

# THE RAILWAY MAGAZINE.

APRIL, 1901.

## ILLUSTRATED INTERVIEWS.

NO. 40.—MR. HERBERT EDWARD JONES, M.I.M.E.,  
Locomotive, Carriage and Wagon Superintendent, Cambrian Railways Company.

Time: 10 a.m. Place: Locomotive Superintendent's Office, Oswestry, Salop.

"GOOD morning, sir."  
"Good morning; I am too busy this morning to look at your sam-

ples; you had better call again."

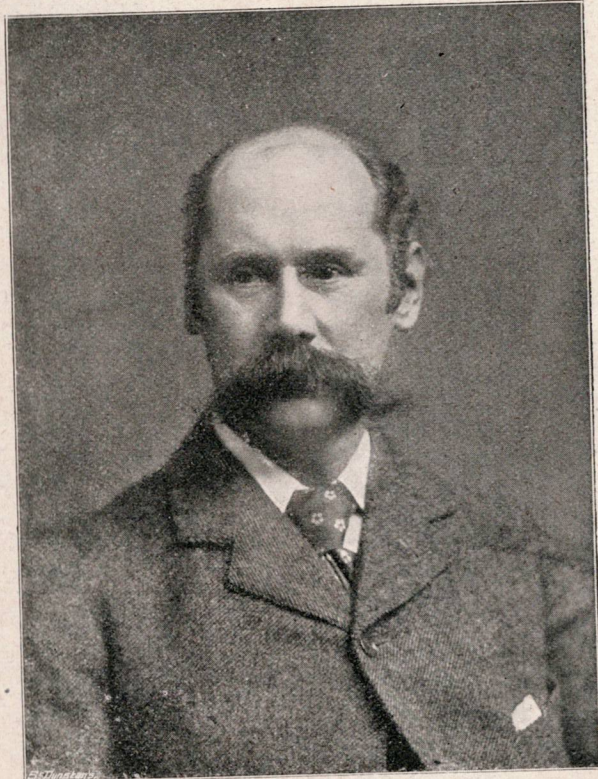
"Excuse me, Mr. Jones, this is not a sample, but a harmless Kodak, and I am only taking a 'snapshot' of you in your office for the 'RAILWAY MAGAZINE Illustrated Interview' you so kindly promised me for the April number."

"Oh! well, sit down and tell me briefly what you think would be most interesting to your readers so far as the Locomotive Department of the Cambrian Railways and myself are concerned, and I will do what I can for you."

"Thank you. May I ask you to give me first a little of the history of the Cambrian Railways from the beginning down to to-day?"

"Well, briefly, the first portion of the 257 miles of railway, now known as the Cambrian Railways, was from Newtown to

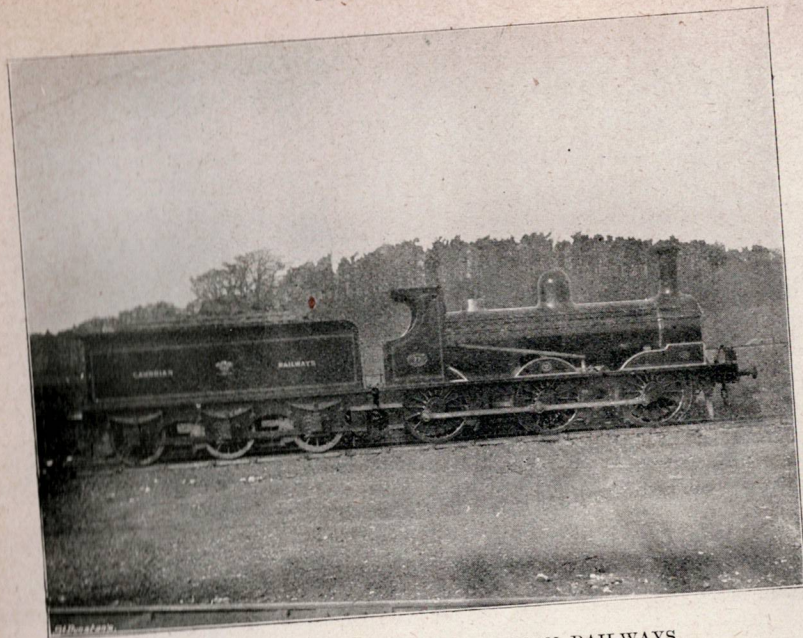
Llanidloes, the Act for which received the Royal Assent in 1853; the Oswestry, Welshpool, and Newtown portion was incorporated in 1855, Newtown to Machyulleth in 1857, Aberystwyth and the Coast Section in 1860, and the Oswestry, Ellesmere and Whitechurch Section, after a long and tedious fight, extending over two Sessions of Parliament, obtained the Royal Assent on August 1, 1861. A portion of this line, that between Bettisfield and Fenns Bank, presented great engineering difficulties, owing to the crossing of Whixall Moss, a peaty track of land



*Herbert Jones*

about 3 miles long, somewhat similar to Chat Moss on the Liverpool and Manchester





STANDARD GOODS ENGINE, CAMBRIAN RAILWAYS.

(New Street and Snow Hill), Shrewsbury, Liverpool (Lime Street), Birkenhead (Woodside), Manchester (London Road and Exchange)."

"A good deal of the Cambrian Railways is single line, I understand?"

"That is so; indeed, with the exception of a few miles our line is single, but we have crossing places at most of the

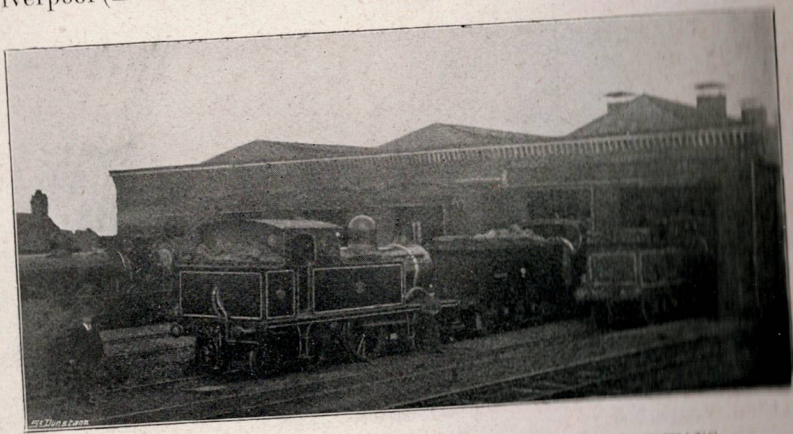
"We have through lavatory corridor bogie carriages running daily (except Sundays) during the year between Aberystwyth and London (Euston and Paddington), Birmingham (Snow Hill), Shrewsbury, Liverpool (Lime Street), and Manchester (London Road).

"Also during the months of July, August, and September, between Aberystwyth and London (Euston and Paddington), Birmingham (New Street and Snow Hill), Liverpool (Lime Street), Manchester (London Road and Central), Seacombe, Shrewsbury, Hereford, Newport (Mon.), Merthyr, Cardiff (Taff Vale and Rhymercy); also between Barmouth and London (Euston and Paddington), Birmingham

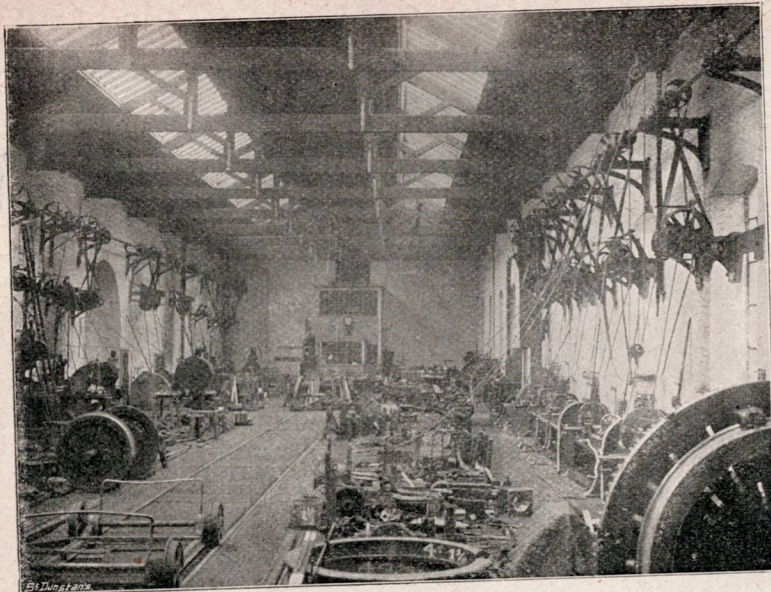
stations. The single line is worked by Tyers' Patent Electric Tablet System.

"Some of the gradients are very heavy, but in spite of these manifold difficulties we pass a large number of trains, and run them at good speeds.

"You will also see by the map that the line runs through the most delightful scenery in North and Mid-Wales, some of which is equal to the mountain scenery in Switzerland; the Coast line runs round Cardigan Bay for 70 miles,



THE OSWESTRY LOCOMOTIVE SHEDS, CAMBRIAN RAILWAYS.



VIEW IN THE LOCOMOTIVE MACHINE SHOPS, OSWESTRY WORKS.

and practically on the beach the whole way. We also have on the Cambrian what I believe to be unique in English railway annals, namely, two lady station-masters, or, I should say, to be correct, station mistresses."

"This is interesting, Mr. Jones. Tell me about them, their names, where they are stationed, and how long have they held their posts?"

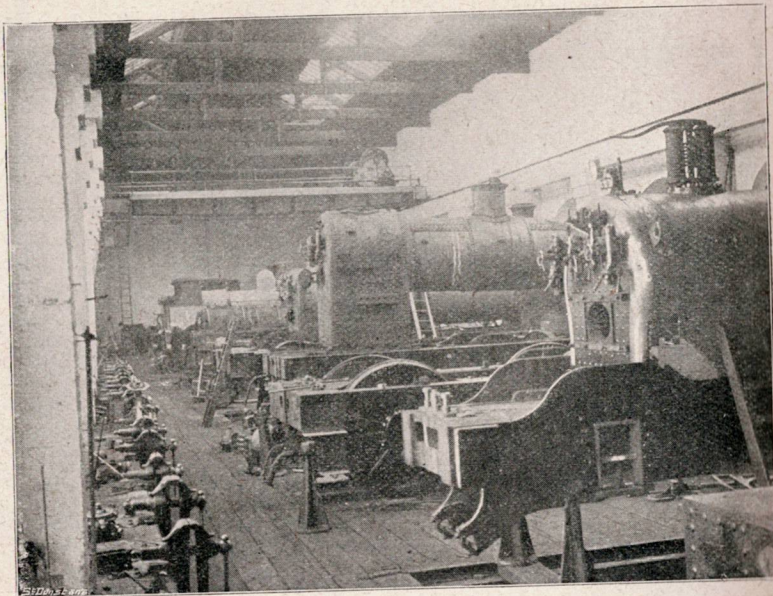
"Miss Jenkins is stationed at Dolwen, and has held the post for the last six years; Mrs. Jones is, and has been for the last sixteen years, at St. Harmon's,

Beam engine, etc., and left the works ready for use, with the machinery in position nearly as they are to-day, we have repair shops at Bulth, which

and I can assure you they carry out their duties in a very business-like manner."

"Then as to the Locomotive Department, Mr. Jones?"

"In addition to the works at Oswestry, which were built in 1865 by Savin and Co. (who were the contractors for the line), from designs by Sharp, Stewart and Co., then of Manchester, who supplied all the machinery, including the



SOUTH BAY OF LOCOMOTIVE ERECTING SHOPS, OSWESTRY WORKS.

belonged to the Mid-Wales Railway, and another at Portmadoc for repairing wagons on the Coast Section.

"The works here at Oswestry comprise erecting, boiler, machine, smiths', carriage, wagon, paint, coppersmiths', trimming, saddlers', and pattern shops; saw mill, iron and brass foundries, sheet-making rooms, grease house, and boiler house; and at present we are building a new paint shop, 300ft. long by 50ft. wide, and otherwise considerably extending the works."

"How is the power supplied for

bogie lavatory composites, six-wheeled thirds, brake coaches, passenger guards' vans, poultry vans, horse boxes, carriage truck etc., and 2,148 wagons of various classes.

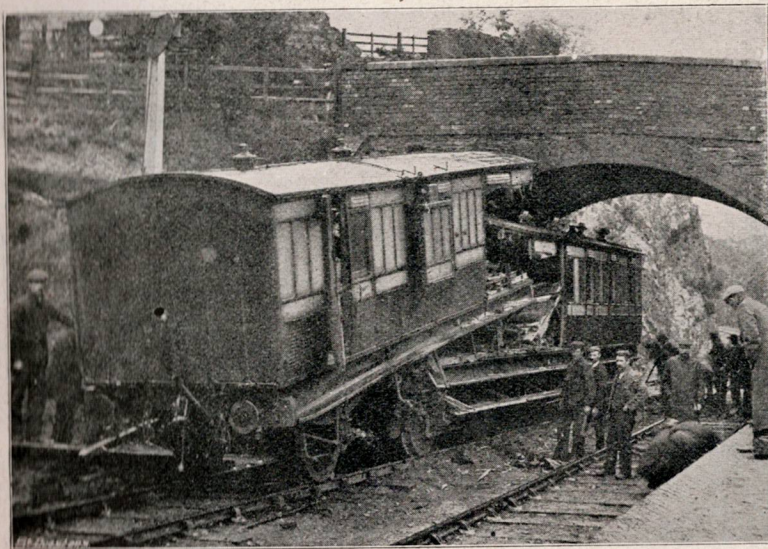
"The colours of our locomotives are black lined with yellow and red, and carriages bronze-green bodies, white panels lined with black and gold and fine lined red; the brake we have adopted is the automatic Vacuum, which is attached to all our coaching stock, etc.

"Most of the engines are new, or have

been rebuilt during the last six years; the majority have been built by Sharp, Stewart and Co., others by Stephenson's, Neilson's, Manning-Wardle and Co., Nasmyth's, Kitson's, and the Vulcan Foundry Company."

"Do you not build engines at Oswestry?"

"The Cambrian Railways did not, but now I have come here we intend to do so; in



CARRIAGE AND BRAKE VAN DESTROYED IN THE TYLWCH ACCIDENT  
(See illustration on page 296 for the vehicles built to replace these.)

driving the machinery at Oswestry?"

"Two Lancashire boilers supply steam for driving the engine and heating the works, and two locomotive boilers steam for the steam hammers and saw mill."

"Now, as to the locomotives and rolling stock, Mr. Jones?"

"Our locomotive stock consists of eighty-eight engines, of which forty-one are main-line passenger, thirty-two tender goods engines, and fifteen tank engines of various types; then we have 282 carriages, consisting of saloons,

fact, we have just begun building for ourselves, the first engine being now in course of construction. She is a similar engine, in fact, to the one illustrated in the coloured plate.

"Light engine, carriage and wagon repairs are done at Builth, and wagons only needing light repairs at Portmadoc."

"I suppose you have several locomotive sheds on the system?"

"We have engine sheds at Oswestry, Welshpool, Moat Lane, Llanidloes, Kerry, Llanfyllin, Wrexham, Builth,

Machynlleth, Penmaenpool, Brecon, Pwllheli, Portmadoc, Aberystwyth, and Caersws; all the heavy repairs to engines are done at the Oswestry Works, where all new carriages and wagons are also built."

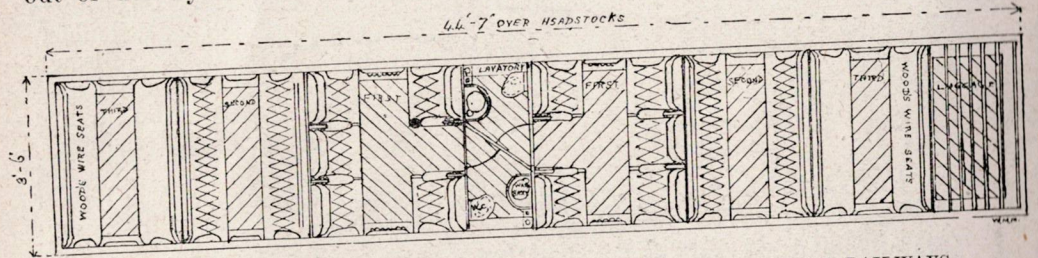
"Then do you build your own carriages and wagons, Mr. Jones?"

"Yes; during the time I have been here we have built a number, consisting of 45ft. bogie carriages, 30ft. passenger guards' vans, and a large number of goods and cattle wagons, and have others in hand; these are photos of some of the new stock taken as they were turned out of the works. Some of these new coaches have been built out of revenue to replace older and smaller vehicles worn out or destroyed in railway accidents,

locomotives of the Cambrian Railways?"

"The following are the leading dimensions of our various classes of engines:—

Express Bogie Passenger Class:  
 Heating surface: tubes, 1,057 sq. ft. (230 copper  $1\frac{3}{4}$ in. diameter, outside), firebox 99.5 sq. ft., total 1,156.5; grate area, 17 sq. ft.; cylinder 18in. diameter, 24in. stroke; link motion (Stephenson's); driving and trailing wheels coupled, 6ft. diameter; bogie wheels, 3ft. 6in. diameter; wheelbase: bogie 5ft. 6in., driving and trailing 8ft. 3in., centre of bogie to centre of driving-wheels 9ft.  $3\frac{1}{4}$ in.; total weight in working order (engine and tender), 80 tons; working boiler pressure, 160lbs. per sq. in. Six-wheeled Coupled Goods: Heating surface, tubes, 986.2 sq. ft. (204 copper  $1\frac{3}{4}$ in. diameter,



PLAN OF 45FT. BOGIE COMPOSITE CARRIAGE BUILT AT THE CAMBRIAN RAILWAYS WORKS, OSWESTRY.

so that, after all, some good comes out of such mishaps.

"We also make all the drays, parcel carts, hand-carts, barrows, foot-warmers, lamps of all kinds, signal fittings, points, crossing, rail chairs, etc.; also the wagon and other sheets, harness, and, in fact, anything and everything required on a railway."

"Have you charge of the pumping stations?"

"Yes; all the pumping stations are under my care, also water columns, tanks, all turn-tables, steam, travelling and other cranes."

"How many men have you in your departments?"

"About 700 men, including the locomotive staff and the men employed in our works."

"Please give me some details of the

outside), firebox 98.3 sq. ft., total 1,084.5 sq. ft.; grate area, 16.5 sq. ft.; cylinder 18in. diameter, 26in. stroke; link motion (Stephenson's); wheels (six-coupled), 5ft.  $1\frac{1}{2}$ in.; wheelbase: leading and driving, 7ft. 5in.; driving and trailing 7ft. 10in.; total, 15ft. 3in.; working boiler pressure, 160lbs. per sq. in.; total weight in working order (engine and tender), 76 tons.

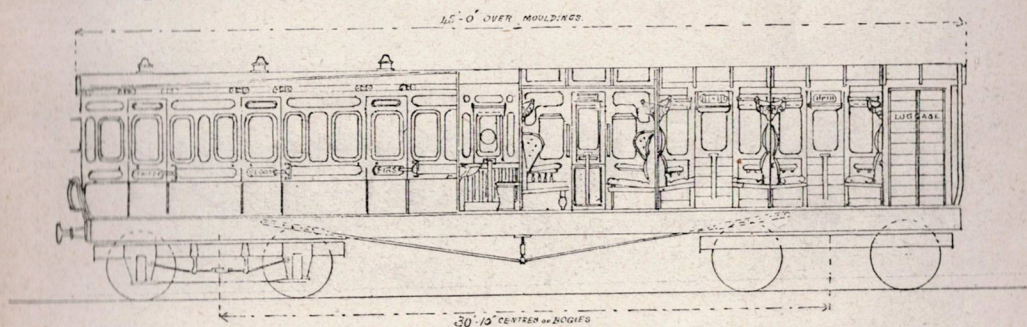
"Particulars of bogie side-tank, rebuilt passenger and goods engines:—

"Bogie side-tank: Heating surface, tubes 920.1, firebox 90.0 sq. ft., total 1,010.1 sq. ft.; grate area, 13.3 sq. ft.; diameter of cylinders 17in., stroke 24in.; diameter of wheels, driving 5ft. 3in., leading 5ft. 3in., bogie 3ft.  $1\frac{1}{2}$ in.; wheelbase: leading to driving 7ft. 8in., driving to centre of bogie 9ft.  $2\frac{1}{2}$ in., total wheelbase 20ft. 1in., centre to centre (bogie

wheels) 5ft. 3in.; boiler pressure, 160lbs. per sq. in.; weight in working order: leading 13 tons 16 cwt., driving 15 tons 3 qrs., bogie 16 tons 13 cwt., total weight (working) 45 tons 9 cwt. 3 qrs. Rebuilt passenger engine: Heating surface, 965.76 sq. ft.; grate area, 11.6 sq. ft.; diameter of cylinders 16in., stroke 20in.; diameter of wheels: driving and trailing 5ft. 6in., leading 3ft. 6in.; wheelbase: leading to driving 6ft. 6in., driving to trailing 7ft. 9in.; total wheelbase 14ft. 3in.; boiler pressure, 150lbs. per sq. in.; weight in working order: leading 8 tons 15 cwt., driving 10 tons, trailing 8 tons; tender, 13 tons 11 cwt.; total weight (engine and tender) working, 40 tons 11 cwt. Rebuilt goods engine: Heating surface,

stead. Are you not in favour of names for locomotives, Mr. Jones? To my mind names are much more interesting than numbers, especially on a tourist line, such as the Cambrian."

"I agree with you to a certain extent that it is more interesting to the general public to see names on engines, but when you have to deal with names, such as the following, in telegraphing up and down the line when an engine failure occurs: 'Send piston-head for "Tubal Cain,"' or "'Castell Dendraeth"' off road at Penrhyndendraeth.' Then, again, take your choice of a few of these old engine names: 'Llanerchydol,' 'Nant Clwyd,' 'Rhiewport,' 'Plynlimon,' 'Rheidol,' 'Cyfrouydd,' and 'Plasefynnon.' I think you will agree with me, from



ELEVATION (PART SECTIONAL) OF 45FT. BOGIE COMPOSITE CARRIAGE, BUILT AT OSWESTRY WORKS.

1,006.0 sq. ft.; grate area, 14.16 sq. ft.; diameter of cylinders 16in., stroke 24in.; diameter of wheels, leading, driving, and trailing, 4ft. 6in.; wheelbase: leading to driving 6ft. 9in., driving to trailing 8ft., total wheelbase 14ft. 9in.; boiler pressure, 150lbs. per sq. in.; weight in working order: leading 9 tons 8cwt. 2 qrs., driving 10 tons 5 cwt., trailing 7 tons 3 cwt.; tender, 17 tons 15 cwt. 3 qrs.; total weight (engine and tender), working, 44 tons 12 cwt. 1 qr.

"In addition we have one or two other specimens that do not belong to any of the above classes."

"At one time all the engines on the Cambrian had names; I observe that now as they are rebuilt the name is taken off and a number put on in its

Cambrian railwayman's point of view, it is much easier to deal with numbers. I agree as to the interest, but the saving in time and trouble by adopting numbers more than compensates for this\*; besides, the names selected are always those most difficult to spell and pronounce."

"How many locomotive superintendents have the Cambrian had since the amalgamation?"

"Three. Mr. Alex. Walker was the first; he resigned in 1882, and was succeeded by Mr. W. Aston, whom I succeeded two years ago. You will be sorry to learn that only a few days ago

\*The engines would have numbers as well as names, and the former could be used for telegraphing. [Ed.]

(on February 26th) Mr. Aston died quite suddenly."

"Just one thing more before I ask you about yourself. What is to be the number of the first engine built at Oswestry?"

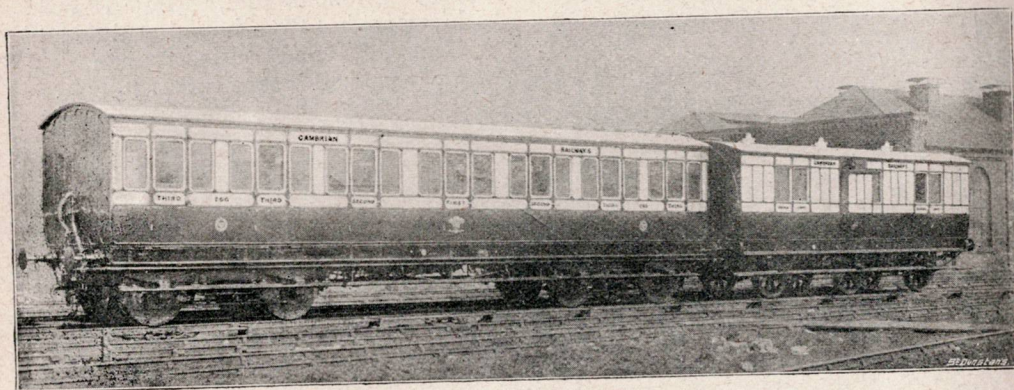
"It is a coincidence that the engine now under construction (that is the first built here) is an express bogie passenger engine, and is to be No. 19, which is the same number as the locomotive Mr. Longbottom refers to in the RAILWAY MAGAZINE for March as being the first built at Stoke Works by the North Staffordshire Railway.

"Now, Mr. Jones, about yourself; I

new shops and offices were built, also new engine sheds at Heaton Mersey and Trafford Park, etc., making Manchester one of the most important districts on the Midland. I came to the Cambrian in March, 1899.

"You mention my coming of an old railway stock; my father, Mr. C. H. Jones, J.P., of Huddersfield, was one of the original directors of the Lancashire and Yorkshire Railway, and up to the time of his death, in 1885, a director of the Midland Railway."

"Now, perhaps, you would like to look round the works, and see for yourself what we are doing?"



COACH AND VAN BUILT AT OSWESTRY WORKS TO REPLACE THOSE DESTROYED IN THE TYLWCH ACCIDENT. (See illustration, page 293.)

believe you come of an old railway stock, so to speak?"

"I commenced my railway career twenty-nine years ago, at the Midland Railway Locomotive Works, at Derby, as a pupil of the late Mr. Mathew Kirtley, finishing my training under the present locomotive superintendent, Mr. S. W. Johnson; and for a short period in the Carriage and Wagon Departments, under Mr. T. G. Clayton.

"From Derby I went to Leicester, then to London to take charge of the laying down of the hydraulic plant at the White Cross Street Goods Depot and Victoria Docks. On the completion of this work I was appointed district superintendent at Brecon, from there to Toton, then to Manchester district. During the time I was at Manchester,

"This is the time office and entrance to the works. Our system of time-keeping is by check, and the men work by the hour. This is the workmen's messroom, with a reading-room and library adjoining, there are upwards of 1,000 volumes on the library shelves; we also take daily, weekly and monthly periodicals and papers. You will see by the dirty condition of the papers they are well read."

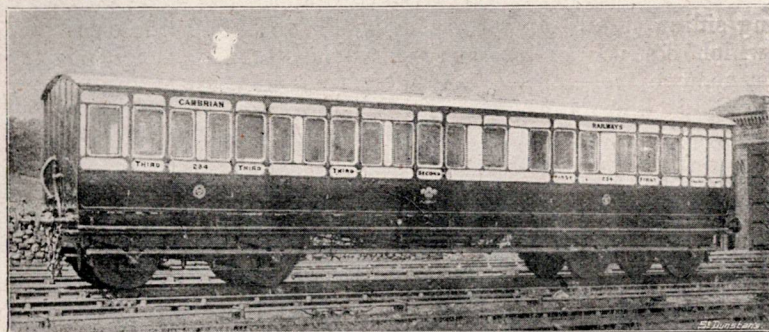
"I noticed by a board on the wall in the entrance that you have a fire brigade?"

"Yes, the fire brigade has been formed since I came here.

"This is the machine and fitting shop. The large casting you see on the boring machine is a bed-plate for a 10-ton travelling crane. These castings lying

about are portions of new machinery we are making. The hydraulic press you see in front of you (which was made here a short time ago) is for pressing wheels

“ This is the erecting shop, and close to the new engine is its boiler; you will see the cylinders and drag-plates are already fixed in the frames, and nearly ready for the wheels and motion to be put in. The crane overhead is driven by an endless rope, and was erected last year. The crane in the boiler shop was originally in here, but as it is worked by hand it was too slow for our purpose, as



45-FT. CORRIDOR TRI-COMPOSITE COACH WITH LAVATORY.  
Built at Oswestry Works to replace a carriage destroyed in the Welshampton Accident.

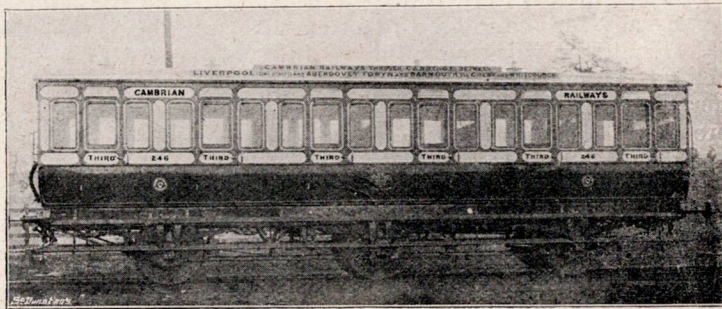
on the axles and various other purposes; we can put a pressure of 200 tons on this machine, and we often work at that pressure. In that wheel lathe we are boring tyres for the new engine; the two coupling rods you see on the planing machine, and the crosshead on the slotting machine table, are also for the new engine. The machine nearest you is planing two rails to make a pair of crossings for the permanent way.

“ We are now in the boiler shop, which contains the punching and shearing machines, plate-binding rolls, and other machinery requisite for boiler making.

“ This is the tender shop, we will cross this traverser, which is used for setting engines over the pits, as you see we only have one entrance to the erecting shop, and we have eleven pits on either side of the traverser. An engine is brought up or down the shop to the pit over which it is to be repaired.

nearly all the works staff are working piecemeal.

“ We will now go to the old material yard; all old materials are brought into this yard and sorted, and anything likely to work in again is put on one side under its classified head. This heap of old axles you see here will all be worked up into drawbar-hooks, buffers, and other articles required for wagon building and repairing; this part of the yard with a siding is for scrap of various kinds, and



THIRD-CLASS COACH BUILT AT THE OSWESTRY WORKS.

is put here so as to be handy for loading.

“ Here are the oil gasworks, where we make the gas for the whole of the line, and send it to the out stations in these travelling holders which you see stand-

ing here; they are charged with gas to a pressure of 150lbs. per square inch, and are sent where required. We have seven sets of these travelling holders constantly at work.

"In this adjoining siding stands our breakdown train, which consists of a 20-ton travelling crane, two tool vans, and messroom fitted with cooking range, tables, seats, cups, saucers, etc., also a wagon containing permanent-way materials. As I told you before, our line is a single one, therefore we have to be prepared to clear the line very quickly, or else the whole of the traffic on the section the accident occurs will be delayed.

"We now come to the timber yard for the saw mill; these logs and trees you see stacked here will be cut up at the frame saw for carriage and wagon building. All the rail-chair keys used on the line are sawn, cut, steamed, and pressed here.

"We will now proceed to the iron foundry, passing on our way the copper-smiths' shop, engine and boiler house, and the signal-fitting shop. The iron foundry is laid with a tramway of cast-iron plates, on which run the ladles on wheels for carrying molten metal. We make here all the axle-boxes, engine drag-plates, cylinders, and rail-chairs (you will see there are 300 moulding-boxes ready for the metal to be poured in). That man with the ladle is filling each box as he passes, the ladle holding enough to fill ten boxes. This is the core oven; we have two cupolas, each capable of melting 14 tons per day.

"This is the fettling shop, where all the castings are dressed and cleaned prior to their being taken into the stores.

"We are now in the brass foundry. These are the axle-boxes for the new engine, and that is a heap of carriage and wagon brasses ready to be taken into the stores.

"This is the smithy, which contains two steam hammers, nut and bolt making machine, spring and tyre furnaces, and various presses required for forging.

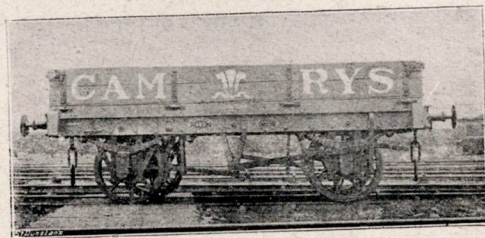
"We will now go into the wagon

building shop; the cattle wagons we are building on this side are to complete an order we have on hand; we are also building new drop-side wagons.

"Here is the carriage shop, where we have in hand two 45ft. bogie carriages, three third-class brake coaches, poultry van, alterations to saloons, and other carriage repairs.

"You see the paint shop is full of work. Over this shop is situated the French polishing and glass-etching rooms. When the new paint shop is finished, the wall will be taken down and this shop will then form part of the iron foundry.

"We are going into the north yard, where we have our grease-making house and sheet-making rooms, which are detached buildings.



STANDARD GOODS WAGON, CAMBRIAN RAILWAYS.  
Built at Oswestry Works.

"This is the new paint shop in course of construction.

"At the far end of the north yard we have our store of engine, carriage, and wagon wheels, tyres, and axles, also the breaking-up siding where all condemned stock is broken up.

"This is the timber stock yard, with the timber cut and drying ready for use.

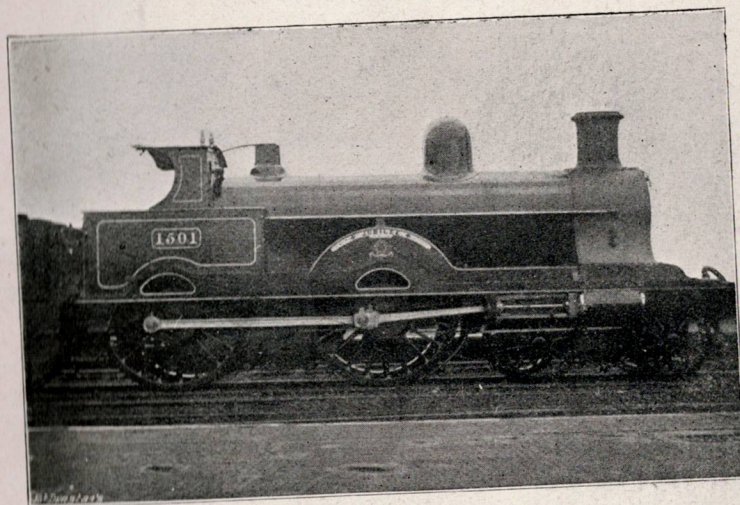
"Here is situated the wagon repairing shop.

"We will now proceed to the carriage machine shop, where we have planing morticing, boring, and other machines; circular and band saws. Over this shop the trimming, saddlers', pattern-makers', cart and rullely makers' shops are situated.

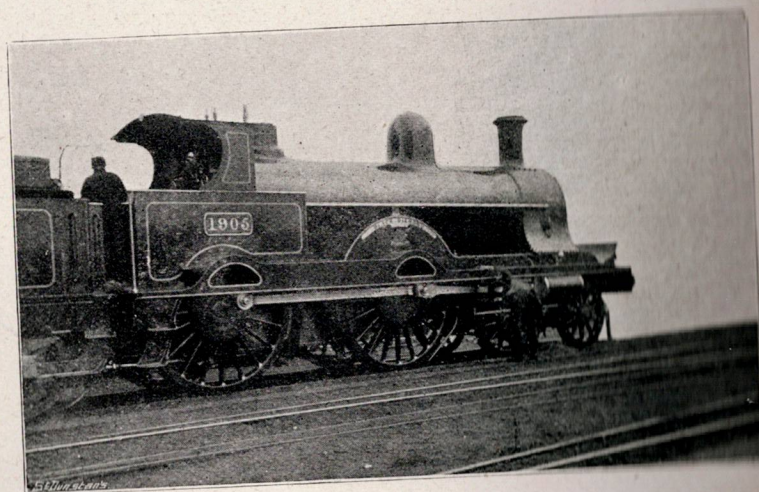
“Here are the iron stores, and over here are the storekeeper’s offices. You will notice all the iron is standing on end in pits; it is much easier to handle stocked in this manner than in racks, and you can see the amount at a glance. “Lastly, we come to the general stores; this building is a three-storey high build-

ing. Passing through here we again come to the entrance of the works, mess-room, etc.; over here the locomotive offices, including drawing and other offices, are situated.

“I must again say, ‘Good morning,’ and wish you and your excellent RAILWAY MAGAZINE every success.



JUBILEE  
London and North-Western Railway 4-cylinder compound Express locomotive, showing the double chimney.



“BLACK DIAMOND”  
London and North-Western Railway 4-cylinder compound Express locomotive, showing the standard chimney.



*W. Jackson*

General Manager, North British Railway.

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FARMHOUSE AND COUNTRY LODGINGS.—Attention is drawn to the Illustrated Pamphlet now re-issued by the Company, "List of Lodgings at Seaside and Holiday Resorts in Wild Wales." Price 1d., at the principal Railway Bookstalls and Company's Stations.

Time Tables, Tourist Programmes, Guide Books, and full particulars of Trains, Fares, &c., may be obtained from Mr. W. H. Gough, Superintendent of the Line, Oswestry; at any of the Company's Stations, and at their District Agents' Offices, Crue-woode Buildings, 17, Back Goree, Liverpool, and The Exchange, Cardiff; or on application to the undersigned. Also at the Cambrian Railways' London Offices, 53, Queen Victoria Street, E.C.; 32, Westbourne Grove; and 150, Piccadilly Circus, and at the undermentioned Offices of Messrs. Henry Gaze & Sons, Ltd., Excursion Tourist Agents—BIRMINGHAM: 42, Union Passage, New Street. MANCHESTER: 111, Market Street. LIVERPOOL: 25, Lime Street. DUBLIN: 16, Suffolk Street. GLASGOW: Central Station.

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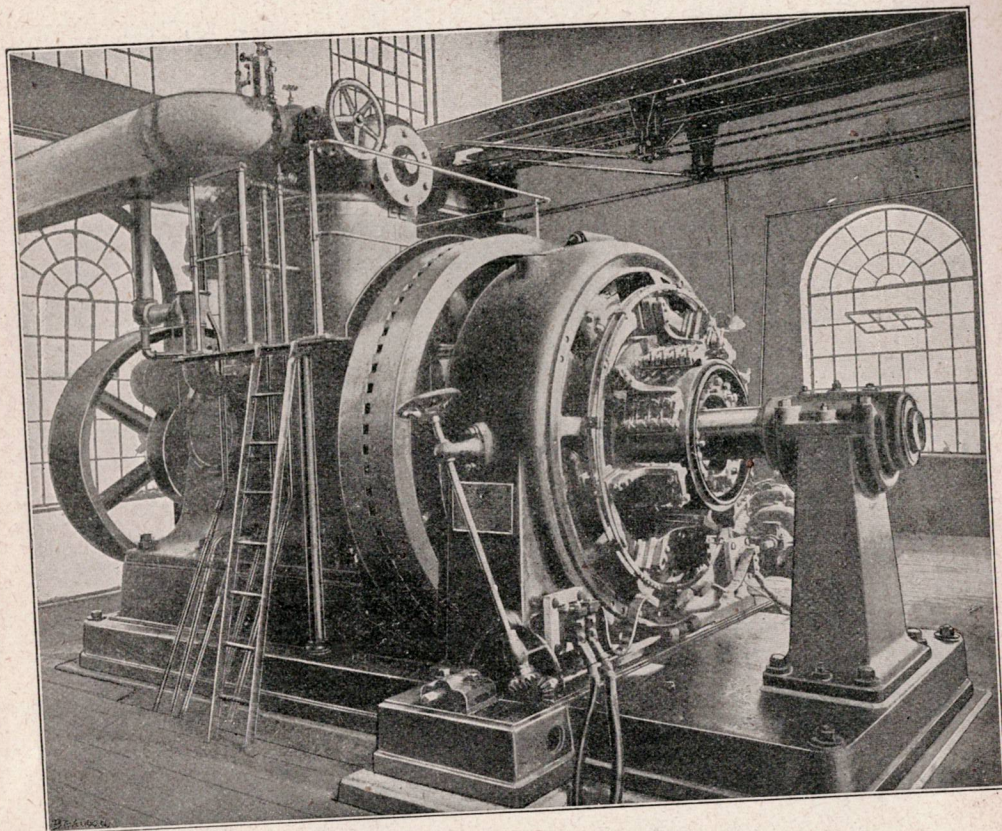
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# THE RAILWAY MAGAZINE.

Contents for April, 1901.

	PAGE
ILLUSTRATED INTERVIEWS— No. 40.—Mr. HERBERT EDWARDS JONES, M.I.M.E. ( <i>Locomotive, Carriage and Wagon Superintendent, Cambrian Railways Company</i> ) .. .. .	289
RAILWAY PORTRAIT GALLERY— Mr. WILLIAM FULTON JACKSON ( <i>General Manager, North British Railways</i> ) ..	301
THE "GREATER" WESTERN RAILWAY .. .. .	FRED. J. HUDSON 302
( <i>With Illustrations.</i> ) .. .. .	N. E. STILUS 314
THE FOOT-WARMER: A LAMENT ( <i>Poem</i> ) .. .. .	HAROLD J. SHEPSTONE 315
MOUNT LOWE AND ITS RAILWAY .. .. .	JOHN FAIRMAN 321
( <i>With Illustrations.</i> ) .. .. .	JOHN FAIRMAN 321
WORLD-FAMOUS TRAINS: VII.—THE ALTON, LIMITED, U.S.A. ..	P. DOBBS 327
( <i>With Illustrations.</i> ) .. .. .	REGINALD H. COCKS 328
TYPES OF RAILWAY PASSENGERS—"THE CONTENTED ONE" ( <i>Illustration</i> ) ..	P. DOBBS 327
SOME DECORATED LOCOMOTIVES .. .. .	REGINALD H. COCKS 328
( <i>With Illustrations.</i> ) .. .. .	HAROLD MACFARLANE 334
ORIGINAL WAYS OF RAILWAY TRAVELLING .. .. .	HAROLD MACFARLANE 334
( <i>With Illustrations.</i> ) .. .. .	W. J. STEVENS 338
ELECTRICITY v. STEAM FOR "UNDERGROUND" RAILWAYS ..	W. J. STEVENS 338
( <i>With Illustrations.</i> ) .. .. .	H. W. HARTNELL 345
RAILWAY RACING ( <i>Illustration</i> ) .. .. .	H. W. HARTNELL 345
WHAT "ACCIDENTS" COST THE RAILWAY COMPANIES ..	GEORGE A. WADE, B.A. 346
( <i>With Illustrations.</i> ) .. .. .	GEORGE A. WADE, B.A. 346
DARLING'S AUTOMATIC RAILWAY COUPLING .. .. .	352
( <i>With Illustrations.</i> ) .. .. .	355
THE WHY AND THE WHEREFORE .. .. .	355
TYPES OF RAILWAY PASSENGERS—"THE IMPATIENT ONE" ( <i>Illustration</i> ) ..	359
THE EXPRESS LOCOMOTIVES OF A GREAT RAILWAY .. .. .	CHAS. S. LAKE 360
( <i>With Illustrations.</i> ) .. .. .	367
A PROSPEROUS AMERICAN ELECTRIC RAILWAY .. .. .	367
( <i>With Illustrations.</i> ) .. .. .	371
WHAT THE RAILWAYS ARE DOING .. .. .	371
AN EASTER HOLIDAY-MAKER OF THE NINETEENTH CENTURY ( <i>Illustration</i> ) ..	376
PERTINENT PARAGRAPHS .. .. .	377

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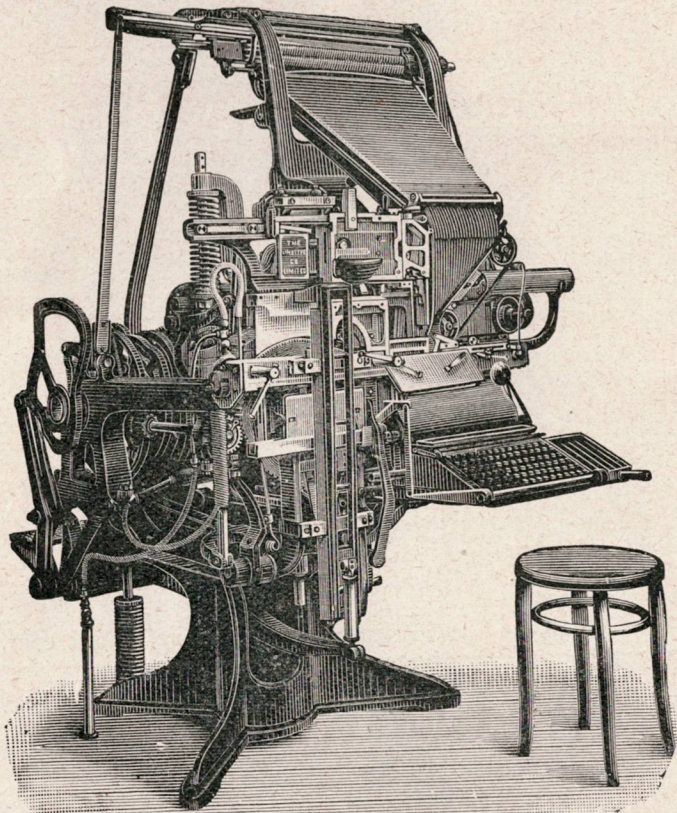
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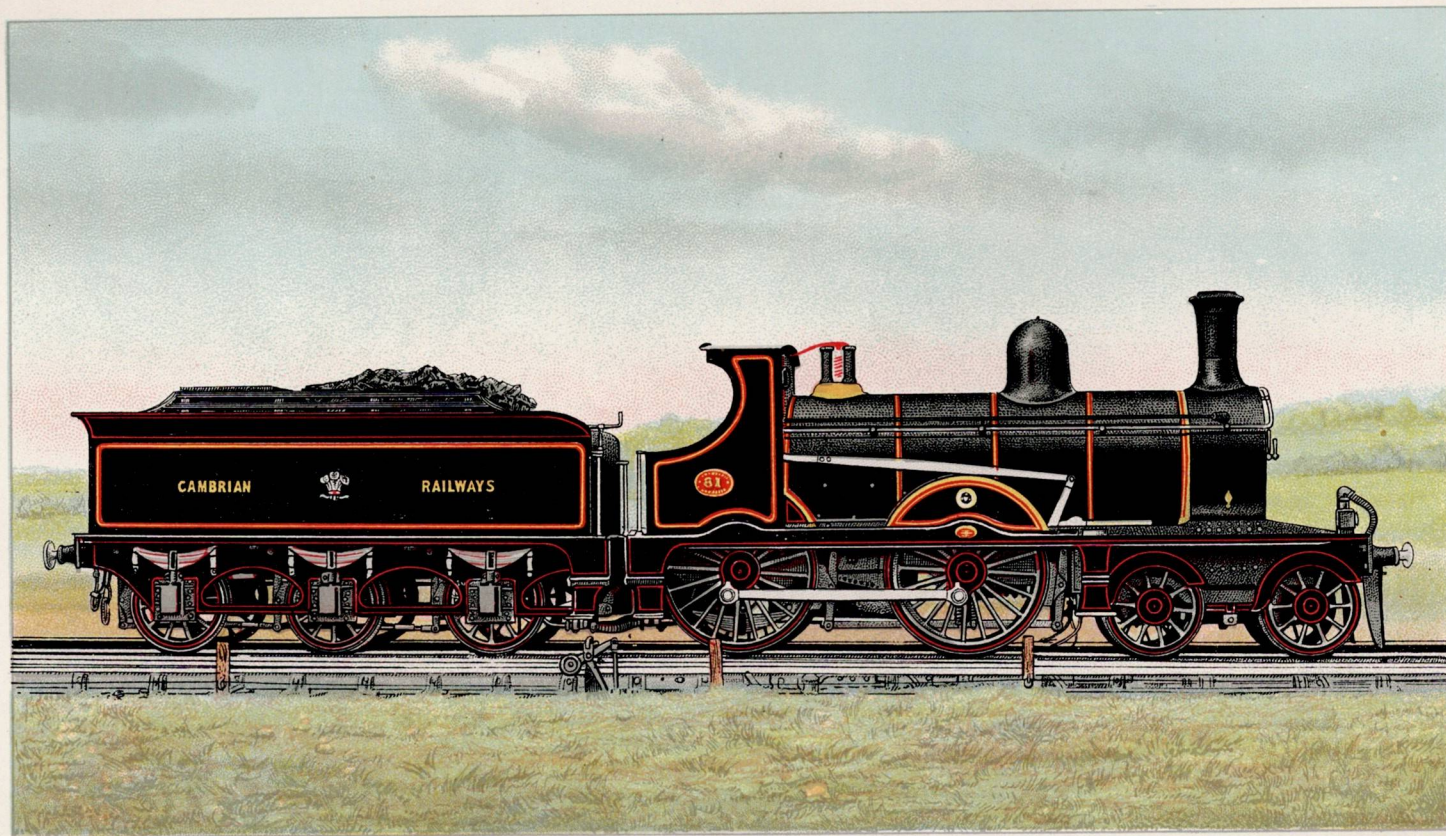
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