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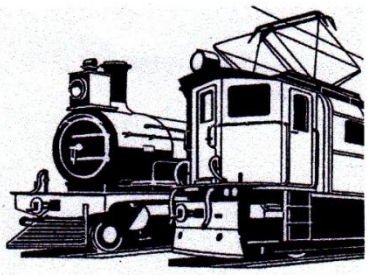

Bulletin No. 120 November 2013

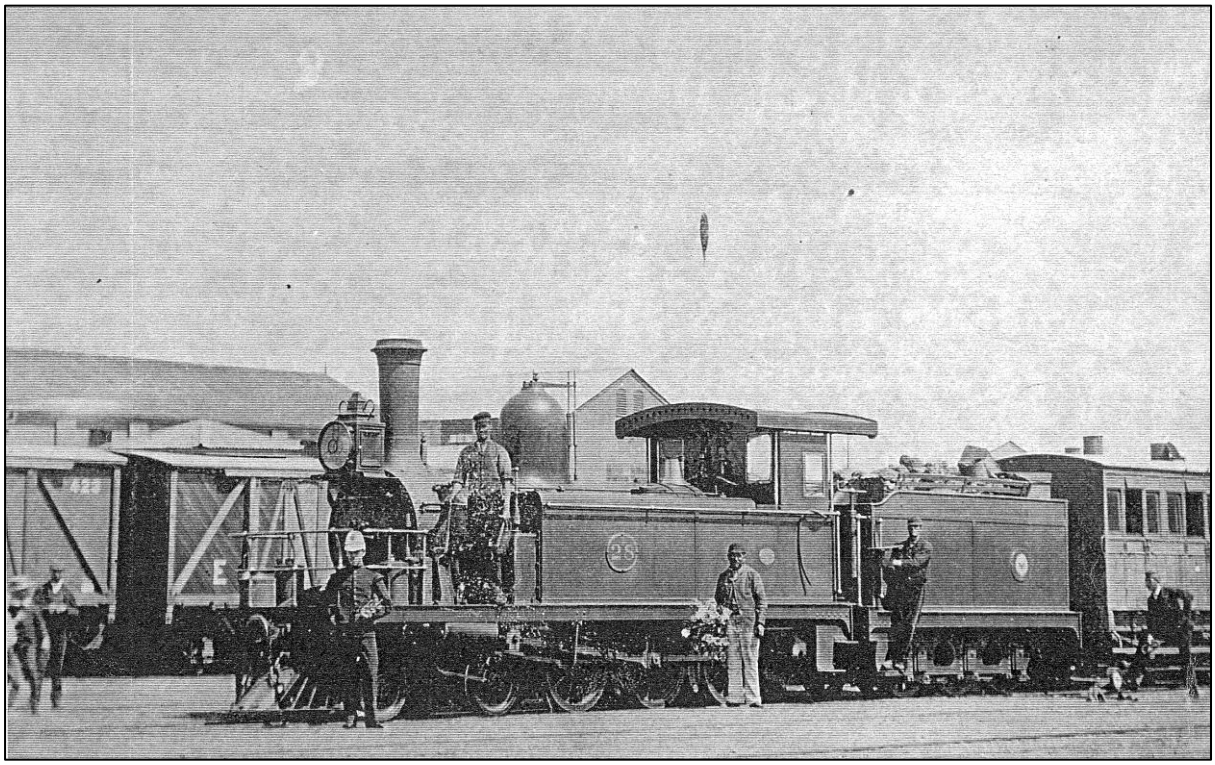

Photo is believed to have been taken at East London. Loco (E) 28 was a Cape 4th Class loco, with 3'2" coupled wheels and fitted with Joy's valve gear. (Stephenson No. 2386/1882). It would have been renumbered in 1888, though Holland does not quote the renumbering. (The logical 628 was given to another of the Class). Does the E on the wagon indicate Eastern System? *Dave Rhind Collection*

Editorial

The first two Class 20E dual voltage locomotives arrived in Durban in the middle of November. For the full story and a photo do as aearch on the words Class 20E wiki

Andre H Kritzinger has done an enormous job to put the full details about South African locomotives on Wikipedia. He has included steam, diesel and electric locomotives. With regard to the section on steam locomotives, he has received assistance from John Middleton and Leith Paxton. Since Holland wrote his book on S A steam locomotive a lot of additional information has come to light and Andre has included this. To get to the index for this data do a search on

Category:Locomotives of South Africa wiki

Subs for 2013 are now overdue this will be the last Bulletin that members, who have not paid, will receive. I will be sending an email to those who still need to pay

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Follow up on Bulletin No. 119

On page one there was a photo of the first train from Salisbury to Umtali. There were some unusal looking coaches in the photo. Robin Lake has provided the following information about these coaches.

The four passenger coaches used on the two opening trains were to be purchased for the Mashonaland Railway and had an interesting history. Strangely enough, they had been built by the Gloucester Railway Carriage & Wagon co for the metre-gauge Sao Paulo Railway in Brazil, which line had been constructed by Pauling and Co. Ow2ing to some financial difficulty, however, though the carriages had been dismantled and packed in zinc-lined cases for shipment, they were never despatched to South America and lay in the Gloucester works until they were offered to the Mashonaland Railway. Glad to get speedy delivery of four suitable coaches, the offer was accepted and after suitable alterations they were re-packed and shipped tp Beira. It took five days to get them conveyed from the port to Umtali over the narrow gauge Beira Railway, as many of the railway cuttings had to be widened to allow the large cases to pass. In April 1899 they had safely reached Umtali where tha carriages were assembled in the somewhat pioneer workshops.

These four carriages became MR nos 1 to 4; two were first class and two were second class. The first class had four berth compartments and a two-berth coupe, with a toilet at each end of the corridor.

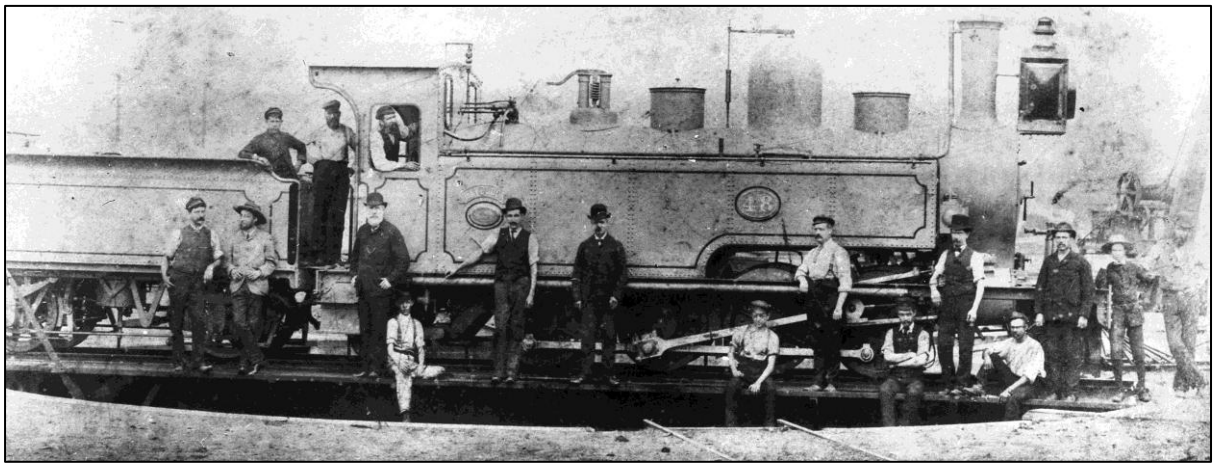
The NGR Locomotive “Havelock” aka as “Hairy Mary”

Part 1 by Bruno Martin

TANK/TENDER ENGINE “HAVELOCK”

What appears to be experimental locomotive erected in the Durban Workshops during 1888 claimed a place in history by being the world’s first 2-8-2 with tender. It was the first locomotive to be manufactured in South Africa and only the wheels and axles were obtained from England. Designed to the specifications of William Milne, the engine of 39 tons 12 cwt [***1***] (a report in the ***Natal Mercury*** of 22 February gives 36 tons 4 cwt) service weight had a four-wheeled tender which carried 3½ tons of coal and 1200 gallons of water with an all up weight of 14½ tons. It was named *“HAVELOCK”* after the Governor of Natal from 1886 to 1889, Sir Arthur Havelock. Work on assembling the engine started on 26 January 1888 and it went on its first trial trip during August. The

Natal Mercury records that the first official trip was made to Pinetown on 7 January, 1889. Thereafter, the "HAVELOCK" operated on the Durban-Cato Ridge section. An official trip was made from Cato Ridge to Pietermaritzburg on 22 February.



NGR No. 48, Havelock, as built as a 2-8-2T Tender locomotive. *Photo:Local History Museum, Durban*

The *"HAVELOCK"* made headlines in a report which appeared in the ***Natal Mercury*** on 9 April (1889) when it was involved in an accident at Cato Ridge. It stated that the driver was unable to stop in time to avoid a collision with a stationary passenger train *"2 coaches were slightly damaged, minor damage to the "HAVELOCK" ["buffers bent"]*. The engine was the pride and joy of the NGR and was present at several functions such as at the opening of the line from Ladysmith to Biggarsberg Junction on 12 September 1889 [***2***], the turning of the first sod for the OFS branch line at Ladysmith on 7 November, 1889. For the opening of the new Durban passenger terminal the *"HAVELOCK"* hauled the first train over the deviated section of main line from Berea Road on 19 February, 1893. The *"HAVELOCK"* also did its 'tour of duty' during conflict between the Boers and British forces during the war of 1899 – 1902 clad in a rope mantle for protection. With the introduction of more powerful locomotives, the career of *"HAVELOCK"* was cut short and consequently relegated to branch line working, notably between Durban and Verulam until scrapped in 1905, for which it was converted to a 4-6-2 wheel arrangement.

Havelock, after conversion to a 4-6-2 wheel arrangement *Photo:Natal Society Foundation, Pietermaritzburg*

[***1***] Holland, D F, Steam Locomotives of the South African Railways, vol 1, p.90.

[***2***] The *"HAVELOCK"* was hitched to the official train at Ladysmith at 7:00 a.m, reached Waschbank at 9:00 a.m. where the ascent of the Biggarsberg begins. The *"HAVELOCK"* broke an eccentric strap and continued on its own to Biggersberg Junction from where another engine was sent down to haul the official train.

"Havelock" – The first Mikado?

Part 2 by A E Durrant

Locomotive type names originated in the USA, were generally rather haphazard, and usually inconsistent. For example, a 4-6-0 was a "Ten Wheeler", whereas 4-4-2, 2-6-2, 2-8-0, 0-10-0 and various other types with ten wheels were not "Ten Wheelers"!! The "Pacific" type was named after some 4-6-2 built for the Missouri Pacific Railroad in 1902, yet there were earlier American 4-6-2 both for home and export service which failed to generate names for this type. The "Mountain" type was allegedly named after some Chesapeake & Ohio 4-8-2 built in 1911, for mountain passenger service, yet the first American-built 4-8-2 was for the Natal Government Railways, two years earlier, ordered for comparison with British-built 4-8-2 of earlier design. Thus we come to the universally named "Mikado" for the 2-8-2 type, named after the 1897 vintage locomotives built by Baldwin for the Nippon Railway Company in Japan, later Japanese National Railways class 9700. Fairly evidently the first 2-8-2 built in the USA, although not for domestic service, which from the above does not necessarily qualify it from being the "first". Actually, the very first 2-8-2 tender engine seems to have been an obscure experimental machine built by W Milne of the Natal Government Railways in 1888, and named "Havelock". It was a 2-8-2 and had a tender, although about half the water supply was carried in side tanks. All coal was in the tender, and the firebox was narrow. Not perhaps the classic Mikado of later days, but who can deny that the world's very first 2-8-2 with tender was built in, and used in, Natal, South Africa? Although not very successful in its original form, "Havelock" led to the "Dübs 'A' class" 4-8-2T, also built in 1888, which in tank engine form introduced the 4-8-2 type to the wider world, and was built to a total of 102 locomotives, several of which still exist today!

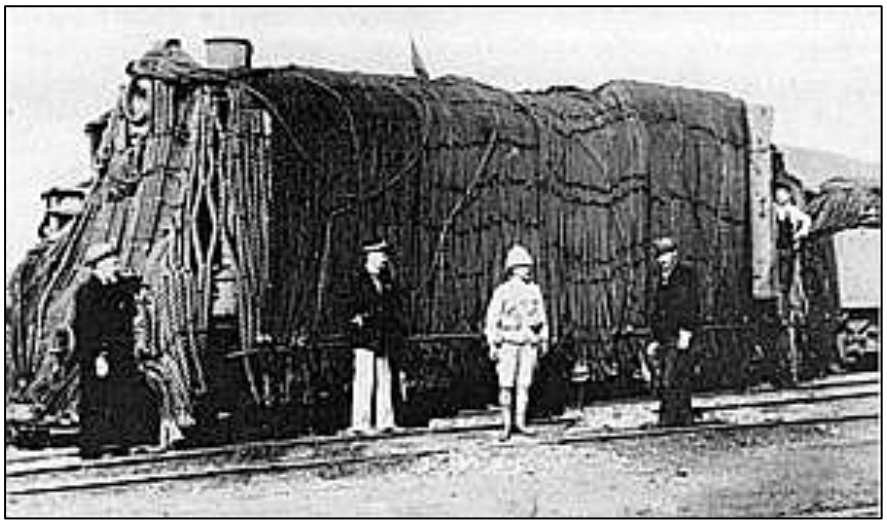
(Published in SA Rail, Vol.31, No.2, March-April 1991, p.48)

Source: Based on abridged reports in the Natal Mercury, 1889.

Natal Mercury, 22 February, 1889. New Engine "Havelock". Official trip from Durban to Pietermaritzburg drawing a full load. Leave Durban at 12 noon, expected at 6 p.m. at Pietermaritzburg. Select party accompanying the engine, including David Hunter, and His Excellency the Governor. Yesterday the trial trip was made to the City, when the engine worked almost satisfactorily, drawing a load of 100 tons, which is about 50% more than present with other engines.

The new engine was built in the Durban Workshops, and the first trip was made to Pinetown on 7 January, 1889. Since then the engine has constantly taken loads between Durban and Cato Ridge, but has never been to Pietermaritzburg.

Total weight of the engine: 36 tons 4 cwt; tender has water capacity of 1200 gallons, 4 pairs of driving wheels and two pairs of bogie wheels, 3 ft. 2 in. and 2 ft. 0¾ in. diameter, respectively. The boiler is 10 ft. 9 in. long and 3 ft 9¼ in. in diameter. The dome 2 ft. 6 in. in height and 2 ft. 2 in. in diameter. Work of the Colonial Industry.



Havelock, in service with British forces, during the Anglo Boer War. She had the nickname "Hairy Mary"

Natal Mercury , on 25 February, 1889 reports on the official trip from Durban to Pietermaritzburg on 22 February, 1889.

Official trip departed Durban at 9:05 a.m. and arrived at Pietermaritzburg at 3:12 p.m. Load: 5 six-wheeled and 1 four-wheeled wagon, and a four-wheeled brake van. At Cato Ridge several trucks were taken on, so that the train consisted of 8 six-wheeled and 1 four-wheeled wagon and brake van, carrying just under 100 tons of goods.

The official party consisted of His Excellency the Governor, D Hunter *(NGR General Manager)*, W Milne *(NGR Locomotive Superintendent)*; Mr Hutchinson *(locomotive draughtsman)*; W Butterton *(District Engineer)*; D W Simpson; G Chick *(District Traffic Superintendent* who joined the official train at Cato Ridge. The driver was G Giles.

Work on erecting the engine began on 26 January, 1888 and went for its first trial trip on 31 December, 1888. Everything except the wheels and axles (which were imported from England) were made at the Durban Railway Workshops. The engine is 20% heavier than other engines present employed, cylinders 16 in. in diameter, against 14 in. of other engines, 174 tubes against 130. Weight of tender 14½ tons.

Ninety years ago

By Wally Greig

On Monday 26 November 1923, the first Union Express train left Cape Town for Johannesburg. This event was to have an unprecedented effect on passenger train travel, in South Africa and that effect is still with us.

Early that morning a Class 6H loco hauled the train into the Cape Town Docks and parked it alongside the Union Castle mailboat, which had just arrived from England. It was but a short walk from the ship to the train, for the passengers booked on the train. The train consisted of eight carriages, which had been "specially selected" and were the best available C-16 balcony coaches, one being coach No. 761. Also part of the consist, were a single diner and a guards van. At 10 a.m the train left the Docks, again hauled by the Class 6H and proceeded to Monument Station. While local passengers were boarding the train, the Class 6H was replaced by Class 15A No. 1810 and at 10.30 a.m. the train departed. It reached Johannesburg at 4.29 p.m, the next day, thereby becoming the first train, carrying fare paying passengers, to cover this distance in less than thirty hours. These trains were first class only.

Class 15A No. 1810, leaves Monument Station at 10.30 a.m. on 26 November, 1923, at the head of the first Union Express. Photo: Allen Duff Collection

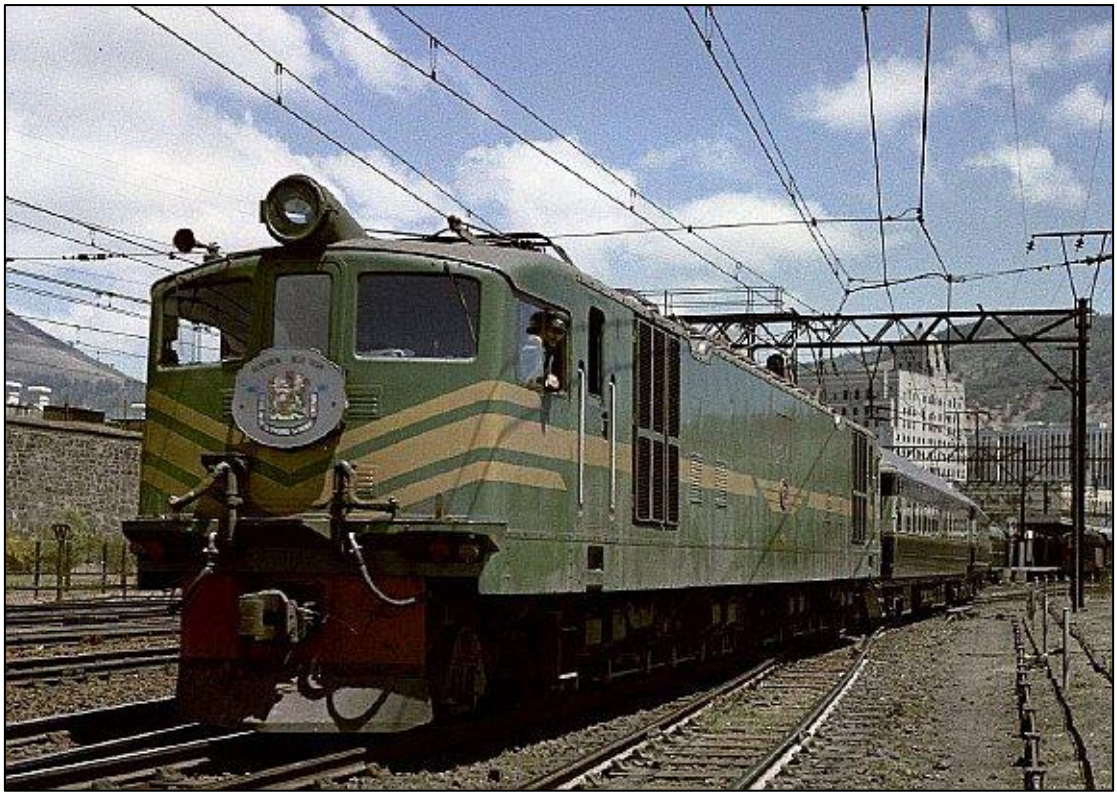
On Thursday 29 November 1923, the first Union Limited departed Johannesburg at 8.45 a.m. It arrived at the outgoing mailboat berth, in Cape Town Docks, at 2.08 p.m. on the Friday, also covering the distance in less than 30 hours. Other trains, running at the time, were taking about 37 hours for the journey. From then on there were two trains a week, in each direction.

1928 saw the introduction of imported, luxury, articulated C-22 coaches onto these trains and from then on the Union trains were both fast and luxurious. These trains underwent a major makeover in 1939, when imported, steel, airconditioned coaches were placed in service. In 1946 these trains were renamed the Blue Train, a name which is still in use.

Class 4E

By Ken Livermore

NB's largest excursion into the world of electric traction came in the form of Order No. L998 which was for 40 Class 4E 3,000 volt dc main line electric locomotives for South African Railways.



A Class 4E hauls the Blue Train out of Cape town Station. Photo: Les Pivnic

Delivery of the locomotives actually commenced in 1951 with the bulk of the order being completed in 1952. Large was the operative word for the 4E's as they not only represented NBL's biggest order for electric traction but their 132 tons weight and 72,000 lbs nominal tractive effort put them amongst the heaviest and most powerful electric locomotives in the world at that time. No. E250 is seen above leaving Cape Town in January 1960.

The Class 4E's were specifically built for use on the main line from Cape Town through the Hex River Pass to Touws River where Class 25 and 25NC steam locomotives took over the running to De Aar and Kimberley. The first locomotives to be delivered however, were placed in service on the Natal main line while electrification from Worcester to Touws River was being completed.

Originally delivered in a plain bottle green livery, the colour of the 4E's and their almost 72 feet length soon resulted in the nickname 'Green Mamba' after a local snake. However, when the Hex River farmers complained that their colour scheme made them difficult to see, various stripes and whiskers were added. They ended their days in the standard SAR electric livery of Gulf Red livery with yellow stripes. The first and last of the class survive, E219 and E258 (NBL 26859 & 26898) both nominally stored for preservation.

Part 2

By John Grant Silver

I always enjoy receiving the NBL News Letters, the June edition with details on the SAR Class 4E, with its wonderfully evocative full colour picture, is of particular joy to me, as the Class 4E is among my favourites. I should, however, like to make a correction to the written commentary. I did a lot of research on the Class 4E and I wrote a lengthy article about them which appeared in 'Continental Modeller' many years ago.

When the Class 4E was ordered in 1947, the idea was to use them on the Cape Western main line through the Hex River tunnels which were then in the planning stages. This would have permitted a

single Class 4E unit to haul the heaviest passenger and goods trains from Cape Town to Touws River through the tunnels with their easy curve radii and moderate grades. In fact, blasting of the portal for the first tunnel took place around 1947/48 but when the National Party Government came into power in 1948, it decided the cost of the tunnels was too great and the monies earmarked for them could be better spent on other capital projects.

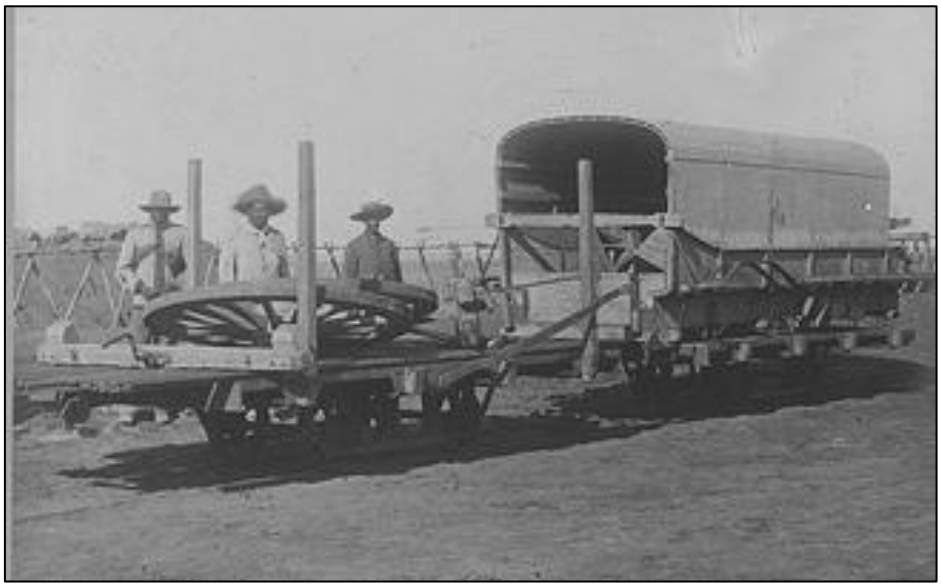
This meant the Class 4Es had to be used on the existing main line through the Hex River Mountains with virtually restrictive curvature of the line and severe gradients. The heaviest of the trains required two Class 4Es 'up front' to pull them through on the up-hill journey from De Doorns to Touws River . The curvature caused exceptional wear of the bogies (including frame cracking) because the Class 4Es were being used on a purpose for which they had not originally been designed. The Hex River Tunnel scheme was later revived and completed some years ago (I cannot remember the exact year) by which time the Class 4E units had been withdrawn. Best regards, John Grant-Silver, Prestwick, Scotland (Many thanks to John for these notes)

Les Pivnic's superb photo above shows SAR 4E No. E225 (NBL 26865) waiting to leave Cape Town Station with a Rhodesia Express in January 1962. Below – 4E insignia from KL & Adrian Jarvis collections.

4E No E258 is at Bellville Depot; vandals are believed to have done considerable to her. E219 is at Millsite; therer are no details as to her condition. More details on the Class 4E can be found by doing a search on: Class 4E wiki

Class 4e at Worcester, with a goods train, in 1953. *Photo: Les Pivnic*

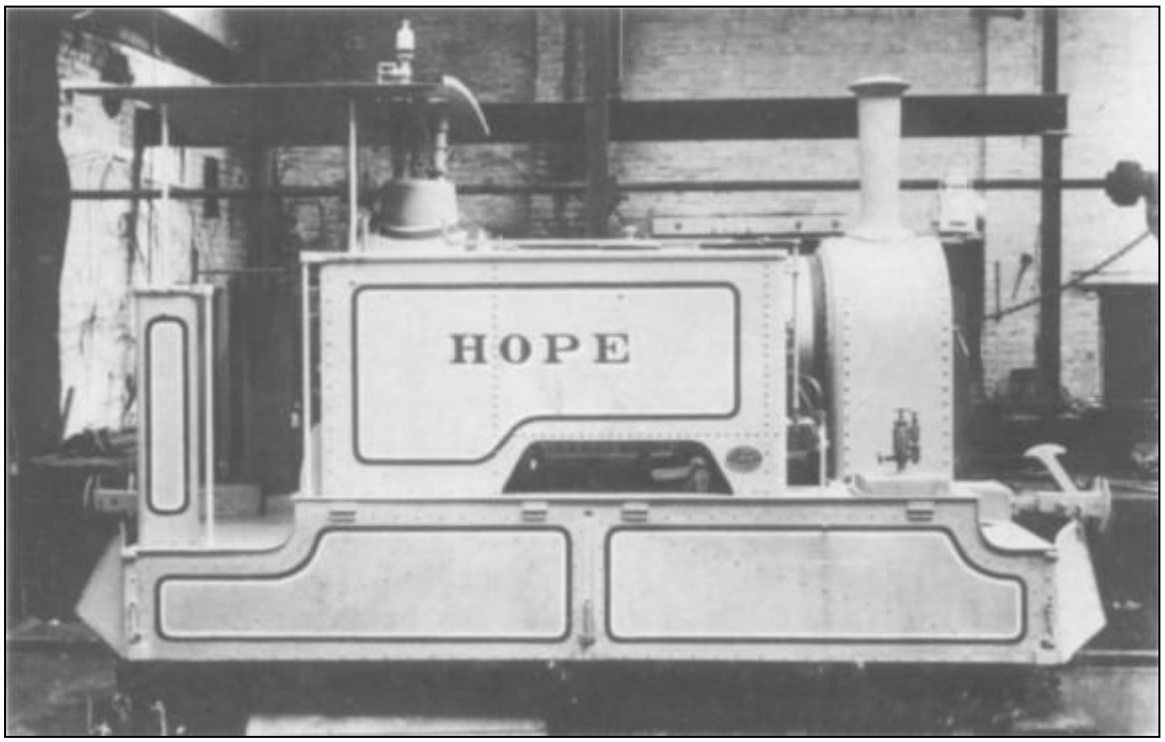
Walvis Bay Railway



An ox wagon, being transported on the Walvis Bay Railway. This was before the loco "Hope" arrived and the railway was operatd by donkeys.

The first narrow gauge railway in the Cape Colony was in territory bounded entirely on the landward side by German South-West Africa. Initially projected merely to connect the jetty

with the town, the Walvis Bay Railway was opened in 1899 and ran for twelve miles up to the German border at Plum. On 6th March 1899 the Agent General for the Cape of Good Hope ordered a "Sirdar" class locomotive named HOPE which was almost as long in transit to Walvis Bay – where it arrived on 22nd August 1899 – as it had been in the building. Because of the extremely light nature of the track (12lb rail with sleepers spaced three feet apart) HOPE was provided with an additional pair of carrying wheels at both ends. Even so the maximum axle load of HOPE in working order would be about 1¾ tons, which is considerably more than today's suggested figure for this category of track of 1 ton 4 cwt. Within six years the railway was virtually moribund and by 1915 HOPE had been laid aside and forgotten. It was later resuscitated and after many years on exhibition at Windhoek was returned to Walvis Bay in 1963 for preservation at the new railway station.



Kerr Stuart locomotive "Hope".

Stars of Sandstone 2014 will take place from 12th – 21st April 2014, at Sandstone Heritage Trust's farm, near Ficksburg. Nowhere else in the world can you see double-headed Lawleys in action. Full details at: www.sandstone-estates.com