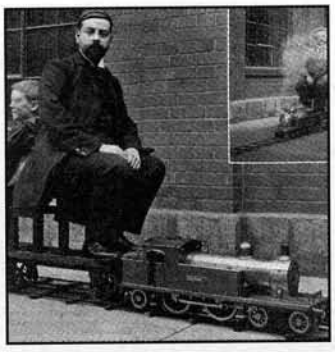
Mr. C. Rompler's Inch Scale Model Tilbury Tank Locomotive.



Mr. C. Rompler's Locomotive: An Easy Load.

My Model L.T. & S.R. Tank Locomotive

By C. Rompler (Germany)

Our friend, the Editor, when he gave me the pleasure of a visit some eighteen months ago, suggested to me that, while model loco building of small scale was very nice and enjoyable, the building of a loco which would be able to pull her owner was of greater educational value so far as practical model engineering was concerned, and much more fun might be got out of the model when finished.

His arguments proved convincing, and he assisted me in selecting the L.T. & S.R. tank engine of in. scale as a suitable model on which to exercise my talents (?), and as some very clear papers and drawings had appeared in "Ours", I ordered a complete set of casting, etc. and boiler parts of Messrs Martin & Co., West Ham, and studied the drawings while waiting for the parts to arrive.

The building of the L/T.& S.R. model took, roughly, six months of spare time for the engine part; that is, after this time I could put steam into her from a vertical boiler, which, with a "Primus" cooking stove, was tied on to the footplate, and just sufficed to make her go along at a slow rate.

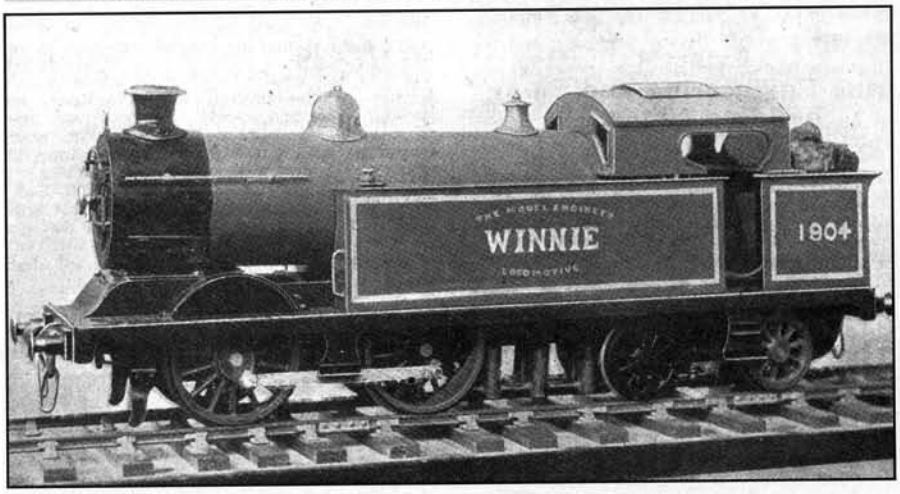
I then started on the boiler, and knowing from experience that only thorough work is wanted for this, I put my best into it, and found, with great satisfaction, that it did not shed a single tear when pressed cold to 200 lbs.

It was soon settled on the engine, the smokebox was made airtight with red lead, superheater and steam connections and exhaust pipes fitted and fixed; then tried the engine again on the lines. This was exciting pleasure, as she wanted careful watching, for once she got out of hands and tried to run through a brick wall; my assistant, trying to catch up with her, got his fingers between the clearing hole for drivers in the footplate and connecting rod, and was badly cut. This, however did not damp our fervour, and we soon got to know her little ways. I replaced the temporary burner with the proper burner, fixed the oil tank, and began new trials, this time with a car "made for two". Pressure gauge showing 55 lbs. and safety valves blowing off, I coupled the car onto the engine, took my seat, and turned on steam. she responded well and pulled the car and driver over the length of rail 25 yards, in splendid style; so well indeed, that I felt justified to invite my assistant to take a seat with me for the second trip, which was also accomplished satisfactorily, if not so quickly. I weighed the engine, car and ourselves afterwards and found as result 4 cwt in all. Next came the question of water supply during the running, and I decided to use a force pump screwed to the motion plate, driven by a separate eccentric on driving axle, half in. stroke.

After several trials a barrel of half in. bore was found sufficient to keep the water level during forty return trips of 25 yards, i.e., 2000 yards in all were covered, when the oil burner gave out. - By the way, I always use inverted leather cups for my force pump, screwing these on the end of the plunger, and find that they do not let a drop of water escape during pumping, and no glands nor packing are required. - The piston rods of the engine are of steel, and during time of rest become rusty, and stick in stuffing-boxes and glands so much that one can hardly move the wheels, etc. I shall therefore change these steel rods for German silver rods and also fit drain cocks to cylinders. - I have not painted the engine, - a painted engine is hardly ever used afterwards - and I intend driving her a great deal yet. I blackleaded her instead, which gives also a nice finish and can easily be renewed.

The photographs show this even coating. The small photograph of loco pulling my boy and my assistant does not show up very clearly on account of too long exposure; the engine moved along during the exposure. I shall take some more and send these in for publication, if the Editor will spare the space.

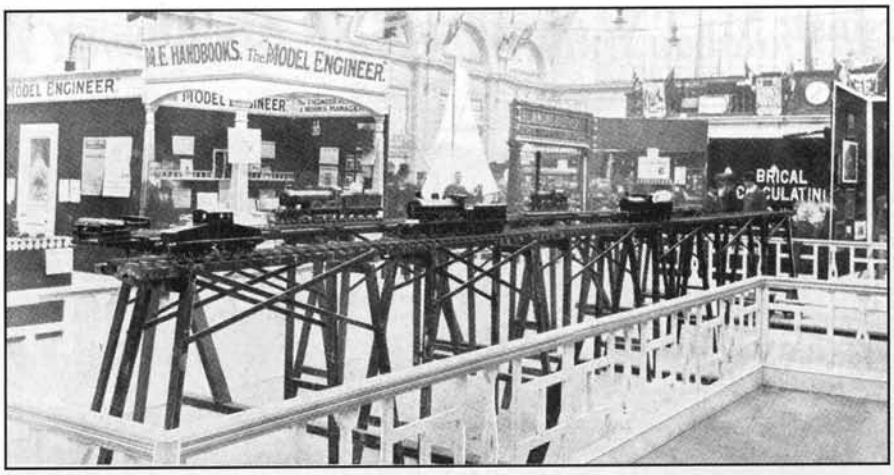
I searched diligently but could find no further reference. (I hope, dear reader, that you will forgive my spending so much space on Herr Rompler but thought it interesting that someone in Germany should be building something so English with such enthusiasm. I liked the style of the writer and the, I suspect, unintentional humour such as the occasion when the loco got away from them, with dire consequences to the assistant's fingers, "This, however did not damp our fervour". I wonder what the assistant thought!)



Mr. W. H. Hunt's "Model Engineer" Locomotive

A "Model Engineer" Locomotive.

The photograph reproduced herewith represents the results of a first unaided attempt at model locomotive construction by Mr. W.H. Hunt. From the illustration, it will be seen that model engineer locomotive, which was the subject of our coloured plate presented with the January 7th, 1904, issue, and details of which appeared in subsequent issues. The cylinders were only parts not made by the builder. Particulars of sizes, etc., will be found in the above mentioned numbers. It may be interesting to note that the builder of this model secured one of the model engineer's certificates of merit for his work.



View Of Hall Showing The Society Of Model Engineer's Railway Track.

The Society of Model Engineers

This well-known and enthusiastic Society occupied one of the annexes, and made a most interesting display of their members' work. These were so numerous that it is not possible for us to mention them individually, but they were a continual source of attraction and delight to the visitors. the Society's new testing stand was on view, and a number of engine models were shown in motion running from an electrically driven countershaft. In the centre of the main hall two of the society's model railway tracks were erected inside a strong barrier, and numerous trips of both steam and electric locomotives were made during the week, arousing great enthusiasm. There were many visitors who had not previously seen a model locomotive under steam, and both the members of the Society and the several trade firms who ran models on the tracks came in for much applause. A number of the Society's members attended regularly during the week and rendered valuable assistance in the arranging and supervision of the models.

In Class A the first prize of silver Medal and £3 was awarded to Mr. John A. Baker for a beautifully finished model of a Stuart vertical compound engine. The second prize of Bronze Medal and £2 was well earned by a fine model compound undertype engine built by Mr. A. F. Hart; while Mr. J. Chadwick Taylor secured the third prize of Bronze Medal and £1 for his excellent working model steam road roller. An extra bronze medal was awarded to Mr. Paul Blankenburg for a partly-finished Caledonian locomotive, which shows promise of being a fine model when completed. Certificates of Merit in this class were awarded as follows;_

Very Highly Commended.- Two-cylinder launch engine, by Mr. J. Chadwick Taylor; partly finished model Caledonian locomotive by Mr. H. C. Waller.

Highly Commended.- Model De Laval steam turbine, by Mr. George Frakes; model hot air engine, by Mr. John. W. Randall.

Commended.- Small model undertype engine, by Mr. Sydney Knight; cardboard model L.T. & S.R. ten-wheel tank locomotive, by Mr. A. J. Limebeer, Jun.

We reproduce in Fig. 1 a photograph of the finished engine. This model is unusual, if not unique, in that within the comparatively small space available in a ¾ in. scale model, rendered even smaller by the tucking in of the frames as on the prototype, the builders have been able to fit the four cylinders and the complete Walschaerts valve gear of Mr. Churchward's engine, and moreover, what is even more important, have been able with a single burner of the Primus type to supply four ¾ in. bore by 1½ in. stroke cylinders.

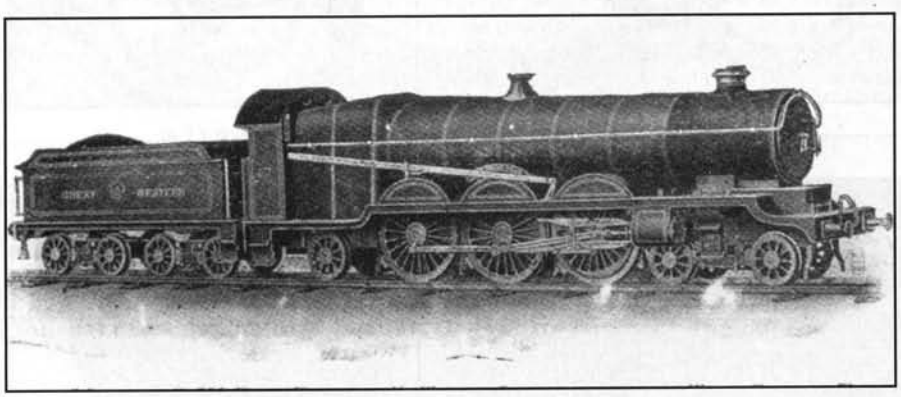


Fig. 1.– Model G.W.R "Pacific" Type Locomotive, "The Great Bear"

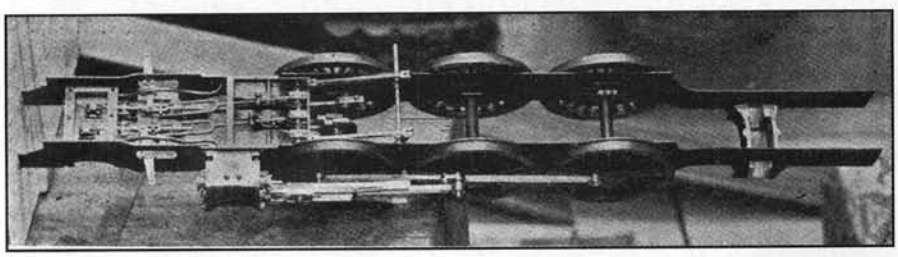


Fig. 2.– Showing Arrangement Of "Motion" Of New Model G.W.R. "Pacific" Type.

A miscellany for 1907/8. The first ME Exhibition, not many loco's in the competition section. The "Chats on Model Locomotives" series preceded LBSC by some years, although not in the same style, they are very interesting and contain a lot of drawings of fittings, etc. They ran until 1908 and for a while there was a concurrent series on Rolling Stock. The "Great Bear" looks beautifully made, we will hear more of it in 1909.

Chats on Model Locomotives.

By Henry Greenly.

At the commencement of a new series of articles it is a common practice for the author to make clear his intentions with regard to the scope and arrangement of the following instalments. However this may be, it is somewhat difficult in the present case for me to define my future course of action. The heading would certainly appear to limit the scope to things appertaining to the model locomotive, but as the subject is one involving many side-issues, readers who are interested in model steam engines as a whole, may not fail to find something which will at least attract their attention.

My business will be to talk about the development of the railway locomotive, more particularly with reference to the effect of such developments upon the construction and design of model replicas. No branch of the subject will be beyond bounds, and no special order will be observed, except that the series will be continued - space permitting - week by week until such time as both Editor and reader become weary of it.

Points of controversial character may also be raised, and in connection with any such question, the opinions of my fellow model locomotive enthusiasts will be heartily welcomed. No criticism of any remarks I may from time to time make will be otherwise than courteously received.

An Alcester Enthusiast: Mr T.W. Averill's GNR Atlantic.

To demonstrate a test was made with five "fifty-sixers" (56 lbs weights) and the driver, the load totalling:-

	Lbs.
Engine and tender	90
Driver	154
Truck	14
Weights	280
	538

The weights and the truck are shown in the photograph. Following this I also mounted the truck in company with another fifty-sixer. The load was then;_

	Lbs.
Engine and truck	104
Driver	154
Weights	336
Passenger	147
	741 =1/3ton

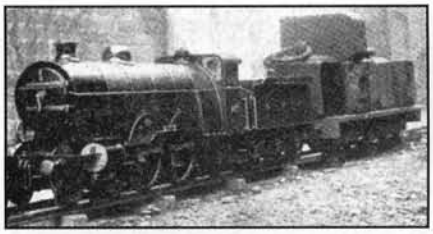


Fig. 2. – The G.N.R. With Five 56-lb. Weights.

The engine started away with only a small amount of slipping from a dead start, on practically a level track, and with only 10 lbs. drop in steam in the track. Since my visit this performance has been beaten, the asbestos piston packing, which was blowing slightly, being replaced subsequently at my suggestion, I have to admit. New pistons provided with hard-brass piston rings were fitted to the cylinders.

Two rings were used without a distance-piece between. The slits were diagonal ones, and pins were fitted to keep the slits in their respective positions. While these rings seemed satisfactory when the engine was cold, under running conditions, however, the friction appeared excessive, and was no doubt due to the high temperature and comparative inefficient lubrication. As far as I can gather, the real cause of the trouble was due to the "stickiness" which is present when brass and brass work together at thigh temperatures. A reversion has lately been made to soft packing with excellent results.

Getting Steamed Up

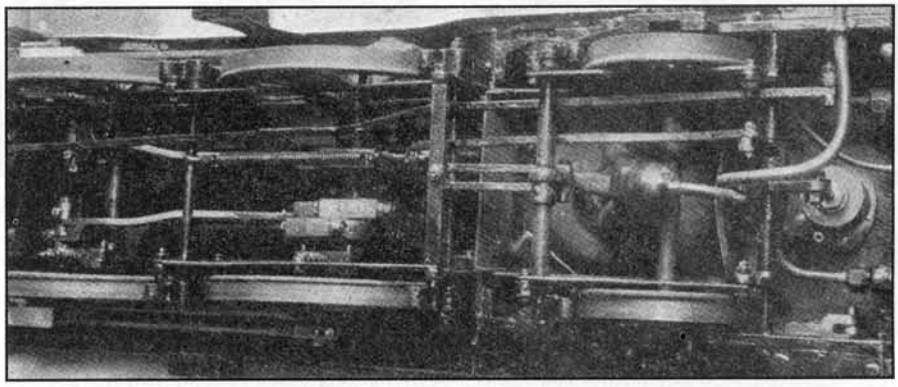
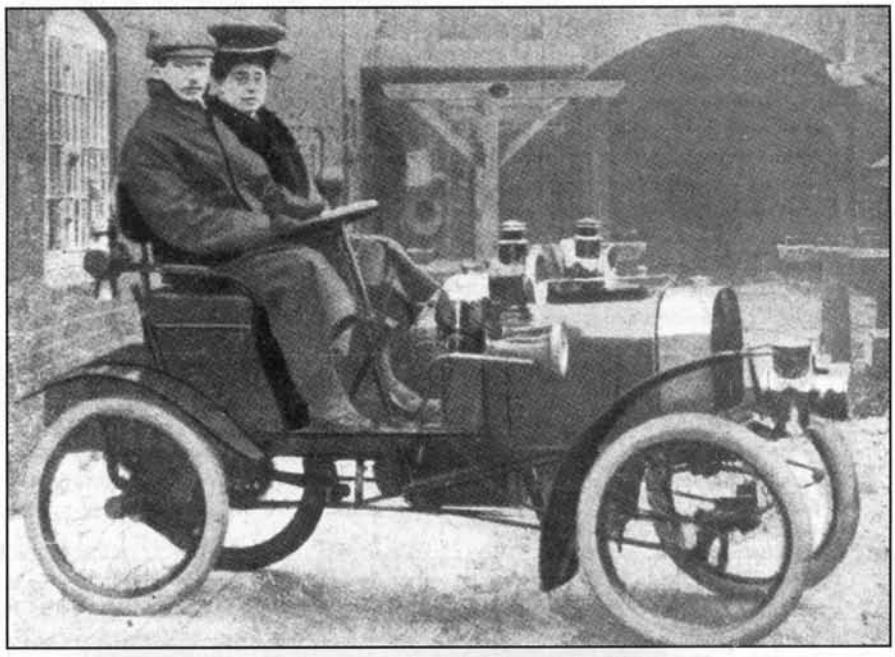
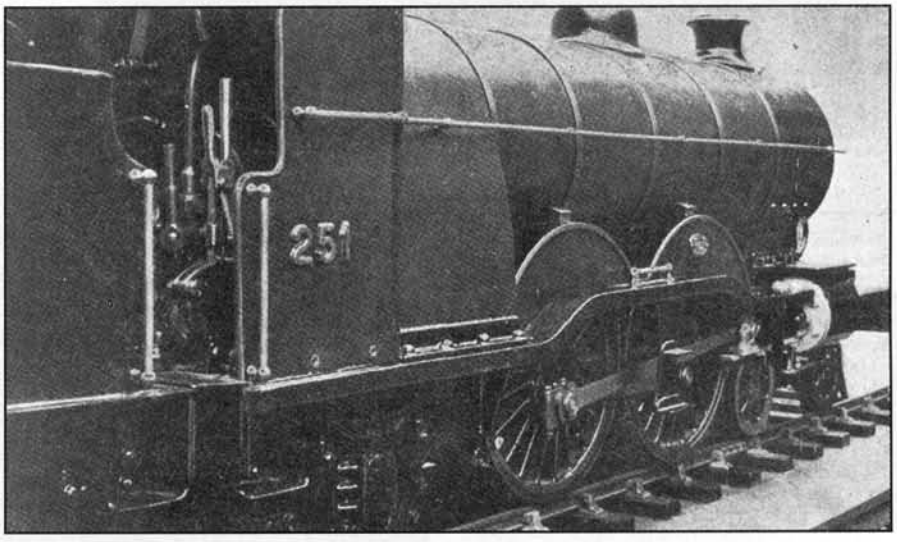


Fig. 3. – Underside Of G.N.R. Model, Showing Primus Burner And Steam Brake.

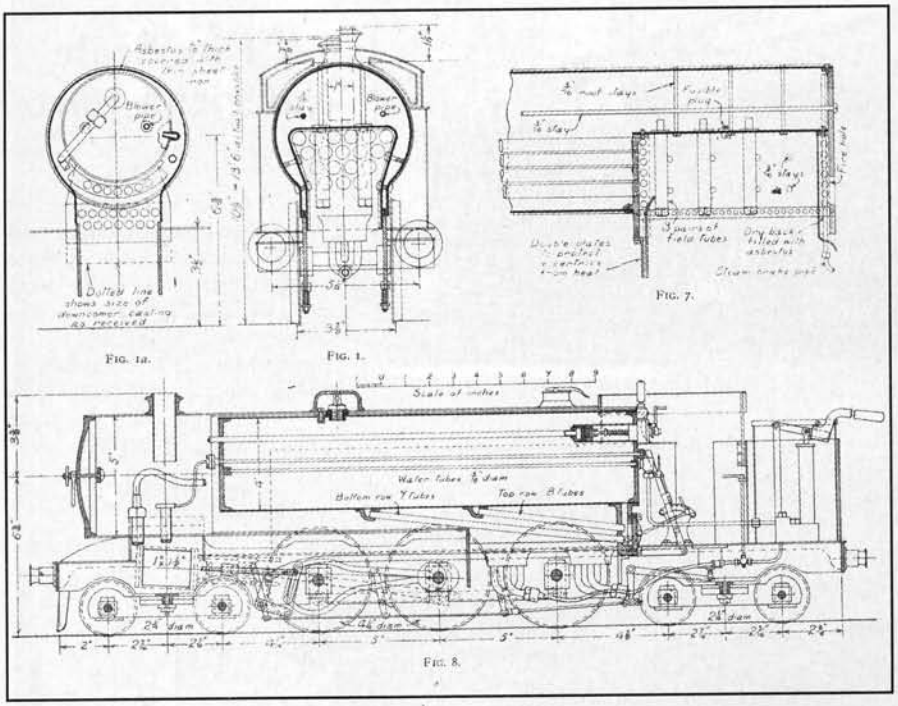


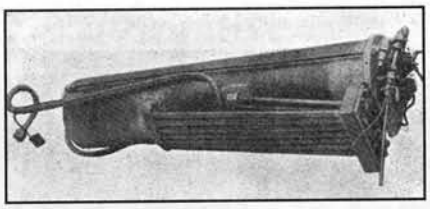
Mr T. Averill's Home- Made Belt-Driven 4½ H.-P. Motor Car



Mr. Averill's Model G.N.R. as viewed by a Scale Model Passenger.

A Powerful ¾= in. Scale Tank Locomotive.



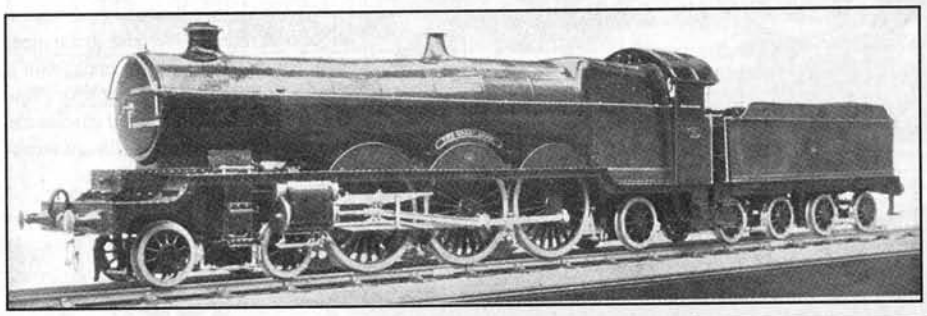


The Generator Or Water Tube Boiler

The ¾ in. Scale Tank Locomotive, with Passengers.

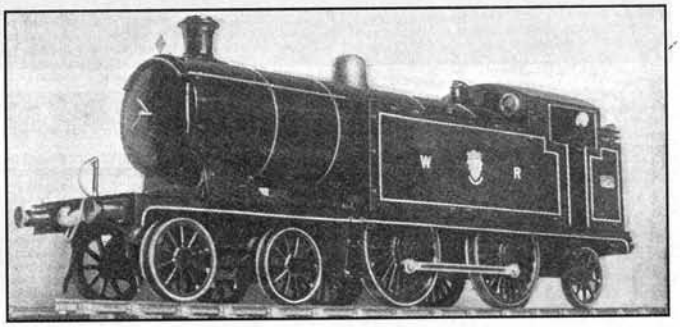
Mr. T.W. (Tom) Averill had a considerable reputation as a modeller and innovator. A staunch supporter of liquid firing, he certainly made some beautiful loco's, and he made them pull well.

Prior to this he had made several other types of model, including a gauge O loft layout and built his own car! I know I said before that running loco's appears to be a serious business, but Mr. Averill and his colleagues really don't appear to be enjoying the hobby. I had assumed that Mr. Averill was the bearded gentlemen looming large in the centre and driving a loco, actually he is Mr. G. Whittiker and he on the far left, Mr. C. Stairmand, both GWR drivers and obviously jolly good sorts. the person between them is not named but is probably one of the same fraternity, the rather diffident looking gentleman on the far right is Mr. Averill. The loco is pulling not only the two men, but nine 56 lb. weights, a total of 1001 lbs. including the loco . Although ¾" scale the loco was built to the extremes of the loading gauge and is 3⅝" gauge. As built it had a fire-tube boiler, albeit of somewhat unconventional design, having a dry backhead and no water space below the throatplate level in the firebox, but had 3 pairs of field tubes to offset this, see Figs. 1 and 7, it was not successful, it was fired by two No. 1 'Primus burners'. He says: "Since I am rather prejudiced in favour of water-tube boilers, using the shell of the old boiler for the outer casing, see fig. and photo. I am so satisfied with this water-tube boiler that I have resolved never to make another locomotive with a fire-tube boiler, and although Mr. Greenly, in his book, "The Model Locomotive", says that the fire-rube is the more powerful, I must respectfully beg to differ from him."

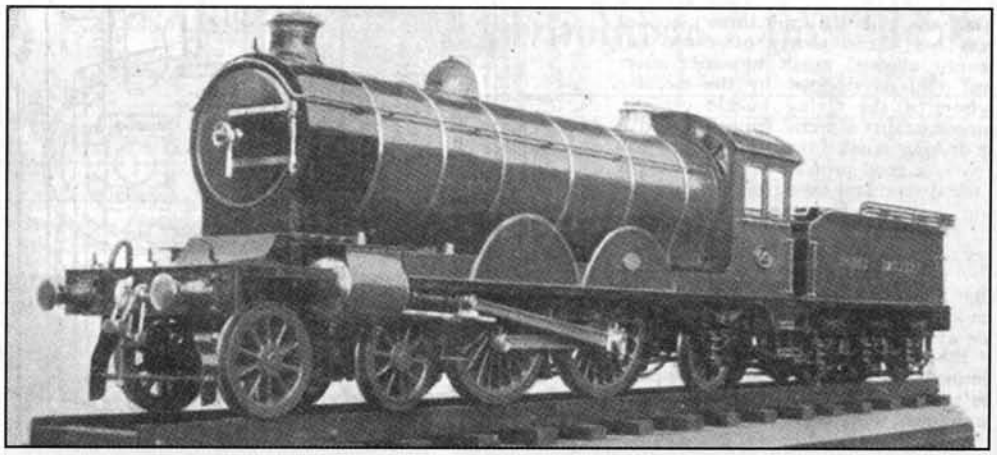


Messrs. Carson & Co.'s "Great Bear" - Winner of the Silver Cup.

We have the 2nd MEX in 1909 and Messrs Carson's "Great Bear" is winner of the 1st prize and Silver Cup. (I am still trying to ascertain how a commercial loco got an award, presumably they were eligible in the early days? What I need is a 1909 programme with, I hope, contest rules.) Below, from 1910, we have Mr Russell's rather fine loco, for which he received a certificate of merit at the 1909 MEX.



Mr Walter J. Russell's ¾-in scale tank locomotive



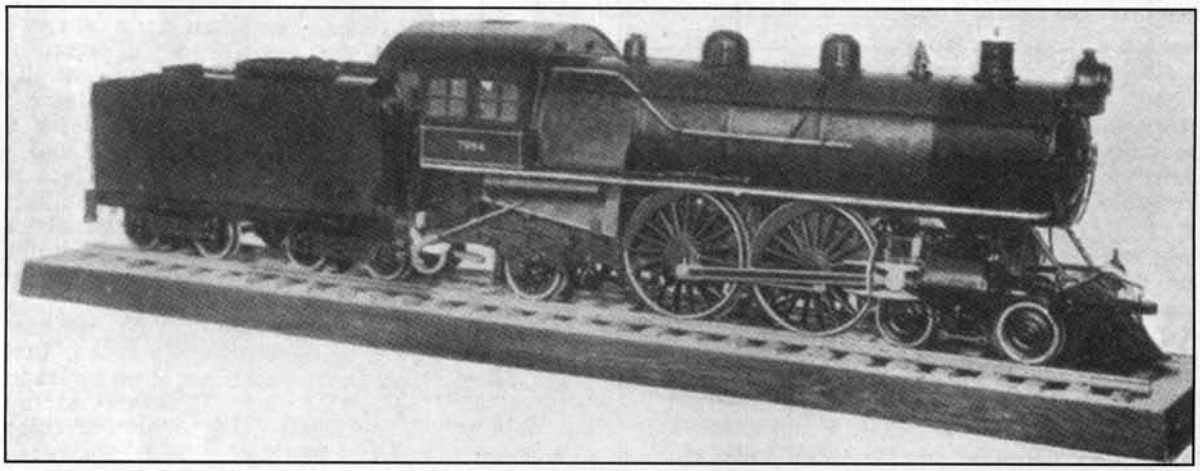
General views of Mr. Averill's NER Atlantic

A 1 in. Scale American Loco

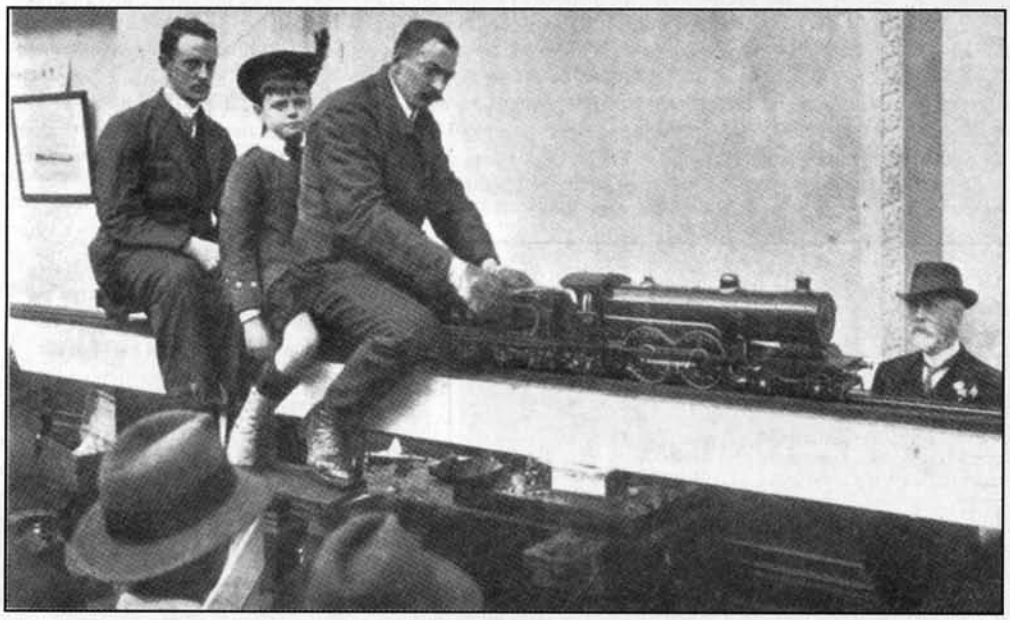
By James B. Seaverns (Chicago).

As I believe many M.E. readers will be interested in the model locomotive which I have already lately completed, I have pleasure in giving the following brief description and photograph.

The model was built to scale of 1 in. to the foot, and constructed in the same style as a modern engine. The model



A 1 in. Scale Model "Atlantic" Type Passenger Engine.



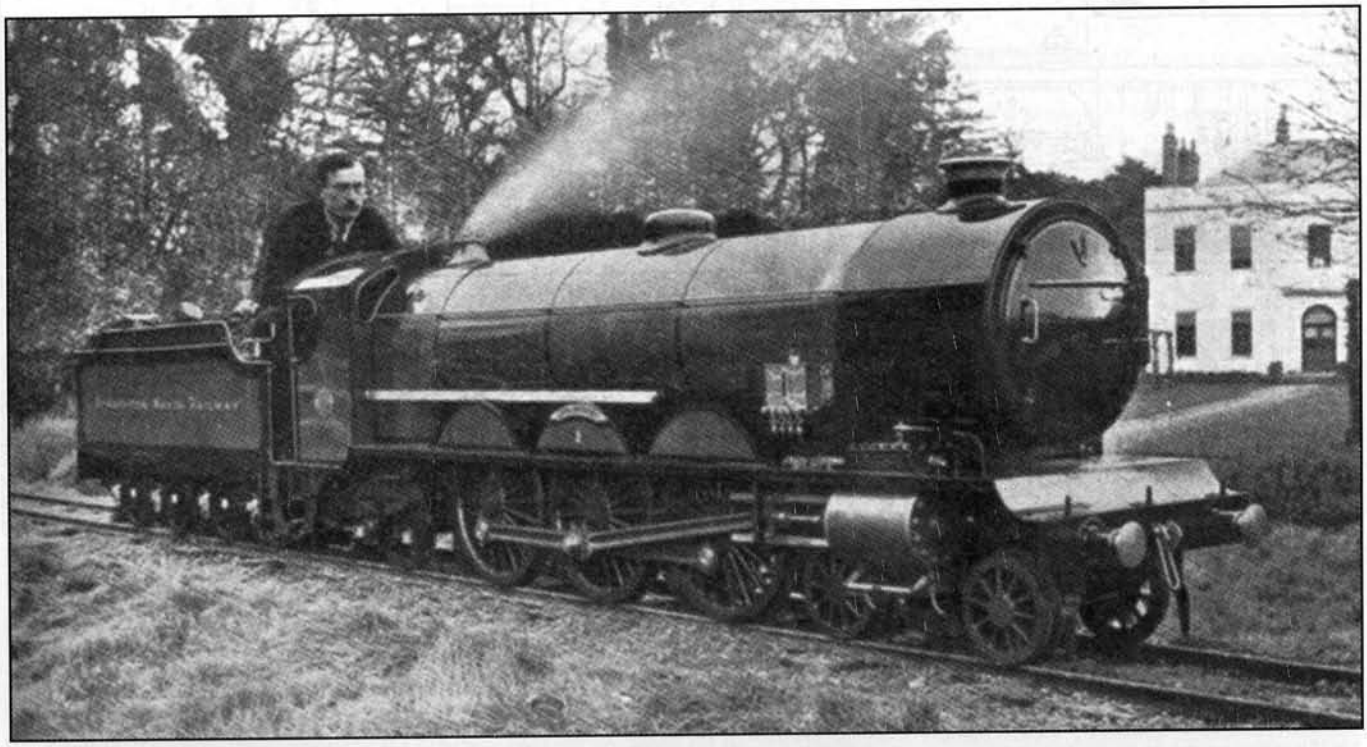
was copied from an "Atlantic" type passenger engine in service on the Michigan Central railroad running between this city and Jackson, Mich. The model was started and practically finished when I was seventeen years old, and had occupied what little time I could afford to spend on it.

The boiler was constructed from a piece of 6 in. high-pressure steam pipe, with caps screwed on for ends, with a single flue 1½ ins. in diameter. This boiler when fired with good gasolene is capable of generating 80 lbs. of steam in ten minutes from cold water

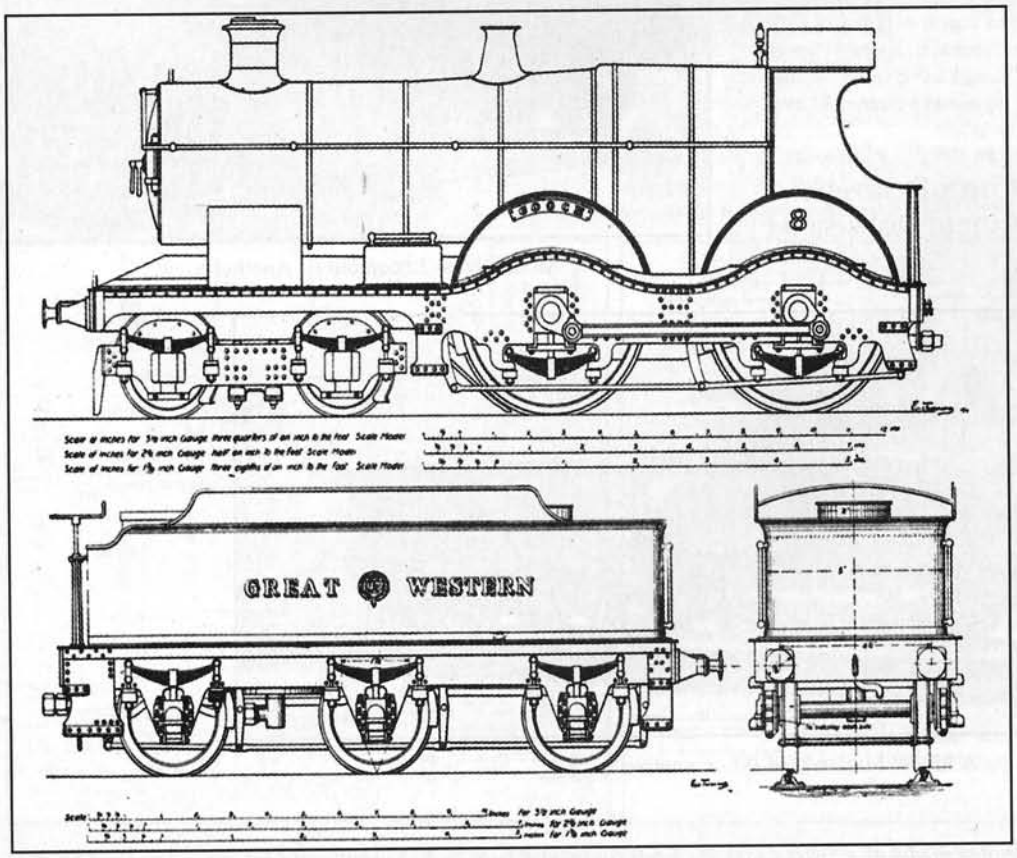
On the London S.M. & E.E.'s Track.
Mr. J. C. Crebbin driving his "Cosmo Bonsor" with Mr. John Wills and a juvenile passenger. Mr. J. P. Maginnis looking on.

Mr. Averill again, this time with a 1" scale Atlantic, which he describes in full, with drawings, in 1911. A rather nice 1" Atlantic, this time from James B. Seaverns of Chicago. We leave 1913 at the last ME Exhibition until January 1922.

Trial Runs with a 15-in. Gauge"Pacific" Locomotive



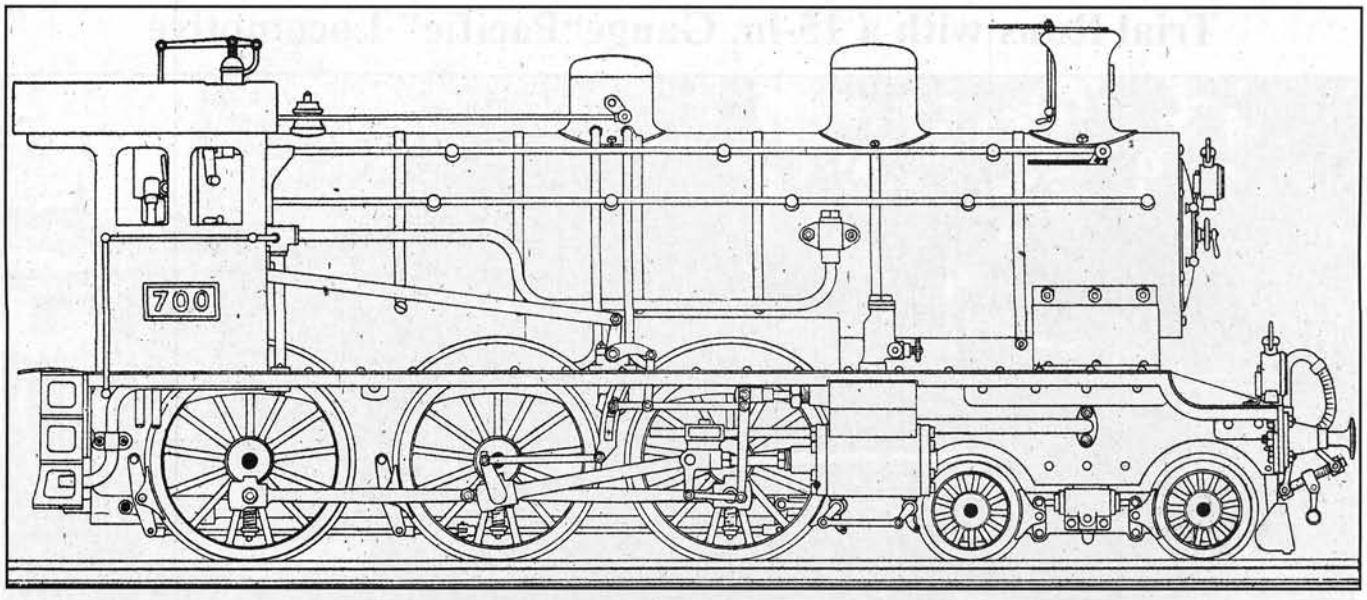
THE 4-6-2 LOCOMOTIVE "JOHN ANTHONY" : STAUGHTON MANOR RAILWAY.



In our issue for October 2nd, 1913, a drawing and constructional details of this remarkable engine were given, and we are now able to supplement these with a photograph, which also shows the owner, Mr. J. E. P. Howey, at the regulator, and his residence, Staughton Manor, in the background. This is the first "Pacific" type locomotive yet built for the 15-in. gauge, and may be described fittingly as the *chef d'œuvre* of the well-known model engineering firm Messrs. Bassett-Lowke, Ltd., of Northampton.

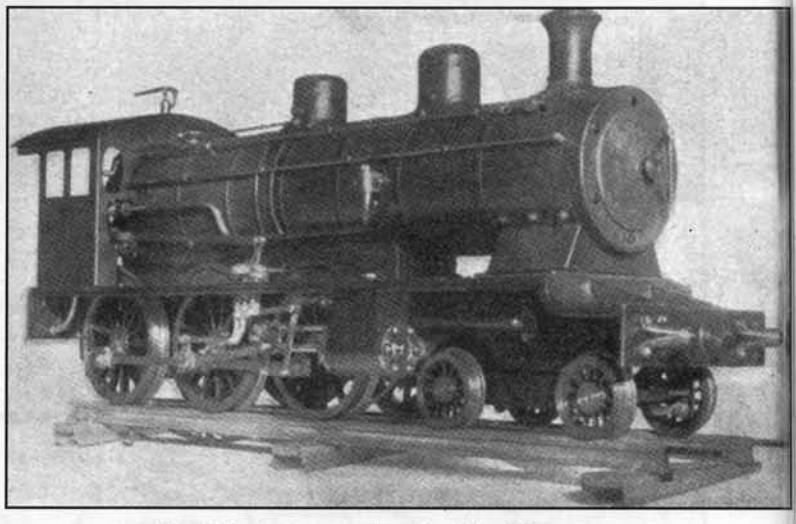
By courtesy of the Duke of Westminster, load and speed trials have been recently been conducted on the Eaton Hall Railway with the "John Anthony".

The next time we see Mr. J.E.P. Howey he will be Capt. Howey and about to start the RH&DR (I believe the loco name was changed to "Colossus"?)
One of the many locos designed by the distinguished E.W. Twining.

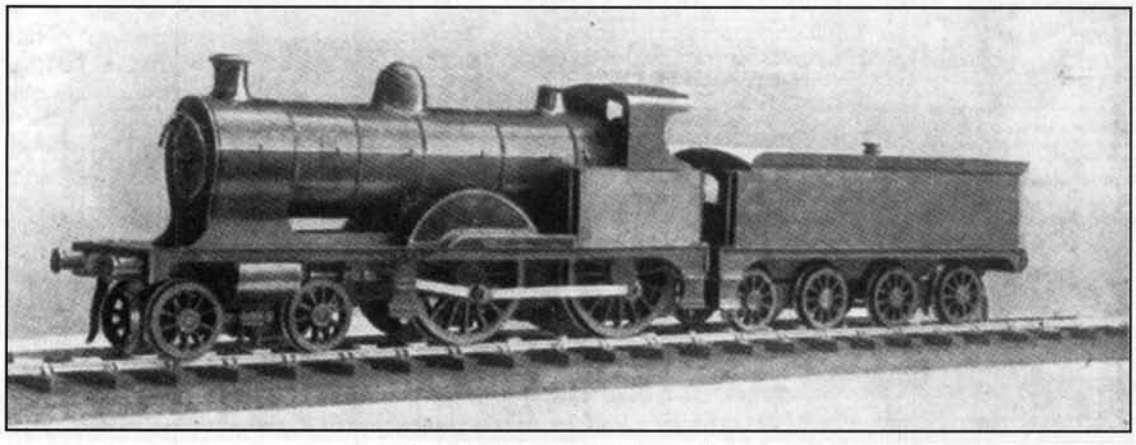


Wheel base of engine, 279 mm.
Wheel base of bogie, 68 mm.
Train 1st coupled to driving axle, 68 mm.
Train driving to 3rd coupled axle, 72 mm.
Driving and centre wheels, 2¼ in. = 57.6 mm. on tread.
Bogie wheels, 1⅛ in = 28.8 mm on tread.
Centre line of motion horizontal, 1 ⅛ in. (taken as 29 mm.) above rail.
Pivot of curved link, 16 mm. above centre line of motion.
Travel of the die in slot, 15 mm.
Throw of cranks, 10 mm.; piston stroke, ¾ in. full = 20 mm.
Throw of return crank, 11 mm.
Throw of return crank from wheel axle, 4 mm. (stroke 8mm.)
Valve spindle above centre line of motion, 19mm.
Length of connecting rod between centres, 57 mm.
Length of valve connecting rod between centres, 34 mm.

MODEL SWISS LOCOMOTIVE EXTERNAL ELEVATION AND SOME LEADING DIMENSIONS



Model Swiss Locomotive - Another View.



A Model Midland 4-4-0 Locomotive.

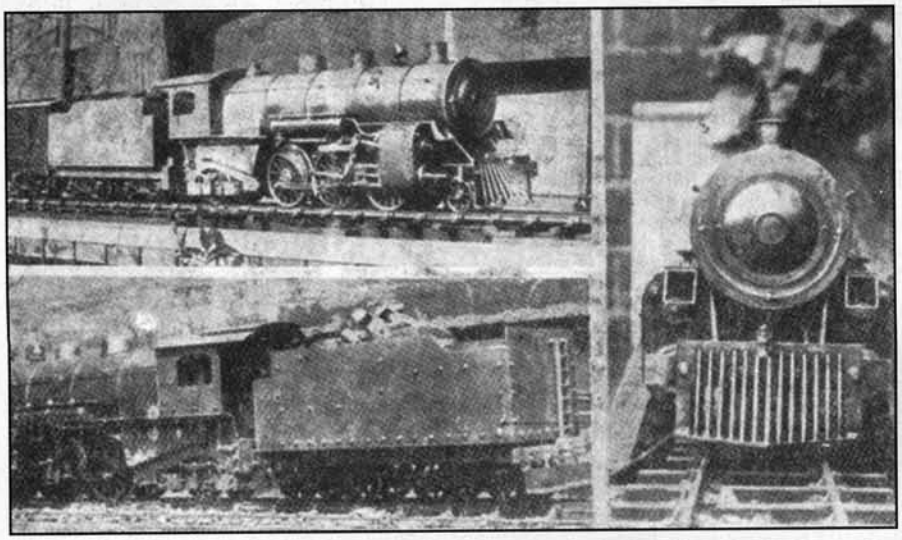
In 1916 we have an incredibly detailed model of a Swiss Class A⅗ 4-6-0 compound built by R. Koechlin of Cannes, it has 4 cylinders and is made to 35/100 or approx. 7/16" to the foot. (No. 705 is still preserved in working order and is, I believe, in Lucerne Transport Museum.) The Midland loco was designed and built by Mr. Coates to ¾" scale and 3 ¼" gauge, he made his own drawings based on Greenly's "The Model Locomotive". He also made the patterns, apart from the wheels.

A Small Scale Solid Fuel Locomotive.

By V. B. H.

In reply to a request from the Editor, the following are my impressions and experiences with a 1¾ (⅜ scale) solid fuel locomotive I have built. In the first place it sounds impossible that a model of such a small size should work at all, and I will say at once that not only does it work, but is a success. I am not a great expert model builder. This model is only the second locomotive I have constructred, and on close examination an expert would find many faults.

piece of 2 3/4 ins. diameter, 16 gauge solid drawn copper tube. It was screwed and silver-soldered together. The castings were unfortunately very faulty, and so had to be floated all over with soft solder to make them steam and water tight. It was not at all a promising beginning, but I mention these facts in order to show even with an imperfectly constructed boiler success was achieved. the fire-tubes are five in number, and ⅜ external diameter, and 18 gauge thick. These were screwed and sweated into the back tube-



Three Views of a Small Scale Model Locomotive Burning Solid Fuel.

The boiler is constructed with castings and tubes and is of the dry-backed variety. The back-plate firebox, tube-plate, throat plate and front tube plate are gun metal castings. The barrel is a plate, and sweated into the front plate.

The motion is nothing out of the ordinary, except that the valve gear is of the Walschaerts variety, but not corrected. It works excellently and has shown no sign of wear in any one of the parts. When next constructing an engine I shall try and equip it with full corrected gear. When the engine was first assembled and the boiler in place, steam was raised in the following manner.

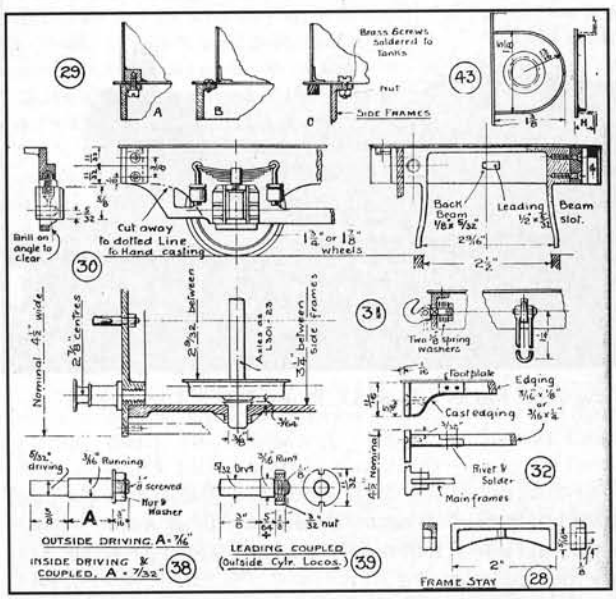
I used one of those "Imp" blow-lamps, and let it play into the firebox through the fire-hole. In about 20 minutes the gauge registered 5 pounds. Then dalli-fuel was put into the firebox, and as soon as it was nice and red, the door was shut and the blower opened. Pressure rose rapidly, and when the gauge registered 40 lbs., I opened the throttle. The motion ran perfectly. All this was carried out with the engine jacked up. The engine was then placed on the track in my garden, and to my disgust she barely propelled herself.

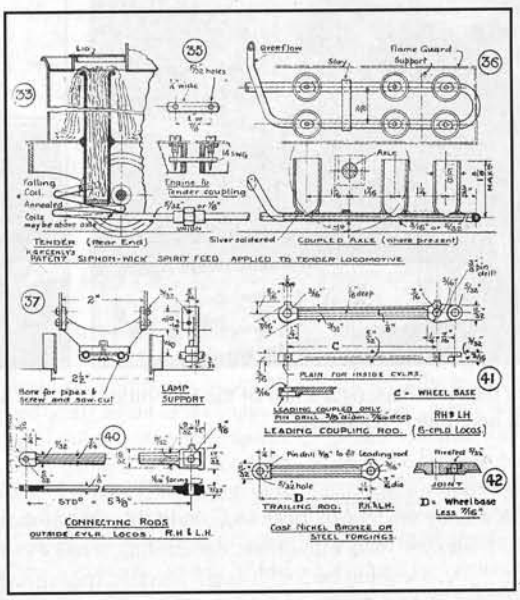
I first tried all sorts of mixtures of fuels - viz., dalli fuel and charcoal, charcoal alone, dalli and anthracite, charcoal and anthracite, and anthracite alone - but with no better results in any of the various experiments.

Then the M.E. came to the rescue. There was an article describing some ash-pan ventilator experiments in America. This gave me seriously to think. Up to now, I had been running the engine with the bottom of the grate open to the atmosphere with no ash-pan of any description. I inmediately constructed an ash-pan and fixed it in position, and raised steam. The fire did not seem to burn quite so well, but steam was raised just as rapidly as before. The engine was attached to its two coach train and throttle opened as before. That trip was nearly the last. She got under way in her usual slow methodical manner, but speed increased to an alarming degree. I had barely time to catch her before she reached the curve at the end of the long straight run on which I had been testing her. If I had not caught her she would undoubtedly have left the rails and dropped on to the gravel four feet below.

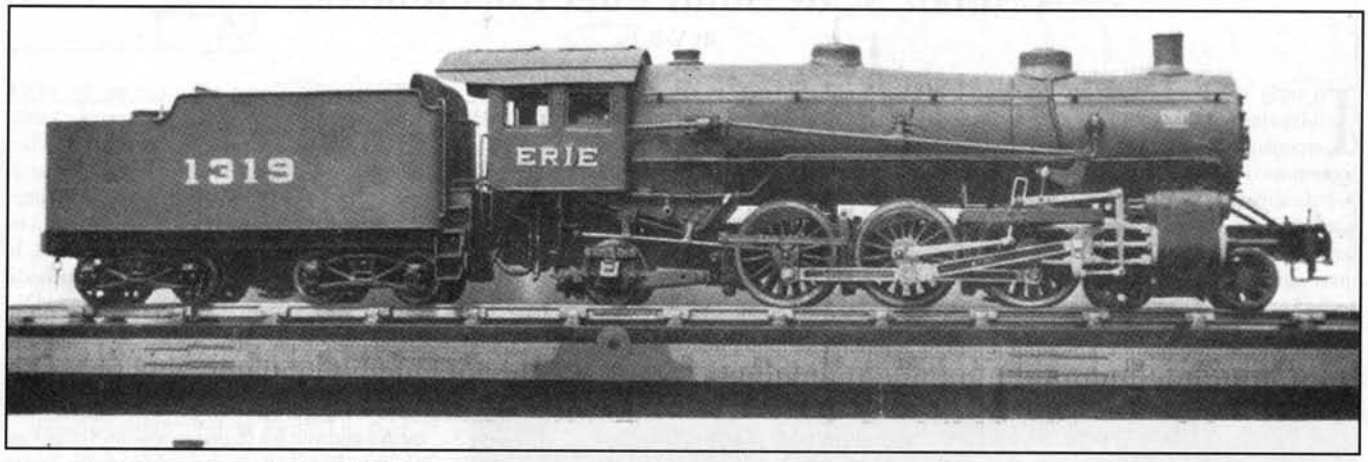
I then attached a train of five coaches, weighing in all 18 lb. This she pulled along with the throttle just open with the greatest of ease.

With this train, on the firing and with the boiler full of water, the engine has run 1,600 feet, and also 2,000 feet with another firing after running 800 feet.



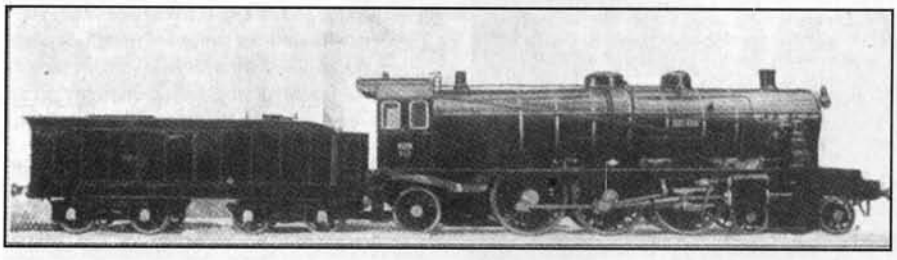


A loco from America in 1918, pre-empting the "battle", he did not fancy water-tubes and liquid firing and opted for solid fuel, not bad for a ⅜" scale, 1¼" gauge loco.In 1919 Henry Greenly was writing a further series on loco building and these are an example of some of the very useful fittings described.



A Model "0" gauge American Pacific Type Locomotive to a Scale of 7mm. to the foot.

A Model French State Railway Locomotive.



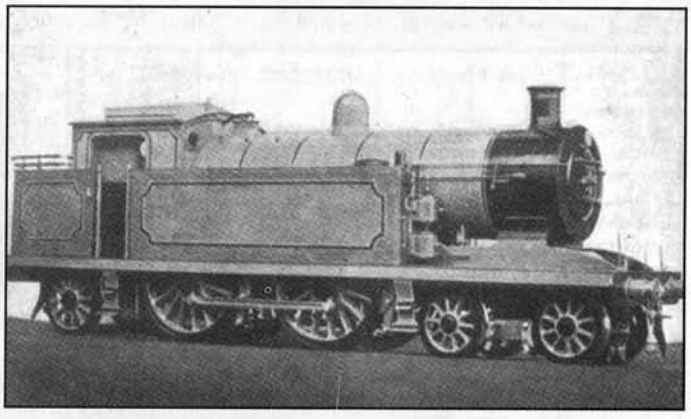
Side view of Model French State Railway Locomotive and Tender

The illustrations show a very fine piece of modelling which has recently been completed for one of the leading British firms of locomotive builders by W. H. Jubb, Ltd., of Sheffield.

The following leading dimensions of the model are given in millimetres.

Length of the engine and tender overall, 2,228; length of engine, 1,365; boiler length shell, 590; smokebox length, 215; firebox length, 280; height to top of chimney, 427.

Mr. J. C. Crebbin takes the first Passenger Load of the Exhibition with his Model "Aldington".



View of the Model L.B. & S.C.R. 4-4-2 Tank Locomotive.

Starting in 1920, a scale model American loco, built this side of the pond by "Pacific", it has a 12V Butcher "Ibbe" motor.
An unusual model from Messrs. Jubb with metric dimensions, it has 4 cylinders and is to 1/10th scale. It doesn't give the gauge but it would be 5½" if taken literally, (perhaps they rounded it down to 5"?)
January 1922 brought forth the 1st MEX since 1913, a bumper show according to contemporary reports. Mr. Dyer got a Silver for ¾" LBSCR tank.
J. C. Crebbin is back again, this time with a newer loco, "Aldington", a ¾" scale (based on 5ft.6" gauge, giving him 4½ in. gauge.) compound "Pacific". He also ran, by popular demand, "Cosmo Bonsor".

The Battle of the Boilers

In 1922, just when everyone thought hostilities were over, an innocent letter from a Mr.J. Leeming started another conflict, ***The Battle of the Boilers.*** [46/93] Mr Leeming wrote a purely academic query regarding the problem he was having with firing his water tube boiler. [46/158] A Mr. Woodrow replied, suggesting that he change from meths to paraffin, extolling the virtues of the 'Torrid' burner.

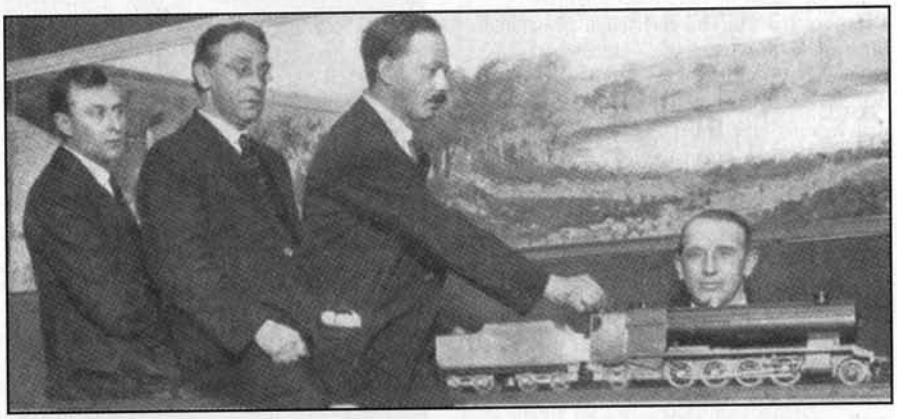
The next reply was from a reader, using the pen-name LBSC. [46/159] Ever the diplomat, he suggested "putting his methylated spirits and water tubes in the dustbin." Pow! A lot of angry people reached for their pens.

For the most part it was conducted in a very polite manner. (I was reminded of the first AGM I attended at the North London Society, being used to the propriety of the St. Albans Society where no one disagreed and no one raised their voices. Here we had some really tough in-fighting but always in an incredibly polite manner. The principal protagonists were Tom Pinnock, Alf Savage, Nobby Clarke and Don Gordon, encouraged by the Chairman, Ted Moon, who didn't believe you could have a satisfactory AGM without a row. Tom Pinnock, who was a very successful solicitor and well respected member of SMEE would never take office but preferred to run the meetings from the floor, "On a point of order, Mr.Chairman ...",etc. "If my friend Mr Savage will stop talking for a moment ...", and so on.) It was only after Mr.Basset-Lowke, most inadvisedly, suggested that LBSC was being economic with the truth in his claims, and more particularly, after the contest, that the correspondence became rather acrimonious, if not schoolboyish, in its import.

Some 59 letters were published in 1922/3, mostly in 1922 plus some reports and letters in 1924 with a further flourish in 1931, plus sundry outbreaks at intervals since. A premium on space precludes printing all the letters but I have included some which I hope are the key ones and summarised, or taken excerpts from some of the more relevant. For those keen folk who have access to the appropriate volumes, mostly in 1922, I have included references [vol./page number, author]. (If there is a number without comment, the content did not seem to me to be particularly significant.)

[46/182, Rummens]; [46/206, Peck] The first voice raised in dissension against LBSC; [46/206, Cook]; [46/206, Brown]; [46/253, B.A.F.]; [46/253, LBSC] Shooting down friend Mr.Peck, (my italics, not Curly's); [46/277, Coates] [46/302. Conybeare] A well respected exponent of the petrol/paraffin burner and a force to be reckoned with!

[46/321, Leeming] Thank you all for your advice, I think I will plump for the burner... [46/321, Wolverton] Lots of data and figures, (which made my brain hurt); [46/322, Evans] "Oil is the coming fuel, our coal measures are within sight of exhaustion." [46/323, Woodrow] Who needs sparks? Get yourself a 'Torrid'.



The Challenger 2½ Gauge Spirit-fired Water Tube Boilered Loco Hauling a Good Load at the Exhibition

[46/349, LBSC] Quick ripostes to Messrs. Coates, Gowland, Crook and Conybeare, "in a spirit of all friendliness."

[46/397, LBSC] "Respecting Mr. Wolverton, I do not think all of us will agree with him. Figures, like photographs, can be made to prove anything" just time for a quick thrust at Messrs Evans and Woodrow, finishing, "Regarding the 'Torrid' burner, there are others as good, if not better. Mr. Conybeare's is the best I know."; [46/398, Yale].

[46/445, LBSC] "Would you be kind enough to correct some very inaccurate statements made by Mr.W.A. Tyrell to the ½in. scale loco chassis exhibited on Messrs. Bond's stand ... The chassis has now developed into an LB&SC Altlantic burning solid fuel, and works very well indeed."

[46/445, Starling]; [46/466, Smith] A bit anti, "How about Messrs Bassett-Lowke's GNR No.1000 hauling 84lbs, this model, I assume, has a water tube boiler. Can 'LBSC' beat this with his fire tubes ... for five minutes?" (Starting to warm up.)

[46/491, '184'] "I feel the that the model locomotive section of your readers owe a debt of gratitude to Mr. Leeming who, in the first place, by his request for help has set the ball rolling, etc." (Another pro-water tube spirit burner fan.)

[46/492, J.A.R.G.] More jibes at LBSC's sparks, how long does it take him to get up steam "without the use of a convenient gas stove, fire or bellows? I daresay about 20 minutes, with plenty of lung power, a smutty face, and the driver nearly as hot as the engine." [46/493, Conybeare] "If one must have sparks why not fire a squib through the fire door? To get back to tubes, for power and long runs nothing will beat a flash tube boiler, and I do not think either of the ordinary types would make enough steam for a ½in. scale with ½ x 1in. cylinders."

[46/518, Meers] At last, a pro-LBSC man, "I am prepared to take on any of your 'water-tube' readers with the next solid fuel ½in. scale locomotive that I turn out.

[46/564, LBSC] "As Mr.Smith asks definite questions, I beg to reply to same. The reason why Messrs Bassett-Lowke and Jubb build their models with water tube boilers is because, as a commercial proposition, the boiler is a success on account of its cheapness and ease of manufacture. If Mr. Smith thinks the increase of cost would be slight, or none at all, let him get a quotation. He will be surprised." ... (He goes on to mention others who consistently haul heavy loads with loco-type boilers, such as J.C. Crebbin and E.W. Twining, and concludes:) "Mr.H. Greenly consistently advocates the loco-type with solid fuel in his new book; and I humbly offer my own experience, as I built my first decent locomotive way back in 1900, when 18 years of age" (That would appear to fix his elusive birth date at 1882. Now he has upset vested interests and it was only a short time before rumblings were heard from Northampton.)

[46/587, Starling] "One of our customers is building a ½in. scale loco and consulted us as to the type of boiler to fit. We suggested the fire-tube type. Our customer expressed a wish to see one under steam before deciding, so we asked LBSC, who is also a customer, if he would be kind enough to show one. We went to LBSC's house and saw his ½in. scale Atlantic in steam. Starting with a dull fire, black on top, very little water in the gauge and only 15lbs of steam, the engine was jacked up and the regulator opened fully, the wheels being braked to about 350rpm. As the fire, of half-burnt cinders and charcoal felt the effects of the exhaust, steam began to rise. The pump was then started, the brake pressure increased to keep the wheels at uniform speed, and against the fully opened regulator and the pump, the pressure went up until the safety valve blew off violently, the gauge showing nearly 100lb. There was no sign of priming. On shutting the regulator and opening the fire hole door the fire died down to a dull red again, and the safety valve dropped to a mere sizzle ... Need I say our customer decided on the spot to build a locotype solid fuel boiler.' (We shall hear more from that customer later.)

Spirit Firing versus Solid Fuel For Model Locos.

Ravenglass, Cumberland.

[46/588, Greenly] (Included in full since I think most folk would agree it is particularly interesting in the light of later correspondence.)

To the Editor of The Model Engineer

Dear Sir, – I am much interested in the complete vindication of "L.B.S.C.'s" arguments. It is useless to say that a solid fuel boiler, if well made and designed, will not give better results than a water-tube boiler. Captain Wall's letter was written from a point of view which I entirely concur. The water-tube boiler has saved many a model maker from failure and disappointment, and I hope to be spared to design many more engines using this convenient, simple, quick-steaming boiler. The only drawback to the solid fuel boiler is that it must be constructed in a perfectly workmanlike manner, that the engine mechanism must be equally good, and the blast arrangements an example of an exact science. I quite understand trade firms fitting the more easily-made water-tube boiler, but it cannot be maintained that it is the best, as "L.B.S.C." has recently proved, and I showed at Manchester in 1913. I am again at Eskdale, and closely watching the fine work of the three "model" engines handling the "summer" traffic. The goods engines of Sir Arthur Heywood, on which I had put much hope before I saw them at work at Eskdale, are not provided with ordinary locotype boilers, and cannot compare in fuel efficiency with the model engines. I should not advise advocates of water-tube boilers fired by spirit or oil burners to attempt to suggest such a thing to the General Manager of the Eskdale N.G. Railway (especially if Mr. Mitchell is away and Mr. Robert Hardie is on duty), even if it is accompanied by offers to pay for the methylated spirit consumed.

Yours,

Henry Greenly.

[46/588, 'CGBS'] (Anti, water-tube and snide remarks about squibs).

[46/613, Bassett-Lowke Ltd., M.J. Barnard]; (The opening shot from the main opponent was a relatively polite and balanced letter with the odd barb from Mr.Barnard on behalf of the company. He does make a valid point relating to the comments from some correspondents about the realism of solid fuel, that the comment is only valid "so long as the operators of the railway companies use solid fuel. If oil fuel were universally adopted, the search for realism would be along a different track entirely ...To give our own opinion, we have no hesitation in stating we consider the water-tube boiler an easy winner, in spite of the absence of 'realism' which would be provided in the other system by the small coal, driver's smutty face, etc." (More was to come).

[46/638, Fenn] (The customer brought along by Mr. Starling. It is a fairly lengthy letter extolling the virtues of fire-tubes and LBSC, the crunch part follows:) "The engine pulled the owner and writer on an improvised truck, coupled. This was from a standing start and on greasy rails, my own weight is 12st. 4lbs. (Presumably he means they each drove the loco separately, since he mentions later that 172lbs.would equate to a very long train of bogie coaches.)

Almost the Load Limit for the ½-in. Scale Solid Fuel "Atlantic"

The Two Noras. An Easy Load.

[46/638, Starling]; [47/21, LBSC] We haven't room for the whole letter but the two photos are of interest, one of which is of LBSC. He says: "The gentleman who took the photographs is 6ft. high and weighs 13st. After operating the camera, he sat on the trolley and opened the regulator; the engine promptly walked off with him... Re: Messrs Bassett-Lowke's note ... I am experimenting with models of the 'Holden' and other spray oil-fuel burners and may have some good results to record shortly, but I do not think solid fuel will be even equalled for steam and power. As to the smutty face remark, ... do you think Miss Nora's mother would allow her to drive my solid-fuel engines in a white dress if there was any chance of it getting smutty. (Although, as LBSC pointed out earlier, "photographs can be made to prove anything") She is an expert driver, by the way."

[47/22, Morgan] Feels "called upon to challenge the sweeping assertions in Messrs Bassett-Lowke's letter." He has a list of searching questions as to what they would claim, in real terms, for the water-tube boiler being "an easy winner."; [47/70, Smith]; [47/116, Wall].

[47/117, for Bassett-Lowke Ltd, W.J. Bassett-Lowke, Northampton] The man himself. An erudite and objective letter in which he answers all Mr. Morgan's queries and puts an excellent case for their preference for water tubes and spirit firing. (What a pity he had to spoil it by saying: "We are inclined to doubt the ease with which LBSC's ½in. scale loco hauls a person weighing thirteen stone.") He concludes his letter: "We trust that at the next M.E. Exhibition some of the solid fuel enthusiasts will not fail to give a demonstration of runs and loads which will bear some relation to those which have recently been described in these columns. We do not think some of the loads could be hauled as described unless additional weight was placed upon the locomotives to prevent slipping." (Those rather unnecessary comments did not win him any 'Brownie' points, some further, unimpeachable, demonstrations were given before the next M. E. Exhibition and when it came to the final showdown it was his loco and not Curly's which had the 'additional weight'.)

[47/118, Crebbin]; [47/164, LBSC]; Quite a restrained letter, replying to points raised by Messrs Morgan, Smith and '184'. He obviously had not read Bassett-Lowke's letter when this was written. Watch this Space!

[47/187, LBSC] "I very much regret that Messrs Bassett-Lowke have seen fit to doubt the statements made in my letters regarding the performance of my ½in. scale solid fuel engine. Because B-L,with all the 20 years of model loco work which they claim, have not produced a ½in. scale passenger engine which will burn coal and pull a 13st driver (and keep on doing it), it does not follow that this accomplishment is impossible to an ex-'real loco' man with a slightly longer experience of modelling even than B-L." (He goes on at some length regarding making a demo to reputable parties which culminated in his being invited to run at Caxton Hall on the SMEE track before an invited group. After a preliminary demo at home without a working blower, Mr. Pitt, Secretary of the Railway Club and Mr. Hart, Chairman of SMEE, both drove, Mr. Hart is 13st. Despite the lack of a blower, due to an accident which had fractured the pipe leading to the blower valve), "the exhaust pulled the fire up from 35lb to blowing-off point with the regulator wide open, the feed pump putting cold water in, and a load of over 1½ cwt behind the engine. Where is the ½in. scale water-tube boiler, either spirit or blowlamp fired, that will run from 35lbs up to blowing-off point with the regulator wide open, the feed pump putting cold water in, and a load of 1½cwt behind the engine? I venture to say, and I am not alone in my opinion, that no such water-tube boiler exists, even on B-L's GN Pacific, in spite of what they say. On July 19th I took her to Caxton Hall. After the methylated and water-tube engines, also a loco fitted with a 'Torrid'

burner which, at the time was anything but torrid, had performed, I raised steam in less than five minutes (as timed by SMEE members)." She repeated her performance, was driven by Curly, Mr.Hart, one or two other members, a Great Northern driver, (Bill Massive?)" I hope Messrs B-L and any other doubters will be satisfied with the above. I have been personally congratulated by Mr.Conybeare, Mr.Crebbin, Mr.Allman and others on the performance they witnessed of the shabby little unfinished Brighton 'Atlantic', and I have been invited to join the SM&EE, which I am accepting. ... Now, Mr.Editor, having severely tried your patience, I confess I am tired of 'blowing my whistle' and hope that my case being proved, I shall not have to blow it again for some time; especially as I want to find out what a ½ in. scale coal-fired goods engine will do."

[47/188, Hart] Mr. Barnard Hart, Chairman of SMEE, gave an account of the recent test and corroborated LBSC's report. His comments included: "I see that Mr Bassett-Lowke doubts 'the ease with which LBSC's loco hauls a person weighing 13st" and further remarks: "We do not think some of the loads could be hauled as described unless additional weight was placed on the loco." I cannot let this pass without protest. I have driven LBSC's loco myself and I weigh 13½ stone - no additional weights were added. Several others drove up and down without any trouble ... There was a representative from B-L present, but whether he saw the performance and went home sick, or did not see it because he was trying to add the 25½ lbs his engine pulled on the circular track to the 44½ lbs pulled on the straight and make it come to 13st I do not know, but I believe he did see it, and he might have informed Mr. Bassett-Lowke and saved him from calling LBSC - I mean from writing such a disparaging letter."

[47/189, H.B.]; [47/190, Mrs. Rose Brown]; [47/212, Starling]; [47/260, Fuller] (The representative from B-L referred to in Mr. Hart's letter) "far from being annoyed at seeing LBSC's loco hauling 13st, I felt more like congratulating him on such an achievement ... I might add that until LBSC appeared there was no mention of any weight-pulling contest taking place, either to myself or to the firm."

[47/260, Bassett Lowke Ltd.] (Again, a lucid and objective letter, pointing out that they were quite capable of making coal fired locos and that they had built 1¼ in. gauge coal fired locos as far back as ten years ago. He concludes by saying: "If the SMEE consider that coal-firing and load hauling are the acme of perfection in model loco work, why not offer a gold medal for a competition at the next M.E. Exhibition, the contest to be for ½ in. scale locos and the winner to be the one which will pull the heaviest load ..."

[47/283, Carter]; [47/283, Twining] (A thoughtful letter from one of the greats in modelling, among the points he raises is that: "The hauling of a man weighing 12 or 13st is not realism. Firstly, because it should not haul a full-scale man at all, and secondly, because the load is far in excess of capacity of the prototype."

[47/306, W.H. Jubb Ltd.]; [47/307, Greenly] I am much interested in the complete vindication of LBSC's arguments. It is useless to say that a solid fuel boiler, if well made and designed, will not give better results than a water-tube boiler ..."; [47/355, Starling]; [47/355, Morgan] (Still querying B-L's claims for their GN Pacific); [47/356, '184']; (Some friendly badinage with LBSC, criticism of B-L).

[47/451, LBSC] (With reference to another test at Caxton Hall on 17 October when his loco humped a 15st passenger:) "I am quite prepared to run any test before an impartial referee; but Mr Bassett-Lowke and some of his staff were present and saw the Atlantic perform as above. I therefore suggest that if they will put an engine of their water-tube-meth type on the track that will equal the performance my engine has already given, I am willing to enter into open competition ..."

[47/451, Fenn] (He has built a 1/2in. scale Atlantic similar to LBSC's but with 1/8in. bigger bore, it performs as well as the original, and he is well pleased.

[47/503, Wood]; [47/505, A.B.]; [47/587, P.W.W.]; [47/588, K.M.Harris] (Any relation?) [47/637, 'Linkhead'] (Had space permitted I would have included this one just for laughs. He makes the most exaggerated claims for his vast railway and stud of B-L locos and rolling stock, which, according to Brian Hollingsworth in *LBSC - His Life and Locomotives,* was non-existent.); [48/73, LBSC] (Unfortunately unaware, at that time, of the fictitious nature of 'Linkhead's' claims, rose to the bait with a few pithy remarks, ending by issuing yet another challenge); [48/98, Hepworth].

[48/414, Hart & Crebbin] Referring to yet another test when the loco pulled Messrs LBSC, Hart and Crebbin, a grand total of 563lb!

We now enter a quiet period during 1923, a lull before the return of 'differences of opinion' in 1924, culminating in the contest at M.E. Exhibition, although that was not the end of the correspondence! [50/41, Greenly] (Not a letter but a 9 page article with photos, drawings and diagrams on Challenger, specially commissioned by B-L.) "Naturally, as the new goods loco for Eskdale was paramount at the time of Mr. Bassett-Lowke's request, the design that was considered best for the service there, where the maximum hauling capacity has to be maintained over a seven-mile non-stop run - to time - was thought to be sufficient for the freak performances on the short Exhibition track".

(So here we are, all ready for the contest. One two year old Atlantic designed and built in a domestic workshop, against a freelance 2-8-2, designed by a professional, constructed by two professional builders, with all the latest workshop equipment. I wonder what the comparative cost was. Although the rules did not specify locomotive type, only loading gauge, it seems to me that for B-L to prove their point, they should have made a four-coupled loco. Otherwise it is a bit like, in later years the LMS challenging the LNER to a tractive effort contest with an 8F against an Atlantic, rather than a similar loco.) However, it's history now and I expect you all know the results. Each loco ran on an up-and-down track for 15 minutes, Challenger achieved 23 laps and the Atlantic 22½. Challenger was adjudged the winner.

B-L was in ecstasy, having 'proved his point'. The B-L driver weighed 9st, LBSC 12st. Both camps were convinced they had won, both wrote reports 'proving' they had won. [50/102, LBSC]; [50/139, Greenly]; [50/224, Bassett-Lowke]; [50/224, LBSC]; [50/279, Greenly]; [50/309, Solomon]; [50/310, L.M.S.]; [50/311, Cellar Worker]; [50/478, Wilson]; [50/503, Stewart]; [50/591, LBSC]; [64/599, Willoughby]; [64/599, LBSC]; [65/215, Greenly].

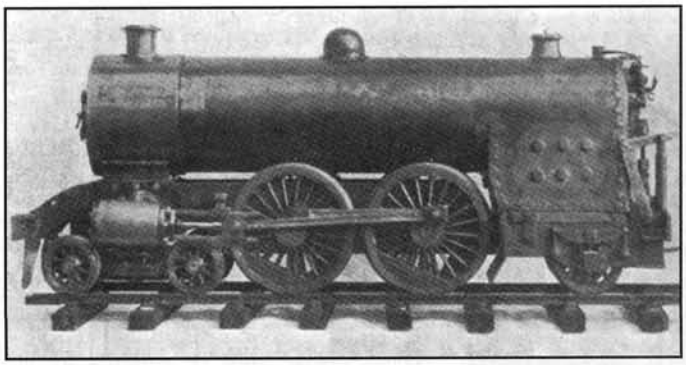
(Whatever the technical results and arguments, most of the great British modelling public, possibly based on sympathy for the individual against a large organisation, thought that LBSC had won, the SMEE and, I suspect, M.E. thought so as well. LBSC certainly came out of it best. Later that year he became a regular contributor to M.E. with Shops, Shed and Road, A column of steam' and became something of a guru among the loco modelling fraternity.

As an LBSC fan my only disappointment is that he didn't just rest on his laurels, he wrote further rather vitriolic reports and letters and never missed an opportunity to pour scorn on B-L, whom he referred to as 'Bally-Joke', and Henry Greenly. While I can understand his bitterness against the former I think his campaign against HG was uncalled for and unfair. Reading between the lines of Greenly's article, in the opening paragraphs, he refers to 'freak performances' and I feel sure his heart was not in it, he wanted to be at Ravenglass with the big stuff, not getting involved in sideshows designed to help commercial interest, especially as it is clear from his earlier correspondence that he was in agreement with LBSC. I believe that they respected each other up to the time of the contest and it was only Curly's repeated jibes, made from an advantageous position, that stung him to reply in a most un-Greenly like manner in 1931 [65/215] when there was a further round of mud slinging.

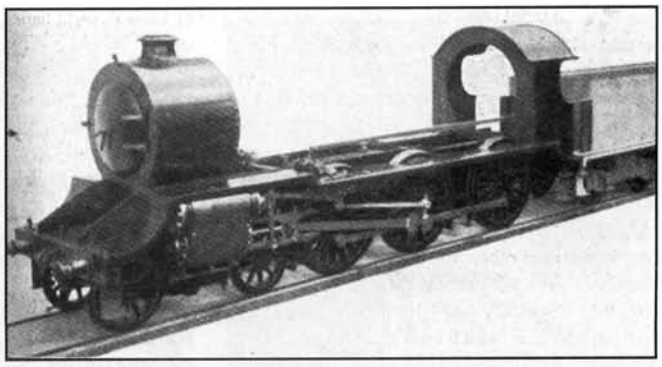
Much has been written about the 'Battle' over the years, Curly frequently referred to it and, in 1955 [113/318] wrote a full and ever-so-slightly biased account of it. I remember reading it and until recently took it as gospel that B-L and Greenly were the villains and Curly the good guy. Since carrying out the research necessary for this special issue I have discovered many things which I had not realised. I believe that the best and most succinct account was written in 1966 by Martin Evans [134/508].

In 1969 [140/62], he also wrote a spirited defence of the late Henry Greenly. He comments: "I think that K.N. Harris was exaggerating when he wrote of a 'campaign' in *Model Engineer* to discredit Greenly. At the same time, I must, in all fairness, agree that Greenly did come in for a great deal of rather unjustified criticism, and from more than one contributor. I suspect that those comments may have been heartfelt as I feel that Martin Evans has also come in for more than his share of unjustified criticism over the years, also from more than one contributor.)

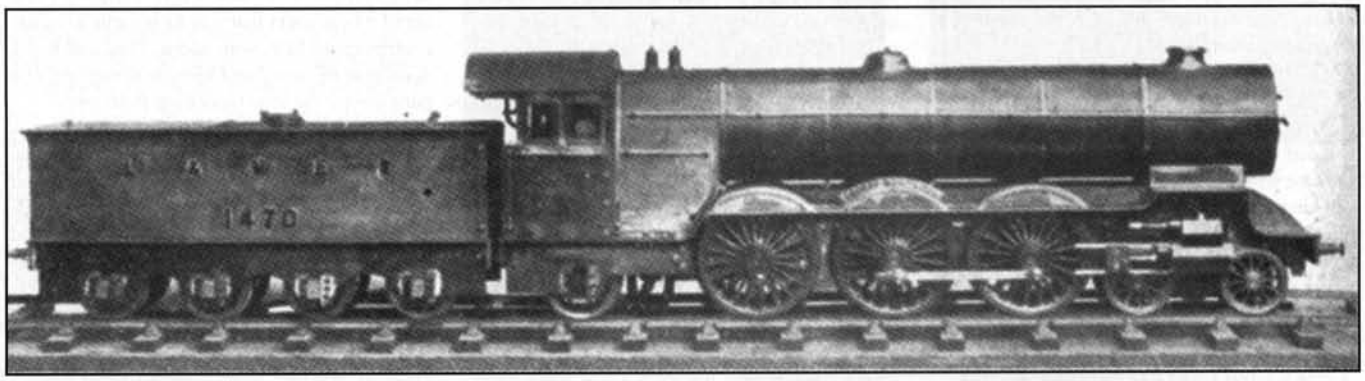
Meanwhile, back in 1923 ..



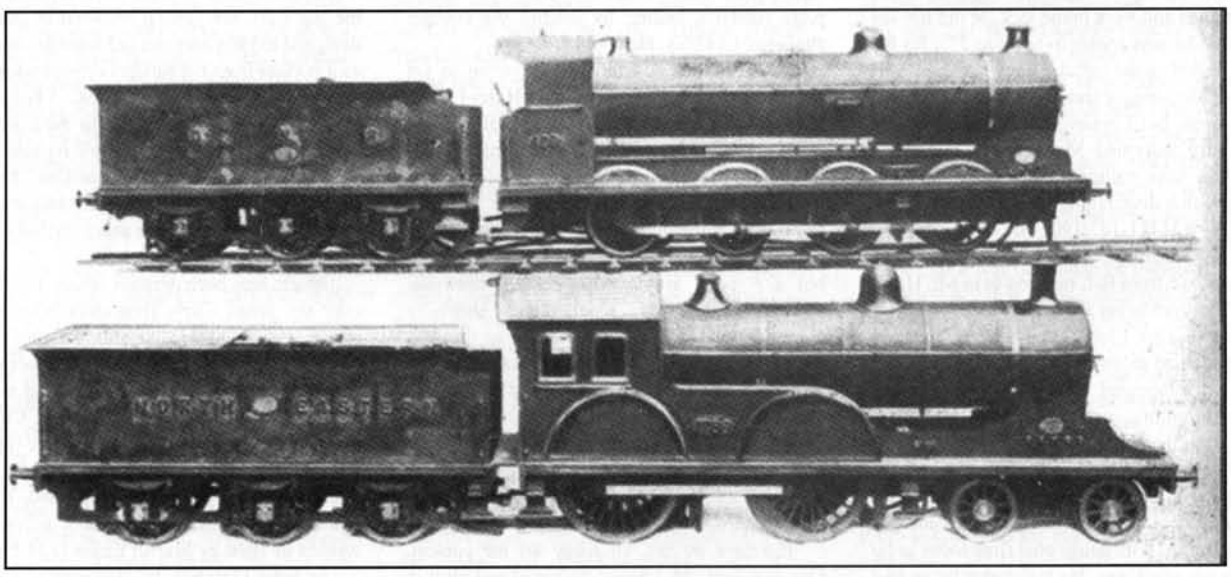
The ½ -in Scale Atlantic Locomotive at the time of her First Test.



Mr E. Cooper's 1½-in Scale Model L.S.W. Locomotive No. 486, in Course of Instruction.



Some of Mr Stark's locos. – A Larger View of the Unfinished ½ in. Scale Great Northern.

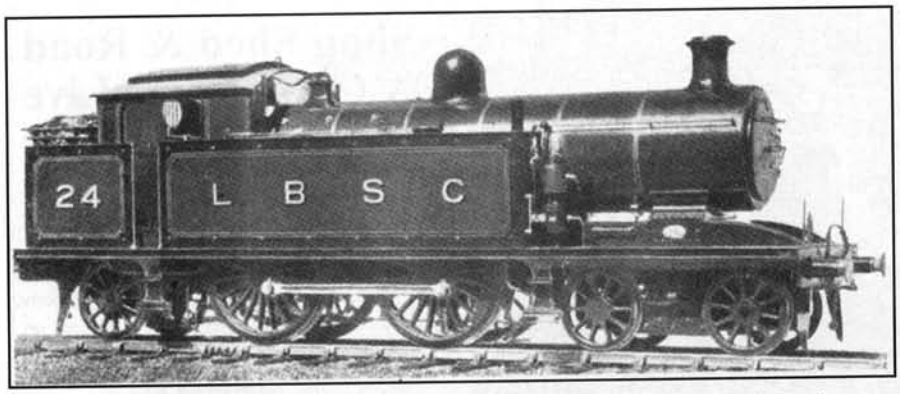


A G.N.R. Goods and a N.E.R. Class "R" Express: ¾-in. Scale Locomotive

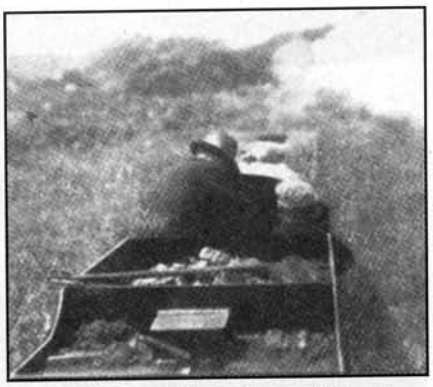
In 1923 LBSC had one of his first contributions, [48/391 & 419], on how to build a ½in. scale Atlantic boiler, not dissimilar to the one shown.

During the course of a SMEE visit to Eastleigh loco works they met the charge-hand of the erecting shop who was building the rather impressive LSW loco.

[51/563/], 'Mr. W.G. Stark, A builder of many models' is a very interesting article, (which is why it's taken me so long to write this!) He had built several different types of model including some 11 locos, 2½in. and 3¾in. gauge at the time of writing. He had an extensive garden layout for hauling rolling stock, his only problem being that the domestic cat had taken up residence in the tunnel!

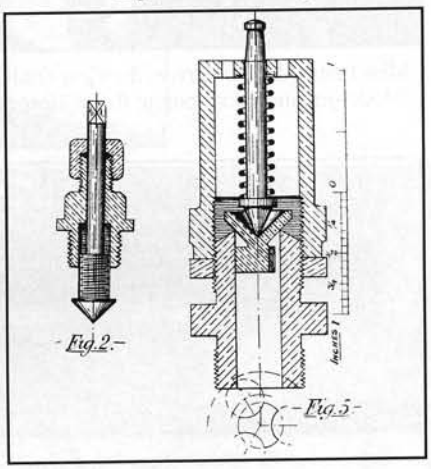


Side View of Model L.B. & S.C.R. ½-in Scale Electrically-Operated Tank Engine.

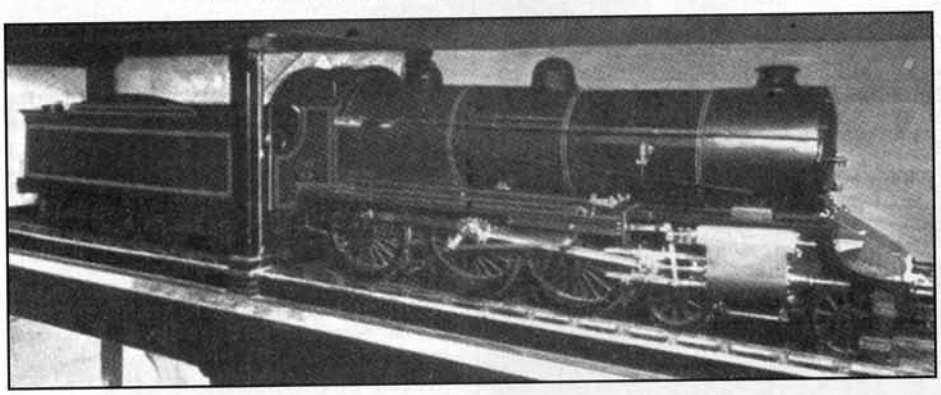


On the Road, Capt, Howey (Driver)
Captain Clive-Gallop

The "Green Goddess" and her Designer at Eskdale



Method of fitting Screw-down Value.
Spindle and Scale Section of Spring
Safety Value.



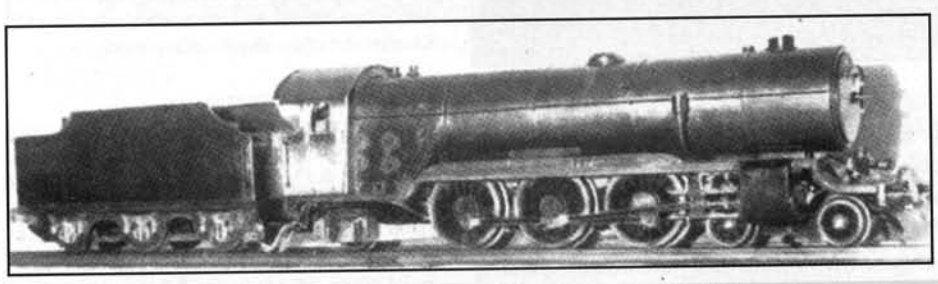
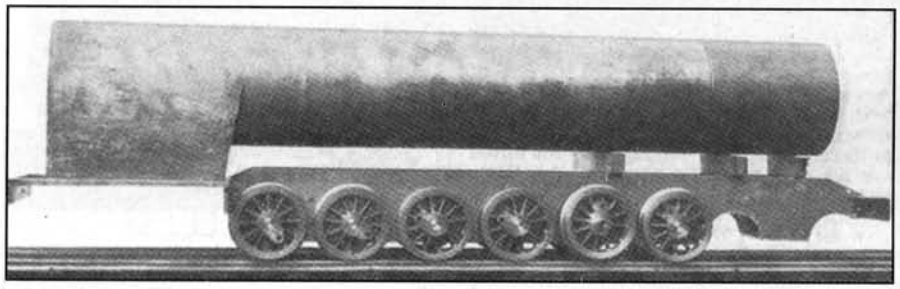


Fig. 3 – The Safety Value.

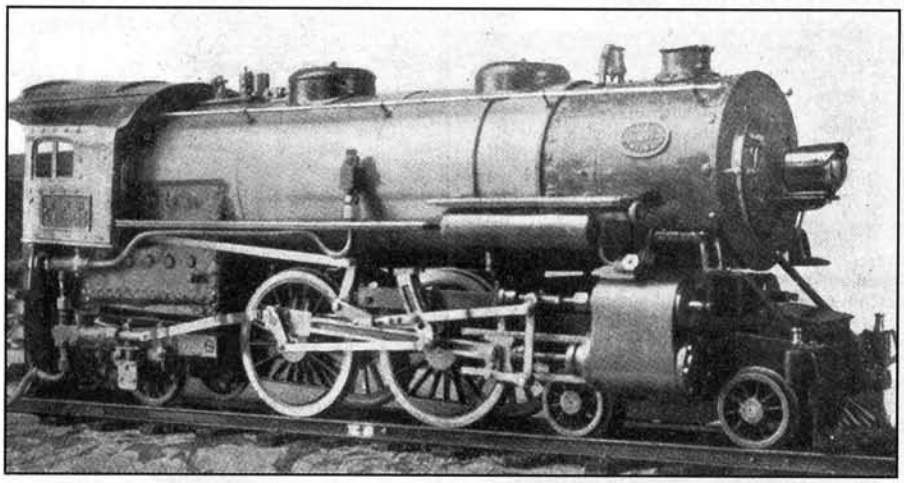
"Sir Morris" finished, less paint.

1925: The 2½in. gauge electrically driven tank is by Mr. E. Reginald Lacey of SMEE.
We last saw Mr. J.E.P. Howey in 1914 at the outbreak of WW1., now Captain Howey, he is about to embark upon the building of the RH&DR.
1926: and I think the Championship Cup winner speaks for itself.
Just in case anyone didn't recognise LBSC's Sir Morris de Cowley, it is a coal fired O gauge locomotive.
I included the safety valve because I thought it looked nice, one of a series of fittings available at the time from G&S Willoughby, [55/628].

Miss Lettice Holder Drives the First Train hauled by Mr. Crebbin's "Sir Felix Pole" at the "Model Engineer Exhibition, Royal Horticultural Hall, Westminster, September 17th-24th.



How the Catapillar Grew in One Week.



1927, what I can say about Miss Lettice Holder, daughter of Mr. John Holder of Broome Garden fame. Mr. Crebbin looks a bit anxious, (or perhaps he's just looking!).

Enter the Caterpillar, just couldn't leave that one out. [57/363]

1928 was one of those good years, a lot of good stuff was turned out, including me! Mr. J. Matthews of Chicago brought his ¾" scale Atlantic over and ran on the SMEE track for a total of 9 hours. (LBSC introduced "Fayette", although she didn't appear properly until 1929. G&S Willoughby introduced a very nice 1½" scale tank called "Peter", a 7¼ in. 2-4-0T, which won a Silver at the 1927 MEX [See also Dunes Railway in 1930]. "Ursa Maximus" also caused a bit of a shock, probably the most powerful 2 ½ in. gauge loco at that time, from a Canadian gentleman called J. A. Joslin, aided and abetted by P. E. Hunt, who in 1929 produced a C.N.R. sister.

Shop Shed & Road A Column of "Live Steam"

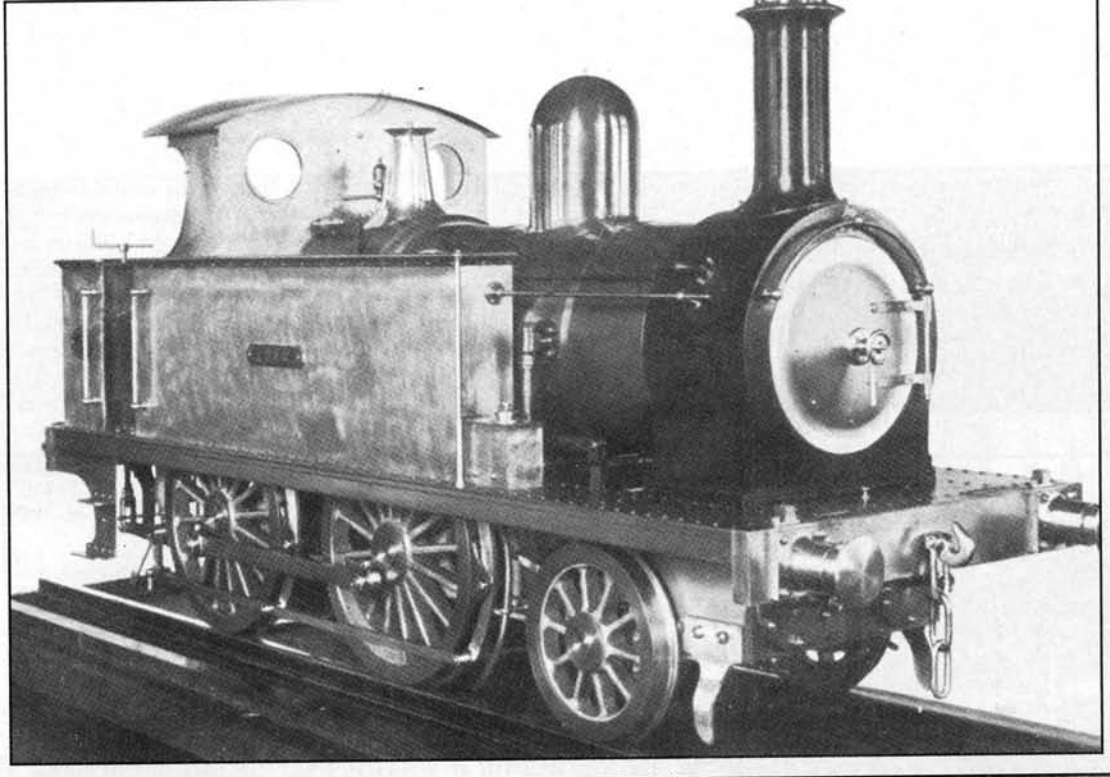
By "L.B.S.C."

Enter the Caterpillar.

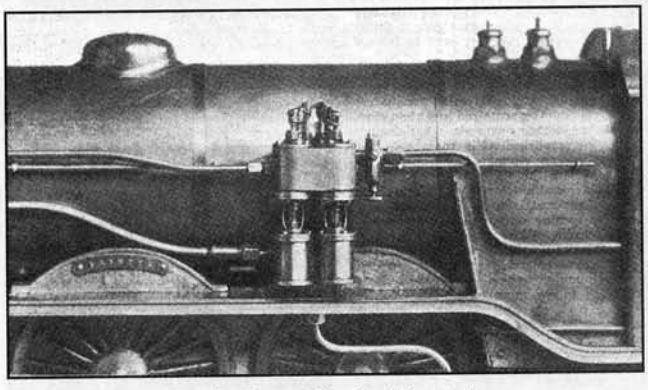
Here goes to redeem a promise made a short while ago and give a few notes about a locomotive, the like of which has never before been seen on a miniature railroad. Now when you get properly fed up with the monotony of working and your outlook on life consists of a garden below, leaden sky above, and water *ad infinitum* everywhere else in between, one is apt to get despondent and long for something to cause a diversion. Sitting by my workshop window one evening last July, conditions as above plus a bad headache which would not yield to tea or aspirins, I looked at Mr. Arthur Line's picture of a Union Pacific 4-12-2 and thought what a nobby time I would have with her on a British railroad, say, bumping the L.M.S. trains up Bromsgrove Lickey or towing half-a-mile of Mr. Collett's coal wagons up from Cardiff, and other jobs too numerous to chronicle. I also pictured her as a little "ette" on the track at THE MODEL ENGINEER Exhibition, or the Caxton Hall, making the regular runners look pretty sick, and hearing in imagination the comments about what she *ought* to pull, seeing she was American load gauge. I fell to wondering how she would look as a G.W., or Southern, and sketched her thus on an odd scrap of paper, cutting down the wheels and boiler to British load gauge, and was tickled to death to think of the fearful blast she would have with four cylinders and the cranks set for eight impulses, like "Lord Nelson". Just then the sun shone through a rift in the clouds and a ray lit up the picture, and the still small voice of the Angel of Mischief whispered, "Now, my lad, you want something fresh. Build her!" I drank up my tea, searched around the boxes to see what castings and material I had in hand, and by 11:30 that night the frames were roughed out and the buffer beams cut. Quick work, wasn't it. I needed no drawings, and I knew she would find a home when complete. Now I will just give a brief outline of her general construction, and if anybody wants to copy, will get drawings made from the actual machine. What few castings are needed are commercially available; Mr. Kennion and other advertisers can supply.

Frames and Underworks.

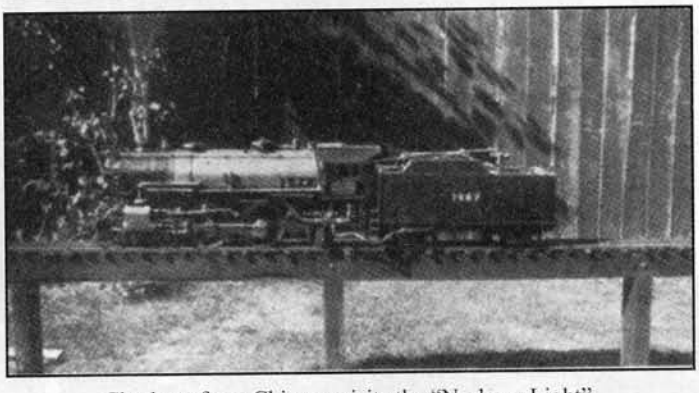
One blessing about building a little locomotive from the view-point of the "full-size" locomotive engineer is, that you make all your parts to do their duty according to the size of the engine; and can introduce methods of construction and variations of design that, while desirable in a small gauge engine, would not be suitable for the 4 ft. 8½ in. size. You will see several instances of this in the building of the caterpillar. The main frames are cut from ⅜nd in. bright steel plate and finish at the firebox. No hornblocks are fitted; the thick plate frames will stand the driving thrust, especially as this is spread over twelve axle-boxes, these being of the usual slotted pattern with single spring-pin passing through a hornstay or pedestal tie, which is simply a strip of bar stuff bolted on at the bottom of each slot.



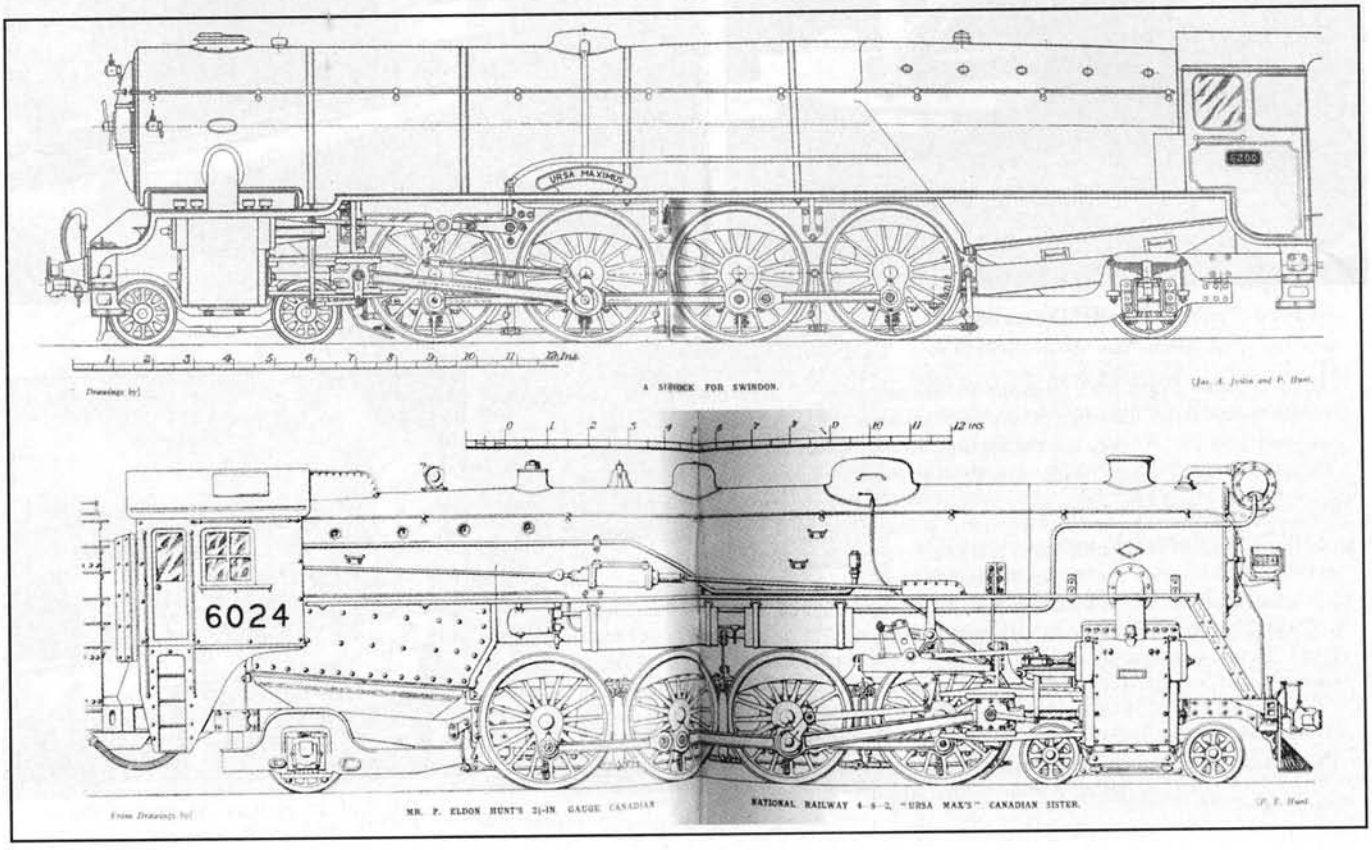
"Peter," a 1½-in. Scale Free-Lance Working Model 2–4–0 Tank Locomotive.

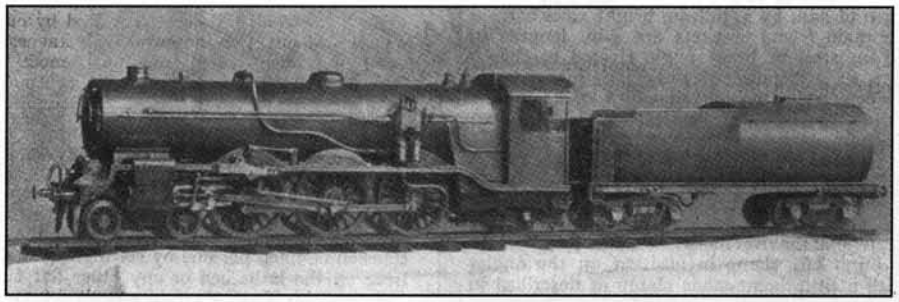


Duplex Pump Fitted to"Fayette".



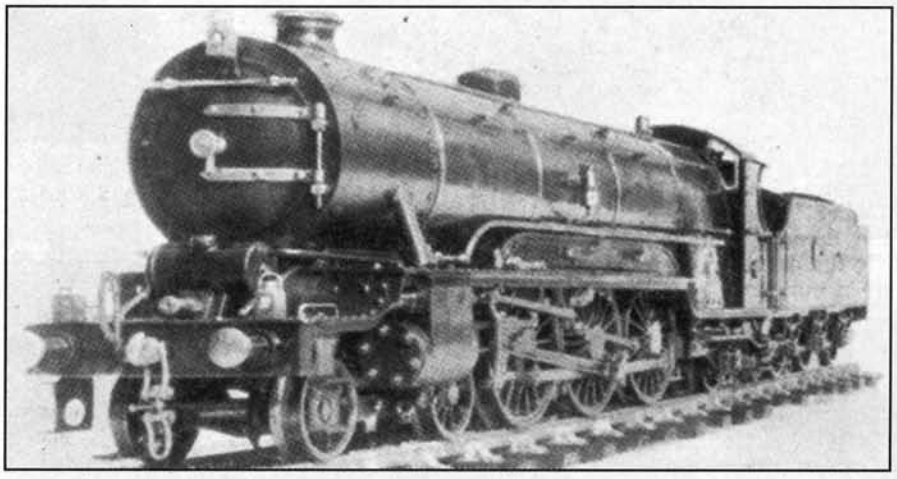
Charlotte from Chicago visits the "Norbury Light".





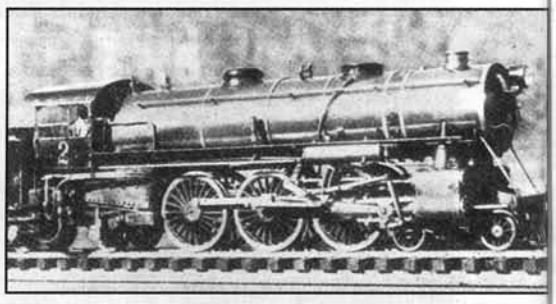
"Fayette"

Mr. Ernest J. Higgins tells me that owing to the poor attendance the proposed mechanical models class at the Islington Men's Institute has had to be abandoned. This he thinks is probably due to the lack of power-driven machinery. He is, however, running a similar class at the Kentish Town Men's Institute, with the co-operation of the head, Mr. E. Cooper-Smith. The class started on October 23, and the plant available includes lathes, shaper, drill, grinding wheel, back-saw, forge, brazing hearth, and ample bench space. Mr. Higgins will welcome any model engineers desiring workshop facilities or instruction.

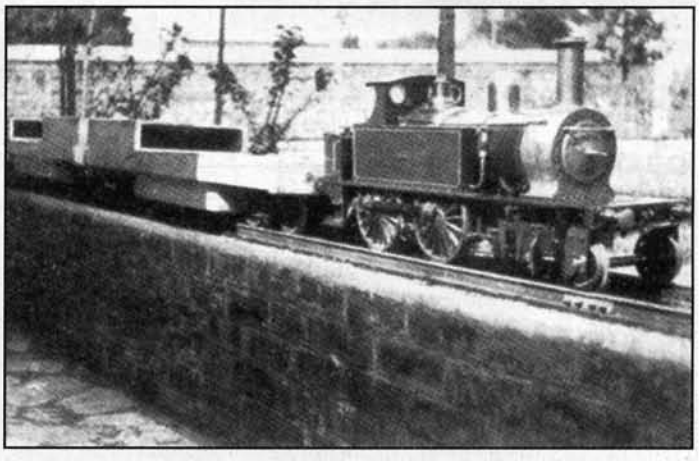


The Coal -fired Pacific.

"Miss Toonerville"



The Relief Driver on Duty.



" Phoenix" with Pony Truck fitted.

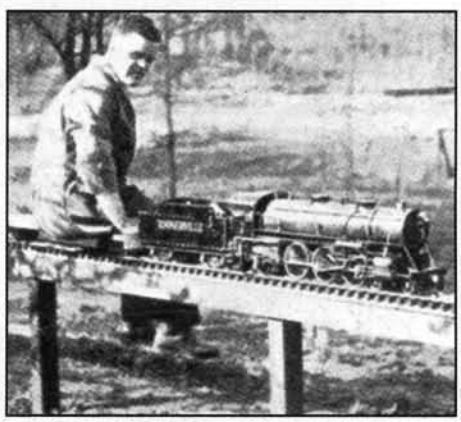
1929: "Fayette" from LBSC, following on "Minnehaha" in 0 gauge, probably the first UK built 2½" loco to have Baker valve gear, a very popular engine (Photo by Miss Alys Daniel. I wonder if there is a link between her and "Alys Loper"?).

This rather smart looking Pacific was one of two locos built by Mr. H. S. Bond in 2"G, 7/16" scale. Originally built with a water-tube, spirit fired boiler, she was singularly unsuccessful, "built before the days of LBSC's notes. She was reboilered, based on the notes for the Atlantic boiler in 1923. Altho' tricky to adapt as a Pacific boiler it has been very successful and seems quite happy running on Charcoal and/or Dalli fuel.

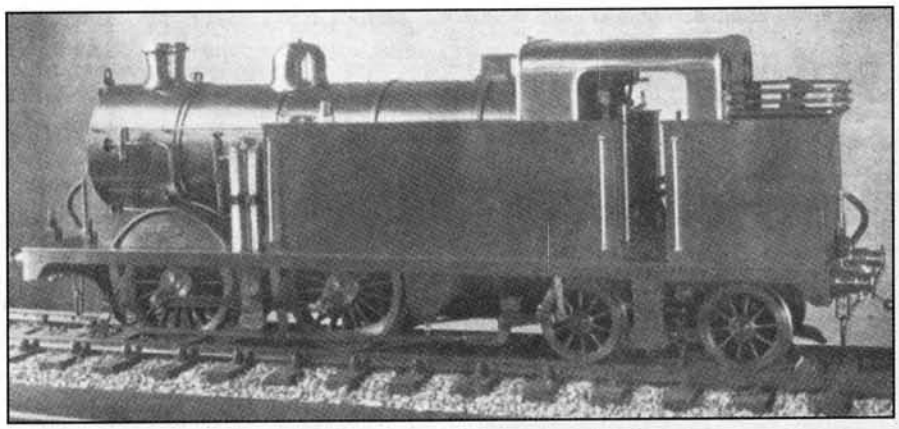
Just an aside, even in 1929 they were having problems with Evening Class attendance.

1930: The "Dunes Railway" in the garden of Kenneth W. Crabb, a modeller of some note, a rebuilt "Puma" as similar to G&S Willoughby's "Peter", boiler by Goodhand. A 2-4-0, the fixed leading wheels are replaced by a pony truck when running, the better to negociate some of the sharper curves. (I have photos of my mother wearing a cloche hat just like that.)

Mr. Calvert Holt, LBSC's benefactor during his sojourn in America, is seen driving "Miss Toonerville", on loan from Vincent Astor's fabulous Toonerville Railroad, for "monkey-gland" treatment from 'Curly', which he successfully did.



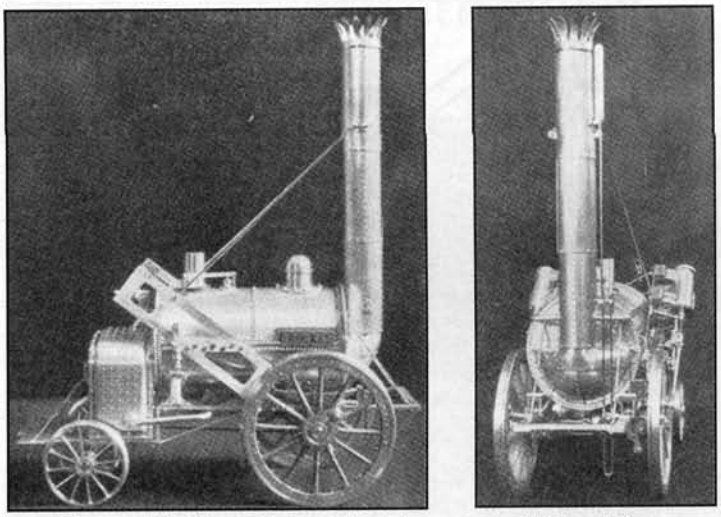
Mr. Calvert Holt as "Skipper of the Toonerville Trolley."



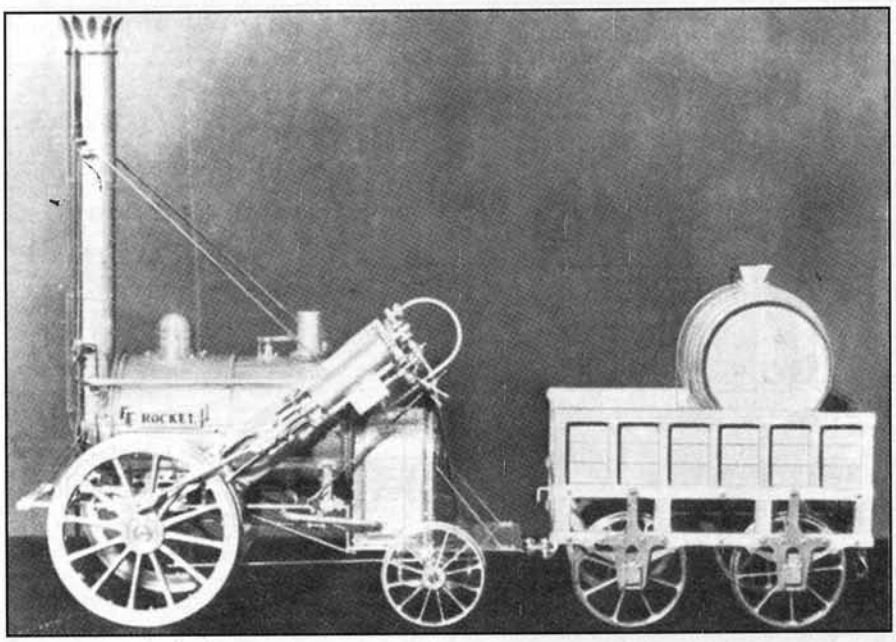
A Side View of the Working Model 1 7/32 nd-in. Scale 0-4-4 Tank Locomotive.

A Remarkable Model of "Rocket".

Constructed by Dr. J. Bradbury Winter and Miss C. Mackworth.

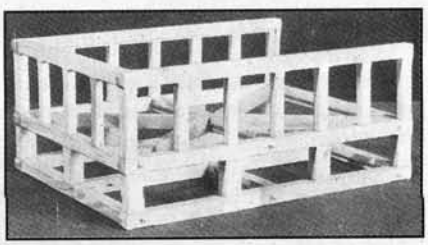


Views of the Silver "Rocket" in various stages of Completion.



The "Silver Rocket", scale ¾ inch to 1 foot.

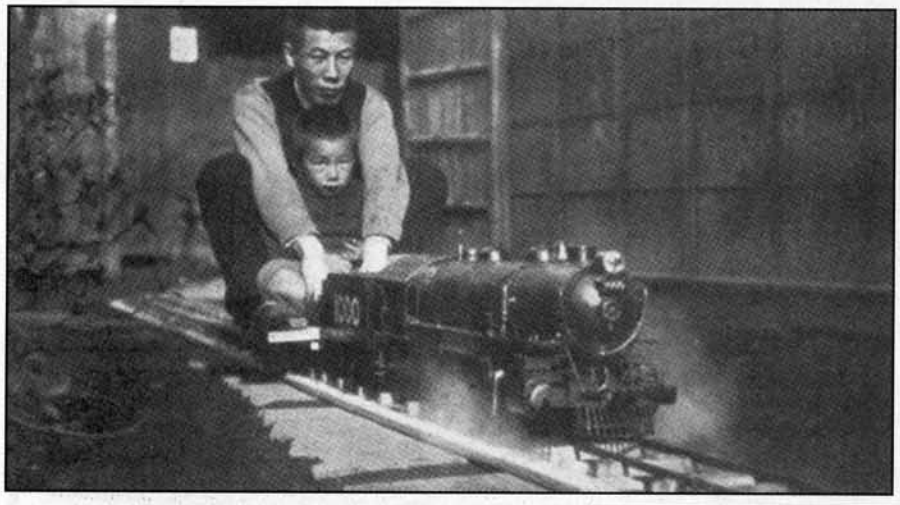
The water barrel showing water valve underneath.



Wood framework of the tender.

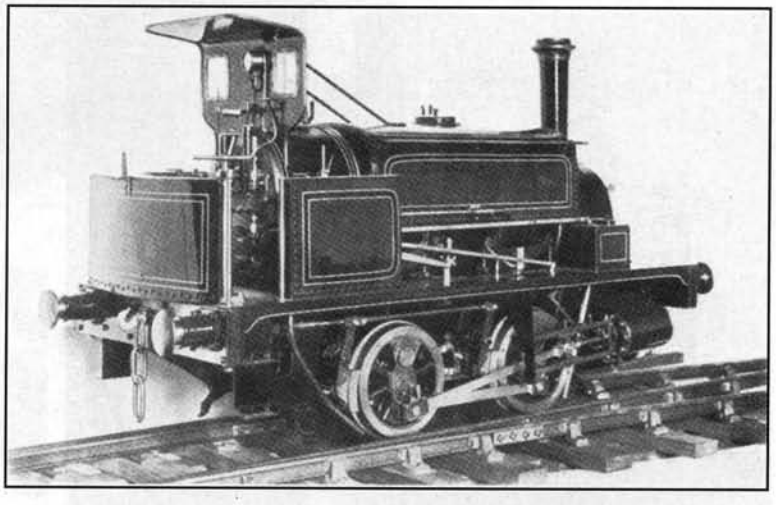
The Silver Rocket came about because the Inst. of Mechanical Engineers, London had, and has, a Council Dining Club, and at 9:30 o'clock the President proposes a toast to the Institute, after which the meeting becomes informal. George Stephenson was the 1st President and the then Mess President and Hon. Sec. Mr. Pendred, proposed that a model of Rocket in silver, mounted on a clock should be made which would give a suitable signal for the toast. Dr. Winter was approached and accepted the task. Discussion and research started in 1929 and the following was decided upon; Silver Rocket in ¾ in. scale, at 9:30 a whistle will sound, followed by a short whistle as if for starting, wheels would revolve, slowly at first, as though pulling a load gathering speed for 10 sec. then 10 sec. at a steady 3 r.p.s. equalling 30 m.p.h. then 10 secs. gradually slowing down. He would start Sept. 1929, assisted by Miss C. Mackworth, an expert mechanic. Expected finish date, middle of 1932. The loco was finished March 1932 and was displayed at the 1932 MEX. (Sadly, the clock never got made, so they never got the 9:30 whistle. The loco, in an airtight case, is at I. Mech. E., London). The articles are very interesting;

1932; Mr. Taguchi made this loco several years ago, he made his own drawings which were lost in the 1923 earthquake. Photos of the loco appeared in M.E. in 1928, it is 1/15th scale in 3 13/16th in. gauge.



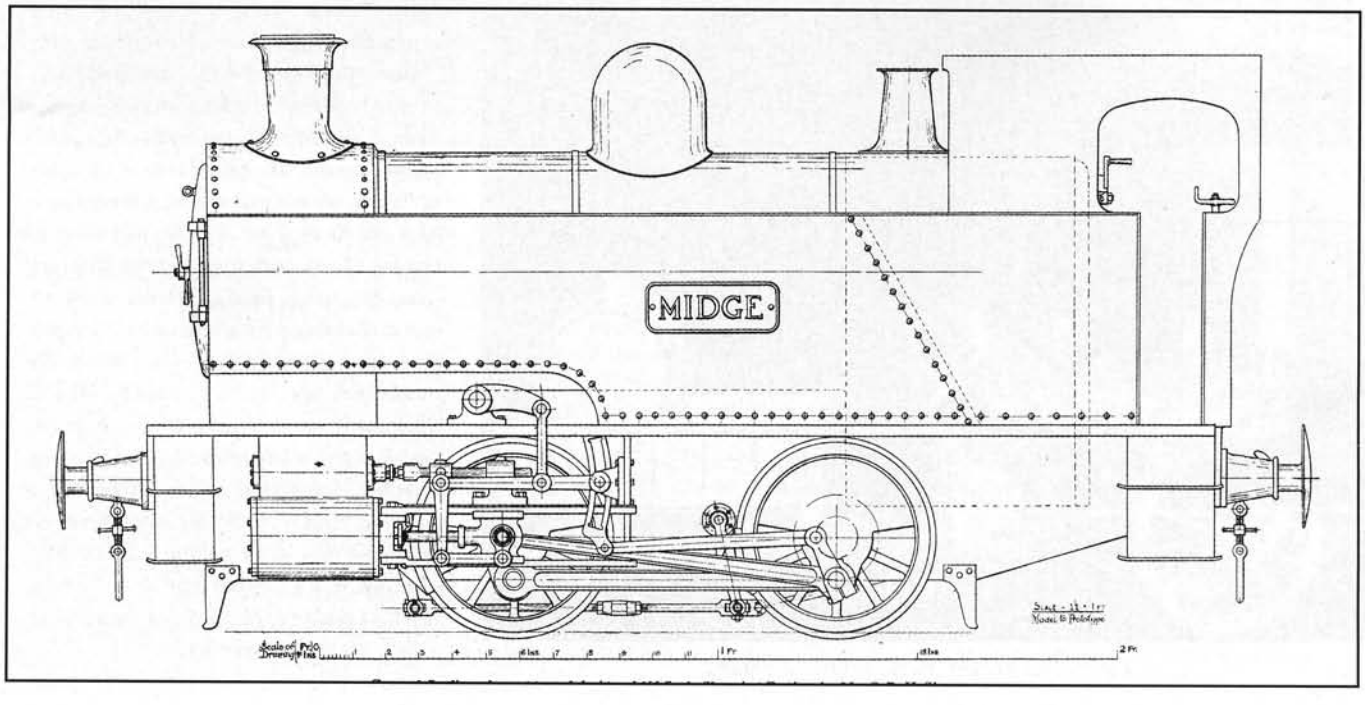
Mr. Toyoda driving Mr. Taguchi's 1/15th Scale Locomotive.

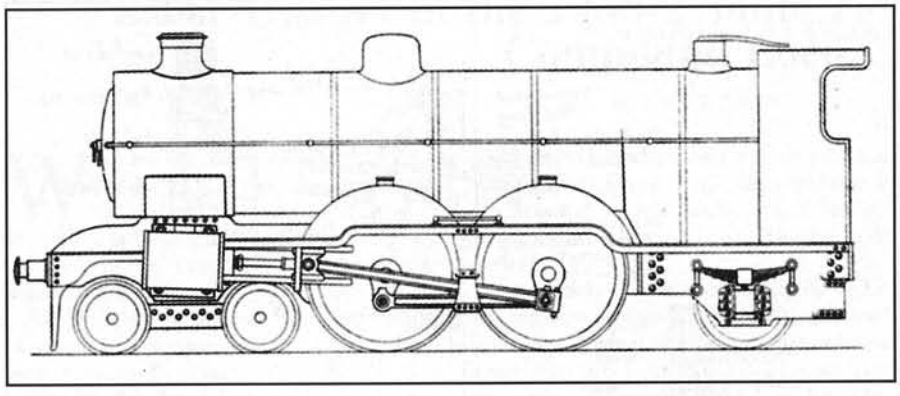
"I beg to add to the above that an exhibition for Inventions and Inventors has been opened at Uyeno, Tokyo, from this Sunday (March 20th), and I am exhibiting a 1/15th scale steam locomotive model there, particulars of which appeared in M.E., August 2nd, 1928, wishing to be "Rocket" in Japanese model locomotive engineering." I like Mr. Taguchi's desire to have his engine recognise as the "Rocket" of model locomotive engineering in Japan, an honour to which he seems fully entitled.



View showing Footplate of 1½" Scale Saddle Tank Locomotive.

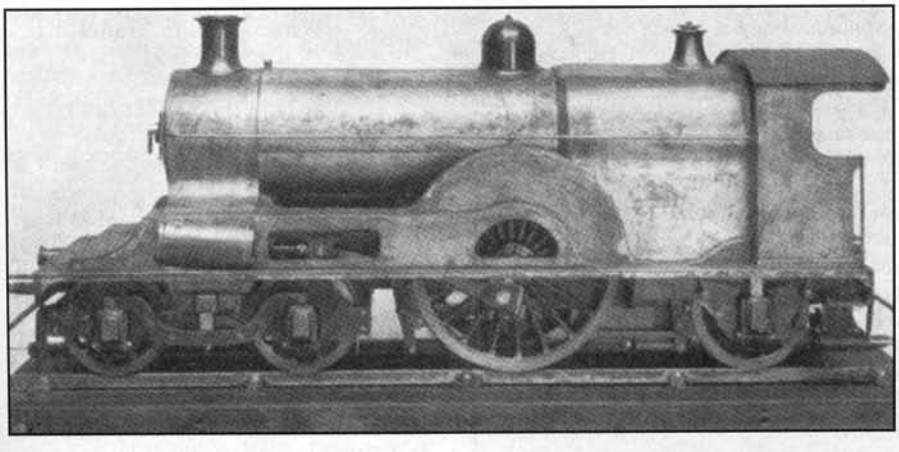
GENERAL OUTLINE OF A SUGGESTED DESIGN OF 1½" SCALE SHUNTING ENGINE, BY MR. C.R.H. SIMPSON.





Maisie" – general arrangement.

Edwin Lewis Pearce – (E.L.P.") – A Retrospect



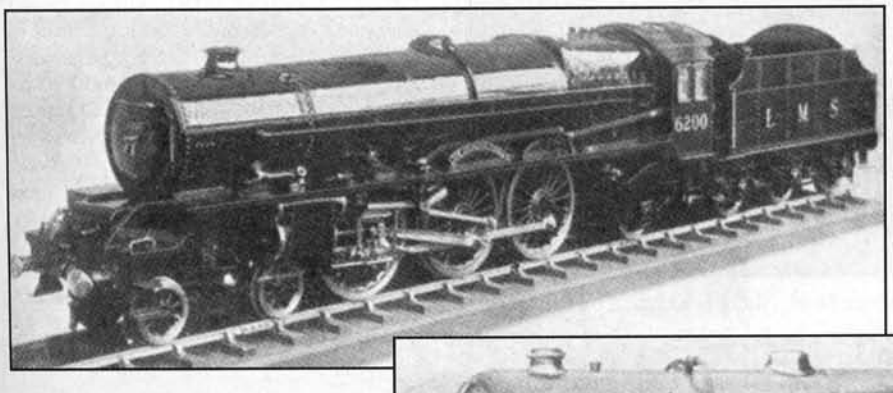
Model Locomotive designed and constructed by E.L.P. about 35 years ago; it was exhibited in the "Model Engineer" Exhibition, 1935; half inch scale, spirit fired.

1935, LBSC's "Maisie", built for 'Bill Massive' (Driver Bill Irvin) and serialised

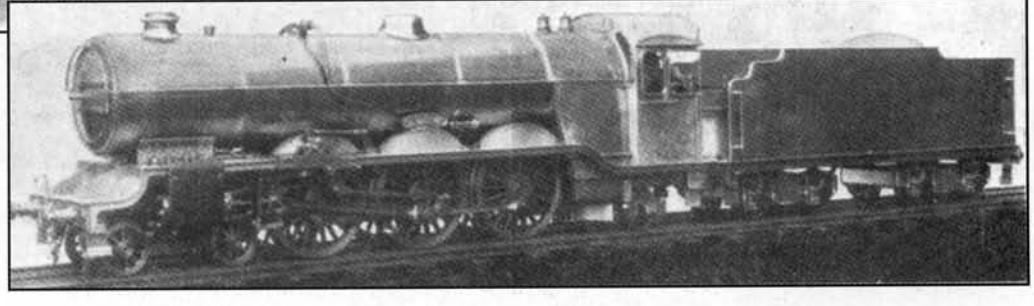
A touching tribute to the late E.L. Pearce, who died in September 1935, aged 77, by his lifelong friend, who himself wrote articles "In the Glow of the Forge", under the pen name "Phantom Pen". He had an interesting life and had been a member of the ME staff in his early days. His occupation was mainly as a draughtsman, (which accounts for the beautiful drawings for "Lady of the Lake" and "Dunalastair" back in 1900 and 1901). "Phantom Pen" says, "My lifetime association with E.L.P. included; cycling tours, running steam launches on the Thames and sailing on the Broads. I saw the commencement of his "Lady of the Lake" model, the first complete engine he had then made." Each one of the "Glow of the Forge" articles opened with the lines:"The bellows ceased, the flames decreased, though on the forges brow. The little flames still fitfully, play through the sable mound." (Ferguson – "Forging the Anchor") Could almost be an epitaph.

Mr. H.C. Powell, 1936 Championship Cup winner (and not for the last time!).

Tom Glazebrook's version of "Fayette", in "Curly's", (and a lot of other folk), opinion the best one to date.



Mr. H. C. Powell's 3½" gauge model L.M.S.R. 4-6-2 loco., "The Princess Royal".

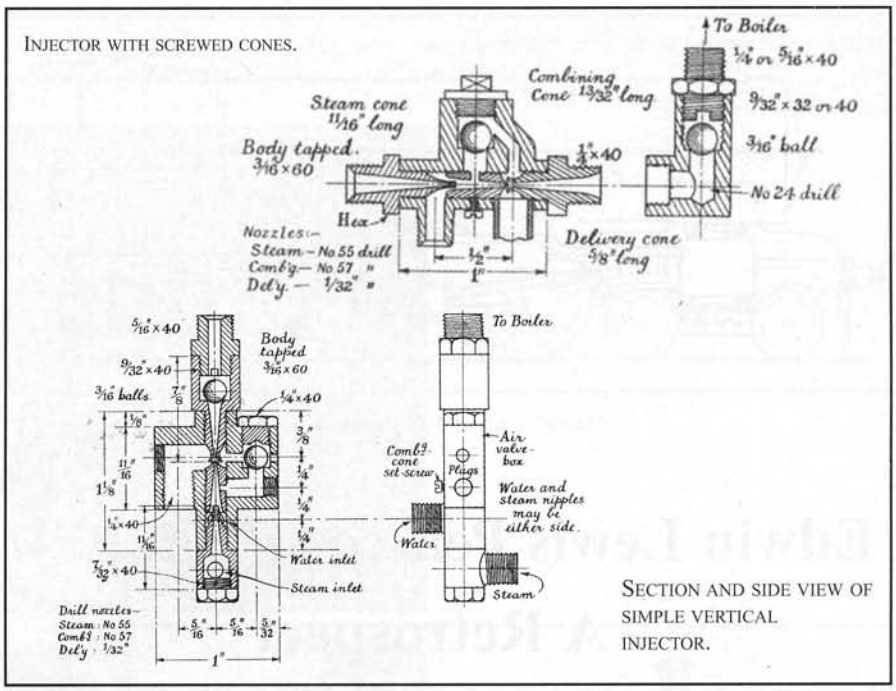


Mr. T.H. Glazebrook's "Victoria".

A Variation of the "Vic" Type Injector.

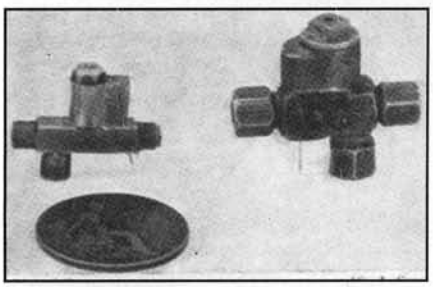
The notes and sketches on a little combination injector which appeared a few weeks ago, have stirred up some of our brotherhood, and I've been shot at from all quarters for some further notes on the subject of these little gadgets, querists wanting to know if I've done any experimenting and made any different kinds. Well, some folk reckon I keep my workshop for ornament, and never do any work in it, as it is always clean and tidy (don't laugh too much, but this has actually been said at more than one club meeting!!!) but nothing is further from the truth, and much has happened within those four walls, which would make many good folk sit up and take notice. I've made plenty of injectors and all sorts of blobs and gadgets, but am not giving everything away, having learned the lesson!

In response to the request, I'll give you just one or two injector variations which anybody can easily make, and which will "do the doings". The "Vic" type jigger which I described in these notes soon after they started and which also appears in the Live Steam book, is about the simplest of the "automatic" types. If made according to the instructions, it will give every satisfaction.



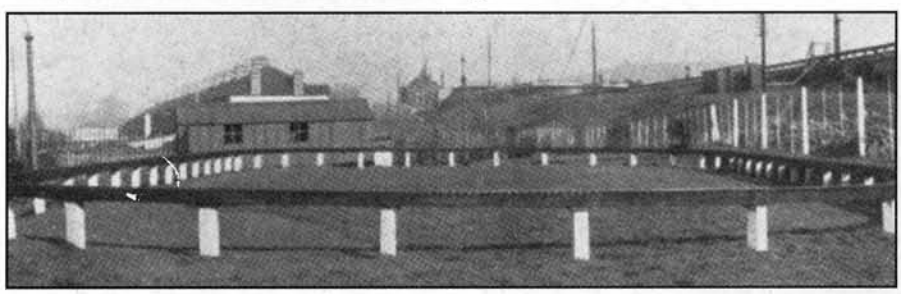
INJECTOR WITH SCREWED CONES.

SECTION AND SIDE VIEW OF SIMPLE VERTICAL INJECTOR.



BABY INJECTOR COMPARED WITH 2½ IN. GAUGE SIZE.

Some little while ago, a brother who is building a gauge "1" L.N.E.R. "Pacific" asked if it were possible to use an injector on the little boiler, and I told him that it was. He was rather sceptical, having heard from various sources of the reputed unreliability of injectors even in larger sizes, and had been assured that for gauge "1" it was impossible. Well, when anybody tells your humble servant a thing is "impossible", I usually proceed to demonstrate, as followers of these notes know pretty well by this time; and two or three days after, when an opprotunity arose, I picked an odd inch of ¼" square brass rod out of the box of short ends which is kept beside my Boley lathe, also a scrap of ¼" round rod, and a bit of 3/16" ditto. A 5/32" hole was pocked through the square stuff, union screws cut on each end, and the ¼" round was made into a little air release valve with a 5/32" ball in it, and silver-soldered to the square. The 3/16" rod quickly assumed the shape of a set of Lilliputian cones, and the whole lot was assembled – time, just about two hours.



The Polar Route–all of it. If you have a microscope handy, there is a engine on extreme left.

Who's Who in Model Engineering.

No. 1. Percival Marshall.

Technical education at Finsbury Technical College, Manchester Municipal Technical School, and Victoria University. Workshop and drawing office experience in London, Coventry, Manchester and France. Mitchell Scholar, 1st class Honours in Mechanical Engineering, and Medallist in Metal Working Tools, City and Guilds of London Institute. Companion of the Institution of Mechanical Engineers. Founder and Past President, Society of Model and Experimental Engineers. Past Chairman, Junior Institution of Engineers.President of the Shiplovers' Association. President of The Model Power Boat Association Executive Chairman, Periodical, Trade Press and Weekly Newspaper Propietors' Association.Member of Council, Empire Press Union. Member of Imperial Press Conferences (Canada, 1920; London, 1930). Member of Commerce Degrees Committee, London University.Hobbies: Golf, and the encouragement of good craftsmanship through model engineering.

Some comment on injectors from LBSC. (I thought the other Mr. Lawrence might appreciate these, knowing his high estimation of "Curly" injectors.)

1937; LBSC, (I think I know him well enough, even though we never met, to call him "Curly"), having returned from the USA in 1930 had taken residence in Purley Oaks and had acquired a strip of land adjacent to the railway and accessible from the garden. There he constructed, assisted by a friendly permanent-way gang, a new track, the POLAR route (Purley Oaks Light Railway).

The History of the 2-8-8-2 Santa Fe ¾" Scale Model Compound Loco.

By J. B. CREBBIN

When the late firm of Messrs. J. Carson & Co., Ltd., was transferred to Cricklewood, London, the directors, who resided in Birmingham, asked me to act as a Chairman of the Company, for a period; I reluctantly accepted.

Up to that time, the firm had been constructing very successful ½" scale model locomotives, mostly of the L. & N.W. type.

The late Mr. James Carson was anxious to build larger scale models.

After the small 4-6-0 L. & N.W. type flash-boiler locos, had been successfully launched, Mr. Carson was anxious to build a model of the (then) largest locomotive in the world. He asked me if I could obtain drawings. These were later sent to me by the Chief Mechanical Engineer of the A.T. and Santa Fé Railroad. An order was obtained, and a price quoted. An elderly mechanic – since deceased – employed by Messrs. Carson, had, previously, been employed by the late Mr. Hesketh Walker (Liverpool Castings Co.), for the construction of marine-type models. This mechanic was handed the drawings to build the chassis, Mr. Carson deciding upon the size of the cylinders. I don't think this mechanic had had much, if any, experience of model loco. work previously.

The boiler, which was of the flash type, was designed by Mr. Carson himself, and constructed by the foreman of the works. It consisted of long, steel tubes, which ran the whole length of the boiler, each end being joined to the next tube by means of cast U-bends. The boiler was heated by an oil-burner. This steam generator was a failure, Mr. Carson explaining that the tubes were too cold at the front end. He next designed a huge "Smithies"-typewater-tube boiler, fired with a large oil-burner. The original water-pump was discarded, and only a hand-pump provided, as the means of filling the boiler. It was with this boiler that the model was shown under test, upon a short piece of track, laid down in the machine-shop, before members of the Society of Model Engineers, who had been invited to view the works. The safety-valves of this boiler were set for 150 lbs. per sq. in. – the pressure Mr. Carson considered necessary for a compound engine.

The model slipped badly, and the boiler was then loaded up considerably. If my memory serves me rightly, much amusement was caused when one of the staff, named "Billy", sat on the boiler. It was then that the loco. hauled a total of eight people – the only time in its existence, until recently.

Mr. Carson was not satisfied with the boiler, etc., and so, at my suggestion, he built a coal-fired boiler, but having a round-type firebox. He arranged for large water-tubes in the box to suport the crown, a design with which I did not agree, and still do not. The safety-valves were peculiar in having one laminated spring to keep them in place. Besides the hand feed-pump, a large Worthington-type pump was fitted in the tender, with flexible connections to the engine. There was no provision made for cleaning the flues in the smokebox, which was filled with large steel pipes for re-heating, etc. A large fire-door was fitted for cleaning the grate.

I never saw the loco. tested with this boiler, but Mr. Carson was disappointed; he remarked that even the steam-pump failed to function properly. As the owner only required the model for Exhibition purposes, and not for working, no further experiments were made, for the cost of production had already exceeded the contract.

Some time afterwards, the late Mr. Daniels obtained possession of the model, and endeavoured to run the engine. An eye-witness stated that steam leaked from several places, and said the test was not a success. It was then sold, by Mr. Daniels, to Messrs. Parsons, paint manufacturers, for exhibition at their showrooms in Oxford Street, W. The model was placed in a case, fitted with an electric motor and penny-in-the-slot attachment, so that its works then went round in the cause of charity.

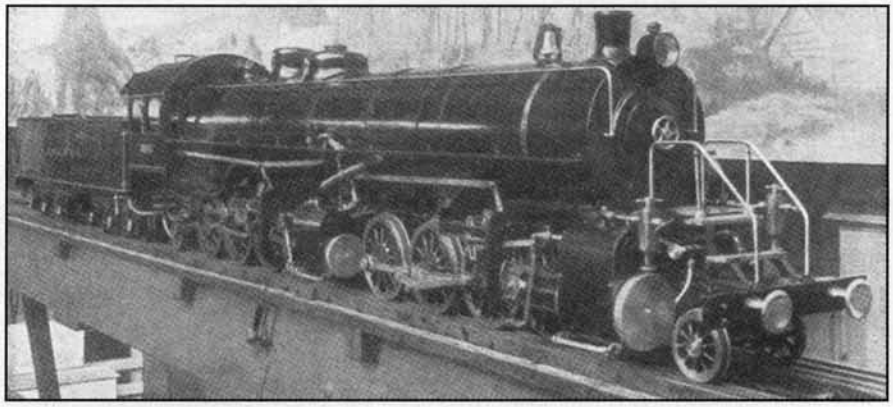
The late Mr. Dawson asked me if I could not do something to create a more original attraction for the track of the MODEL ENGINEER Exhibition. A few days later "Mallet" was offered to me, and, although it was different gauge from my models, yet I obtained the model, first and foremost, to fulfil Mr. Dawson's request to create a new interest for visitors to the Exhibition; and, secondly, to elucidate the mystery of its failure to give complete satisfaction.

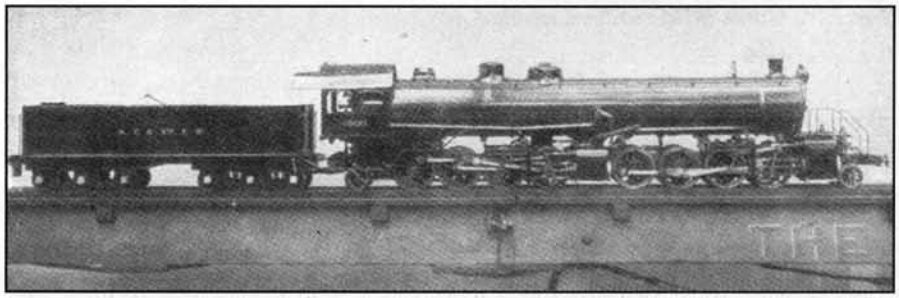
I found that there was a much greater amount of work in the re-construction than I ever had expected, and I had to work hard to get the model ready to run at the Exhibition. Some of this work I will explain in a later article, but the reason why the steam-pump failed was due to a very small steam-pipe being almost "blocked up" with silver solder. The water delivery was, also, inadequate. The main failure of the engine was the valve-gear and valve setting. The mechanic had, apparently, copied the original exactly, but this gear was for inside-admission piston-valves to all cylinders, whereas the model was fitted with slide-valves. Apparently, this was discovered when setting the valves, and the mechanic had compromised, so that the engine ran forward better than when in reverse; but the steam distribution was bad, in either case. Then the regulator was too small.

I am convinced that Mr. Carson never knew of this error, on the part of one of his staff; otherwise, the whole gear would have been re-designed and constructed, as he was a master of valve gears.

As regards the "Mallet", there is still much to do before I can say that I am satisfied; yet, the interest taken by the readers of the "M.E.", the visitors to the "M.E." Exhibition, and the number of letters I have received on the subject, testify that the work I have expended on the re-construction has not been in vain.

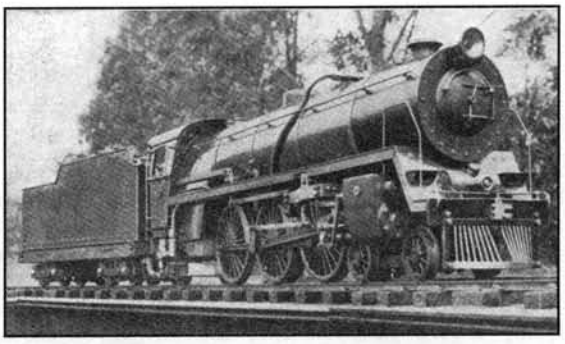
A NEARER VIEW OF THE MODEL "MALLET" COMPOUND LOCOMOTIVE, SHOWING ARRANGEMENT OF THE FRONT END.



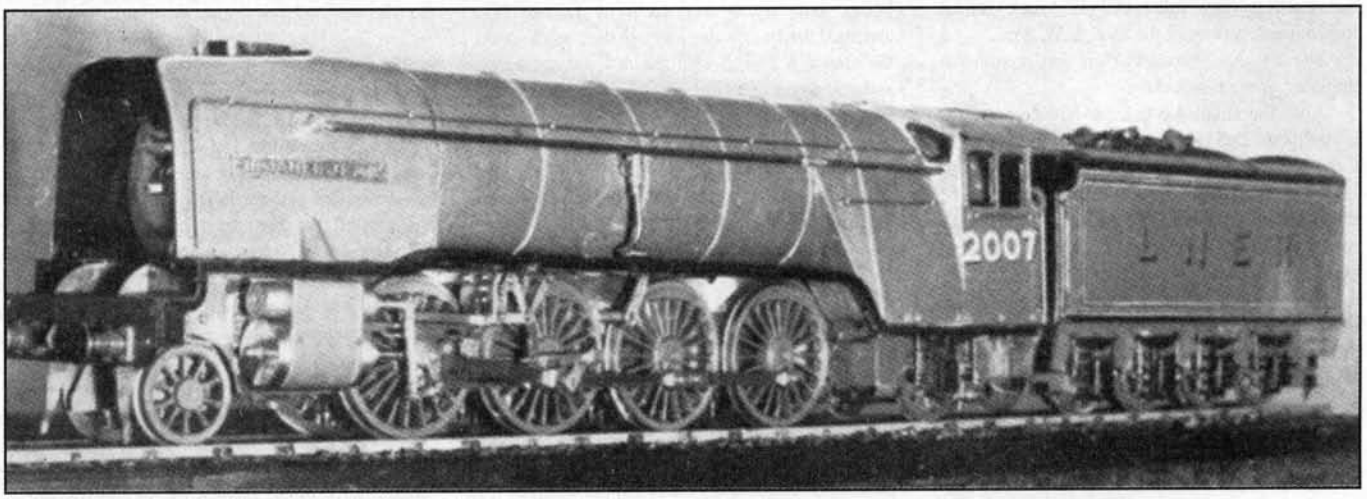


Side View of the model 2-8-8-2 4-cylinder compound "Mallet" locomotive.

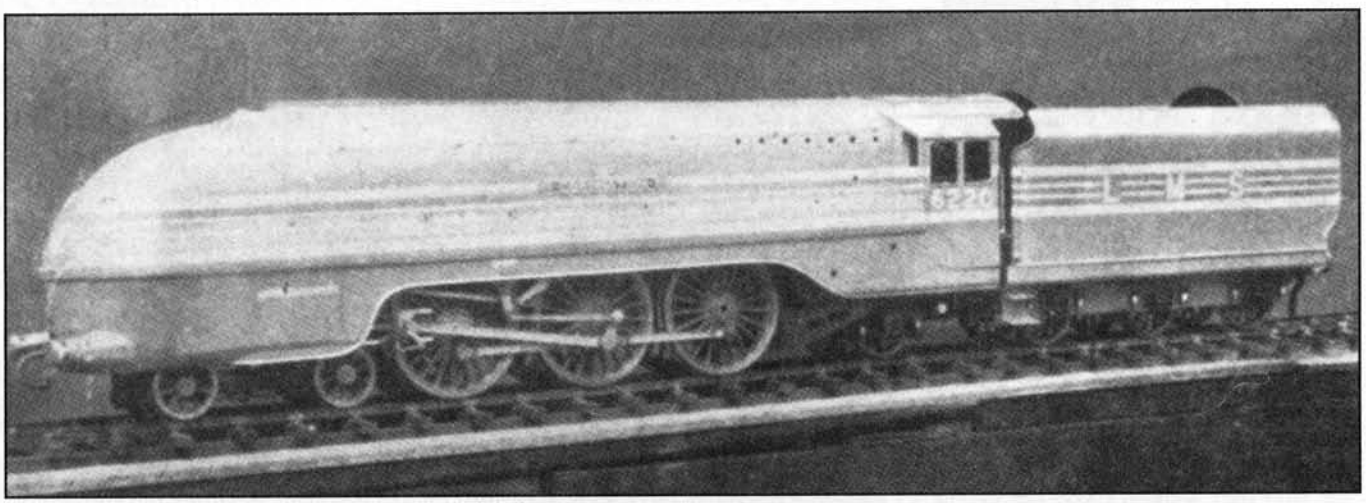
Ready and waiting – note the substantial passenger cars.



South African "16E" built by Mr. H. de Bene with "works" similar to "Fayette".



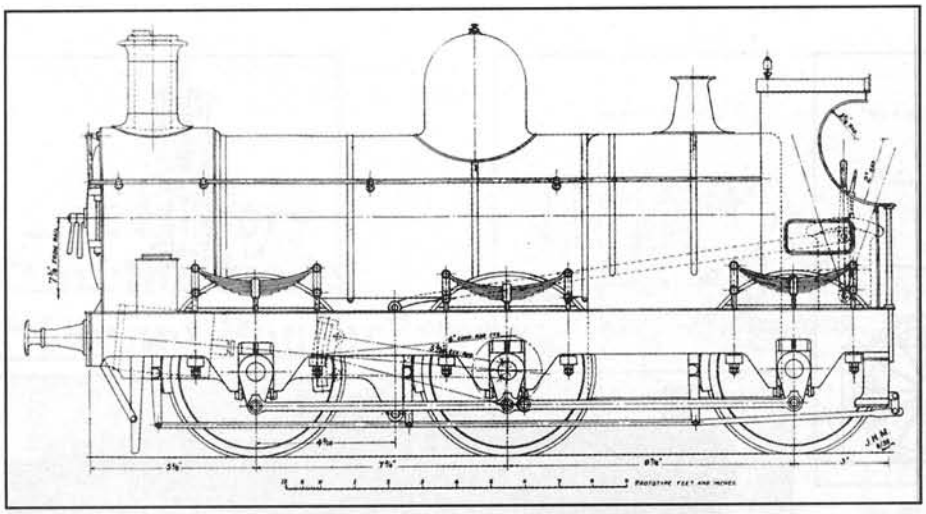
A 2½ in. gauge model 2-8-2 type express passenger locomotive, based on the L.N.E.R. "P2" class, built by Mr. G.R. Hill, of Southampton. It has three cylinders 13/16 in. x 1⅛ in.; coupled wheels 3¼ in. dia.; the boiler is 3¾ in. dia., and has 13 tubes of ⅜ in. dia., and two ⅝ in. superheater tubes. There is a double chimney with twin blast-pipes and blowers. Other equipment includes drop grate, axle-driven pump, mechanical lubricator and "hooter" whistle. The engine is numbered 2007, and named "Sir James Jeans", suggested by the builder's interest in astronomy.



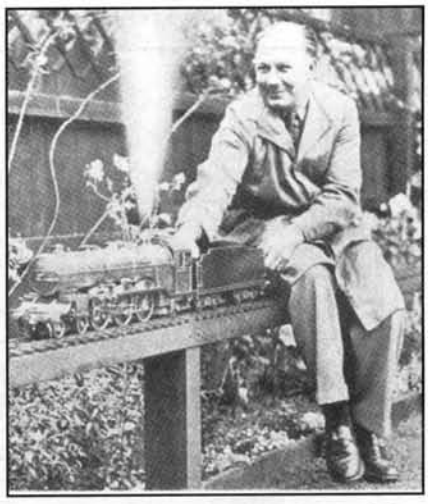
Mr. Jackson's 2½ in. gauge L.M.S. 4-6-2 streamlined locomotive "*Coronation*".

During 1937/8, and after, there was a deal of space devoted in "Curly's" notes to the BRR, Bursleden Rail Road, a 2½" gauge track owned by Noel van Raalte, (Bro. Wholesale), originally an oval, it had its length doubled via a figure of eight, "The Giant Racer"). He had a "Kingette", an L.N.E.R. Pacific called "Tishy" and "Annabel". (You've seen the trailer, now watch for the article.)

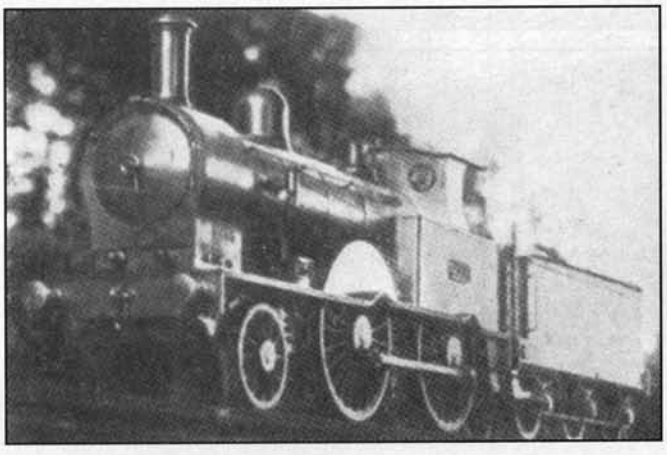
1939 was one of the great years, at least up until Sept. 3rd. the winter was snowy, the summer went on forever, or so it seemed to me, 10 going on 11, the best holiday ever, the last seaside one until 1946. How ironic that the 2000th issue should bear the notice "1939 Model Engineer Exhibition postponed" (until 1946 as it turned out.)



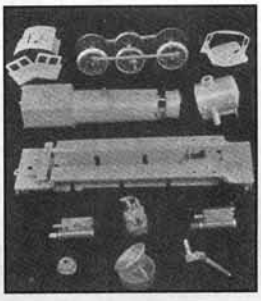
Side Elevation for a 5 in. Gauge Model G.W.R. Goods Engine.



Tom Glazebrook and "Victoria" on their own road.

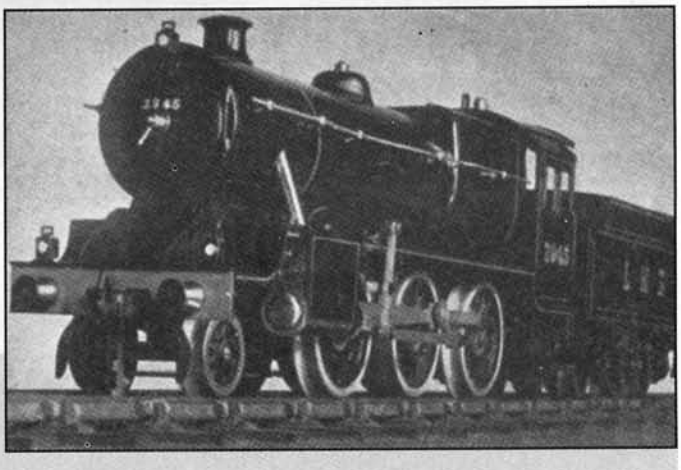


"A lass of the old brigade."



Mogul

Using a kit of parts a beginner builds a "live steam" model in under 30 hours with the simplest tools.



Part of the kit for the 1¼ in gauge "live steam" model of L.M.S. "Mogul".

1939: a 5 in. G GW tender goods engine was introduced by J.N. Maskeylene, hereinafter referred to as JNM, (since I just discovered I can't spell Maskeylene), an outside frame 0-6-0, originally designed by Gooch, many variants were made, the last of which ran until c1915. They were surperseded by the "Dean Goods" 2301 class, (currently being described by Keith Wilson in 7¼ in. G), the loco was described in 6 episodes.

Mr. F.W. Rummens "Sister Dora", a 3½ in. gauge L.N.W.R. "Jumbo".

An article on building a B-L kit in under 30 hours. (I was reading an article recently where it took this chap 300 hours to build a "Rocket" kit, they must have got a bit more complex, or inscrutable).

J.N.M. wrote an article, "Some Pioneers", in which he referred to the late Fred Smithies, which prompted Mr. N.H. Tanniscliffe to write that when he had last seen Fred at Blackpool he has very much alive. (Like Mark Twain, who wrote "The reports of my death have been greatly exaggerated".) Fred was responsible for looking after the railway for which "Little Giant" was built, for quite a while.

"Curly" started the *"Miss Ten to Eight"* series, a 3 ½ in. gauge North Eastern R1 4-4-0.