

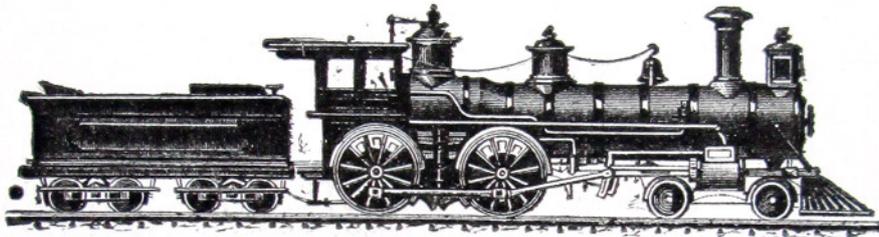
Part 8

Paraguayan steam locomotive list

©David Sinclair and Martin Coombs

v1.16 March 2024

This file can be found, along with the five Chilean parts in the series and single files for a number of other smaller South American countries, at <http://www.railwaysofthefarsouth.co.uk/05x03chileansteamlocos.html>



These lists, though benefitting from modern technology in both research and presentation, build upon those produced by many other investigators, from Wilfred Beckerlegge and Paul Dewhurst in the 1920s to John Kirchner and Allen Copeland eighty or ninety years later. As such, their content will, I hope, be helpful for researchers and authors in the future.

Feel free to use this material, though an acknowledgement would be appreciated.

General introduction

These lists grew from the publication of the book *Railways at the End of the World* (The Araucaria Press, 1 Fellview, Casterton, Westmorland, UK ISBN 978-0-9928622-0-6), back in 2014. During the research undertaken by David Sinclair and I when gathering information for that volume, it had sometimes been frustrating when locomotives in southern Chile could not be easily identified.

Once the book had been published there was more time available, and it gradually became obvious that a list of the engines of the Chilean state railways (*EFE*) would have to cover the whole country to be of any use, and thus the parts of the list expanded all the way up to Arica. In 2020, during the Covid lockdowns, the first moves were made to extend such cover to the other smaller South American countries, beginning with Ecuador and then moving on to Bolivia, Paraguay and Uruguay.

The foundations were built upon earlier lists created by others such as Allen Copeland, John Kirchner, and Reimar Holzinger. Additional information is being added bit by bit to their work. Photographs have also been added, though these have been kept small and at low resolution, partly to reduce the file sizes and partly to minimise the risk that copyright owners will object. I will be happy to remove items if anyone believes I have been too presumptuous. The main purpose of the images is in any case to enable locos spotted in other photographs elsewhere to be identified.

When high-resolution versions are likely to be available from museums and archives, this has been flagged up, to encourage interested readers to purchase what they need from those who care for historic drawings or photographs.

As news of this work has spread, assistance has come from a large number of other researchers, including in particular Andrew Batory, Derek Hyland, Harold Middleton Nagel, Pablo Moraga Feliu, Martin Murray, Jens Schindler, John Schultz and Chris West. Grateful thanks is due to their selfless willingness to share information and images.

Whilst many of the written sources consulted have been in Spanish, these lists are currently solely available in English. This partly results from my own lack of linguistic confidence, but is also a reflection of the fact that keeping a fast-changing document synchronised in two different tongues is very time-consuming. Nevertheless, quotes from historic documents have usually been left in Spanish and it is to be hoped that in the future a Spanish version of the whole work can be created.

Close examination of these pages is likely to remain strictly a minority interest, whilst even fewer are likely to print out all 4600+ pages! Thus the files have been designed to be read on screen, with hyper-links from the contents page to aid in finding each section. The density of information is likely to discourage browsing on a mobile phone, but gradually the layout is being optimised for display on tablets as well as larger computers.

It will be obvious that this is a work still in progress, with updates being uploaded to the web on a quarterly basis at present. Comments, additional items of information or images, and suggestions to improve the layout, would all be very much appreciated, and the author can be contacted at martincoombs11@gmail.com

This Paraguayan list

T

Introducción general

Estas listas crecieron a partir de la publicación del libro Ferrocarriles en el fin del mundo (The Araucaria Press, 1 Fellview, Casterton, Westmorland, UK ISBN 978-0-9928622-0-6), en 2014. Durante la investigación realizada por David Sinclair y yo cuando recopilábamos información para ese volumen, a veces había sido frustrante cuando las locomotoras en el sur de Chile no podían identificarse fácilmente.

Una vez que se publicó el libro hubo más tiempo disponible, y gradualmente se hizo evidente que una lista de las locomotoras de los Ferrocarriles del Estado de Chile (EFE) tendría que cubrir todo el país para ser útil, y por lo tanto las partes de la lista ampliada hasta Arica. En 2020, durante los bloqueos de Covid, se dieron los primeros pasos para extender dicha cobertura a los otros países sudamericanos más pequeños, comenzando con Ecuador y luego pasando a Bolivia, Paraguay y Uruguay.

Los cimientos se construyeron sobre listas anteriores creadas por otros como Allen Copeland, John Kirchner y Reimar Holzinger. Se está agregando información adicional poco a poco a su trabajo. También se han agregado fotografías, aunque se han mantenido pequeñas y de baja resolución, en parte para reducir el tamaño de los archivos y en parte para minimizar el riesgo de que los propietarios de los derechos de autor se opongan. Estaré encantado de eliminar elementos si alguien cree que he sido demasiado presuntuoso. El objetivo principal de las imágenes es, en cualquier caso, permitir la identificación de locomotoras vistas en otras fotografías en otros lugares. Cuando es probable que haya versiones de alta resolución disponibles en museos y archivos, esto se ha señalado para alentar a los lectores interesados a comprar lo que necesitan de aquellos que se preocupan por dibujos o fotografías históricas.

A medida que se ha difundido la noticia de este trabajo, ha llegado la ayuda de un gran número de otros investigadores, incluidos en particular Andrew Batory, Derek Hyland, Harold Middleton Nagel, Pablo Moraga Feliu, Martin Murray, Jens Schindler, John Schultz y Chris West. El agradecimiento se debe a su disposición desinteresada para compartir información e imágenes.

Si bien muchas de las fuentes escritas consultadas están en español, estas listas actualmente solo están disponibles en inglés. Esto se debe en parte a mi propia falta de confianza lingüística, pero también es un reflejo del hecho de que mantener un documento que cambia rápidamente sincronizado en dos idiomas diferentes lleva mucho tiempo. No obstante, las citas de documentos históricos se han dejado habitualmente en español y es de esperar que en el futuro se pueda crear una versión en español de la obra completa.

Es probable que un examen minucioso de estas páginas siga siendo estrictamente un interés minoritario, ¡mientras que es probable que incluso menos impriman las más de 4600 páginas! Así, los archivos han sido diseñados para ser leídos en pantalla, con hipervínculos desde la página de contenidos para ayudar a encontrar cada sección. Es probable que la densidad de la información desaliente la navegación en un teléfono móvil, pero gradualmente el diseño se está optimizando para mostrarse en tabletas y en computadoras más grandes.

Será obvio que este es un trabajo aún en progreso, con actualizaciones que se cargan en la web trimestralmente en la actualidad. Comentarios, elementos adicionales de información o imágenes, y sugerencias para mejorar el diseño, serán muy apreciados, y se puede contactar al autor en martincoombs11@gmail.com

Esta lista paraguaya

T

List of contents

Red text = hyper-links to appropriate pages.

	pages	
8.1	5' 6" gauge railways	
8.1.1	El FC de la Asunción a la Villa Rica, later the Paraguay Central Railway	11
8.2	Standard gauge railways	
8.2.1	The Paraguay Central Railway post 1913	32
8.2.2	The Asunción steam tramway	51
8.2.3	Loco for an unidentified location	57
8.3	Metre gauge railways	
8.3.1	La Azucarera Paraguaya at Tebicuary, 2nd generation	58
8.3.2	José Fassardi at Puerto Casado	64
8.3.3	La Cía. Internacional de Productos at Pto. Pinasco	65
8.3.4	El FC Nacional del Norte at Concepción	67
8.3.5	FC Quebrachales Fusionadas at Puerto Max or Puerto María	72
8.4	2' 6" and 75 cm gauge railways	
8.4.1	La Azucarera Paraguaya at Tebicuary, 1st generation	73
8.4.2	Cía. Carlos Casado SA at Puerto Casado	74
8.4.3	El FC Campos y Quebrachales Puerto Sastre	84
8.4.4	La Cía. Puerto Ibabobo	87
8.4.5	El FC Sociedad Forestal de Puerto Guarani	88
8.4.6	FC Forestal y Agropecuaria José Fassardi at Fassardi station on the Abai branch of the FCCP	89
8.4.7	Quebracho SA, location unknown	91
8.4.8	The River Plate Quebracho Co. at Puerto Palma Chica	92
8.5	60 cm gauge railways	
8.5.1	Don Pedro Christopherson at Carmen del Paraná	93
8.5.2	FC Quebrachales Fusionadas at Puerto María or Puerto Max	94

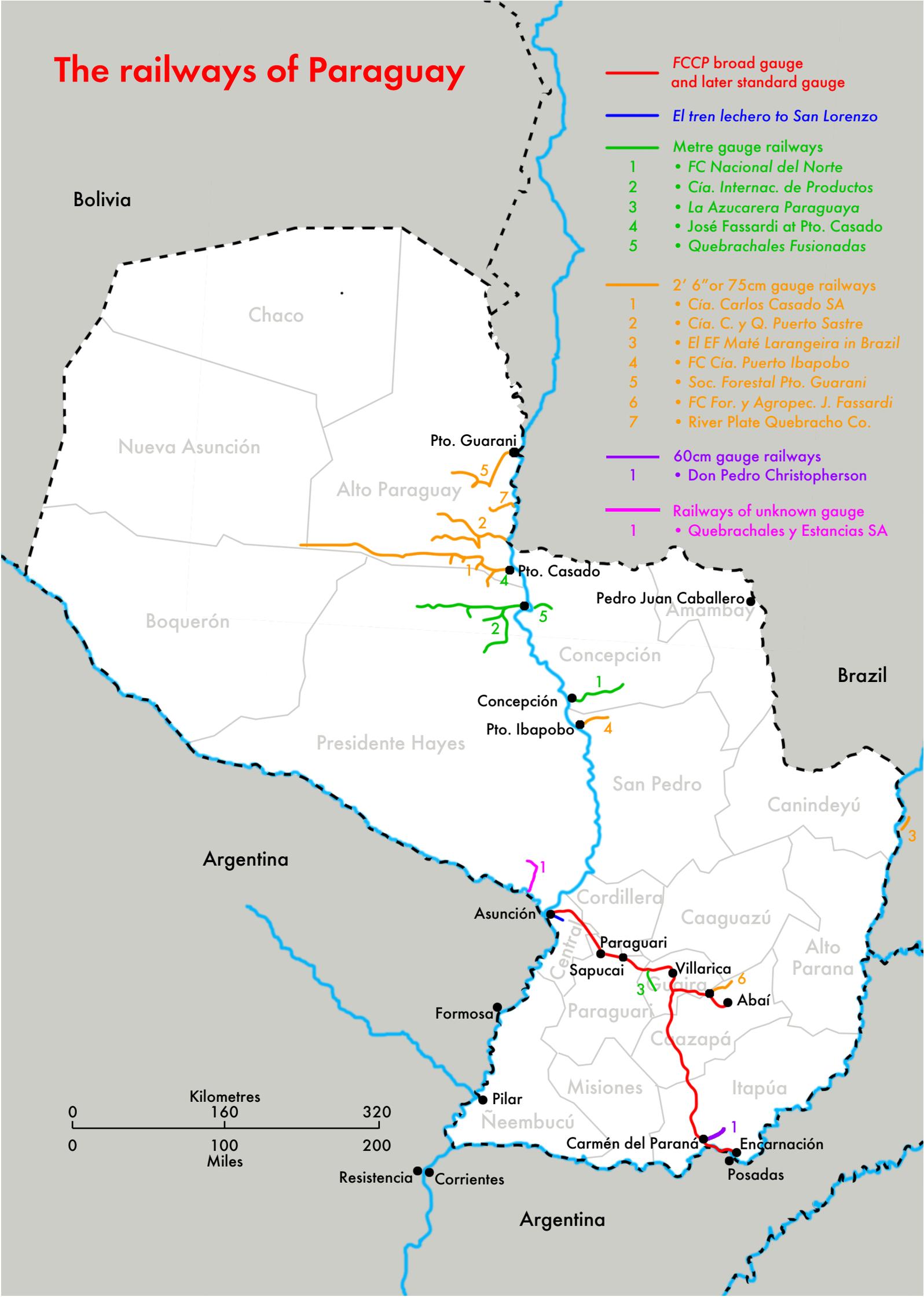
8.6	Railways of unknown gauge	
8.6.1	<i>The Curuzú / Curupayty military railway</i>	95
8.6.2	<i>El FC Quebrachales y Estancias at Puerto Galileo</i>	96
8.6.3	<i>The American Quebracho Company SA</i>	97
8.6.4	<i>El FC San Lorenzo – Palo Blanco</i>	98
8.6.5	<i>El FC Buena Vista – Comparada</i>	99
8.6.6	<i>Industria Nacional del Cemento</i>	100
8.6.7	<i>A railway at Puerto Mihanovitch</i>	101
8.7	Unidentified locomotives	102
8.7	Appendices	
8.7.1	<i>Boiler explosion photos</i>	104
8.8	Index of loco builders	106

Other parts of this work

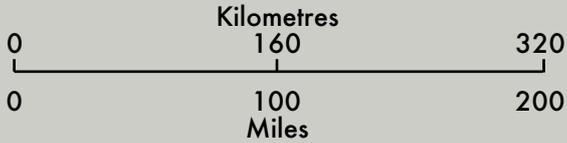
This is one of a number of PDF files covering the steam locomotives of Chile and several of the smaller South American countries across a wide variety of gauges. The other files can be accessed by clicking on the red hyperlinks listed below. It is hoped that further files will be added in due course.

- [Part 1](#)** **[Chilean broad gauge locos](#)**
 - [Part 2](#)** **[Chilean intermediate gauge locos](#)**
 - [Part 3](#)** **[Chilean metre gauge locos](#)**
 - [Part 4](#)** **[Chilean sub-metric gauge locos](#)**
 - [Part 5](#)** **[Chilean locos listed by builders](#)**
 - [Part 6](#)** **[Ecuadorian locomotives](#)**
 - [Part 7](#)** **[Bolivian locomotives](#)**
 - [Part 8](#)** **[Paraguayan locomotives](#)**
 - [Part 9](#)** **[Uruguayan locomotives](#)**
 - [Part 10](#)** **[Venezuelan locomotives](#)**
 - [Part 11](#)** **[Guianan locomotives](#)**
 - [Part 12](#)** **[Colombian locomotives](#)**
 - [Part 13](#)** **[Peruvian standard gauge locomotives](#)**
 - [Part 14](#)** **[Peruvian narrow gauge locomotives](#)**
 - [Part 15](#)** **[Panamanian locomotives](#)**
 - [Part 16](#)** **[Central American countries locomotives](#)**
-

The railways of Paraguay



- FCCP broad gauge and later standard gauge
- El tren lechero to San Lorenzo
- Metre gauge railways
 - 1 • FC Nacional del Norte
 - 2 • Cía. Internac. de Productos
 - 3 • La Azucarera Paraguaya
 - 4 • José Fassardi at Pto. Casado
 - 5 • Quebrachales Fusionadas
- 2' 6" or 75cm gauge railways
 - 1 • Cía. Carlos Casado SA
 - 2 • Cía. C. y Q. Puerto Sastre
 - 3 • El EF Maté Larangeira in Brazil
 - 4 • FC Cía. Puerto Ibabobo
 - 5 • Soc. Forestal Pto. Guarani
 - 6 • FC For. y Agropec. J. Fassardi
 - 7 • River Plate Quebracho Co.
- 60cm gauge railways
 - 1 • Don Pedro Christopherson
- Railways of unknown gauge
 - 1 • Quebrachales y Estancias SA



Notes and sources

The structure of this document is based upon the earlier ones for Chilean locos. The starting point was the locomotive list created by John Kirchner and Allen Copeland. Further sources are as listed. In general the locos ordered for the wider gauges have been covered first, then the narrower ones.

Sources

- [1] *Paraguay Railroads locomotive list*, Allen Copeland and Dr. John Kirchner, various versions to 2014.
- [2] *El ferrocarril en la Guerra del Paraguay*, Jorge Waddell, in *Todo Trenes* issue 92, p32-4.
- [3] *Paraguay and the Triple Alliance: The Postwar Decade, 1869-1878*, H. G. Warren and K. F. Warren, 1978?, University of Texas Press.
- [4] *Letters from the Battlefields of Paraguay*, Sir Richard Burton, 1870, Tinsley Brothers, London. <https://archive.org/details/lettersfrombattl00burt/page/462/mode/2up>
- [5] *The Railways of Paraguay*, T. R. Seymour, 1947, US Dept. of Commerce Industrial Reference Service. <https://books.google.co.id/books?id=cicoAAAAMAAJ&pg=PA1&dq=The+Railways+of+Paraguay,+by+T+R+Seymour+1947&hl=en&sa=X&ved=2ahUKEwjgnuXzs8fqAhWRrZ4KHSMeARoQ6AEwAXoE-CAUQA#v=onepage&q=The Railways of Paraguay, by T R Seymour 1947&f=false>
- [6] *The war in Paraguay : With a historical sketch of the country and its people and notes upon the military engineering of the war*. George Thompson, 1869, Longman Green & Co. London. <https://babel.hathitrust.org/cgi/pt?id=hvd.32044011556099&view=1up&seq=>
- [7] *Railways of South America, Part II*, W. Rodney Long and George S. Brady, 192?, US Dept. of Commerce Trade Promotion Series.
- [8] *Transportation in Paraguay*, R. Henry Rowntree, 1944, Coordinator of Inter-American Affairs, Research Division.
- [9] Reimar Holtzinger's Paraguay locos list, courtesy of SLS library.
- [10] *Unsuccessful Paraguayan imports from Argentina*, Ian Thomson, 1997, in *Locomotives International* issue no. 39.
- [11] *Broad gauge Paraguayan Locomotives in 1916*, Jorge Waddell, 1999. Article in *Locomotives International* issue no. 49.
- [12] *Paraguay Sentinels: the end and the beginning*, Ian Thomson Newman, 2016, in *Locomotives International* issue no. 100.
- [13] *The Railways of South America*, Trevor Rowe, 2000, *Locomotives International*.
- [14] Summary by Jim Ballantyne in *Locomotives International* issue 120, Aug./Sept. 2019, p63.
- [15] Brazil - Paraguay Treaty 1941, available at <https://www2.camara.leg.br/legin/fed/decret/1940-1949/decreto-7414-19-junho-1941-335687-publicacaooriginal-1-pe.html>
- [16] 'Back track' notes by Dr. Paul Waters in *Locomotives International* issue no. 59, p28.
- [17] *Paraguay Central Railway Broad Gauge Locomotive History*, Dr. Paul Waters, 1997, in *British Overseas Railways Journal* no. 15.
- [18] *Paraguay Central Railway – 6 Control by Percival Farquhar – Rodriguez funds a revolt*, Dr. Paul Waters, 1997, in *British Overseas Railways Journal* no. 16.
- [19] *Paraguay Central Railway – 7 Control by bond holders*, Dr. Paul Waters, 1997, in *British Overseas Railways Journal* no. 17.
- [20] *La república del Paraguay en su primer centenario, 1811-1911*, Ramón Monte Domecq, 1911, Buenos Aires, Compañía sud-americana de billetes de banco.

Dimensions

Imperial unit driving wheel and cylinder dimensions, ie. in inches have been added if it seems likely that they were originally created in that system.

Photographs

Photos have been added here solely to aid in the identification of locos seen in other images elsewhere. They have been found from many different sources, and may still be in copyright. For those reasons, and to keep the file sizes down, they are of low resolution, the majority being only 600 pixels across. The names of photographers will be added as time permits. As these documents are likely to have a very limited readership and are not being produced commercially, it is hoped that copyright holders will understand and permit their presence here. If not, please contact the author and they can be removed.

Baldwin loco classes and specification sheets

Baldwin loco details in the following lists usually include the class and a volume and page reference to the appropriate spec. sheet. These can be found at <https://digitalcollections.smu.edu/digital/collection/rwy/id/32> amongst the collections at the DeGolyer Library of Southern Methodist University in Texas. An explanation of Baldwin's class system can be found at <https://guides.smu.edu/c.php?g=1029481&p=7460937>

Large scale maps of Paraguay

Renaud Olgiati's website displays a number of 1979 Russian maps of Paraguay created at the scale of 1:500,000 or 2 cms/10 km, which equates to roughly 7.5 miles/1 inch. These show the majority of the railways listed in this file, though obviously an ability to read Cyrillic letters is an advantage when perusing them. They can be accessed from <https://olgiati-in-paraguay.org/RussianMaps/index.html>

Railway names and abbreviations

Railways in Paraguay

<i>FCCP</i>	<i>Ferrocarril Central del Paraguay</i>	Central Railway of Paraguay. For many years this company was owned by the same interests who controlled the Argentine railways mentioned below.
<i>FCP</i>	<i>Ferrocarril Central del Paraguay</i>	A shorter abbreviation for the same railway.

Railways in adjacent countries

<i>FCER</i>	<i>Ferrocarril Entre Rios</i>	The Entre Rios Railway, British-owned and mainly operating in Entre Rios province. Managed after 1915 jointly with the adjacent Argentine North-Eastern Railway, which see below. Nationalised in 1948 as part of the <i>FC Nacional Gral. Urquiza</i> , which also see below.
<i>FCNEA</i>	<i>Ferrocarril Nordeste Argentino</i>	The Argentine North-Eastern Railway, operating the Corrientes and Misiones Provinces in the far north-east of Argentina. Managed after 1915 jointly with the adjacent Entre Rios Railway, which see above. Nationalised in 1948 as part of the <i>FC Nacional Gral. Urquiza</i> , which see below.
<i>FCNGU</i>	<i>Ferrocarril Nacional General Urquiza</i>	The post 1948 Argentine state-owned railway encompassing all standard gauge routes in the north-east of the country.

Other abbreviations

d/w	driving wheels
cylns.	cylinder bore and stroke
w/n	works or builders' numbers

8.1 Broad gauge railways in Paraguay

8.1.1 *El Ferrocarril de la Asunción a la Villa Rica*

1856-1887

The Paraguay Central Railway Co.

1887-1913

Background

5' 6" gauge. This broad gauge line was one of the earliest railways to be built in the whole of South America. It was constructed in stages working south and east from Asunción. Little evidence of the broad gauge infrastructure remains other than the fine station building in the centre of Asunción, which now houses a railway museum.

The first section of line, opened in June 1861, extended from Central Station in Asunción to Trinidad; then to Luque on 25 December 1861; in mid 1862 it was further extended to Areguá. The final section to Villarrica reached Paraguari in September 1886; Ybytymí on 12 June 1889 and Villarrica itself on 25 December 1889; it included six stations.

The railway in the broad gauge era was initially owned by the State, sold to a Sr. Patri and then re-purchased by the government. It was then sold to a British company, the Paraguay Central Railway Co. During the first part of the era there is no information so far discovered about locomotive numbers; indeed, the suspicion must be the locomotives were identified by name only. What information is known about the locomotives has been derived largely from information from outwith Paraguay. While, at first sight, this might seem surprising, it should be remembered that Paraguay was involved with the War of the Triple Alliance between 1865 and 1869, which almost exterminated the male population. This had the effect of stalling progress on the development of the railway for a great many years.



The original locomotives were built by Krupp, so the story is, and were intended for the Crimea! That is highly unlikely, both because Krupp did not begin building locomotives until after WW1 and because the Grand Crimean Central Railway – of standard gauge not broad – built to supply the army north of Balaklava was a wholly British affair. However, Sir Richard Burton, he who translated *One Thousand and One Nights* no less, wrote in his *Letters from the Battlefields of Paraguay* [4 p460], that “The asthmatic little engine – which after serving its time upon the Balaklava

line, and being condemned as useless at Buenos Aires, had been shipped off to Paraguay – was driven by a Brazilian officer in goggles.” The story thus has had a long history.

For the first step of the modernization four locomotives (later Clase I), 20 tapados [tarpaulin], 40 mesa [flat], 5 cajón [box] wagons and two saloons, four 1st, eight 2nd and twelve 3rd class coaches were acquired in connection with the extension of the line to Villarrica.

All locomotives were wood fired.

Over this period there were eight locomotives recorded, but only a couple seem to have survived to be incorporated into the modernised fleet after 1887.

The pre-war broad-gauge locomotives

2-2-2WT d/w 60", cyls. 10x15" built by Wm. Fairbairn & Sons probably in 1858

Ordered via John and Alfred Blyth of Limehouse for the Central Railway of Paraguay.

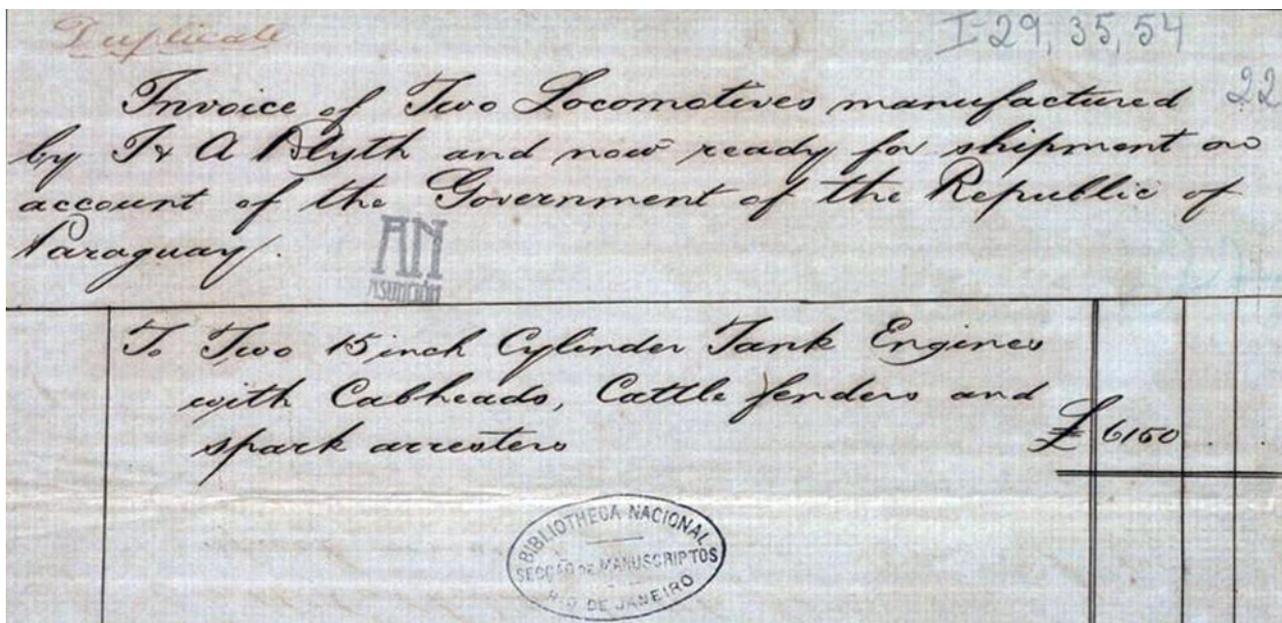
? ‘PARAGUAY’ w/n ? Hauled first train on Oct. 21, 1861. Later converted to 4-2-2WT and carried name ‘SAPUCAY’ or ‘SAPUCAI’ (both spellings were carried at different times). Later numbered **10**, and then **13** by 1905. Placed on display in Asuncion Station.

2-4-0 d/w ?, cyls. 15x? ", built by Slaughter Gruning in 1861

Ordered via John and Alfred Blyth. Possibly 4-4-0s, Reimar Holzinger's list suggests, though no evidence for that is given. A partial photo of ‘VESUVIO’ found by Dr. Paul Waters was published in *Locomotives International* no. 59. Whilst the front end of the loco is missing from the image, it certainly appears to be a 2-4-0.

? ‘VESUVIO’ w/n ?

? ‘?’ w/n ?



Chris West points out that the price quoted seems very high for the period.

Note that this invoice refers to ‘tank engines’, which is a puzzle.

2-4-0T or 0-4-2T? d/w 60", cyls. 13x20", built by R. & W. Hawthorn in 1864

Ordered via Burrell and Valpy? in May 1864?, for the Asunción and Villa Rica Railway, but not delivered owing to the War of the Triple Alliance. Sold in 1866 to India. If these are indeed nos. 1277-8 then Hawthorn list SLS WL8723 shows them with the above dimensions but as 0-4-2Ts, sold to the Bombay Reclamation Company. SLS WL10320 on the other hand says they were 2-4-0Ts. R&WH order book 2 confirms that they were four-coupled with a single carrying wheelset, but does not specify the actual arrangement. The book confirms that they were sold to the

Bombay Reclamation Co. (Mr. Michael Scott, engineer) and left the works by rail in February 1866.

(?) w/n 1277

(?) w/n 1278

The War of the Triple Alliance

Paraguay became embroiled in a war against Brazil, Argentina and Uruguay in 1864, largely over competing land claims. This had truly catastrophic results for the country. The war lasted until 1869 and Paraguay remained occupied until 1876.

What follows has been largely distilled from an article in *Todo Trenes* by the Argentine railway historian don Jorge Waddell [2].

The war progressed 'til in 1869, the forces of Argentina, Brazil and Uruguay, with the impending collapse of Paraguay, approached Asunción, and the Paraguayan leader, Francisco Solano López, son of Carlos Antonio López, who initiated the railway, fell back on Asunción using a train hauled by the only serviceable locomotive on the line. When the allied troops entered Asunción they noted that there was also an engine unusable there, implying that at that time there must have been at least two locomotives on the line.

The retreating Paraguayan army had destroyed the railway bridge at Yugrú. Thus the allies could only make use of the railway between Luque, where their main army camp was located, and Asunción, using oxen as motive power.

The occupying army took two separate steps in connection with the railway, attempting to repairs the locomotive(s) in Asunción and seeking replacements from the Argentine government. The Argentine government approached the Buenos Aires provincial government, owners of the *FC Oeste*, for assistance. One locomotive, one coach and nine wagons were at once released and sent north, whereby a railway service between Asunción and Luque was established.

The condition of the line was severely affected by its military use and it was subject to periodic sabotage by, it is said, local hauliers whose traffic had been taken by the railway.

Ultimately, a total of five engines from the Argentine *FC Oeste* were sent to Paraguay, four of which were operated by the Argentine army. The fifth engine, the 4-4-0 'INDUSTRIA', was acquired by the Brazilian army for its own use, and ultimately named 'GASTAO d'ORLEANS'. It was later passed to a private contractor to operate. Co-ordination between the Argentine and Brazilian operations on the line were non-existent. See later paragraph on wartime loco use for more detail.

Second-hand locos from Argentina, brought in during the war

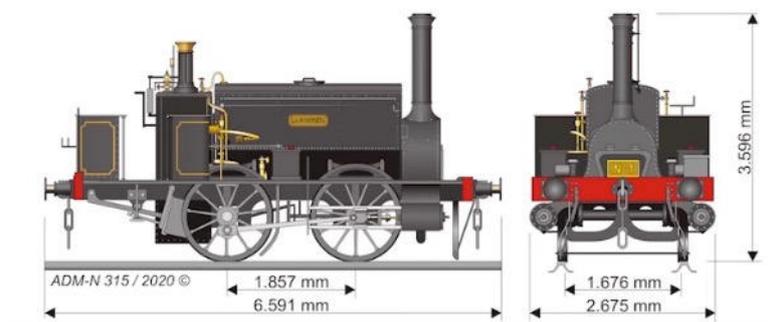
0-4-0ST but possibly later 2-2-0ST d/w 48", cyls. 10x15", built by E. B. Wilson in 1856

Ordered for *Societas del Camino de Hierra de Buenos Aires al Oeste* no. 1 'La ARGENTINA'. Name changed to *FC Oeste de Argentina* no. 1 on 1-1-1863. Sold in 1869 to *FC del Estado del Paraguay* for use by Argentine forces in later stages of the war. NB A number of sources suggest that *Oeste* no. 1 was 'La PORTEÑA', now preserved in Buenos Aires, and that the 'La ARGENTINA' had been no. 2.

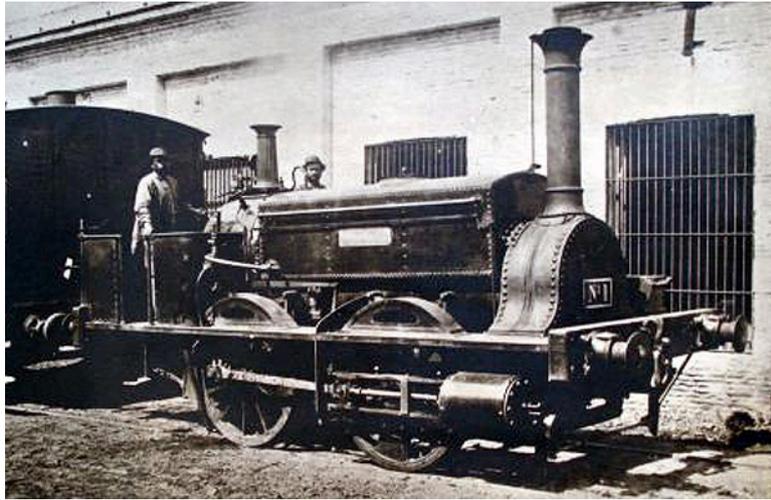
2? 'La ARGENTINA'

w/n 571

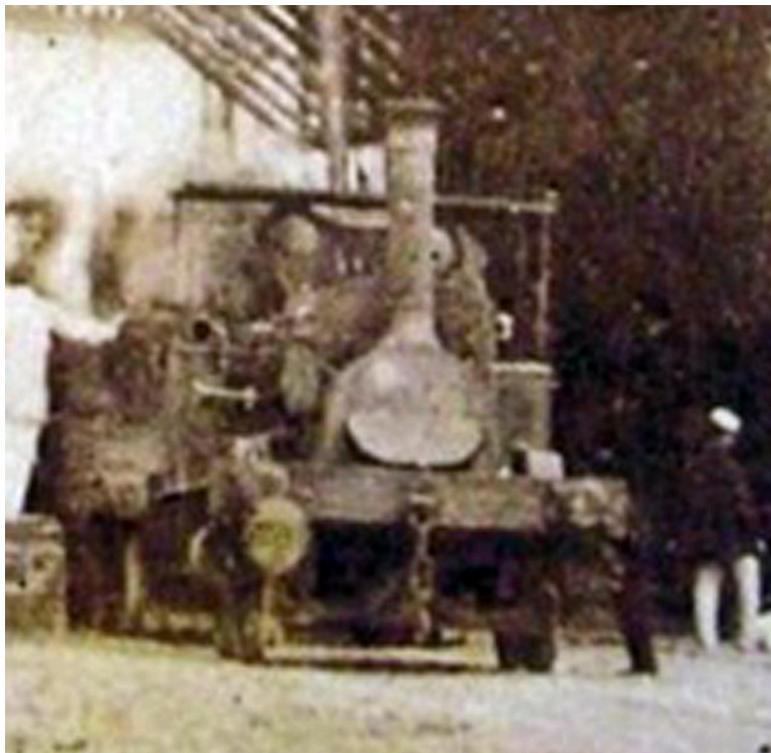
The name may of course have been changed on the engine's arrival in Paraguay.



Coloured drawings of 'La PORTEÑA' preserved in Buenos Aires. Artist unknown.



Here is FC Oeste sister loco 1 'La PORTEÑA' which is preserved at Buenos Aires.



This engine, seen at Asunción station supposedly in 1870, would appear to be no. 2 'La ARGENTINA' as it seems to be very similar to the loco illustrated above. Strangely, the smokebox door looks to be open so it presumably was cold at the time the photo was taken.

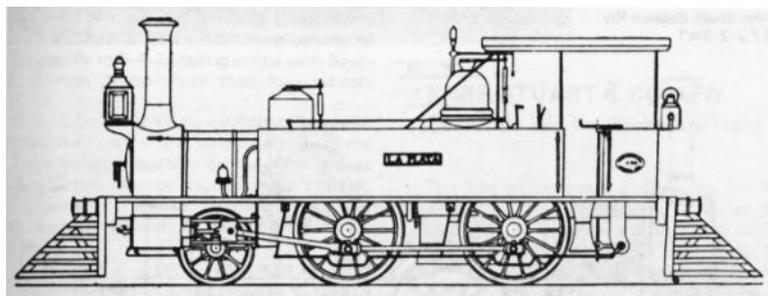
2-4-0T d/w 54", cyls. 12x18", built by John Jones in 1861

Ordered for *Sociedad del Camino de Hierro de Buenos Aires al Oeste* as nos. 5 'RAPIDEZ' and 6 'PUNTUALIDAD'. Railway absorbed into *FC Oeste de Argentina*, nos. 5 and 6 on 1-1-1863. Sold 1869 to *FC del Estado del Paraguay* for use by Argentine (or possibly by Brazilian – see quote below) forces in later stages of the war. Jorge Waddell says these were in very poor condition. NB The Jones & Potts / John Jones list is very incomplete, and thus the builders' numbers for these two locos cannot be checked.

? '?' w/n 333 Source [3] says that these two locos were renamed 'HERVAL' and
? '?' w/n 334 'POLIDORA' whilst in use by the Brazilian army during the war.
Herval is a town in the south of Brazil but the significance of
Polidora is as yet unknown.



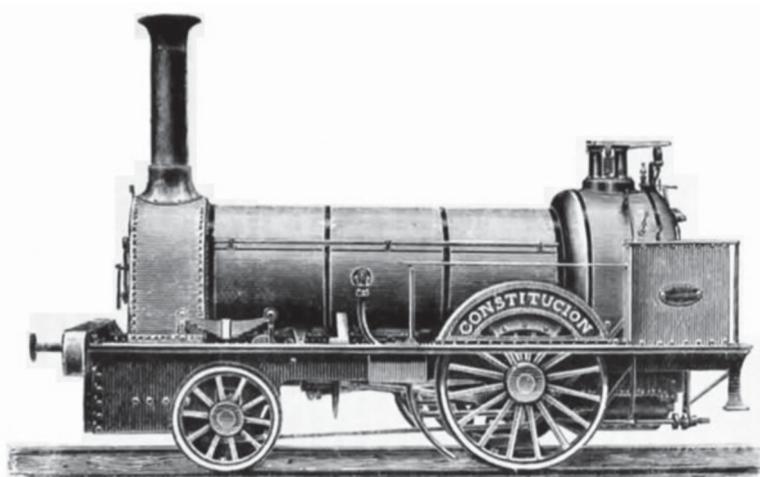
These two images would seem to show the derelict frames and wheels of one of the two John Jones 2-4-0Ts, as photographed at Sapucay around 1943. The prints were sent to P. C. Dewhurst, then in Uruguay, in response to an enquiry that he had made to F. L. Stafford, the Central of Paraguay's CME. The identification of this engine as having been by Jones relies on the wheel diameters, spacing and spoke numbers seeming to match the known proportions of similar John Jones locomotives, and the fact that no other 2-4-0 is known to have worked on the railway. Close examination of higher resolution versions of these images suggests that the rods were arranged with the connecting rods inside of the coupling rods, not a common arrangement but one which was perfectly practicable if as here the connecting rod drove on the front pair of driving wheels.



John Jones no. 338 of 1863 was supplied to the Buenos Ayres Northern Railway. Apart from having driving wheels of 55" diameter instead of 54", this was probably very similar indeed to the Buenos Aires al Oeste engines sold to Paraguay. This sketch comes from James W. Lowe's book *British Steam Locomotive Builders*, p353.

2-2-0 d/w 60", cyls. 12½x18", built by Sharp Stewart in 1859

Ordered as SS order E351 by F. Fry, Birmingham, England for *Sociedades del Camino de Hierra de Buenos Aires al Oeste* no. 3 **'La CONSTITUCION'**. Railway absorbed into *FC Oeste de Argentina*, no. 3 on 1-1-1863. Sold in 1869 to *FC del Estado del Paraguay* for use by Uruguayan forces in the later stages of the war. NB Brian Rumary's SS list shows nos. 1124-5 as being *FC Oeste* nos. 1 and 2, ie the locos mentioned above as **'La PORTEÑA'** and **'La ARGENTINA'** and as delivered via Fox of Birmingham. The engraving pictured below, on the other hand, was entitled as being for the 'Spanish State Railways 1859', a year in which the only 2-2-0s SS built were a pair for Argentina. 3? **'La CONSTITUCION'** w/n 1124



Precise identification of early locomotives can be exceedingly difficult. However, this early Sharp Stewart 2-2-0, supposedly from 1859 and named **'CONSTITUCIÓN'**, is at least a possible candidate for the loco of that name which came to Paraguay.

4-4-0 d/w 65/66"?, cyls. 13x18", built by Sharp Stewart in 1863

Ordered as part of SS order E448 for *FC Oeste de Argentina* no. 5 **'INDUSTRIA'**. Sold 1869 to *FC del Estado del Paraguay*. for use by Brazilian forces in the later stages of the war. NB Sources differ on the precise running number and builder's number for this loco. SS no. 1463 is often quoted.

? **'GASTAO d'ORLEANS'** w/n 1462 Gastão d'Orleans, Comte d'Eu, was the Brazilian commander during the war in Paraguay. Rebuilt at unknown date and renumbered **15 'BAREIRO'**, probably around 1878-80 when Sr. Bareiro was President of Paraguay and just after the withdrawal of the occupying Triple Alliance, one of whose leaders the Comte d'Eu had been. This loco had a long life on the railway. It was out of service by the time of the gauge conversion but the hulk survived until the 1940s; see below.

Wartime loco working

"A major casualty of war was this *Ferro-Carril del Estado*, or State Railway, which Lopez attempted to destroy as he retreated before advancing Brazilian forces. When the Allies occupied Asunción, there was but one dilapidated locomotive in the city, and not until June 20, 1869, did an engine reach Pirayú. By importing a few used locomotives, repairing what little rolling stock remained, patching the road-bed, and rebuilding destroyed bridges, the Allies restored a semblance of service. For a few months they operated four trains. The *Ferro-Carril Empresa Brasileira* (Brazilian Railway Enterprise) by October ran two trains between Asunción and Pinayú; the Argentine train went only to Areguá. Not to be outdone, the Uruguayans also had a train, which apparently went nowhere. Most of the rolling stock belonged to the Brazilian train. Its three locomotives, the "Gastão de Orleans," "Herval," and "Polidora," shared the task of pulling an assortment of forty-six wagons and coaches. The Argentines had one locomotive, "La Argentina," which had a stock of ten decrepit wagons, and the Uruguayans could boast of only the rickety "Constitución," which had a

stable of two old cargo cars and one passenger coach. Five locomotives and sixty wagons and coaches would have been respectable equipment had they been in good running order and placed under one manager, but riding the train was a hazardous venture:

The train is miserable, shabby and uncomfortable; the high windows and hard benches suggest the notion that the first class carriages were originally intended for carrying horned cattle, but people need look for no creature comforts today in Paraguay, and it seems indeed unaccountable how a railway coach ever got into the country at all.” [3]

0-6-0ST d/w 42", cyls. 13x20", built by Fox Walker in 1873

Ordered as Fox Walker order 317 for Paraguay. Sources conflict but this may well have been for the broad gauge, and would then have almost certainly been for this railway. However, if that was the case, then why is there no obvious gap for it in the later numbering scheme and why did it not survive to appear in the diagrams poster (See below) in 1905?

? ‘?’ w/n 183

Changes of ownership

After the war and the subsequent occupation by Alliance forces had ended in 1876, the government sold the railway to don Luis Patri, a wealthy businessman who extended the line onward from Paraguari to Villa Rica, but in 1886 the state bought it back again. The following year a deal was signed with a British company, Perry Cutbill de Lungo & Co., to begin a further extension toward Encarnacion on the Argentine border, but the contractor eventually went bankrupt. By then, in early 1889, the Paraguay Central Railway Co. Ltd. had been formed in London to take on the ownership and operation of the line.

That final 19th century change in ownership, and perhaps, more importantly, management, meant that the railway was then in a position to engage experienced railway engineers, rather than having to depend on military engineers from within the army, as it had been when it was run by the state. It marked the start of a re-equipping of the motive power with a number of British engines. From information about the dates relating to the purchase of locomotives, the series of sketches (a primitive form of locomotive diagram, interestingly using the metric system) which are used to illustrate the locomotives would appear to have been compiled between about 1904 and 1907, but not kept going after that date. It is clear that there were some re-numberings in this period, apparently to keep the new-build engines ahead of the engines which were inherited from the State railway.

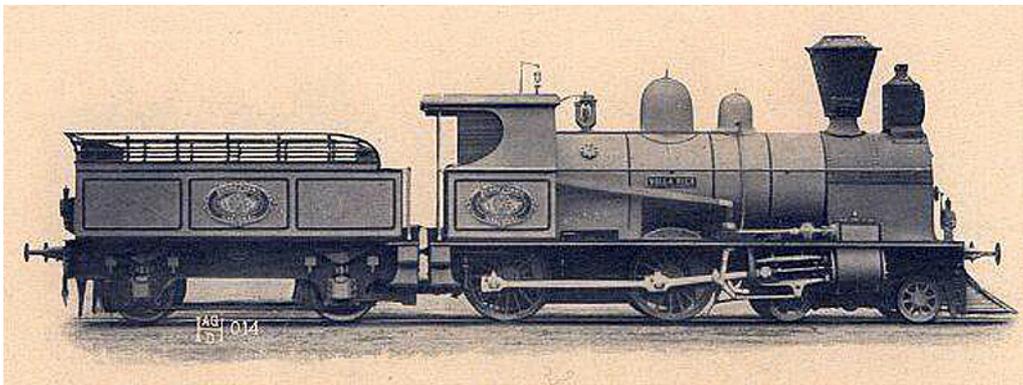
Engines purchased via the contractor Perry Cutbill de Lungo & Co.

This contractor built the route extension to Villa Rica. Source [16] suggests that the first four engines listed below were transferred to the Paraguay Central Railway Co. at the end of 1889. The second four then arrived and entered service in early 1890.

4-4-0 d/w 52", cyls. 19¾x17¼", built by Hohenzollern in 1888

When a British company, Perry Cutbill de Lungo & Co., took on the task of extending the railway, and began to construct toward the River Parana at Encarnacion, four locomotives were ordered for this extension. They were ordered via J. C. Schuchard of Bremen for the *FC Nacional del Paraguay*. They entered service in 1889. Mr. F. L. Stafford, CME of the railway in the early 1940s, commented in a letter to P. C. Dewhurst on the notably massive construction of these engines.

‘VILLA RICA’	w/n 432	Named after town in department of Guairá.
‘ESCOBAR’	w/n 433	Named after Presidente Patricio Escobar, president of the republic 1886-1890.
‘PROGRESO’	w/n 434	
‘CABALLERO’	w/n 435	Named after Pedro Juan Caballero, hero of the independence movement.



'VILLA RICA' as illustrated in a Hohenzollern catalogue.

4-6-0T d/w 54", cyls. 17x26", built by Black Hawthorn in 1889

Ordered 23rd July 1889 by Perry Cutbill de Lungo & Co. for the Paraguay Central Rly. These entered service in January and March, 1890. The Black Hawthorn list suggests that the running numbers for the final two might have been 3 and 4, but gives no numbers for the first two. Allan Baker in *The Industrial Locomotive* issue no. 43 says the cyls. were 17x24".

- | | | |
|----------------------------|---------|--|
| 5 'CAMPANA' | w/n 978 | |
| 6 'YURI' or 'YUTY'? | w/n 979 | Named after an historic town in the south-east of the country. |
| 3 'BORJA' | w/n 982 | Named after town near Villarrica, on line to Encarnación. |
| 4 'SAN PEDRO' | w/n 983 | Named after town north-east of Asunción. |

May have been first numbered 4, 2, 3, 1. Nos. 3-4 renumbered 7-8 in 1905.

The fleet ordered / used by the Paraguay Central Railway Co. post-1889

4-4-0 d/w 52", cyls. 19³/₄x17¹/₄", built by Hohenzollern in 1888

Inherited from the contractors Perry Cutbill de Lungo & Co.

- | | | |
|-----------------------|---------|---|
| 1 'VILLA RICA' | w/n 432 | Named after town in department of Guairá. |
| 2 'ESCOBAR' | w/n 433 | Named after Presidente Patricio Escobar, president of the republic 1886-1890. |
| 3 'PROGRESO' | w/n 434 | |
| 4 'CABALLERO' | w/n 435 | Named after Pedro Juan Caballero, hero of the independence movement. |



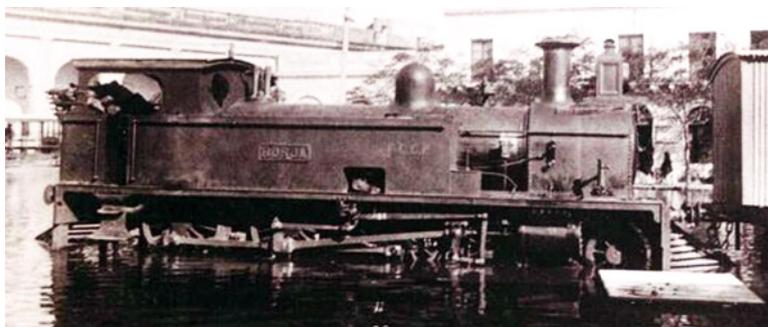
Judging by the shape of the tender rails and the spark-arresting stack, this tinted image taken at Luque in 1894 would appear to show a Hohenzollern engine.

4-6-0T d/w 54", cyls. 17x26", built by Black Hawthorn in 1889

Inherited from the contractors Perry Cutbill de Lungo & Co.

- | | | |
|----------------------------|---------|--|
| 5 'CAMPANA' | w/n 978 | |
| 6 'YURI' or 'YUTY'? | w/n 979 | Named after an historic town in the south-east of the country. |
| 3 'BORJA' | w/n 982 | Named after town near Villarrica, on line to Encarnación. |
| 4 'SAN PEDRO' | w/n 983 | Named after town north-east of Asunción. |

May have been first numbered **4, 2, 3, 1**. Nos. **3-4** renumbered **7-8** in 1905.



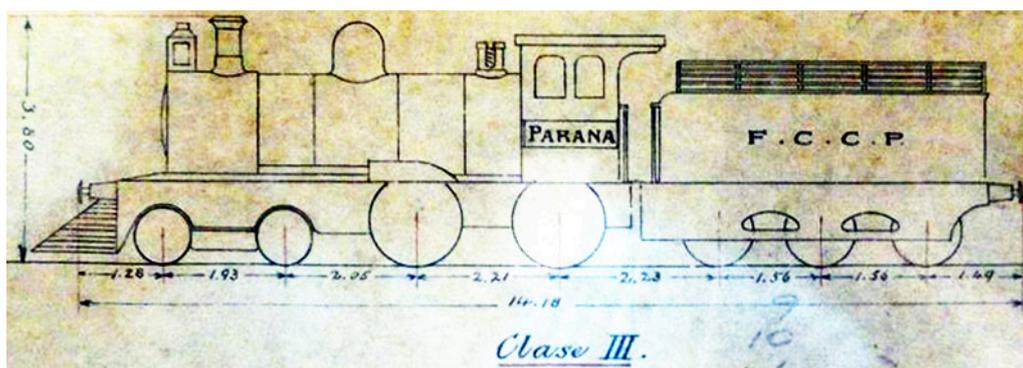
No. **3 'BORJA'** wades through flood water in Asuncion. The white panel by the front buffer-beam is floating in the water.

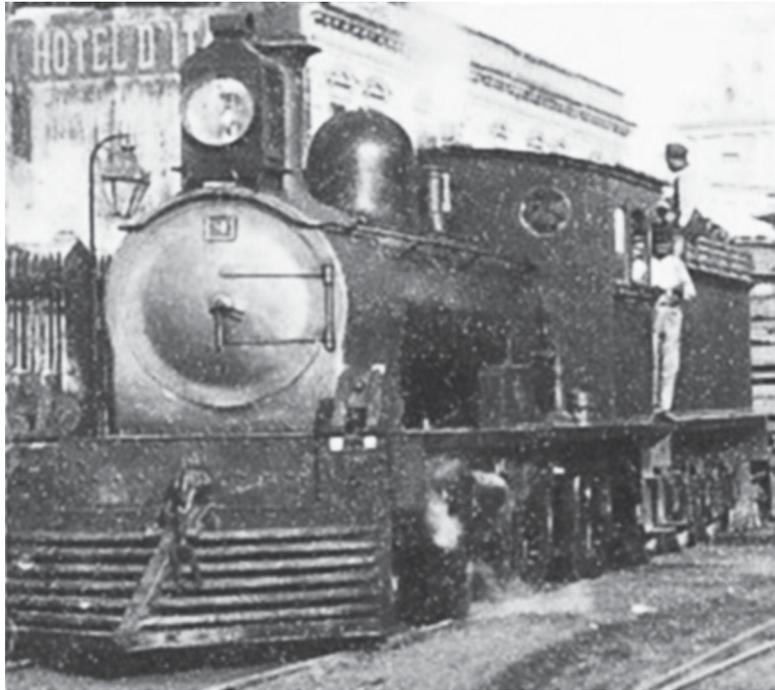
4-4-0 d/w 54", cyls. 16½x24", built by R. & W. Hawthorn Leslie in 1899 and 1904

First pair ordered via A. L. Secretan for Central Railway of Paraguay in November 1898, as affirmed in the report to shareholders dated 9th December 1898. Reimar Holzinger's list has the names of nos. **9** and **10** the other way round. The R. & W. Hawthorn order book 3 in the NRM at York has '**PILCOMAYO**' as no. **13** and '**POSADAS**' as no. **14**. Delivered June and July 1899. Tenders were numbered 988-989.

Second pair ordered via Secretan & Co. for Paraguay Central Railway on 20th April 1904. Delivered December 5th 1894(?) and Jan 25th 1905. Tenders to hold 2400 gallons.

- | | | |
|-----------------------|----------|---|
| 9 'TEBICUARY' | w/n 2417 | Later renamed ' PARANÁ ' after the river. |
| 10 'PIRAPÓ' | w/n 2418 | Named after a district in the south-east of the country.
Abandoned at Villa Rica at the gauge conversion [12]. |
| 11 'POSADAS' | w/n 2592 | Named after the gateway town opposite Encarnación. |
| 12 'PILCOMAYO' | w/n 2591 | Another river making up part of Paraguay's boundary. |





No. 9 'PARANÁ' seen in the streets of Asunción.

4-2-2WT d/w 60", cyls. 10x15" built by William Fairbairn probably in 1858

Originally a 2-2-2WT, see above.

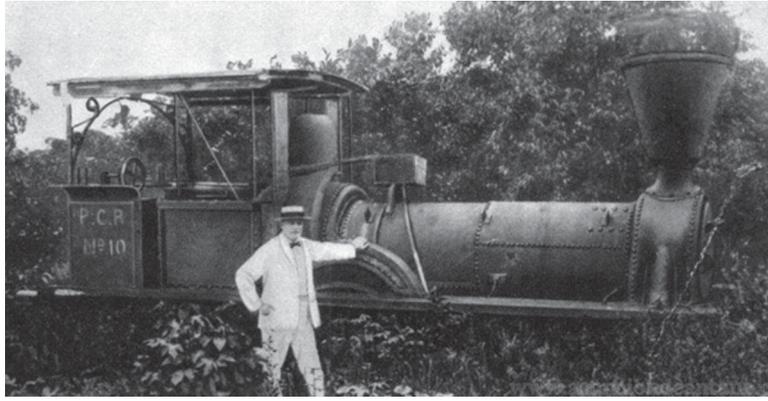
10 'SAPUCAY'

w/n ?

Named after location of railway's works.



Presumably pre-1905 as the bunker bears the number 10. The name-plate carries the letters 'SAPUCAY' rather than 'SAPUCAI' as often quoted. Note that the boiler-top sandbox carried later is not present in this image.



The photo shows this engine carrying the number **10**, whilst the sketch diagram below, which dates from 1905, shows it with the number **13**.



Another photo of no. **10** lying derelict, date unknown.

0-6-0 d/w 54", cyls. 18x24", built by Sharp Stewart in 1896

Ordered 11-14-1895 as SS order E-1077 for *FC Aragon y Catalonia* no. **51** for Spain. Cancelled and placed in stock. Sold as order E-1141 of 22nd March 1898 to Central Rly. of Paraguay. Reported in the report to shareholders dated 9th December 1898 as having been purchased and forwarded during the year.

14 'PARAGUAY' w/n 4157 Later renamed '**BARRIERO**' according to one source, but this may be a mistake caused by the reclassification of these locos.

4-4-0 d/w 66", cyls. 13x18", built by Sharp Stewart in 1863

Ordered as SS order E-498 for *FC Oeste de Argentina* no. **9 'INDUSTRIA'**. Sold 1869 to *FC Estado*, see above.

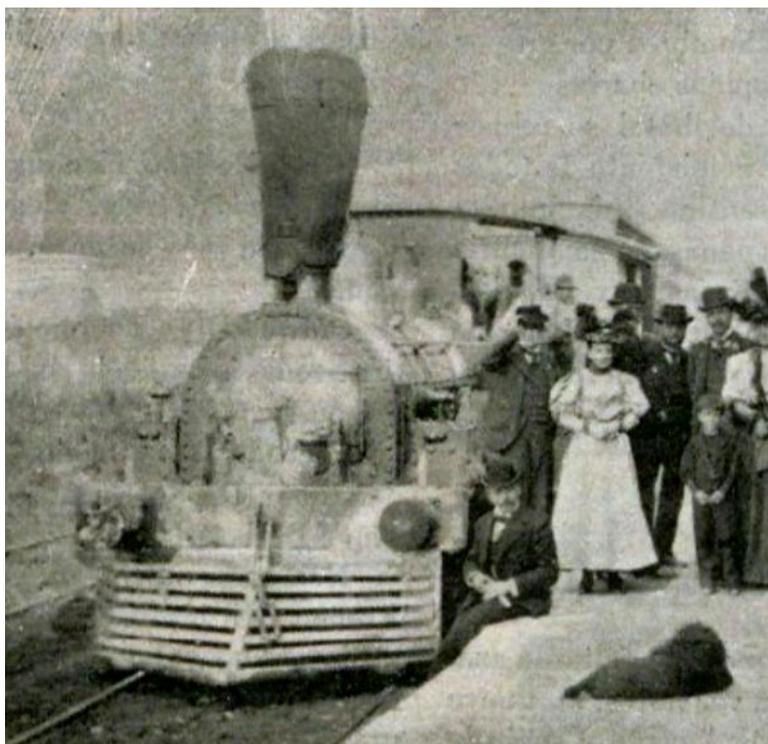
Named '**GASTAO d'ORLEANS**' at that time.

15 'BAREIRO' w/n 1463 Cándido Pastor Bareiro was President of Paraguay 1878-1880. Missing its boiler at the time of the gauge conversion [12]; boiler was in stationary use at Sapucay.

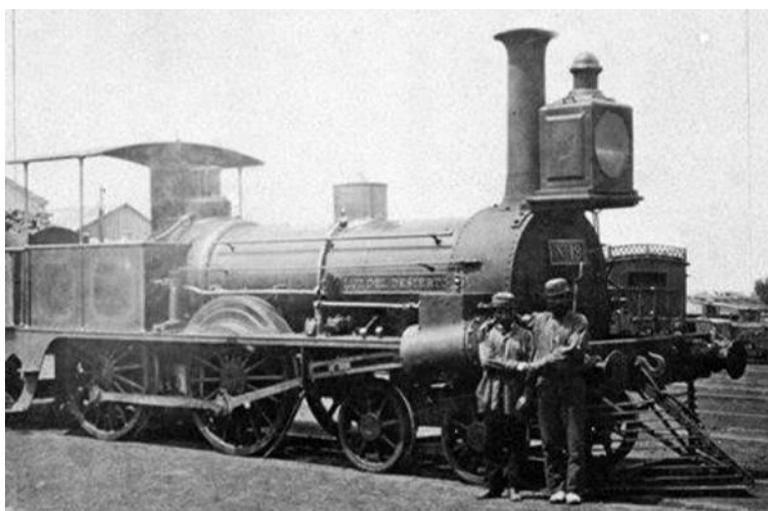


Although there are clear differences between the sketch diagram and the photo – such as the chimney and cab – these might well have developed during a forty

year life on the railway. The lack of outside cylinders on the sketch displayed later is a problem, but possibly one created by a careless draughtsman.



The high valve chests alongside the smokebox suggest that this view, taken at Asunción station during the visit of an Argentine party, shows a Sharp Stewart 4-4-0.



This photo of the Argentine FC Oeste loco no. 19 'LUZ del DESIERTO', also built by Sharp Stewart though some years later, shows the characteristic horizontal valves driven by push rods above inclined cylinders.

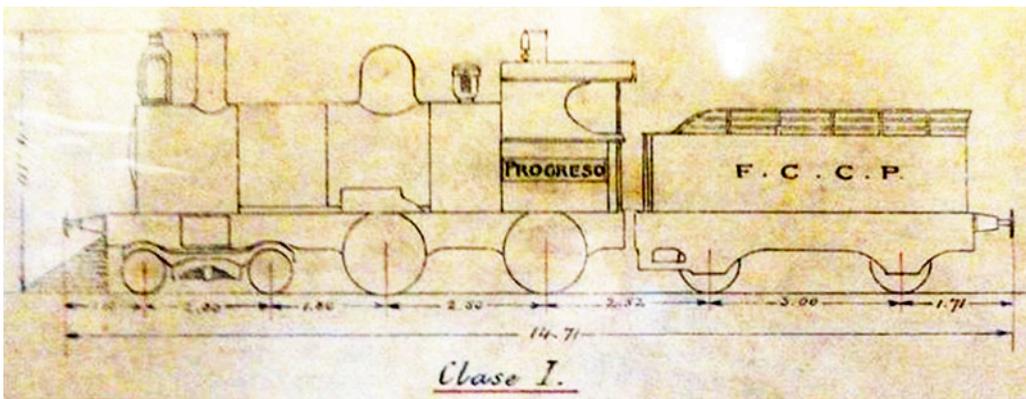
The fleet as renumbered in 1905

Class I

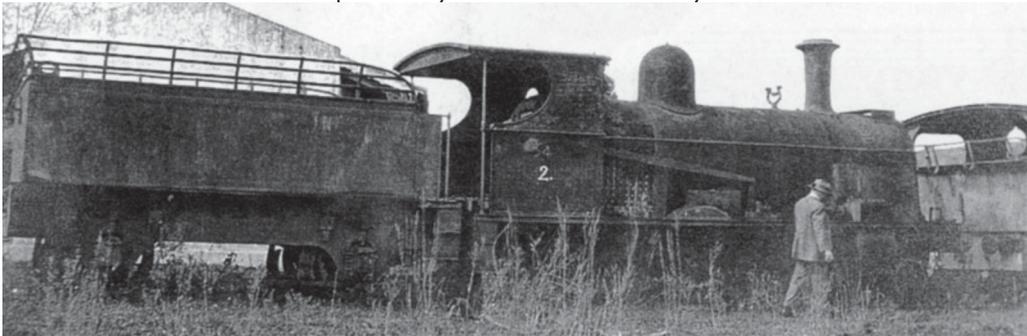
4-4-0 d/w 52", cyls. 19³/₄x17¹/₄", built by Hohenzollern in 1888

1 'VILLA RICA'	w/n 432	Named after town in department of Guairá.
2 'ESCOBAR'	w/n 433	Named after Presidente Patricio Escobar, president of the republic 1886-1890.
3 'PROGRESO'	w/n 434	
4 'CABALLERO'	w/n 435	Named after Pedro Juan Caballero, hero of the independence

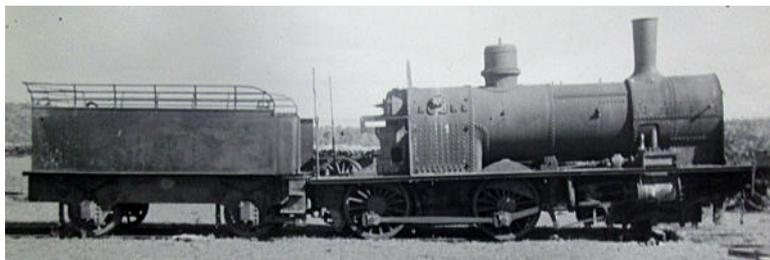
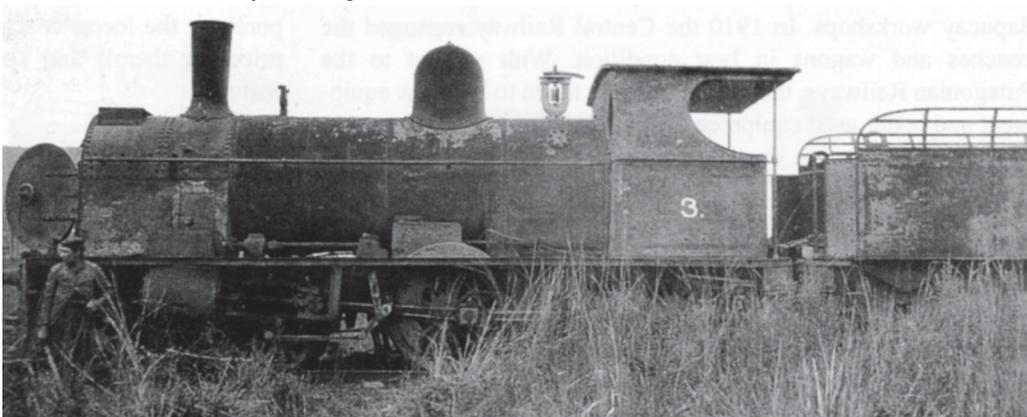
movement.



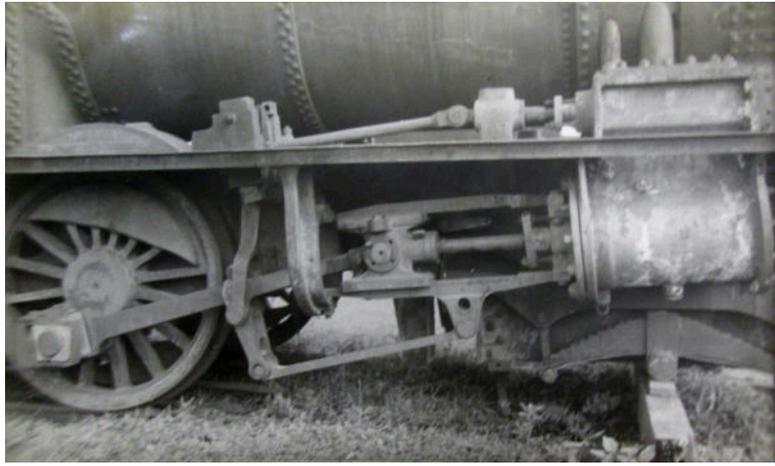
It looks as though by 1905 the spark-arresting stacks on these engines had been replaced by conventional chimneys.



Nos. 2 and 3 await their fate in the yard at Sapucay during 1916, after the regauging of the railway. These images, and other similar ones on the following pages, come from the collection of the Fundación Museo Ferroviario in Buenos Aires, via an article by Sr. Jorge Waddell in *Locomotives International* issue no. 49.



In the mid 1940s P. C. Dewhurst, at that time CME of the Central Uruguay Railway, corresponded with his counterpart on the Central Railway of Paraguay, Mr. F. L. Stafford. Stafford provided a number of photos of derelict broad gauge engines lying in the yard at Sapucay. One of them was one of these Hohenzollern 4-4-0s.



A closer view shows the Joy valve gear they had used. As Dewhurst commented, "what a terrible extra weight the Joy gear intermediate union lever is adding to an early over-burdened connecting rod."

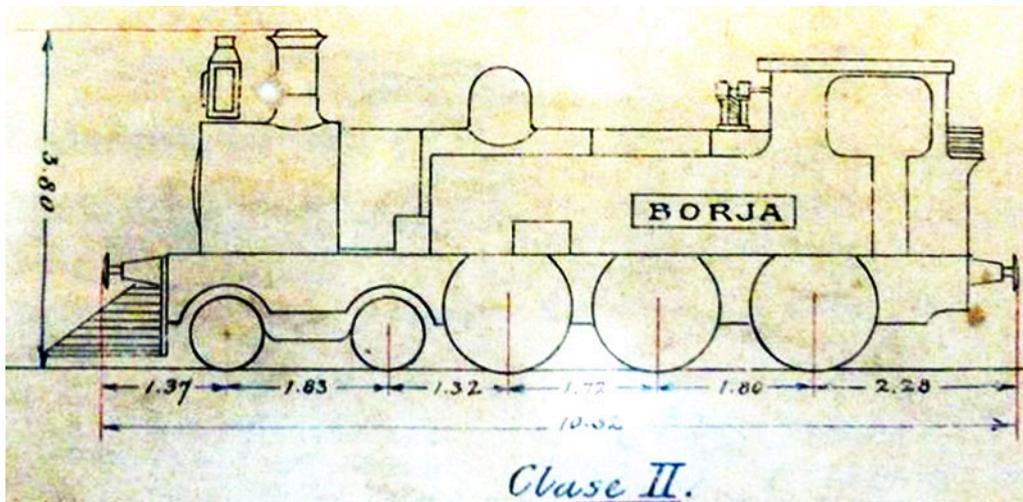
Class II

4-6-0T d/w 54", cyls. 17x26", built by Black Hawthorn in 1889

- | | | |
|----------------------------|---------|--|
| 5 'CAMPANA' | w/n 978 | |
| 6 'YURI' or 'YUTY'? | w/n 979 | Named after an historic town in the south-east of the country. |
| 7 'BORJA' | w/n 982 | Had originally been no. 3. |
| 8 'SAN PEDRO' | w/n 983 | Had originally been no. 4. |



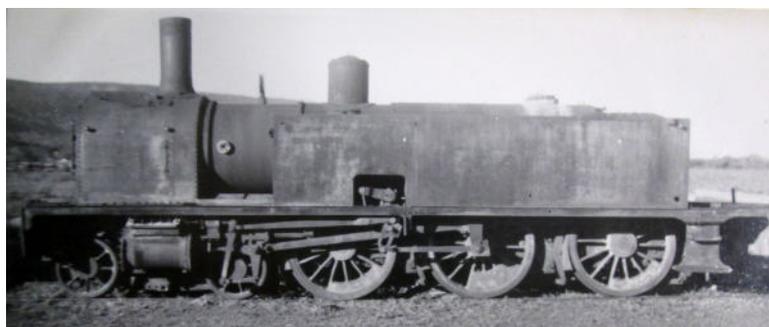
A class II 4-6-0T at Asuncion terminus.



Class II loco diagram from the 1905 rolling stock diagram poster.



No. 8, presumably the original no 4, at Sapucay in 1916.



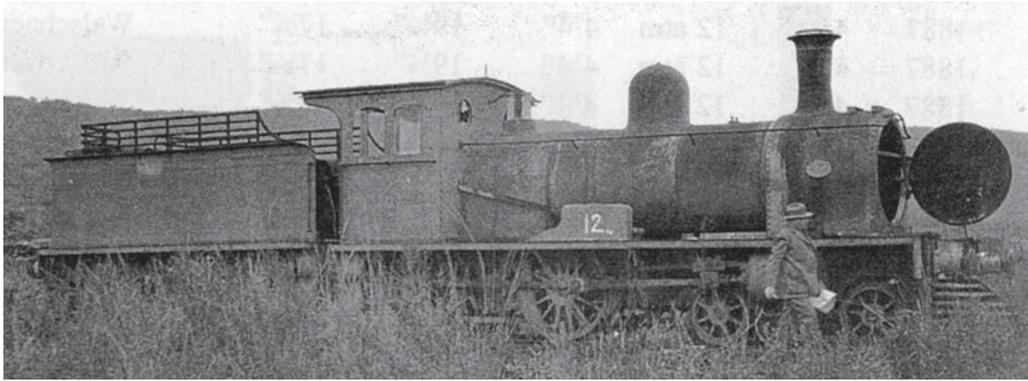
Nearly thirty years later, in the early 1940s, a survivor in the same yard unsurprisingly appears to be in a considerably worse state.

Class III

4-4-0 d/w 54", cyls. 16½x24", built by R. & W. Hawthorn Leslie in 1899 and 1904

First pair ordered via A. L. Secretan for Central Railway of Paraguay in November 1898. Reimar Holzinger's list has the names of nos. 9 and 10 the other way round. The R. & W. Hawthorn order book in the NRM at York has 'PIL-COMAYO' as no. 13 and 'POSADAS' as no. 14. Delivered June and July 1899. Tenders were numbered 988-989. Second pair ordered via Secretan & Co. for Paraguay Central Railway on 20th April 1904. Delivered December 5th 1894 and Jan 25th 1905. Tenders to hold 2400 gallons. R&WH order book 3 gives running numbers as 13 and 14 in the correct order of construction.

9 'TEBICUARY'	w/n 2417	Later renamed ' PARANÁ ' after the river.
10 'PIRAPÓ'	w/n 2418	Named after a district in the south-east of the country. Abandoned at Villa Rica at the gauge conversion [12].
11 'POSADAS'	w/n 2592	Named after the gateway town opposite Encarnación.



No. 12 out of use in 1916.

Class IV

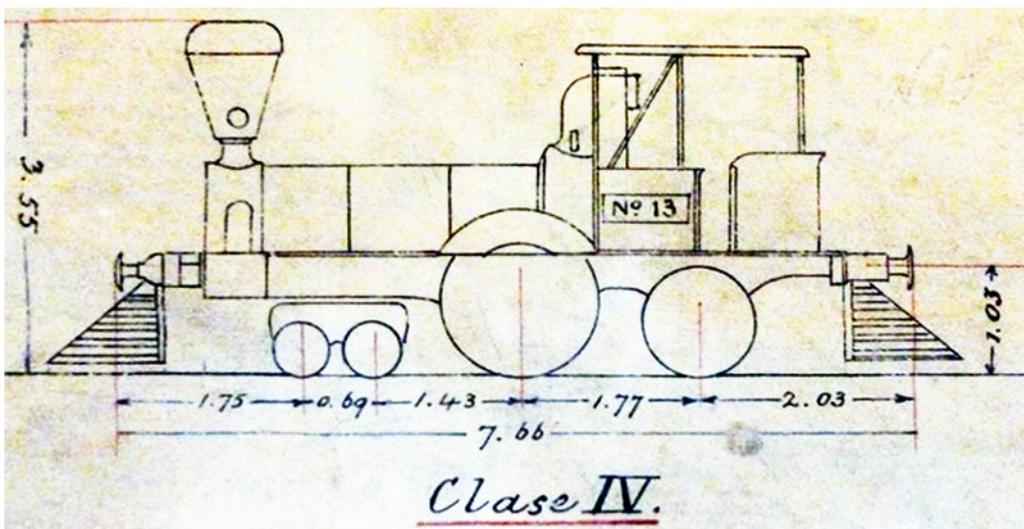
4-2-2WT d/w 60", cyls. 10x15" built by William Fairbairn probably in 1858

Originally a 2-2-2WT, see above.

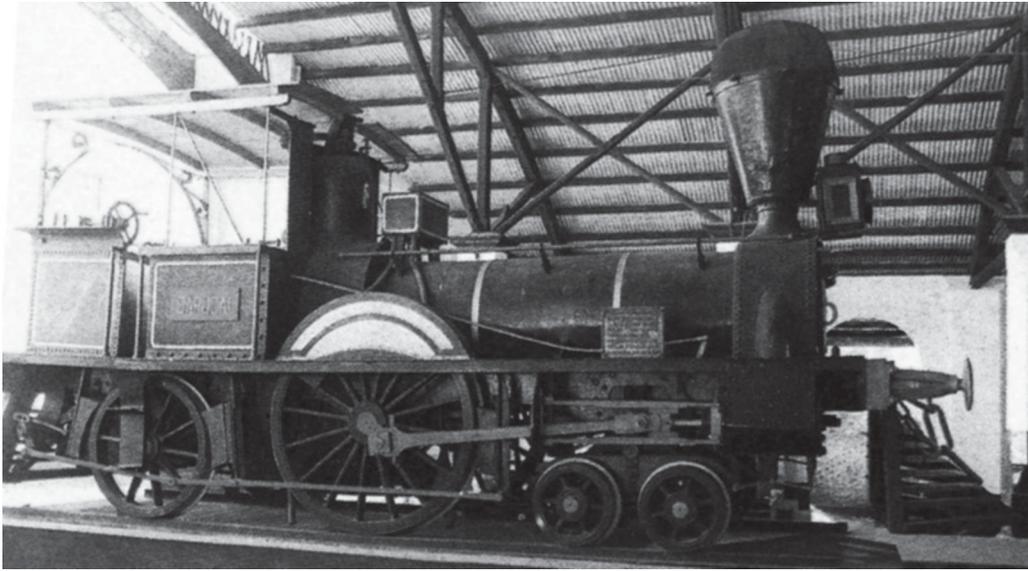
13 'SAPUCAY'

w/n ?

Had previously been no. 10. Latterly named after location of railway's works. Placed on display in Asuncion Station. Plinthed there still.



For such an old engine to have survived until 1905 when this diagram sheet was produced, and alone of all its contemporaries, argues that it had a particular use or advantage, possibly a particularly low axle-loading or ability to traverse sharp curves.



No. 13 'SAPUCAY' as plinthed in the old station in Asunción. The cow-catcher / pilot would not have lasted long in service without some adequate bracing backward to the frames.



A more recent colour view, though it is clear that most visitors have difficulty getting clear photos given the loco's position in front of the open end of the station.

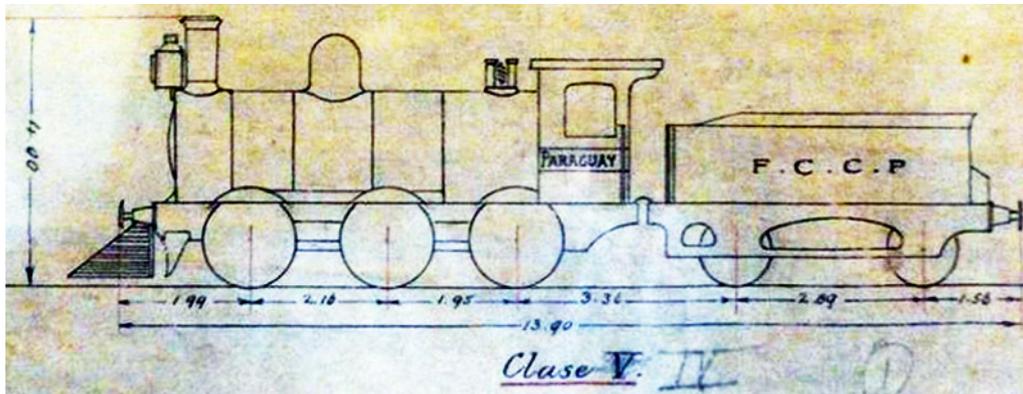


Class V possibly later class IV

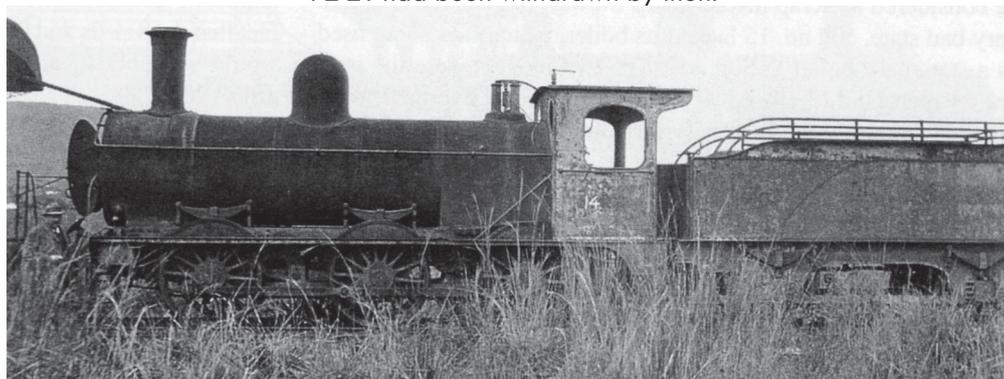
0-6-0 d/w 54", cyls. 18x24", built by Sharp Stewart in 1896

Ordered 11-14-1895 as SS order E-1077 for *FC Aragon y Catalonia* no. **51** for Spain. Cancelled and placed in stock. Sold as order E-1141 of 22nd March 1898 to Central Railway of Paraguay.

14 'PARAGUAY' w/n 4157 Later renamed '**BARRIERO**' according to one source, but this may be a mistake caused by the reclassification of these locos.



It is not yet clear why this loco was re-classified from V to IV, unless the little Fairbairn 4-2-2T had been withdrawn by then.



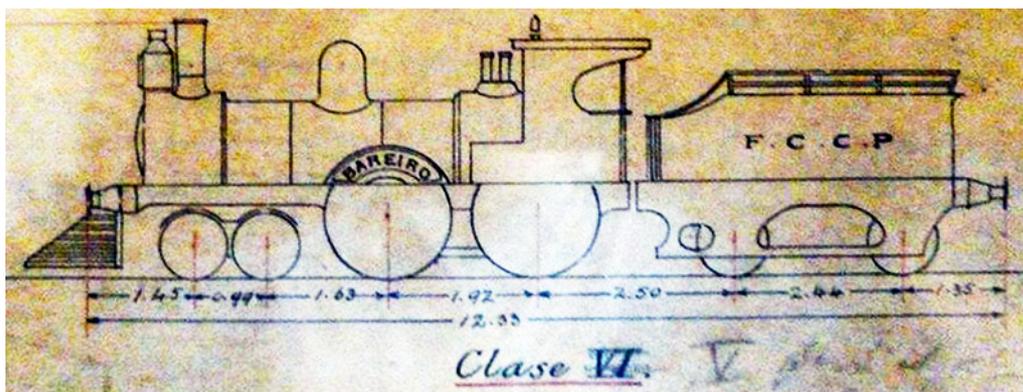
No. 14 was also photographed for the record in 1916.

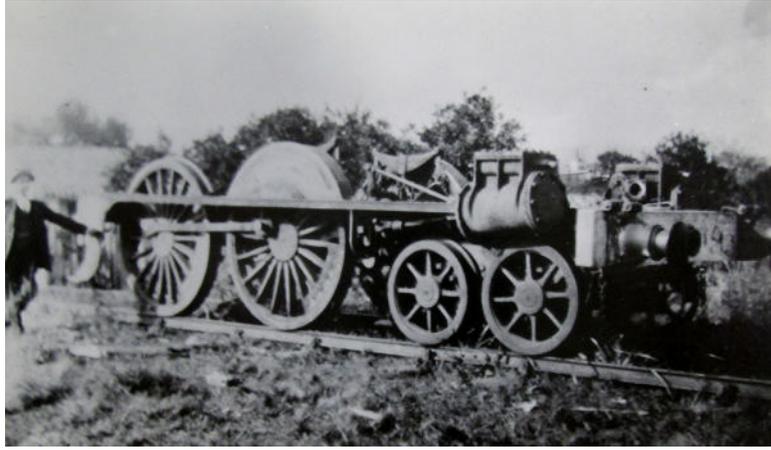
Class VI, possibly later class V

4-4-0 d/w 66", cyls. 13x18", built by Sharp Stewart in 1863

Ordered as SS order E-498 for *FC Oeste de Argentina* no. **9 'INDUSTRIA'**. Sold 1869 to *FC Estado*, see above. Named '**GASTAO d'ORLEANS**' at that time.

15 'BAREIRO' w/n 1463 Cándido Pastor Bareiro was President of Paraguay 1878-1880. Missing its boiler at the time of the gauge conversion [12]; boiler was in stationary use at Sapucay.





This derelict set of frames, cylinders and wheels in Sapucay yard around 1943 would appear to be from this engine. The short-wheelbased bogie, the eighteen spoke driving wheels, and the valve chests driven by push rods well above the running board, all seem to match features in the photo above.

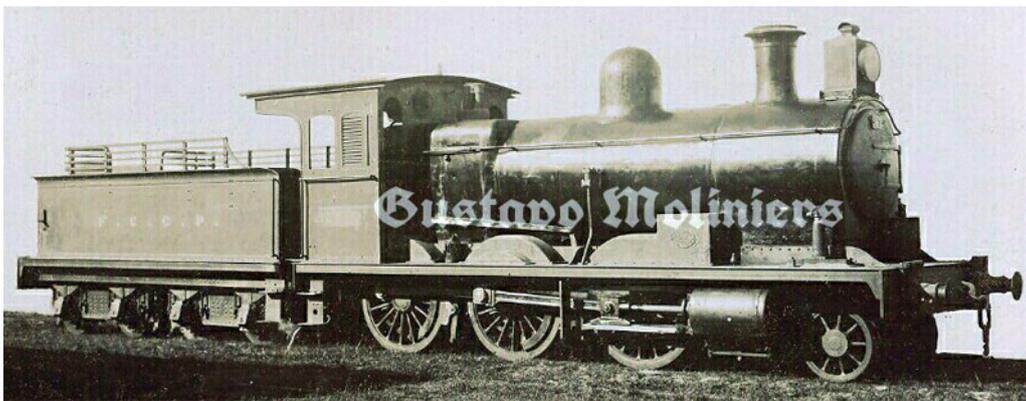
There is a good clear photo of no. **15 'BAREIRO'** in *Locomotives International* issue no. 51, on page 32, supplied by Uwe Bergmann. The image shows the loco in its later years, with more substantial cab than when first built.

2-6-0 d/w 61½", cyls. 19x26", built by R. & W. Hawthorn Leslie in 1907

Ordered for Central of Paraguay. R. & W. Hawthorn order book 3 in the NRM at York has no. **16** as '**PILAR**' and no. **17** as '**PIRAYU**'. There is no data as to whether these names were carried. The 3000 gallon tenders were numbered 1017 and 1018 in Hawthorn's list. The engines entered service in May 1907.

- | | | |
|-----------------------|----------|---|
| 16 'PIRAYÚ' | w/n 2672 | Colonia Piray is east of Asunción, and possibly named after some notable Paraguayan personage. Pirayú is similarly east of Asunción and had a station on the railway. |
| 17 'PIRIBEBUY' | w/n 2673 | Name sometimes written as ' PIRISIBY ' but Piribebuy is a town east of Asunción and is a much more likely spelling. |

One of these, probably no. **17**, reputedly in service until 1943. The other may also have been regauged.



These engines can only have worked for a maximum of six years or so before the regauging.

Re-gauging the railway

The *FCCP* had originally been laid to the Argentine broad gauge of 5' 6" as that is what was expected to arrive at Posadas from the south. However, in the event it was the standard gauge tracks of the Argentine North Eastern Railway (*FCNEA*) which reached the Paraguayan border. As interchange and through traffic was essential, the decision was eventually made to regauge the whole of the *FCCP*. Much of the initiative for this came from the Argentine government, which worked through the medium of the *FCNEA*.

In 1910, work started on extending the line from Villarrica to Encarnación, using standard gauge, and presumably also on re-gauging the line back to Asunción. Encarnación was reached in 1913. In 1914, work started on the branch from Borja1 to Abai, which was reached in 1915, and intended as the first step of a rail link to Brazil.

After the gauge conversion, these engines were stored at Sapucay. They were in fact sold to Argentina for use in Patagonia, where a broad gauge network was to be built. However, the choice was made in Argentina to buy new equipment and items from the *FC Andino*, and the Paraguayan stock was abandoned and never shipped. Most of them were in bad shape, and only locomotives **9**, **11**, **12**, **16** and **17** were recommended for shipment to Argentina. However the high cost of rebuilding and shipping (the third broad gauge rail having already been removed from the route to Encarnación) caused the project to be aborted.

Dr. Paul Waters reported in [17] that the locos and stock were eventually resold back to the railway at scrap price after they had been badly damaged during the 1908 Jara revolution.

[12] reports that the majority were then scrapped at Sapucay in 1917, but the photos from P. C. Dewhurst's collection show that several survived until the 1940s. No. **17** was converted to standard gauge for further use, see below.

Sylvester Damus has speculated (citing *Boletin Oficial N° 30* octubre 1911 pp. 1613-1614) that the Argentine North-Eastern Railway had its eye on the Paraguayan locos, "with the intention of re-gauging some and perhaps using others for spares but the war intervened and when the administrations of the North-Eastern and Entre Rios railways were unified at Concordia in 1915, access to a joint locomotive stud made re-gauging unnecessary" [private correspondence from SD in July 2021].

8.2 Standard gauge railways in Paraguay

8.2.1 Paraguay Central Railway Co. abbreviated to *FCCP* or *FCP*

1913-1961

El FC Presidente Carlos Antonio López

1961-

Background

The adoption of standard gauge was to allow the connection of Asunción to Buenos Aires without a break of gauge, and later also to Uruguay through Argentina. This was achieved by means of a pair of wood-burning train ferries linking Pacú Cuál to Posadas until 9 April 1990, at which time the rail connection on the newly constructed road-rail bridge linking the two places was brought into use. Through passenger trains were operated, with passengers travelling in the coaches on the ferry, as did freight wagons. Typically, the through passenger journey occupied about 48 hours.

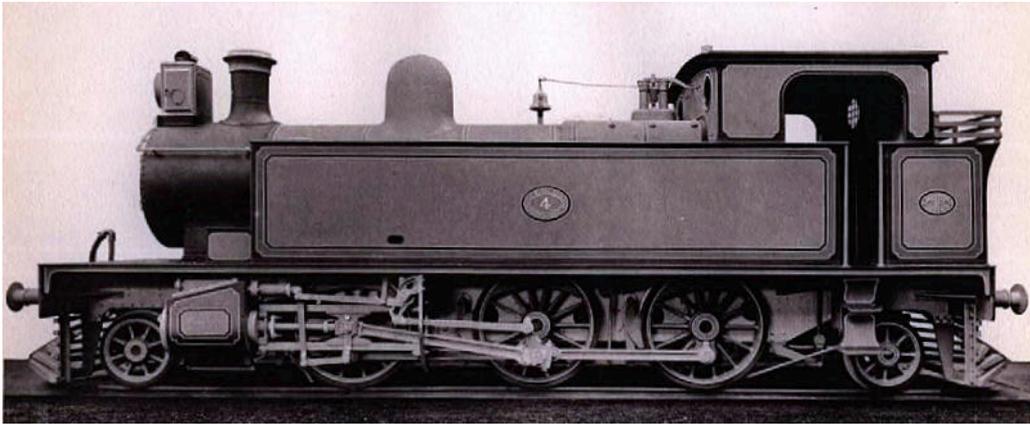
Track was light (rail at 60 lb/yd spiked directly to hardwood sleepers, ballasted with earth) compared with the standards adopted by the British companies in the Buenos Aires area at that time (100 lb/yd on base-plates and hardwood sleepers with stone ballast). Despite being rooted in British practice, facing point locks were not used and fixed signalling was unknown until the new bridge near Encarnación was protected by a semaphore at *FCNGU* insistence. With the change in gauge, the opportunity was taken to re-equip the railway's motive power and rolling stock, all from British sources. This equipment remained largely the same till the end, though supplemented in the 1970s by a selection of second-hand locos from the *FCN Gral. Urquiza* in Argentina.

Dr. Waters says in [18] that in 1911 the PCRCo came under the ownership of Percival Farquhar's Brazil Railway Co. as part of his scheme to build a railway through to Brazil via Iguazu. However, Farquhar's empire collapsed during the lead up to the First World War in 1914.

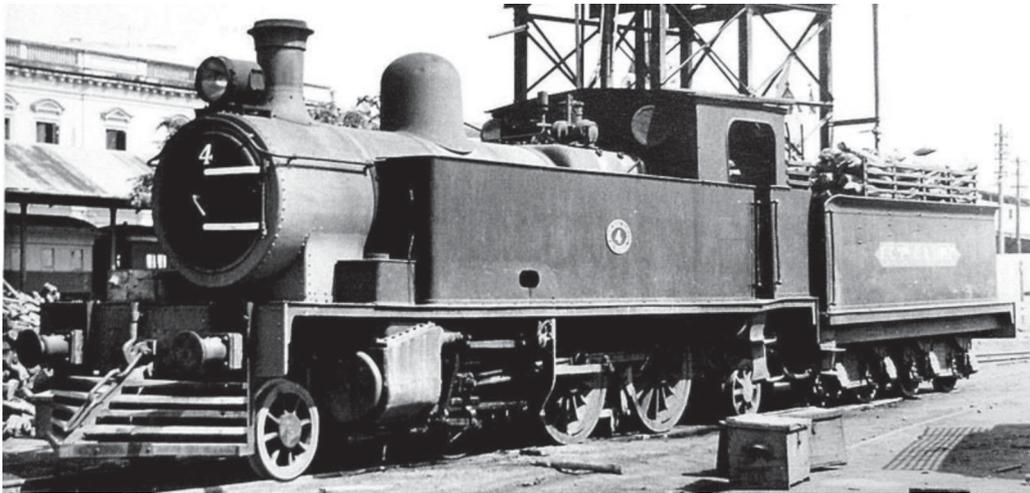
2-6-2T d/w 54½", cyls. 18x24", built by R. & W. Hawthorn Leslie in 1910 and 1914

First batch ordered via A. L. Secretan for Central del Paraguay. Delivered January 1910. Last two ordered 19th June 1912, and delivered May and June 1913. Duties: **1-4** Asunción suburban service?? **5-6** Abai branch?? Often used hauling tenders for wood fuel.

1	w/n 2808	
2	w/n 2809	Supposedly operational, Sapucaí.
3	w/n 2810	
4	w/n 2815	
5	w/n 2977	Not seen by ITN in 1990 but supposedly about to return to traffic
6	w/n 2978	



One of these 2-6-2Ts hauls the first train into Encarnación in 1910 [20].



A later view showing no. **5**, again with a tender. This one was taken by Paul Alexander at Encarnación in 1985.

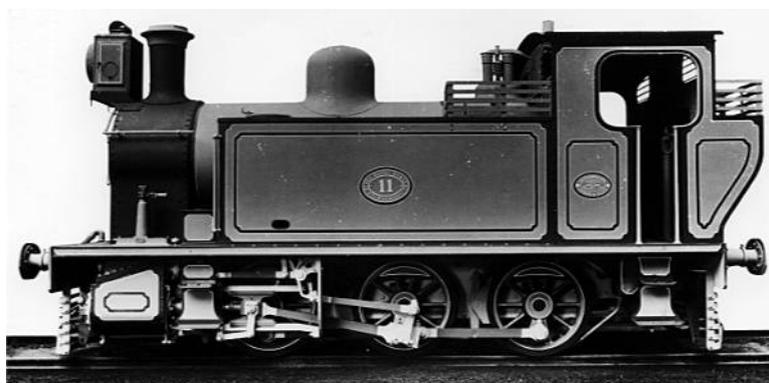


No. **5** very late in its life, but seemingly with few alterations. The trailing truck wheels now have seven spokes each rather than eight, and the rear cow-catcher has disappeared. A turret and whistle seem to have been added at the front of the firebox, and unsurprisingly there is now an electric headlight.

0-6-0T d/w 42", cyls. 15x22", built by R. & W. Hawthorn Leslie in 1910 and 1914

First two ordered via A. L. Secretan & Co. for *Central del Paraguay* on 29th December 1909. Delivered 17th and 29th October 1910. To carry oval number-plates with 'FERRO-CARRIL CENTRAL DEL PARAGUAY' around edge. Duty: Ferry shunting at Encarnación?? Third one ordered after Radical Revolt.

- 10** w/n 2818
- 11** w/n 2819
- 12** w/n 2981

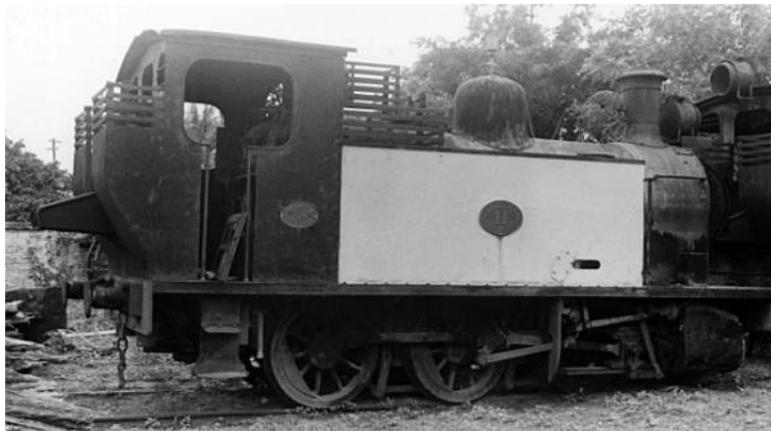


A Hawthorn Leslie builder's photo of 0-6-0T no. **11**. Kindly provided by Richard Pelham.





Disused 0-6-0Ts nos. **10** (above) and **11** (below) at ?? in ?. Note the gap in the rear bunker of no. **11**, with a chute to enable the transfer of wood fuel from a wagon or tender attached behind. Photo kindly provided by Richard Pelham.



2-6-0 d/w 61½", cyls. 19x26", built by R. & W. Hawthorn Leslie in 1907

Regauged from broad gauge in 1921-5. See section 8.1.1 for earlier history. Dr. Paul Waters in [18] gives evidence to show that both of these broad gauge 2-6-0s were regauged, but nothing has emerged to prove that the second one entered service on the standard gauge. In fact Dr. Waters, quoting the company's annual reports, states that work on it was halted in 1925 when the railway's financial state was somewhat desperate.

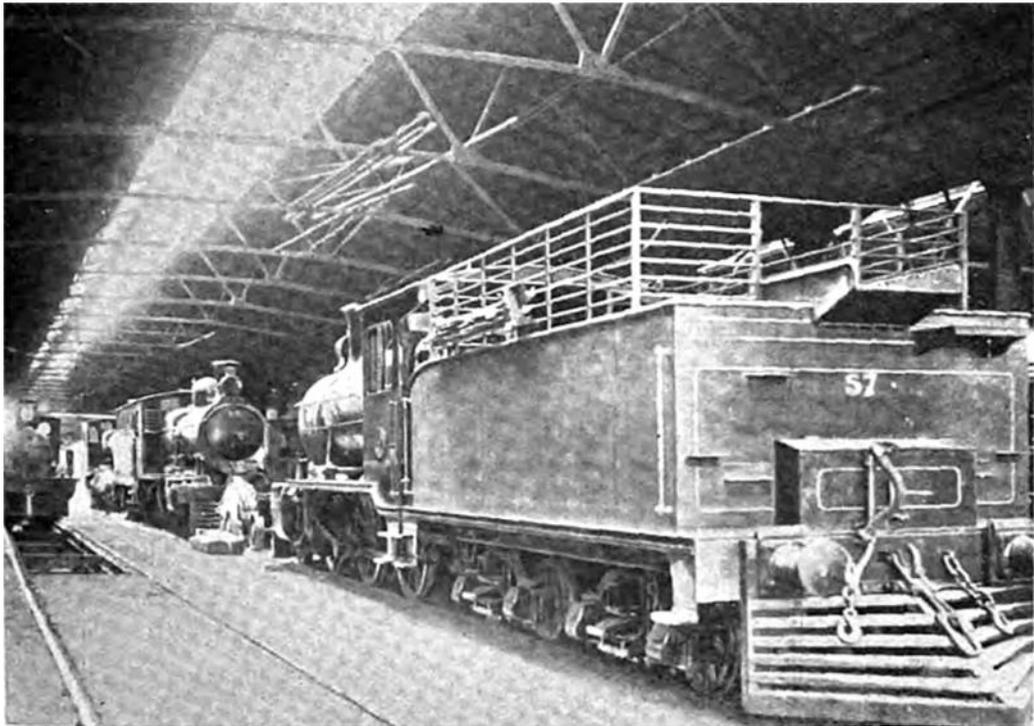
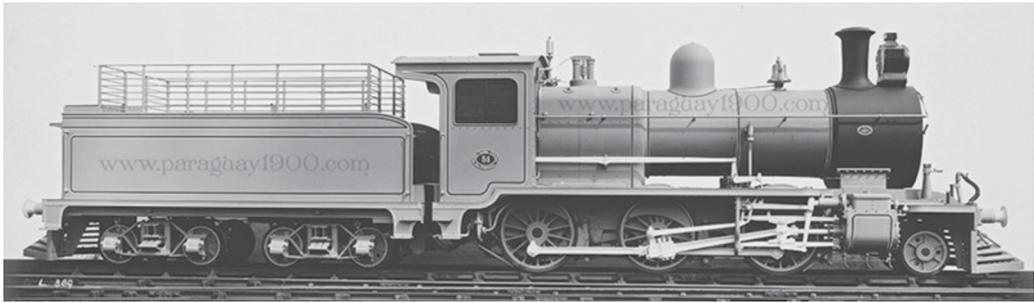
17 w/n 2673 Reputedly in service until 1943.

2-6-0 d/w 54½", cyls. 18x24", built by the North British Locomotive Company in 1911

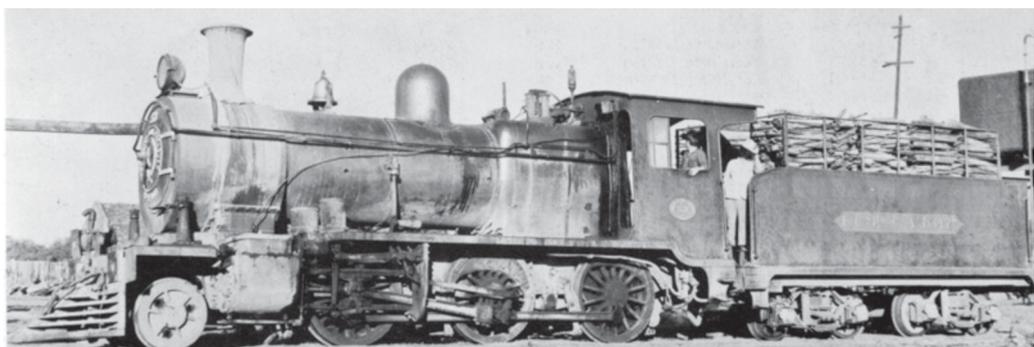
Ordered for Central del Paraguay under NBL order E389. Duty: mixed traffic. BP 175 lb/in², TE 21,223 lb, wt (e&t) 92 tons 18 cwt

- | | | |
|-----------|-----------|--|
| 51 | w/n 19134 | |
| 52 | w/n 19135 | Survives at Bogado. |
| 53 | w/n 19136 | In service 1986. Supposedly operational, Asunción. |
| 54 | w/n 19137 | In service painted red in 1990. |
| 55 | w/n 19138 | |
| 56 | w/n 19139 | |
| 57 | w/n 19140 | |
| 58 | w/n 19141 | Supposedly operational, Encarnación. |
| 59 | w/n 19142 | In service painted red in 1990. |

60 w/n 19143 Nick-named *El Inglés*. Supposedly operational, Encarnación.
The pony truck wheels are discs. In the River Plate region, it was considered that disc wheels were more robust, and thus less liable to damage when colliding with cattle.



The rear of no. 57's tender, as originally built, probably in Sapucaí shed around 1911 [20].





No. 60's cab looks a little the worse for wear in this relatively recent shot.



A blueprint drawing for the numberplates for this batch of engines, and an actual plate from no. 59. Note how the number spacing differs from the drawing.

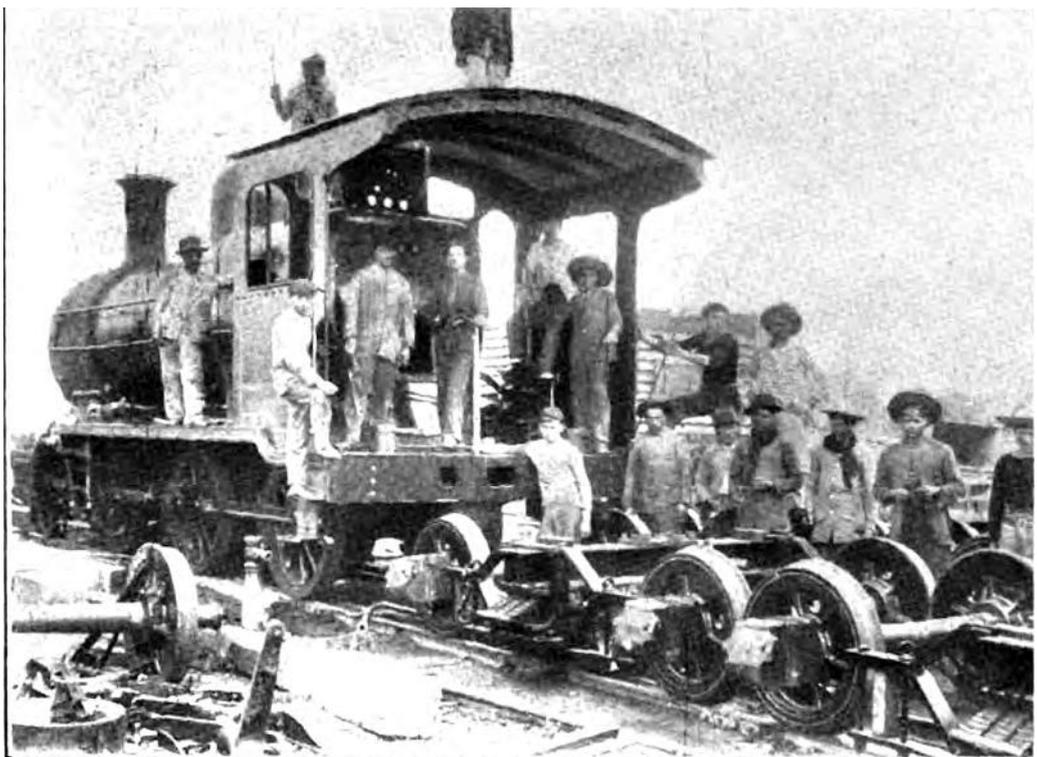
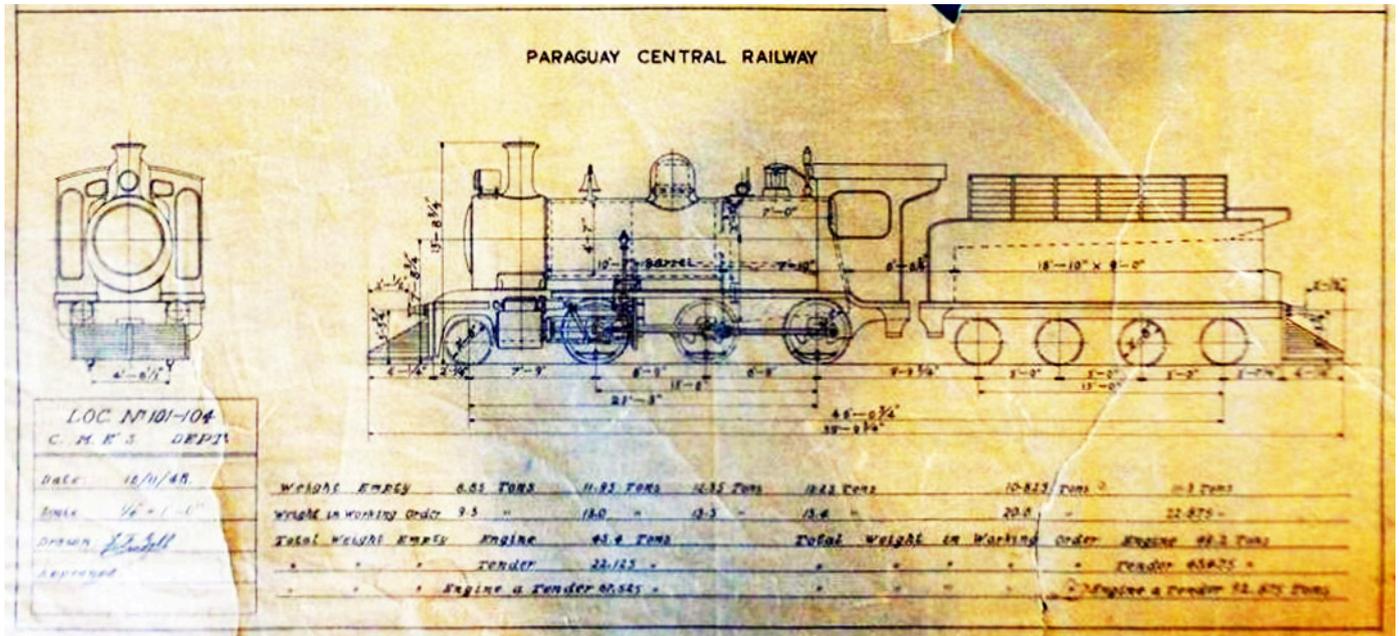


2-6-0 d/w 54½ or more probably 48?\"", cyls. 18x24", built by North British Locomotive Co. in

1911 and 1913

Ordered for *Central del Paraguay* under NBL order E390. Duty: goods. BP 160 lb/in², TE 22,032 lb, wt (e&t) 92 tons 18 cwt. Trevor Rowe suggests that the original no. **101**, supposedly replaced very quickly, had been lost at sea during delivery. [13] An article in *The Railway Magazine* on steam locos known to have been lost at sea/in transit 1829-1991 also speculates that a Paraguayan 2-6-0 was lost, but [18] suggests that it had been destroyed during the Radical Revolt of 1911-12.

- 101¹** w/n 19144 Destroyed during revolution soon after arrival?
- 102** w/n 19145 Red livery. Derailed whilst hauling train 2 at Isla Alta in 1984. In service 1986. In service painted red in 1990.
- 103** w/n 19146 In service painted red in 1990.
- 104** w/n 19147 In service painted red in 1990.
- 101²** w/n 20082 Replacement for original no. **101¹** presumed destroyed during revolution. Supposedly operational, Encarnación.



An NBL 2-6-0 being erected at Sapucaí in 1911, and probably one of

the goods loco batch, to judge by the wheel diameter, source [20].



This street running view of no. **102** interestingly shows one of the front buffers folded up and the other down. The boiler side sandbox is also clearly visible.

The cast bogies beneath the tender are presumably later replacements for diamond/archbar originals.



A view from the other side, taken by Martin Wollman in 2007.

2-4-0 d/w 45", cyls. 11x16", built by Porter in 1896

Ordered for the *FC Central de Buenos Aires* as their no. **9** of class C. Sold by them to the Central of Paraguay in 1919, though [17] suggests that it actually arrived during 1917. Mentioned in Reg Carter's Argentina list and confirmed by a letter from F. L. Stafford (CME of the Central of Paraguay) to P. C. Dewhurst in 1943. It is not clear why this loco should have been numbered **19**, as that does not fill a place in any continuous sequence.

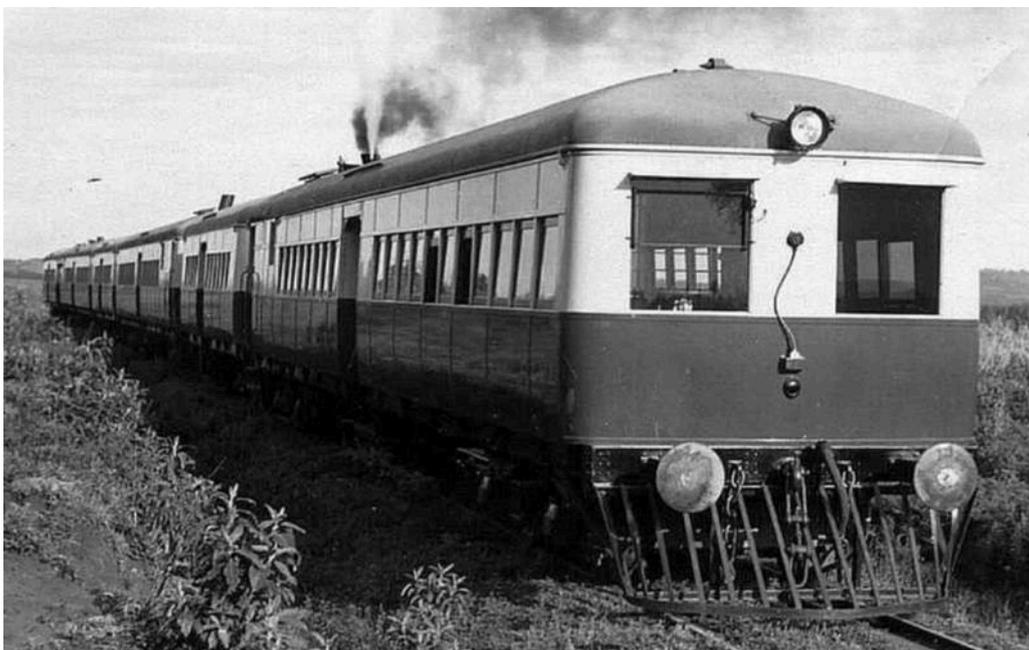
19 w/n 1653 In service in 1943, as confirmed in F.L. Stafford letters mentioned above.

Bogie steam railcars built by Sentinel Cammell in 1935

Oil fired. Purchased for Asunción suburban services. Total price apparently £25,447 0s 2d [12] and they were put into service in December 1935. See *Locomotives International* issue 100, Feb-Mar 2016, for a short article by Ian Thomson on these vehicles.

CM1 w/n 9070
CM2 w/n 9071
CM3 w/n 9072

Little used during the Second World War owing to the high cost of oil fuel [5]. Several of these and/or their trailer cars survived for many years. ITN [12] recalls seeing one at Sapucay in 1992.



The three Sentinel railmotors together, probably on a demonstration train shortly after their arrival.



The two previous images showed Sentinel cars running with the power bogie trailing, but this photo has the power bogie at the front. It can be seen that there are no windows alongside the boiler, and the chimney and other roof features are also apparent. Behind the whole power car there would appear to be a trailer car and then a van.



The Sentinel Cammell railcars also had trailer cars. Judging by the absence of a roof-mounted headlight this surviving car is one of those trailers, though of course it might have been lost after the cars ceased to work independently. The doorway may well have been a later modification as the photos above suggest that neither end of the power cars had such a feature on their arrival.

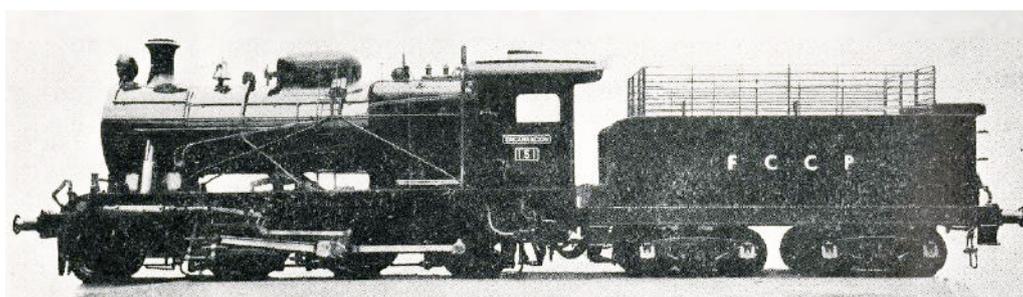
The fleet in 1924 and 1944

The 1920s US Dept. of Commerce report [7], lists the fleet in 1924 as including eleven mixed traffic locos, four for freight, six tank engines and three switchers. T. R. Seymour, writing in 1944 [5], agrees but gives the figure for mixed traffic engines as twelve, and Rowntree [] concurs with the sum total of twenty-five engines then in use. The totals for tank locos and switchers correspond perfectly with the Hawthorn Leslie 2-6-2T and 0-6-0T classes, whilst the four freight engines were presumably the four moguls numbered 101-4. The remaining known engines – 2-6-0s nos. 51-60 plus the regauged Hawthorn 2-6-0 no. 17 and the second-hand Porter 2-4-0 no. 19 – total the twelve that Seymour recorded.

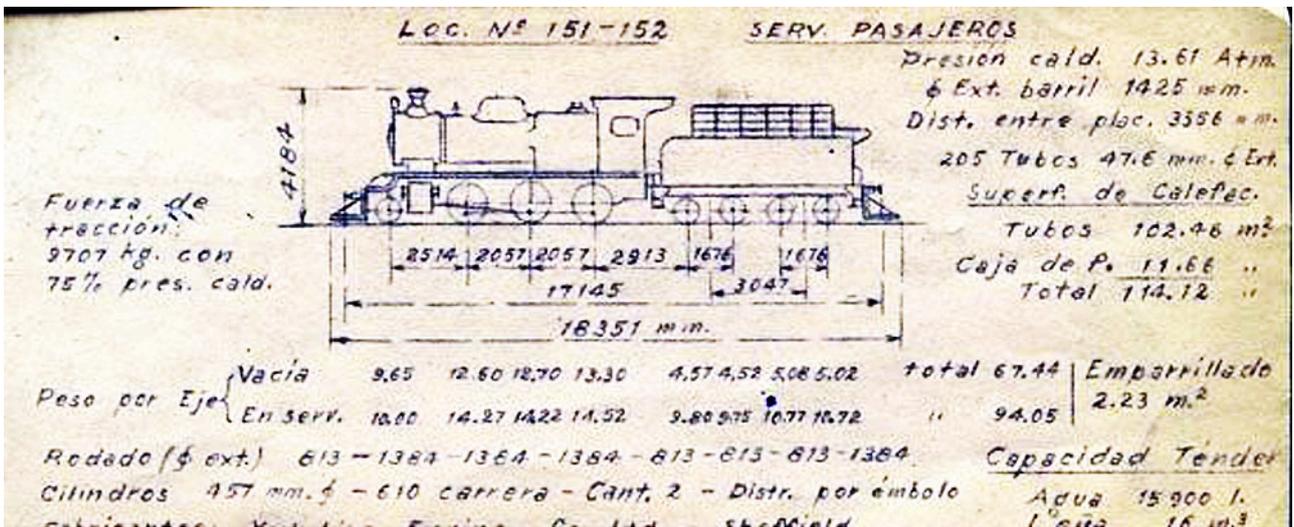
2-6-0 d/w 54½", cyls. 18x24", built by the Yorkshire Engine Company in 1953

Duty: Mixed traffic. BP 200 lb/in², TE 24,255 lb, wt (e&t) 92 tons 11 cwt. YECo order nos. C403-7. How many of these were ordered?

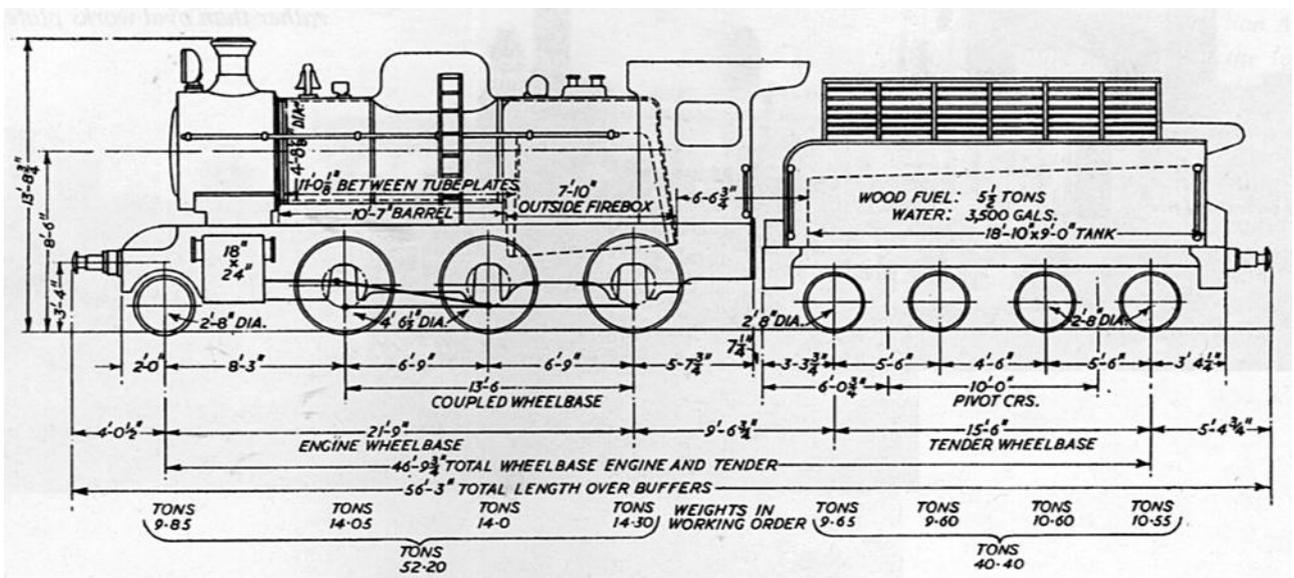
151 'ENCARNACION'	w/n 2513	Hit a lorry on outskirts of Asunción on 7th June 1970: minor damage including loss of cow-catcher. Out of service owing to broken cylinder, painted red, in 1990.
152 'ASUNCION'	w/n 2514	In service painted red in 1990.



No. 151 'ENCARNACION' as illustrated in *The Locomotive* in the December 1953 issue.



The most obvious distinguishing feature of these YECO engines was the wrapover cab roof. note that this engine has a conventional dome with sandboxes on the running boards rather than the combined elongated dome originally fitted.



Nationalisation

The railway was purchased by the state in 1961, but little changed other than its name, which became the *FC Presidente Carlos Antonio López*. No attempt was made to modernise (eg to introduce diesels) and it continued to operate suburban trains in Asunción using wood-burning steam until the closure of the service in 1999. Additional steam locomotives were bought, hired and borrowed from *Ferrocarriles Argentinos*. This produced certain fuel supply difficulties, as they had been built as coal-burners with a much smaller firebox door, which required the wood supply to be of smaller dimensions than usual.

Regular rail services ended in 1999 with the assets then being transferred to *Ferrocarriles del Paraguay SA* or *FEPASA* in 2002.

When work was completed on the Yacyretá dam a short distance downstream of Encarnación it caused the formation of a lake which flooded parts of the railway between Encarnación and General Artigas about 80 km away. No provision was made to raise or relocate the railway as part of the dam project. In 2003/4 *FEPASA* lifted most of the line to General Artigas and about 50 km of the branch line to Abai; it auctioned off the rails, most of which finished up in Chile.

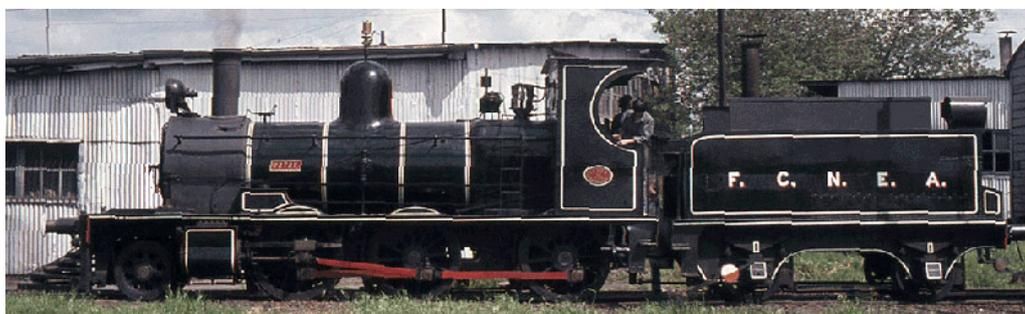
The following locomotives were bought or hired from, or loaned by, *Ferrocarriles Argentinos* or were merely observed visiting. In every case the numbers quoted are those they carried in Argentina and not changed when in Paraguay. The loco batch numbers are of the locomotives as they operated in Argentina and do not imply that any, other than the numbers noted individually, operated in Paraguay.

Locomotives acquired from Argentina in the 1970s.

2-6-0 d/w 1291mm 51", cyls. 356x560mm 14x22", built by Neilson in 1890

Ordered as 0-6-0 for Northeast Argentine Railway no. **32** 'AVELLANEDA', later rebuilt in 1911 as 2-6-0; to *FCN Gral. Urquiza* as no. **70** in 1948. To Paraguay as no. **70**. The last of a batch of twenty-four.

70 w/n 3875 May have eventually returned to Argentina? Ian Thomson suggests that there was a second loco of this type at Sapucay in 1980 when he visited [10].

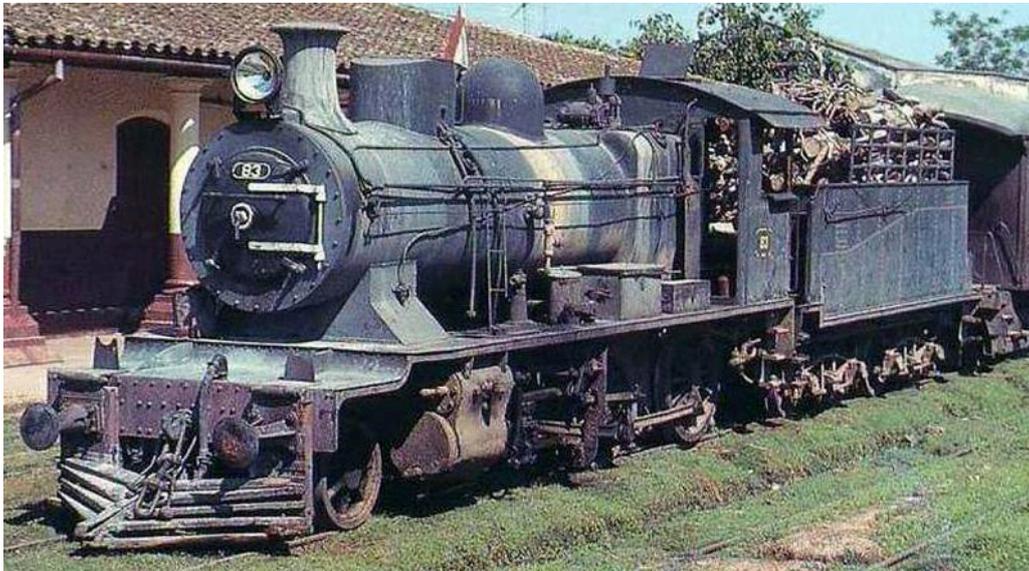


The preserved example of this class, no. ??.

2-6-0 d/w 1400mm, cyls. 430x650mm, built by Couillet / Hainaut in 1910

Ordered for *FC del Este* nos. **551-552** (part of batch 551-6); to *FCN Gral. Urquiza* nos. **81-83** in 1948. To Paraguay as nos. **81-83**.

81 w/n
82 w/n 1581 In service 1990 on Ypacarai suburban service.
83 w/n 1582



No. 83 stands at the head of a rake of passenger stock.



No. 81 stands outside Asunción station on 5th June 1981, in this photo by Geoff Monks.
The front nearside buffer is lying unattached adjacent to the smokebox!

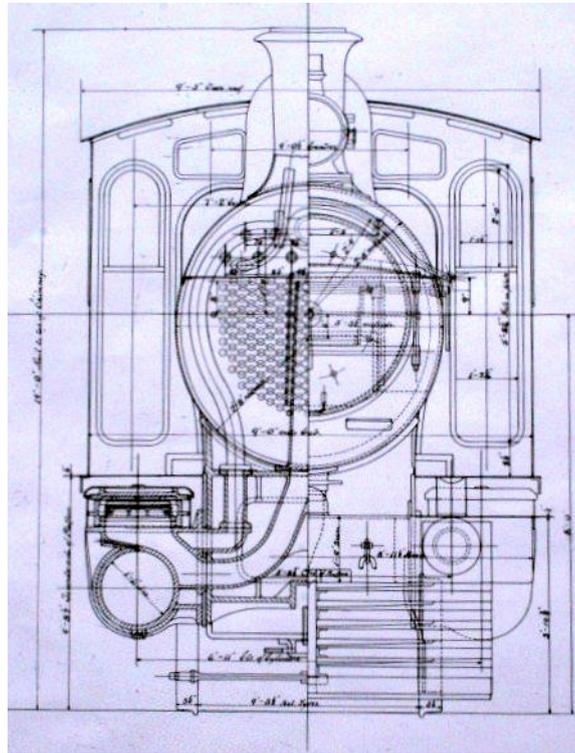


No. 83 lying derelict rather more recently. Photographer unknown.

4-4-2+2-4-4T Garratt d/w 56", cyls. 15x22", built by Beyer Peacock in 1930

Ordered for *FC Nordeste Argentino* no. 203; to *FCN Gral. Urquiza* no. 203 in 1948. To Paraguay as no. 203.

203 w/n 6647 Little used and later scrapped.



It will be noted that this batch of NBL 4-6-0s have an American look to them, in contrast to the slightly later batch seen below.

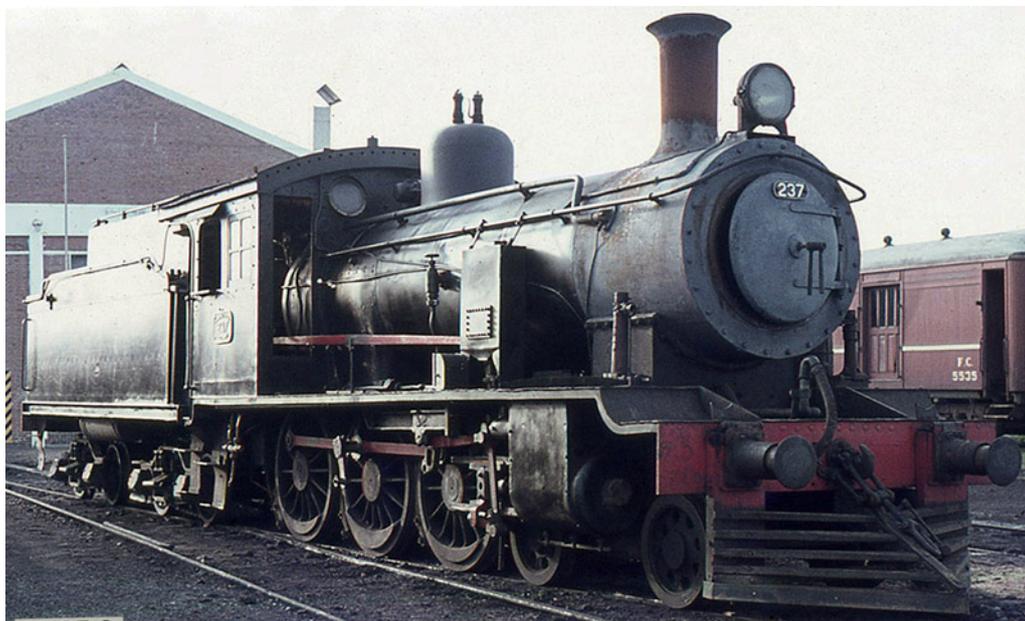


No. 230 reportedly surviving amidst undergrowth near Encarnación in 2020.

4-6-0 d/w 56", cyls. 17x24", built by North British (Atlas Works) in 1912

Ordered as part of NBL order L495 for *FC Entre Rios* (nos. 234-238) nos. 235 and 237; To *FCN Gral. Urquiza* nos. 235 and 237 in 1948, To Paraguay as nos. 235 and 237.

235	w/n 19855	In service 1986 and 1990.
237	w/n 19857	Seen at Tebicuary by Trevor Rowe in 1981 [13].
240	w/n 19977	
241	w/n 19978	



These engines had a much lower running plate, and in consequence appeared more British in style. In this photo, no. 237 appears to be oil-fired.

4-6-0 d/w 56", cyls. 17x24", built by Baldwin in 1908

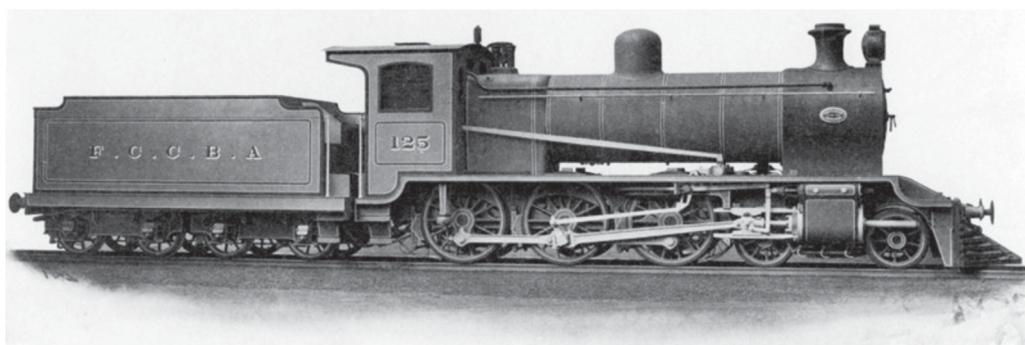
Built for *FC Entre Rios* no. 252, then to *FCN Gral. Urquiza*.

252	w/n 32578	To Paraguay as no. 252. However, reported 1993 out of service at Posadas on Argentine side of river.
-----	-----------	--

4-6-0 d/w 57", cyls. 20x24", built by Kerr Stuart in 1914

Ordered for *FC Central de Buenos Aires* no. 101-108 and 125-136; to *FCN Gral. Urquiza* nos. ??? in 1948. To Paraguay as nos. 286, 291 and 294.

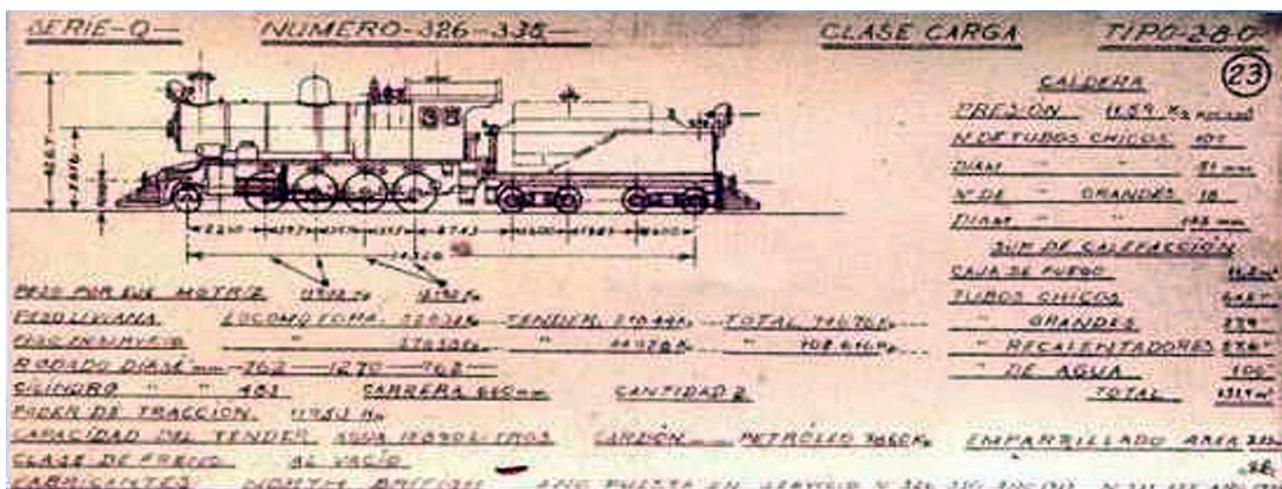
286	w/n ?	In service painted red in 1990.
291	w/n 1336	
294	w/n 1339	Spare loco at Asunción 1983 but OoS at Posadas in 1988 and 1992 [14].



A Kerr Stuart image showing one of these FCCBA 4-6-0s as built.

2-8-0 d/w 50", cyls. 19x26", built by North British (Atlas Works) in 1913

Ordered as part of NBL order 559 for *FC Entre Rios* no. **334**; to *FCN Gral. Urquiza* no. **334**. To Paraguay as no. **334**
 334 w/n 20397 Oil burner, based at Encarnacion. Survives at Encarnación.

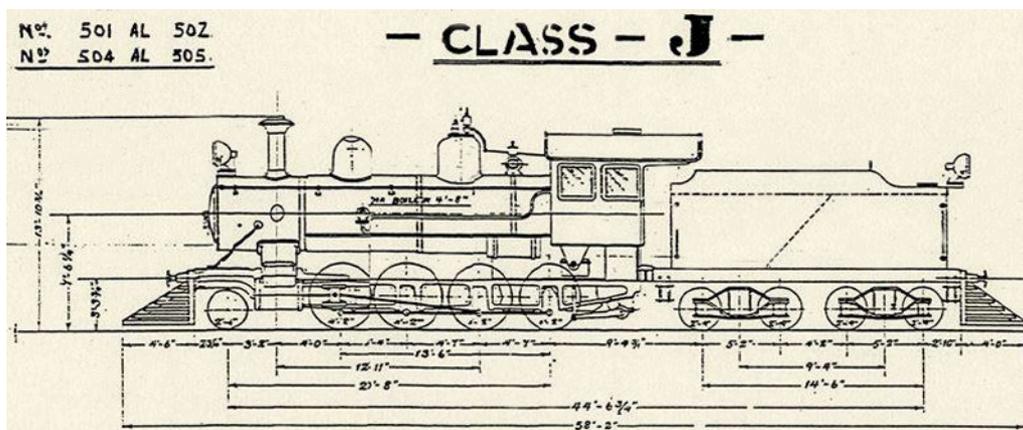


2-8-0 d/w 50", cyls. 18x24", built by Baldwin in 1906

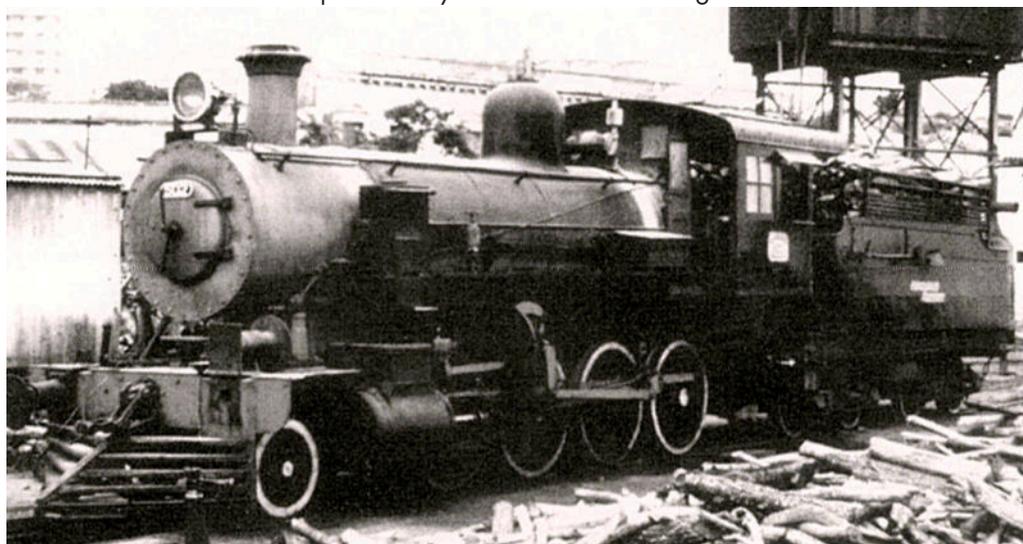
Baldwin sales order no. 6197, ordered 7-28-1905, completed 1/19/06. Class 10-30E no. 83. For *FC Entre Rios* no. **502**; to *FCN Gral. Urquiza* no. **502** 1948. To Paraguay as no. **502**.

502 w/n 27213

503 w/n 27214



This was presumably from an FCNGU diagram book.



FCNGU no. **502** seen at Asuncion.

2-8-0 d/w 50", cyls. 18x26", built by North British (Atlas Works) in 1912

Ordered as part of NBL order 463 for *FC Entre Rios* nos. **521, 524** as class P; to *FCN Gral. Urquiza* nos. **521** and **524**.
To Paraguay as nos. **521** and **524**.

521	w/n 19670	Latterly converted to wood-burning.
524	w/n 19673	In service painted black in 1990. Survives at Encarnación.

4-6-0 d/w 52", cyls. 16x24", built by Baldwin in 1908

Built for *FC Entre Rios* no. **252**, then to *FCN Gral. Urquiza*. no. **602**, to Paraguay as no. **602**.

602	w/n 33039	Reported 1993 out of service at Posadas on Argentine side of river.
------------	-----------	---

Replacement boilers

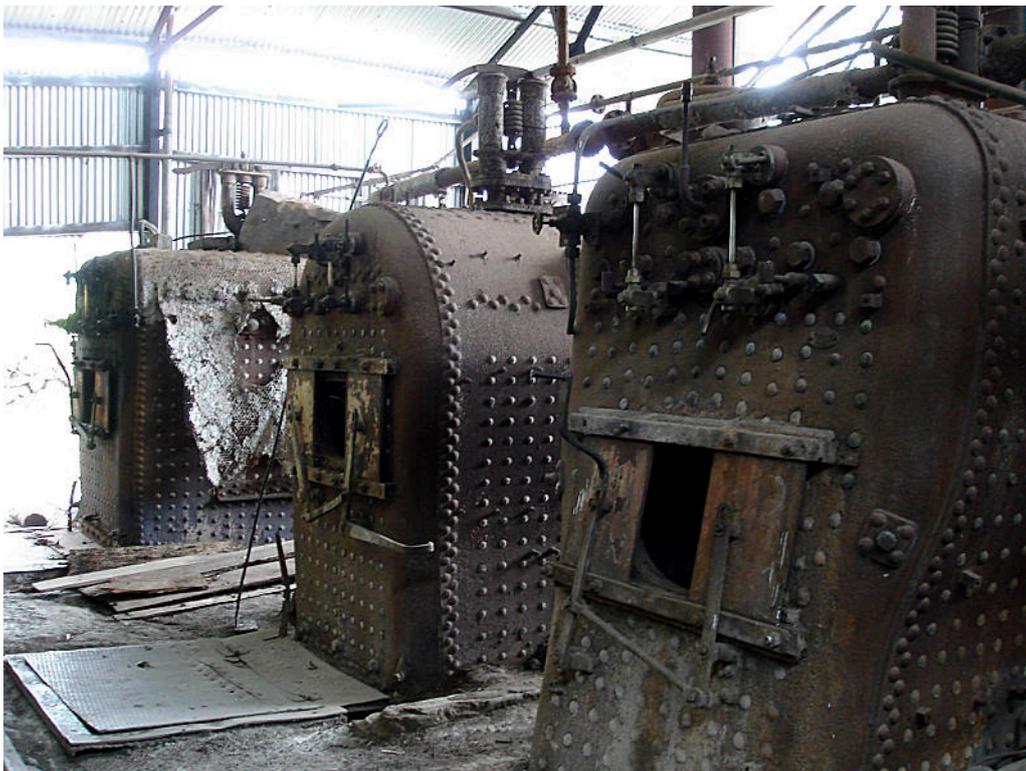
In 1958 the German locomotive builder Arnold Jung supplied three boilers to Paraguay.

K	13046	1958 Kessel	-	neu	Dolberg, für Paraguay
K	13059	1958 Kessel	-	neu	Glaser & Pflaum, für Paraguay
K	13060	1958 Kessel	-	neu	Glaser & Pflaum, für Paraguay

It seems likely that these would have been for mainline locos, but no further details are known.

Stationary boilers at Sapucay works

The following pair of photos were found on the Facebook page of *los Amantes del Ferrocarril del Paraguay*.



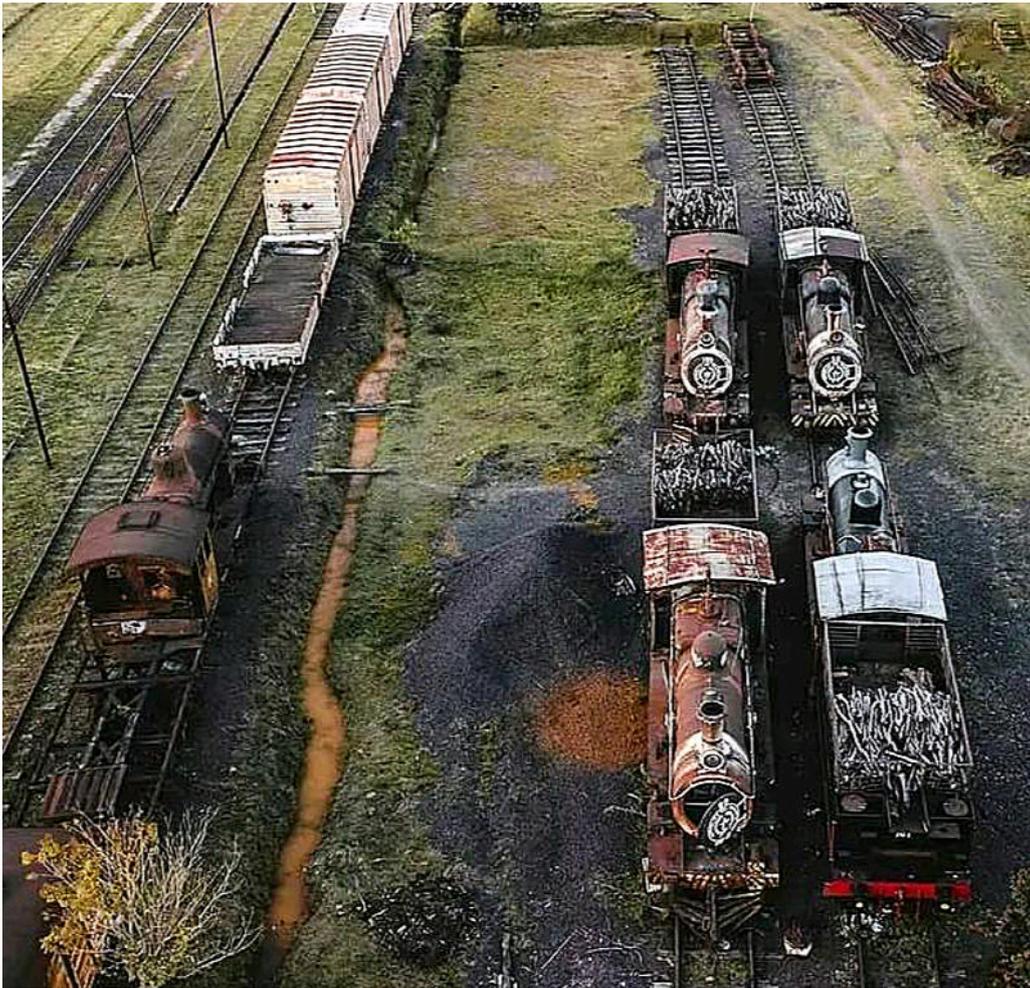
It would be interesting to discover which locomotive classes they originated from.

The right hand boiler in the picture above, ie. the left hand one below, has a belpaire firebox and a door mounted relatively high on a circular smokebox.

It might well have come from NBL 2-6-0s **51-60** or **101-104**. On the other hand, the left hand boiler above (right hand one below) also has a belpaire firebox but a slightly waisted flat-bottomed smokebox. It just might have begun its life on one of the pair of Hawthorn Leslie broad gauge 2-6-0s from 1907.

Finally, the middle boiler has a round-topped firebox and a strange smoke-box with low-mounted door and flat-bottomed front plate. So far its origin is a mystery.



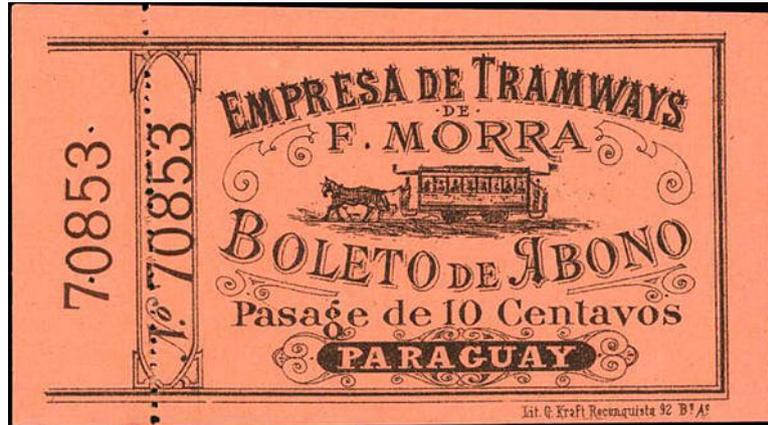


A photo that first appeared on the internet in late 2023 showing derelict steam locos at Encarnación. The guess must be that this drone photo is very recent.

8.2.2 The Asunción steam tramway

El tren lechero to San Lorenzo

1890-1936



Background

Standard gauge. The original horse tramway dated from 1871 (during the war, which seems a strange time to open a new tramway), running between Asunción port and railway station and owned by the *Cía. de Tramways de la Ciudad de Asunción*. In 1884 Francisco Morra purchased the operation and extended the route to his new town of Villa Morra via La Recoleta. Another (narrow gauge) route was built by Pacifico de Vargas and Sinforiano Alcorta at the same time, this one being to Cancha Sociedad and onward to Trinidad by 1890. That year both tramways were purchased by Campbell P. Ogilvie, and the Villa Morra line was extended to San Lorenzo and worked by steam. Various ownership changes, including purchase by the PCR in 1912, a hiving off into a separate but related entity, and the electrification of routes within Asunción, followed [? gives full details]. The San Lorenzo line continued to be steam worked from Villa Morra, around 11 km. This steam operation apparently closed in 1936.

Incidentally, but relevant to the interpretation of tramway photos, the late Allen Morrison pointed out that until 1945 Paraguayan road users drove on the left.

left rather than the top, contains more detail along the tramway route than any other so far seen. The steam-worked line commences at Villa Morra, bottom, and runs via Recoleta, Zavala-Cué and Capiipery to San Lorenzo del Campo Grande.

2-4-2T d/w 30"?, cyls. 10x16", built by Porter in 1899 and 1908

Ordered via S. H. Payne & Son, for Campbell P. Ogilvie, London, for Asunción, Paraguay. Later pair direct to Campbell Ogilvie.

- 1? 'SAN LORENZO' w/n 1948 Named after the town at the eastern end of the line.
- 2 'VILLA MORRA' w/n 1949 Named after Sr. Morra's eponymous new town part-way along the route.
- 3? 'PARAGUAY' w/n 3962
- 4? 'ITA' w/n 3963 Ita is a town of the indigenous Guaraní people 35 km from Asunción.

Note that the photos below show three variants of this basic 2-4-2ST design. That should not be a surprise. The Porter 2-4-2ST design with 10x16" cylinders and thus known by the code word *Himera* altered subtly over the years. In 1899 when the first pair were ordered, the saddle tank held 500 gallons, whilst by 1908 when the third and fourth locos reached Paraguay the tank had been enlarged to 600 gallons. All other basic dimensions had remained the same, but the boiler pressure had gone up from 140psi to 160psi, and thus the tractive effort had risen from 5,290 to 6,040 lbs.

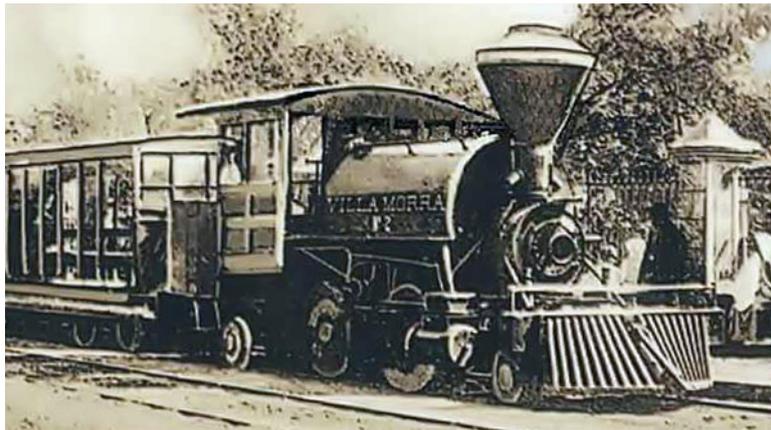
Photographs

Three variants of 2-4-2ST locomotive appear in photos taken on this line.

1 The oldest style, with a narrow but high saddle tank and cabsides whose base is level with the running plate at the base of the tank.



2 An intermediate style, still with a narrow but high saddle tank but with a cab whose sides extend downward no more than a foot below the base of the tank. Two of these photos clearly illustrate engine no. 2 ‘VILLA MORRA’.

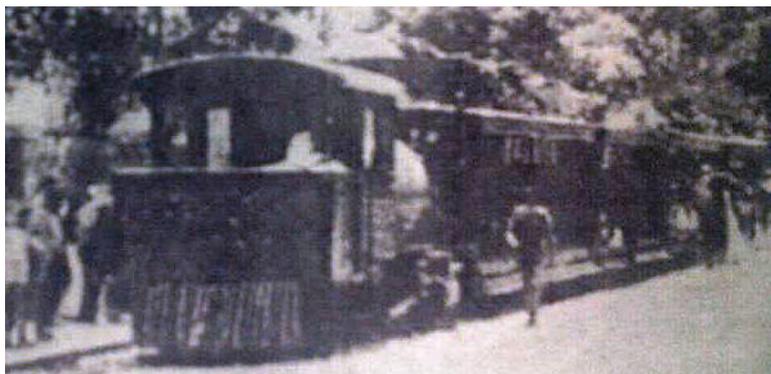


The saddle tank bears the words ‘VILLA MORRA’ No. 2.
This is therefore likely to be Porter no. 1949 of 1899.



Another view of the same engine, as published in *The Engineer*.

3 A more modern type, with a wider saddle tank and cabsides extending down slightly below the tops of the driving wheels.





This tinted image shows a slightly different type of locomotive, with a dome. The saddle tank also extends to the very front of the smokebox, unlike in the previous photos. The tank has a wider profile too.

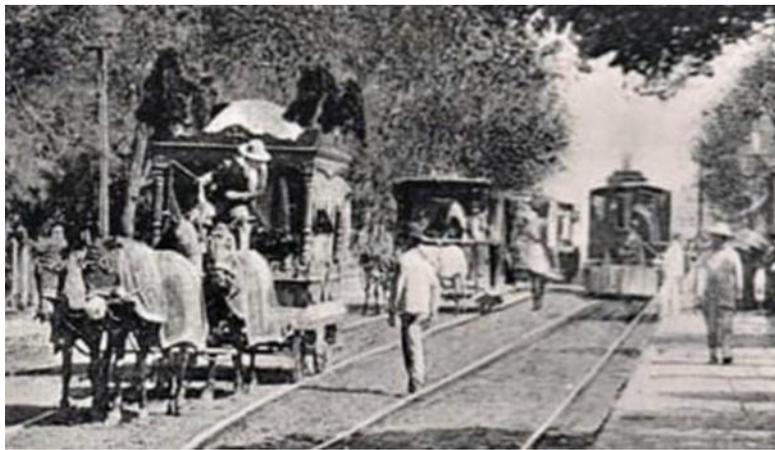
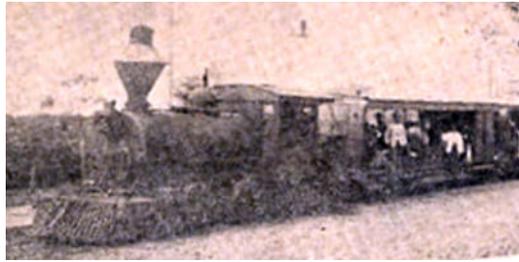
Note that the pair of photos immediately above show a loco with rounded eaves to the cab roof, whilst that below has traditional overhanging eaves.



The fleet in 1924

In the mid 1920s there were reported to be five locomotives, all supposedly with cyls. 240x350mm (approx. 9½x14") and weighing 15 tons.

Further photos



8.2.3 Standard gauge locos for unidentified locations

8.3 Metre gauge railways in Paraguay

8.3.1 *La Azucarera Paraguaya* at Tebicuary, 2nd generation

1924-

Background

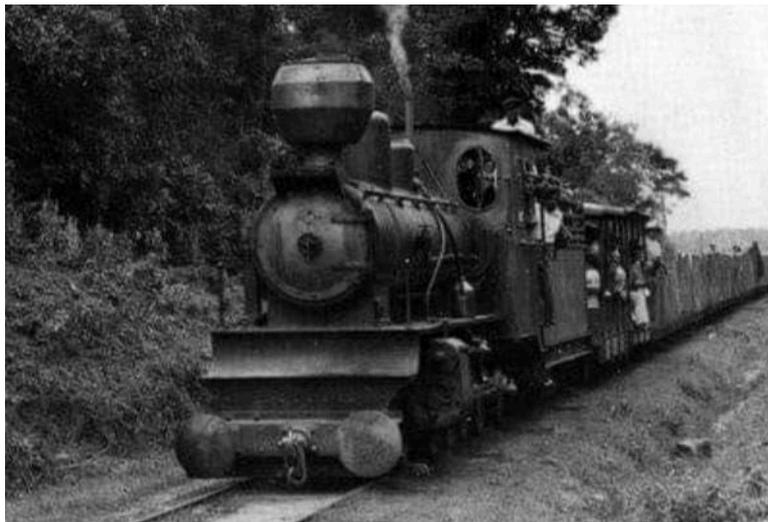
This was originally 75cm gauge, see section 8.4.1, but was regauged to 1 metre in 1924 [Renaud Olgiati]. Length about 40 km, about 13 km???, operated from 1910 to early in the 21st century. Also with standard gauge locos for interchange with the *FCCP*. “This was built for hauling sugar cane. The railway was abandoned, but at last report the equipment and facilities were still intact.” [1]

The line was built in connection with the sugar factory, noted above in connection with private sidings at Tebicuary (Paraguay Central Railway), to connect it to the sugar cane plantations which supplied it.

The US trade reviews for 1927 & 1947 do not give any information about locomotives or rolling stock.

2-8-2 d/w ?, cyls. ?, built by O&K in 1930

001 w/n 12099



0-8-0 d/w ?, cyls. ?, built by O&K in 1924 and 1921

90HP. Ordered for *Azucarera Paraguaya* for *Zuckerfabrik Tebicuary*.

002 'LUNA'	w/n 10786	One survives possibly operational.
003 'ESTRELLA'	w/n 9433	Possibly also the other.



No. **003** seen in the early 1970s in a shot by Roy Cristian from the *World of South American Steam*.

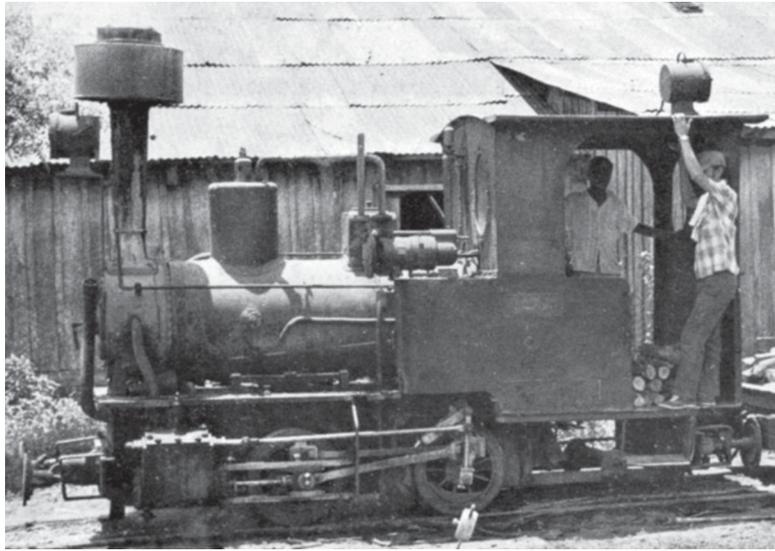


This very old photo almost certainly shows the rear of the tender of either **002** or **003**, though **001** is also a possibility.

0-4-0WT d/w ?, cyls. ?, built by O&K in 1909

30HP. Ordered via Francisco Siritto, who had a tramway at Villa Celina in southern Buenos Aires [Sr. Jorge Waddell 2021]. When that line was regauged and electrified the loco was purchased for *Zuckerfabrik Tebicuary*.

? w/n 3597

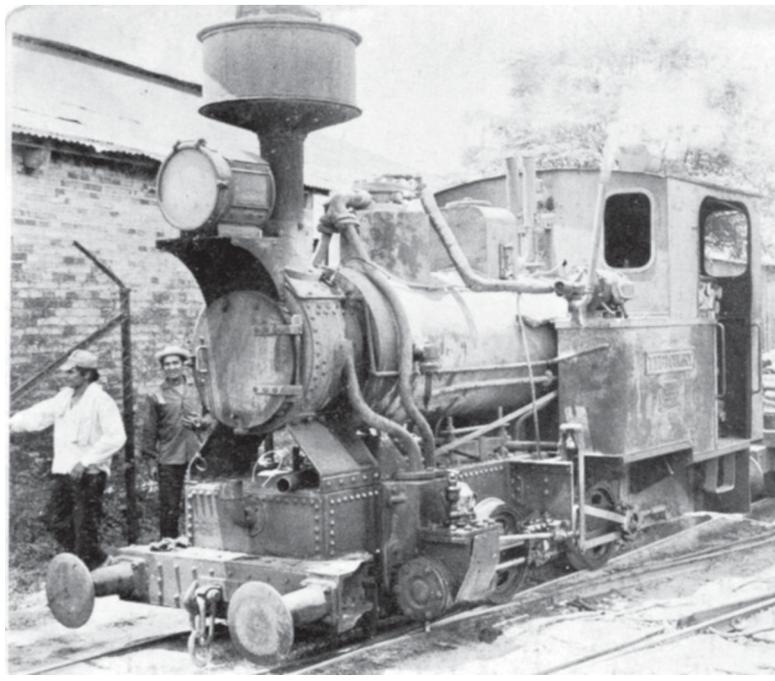


0-4-0WT d/w ?, cyls. ?, built by Hanomag in 1908

Ordered for Heldmann for Zucarfabrik.

‘TEBICUARY’

w/n 4992



0-6-0 d/w ?, cyls. ?, built by ? in ?

‘CHACO’

w/n ?

Standard gauge shunters

0-4-0 d/w ?, cyls. ?, built by Borsig in 1910

These were tram locos ordered via Fransisco Seeber of Buenos Aires for the *Tranvía Oeste y Sudoeste de Buenos Aires*. This company ran a tram line from Floresta to the cattle market and to Villa Lugano, but went bankrupt in 1914 [Info from Sr. Jorge Waddell 2021]. At Tebicuary they were used to shunt mainline wagons within the sugar mill yard.

? w/n 7473 One survives, the other is back in Europe.
? w/n 7624



This would appear to be a photo by the late Colin Garratt, who never missed an opportunity to show spectacular pyrotechnics.



Renaud Olgiati reports that between the world wars the Azucarera ran its own standard gauge trains over the Paraguay Central Railway as far as Iturbe to collect wagons laden with cane, until a new mill was built at that location. It is not known what motive power was used on those trains.



These two images show three surviving engines at Tébicuary. That on the left would seem to be one of the O&K 0-8-0s '**LUNA**' or '**ESTRELLA**', with the HanoMAG '**TEBICUARY**' in the middle and the small O&K 0-4-0T on the right.



8.3.2 José Fassardi at Puerto Casado

Background

Metre gauge. Quebracho wood railway, long abandoned. The following locos have been attributed to this site by some sources, but are much more reliably recorded on 75cm gauge at José Fassardi's other site on the PCR's Abai branch.

2-8-2 d/w ?, cyls. ?, built by O&K in ?

? w/n ?

2-8-2 d/w ?, cyls. ?, built by Henschel in 1925

Ordered via Ferrostaal for Paraguay. To *Holzwerk Jose Fassardi* at Puerto Casado. [JS] notes that the Henschel lists give the gauge of these as built as 750mm.

1 w/n 20455

2 w/n 20456

8.3.3 *Cía. Internacional de Productos* (International Products Company, also of New York)

1911-1960s?

Background

1000 mm gauge, length about 94 km, and possibly 145 km. at maximum. Operated from 1911 until circa 1960s. The New York & Paraguay Company was established about 1910, and soon thereafter constructed a line from Puerto Pinasco, located on the west bank of the río Paraguay to the south of Puerto Casado, where the workshops were, to the areas owned by the company, around Estancia Cáceres Cué, including branch lines from about Km 26 for about 21 km and from about Km 46 for about 5 km. Around 1920 the interests were transferred to the International Products Co. Martinez Domingo, writing on the FB page of *Fotos Antiguas del Paraguay*, says that in 1965 everything passed into the hands of an Argentine business, Invicta Ltd., which filed for bankruptcy less than two years later. [13] says that the line closed around 1967 but that seven steam locos still lay there in 1970. The line, but not the branches, is recorded on a military topographical map published in 1993.

Locomotive numbers in the 1920s

The 1920 US Dept. of Commerce volume *Paraguay A Commercial Handbook* says the company has 70 km of railway, with eight locos and 140 flat cars plus some passenger and cattle cars.

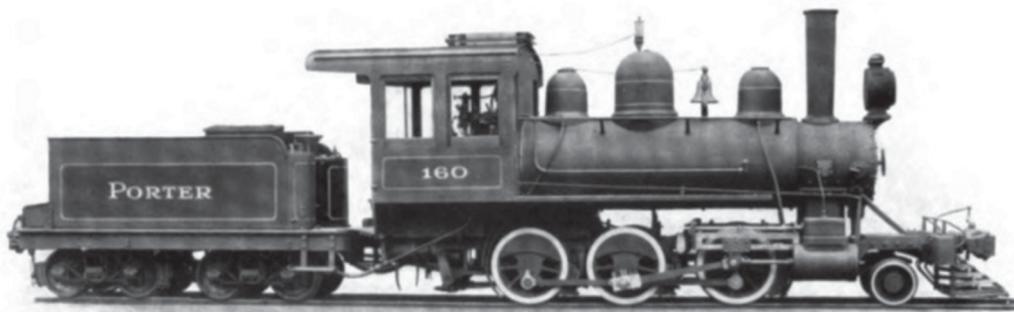
The US Dept. of Commerce report of 1927 [7] indicated that there were:– three German 6-coupled locomotives, cylinders 9½" x 14" stroke, two of 22 tons and one of 14 tons, three American 4-coupled locomotives, cylinders 11" x 16" stroke, of 16½ tons, 150 wagons for carrying wood.

Another source says there were seven locos and seventy wagons.

2-6-0 d/w ?, cyls. 10x16", built by Porter in 1920

Ordered by International Products Co. NY NY, for Paraguay.

? w/n 7192



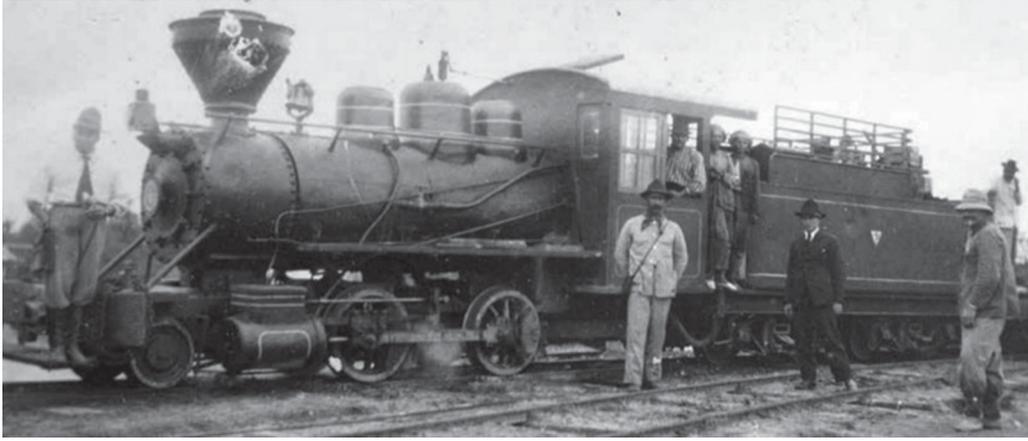
It is reasonable to assume that this 10x16" Porter 2-6-0 from the 1915 catalog would not be too different from the 1920 loco that was supplied here.

2-4-0 d/w ?, cyls. 11x16"?, built by ALCo Cooke in 1919 and 1920

? w/n 60581

? w/n 61582

? w/n 61583



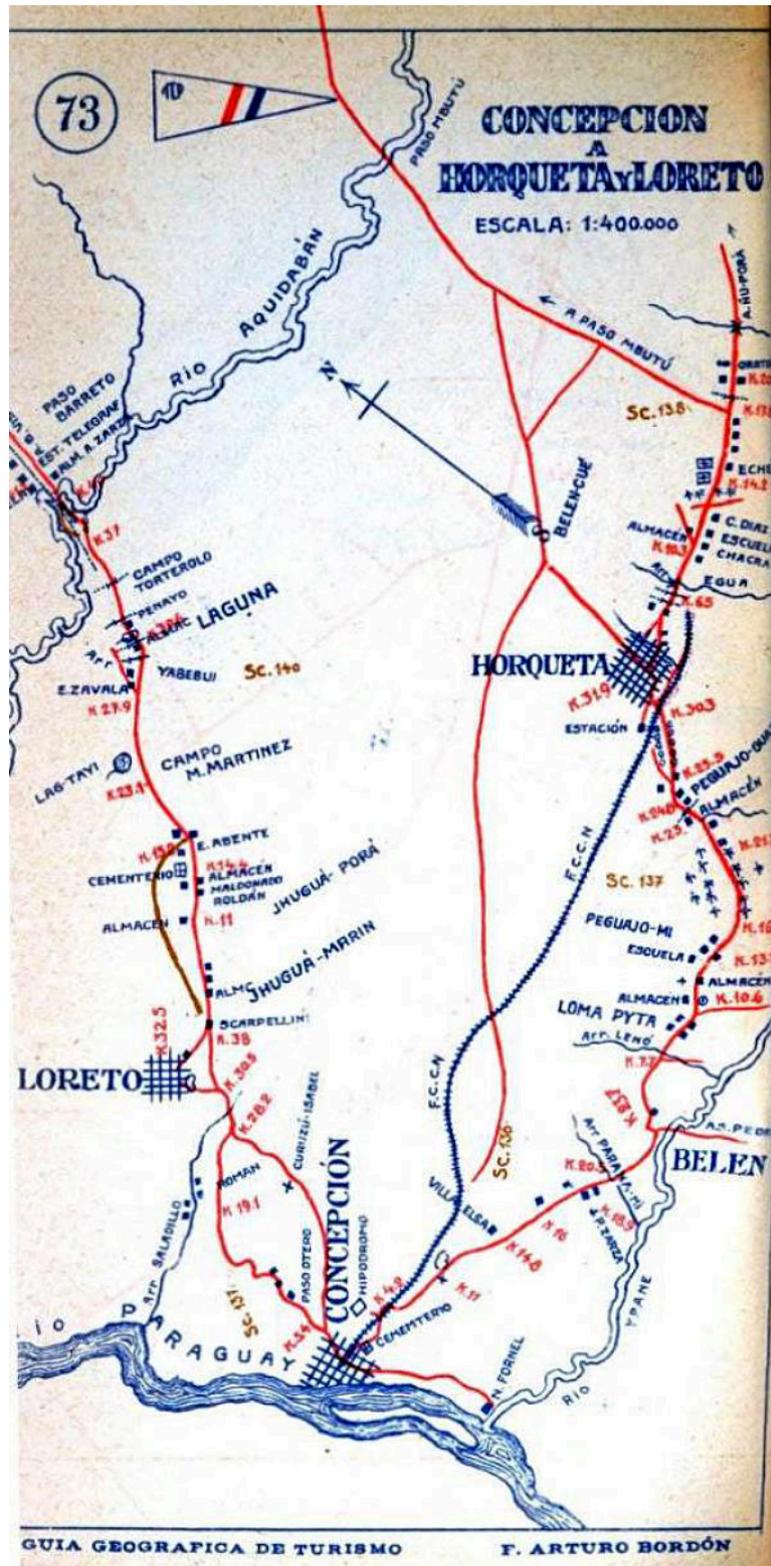
This is one of the three ALCo 2-4-0s which arrived at Puerto Pinasco, but it is not known precisely which one it is. The year was 1923.

Additional engines?

Source [13] suggests that there were seven steam locos lying here in 1970, though the line had closed by then. That suggests that there must have been three locos not yet identified.

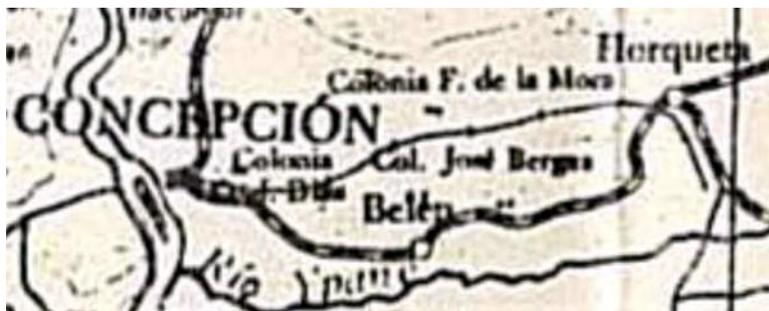
8.3.4 *El FC Nacional del Norte* at Concepción

1911-2013



The map above shows the railway from Concepción to Horqueta labelled as 'F.C.C.N.', though the precise meaning of the latter initials is uncertain.

Note that north is shown to the top left of the map.



This second map, though poorer in quality, shows the railway extending beyond Horqueta with a curve to the south. North in this case is straight up the page in the conventional manner.

Background

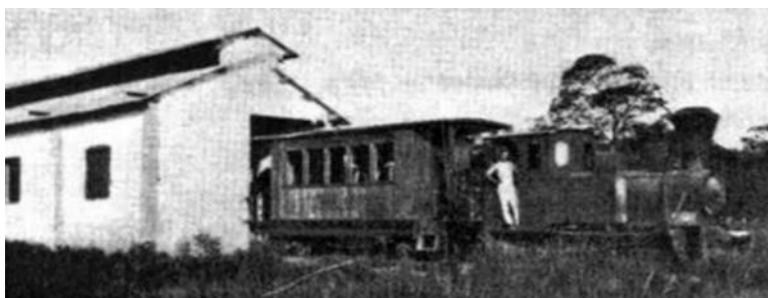
1000 mm Gauge, Length about 56 km. Operated 1911 until circa 2013.

Constructed by the firm of Guggiari Gaona y Cía. to give access to their sawmills, taken over on completion in 1910 by the Cía. Industrial y Comercial Norte del Paraguay which was owned by the same Guggiari, Gaona and Quevado interests. Latterly the railway was operated by the *Ministerio de Obras Públicas* under the business title of *Empresa Carlos Sosa*.

The line nominally connected Concepción, on the east bank of the río Paraguay, to Capitán Sosa a bit to the south of Horqueta on the road to Ponto Porá, a railhead on the frontier with Brazil, from where a metre gauge link built in the 1940s formed part of the *Noroeste do Brasil* network. A Brazilian-Paraguayan agreement signed in 1939 anticipated this line extending west into Paraguay using Brazilian capital, and eventually joining up with the *FCN del Norte* [8]. The US Dept. of Commerce report of 1927 [7] says there was a daily freight train to Horqueta and return, and passenger trains three times weekly. Locomotives were listed then as including 1 x 40hp, 2 x 70hp, 1 x 60hp, and 1 x 150hp. In 1941 a Brazil-Paraguay treaty committed the respective governments to linking up their railways, by extending the Campo Grande to Ponta Pora railway in Mato Grosso (with a branch to Bela Vista) and extending the railway from Concepción via Horqueta to Pedro Juan Caballero with a sub-branch to Bela Vista Paraguay [15]. There was to be a new international bridge at Bela Vista, and the *EF Noroeste de Brasil* would extend its services into Paraguay. These extensions did not reach completion, if indeed any work at all was done.

0-6-0T d/w ?, cyls. ?, built by Krauss in 1903

? w/n 4983 Survived in 1983.



Whilst this side tank loco looks rather different from the plinthead O&K engine illustrated below, it is not clear whether the latter originally had side tanks. This loco might therefore be either the Krauss listed above or one of the O&Ks listed immediately below.

0-6-0T d/w ?, cyls. ?, built by O&K in 1909, 1911 and 1913

Supplied to Guggiari Gaona & Cie., Asunción. All three survived in 1983, according to Dave Rollins in LI issue 141.

? w/n 3609 50hp.
? w/n 4664 70hp.

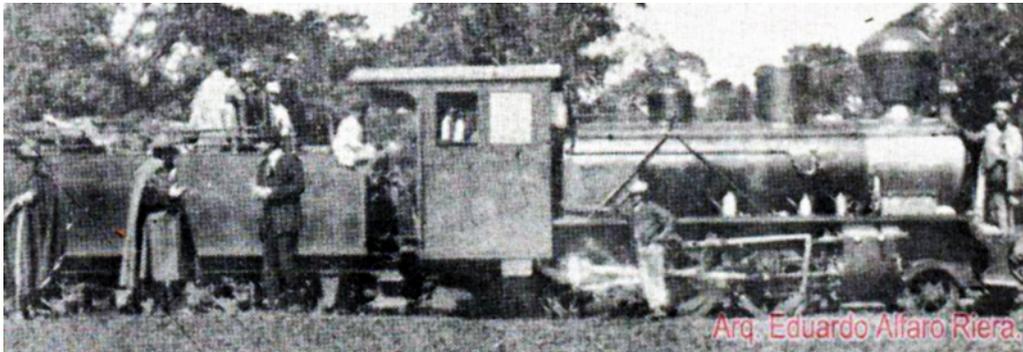
? w/n 6555 70hp.

At least one survives, plinthead, which various sources agree is O&K no. 3609.



2-6-0 d/w ?, cyls. ?, built by O&K in 1921

? w/n 9446 Also survived at old station in 1983.



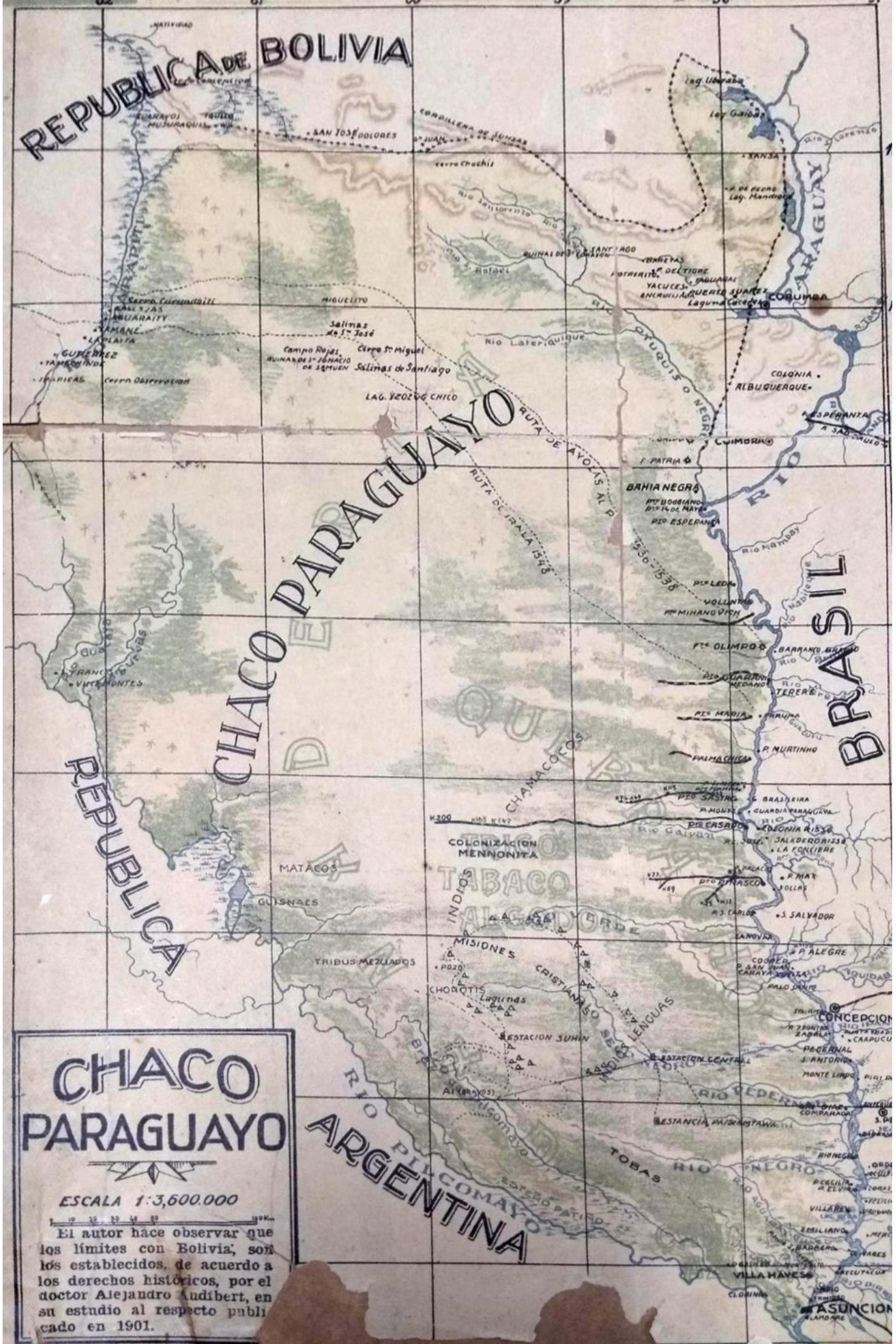
This would appear to be the O&K 2-6-0.

The fleet in the 1940s

A US trade review (1947) noted that there were:–

4 very old German make locomotives, weighing about 35 tons each, 22 timber wagons, 7 vans, 3 semi-passenger coaches. [What is meant by semi-passenger coach is not known.] [8], on the other hand, reporting in 1944 gave the loco total as five.

REPUBLICA DE BOLIVIA



CHACO PARAGUAYO

ESCALA 1:3,600,000

El autor hace observar que los límites con Bolivia, son los establecidos, de acuerdo a los derechos históricos, por el doctor Alejandro Udibert, en su estudio al respecto publicado en 1901.

8.3.5 FFCC Quebrachales Fusionadas at Puerto Max and Puerto María

1905-1960s?

Background

Gauges , length about 20 km, see below. Operated from 1905-6 until circa 1960s?

The Puerto Max line was used to supply the tannin factory with 700 tons of wood each month. The Puerto María line had the same capacity at its associated factory. During the Chaco war there was a military field hospital established at Puerto Max.

The entry for this company in Wikipedia notes that there was 1000 mm gauge track extending to 30 km and 60 cm track extending to 65 km. The assumption is that one relates to the line based on Puerto Max and the other to that based on Puerto María. It is also noted that there were 6 locomotives, 5 coaches and 35 freight vehicles. Source [20] from 1911 stated that Puerto Maria had 17 km of rail route with another 20 km under construction. A photo showing rail track suggests that the gauge there was rather wider than 60 cm, possibly 75cm or wider. The same source then says that Puerto Max was constructing 12 km of track of 75 cm gauge.

The fact that the company appears in a list for Argentina is not surprising as, like several other Paraguayan enterprises, the company was registered in Argentina.

The US Dept. of Commerce report of 1927 [7] states that this railway had by then been dismantled with all the equipment having been taken to the company's main Argentine Chaco plant at Puerto Tirol.

Any of the following could have been used here, or in Argentina on the line from Resistencia to Barranqueros.

0-4-0T d/w ?, cyls. ?, built by Borsig in 1930

Supplied to *Cia. Tecnica Importadora*, Buenos Aires, for *Quebrachales Fusionados*. Metre gauge.

? w/n 11611

0-6-0T d/w ?, cyls. ?, built by O&K between 1904 and 1907

All of these were for 750mm gauge.

?	w/n 1124	20hp	
?	w/n 1651	20hp	
?	w/n 1844	30hp	Tender loco.
?	w/n 1979	40hp	
?	w/n 1980	40hp	
?	w/n 2151	20hp	
?	w/n 2152	20hp	
?	w/n 2191	30hp	
?	w/n 2348	20hp	Tank + tender.
?	w/n 2547	30hp	

8.4 2' 6" or 750mm gauge railways in Paraguay

8.4.1 *La Azucarera Paraguaya* at Tebicuary, 1st generation

1910-1924

Background

2' 6" gauge. Ran from 1910 to about 1924 when it was regauged to 1 metre. Built

8.4.2 *Cía. Carlos Casado SA.* at Puerto Casado

1911-2010

Background

75 cm. gauge. Ran from 1911 to about 2010. Built from the Paraguay River to transport quebracho hardwood, which was used in the tannin industry, and also for chemicals and the manufacture of dyes. The railway was about 159 km. in length. It once had a weekly train on which passengers could travel, although the main purpose was for quebracho transport. The passenger coaches carried the initials *FCGCCh*, though the precise full name which had led to that abbreviation is unknown.

This line is considered to be the pioneer in developing the Chaco. The line nominally connected Puerto Casado, on the west bank of the río Paraguay, with the interior of the Chaco at Fortín Teniente Montanía, some 220 km from Puerto Casado. There was a branch from Km 84 northwards through several un-named encampments to Punta Rieles [= Rail-head] about 90 km. from the junction.

Much of the line is recorded on a military geography map published in 1993.

On 30 July 2011, the Chamber of Deputies passed a bill whereby declara *patrimonio departamental los rieles de la vía del ferrocarril situados en el departamento de Alto Paraguay* [it is declared the rails of the railway line located in the Department of Alto Paraguay are of departmental inheritance], ie the rails were to become the property of the departmental government to safeguard them and allow them to be lifted. It was noted that the only line in existence at that time extended for 180 km from Puerto Casado. This was not without controversy as much of the assets of the railway and the factory had been already removed by government agencies although they were clearly still the property of the company.

The US Dept. of Commerce report of 1927 [7] noted that there were:–

4 Koppel locomotives

1 ‘English’ locomotive

100 Koppel wagonettes for carrying logs.

0-4-0WT d/w ?, cyls. ?, built by Krauss Sendlings in 1903

Ordered through Arthur Koppel & Co. for Argentina.

1 ‘LAURITA’ w/n 5077 Survives derelict? or operational?



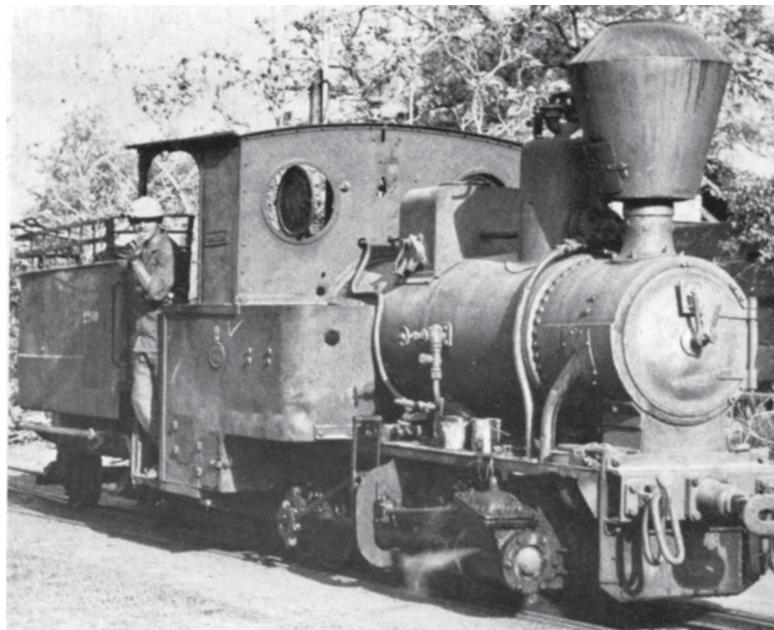
No. 1 in service.



No. 1, as now plinthed under a protective canopy. The date is more likely to relate to the commencement of operations at Puerto Casado than to the construction of the loco.

0-6-0WT d/w ?, cyls. ?, built by Krauss Sendling in 1902

Ordered through Arthur Koppel & Co. for Paraguay. Jens Merte's Krauss list says was Bn2T rather than 0-6-0T.
 2 'MARÍA CELINA' w/n 4639 Survives derelict.



Another shot by Roy Christian from the early 1970s as published in WoSAS.

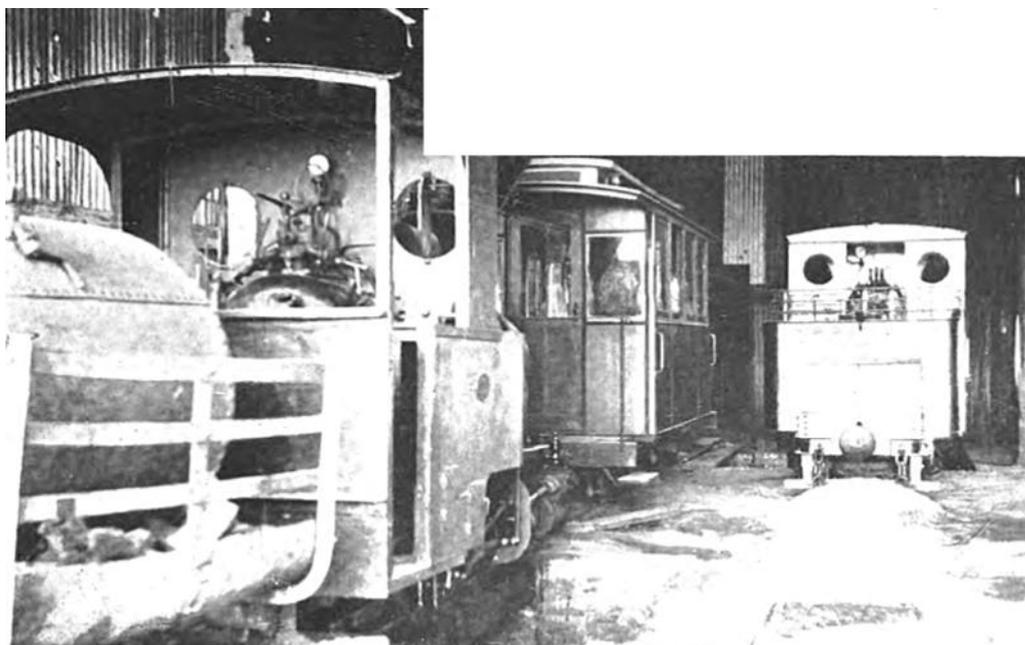
0-6-0WTT d/w ?, cyls. ?, built by Borsig in 1904

Ordered for *FC Puerto Sastrero* (Argentina) as a 0-6-0TT crane locomotive no. **2 'GRACIELA'**. To Cía. Carlos Casado, as **3 'GRACIELA'**.

3 'GRACIELA' w/n 5387 Survives. Later swapped numbers to become **2 'MARÍA CELINA'**.



A photo taken in 2005 showing O&K 0-6-0T no. **7 'FORTIN BOQUERON'** on the left and the Borsig no. **3 'GRACIELA'** on the right.



The interior of the Puerto Casado loco shed around 1911 [20]. The round spectacles of both visible engines could be any of nos. **1 to 3**, but the bunker outline of the left hand machine best matches loco no. **2**.

0-6-2T d/w ?, cyls. ?, built by ?? in 1928

Ordered for ??, later to Cía. Carlos Casado.

4 'DOÑA RAMONA' w/n 1793 Survives.

2-8-2WT d/w 27½", cyls. 9x14", built by Manning Wardle in 1916

Ordered on M-W order no. 73600 by Percy Grant & Co., Buenos Aires for Comp. Carlos Casado, Ltd. Three others of the same design were ordered for the Forestal company in Argentina, not for the Carlos Casado company as others have alleged.

5 'DON CARLOS'

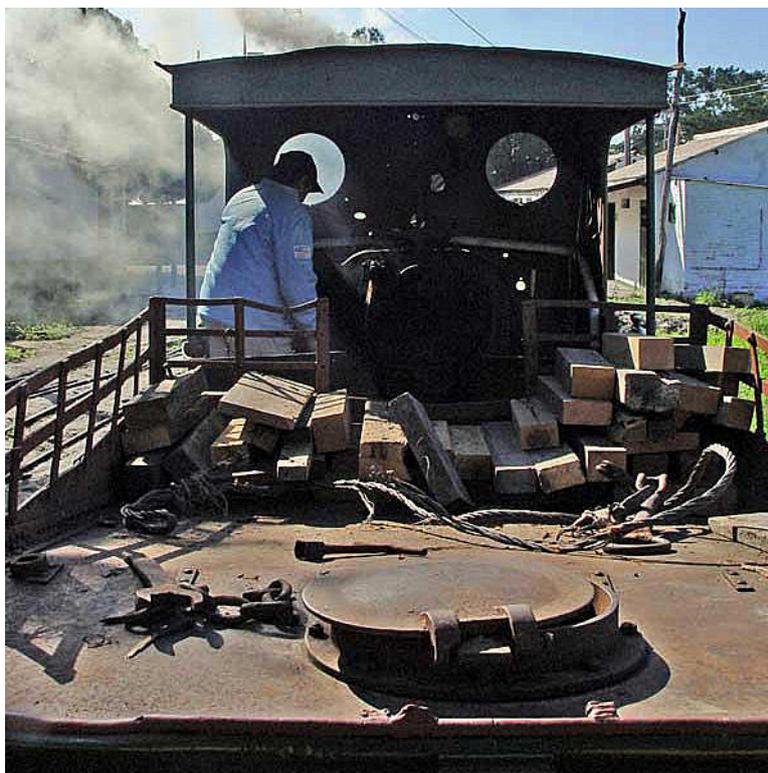
w/n 1901 Latterly seems to have lost both bogies. Survives derelict.



This is an MW builders' photo, found in Fred Harman's MW books.



No. 5 'DON CARLOS' in use toward the end of its active life.

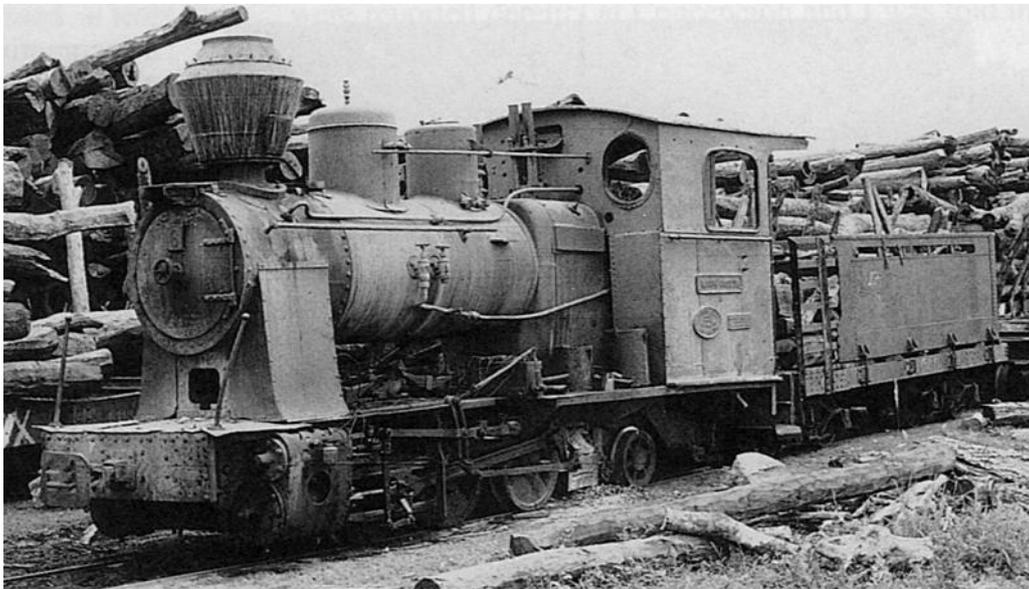


0-6-2T d/w 720mm, cyls. 250x360mm, built by Henschel in 1926

Ordered by Ferrostaal for Paraguay. Weight in service 16.5T.

6 'MARÍA CASILDA' w/n 20752 Survives derelict.





This David Ibbotson photo from 1983 shows the same loco but with tanks removed and a makeshift tender coupled on behind.

0-6-0WTT d/w ?, cyls. ?, built by O&K in 1906

Ordered by Hansenclever & Cia., Buenos Aires, 50HP

7 'FORTIN BOQUERON' w/n 1978 Survives derelict.



Photo by Oscar Ricardo Mazo Campos taken in 2005? Note the unusual shape of the spectacles, presumably a local modification.

2-8-2T d/w 720mm, cyls. 260x360mm, built by Henschel in 1928 and 1935

Ordered for Cía. Carlos Casado. Wheel and cylinder sizes were the same, but no. **8** weight in service 22T; no. **9** weight in service 24.8T. Grate area of second loco also larger, 1.3m² as compared to 0.85m².

8 'MARÍA INEZ' w/n 21239 Survives derelict.

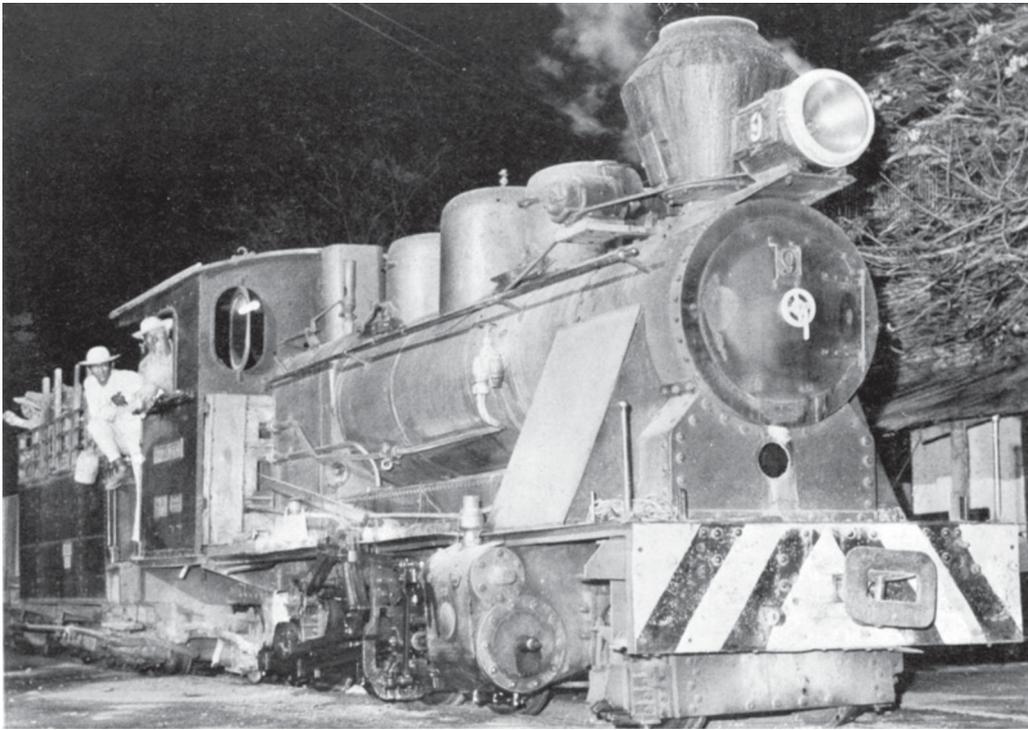
9 'PRES. EUSEBIO AYALA' w/n 22597 Survives derelict.



One of the FCGCCh 2-8-2s is seen at the Km. 145 terminus at the very western end of the railway.



The cab interior of loco no. 9, as seen by Antonio Spiridonoff in 2005.

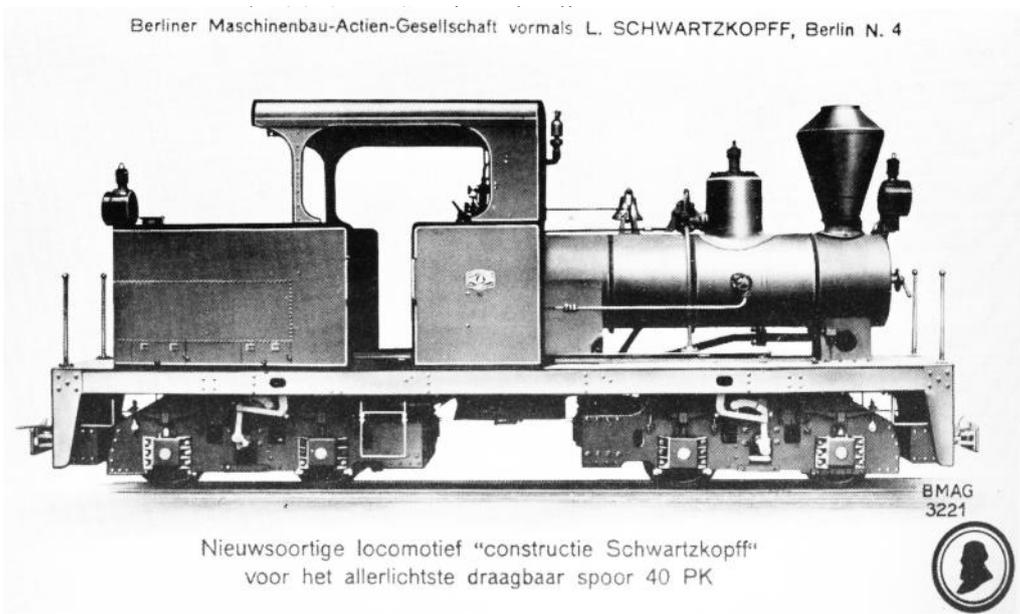


The hulk of one of the 2-8-2s, as surviving and now plinthed.

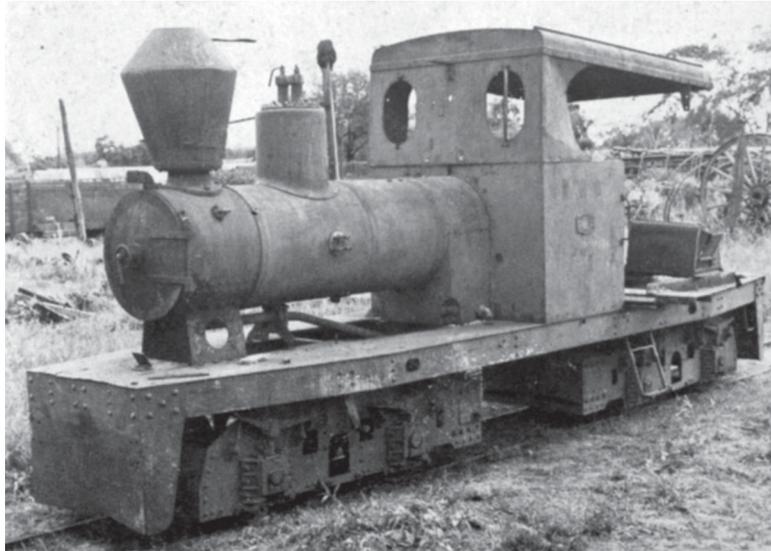
0-4-0+0-4-0T two truck geared d/w ?, cyls. ?, built by BMAG in 1926

BMAG/Schwartzkopff 'Plantagenlok'. Listed as built for Puerto Casado, Paraguay.

?



An illustration from a BMAG catalogue.



The Schwartzkopf articulated loco lies derelict in 1971 or thereabouts in this WoSAS picture by Roy Christian.

0-4-0WT d/w ?, cyls. ?, built by Hanomag in ?

? ‘?’ w/n ?

No locos for 75cm or 2' 6" gauge railways appear in the Hanomag list for either Paraguay or Argentina so the identity of this machine remains a puzzle.



This appears to be a Hanomag 0-4-0WT. The image appeared on a Paraguayan Facebook page as if at this location.

A mystery loco

The photo below appeared on a Puerto Casado photo webpage, but it is not certain whether this was a Carlos Casado engine or perhaps one belonging to José Fassardi's metre gauge system nearby.



This was probably German-built, and would appear to have O&K/Hackworth valve gear. It may well have been an 0-4-0 but the photo is too poor to be sure.

8.4.3 *El FC del Cía. Campos y Quebrachales Puerto Sastre* (Puerto Sastre Land and Quebracho Co.)

1910-1940?

Background

75 cm gauge, length about 90 km (including about 14 km of sidings). Operated circa 1910 until circa 1940.

Puerto Sastre is located on the west bank of the río Paraguay a short distance north of Puerto Casado north of the confluence with the río Apa which forms the frontier between Paraguay and Brazil on the east bank.

The company was established in 1905 to produce tannin. The factory could process 1,000 tons of wood a month at Puerto Sastre. Source [13] says the line closed around 1960.

The 1925 fleet

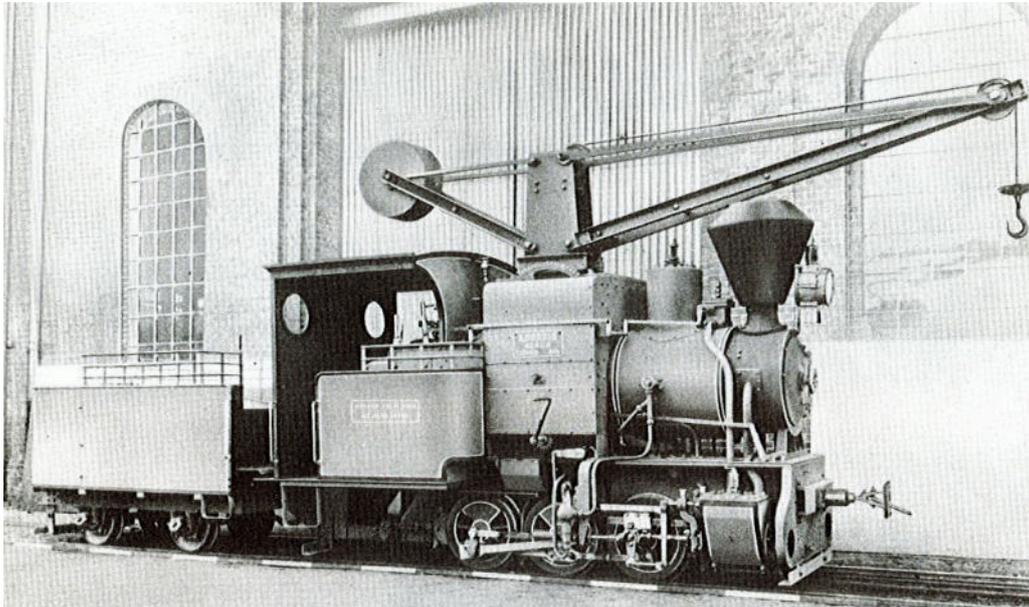
The US Dept. of Commerce report of 1927 [7] indicated that there were: five 4-axle German locomotives, one 3-axle German locomotive with tender, 75 2-axle wagonettes, capacity 12 tons for logs, 8 bogie water tank wagons, 5 bogie vans, 2 bogie service vans.

0-6-0WTT d/w ?, cyls. ?, built by Borsig in 1904

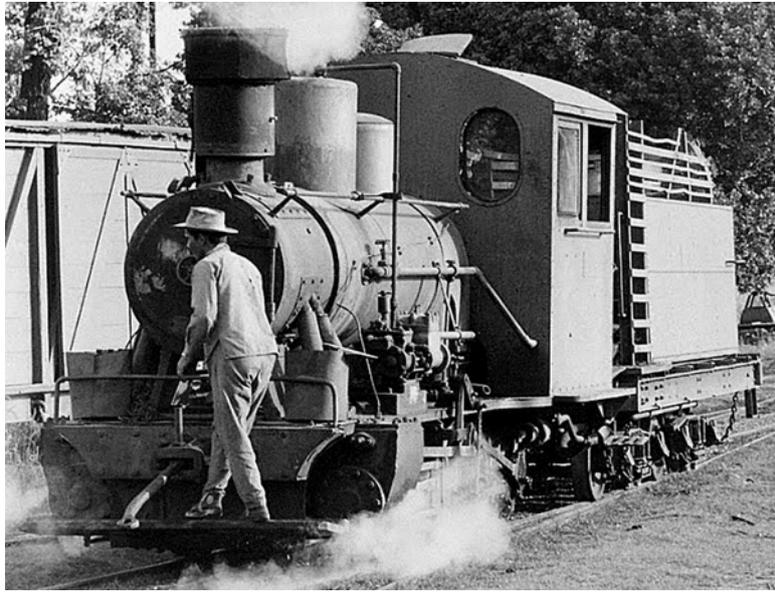
Ordered for *FC Puerto Sastre*. Borsig record notes that both were “crane locomotive with manually-operated crane and two-axle tender”.

1 ‘MARIO OTILIA’ w/n 5386

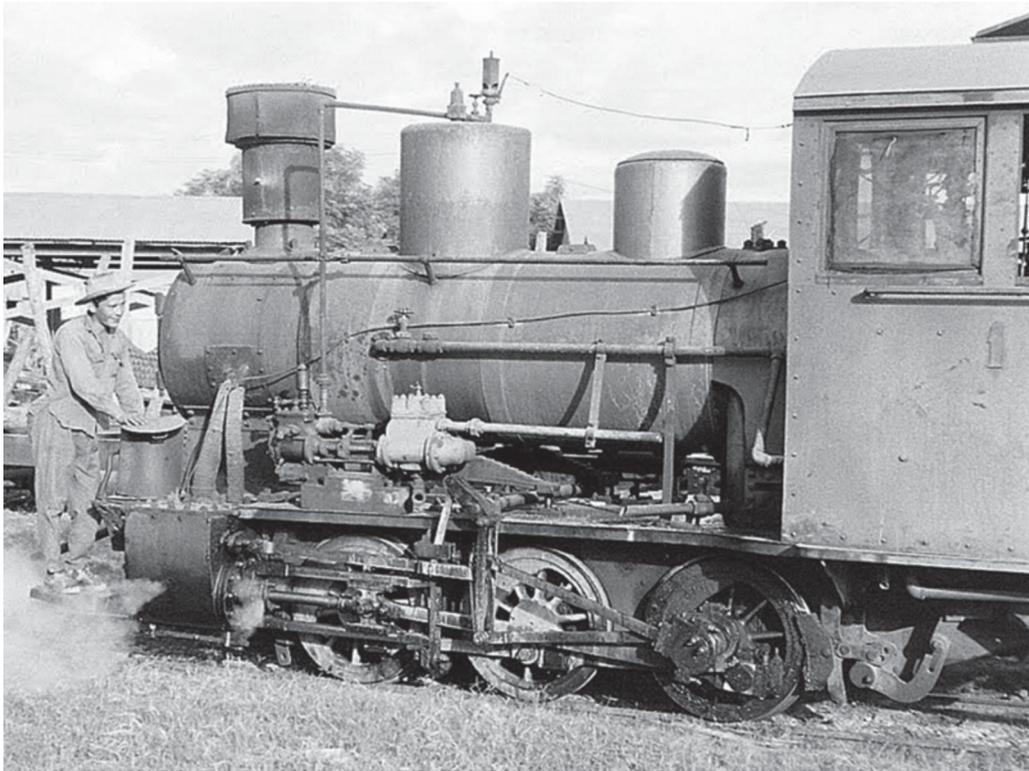
2 ‘GRACIELA’ w/n 5387 Later sold to the *Cía. Carlos Casado*.



A Borsig builder's photo of no.5396 no. 1 ‘MARÍA OTILIA’, by courtesy of Jens Schindler.

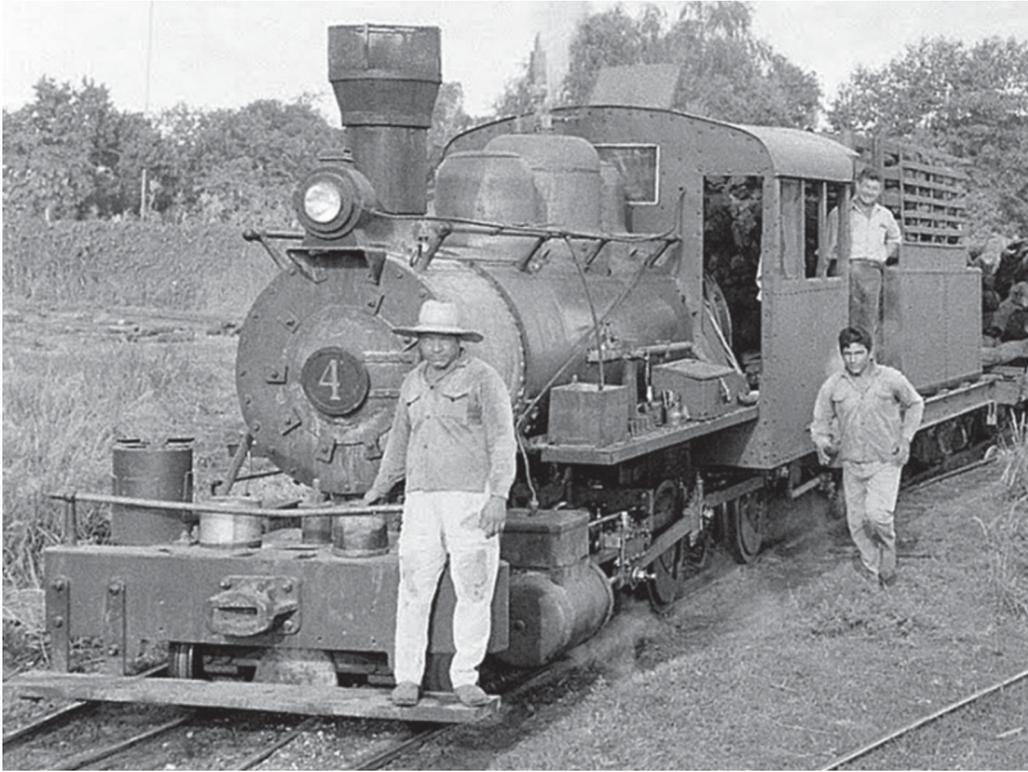


Two later photos of this engine after the crane had been removed. The dome appears to be much larger so possibly the loco had been reboilered. The cab has also been enclosed and a larger bogie tender provided.

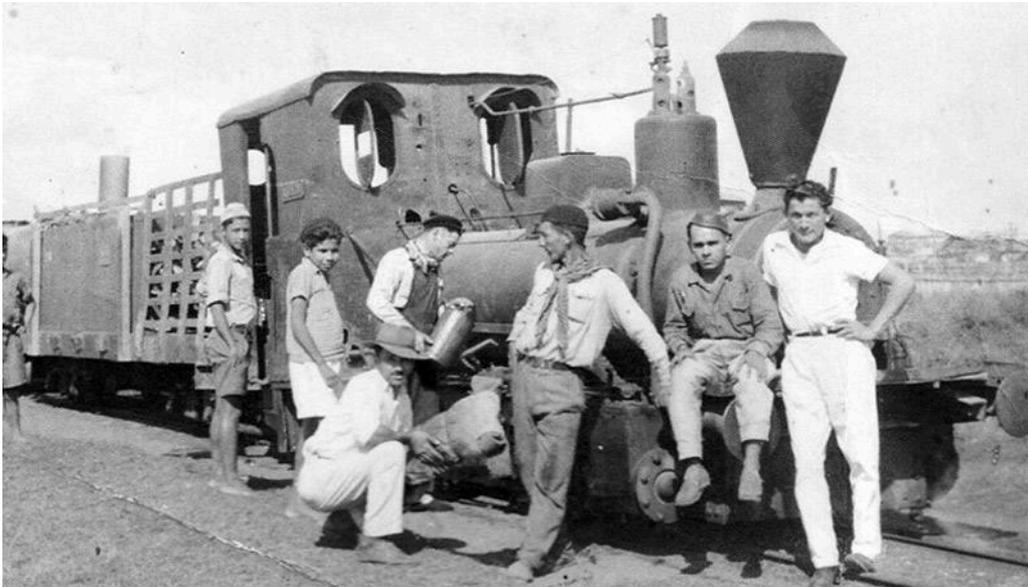


2-6-0 d/w ?, cyls. ?, built by ? in ?

4 w/n ?



? d/w ?, cyls. ?, built by O&K? in ?
? w/n ?



Whilst this engine is supposed to have been photographed at this location, it appears to have side buffers unlike other locos pictured in this section but like those at Tebicuary.

8.4.4 *El FC Compañía Puerto Ibabobo* **at one time *El FC Compañía Forestal del Paraguay***

1905-1960s

Background

2' 6" Gauge, Length about 33 km. Operated from 1905 until circa 1960s. Operated for timber extraction. By 1920 was owned by Devoto Carbone y Cía.

Puerto Ibabobo is located on the east bank of the río Paraguay about 35 km south of Concepción. The building of the railway was started in 1905 with some 20 km completed by 1909, a further 8 km by 1918 and a further 5 km by 1924. The workshops were at Puerto Ibabobo.

The US Dept. of Commerce report of 1927 [7] noted that there were:—

2 locomotives (6 wheels each) weighing 12,000 kg, cylinders 20 cm diameter

2 locomotives (6 wheels each) weighing 15,000 kg, cylinders 24 cm diameter

1 locomotive (6 wheels each) weighing 20,000 kg, cylinders 30½ cm diameter

20 wagons of American manufacture

25 wagons of German manufacture

8.4.5 *El FC Sociedad Forestal de Puerto Guarani* (Forestal Corporation)

1910-1960?

Background

2' 6" gauge, length about 91 km. Operate from circa 1910 to about 1960.

Puerto Guarani is located on the west bank of the río Paraguay, north of Puerto Sastre and south of the town of Fuerte Olimpo. The factory in 1924 was dealing with 5000 tons of timber per month.

Previously, according to source [20], this land had been worked by The American Quebracho Company, and the town had been known as Puerto Medamos. Subsequently the operators had been *El Sindicato Puerto Guarany*.

The US Dept. of Commerce report of 1927 [7] indicated that there were:–

3 Koppel locomotives of 80 hp

70 bogie flat wagons

6 4-wheel tank wagons for water supply

0-6-0T d/w ?, cyls. ?, built by O&K in 1906, 1921 and 1926

For Puerto Guarani, Paraguay-Argentina. 762mm gauge.

2 w/n 1976 50hp.

? w/n 9486 For *SA Forestal*, Puerto Guarani, Argentina.

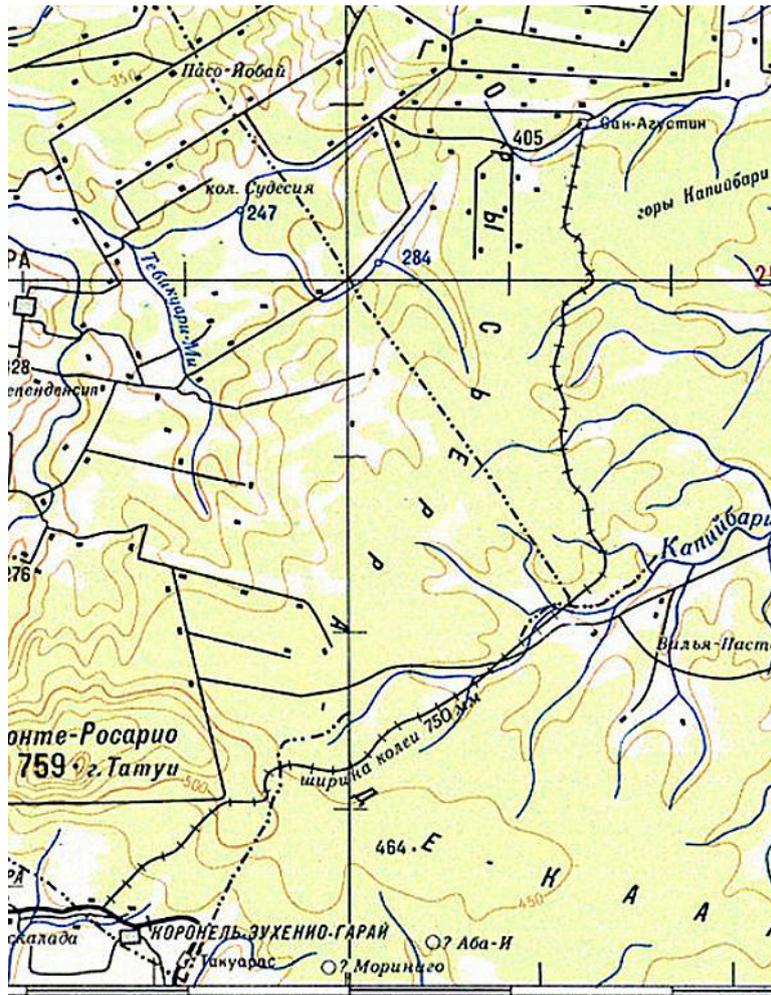
? w/n 11229 0-6-0TT, For *Soc. Forestal de Puerto Guarani SA*, Buenos Aires.



This photo was published in source [20] in 1910, and could very well be O&K 0-6-0T no. 2.

8.4.6 FC Forestal y Agropecuaria José Fassardi

1932-?



An extract from one of the large scale Russian maps of Paraguay that were mentioned earlier. The standard gauge Abai branch is visible at bottom left (solid black line), whilst the Fassardi NG route runs down from top right (thinner black line with cross-hatchings).

Background

75 cm gauge, length about 34 km. Operated from 1932 until ??

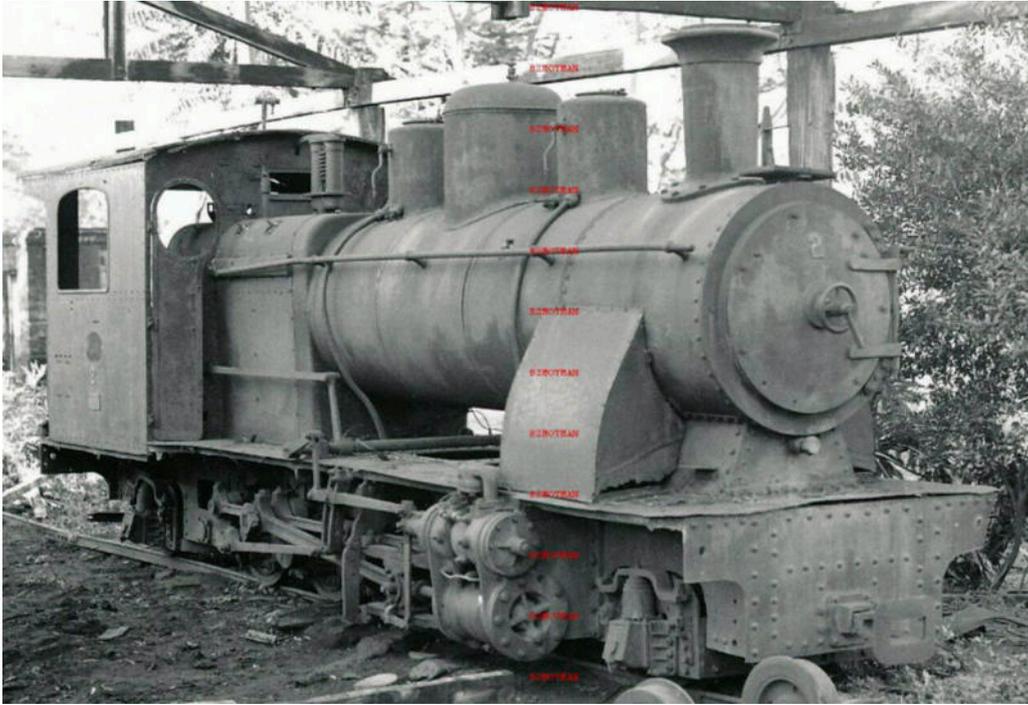
The railway acted as a feeder for timber and forestry products to the Abai branch of the Paraguay Central Railway at Fassardi station. So far as is known the company was not involved with the production of tannin.

The US trade review for 1947 does not give any information about locomotives or rolling stock.

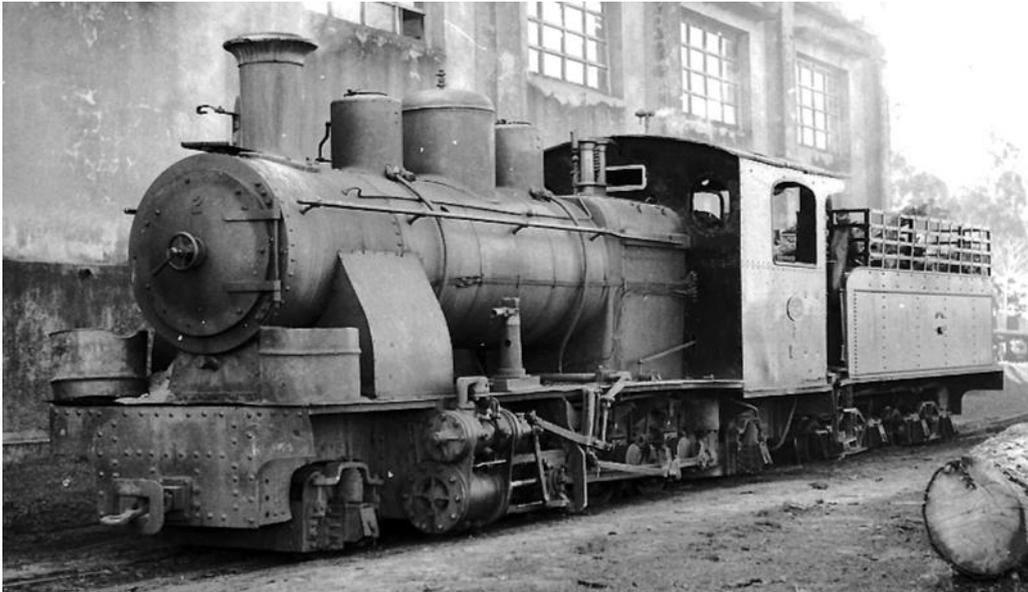
2-8-2 d/w ?, cys. ?, built by Henschel in 1925

Ordered via Ferrostaal for Paraguay. To *Holzwerk Jose Fassardi*. [JS] notes that the Henschel lists give the gauge of these as built as 750mm. These locos have been stated to have been at Fassardi's other site at Puerto Casado, but Jeremy Wiseman's notes, and photos below, very definitely have them at Fassardi on the PCR's Abai branch.

- 1 w/n 20455
- 2 w/n 20456



Henschel 2-8-2 no. 2.



This photo of the other side of loco no. 2 was taken by Jeremy Wiseman in July 1975.

Trevor Rowe in [13] says there had been three engines.

8.4.7 *Quebracho SA, location unknown*

Background

750mm gauge. Location and precise identity unknown. Details from main Henschel list.

0-4-0T d/w 630mm, cyls. 235x300mm, built by Henschel in 1950

Ordered for *Quebracho SA (Brasilien)* via Asunción. Gauge 750mm. Weight in service 13.3T.

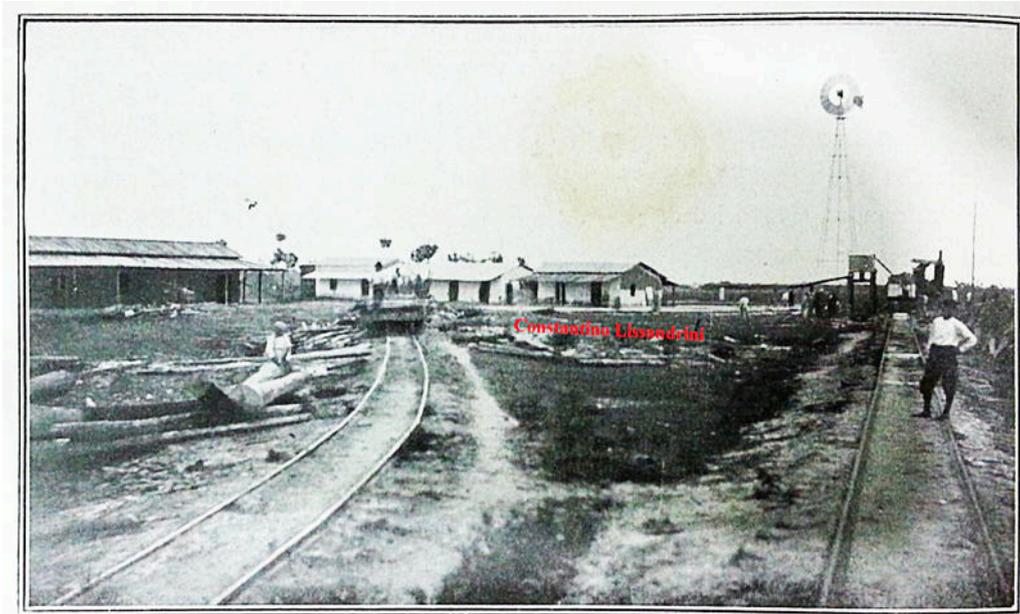
‘MARÍA SUSANA’

w/n 25175

8.4.8 The River Plate Quebracho Co. *El FC Puerto Palma Chica*

Background

Gauge 750mm, length about 24 km. This was on the west bank of the río Paraguay, amongst other similar railways though shorter than some others. Puerto Palma Chica nowadays seems to be known as Puerto María Auxiliadora. 1910-20xx.



Otro gran foco industrial: " Puerto Palma Chica ". — (The River Plate Quebracho Company)
Gran fábrica de tanino. — Galpones y ramales de la vía férrea al interior

So far no clues as to the locos used at Pto. Palma Chica have been found, but at least the rumour of 75cm gauge track would seem to be correct, judging by this image published in *La república del Paraguay en su primer centenario, 1811-1911*.

8.5 60 cm gauge railways

8.5.1 *don Pedro Christophersen*

1911-1950s?

Background

60 cm gauge, length about 18 km. Operated from 1911 until circa 1950s.

The line connected areas of production of timber to Carmén del Paraná, just north-west of Encarnación on the Paraguay Central Railway. It was also said to link a Polish colony to the railway station. It was not involved in the tannin industry.

There is no information so far about motive power or rolling stock.

8.5.2 *FC Quebrachales Fusionadas* at Puerto María or Puerto Max

1905-1960s?

Background

Gauges , length about 20 km [see below]. Operated from 1905-6 until circa 1960s? See also the metre gauge entry in section 8.3.5.

The Puerto Max line was used to supply the tannin factory with 700 tons of wood each month. The Puerto María line had the same capacity at its associated factory. During the Chaco war there was a military field hospital established at Puerto Max. Both Puerto Max and Puerto María are located on the east bank of the río Paraguay.

The entry for this company in Wikipedia notes that there was 1000 mm gauge track extending to 30 km and 60 cm track extending to 65 km. The assumption is that one relates to the line based on Puerto Max and the other to that based on Puerto María. It is also noted that there were 6 locomotives, 5 coaches and 35 freight vehicles.

The fact that the company appears in a list for Argentina is not surprising as, like several other Paraguayan enterprises, the company was registered in Argentina.

The 1920s US report states that this railway had by then been dismantled with all the equipment having been taken to the company's main Argentine plant at Puerto Tirol.

8.6 Railways of unknown gauge

8.6.1 The Curuzú / Curupayty military railway

1866-8?

Background

Jorge Waddell has explained [2] how the invading alliance of Brazil, Argentina and Uruguay, during the 1865 to 1870 War of the Triple Alliance, needed to advance up the rio Paraguay but were stymied by the presence of the armed base of Humaitá commanding a bend in the river.

The answer was to force the pass on a single occasion but then to avoid the problem by constructing a temporary railway from Curuzú / Curupayty across the peninsula which formed the core of the river bend. That way all supplies would be brought up by boat, transferred to rail wagons to cross the meander core and then put back into boats for onward shipment further north.

Note that technically this was on the Argentine side of the Río Paraguay but has been included for its relevance to Paraguayan history.

A locomotive?

Waddell thinks it most likely that this was a *ferrocarril a sangre*, using horse or man-power. However, he presents the possibility that the Brazilians constructed a make-shift locomotive using a boat boiler: “*Suponemos tambien el empleo de traction animal, ya que el corto recorrido y la topografia lo permitian. Sin embargo, en alguna literatura brasileña sobre la guerra, se dice que la marina de ese pais utilizando la caldera de un barco que tuvieron que abandonar, hizo una pequeña maquina de traction, o sea una locomotora improvisada. No nos consta esto pero la version existe.*”

“The Allies made a road round through the Chaco, from Riacho Quiá to the fleet between Curupayty and Humaitá, and laid down a timber tramway for communicating with and supplying their ships.” [6 p214]

8.6.2 *FC Quebrachales y Estancias (Puerto Galileo)*

1899?-1922?

Background

Gauge unknown. Length about 32 km. Operated from possibly 1899, or maybe 190? until circa 1922.

Puerto Galileo is located on the east bank of the río Pilcomayo a short distance above its confluence with the río Paraguay.

The railway was based on Puerto Galileo and extended into areas owned by the company.

It was an Argentine company established in 1906, associated with the Mihanovich family. The factory had a capacity of processing 250 tons of wood a month. The whole railway and factory were dismantled in the early 1920s and the material transferred to somewhere in Argentina.

There has been no information located so far about motive power or rolling stock.

8.6.3 The American Quebracho Company SA

Background

Gauge ?, length about 27 km

8.6.4 *El FC San Lorenzo – Palo Blanco*

Background

Gauge ?, length about ? km

1910-20xx

8.6.5 *FC Buena Vista – Comparada*

Background

Gauge ??, length about km. Operated from 1910 until 20xx?

It cannot be confirmed that Buena Vista is in Paraguay or had anything to do with a railway. There is a Buena Vista in Bolivia that is mentioned in connection with a railway.

Comparada is on the road from Puerto Antequera (east bank of río Paraguay) to San Pedro de Ycuá Manduyú and Nueva Germania.

8.6.6 *Industria Nacional del Cemento*

Background

At Vallemi, San Lázaro, north of Concepción on the east side of the Río Paraguay. The locomotive is plintheed outside the cement works but no background is known. It might have operated here, or could possibly have come from

0-4-0T? d/w ?, cyls. ?, built by O&K in ?

Ordered for ?

? w/n ?



The chimney is clearly that of an O&K.

8.6.7 A railway at Puerto Mihanovich

Background

Gauge unknown. A map displayed elsewhere in this document shows a railway extending west from a Puerto Mihanovich on the west bank of the Río Paraguay but further north than any of the other better known lines. Nothing else is known of this railway.

8.7 Unidentified locomotives



The railroad from Puerto Casado was the primary means of travel to the Mennonite colonies of the Chaco Boreal.

This photo, from an unknown published source in English, appears to show a small Fowler tank/tender loco somewhere up in the Chaco. Although Puerto Casado is mentioned in the caption, that railway is not known to have such an engine so maybe another line was the real operator.

A possible location

The following Fowlers were for Las Palmas del Chaco Argentina, via Hardy & Co. Given that several Paraguayan railways were owned by Argentine companies, it is quite possible that engines were ordered seemingly for Argentina only to end up working in Paraguay.

w/n 6954

w/n 11538

w/n 12273

w/n 12793

w/n 12968

w/n 13614

O&K

This photo was captioned as showing a 'Koppel & Co.' loco at a quebracho mill somewhere in Paraguay, and on 2' 6" gauge.



Interestingly, this engine appears to have squarish spectacles as seen on no. 7 at Puerto Casado though the cab is rather different. It may be the same engine though with the cab later having been rebuilt using the original spectacles.

8.8 Appendices

8.8.1 App. 1 Boiler explosion at an unknown date

This series of photos, seemingly showing the aftermath of a loco boiler explosion in an *FC Central* station somewhere, appeared on the Facebook page *Amantes del Ferrocarril del Paraguay*. The date would appear to be in the 1950s or later. Whilst the coach in the second image carries the initials *FCCP* that might well have remained for a number of years after the 1961 government takeover. The locomotive clearly had a belpaire firebox. The photos are from the collection of Ana Barreto Valinotti.





8.9 Index of locos by builders

* = Loco may have worked at owner's sites in Argentina and not in Paraguay.

Works no.	Year	Wheels	Gauge	Owner and number and name	Section
ALCo					
60581	1919	2-4-0	Metre	<i>Cía. Internac. de Productos ?</i>	8.3.3
60582	1919	2-4-0	Metre	<i>Cía. Internac. de Productos ?</i>	8.3.3
60583	1920	2-4-0	Metre	<i>Cía. Internac. de Productos ?</i>	8.3.3
Baldwin					
27213	1906	2-8-0	Std.	Ex <i>FCER 502</i> , to <i>FCNGU 502</i> , to <i>FCPCAL 502</i>	8.2.1
27214	1906	2-8-0	Std.	Ex <i>FCER 503</i> , to <i>FCNGU 503</i> , to <i>FCPCAL 503</i>	8.2.1
32578	1908	4-6-0	Std.	Ex <i>FCER 252</i> , to <i>FCNGU 252</i> , to <i>FCPCAL 252</i>	8.2.1
33039	1908	4-6-0	Std.	Ex <i>FCER 602?</i> , to <i>FCNGU 602</i> , to <i>FCPCAL 602</i>	8.2.1
BMAG / Schwartzkopf					
8459	1926	0-4+4-0T	75cm	<i>Cía. Carlos Casado ? '??'</i>	8.4.1
Beyer Peacock					
6646	1930	4-4-2+2-4-4T	Std.	Ex <i>FCNEA 107</i> , to <i>FCNGU 107</i> , to <i>FCPCAL 107</i>	8.2.1
Black Hawthorn					
978	1889	4-6-0T	5' 6"	Central Railway of Paraguay, 5 'CAMPANA'	8.1.1
979	1889	4-6-0T	5' 6"	Central Railway of Paraguay, 6 'YUTY'	8.1.1
982	1889	4-6-0T	5' 6"	Central Railway of Paraguay, 7 'BORJA'	8.1.1
983	1889	4-6-0T	5' 6"	Central Railway of Paraguay, 8 'SAN PEDRO'	8.1.1
Borsig					
5386	1904	0-6-0WTT	75cm	<i>FC Pto. Sastre 1 'MARIO OTILIA'</i>	8.4.2
5387	1904	0-6-0WTT	75cm	<i>FC Pto. Sastre 2 'GRACIELA'</i> , then to <i>Cía. Carlos Casado 3 'GRACIELA'</i>	8.4.2
7473	1910	0-4-0 tram loco	Std.	<i>La Azucarera Paraguaya ?</i>	8.3.1
7624	1910	0-4-0 tram loco	Std.	<i>La Azucarera Paraguaya ?</i>	8.3.1
11611	1930	0-4-0T	Metre	<i>Quebrachales Fusionadas* ?</i>	8.3.4
Couillet					
1581	1910	2-6-0	Std.	Ex <i>FCdE 551</i> , to <i>FCNGU 82</i> , to <i>FCPCAL 82</i>	8.2.1
1582	1910	2-6-0	Std.	Ex <i>FCdE 552</i> , to <i>FCNGU 83</i> , to <i>FCPCAL 83</i>	8.2.1
Fox Walker					
0-6-0ST	1873	0-6-0ST	5' 6"	<i>FC del Asunción a Villa Rica '??'</i>	8.1.1
Hanomag					
4992	1908	0-4-0WT	Metre	<i>La Azucarera Paraguaya 'TEBICUARY'</i>	8.3.1
?	?	0-4-0WT	75cm	<i>Cía. Carlos Casado ? '??'</i>	8.4.1

R. & W. Hawthorn / Leslie

1277	1864	0-6-0?	5' 6"	<i>FC de la Asunción a Villa Rica</i> , not delivered, went to India	8.1.1
1278	1864	0-6-0?	5' 6"	<i>FC de la Asunción a Villa Rica</i> , not delivered, went to India	8.1.1
2417	1899	4-4-0	5' 6"	Central Railway of Paraguay, 9 'PARANÁ'	8.1.1
2418	1899	4-4-0	5' 6"	Central Railway of Paraguay, 10 'PIRAPÓ'	8.1.1
2592	1899	4-4-0	5' 6"	Central Railway of Paraguay, 11 'POSADAS'	8.1.1
2591	1899	4-4-0	5' 6"	Central Railway of Paraguay, 12 'PILCOMAYO'	8.1.1
2672	1907	2-6-0	5' 6"	Central Railway of Paraguay, 16 'PIRAY'	8.1.1
2673	1907	2-6-0	5' 6"	Central Railway of Paraguay, 17 'PIRISIBY'	8.1.1
2808	1910	2-6-2T	Std.	Central Railway of Paraguay, 1	8.2.1
2809	1910	2-6-2T	Std.	Central Railway of Paraguay, 2	8.2.1
2810	1910	2-6-2T	Std.	Central Railway of Paraguay, 3	8.2.1
2815	1910	2-6-2T	Std.	Central Railway of Paraguay, 4	8.2.1
2818	1910	0-6-0T	Std.	Central Railway of Paraguay, 10	8.2.1
2819	1910	0-6-0T	Std.	Central Railway of Paraguay, 11	8.2.1
2977	1910	2-6-2T	Std.	Central Railway of Paraguay, 5	8.2.1
2978	1910	2-6-2T	Std.	Central Railway of Paraguay, 6	8.2.1
2981	1910	0-6-0T	Std.	Central Railway of Paraguay, 12	8.2.1

Henschel

20455	1925	2-8-2	Metre	José Fassardi at Pto. Casado 1	8.3.2
20456	1925	2-8-2	Metre	José Fassardi at Pto. Casado 2	8.3.2
20752	1926	0-6-2T	75cm	<i>Cía. Carlos Casado</i> 6 'MARÍA CASILDA'	8.4.1
21239	1928	2-8-2T	75cm	<i>Cía. Carlos Casado</i> 8 'MARÍA INEZ'	8.4.1
22597	1935	2-8-2T	75cm	<i>Cía. Carlos Casado</i> 9 'PRES. EUSEBIO AYALA'	8.4.1
25175	1950	0-4-0T	75cm	<i>Quebracho SA</i>	8.4.6

Hohenzollern

432	1888	4-4-0	5' 6"	Central Railway of Paraguay, 1 'VILLA RICA'	8.1.1
433	1888	4-4-0	5' 6"	Central Railway of Paraguay, 2 'ESCOBAR'	8.1.1
434	1888	4-4-0	5' 6"	Central Railway of Paraguay, 3 'PROGRESO'	8.1.1
435	1888	4-4-0	5' 6"	Central Railway of Paraguay, 4 'CABALLERO'	8.1.1

John Jones

333	1861	2-4-0T	5' 6"	Argentina, then <i>FC de la Asunción a Villa Rica</i> 'RAPIDEZ' later 'HERVAL' or 'POLIDORA'	8.1.1
334	1861	2-4-0T	5' 6"	Argentina, then <i>FC de la Asunción a Villa Rica</i> 'PUNTUALIDAD' later 'POLIDORA' or 'HERVAL'	8.1.1

Kerr Stuart

?	1914	4-6-0	Std.	Ex <i>FCCBA</i> ?, to <i>FCNGU</i> 286 , to <i>FCPCAL</i> 286	8.2.1
1336	1914	4-6-0	Std.	Ex <i>FCCBA</i> 131 , to <i>FCNGU</i> 291 , to <i>FCPCAL</i> 291	8.2.1
1339	1914	4-6-0	Std.	Ex <i>FCCBA</i> ?, to <i>FCNGU</i> 294 , to <i>FCPCAL</i> 294	8.2.1

Krauss

4639	1902	0-4-0WT	75cm	<i>Cía. Carlos Casado</i> 1 'MARÍA CELINA'	8.4.1
4983	1903	0-6-0T	Metre	<i>FC Nacional del Norte</i> ?	8.3.4

5077	1903	0-4-0WT	75cm	<i>Cía. Carlos Casado 2 'LAURITA'</i>	8.4.1
------	------	---------	------	---------------------------------------	-------

Manning Wardle

1901	1916	2-8-2WT	75cm	<i>Cía. Carlos Casado 5 'DON CARLOS'</i>	8.4.1
1991	1916	2-8-2WT	75cm	<i>Cía. Carlos Casado ? 'Las CHUNAS'</i>	May never 8.4.1
1992	1916	2-8-2WT	75cm	<i>Cía. Carlos Casado ? 'Las GAMAS'</i>	have reached 8.4.1
1993	1916	2-8-2WT	75cm	<i>Cía. Carlos Casado ? 'La AURORA'</i>	Paraguay. 8.4.1

Neilson

3875	1890	2-6-0	Std.	Ex <i>FCNEA 0-6-0 32</i> , to <i>FCNGU 70</i> , to <i>FCPCAL 70</i>	8.2.1
------	------	-------	------	---	-------

North British Locomotive Co.

19134	1910	2-6-0	Std.	Central Railway of Paraguay, 51	8.2.1
19135	1910	2-6-0	Std.	Central Railway of Paraguay, 52	8.2.1
19136	1910	2-6-0	Std.	Central Railway of Paraguay, 53	8.2.1
19137	1910	2-6-0	Std.	Central Railway of Paraguay, 54	8.2.1
19138	1910	2-6-0	Std.	Central Railway of Paraguay, 55	8.2.1
19139	1910	2-6-0	Std.	Central Railway of Paraguay, 56	8.2.1
19140	1910	2-6-0	Std.	Central Railway of Paraguay, 57	8.2.1
19141	1910	2-6-0	Std.	Central Railway of Paraguay, 58	8.2.1
19142	1910	2-6-0	Std.	Central Railway of Paraguay, 59	8.2.1
19143	1910	2-6-0	Std.	Central Railway of Paraguay, 60	8.2.1
19144	1910	2-6-0	Std.	Central Railway of Paraguay, 101¹	8.2.1
19145	1910	2-6-0	Std.	Central Railway of Paraguay, 102	8.2.1
19146	1910	2-6-0	Std.	Central Railway of Paraguay, 103	8.2.1
19147	1910	2-6-0	Std.	Central Railway of Paraguay, 104	8.2.1
19208	1910	4-6-0	Std.	Ex <i>FCER 222</i> , to <i>FCNGU 222</i> , to <i>FCPCAL 222</i>	8.2.1
19212	1910	4-6-0	Std.	Ex <i>FCER 226</i> , to <i>FCNGU 226</i> , to <i>FCPCAL 226</i>	8.2.1
19214	1910	4-6-0	Std.	Ex <i>FCER 228</i> , to <i>FCNGU 228</i> , to <i>FCPCAL 228</i>	8.2.1
19216	1910	4-6-0	Std.	Ex <i>FCER 230</i> , to <i>FCNGU 230</i> , to <i>FCPCAL 230</i>	8.2.1
19670	1912	2-8-0	Std.	Ex <i>FCER 521</i> , to <i>FCNGU 521</i> , to <i>FCPCAL 521</i>	8.2.1
19673	1912	2-8-0	Std.	Ex <i>FCER 524</i> , to <i>FCNGU 524</i> , to <i>FCPCAL 524</i>	8.2.1
19855	1910	4-6-0	Std.	Ex <i>FCER 235</i> , to <i>FCNGU 235</i> , to <i>FCPCAL 235</i>	8.2.1
19857	1910	4-6-0	Std.	Ex <i>FCER 237</i> , to <i>FCNGU 237</i> , to <i>FCPCAL 237</i>	8.2.1
19877	1910	4-6-0	Std.	Ex <i>FCER 240</i> , to <i>FCNGU 240</i> , to <i>FCPCAL 240</i>	8.2.1
19878	1910	4-6-0	Std.	Ex <i>FCER 241</i> , to <i>FCNGU 241</i> , to <i>FCPCAL 241</i>	8.2.1
20082	1913	2-6-0	Std.	Central Railway of Paraguay, 101²	8.2.1
20397	1913	2-8-0	Std.	Ex <i>FCER 334</i> , to <i>FCNGU 334</i> , to <i>FCPCAL 334</i>	8.2.1

O&K

1124	1904	0-6-0T	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4
1651	1905	0-6-0T	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4
1844	1906	0-6-0TT	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4
1976	1906	0-6-0T	75cm	<i>Soc. Forestal de Pto. Guarani ?</i>	8.4.4
1978	1906	0-6-0WTT	75cm	<i>Cía. Carlos Casado 7 'FORTIN BOQUERON'</i>	8.4.1
1979	1906	0-6-0T	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4
1980	1906	0-6-0T	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4
2151	1906	0-6-0T	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4

2152	1906	0-6-0T	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4
2191	1907	0-6-0T	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4
2348	1907	0-6-0TT	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4
2547	1907	0-6-0T	75cm	<i>Quebrachales Fusionadas* ?</i>	8.3.4
3597	1909	0-4-0WT	Metre	<i>La Azucarera Paraguaya ? ‘?’</i>	8.3.1
3609	1909	0-6-0T	Metre	<i>FC Nacional del Norte ?</i>	8.3.5
4664	1911	0-6-0T	Metre	<i>FC Nacional del Norte ?</i>	8.3.5
6555	1913	0-6-0T	Metre	<i>FC Nacional del Norte ?</i>	8.3.5
9433	1921	0-8-0	Metre	<i>La Azucarera Paraguaya 003 ‘ESTRELLA’</i>	8.3.1
9446	1921	2-6-0	Metre	<i>FC Nacional del Norte ?</i>	8.3.5
9486	1921	0-6-0T	75cm	<i>Soc. Forestal de Pto. Guaraní</i>	8.4.4
10786	1924	0-8-0	Metre	<i>La Azucarera Paraguaya 002 ‘LUNA’</i>	8.3.1
11229	1926	0-6-0TT	75cm	<i>Soc. Forestal de Pto. Guaraní ?</i>	8.4.4
12099	1930	2-8-2	Metre	<i>La Azucarera Paraguaya 001</i>	8.3.1
?	?	2-8-2	Metre	<i>José Fassardi at Pto. Casado ?</i>	8.3.2
?	?	?	75cm	<i>FC Pto. Sastre ?</i>	8.4.2

Porter

1948	1899	2-4-2T	Std.	<i>Asunción steam tramway 1 ‘SAN LORENZO’</i>	8.2.2
1949	1899	2-4-2T	Std.	<i>Asunción steam tramway 2 ‘VILLA MORRA’</i>	8.2.2
3962	1908	2-4-2T	Std.	<i>Asunción steam tramway 3 ‘PARAGUAY’</i>	8.2.2
3963	1908	2-4-2T	Std.	<i>Asunción steam tramway 4 ‘ITA’</i>	8.2.2
7192	1920	2-6-0	Metre	<i>Cía. Internac. de Productos ?</i>	8.3.3

Sentinel Cammell

?	1935	Bogie railcar	Std.	<i>Central Railway of Paraguay, CM1</i>	8.2.1
?	1935	Bogie railcar	Std.	<i>Central Railway of Paraguay, CM2</i>	8.2.1
?	1935	Bogie railcar	Std.	<i>Central Railway of Paraguay, CM3</i>	8.2.1

Sharp Stewart

1124	1859	2-2-0	5' 6"	<i>Argentina, then FC de la Asunción a Villa Rica ‘La CONSTITUCION’</i>	8.1.1
1462	1863	4-4-0	5' 6"	<i>Argentina, then FC de la Asunción a Villa Rica ‘GASTAO d’ORLEANS’, later ‘BAREIRO’</i>	8.1.1
4157	1896	0-6-0	5' 6"	<i>Central Railway of Paraguay, 14 ‘PARAGUAY’</i>	8.1.1

Slaughter Gruning

?	1861	2-4-0	5' 6"	<i>FC de la Asunción a Villa Rica, later FCCP ‘?’</i>	8.1.1
?	1861	2-4-0	5' 6"	<i>FC de la Asunción a Villa Rica, later FCCP ‘?’</i>	8.1.1

William Fairbairn & Sons

?	1858?	2-2-2WT	5' 6"	<i>FC de la Asunción a Villa Rica, later FCCP 10 ‘SAPUCAI’, then 13</i>	8.1.1
---	-------	---------	-------	---	-------

E. B. Wilson

571	1856	2-2-0ST	5' 6"	<i>Argentina, then FC de la Asunción a Villa Rica ‘La ARGENTINA’</i>	8.1.1
-----	------	---------	-------	--	-------

Yorkshire Engine Company

2513	1953	2-6-0	Std.	Central Railway of Paraguay, 151	8.2.1
2514	1953	2-6-0	Std.	Central Railway of Paraguay, 152	8.2.1

Unknown

?	?	0-6-0	Metre	<i>La Azucarera Paraguaya</i> ' CHACO '	8.3.1
1793	1928	0-6-2T	75cm	Ex ?, to <i>Cía. Carlos Casado</i> 4 ' DONA RAMONA '	8.4.1
?	?	2-6-0	75cm	<i>FC Pto. Sastre</i> ? ' ? '	8.4.2
