

Cerbyd Rhif 238 Rheilffyrdd y Cambrian

Yn ystod ail hanner y 19eg ganrif, roedd Cwmni Rheilffordd y Cambrian yn gwasanaethu rhan sylweddol o ganolbarth Cymru, gan groesi ardal gymharol isel ei phoblogaeth. Prif swyddogaeth y llinellau rheilffordd eraill yn ne Cymru, yn eu hanfod, oedd cludo haearn a glo o'r gefnwlad i'r pwynt agosaf ar yr arfordir. Roedd Rheilffyrdd y Cambrian, ar y llaw arall, yn darparu'n bennaf wasanaethau gwledig a gwasanaethau hirbell i deithwyr, ac yn benodol yn cysylltu trefi gwyliau arfordir Bae Ceredigion gyda'r prif ganolfannau poblogaeth yn Lloegr. Yn ganlyniad i hyn, cludai llawer o'r trenau teithwyr gerbydau o Aberystwyth, a oedd bryd hynny'n frenhines ar drefi glan-môr Bae Ceredigion, yn syth drwodd i Lerpwl, Manceinion, Birmingham a Llundain.

O'i gymharu â chynllun syml iawn y tu mewn i gerbydau rheilffordd heddiw, roedd cynllun cerbydau teithwyr yn y 19eg ganrif yn gymhleth iawn fel arfer. Roedd gan y cerbyd arbennig a ddisgrifir yma, a fu'n wrthrych project pwysig i'w adfer yn Amgueddfa Diwydiant a Môr Cymru (ADMC), adran fagiâu fechan iawn, y cyfeiria'r cwmni ati fel 'cwpwrdd', y naill ben iddo, ac yna ddwy adran dosbarth cyntaf. Ceid dau dŷ bach ar wahân ar draws canol y cerbyd, un ar gyfer y teithwyr dosbarth cyntaf a'r llall yn gwasanaethu'r teithwyr yn y pedair adran trydydd dosbarth cyfagos. Yn olaf, ceid tŷ bach arall ym mhen pellaf y cerbyd ar gyfer teithwyr trydydd dosbarth. Er mwyn sicrhau y cedwid y gwahanol ddosbarthiadau ar wahân, fel yr oedd yn briodol, roedd coridor adran y dosbarth cyntaf yr ochr draw i'r cerbyd i goridor trydydd dosbarth.

Tueddai bron i bob cwmni rheilffordd bychan ym Mhrydain roi'r gwaith o adeiladu eu cerbydau i wneuthurwyr arbenigol, ac adeiladwyd y cerbyd arbennig hwn gan y Metropolitan Railway Carriage Company yn Birmingham ym 1895. Bu Peiriannydd Trenau Cwmni Rheilffyrdd y Cambrian yn eithriadol o fanwl wrth lunio'r daflen ofynion a roddodd i gwmni Metropolitan ac ymhlith y gofynion ceid ymadroddion megis: *'Draw-gear to be of the best Yorkshire iron, Low Moor, and all other ironwork to be best Staffordshire'* a *'Interior panelling of polished Sycamore framed with Walnut wood and gold lined'*. Ceid disgrifiadau



Y cerbyd cyn dechrau ar y gwaith.
The coach before work began

Cambrian Railways Coach No. 238

In the latter half of the 19th century, the routes of the Cambrian Railway Company straddled a large part of mid Wales with the lines passing through relatively sparsely populated terrain. Unlike other lines in south Wales, which were essentially short distance railways whose primary function was to transport the iron and coal of the hinterland to the nearest point on the coast, the Cambrian Railways provided mainly rural and long-distance passenger services. In particular, the company connected the resorts of the Cardigan Bay coast with the main centres of population in England. As a result, many of the passenger trains conveyed 'through coaches' from Aberystwyth, which in those days was the queen of the Cardigan Bay resorts, to Liverpool, Manchester, Birmingham and London.

By comparison with the very simple internal layout of today's railway coaches, that of passenger coaches in the 19th century was commonly very complicated. The particular coach described here, which has been the subject of a major restoration programme at the Welsh Industrial & Maritime Museum (WIMM), had at one end a very small luggage compartment, which the company referred to as a 'cupboard', followed by two first-class compartments. Across the centre of the coach were two independent toilets, one of which served first-class passengers while the other served passengers in the adjacent four third-class compartments. Finally, at the far end of the coach was a further toilet for third-class passengers. To provide due and proper social segregation of the classes, the corridors for the first and third-class compartments were on opposite sides of the coach.

As with nearly all the smaller railway companies of Britain, coaches tended to be built by specialist manufacturers, and this particular coach was constructed by the Metropolitan Railway Carriage Company in Birmingham in 1895. The Locomotive Engineer of the Cambrian Railways was exceedingly precise in the specifications that he issued to the Metropolitan Company and these included such phrases as: *'Draw-gear to be of the best Yorkshire iron, Low Moor, all other ironwork to be best Staffordshire'* and *'Interior panelling of polished Sycamore framed with Walnut wood and gold lined.'* Comparable descriptions applied to all parts of the coach and the quality of the resulting vehicle can only be imagined.

With this sumptuous standard of luxury, the coach entered service in 1895 and was used particularly on the through route between Aberystwyth and Manchester (London Road) Station. With the major railway amalgamations of 1922, the coach

tebyg ar gyfer pob rhan o'r goits a medrwn ddychmygu safon uchel y cerbyd o'r herwydd.

Dechreuodd y cerbyd hynod o foethus hwn ar ei wasanaeth ym 1895 ac fe'i ddefnyddiwyd yn arbennig ar y daith rhwng Aberystwyth a Manceinion (gorsaf London Road). Adeg aruno mawr y rheilffyrdd ym 1922, aeth y cerbyd i feddiant y Great Western Railway a bu'n gwasanaethu teithwyr hyd 1939. Bryd hynny fe'i addaswyd yn Gerbyd Radio Di-wifr i'w ddefnyddio o dan amodau cyfnod y rhyfel. Yn ddiweddarach fe'i symudwyd i Adran Beirianneg y cwmini, ac o'r diwedd aeth i feddiant Mr Selwyn Pearce Higgins ym 1970 a'i gadw yn Amgueddfa Reilffyrdd Didcot. O'r fan honno aethpwyd ag ef i'r Amgueddfa Reilffyrdd Genedlaethol yn Efrog, ac o'r fan honno symudwyd y cerbyd wedyn i ADMC ym 1991. Wedi marwolaeth Mr Pearce Higgins sefydlwyd Ymddiriedolaeth yn ei enw ac arweiniodd trafodaethau gyda'r Ymddiriedolaeth, tra'r oedd y cerbyd yn Efrog, i gytundeb ynglŷn â'r gwaith y byddai'r Amgueddfa yn ymgymryd ag ef pan ddaeth y cerbyd i Gaerdydd.



Y cerbyd ar ôl ei orffen.
The completed coach

Yn ystod y broses o'i addasu at ddibenion eraill, diberfeddwyd y cerbyd ac yn ei hanfod cragen oedd y corff. Cytunwyd gyda'r Ymddiriedolaeth y byddai'r Amgueddfa yn adfer un adran dosbarth cyntaf ac un adran trydydd dosbarth y naill ben a'r llall i'r cerbyd, gan addasu'r gofod rhwng y ddwy adran fel y gellid ei ddefnyddio gan grwpiau o ymwelwyr.

Gan nad oedd gan yr amgueddfa adeilad digon mawr i gynnwys y cerbyd penderfynwyd mai ymarferol fyddai codi canopi a fyddai'n gallogi'r gwaith i fynd yn ei flaen er gwaethaf pob tywydd. Pan gyrhaeddodd y cerbyd ADMC gosodwyd ef ger plattform rheilffordd byr a ailgodwyd yno. Gwnâi hyn hi'n haws i fynd at y cerbyd, gan hyrwyddo'r gwaith o'i adfer.

Dechreuwyd ar y gwaith trwy ail-doi'r cerbyd. Roedd hyn yn cynnwys adeiladu bwâu newydd i'r to o goed derw, a defnyddio gwyrdr ffeibr, yn hytrach na'r haenau niferus o gyfnas a thar traddodiadol. Mae'r dull modern hwn yn rhoi arwyneb sy'n dal dŵr yn berffaith ac un a fu'n llwyddiannus iawn. Y cam nesaf oedd adnewyddu'r planciau ar lawr y cerbyd. Dwy haen o blanciau tafod-a-rhigol oedd y rhain ym mhob man, ond er bod y ddwy haen yn adran y trydydd dosbarth yn gorwedd y naill ar ben y llall ac i'r un cyfeiriad, gosodwyd yr haen isaf yn adran y dosbarth cyntaf ar ongl o 45 gradd i'r cerbyd a'r haen uchaf ar ongl o 90 gradd i'r haen isaf. Golygai'r dull hwn o drefnu'r planciau y câi'r teithwyr dosbarth cyntaf daith dawelach ac roedd hefyd yn fodd i atal llwch rhag codi trwy'r llawr. Un ymhlith nifer o wahaniaethau bychain a sicrhâi gwell byd i'r teithiwr dosbarth cyntaf oedd hwn. Ar ôl adnewyddu'r



Tu mewn i brif ran y cerbyd.
The interior of the main part of the coach

passed into the ownership of the Great Western Railway and was only finally withdrawn from passenger service in 1939. It was then converted to a Wireless Van for use during wartime conditions. It was later transferred to the company's Engineering Department, and finally passed into the ownership of Mr Selwyn Pearce Higgins in 1970 and was stored at the Didcot Railway Museum. From there it was moved to the National Railway Museum, York, and, from this latter location, the coach was transferred to WIMM in 1991.

Following the death of Mr Pearce Higgins a Trust was established in his name and discussions with the Trust, while the coach was at York, resulted in an agreement as to the work which would be undertaken by the Museum when the coach came to Cardiff.

Following its conversion to other railway uses, the coach had been totally gutted internally and the body was essentially a hollow shell. It was agreed with the Trust that the Museum would restore one first-class and one third-class compartment at either end of the coach, and adapt the intervening space between the two compartments so that it could be used by groups of visitors.

In the absence of a building large enough to accommodate the coach, it was found expedient to construct a canopy which allowed work to proceed regardless of the weather. When the coach was delivered to WIMM it was placed alongside a short reconstructed railway platform. This facilitated access to the vehicle and made the work much easier.

Work commenced with re-roofing of the vehicle, which included the construction of new roof arches in oak and the use of fibreglass instead of the traditional multiple layers of canvas and tar. This modern approach provides a totally waterproof surface and has been found to be extremely successful. The next stage was to replace the planking in the floor of the coach. This consisted of two layers of tongued and grooved planks throughout, but whereas the two layers of planks in the third-class compartment were simply laid in the same direction on top of each other, the lower layer in the first-class compartment area was laid at 45 degrees to the coach with the upper layer at 90 degrees to the

lower layer. This arrangement of the planking resulted in a quieter ride for the first-class passengers and also prevented dust moving upwards straight through the floor. This difference is one of a number of subtle features which served to improve the lot of the first-class passenger. After renewal of the external panelling and mouldings it was possible to construct the internal partitions, following which the seat frameworks were erected. Throughout all this renewal and construction work, adherence was made to the original timber specifications.

mowldins a'r paneli allanol roedd modd adeiladu'r parwydydd, ac wedi hynny codwyd fframwaith y seddi. Trwy gydol y gwaith o adnewyddu ac adeiladu'r cerbyd, defnyddiwyd yr un math o goed ag a nodwyd yn y fanyleb wreiddiol.

Hyd yn hyn bu'r holl waith yr ymgymerwyd ag ef o fewn gallu arbenigol staff cadwraeth yr amgueddfa ei hun, ond roedd gofyn am gymorth o'r tu allan ar gyfer y cam nesaf, sef darparu'r clustogwaith ar gyfer y ddau gerbyd. Yn ffodus roedd gennym ddisgrifiadau ohono; *'drab and lavender tapestry with worsted lace trimming'* oedd yn adran y trydydd dosbarth, a *'Tashmere tapestry trimmed with suitable laces'* yn adran y dosbarth cyntaf. Rhoddwyd cyngor ar yr agweddau hyn gan staff o Amgueddfa Werin Cymru.

Roedd yn anochel mai ychydig o wybodaeth fyddai gennym am lawer o'r celfi lleiaf yn y cerbyd, ac ymhlith y rhain roedd y bracedi metel a ddaliai'r silff ffagiau. Yn ffodus, daethpwyd i wybod bod braced o'r math hwn wedi goroesi damwain drychinebus Rheilffyrdd y Cambrian yn Welshampton ym 1897 a'i gadw mewn blwch arddangos. Cytunodd y perchennog i roi benthyg y braced i'r amgueddfa a gwnaed patrwm oddi wrtho. Castiwyd bracedi o'r patrwm hwn wedyn yn ffowndri bres Amgueddfa Lechi Cymru yn Llanberis.

Mae'r argraff weledol gyffredinol a rydd y rhan fwyaf o wrthrychau yn dibynnu, i raddau helaeth, ar ansawdd eu caboliad ac nid eithriad mo'r cerbyd hwn yn hynny o beth. Disgrifiodd y fanyleb wreiddiol ansawdd yr 14 côt o baent yr oedd y cerbyd i'w derbyn; yn ffodus, nid yw paent heddiw yn galw am ddulliau o'r fath. Gorffennwyd hanner isaf y cerbyd mewn *Cambrian Green*, ac roeddem yn ffodus bod sampl a oedd yn dyddio o gyfnod gwreiddiol Rheilffyrdd y Cambrian wedi goroesi yn nwylo hanesydd rheilffyrdd. Defnyddid hwn yn gysail er mwyn cymysgu paent o'r lliw priodol.

Arfbais Cwmni Rheilffyrdd y Cambrian a phlu Tywysog Cymru oedd y cyffyrddiad olaf ar y tu allan. Byddai'n eithriadol o gostus i gomisiynu trosllun farnis yn unswydd ar gyfer y cerbyd hwn ond yn ffodus iawn roedd rhan o banel o gerbyd a fu yn y ddamwain yn Welshampton ac a ddygai'r arfbais wedi goroesi. Tynnwyd llun hon, ei sganio a'i argraffu ag argraffydd lesyr, gan roi copiâu o'r maint cywir sydd yn union yr un fath, bron, â'r rhai gwreiddiol.

Y rhaglen gadwraeth ac ailadeiladu hon oedd y fwyaf a'r bwysicaf o'i bath o bell ffordd i ni ymgyrdd â hi erioed yn Amgueddfa Diwydiant a Môr Cymru. Daeth y dyddiad a bennwyd ddechrau 1997 ar gyfer cwblhau'r project a dadorchuddiwyd y cerbyd ar ddydd Sadwrn, Hydref 4ydd, gan Mr Tim Pearce Higgins o Ymddiriedolaeth Pearce Higgins. Er i'r Amgueddfa ei hun ddarparu'r adnoddau dynol i ymgyrdd â'r gwaith adnewyddu, roedd y cyfraniadau ariannol sylweddol iawn a gafwyd gan yr Ymddiriedolaeth ac a fu'n fodd i ni brynu'r holl ddeunyddiau a'r gwasanaethau allanol yn anhepgor i'r gwaith. Mae'r Amgueddfa yn hynod o ddiolchgar am y cyfraniadau hyn, a'n gobaith yn awr yw y bydd y cerbyd godidog hwn yn fodd i'n hatgoffa am yr oes aur ar ddechrau'r ganrif hon pan deithiai pobl o bob cwr o Loegr i ymweld ag Aberystwyth - brenhines trefi glan-môr Bae Ceredigion.

*Dr Stuart Owen-Jones, Ceidwad
Amgueddfa Diwydiant a Môr Cymru*

*Ymgymerwyd â'r gwaith rheoli o ddydd i ddydd ar project Cerbyd y
Cambrian gan Chris Perry gyda chymorth John Greenhall, ill dau yn
aelodau o staff ADMC*

Up to this stage all the work undertaken had been within the expertise of the museum's own conservation staff, but the next phase required external assistance. This was the provision of the upholstery for the two compartments for which a reasonable degree of information was available. The third-class upholstery was 'drab and lavender tapestry with worsted lace trimming', while the first class compartment had 'Tashmere tapestry trimmed with suitable laces.' Advice on these aspects was provided by staff at the Museum of Welsh Life.

It was inevitable that little information would be available on many of the smaller components within the coach, and one particular topic concerned the metal brackets which supported the luggage rack. Fortunately, information became available that such a bracket had survived the disastrous Cambrian Railways crash at Welshampton in 1897 and was preserved in a display case. Agreement was reached with the owner to borrow the bracket from which a pattern was made. Casts of this pattern were then made in the brass foundry of the Welsh Slate Museum at Llanberis.

The overall visual impression conveyed by most objects is, to a large extent, determined by the quality of the surface finish and the coach was no exception in this respect. The original specification for the coach described the nature of the 14 coats of paint which it was to receive; fortunately, modern paints do not require such methods. The lower half of the coach is finished in Cambrian Green, and it was fortunate that a sample dating from the original days of the Cambrian Railways had survived in the hands of a railway historian. This was used as a basis for mixing paint of the appropriate shade.

The external finishing touches were provided by the coat of arms of the Cambrian Railway Company and the Prince of Wales' feathers. To have commissioned varnish transfers for the minute numbers required here would have incurred a totally unacceptable cost and it was fortunate that part of a section of a coach panel bearing the coat of arms had survived from the same crash at Welshampton. This was photographed, scanned and laser printed to provide copies of the right size which are virtually indistinguishable from the original.

This conservation and reconstruction programme was by far and away the largest and most important of its type ever undertaken at the Welsh Industrial & Maritime Museum. The target set at the beginning of 1997 for the completion of the project was duly reached and the unveiling of the coach took place on Saturday, 4th October, with the honours being performed by Mr Tim Pearce Higgins of the Pearce Higgins Trust. Although the human resources to undertake the restoration were provided by the Museum, the project could not have been completed without the very substantial financial contributions from the Trust which allowed all the materials and the external services to be acquired. For these contributions the Museum is extremely grateful, and we can but hope that the glory of this coach will serve as a reminder of the halcyon days at the beginning of this century when people travelled from all over England to visit the queen of resorts in Cardigan Bay at Aberystwyth.

*Dr Stuart Owen-Jones, Keeper of the
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*The day to day running of the Cambrian Coach project was undertaken
by Chris Perry and assisted by John Greenhall, both members of
staff at WIMM*