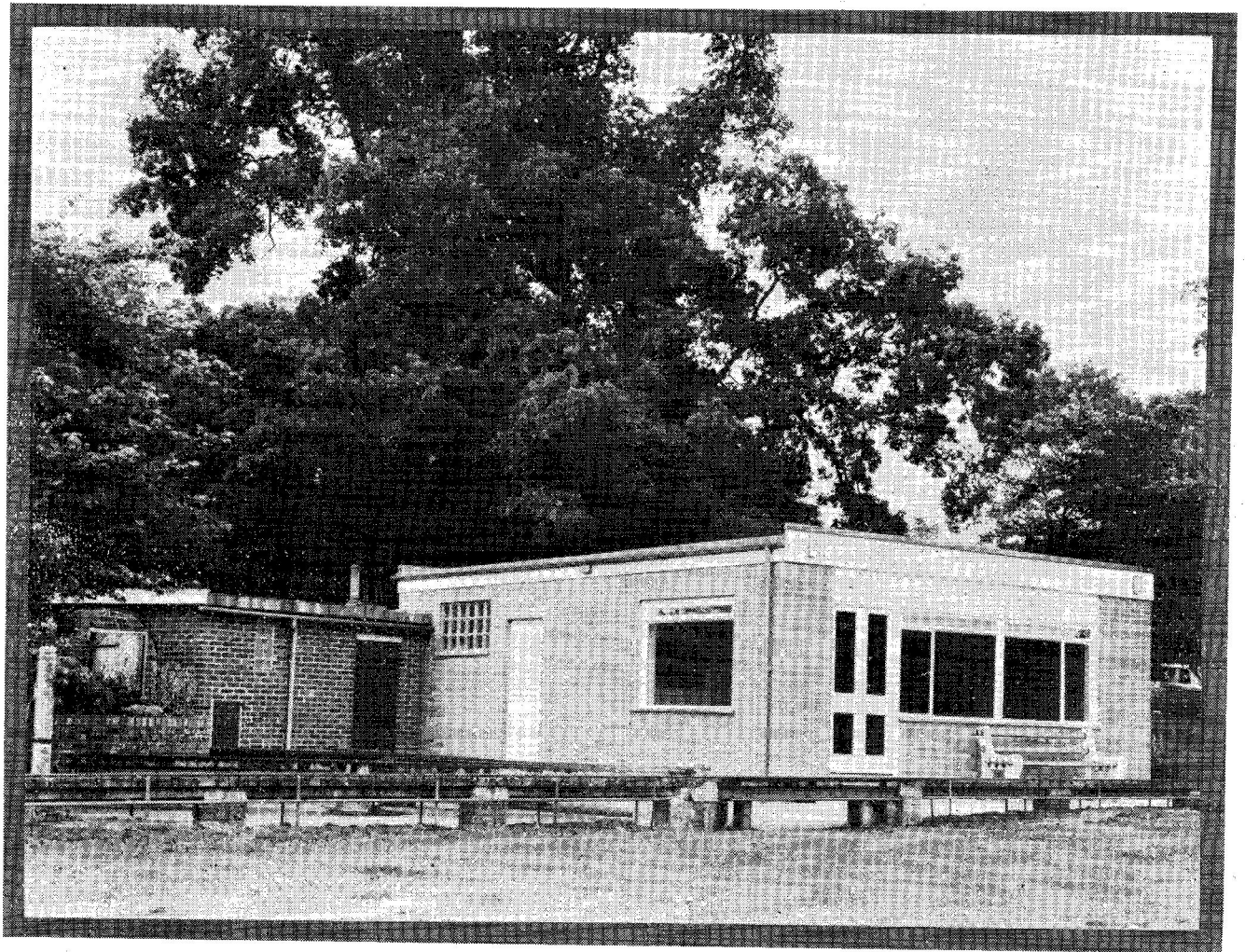


# MAIDSTONE MODEL ENGINEERING SOCIETY



*Summer 1973*

## CHAIRMAN'S NATTER SPOT

In the last Newsletter I mentioned that I hoped for a successful year - well up to now we have enjoyed a very good season.

We have been busy over the park working on the electrics for the new club house, making and fitting shutters for the door and windows. Still there is much to do before the club house is complete, finishing off the wiring, fitting the sink unit, putting in drains etc. These jobs are in hand and I would like to thank all the members who are making these things possible. The internal decoration is coming along nicely thanks again to one of the members.

We also have been busy running the railway at Mote Park as the following record shows - January 7th, 14th, 21st, 28th, February 4th, 11th, 18th, 25th, March 4th, 11th, 18th, 25th, April 1st (we ran in the rain), 8th, 15th and 22nd, (also in the rain) but finishing on the 29th in sunshine. May 1st was completely rained off but we ran on the 13th, 20th, 27th and 28th, also June 3rd and 10th.

On the 8th July we will open the new club house and we have invited Mr. & Mrs. Wallis to perform the Opening Ceremony. Mr. P. G. Wallis as most of you know is a life member of the Society and his good lady is one of the Society's Vice-Presidents so as you see we will be in very capable hands.

In conclusion may I once again appeal to all members who can to give assistance at Mote Park during the running days which, weather permitting will continue to be each and EVERY Sunday. There are always odd jobs to be done, helping load the kiddies, watering the engines, carrying coals, spot repairs to the track, even driving the said trains and of course there is always a cup of tea to be disposed of, or despatched.

Thanks for reading.

A.H.W. Payne, (Jack) Chairman. 15th June, 1973

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You are invited to attend the  
**OFFICIAL OPENING OF THE NEW PREMISES**

at Mote Park on Sunday 8th July at 12 noon.

after which light refreshment will be provided

**IMPORTANT**—All members who can are asked to bring along models of any description in order to make an attractive show prior to the Opening. Southern Television, Radio Medway and the Press have been invited so let us take the opportunity of presenting a first-class display of our work.

## SECRETARY 'S NOTES

The past three months since the publication of our last Newsletter the scene at Mote Park has changed quite dramatically.

During the Winter Martin Parham's design for a new building was wrangled over by the Society's Committee at great length. In the fullness of time the plans were considered by the Town Council (in a more dignified manner, no doubt) and finally permission to build was given.

When the Easter holidays came some of us braved the tempest to moor our cars carefully to the trees on high ground and slither, at considerable risk down to the building site. Some time after 8 bells on Easter Sunday the tide ebbed just sufficiently to allow a glimpse beneath the murky depths of what appeared to be lines of cement drawn on the ground with a giant paintbrush. We were allowed to study the embryo palace in this condition for some time whilst awaiting the delivery of those very necessary but elusive components known to the laymen like myself as bricks. During this rather depressing interlude even the more optimistic members entertained doubts as to whether (a) we should ever have started the project? (b) would it ever be finished? (c) in view of the fact that it had hardly stopped raining since its inception had we any prospect of raising sufficient funds to pay for the materials?

The only diversion we allowed ourselves at this time was the general criticism of all concerned, and the designer in particular. In retrospect this was probably more than a little unkind considering young Martin's building is his first effort. Quite impressive for seventeen, as the photograph portrays.

Sundays at this time consisted of hopefully steaming our engines, then crouching in the coal shed, (having demolished our original building to make way for the new), waiting for the rain to stop and the customers to appear.

Suddenly, one Sunday morning an inexplicable quirk of nature occurred - the sun came out. Seemingly, within minutes engines rolled off the traverser. Ajax, two Springboks, a Minx, a Southern Mogul, a Green Arrow and my Nigel Gresley all "five inchers". That day we hauled 640 passengers, the season had begun in earnest. I know that hauling the maximum number of children is not the Zenith of model engineering and some of our members continually say so. To many of us the hobby is a family affair. Three of our Committee have wives who are members in their own right and drive passenger trains in addition to aiding many other ladies in the production of various gastronomic delights from the depths of the coal shed cum kitchen, all this and more with no complaint, doubtless because more hygienic and conducive conditions will be available in their new club room.

The encouragement of new and old members to participate more actively is a principal aim of the M.M.E.S. Providing new and larger premises to accommodate the increased membership (doubled in 5 years) must surely justify the passenger hauling. Four thousand feet of guard rail was hardly model engineering or cheap, nor can you sit in it with a hot drink after a night run.

Fortunately all these tribulations are now behind us. The sun has shone on most Sundays lately. We've hauled thousands of passengers and the building is now complete - virtually on time in spite of all the snags.

I should hasten to add at this juncture that the snags referred to were not in any way attributable to either Martin's design or Mr. L. F. Parham's company. On the contrary they have been remarkably indulgent, the snags being largely of our own creation. Many thanks are due to the Parham family and I hope Mr. L. F. Parham will accept our invitation to the Opening Ceremony enabling us to thank him personally.

On Sunday July 8th at 12 noon the Official Opening will take place. The Committee have invited Mr. & Mrs. P. G. Wallis to "do the honours". No one, I am sure would deny them the pleasure of opening the latest addition to the facilities of the M.M.E.S. which they themselves have done so much to bring about through their untiring efforts over the last 27 years.

In the light of present day high speed activity it is very easy to lose sight of past efforts by older members without which there would be no Society today. This fact is lucidly illustrated by Jack Payne's continuing saga elsewhere in this Newsletter.

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#### COMING EVENTS

The I.M.L.E.C. on July 7th when Fred La Roche and I contend with each other and of course 14 more on the Chingford battleground should not be without interest (to us at least).

Between writing and publication many of us will have enjoyed the hospitality of Malden M.E.S. and Beech Hurst, not forgetting Guildford, Romford and Chingford over the past few weeks.

Other exchange visits are planned for the rest of the season including 2 night runs plus barbeques to coincide with Guildford's visit on July 21st and Eltham Society's visit on September 15th.

Arrangements have also been made for an interchange of Newsletters between us and many similar Societies in the Southern Counties. This should enable us to glean information regarding their administrations and activities generally.

This season saw the appearance of my predecessor Ron Heathcote's new engine, a Great Eastern B12 after 6 years hard labour. Judging by its performance at Mote Park Ron should surely be well pleased with it.

Any day now will herald the appearance of the latest creation from that most prolific of model engineers Mr. J. N. Liversage. This huge new narrow gauge model is most attractive both from an engineering aspect with its power bogies, to its colourful paintwork complete with bell. Since finishing this model in February the redoubtable Jo' has three parts finished a further model ostensibly for Mrs. Jo' who, according to rumour locks him in the workshop from dawn until dusk each day until he finishes it.

Ken Linkin's Ajax has reappeared this season fully complete and painted with every kind of detail possible carried out in the meticulous manner so distinctive of Ken's work (I must remember to keep my Ajax out of sight).

Martin Parham's Stirling Single will no doubt grace Mote Park track in a month or so



with its classic appearance and equally classic performance.

Many of our new members have also got engines nearing completion so the next few months should not be without interest from an engineering aspect. Even my own new one is progressing satisfactorily when I find time in between writing letters. I sometimes think Ron only gave up the Secretaryship so that he could finish his engine and prevent me from getting on with mine.

Raymond Milliken, Hon. Secretary.

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#### HISTORY OF THE MAIDSTONE MODEL ENGINEERING SOCIETY - continuing from the last issue of the Newsletter.

On the 6th September 1955 we were reported in the press, this time we were opening a model car track. The then Mayor, Brigadier Harold Fletcher officiated. The railway was almost a 2nd to the model cars, as these little chaps caught the public's eye.

It was in 1961 we put up earthworks to form an embankment on the lakeside of the railway. By 1962 we had completed a bridge in the embankment, this was opened by the then Mayor, Councillor W. B. Hawkins, his passenger was Mrs. S. Wright. The bridge is called the "Sydney Wright Memorial Bridge".

By now we had put up the fare to 6d. so we were starting to get a little money in the "kitty". In 1962, the 29th July to be exact we started to build another "bit" to the track, in other words an extension. Once again our good members acted as guarantors. Also at this time the Park had become a well kept park as it so remains today. Track extensions went on throughout the winter and the opening took place on June 2nd, 1963 by the then Mayor Councillor John Evans.

We found the track was a little too much for the  $2\frac{1}{2}$ " gauge engines so we have just relaid the track in  $3\frac{1}{2}$ " and 5". The track is just under three eighths of a mile long consisting of concrete beams with wooden sleepers at 6" spaces. Rails are of aluminium alloy held down with screws thro' little steel chairs.

On January 1th 1956 we held our first annual Dinner & Social, (sorry about the date but found it long after I started the article).

Towards the end of 1965 we had managed to pay off the cost of the extension and were all set to railway running at its best. One of the many visits by other Societies was Chingford M.M.E.S. on the 15th May, 1965.

152 m.p.h. was a speed recorded at Mote Park racing track in 1966. This was reported in the Kent Messenger on the 2nd December.

1967 - an 80 m.p.h. gale dropped an Elm tree across the railway track and damaged 30 feet of double track cutting short our running season. Easter 1968 found us once again in running order thanks to the efforts of our members.

On the 18th November we applied for permission for a new loco shed which we completed during 1969. We now had a loco shed and a hut for shelter and tea making. (I forget the date the latter was erected but it was some time around 1963 and was kindly donated by our past Chairman and his wife who is one of our Lady Vice-Presidents).

We have a very strong link with New Zealand for they have a Society that runs a track in Maidstone Park, New Zealand, hence their Society is named the Maidstone Model Engineering Society. Our two Societies have been affiliated for some years now and we write to each other with news.

Boxing Day 1970 found us running at the park thro' 6" of snow.

Easter Monday, 12th April 1971 we ran our 21st year at the Mote Park track, complete with a cake, made I may add by our first Lady Member of the Society.

Toward the end of 1971 we started to build a guard rail round the track and completed the work in March 1972. This rail is now paid for and is a great help to passengers and drivers alike.

Boxing Day 1972 we ran the railway and carried hordes of kiddies plus their Mums and Dads.

November 1972 we applied for planning permission to erect a store and shelter on the site. It is now completed and features on the cover of this issue.

A.H.W.Payne, (Jack) Chairman.

Dear Sir,

"Shunters" 13 Dorking Road,  
Tunbridge Wells. 29/3/73

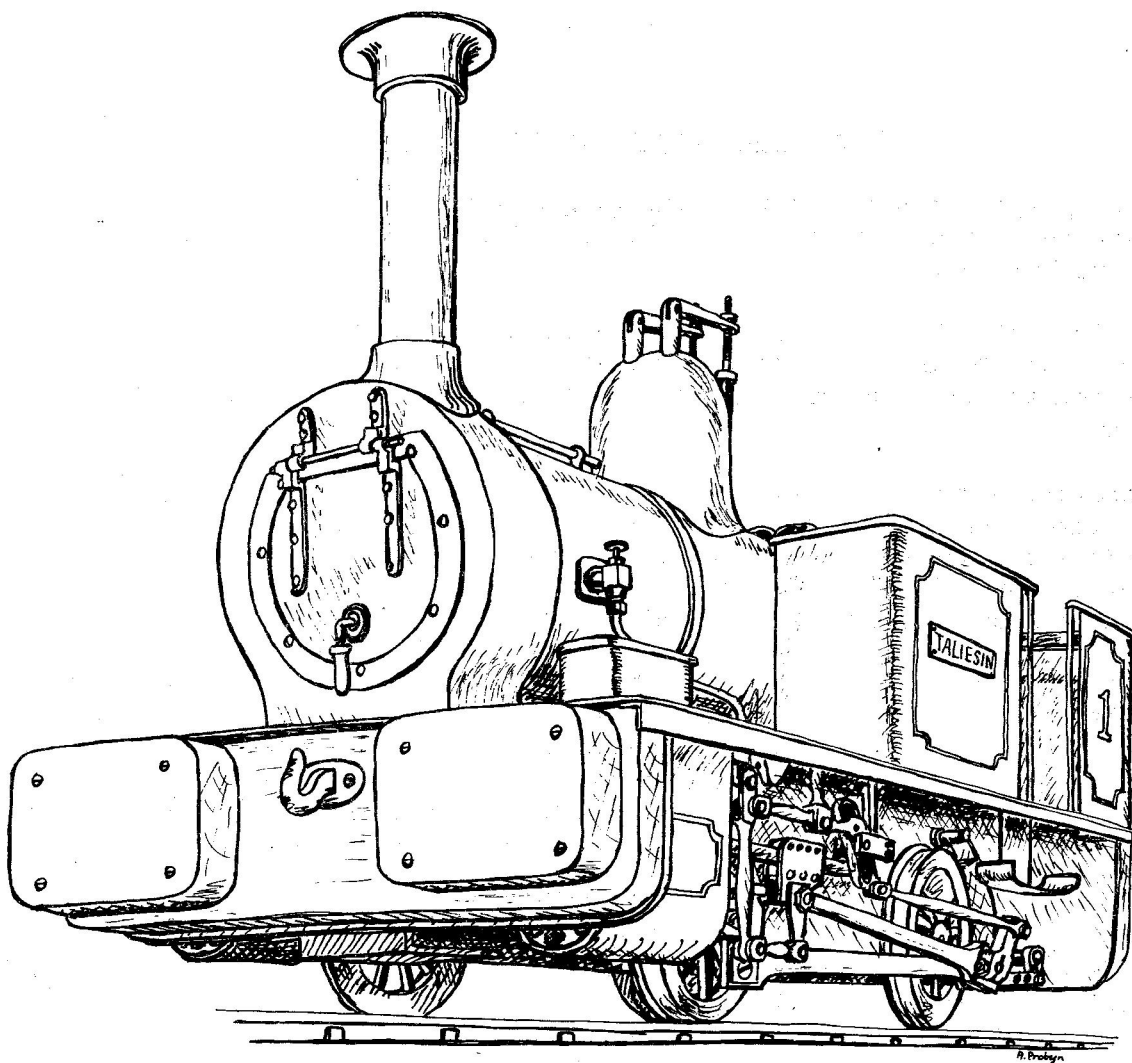
Many thanks for the Newsletter. I note that you are asking for articles and submit a sketch of a 1" scale locomotive steam crane which is nearing completion. One day when looking through some old M.E's I came across a full page illustration of a 1" scale Stothert & Pitt 10 ton steam crane built by a Mr. Clarkson of Waterloo, Liverpool. The issue was 1939.

This type of model quickly took my fancy and I started work having only the picture to go on, knowing the scale I made up some drawings which kept the general layout as near to the picture as possible. Most of the running gear and base plate was found in my scrap box and side frames and plates of 1/8th from the local engineering shop. The vertical engines used are Stuart Turner 1" bore 1" stroke type but slightly modified for this job also having Stevenson's reversing gear added, they drive the top countershaft from which the various gears are meshed. The length of jib is 3'-8" overall length of crane is 21" by 13" width, track wheels are 3 1/4" diam. set to 5" gauge. The boiler is 5" diam. and will have 50 5/16" tubes plus superheater element. Overall height with chimney will be 16 1/2".

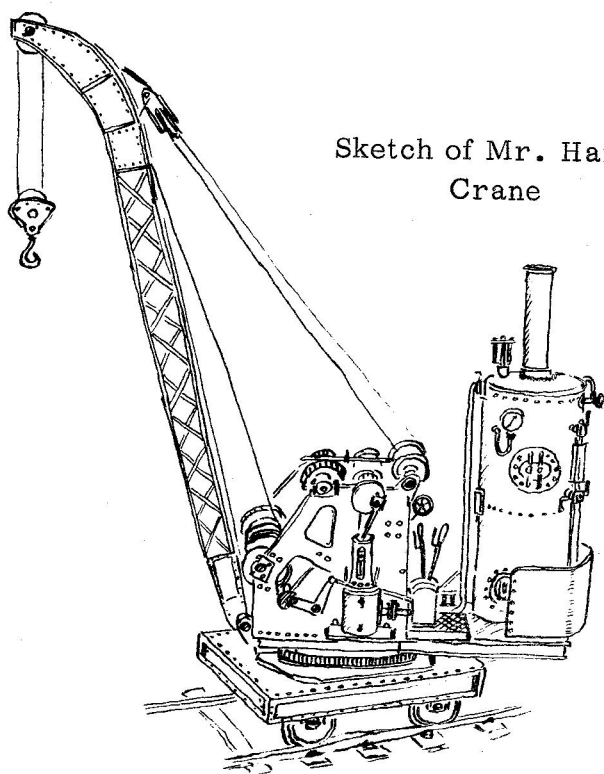
R.W.L. Hamilton.

I'm sure all the members look forward to seeing Mr. Hamilton's efforts on the Mote Park track but hope that it will not be called upon to take action on any derailments.

Ed.



The above sketch by Mr. A. Probyn, one of our members, is of his engine which featured in the Model Engineer a few weeks ago.



Sketch of Mr. Hamilton's  
Crane

#### SALES & WANTS

Wanted - Bench Drilling Machine  
of  $\frac{1}{2}$ " capacity with motor.

Also Stuart Turner "Babcock"

Boiler No. 500. Please contact  
Mr. Hamilton, "Shunters"

13 Dorking Road, Tunbridge wells.

Milling - Grinder - and shaping  
machinery wanted

by F.G. Gregson,

4 Northdown Close, Maidstone.

### Inspecting Locomotive Type Boilers

Some years ago the Vulcan Engineering Insurance Group published the following details concerning the problems and common defects found on locomotive boilers.

It is quoted here, not just because it is most interesting in its own right, but to assist us to offer a sigh of relief, should we have a spot of bother with our own engines - that they are not full size spots of bother.

"Locomotive type boilers, considering the small space occupied, produce large quantities of steam at pressure up to 250lbs/square inch. The fundamental design has altered little since its inception over a century ago, whether for main-line passenger work, shunting engines, road rollers, traction engines or road haulage vehicles.

Loco type boilers have many inaccessible areas where inspection is concerned, and so hydraulic test with the lagging removed is needed more often than in other types of steam boiler. Other supplements to thorough examinations are inspections with the boiler stripped of all lagging and out of the loco frame, removal of saddle or side tanks where fitted and, in the case of stationary boilers where the firebox foundation ring is set on brick supports, selected portions of brickwork removed from time to time.

The barrel of traction engine boilers provides the engine mounting, a doubling plate being fitted to give support. This plate should be exposed at intervals by removing the engine. Smoke tube removal for sectioning and close inspection and drill testing of plates are further supplements.

Before a thorough examination a periodic removal of the lagging may be required, but in any case the boiler would be opened up and cleaned internally by removal of washout plugs located in the firebox casing plates and the smoke box tube plate. Small oval doors are often fitted rather than screwed plugs. In some designs a mud pocket is riveted to the barrel bottom in the trailing plate and/or the inspection door in the upper part, sometimes large enough to permit entry when tubes are removed for renewal. Where a steam dome is fitted the cover would be removed.

On the external side the firebox would be made accessible and cleaned, the smoke box would be swept clean and the tubes thoroughly brushed through.

The boiler would now be ready for the surveyor and he may begin his inspection by examining the boiler internally, starting with the firebox wrapper, firehole and tube plates, together with the casing and throat plates. A probe torch is useful in this location; a mirror attachment affords views of otherwise inaccessible surfaces. An oil-soaked wad torch or a candle on a telescopic holder is sometimes used; either gives a surprisingly comprehensive lighting effect in the cavities between the plates.

The supporting stays, about  $\frac{7}{8}$ " diameter, are pitched approximately 4" - 5" apart in vertical and horizontal rows, screwed through both plates and riveted over in the type of boiler under discussion. They will be carefully examined for necking or complete breakage, and a chisel-ended bar of convenient length is often used to

chip gently at the junction between plates and stay. The colour of the plate and stay is significant; a fine red or black line often indicates a broken stay. If the junction is broadly discoloured judicious chipping will often reveal severe corrosion in necked form, so reducing the stay diameter that renewal is necessary. If the adjacent plate is wasted in annular form the threads may be insufficient to support the plate, although if the stay head is sound this provides some support (Fig.1). Stay and adjacent plate defects will generally be more severe in upper stay rows due to differential expansion between the firebox and casing plates.

The plates will be examined for pitting, blotching and general wastage. Corrosion in channel form will be searched for at the junction between plates and foundation ring (Fig.2).

Grooving defects also appear in vertical flangings of the casing plates and in the heel of the throat plate flanging to the barrel. The barrel and throat plate seam will be examined for the usual seam defects. A portion of the tube plate can be seen in this location and it will be examined for scale accumulations around the tubes, general corrosion, pitting, wasting at tube holes and ligament cracks. The tubes at the junction with the tube plates may also be reduced in diameter and this can be serious because the tubes are little more than  $\frac{1}{8}$ " thick when new.

In some designs, support is provided for the area of tube plate between lower tube row and upper stay row by a palm stay. This component is difficult to examine and is most usually percussion tested with a bar passed through one of the cleaning holes.

In the space between the firehole plates the defects common to plates, stays and foundation ring areas mentioned above will be sought and particular attention will be given to the parts forming the firehole opening. If these are flanged, grooving and radial cracks across the root are quite common defects. Where the block ring method of attachment is used defects similar to those associated with foundation rings could be present together with cracks radiating outwards from the block which may eventually break through.

Transferring attention to the external parts of the firebox and firebox casing plates, the inspection openings will be examined. Wastage at the edges of mudholes, inspection holes and on the spigot edges of doors is a potentially dangerous defect which could result in a door joint blowing out, so the doors will be tried in the holes to ensure a good spigot fit and examined to ensure they are of sufficient thickness to withstand the loading imposed both by internal pressure and the tightening of the stud nut. The studs, dogs and nuts will be examined to ensure that studs in doors are sound, that stud and nut threads are in order, and that **dogs** are not distorted. If screwed plugs are used the plug and hole threads will be examined and search made for fine cracks at the edges of the holes and the plugs tried in the holes.

Examination of the firebox plates on the fireside will be the next step because it is important to relate defects noted internally with those externally, particularly on the exact opposite side of the plate. Smooth wasting of the plates and stay heads is probably the most common defect found on the fireside, particularly so at firebar level in some solid fuel fired boilers (Fig.3). If conditions warrant, the plates will be drill tested to establish thicknesses beyond doubt.

Distortion of plates may be present and the form of any such distortion has significance. For instance, a "quilted" form could indicate that plates are thinning, or if proved of full thickness by drill test, that overheating is taking place due either to flame impingement or excessive scale on the water side.



If distortion is in broad "contour" form, sounding of stays or sample removal would show these to be broken (Fig.4).

Distortion on a flat type of furnace crown plate is particularly serious because scale deposits collect in the depressions on the water side. The tube ends would be examined for leakage, cracking of extensions, leakage through tube walls and general wastage and burning of ends. The prodding tool would be inserted into selected tubes, judicious levering giving some indication of wall thickness. To complete the tube examination these will be sighted, the shape of the hole being distorted when tubes have "sagged" or "hogged".

At the other end of the tubes, in the smoke box, the same procedure will be carried out and the tube plate, shell extension, riveted seam and cleaning hole edges examined. Tube hole ligament cracks will be sought, although this is a defect more usually found in the firebox tube plate.

Some method of staying is necessary to support the upper parts of the smoke box tube plate and firehole casing plate and longitudinal bar stays between the plates, or girder type stiffeners, are most generally used. These supports would be carefully examined both inside and outside, hammer tested and measured to ensure that no reduction due to corrosion was taking place. Where girder stays are fitted the rivet heads would be hammer tested, these having the important role of holding the girder firmly to the plate so that it can properly perform its supporting function.

Internal examination of the barrel lower part at the front end of the leading ring can be made through washout holes in the smoke box tube plate; a limited view of the tubes is also possible, giving an indication of the general condition. Manual probing will reveal any wasting on the lower part of the tube plate and along the barrel; deposits tending to collect in this area.

Where a mud pocket is fitted the upper and lower flangings internally will be carefully examined. The lower flange is particularly prone to corrosion if corrosive elements are present in the boiler water supply.

If a steam dome is fitted a limited view of the tubes can be had while the dome, together with its seams, is being examined. If the boiler is on a loco the steam strainer and regulating valve will further restrict access. Examination of the firebox crown and supporting stays will be made from inspection openings in the upper parts of the firebox casing plates or in the upper part of the barrel. Such examination is supplemented by manual probing and sounding with a chisel-ended bar. In some boilers it is possible to reach the knuckle of the firebox firehole plate flanging to the wrapper plates. This area is prone to corrosion in channel form and if undetected will progress to penetration.

If the boiler is lagged at the time of the inspection a search of the whole will be made for bulges, cracks, salts and dampness. All these defects often indicate trouble of some kind. The lagging would be removed for close investigation of concealed suspect parts. In particular, the underside of the barrel will be scrutinised, as this area, as mentioned previously, is susceptible to internal wasting. External wastage due to leakage from circumferential seams at lower parts coupled with internal wastage is a serious combination.

If the boiler is not lagged the surveyor will examine and hammer-test all parts, bearing in mind his findings from internal inspection. Stays will be sounded, a helper bearing on the opposite end with a hammer. If a stay has parted the gap between cannot transmit the reaction between strike and bearing hammer. There is, however,

the case where a stay, usually recently broken, has not parted and such a defective stay offers a reaction similar to a sound one. This is one of the reasons for comparatively frequent hydraulic testing of loco boilers. The accompanying deflection tests would reveal a broken stay.

In conclusion, the most important inspections can be those of parts normally inaccessible for inspection. For instance, the entire boiler should be examined when lagging, seating or refractory brickwork, tanks or engines are removed or the boiler is out of its frame; ideally such examination should be supplemented by hydraulic test. The barrel should be examined, before retubing, with the old tubes out.

D.S.P.

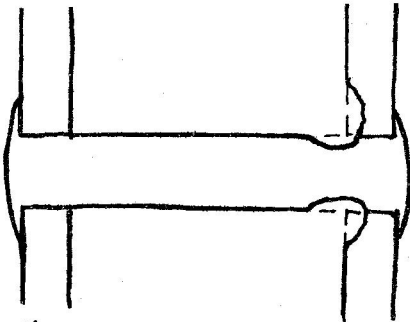


FIG. 1. "NECKING" OF FIREBOX STAY & PLATE WASTAGE IN ANNULAR FORM

FIG. 2. CORROSION IN CHANNEL FORM AT JUNCTION OF FIREBOX AND FOUNDATION RING

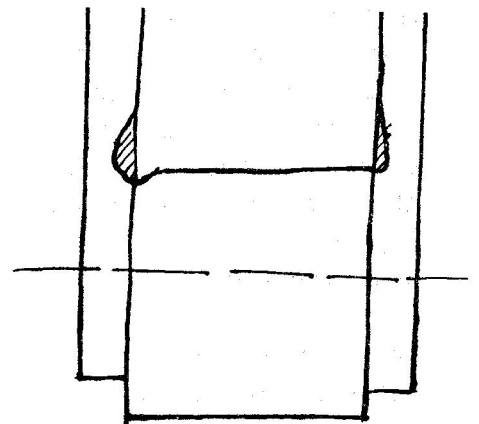


FIG. 3. SMOOTH WASTING. THE HATCHED PORTION HAS WASTED OR BURNED AWAY NOTE STAY HEAD REDUCTION

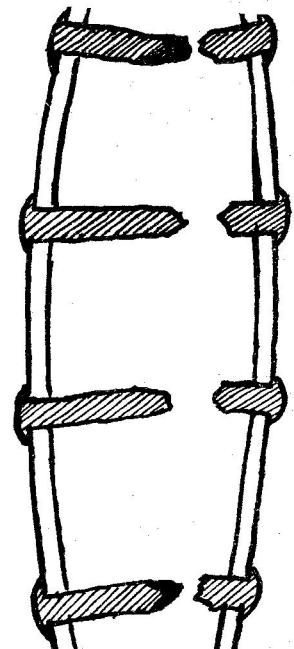
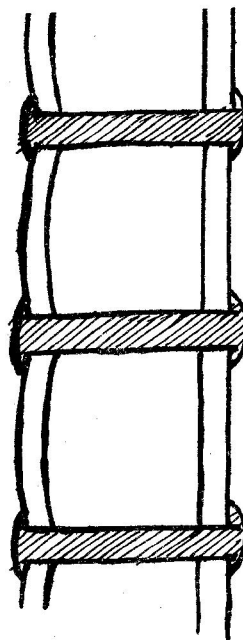
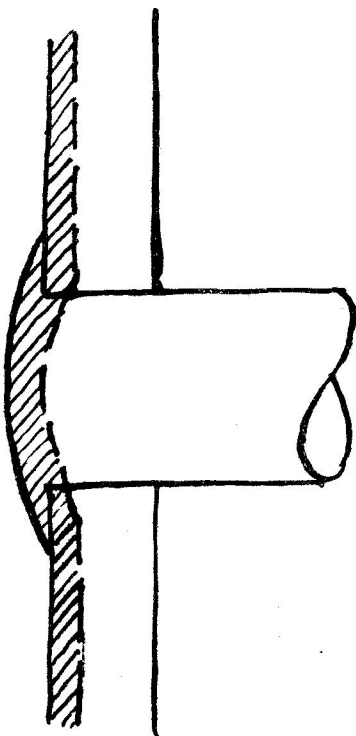


FIG. 4. DISTORTION IN "QUILTED" AND "CONTOUR" FORM.

## AN EXCITING NEW PROJECT

Adjacent to the Hove Park track of the Brighton & Hove Society of Miniature Locomotive Engineers is the Goldstone Pumping Station of Brighton Corporation Waterworks. This pumping station is to be the scene of a most exciting project in the preservation of steam power.

Goldstone Pumping Station was built in 1876, the power for pumping was obtained from 2 beam engines. The engines were in use until 1954 when the boilers were run down for the last time. Pumping still takes place but now with electric pumps, one at the foot of No. 1 well and others outside the station building at the bottom of soil shafts. Brighton Waterworks Department was one of the first to pioneer the use of remote controlled sub stations controlled from a central headquarters and all the pumping stations in the department have gradually been replaced by this type of station. In view of the cost of keeping the engine and boiler houses water tight and weather proof the waterworks department invited tenders for the demolition of Goldstone and Waterhall pumping stations in 1970. Waterhall station had already been reduced by previous demolition and contained a triple expansion engine built in 1934. This station has now gone the same way as Lewes and Falmer stations amongst others and a small brick built building now replaces the elegant engine houses with their tall windows through which could be seen large amounts of polished steel and brass.

The proposal to demolish Goldstone caused a great deal of concern to local enthusiasts. Brighton Corporation proposed to donate No. 2 engine to the Sussex Industrial Archaeological Study Group for demolition and eventual re-erection at a proposed Sussex Steam Museum. Privately some enthusiasts wondered whether the engine would ever be seen complete again - an engine of this size is not the easiest thing to move and the engine is in part supported by the walls of the engine house. The demolition plans were brought suddenly to a halt by the Department of the Environment making the station a "listed" building. This brought a short reprieve, while Brighton Corporation were going through the legal requirement to take the building off the preservation list a proposal to take over the station and turn it into a Steam Museum was received from Mr. Jonathan Minns. Brighton Corporation subsequently accepted Mr. Minns' offer and plans are now well advanced although a lot of work has to be done before the station is open to the public.

The main exhibits of the museum will of course be the beam engines. No. 1 engine has been stripped of its eccentric strap and push rods, the slide valve hand control gear and various other parts so that for the time being it would not be made to run, but No. 2 engine is complete and so far as is known only requires stripping and cleaning before being put back into steam.

The engine was built in 1876 by Easton & Anderson of Erith, Kent and is a compound double acting engine. The H.P. cylinder is 28" diameter x 48" stroke and the L.P. cylinder 46" diameter x 92" stroke, with a working pressure of 70lbs./sq.inch the engine produces 250 I.H.P. at 18 R.P.M. and 150 I.H.P. at 12 R.P.M. The beam, 20'-9" above the engine room floor is 26'-6" long with a maximum depth of 3'-9", the approximate weight being 6 tons. The flywheel is a wonderful example of the millwright's art with a diameter of 23'-4" and a calculated weight of 20 tons.

The wheel is cast in four pieces each bolted together during erection.

The engine drives four pumps, two single acting well pumps each 33 3/8" diameter x 25" stroke, a high service pump 24" diameter x 48" stroke and a middle service pump (double acting) 12" diameter x 48" stroke. The last two pump the water to service reservoirs in the district. Each engine will pump approximately 136,000 gallons per hour at 12 R.P.M. and over 200,000 gallons per hour at 18 R.P.M.

Between the engine houses is situated the boiler house at low level. The boiler house contains four Lancashire hand fired boilers built by Yates & Thom Ltd. in 1934. Each boiler is 8' diameter x 30' long with a heating surface of 960 square feet. The coal consumption varied but a typical average was 8 cwt. per hour, only one boiler being required to run the plant. Connecting the boiler house with the coal store is a tunnel under No. 2 engine through which runs a narrow gauge railway with hopper wagons bringing the coal and taking away the ashes.

In the coal store Mr. Minns intends to build a mezzanine gallery for the display of over 200 models illustrating the history of the steam engine including railways, marine engines, road and firefighting engines etc. These engines are part of Mr. Minns private collection and include original works by Trevithick, Hackworth, Stephenson, Watt, Maudslay, Faraday, etc. There will also be various full size marine and industrial engines and traction engines. In the centre of the building it is proposed to erect a full size large engine to be chosen from the list of important engines to be saved. All exhibits will be workable by air, steam or electricity. An area at the end of the gallery will be designed for ready conversion into a cinema or special exhibition area.

The workshop is a rare example of a Victorian workshop. The machines, driven by a horizontal steam engine include a 15 1/2" centre lathe with an extended flat bed to 17 feet built about 1880-90, two other lathes, planer, grindstone, grinder, shaper, forge and a large collection of blacksmiths tools. The workshop will be used to restore and maintain the exhibits. A large plate glass window will be set into the dividing wall between the coal store and workshop so that the public can look down into it from a raised walkway.

This museum will be unique in the South of England and will draw enthusiasts from all over the Country.

The Brighton Society have a planned extension of their track under way giving a total of 2000 feet of track which we hope will fit into the general scheme of things and we look forward to entertaining fellow model engineers in what promises to be a most exciting future.

G. F. Collins, Hon. Secretary,  
Brighton & Hove Society of Miniature Locomotive Engineers.

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Thanks are extended to Mr. Collins for this most interesting article - I have no doubt that the members of Maidstone Society will be arranging a trip to Hove at some convenient date.

As many members are aware our worthy Chairman, Mr. A.H.W. Payne, (Jack) to all his friends, is a most gifted artist and I have just seen a picture of an engine steaming into the station painted in watercolour and so beautifully done. The size is 20" x 30" and I know that he is going to present this to the Society for hanging on the wall in the new premises. This will cause comment by all who see it and it must give Jack satisfaction to know that we are so appreciative of his work and kindness.

# WOBBLER - contributed by Mr. J. Liversage

Got a "Wobler"? No! Then make one right away as this useful tool is absolutely necessary for setting a centre punch mark running truly in the lathe using either the 4 jaw chuck or faceplate and is far and away more accurate than trying to set a mark by bringing up the tailstock centre and setting from that.

First of all clamp a short piece of rectangular or square M.S. in the toolpost at or about centre height and with a Slocombe centre drill in the chuck drill a small centre hole in the bar at the outer end. This will then be always at centre height whenever you want to use the tool without bothering about packing. The remainder of the wobler is made roughly as sketch, the dimensions given are of the one I made many years ago but are not in any way critical. Use whatever stuff you have on hand. In use to get a punch mark running truly simply clamp the drilled bar in the toolpost, put the point inside the ring in the hole in the bar and bring the whole saddle up to the work so that the outer point runs in the punch mark which has to be true. On revolving the lathe by hand the outer end of the Wobbler will wobble. Adjust the cross slide so that it wobbles equally on either side of the tailstock centre. Now adjust the job so that this outer end doesn't move when the work is rotated. Tighten up the chuck or bolts, check again for movement, remove the tool and carry on. As the Wobbler has a magnification of roughly 10 to 1 you can easily set work to 0.001" without much trouble but this of course depends on the placing of the original punch mark. So be as accurate as possible with this on any cross lines scribed, an automatic punch is useful here but a sharp pointed punch is just as good to make the first impression.

