist, jib and movement of the crane. It has rear wheel steering so it can turn very sharply. A pedal on the floor controls the engine revs and as the engine speeds up so the main generator speeds up and the output voltage goes up. This is used to drive the motors of the crane. There is also a brake pedal to stop the vehicle. At the moment the brake pedal works but the brakes don't.

It was delivered to the MWBR'S in the spring of 2010 from Thames Water, Kempton, where it had been left to rot in peace at the back of Thames Water's workshop. It was pushed round to beneath the A316 with the handbrake on but it did not matter as when the handbrake was released the brakes stayed on. This is what happens when you leave a vehicle for a long time with the brakes on for approximately 15 years. The brakes were well and truly seized on. After a good look over it was felt that it was a good proposition to give it an overhaul and put it back into working order. The hoist and jib motors could be turned over by hand and the only fault that could be seen were the two pulleys in the jib which were seized. The diesel engine was turned over by hand and was nice and free even with the main generator connected to it. There was antifreeze in the radiator and oil in the engine so it was decided to try to start it. The fuel lines had rotted away and what was left of them were placed in a fuel can and the engine was primed. A battery was connected up and the ignition switch was rigged (no key) to start the engine. The engine turned over OK but would not start. The heaters were left on longer but it would still not start so a good squirt of "Start ya bast**d" was injected into the inlet manifold and after a coughing, spluttering and loud banging it started! It ran very well and was left running for about approximately 20 minutes. The voltage of the main generator was checked. It was approx 25 volts dc at tick-over and 200 volts dc at a higher rpm. The hoist lever was moved from a middle position to another position and the hoist motor solenoid worked, the motor turned and the hook moved. The hoist lever was moved to another position; the hoist motor reversed and the hook went in the opposite direction. So we had the hook going up and down. Next the jib lever was moved from the neutral position and the jib solenoid operated. The jib motor rotated and the jib moved, so the lever was put into the reverse position and the movement of the jib reversed. It moved even with the brakes jammed on.

So now we had a crane that worked except for two jib pulleys and brakes that didn't! Nothing to worry about then. The engine was then stopped and a few checks were made to see if everything was OK. It was and there were no leaks either!

The stabilising jacks were quite hard to adjust and after a lot of heat, oil, cursing, levering, hitting and some swearing they were freed off. First part of the overhaul completed. Someone suggested we have a look at the brakes; (what a stupid idea) we all looked at

the wheel and tyre and said "It looks heavy" but someone had donated a wheel removing trolley jack for lorries, so we had go at using it (that was heavy too). We started this job in the Autumn, (I can't remember what year) eventually we got the wheel off and it took two people to wheel it away. Next it was the turn of the seized brake drum. The drum end float bearing was released but it did not move. It was decided to try to use an extractor (some extractor, the drum is 25 inches in diameter). An extractor was found and mounted in place and pressure applied. More pressure, more levering, more cursing and swearing and the drum moved slightly. It took ages to get the drum off but eventually it did off revealing new brake shoes, so someone in Thames Water had done some maintenance some time ago. It also was very heavy, but no marks or scores on the inside. The shoes came off very easy, but the brake cam was seized solid in the axle. With the wheel and drum off it revealed some horrors to the chassis and fastenings. Where the dirt had collected behind the brake drum over the years of use if had caused a bit of rot to the chassis and they used strange nuts in them days, they were round and conical (rusted away). These were the nuts and bolts that hold the front axle to the main chassis. They were chiselled off eventually and the bolts removed. The front brake block spindle was also persuaded to depart the crane and the brake cam eventually followed. This took months to do and then someone went round to the other side of the crane and said "Look there is another one to do".

Spring came and we had both wheels off and both brake drums off and rot to both sides of the crane and more funny round and conical nuts. These nuts were



The first movement under its own power.

John Morson

chiselled off and the brake spindle and brake cam were removed. It was decided to fit a metal plate 36in x 4in x 3/8in underneath the chassis rail and weld it in place both sides. Metal plates were sourced and drilled and fitted with new nuts and bolts. The welding will be done later when the crane is fully mobile. The outline of the battery box was sort of there in the front of the

crane but I don't think it would have held a battery, so a new one was made and fitted. The surrounding metal work was taken off either by grinding or chiselling the nuts off and then wired brushed ready for painting. Refitting of the



The first lift

John Morson

brakes was next after all the parts were cleaned, grease nipples and holes checked for any blockages, grease injected and brake spindle and cam inserted and they moved. Next were the brake shoes, drums and wheels. The brakes were adjusted and a renovated handbrake lever refitted. At the jib head it was found that two pulleys did not revolve so grease was injected and still they did not move. Diesel was injected and still they did not move; heat was applied followed by swearing and cursing but they did not move. It was decided to leave these until the crane was finished and we would stick some weight on the hook to shift them. Andy Fearon made a completely new steering wheel as the original one was not strong enough for a Go-kart. This was given to me to weld up (what a mistake to make!). I welded it up but it was welded upside down so when it was fitted the dishing of the wheel was going down so it would have to be driven (coffee shop racer style, which I like) with people with long arms and short legs. Andy took it away and cut and shut it so it was the right way round and I welded it up again and now you drive it (sit up and beg style) with short arms and long legs.

So now we have a crane that has steering, brake pedal and brakes that work, a diesel engine, generator and motors that also work. Attention was turned to the override cut outs that work on the jib and hoist. These were installed when the crane was assembled at Ransomes in Ipswich but along the way seem to have been disconnected. A new override button was installed on the dashboard and connected up and now works OK. Also a new ignition switch has been installed as there were no keys to fit the old one. All the grease nipples were cleaned and injected with grease, fuel tank cleaned and painted and fitted, new fuel lines installed and fuel added. Someone donated a car battery and that is only fitted on working days. We were ready; it was lowered off the blocks which it has been on for over a year and ready to start. It didn't, it just turned over very slowly. The battery earth was the problem, so another earth cable was connected up to the battery direct to the engine earth. This cured the problem and it turned over at speed and a good squirt of "start ya bast**d" in the

inlet manifold and away it went. It was put in forward motion and the vehicle moved forward with ease. The steering is something else; you put lots of turns onto the wheel and wheels turn slowly. As you keep turning the steering wheel the wheels start to turn more sharply (that's rear wheel steer for you). We aimed the crane at the 850 kg bags of sand that are used for making sleepers to use it as a weight for the hoist to see if the jib pulleys would free. Then I tried the brakes as I neared the sand bags. The brake pedal works and the brakes, well it stopped but needs some more adjustment. The hook was lowered and a sand bag hung on the hook and up it went and, yes, the hoisting pulley gave in and started to turn. Next the jib was raised and again the jib pulley gave in and turned. The jib cut out works OK but the hoisting cut out does not so will need further investigation. It has come to our attention whilst using the crane to lift various things that the diesel engine coupling to the main generator is out of alignment so this is the next thing to do. This involves lifting the diesel engine and modifying the rear engine mounting brackets. The welding of the chassis plates is still to be done. As the crane can move under its own power it will be moved nearer the welding equipment. After that it's down to painting and maintenance.

So there we have a Ransomes and Rapier 6 ton mobile crane that's been overhauled, and if anyone else wants to do one you are on your own.

Workers - Dave Pearce, Tom Witt, Andy Fearon, Paul Newman.

Our Latest Acquisition

John Morson

On Monday 8th August Dick Scholefield and I travelled down to Dorset to collect the Rolling Stock Group's latest acquisition - an End Tipper Wagon.

The underframe assembly is constructed from two Hudson chassis (one mounted on top and at 90 Deg to the other) and is reasonable condition but the Tipper bucket is



Skip wagon loaded for transport to Kempton

in need of quite a lot of work (new plates will have to be fabricated and welded into place, etc).

The wagon has been purchased for the next phase of the railway's construction in the Kempton South field,

where we are going to have to move large quantities of ballast over longer distances than in the 'Hanworth loop'.

Once the chassis of our Coach has been de-rusted, painted and the braking system completed (ready for the woodworking stage to begin), we will move on to getting the End Tipper's chassis into good working order.

The plan is to construct a new type of bucket to fit onto the existing mounting frame and this will have 3 controlled discharge ports (lever operated) to allow the ballast to be delivered carefully between the sleepers and to either side of the track. This will save a lot of time and effort in ballasting up the track to a good standard.

The original 'bucket' will be repaired at some time in the future and could be refitted to the chassis (when required) if more ballast bulk delivery capacity is required when we get to the Bunny Lane section of the track and beyond.

Reprofiling the Skate Wheels

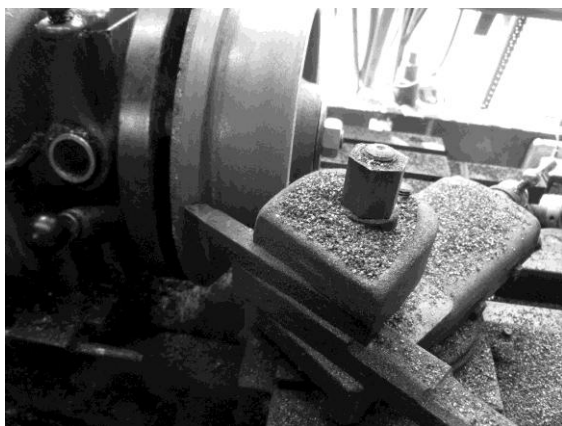
The "rail skate" trolleys we have made up have been mentioned before. Although they have proved useful, especially at Cambridge, they have also proved troublesome as they are prone to derailing. Wheels like these are difficult to find and these came from Radio Spares (!) and are really just meant to move heavy equipment backwards & forwards along a very short track.

The derailing can be put down to several causes:-

- a) wheels being too small
- b) no coning on the wheels
- c) wheels out of gauge
- d) the flanges not being bevelled
- e) tread not wide enough.
- f) Flanges not thick enough or deep enough

We are stuck with the wheels we have so we have to live with a) & e) although slightly larger wheels are available from the same source. We do have a solution for e) also but we are still thinking about it.

We thought b) could be achieved fairly easily but having done one wheel it was realised that it only does any good when the two wheels are rigidly fixed to the axle and the axle revolves; on ours the axle is fixed and the wheels



Machining the bevel on the flange

rotate on it. When rigidly fixed together and coned the wheels automatically keep the flanges away from the running rails even on corners (given the correct

conditions). The wheels run on their own bearings on the axle so are independent and there is no point in coning. We have a plan to correct f) but more of that another time if we correct it.

c) can be adjusted by adding spacers and that does help however we tried d) also and that seemed to work surprising well. We sent the skate through the points quite fast several times and it stayed on so we are hoping this is the answer. It should be pointed out that the flanges are rather thin anyway and bevelling them makes the edge rather thinner than we would like. This can lead to splitting of facing points but we felt that as these skates are very light that was unlikely and anyway we only push them by hand at very slow speed so they can be watched. Experience has shown that the bevelling was an improvement. We intend soon to fit discs to the back of the wheels. These can be made slightly larger than the existing flanges which should help solve the problem.

So how was it done? Well, like a lot of things it is simple when you get it all set up. With the right lathe the wheel could probably be held in the chuck but all that was available was a Myford Super 7 which was marginally OK but at its limit on several counts, size and power to name but two, The only way to hold it in the machine was to make a special shaft (a mandrel) and mount it on that. First I had to find a piece of suitable metal and I was half way through making one when I realised the steel was hardened and I would be unable to drill a hole down the middle. A friend found me something more suitable so a second one was started which turned out OK. With the wheel mounted on it the next problem was to find a suitable tool to machine it. The wheel itself was cast steel but was quite tough and needed a special hard tool. I slowly worked my way through the various tools I had until I found one hard enough and of the right shape. One problem was that it needed to be quite long to get where required. Eventually I seemed to have everything right but it had taken several hours to get there. It was taking about 5 minutes to do each one and having done two (of 12) disaster struck! The lathe stopped turning with a groan; what could have happened? To do this job required the wheel to turn relatively slowly and to do that the lathe has to be put in "back gear". What I had failed to notice whilst I was concentrating on the job in



Flange before (right) & after (left).

hand was that the oil flow to the back gear bearing had stopped and it had seized up. This meant I had to dismantle all the drive to clean up the bearing but once that was done the rest of the wheels were done quite quickly although I only did four per week.

Finally, they do seem to run much better through the points. I will report back if we try any of the other modifications.

M.W.B.R.S. visit to Exbury Gardens Railway Ray Marie

On the 4th of July, a group from the Kempton Great Engines Trust accompanied by representatives of the M.W.B.R.S. were invited by Lord Leopold de Rothschild to visit his twelve and a quarter inch gauge railway in Exbury Gardens.

The Rothschild family have been involved with railways since Victorian times and after Lord Rothschild "retired" he decided to build one for himself as a birthday present! It was formed in 2001 and runs for one and a half miles through the internationally renowned gardens near Southampton. The gardens are most famous for azaleas and rhododendrons but offer wonderful displays of other flowers from spring through autumn. By adding the railway, visitor numbers to the gardens has increased and it provides an extra attraction for family groups.

Having started the operation relatively recently from scratch, it was a unique opportunity for us to hear what Mr Leo, as he prefers to be called, and his staff could tell us about their experiences. The railway was constructed by a subsidiary of Mowlem, working to plans and specifications prepared by teams of architects, surveyors and civil engineers so in that respect it is rather different from our endeavours! We took a ride accompanied by Mr Leo, his estate manager Nigel Philpott and chief engineer Ian Wilson. The route consists of three interconnected loops that enable passengers to view different parts of the gardens and includes a level crossing, a tunnel, a bridge and a substantial viaduct; a complete railway experience. Interlocked signalling and tokens are used to control the fairly complicated layout, which can accommodate up to sixteen trains a day with two engines in steam.

There are three beautifully constructed coal-fired steam locomotives, painted blue and named after female members of the de Rothschild family. A diesel locomotive is named after a male member of the family (is there a message there somewhere?). An engine can pull up to six carriages. The carriages are open sided and each one can accommodate sixteen passengers sitting two abreast or fourteen with two wheelchairs on board. The journey starts at Exbury Central station which has a canopied platform. Passengers waiting to join their train have a good view of the engine shed, turntable and locomotives being prepared for service. The journey time is twenty minutes and costs £3.50.

After the ride we were able to talk to Mr Leo, Nigel and Ian about business and operational matters, the real reason for the visit. The railway operates from mid-March to the end of October. Passenger numbers have been steady, about 54,000 per year since 2002 which is just over a third of the total annual average for the gardens. We went on to discuss finance, staffing, marketing and visitor facilities.

Clearly our circumstances are and will be different to the Exbury Railway because it is managed by paid

staff and before the railway came to the gardens it already had well developed facilities to cater for a substantial number of visitors including a restaurant. We expect (hope?) visitor numbers to greatly exceed those currently coming to see the Great Engines so the facilities must be improved to cope with the increase.

I would like to record our thanks to Lord Rothschild and his staff for making us very welcome and giving us so much valuable information. My thanks also to K.G.E.T. trustee, Adam Ridley for arranging the invitation and his skill in choosing a fine, sunny day for it!

Postscript. Lord Rothschild visited Kempton on the 24th September as a guest of the Kempton Great Engines Trust to see engine number six in steam and the railway exhibits.

MWBRS Contacts

Chairman: Ray Marie, 13a Felcott Close, Walton-On-Thames, KT12 5NT, ☎ 01932 223298
email: randjmarie@talktalk.net

Secretary: John Webb, 14 Orchard Road, Hampton, Middlesex. TW12 2JJ ☎ 020 8979 4245
email: jhnwbbjohn@aol.com

Treasurer: Tony Eaton, Nigella, Burney Road, West Humble, Dorking, Surrey. RH5 6AX ☎ 01306 887523
email: anthony.eaton@tesco.net

Newsbrief Editor: Jim Hewett, 1, Lavender Vale, Wallington, Surrey. SM6 9QR ☎ 020 8669 1721
email: heritagejim@yahoo.co.uk

Working Parties: Robert Leadbetter, 75 Ormond Drive, Hampton, TW12 2TL ☎ 020 8979 5003
email: leadbr@yahoo.com

Membership: Roger Griffiths, 16 Walsham Road, Feltham TW14 0JD ☎ 020 8890 1978
email: rjjagriff@btinternet.com

All unattributed articles & photos are by the Editor

KGE steaming dates (and our open days) for this year are the weekends

of:-

Oct 15th/16th and the **Special weekend of November 19th/20th.**

Come and see us on either of these dates, open 10:30am to 4pm.

Don't forget the Get-together Saturday November 26th at The Bell, Hampton.