THE

MALTA RAILWAY

Revised Edition

Joseph Bonnici
Michael Cassar

Malta, 1992

Birkirkara Railway Station

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Revised Edition 1992

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4 Tifkira tal-Kungress Ewkaristiku Internazzjonali 1913 (1988)
5 The Royal Navy in Malta (1989)
6 Malta Then and Now 2. (1989)
7 The Malta Buses (1989)
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Front – Porta Reale Railway Terminus (photo montage)
Back – A railway advert for October 1885

FOREWORD

Sixty-one years ago the Malta Railway passed into history. There are stations, tunnels and street names to remind us that there was once a railway in Malta, but somehow the absence of engines, carriages, uniformed staff and the accompanying smoke, clanging and whistling make these railway relics everyday buildings when they are not a downright nuisance to the residents, like the embankment behind the Corinthia Hotel. So while some remnants of the railway survive, we hurry past, not having the time or the interest in this forgotten piece of Malta's heritage. In 1983, the Post Office issued a stamp set to commemorate the railway and the occasional article is still published in newspapers, written by railway buffs or people with fond memories. Most of the railway staff have gone and their children regret "that father had lots of memorabilia, but honestly we do not know where it is; perhaps we will find it some day and let you know". BD Rigby partly redressed the balance in 1971 with his *Malta Railway*, one of a series of books on narrow gauge railways such as ours was.

We aim to rediscover the railway and try to understand why we discarded the words train, iron horse, railway, in favour of our unique appellative, "Il-Vapur ta' l-Art" - "The Land Steamer". We will try to look at it through the eyes of the farmer whose land was partitioned to let the thing through, though that was half his trouble - the sparks began to set fire to his cornfields around harvest time; to look at it through the eyes of the worker who hoped to reduce his walking hours if he could find the fare out of his 2 shillings daily. Thereby hung the tale of the promoters who misjudged Maltese pockets and could not understand why the more people carried the more money they lost.

Then Government suspended the service for reasons of public safety and acquired the railway "for a song"; but well did the shareholders ask, what about us, the money we sank into the enterprise? The shareholders lost out to a gleeful Government but the railway seemed to have been accursed from the start. Losses mounted, subsidies were given, politicians meddled in its affairs, their initial exuberance soured by the arrival of the tram and the motor carriage, which went where the railway could not, for less. The same politicians who had expropriated the railway discovered, to their dismay, that they were saddled with it after newer, more efficient means of transport arrived on the Island. It is no wonder that they asked: "What are we going to do with it, this *Haereditas Damnosa*?

Which brings us back to the remains and the meaning of the railway if we accept that the present is a measure of our past. The railway introduced the concept of travelling for fun, the Sunday afternoon outing to leave crowded, unhealthy Valletta and discover our tiny, beautiful countryside, hitherto the prerogative of the very rich. On weekdays, the railway bred the first Maltese commuter and made intercourse between town and village a reality. Large groups of us began to travel together, speedily and safely. As Governor Borton predicted, it introduced speed in our lives, the concept of time being money, reducing the use of our legs and starting the urban sprawl which is threatening our countryside and making a big town of Malta.

It makes more than authors to write books and we are indebted to several people who rummaged in their boxes and drawers to come up with documents and photographs. We received invaluable help from Director of Public Works, Fr M Zerafa, Police Department, Treasury Department, Fr Gatt SJ, Miss M Strickland, M Ellul, J Degiorgio, JV Toledo, Chev E Tonna, T Terribile, Dr V Depasquale, A Baldacchino, J Galea Naudi, Mrs Bernard, Dr A Abela Medici, W Zammit, J Mizzi, LF Tortell, L Zahra, L Falzon, RJ Caruana, J Caruana, N Azzopardi and G Farrugia. Special thanks go to John Sultana for revising the original text and making several useful suggestions.

The first edition has been out of print for some time now, having won widespread acclaim for its authentic, in-depth study of Malta and its railway. This second edition has been completely revised and re-set and includes new photographs and information on the disposal of the railway after March 31, 1931. The new A4 portrait format makes it a companion volume to our Malta Buses and Tramway/Lift books.

Joseph Bonnici–Michael Cassar
May, 1992

PAPÀ, ARĠA' SAFFARLU!

Nhar l-Imnarja mill-Imdina
Bil-Vapur ta' l-art ġejt 'l haw:
Fil-vagun kien hemm sinjuri,
Nies ihobbu jiċċajtaw.

Binhom Karlu kien imxerref
Jara kollox jimxi lura;
U, ghax kien ir-rih ftit qawwi,
Qabżet qalet is-sinjura:

"Karlu, żomm il-kappell sewwa
ghax ir-rih itajjarulek:
Fhimtni x'ghidtlek?... Isma' ruhi,
Jekk itir, hadd ma jġibulek."

Trux it-tifel ghall-kliem t'ommu,
Baqa' mxerref barra t-tieqa,
Il-misser, raġel minn taghna,
Malajr haseb ghamel hlieqa.

Il-kappell hadlu bil-mohbi,
U fil-waqt li wrajh hbihulu:-
"Rajtx, kif tarlek?" Qabżet ommu:
"Inbus l-art li r-rih hadulu!"

Karlu nfexx jixher u jibki,
Rasu jhokk, jaghti b'riġlejh;
B'dak ix-xhir u t-tahbit tieghu
Dejjaq lil kull min kien hdejh.

"Iskot, Karl," qallu missieru,
"Oqghod ġwejjed, tibża xej';
Ha nsaffarlu u jarġa' jiġi:
Fis, fis, fis! Hawn hu, ġej, ġej!"

Hekk kif hass il-kappell f'rasu,
Karlu tbissem, faqqa' jdejh;
Ahna dhakna, u dhakna sewwa;
U staghġibna nharsu lejh.

Wara ftit li ntsiet il-biċċa,
B'heffa kbira jaqbad Karlu
Il-kappell u jixhtu barra,
U: "Papà, arġa' saffarlu!"

PAPÀ, WHISTLE TO IT AGAIN!

On Mnarja day from Notabile
I came here by train:
In the carriage there were gentlefolks,
Persons who are fond of joking.

Their son Charles was looking out
To see everything move backwards:
And as the wind blew rather hard,
The Lady cried out:

"Charley, hold your hat fast,
For the wind will blow it away:
You understand what I say... Listen, dear..
If it flies, nobody will bring it to you."

Deaf to his mother's words,
The boy kept leaning out of the window;
The father, a good natured man,
Quickly thought to have a joke.

He snatched the hat stealthily,
And, as he hid it behind his back:-
"You see, how it flew away!" - cried his mother
Thank goodness, the wind has blown it away!"

Charles burst out screaming and crying,
Scratching his head, and kicking his legs;
With all his screaming and stamping
He annoyed all those who were near him.

"Be quiet, Charley," the father said,
"Be good, don't worry;
I'll whistle to it, and it will come back;
Fis, Fis, Fis! Here it is, coming, coming!"

As he felt the hat on his head
Charley smiled, clapped his hands;
We laughed, and laughed heartily,
And we were astonished watching him.

Shortly after, when all was forgotten,
Very swiftly Charley snatched
His hat and threw it out,
And:- "Papa, whistle to it again!"

Quoted from the Second Book of Maltese Readings
with a literal translation for use in the
Government Elementary School - 1904

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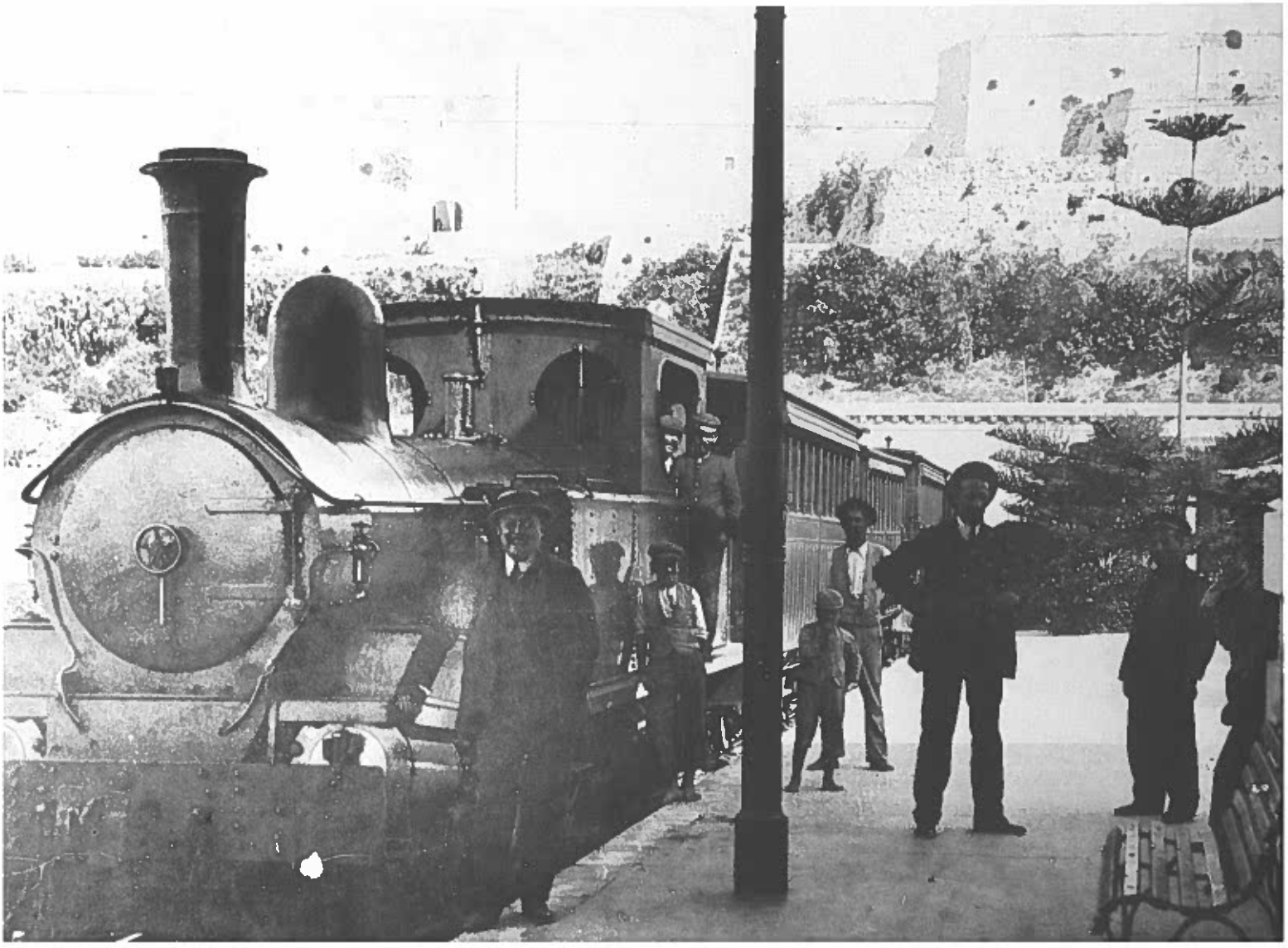

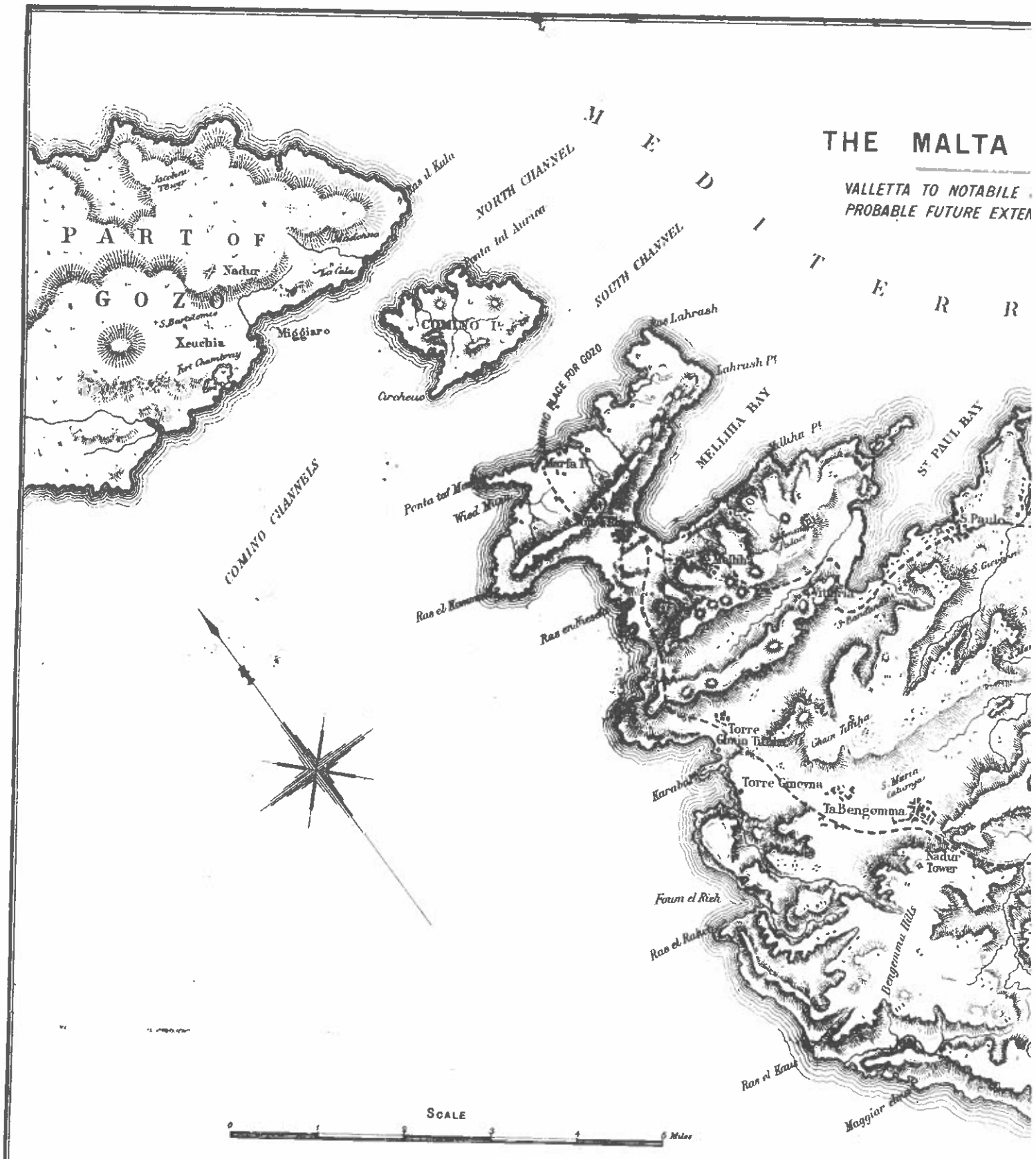
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NORTH CHANNEL
Punta tal Aurora
COMINO
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COMINO CHANNELS
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Ta Bengemma
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Forum el Rieh
Ras el Rakt
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Maggiar
SCALE
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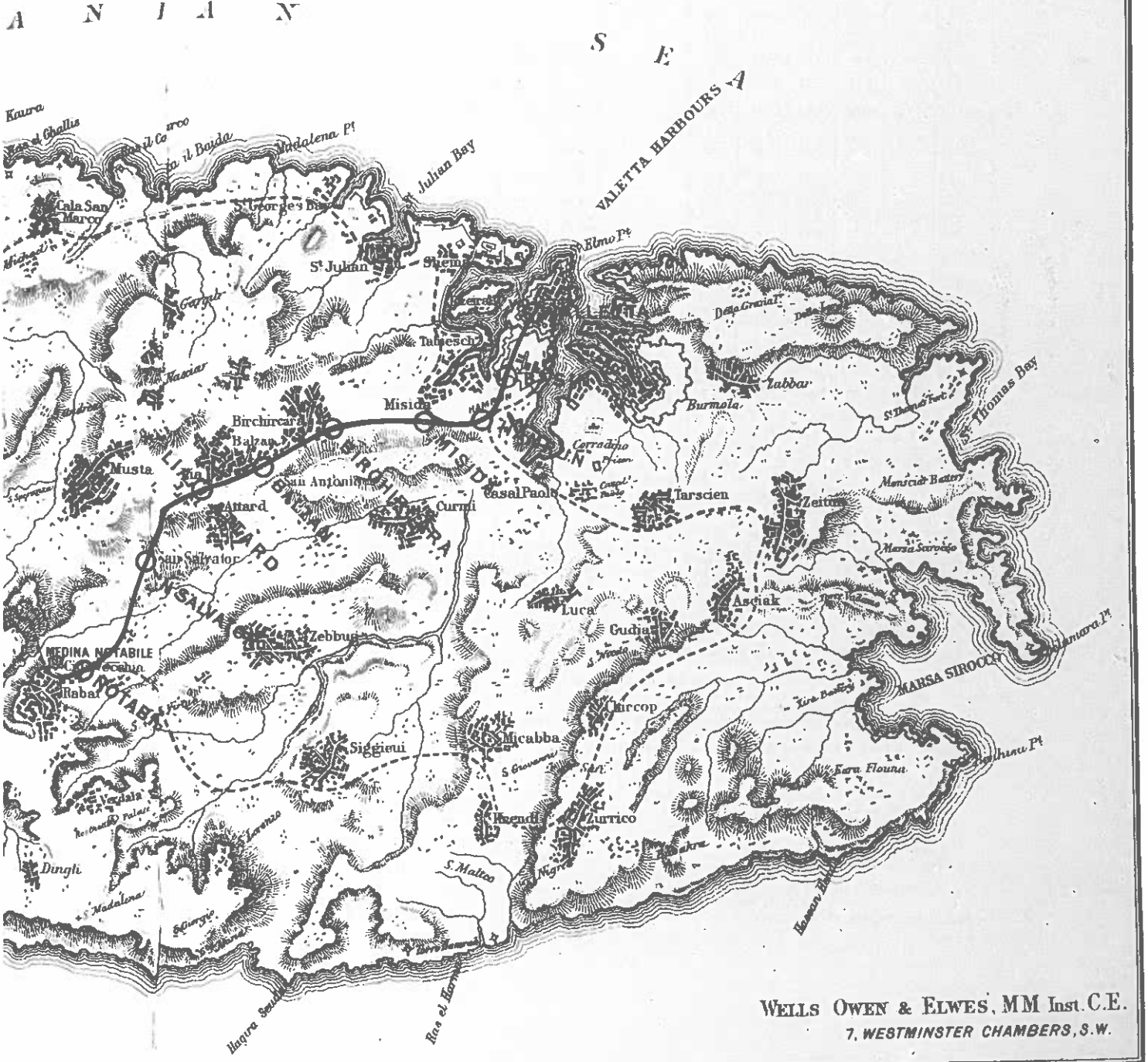
MAP OF MALTA AND ITS DEPENDENCIES.



WELLS OWEN & ELWES, MM Inst. C.E.
7, WESTMINSTER CHAMBERS, S.W.

FERROVIA DI MALTA

Servizio Ferroviario da Sabato 20 Ottobre 1912, (inclusivamente) fino a nuovi ordini.

GIORNI LAVORATIVI

Valletta—Notabile

Valletta	Floriana	Hamrun	Birchir.	Attard	Notabile Museum
a. m.	a. m.	a. m.	a. m.	a. m.	a. m.
		c4.30	4.38	4.48	4.56
		c5.40	5.46	Per Birchir. sol.	
c6.16	6.19	6.21	6.26	6.31	6.45
c6.35	—	6.40	6.45	Per Birchir. sol.	
c7.17	—	7.22	7.28	Per Birchir. sol.	
c7.33	7.36	7.38	7.44	7.49	8. 4
c7.50	—	7.55	8. 2	Per Birchir. sol.	
c8.25	—	8.30	8.40	8.44	8.57
c9.30	9.33	9.38	9.48	9.49	10. 2
c10.40	10.43	10.48	10.54	Per Birchir. sol.	
c11.15	11.17	11.20	11.29	11.38	11.46
p. m.	p. m.	p. m.	p. m.	p. m.	p. m.
c12.10	—	12.15	12.24	12.29	12.40
1.10	—	1.15	1.24	1.27	1.40
1.30	—	1.30	Si ferma	al Hamrun sol.	
2.25	2.27	2.30	2.39	2.42	2.55
3.20	3.22	3.25	3.34	3.37	3.50
c4.10	4.12	4.15	4.24	4.27	4.40
bc5. 5	5. 7	5.10	5.19	5.23	5.35
ac6. 5	—	6.10	6.19	6.24	6.35
c6.35	—	6.40	6.49	Per Birchir. sol.	
c7.10	—	7.14	Si ferma	al Hamrun sol.	
c7.30	—	7.35	Si ferma	al Hamrun sol.	

Notabile—Valletta

Notabile Museum	Attard	Birchir.	Hamrun	Floriana	Valletta
a. m.	a. m.	a. m.	a. m.	a. m.	a. m.
ac5.30	5.43	5.46	5.54	—	6. 0
		c6.15	6.21	—	6.26
		c6.50	6.57	—	7. 2
c7. 0	7.13	7.16	7.21	7.25	7.28
		c7.32	7.38	—	7.43
		c8. 8	8.14	8.17	8.19
8.25	8.36	8.40	—	—	8.48
9.15	9.26	9.30	9.36	—	9.42
10.20	10.33	10.37	10.45	—	10.51
		11.12	11.19	11.23	11.25
p. m.	p. m.	p. m.	p. m.	p. m.	p. m.
12.6	12.21	12.24	12.29	12.32	12.34
12.50	1. 3	1. 7	1.15	1.18	1.20
			2.10	—	2.18
2. 5	2.18	2.21	2.30	2.32	2.34
3.16	3.31	3.34	3.42	3.45	3.48
c4. 8	4.21	4.24	4.31	4.33	4.36
c4.45	4.57	5. 0	5.10	5.13	5.15
		c5.45	5.53	—	5.58
c6. 0	6.13	6.19	6.26	6.27	6.30
		c6.52	7. 0	—	7. 6
c6.50	7. 2	7. 6	7.14	7.18	7.22

Domenicho o giorni festivi

Mattino

										8.50	8.55
§7. 0	7. 3	7. 6	7.13	7.18	7.31	§8. 0	8.12	8.16	8.24	8.27	8.30
§9. 0	9. 3	9. 6	9.13	9.18	9.31	§10 0	10.12	10.16	10.24	10.27	10.30
§11. 0	11. 3	1 . 6	11.13	11.18	11.31	§11.45	11.57	12. 1	12. 9	12.12	12.15

Dopopranzo

12.20	—	12.25	Si ferma	al Hamrun sol.							
									1. 0		1. 6
									2. 0		2. 6
§1.10	—	1.18	1.26	1.29	1.42	§2. 8	2.21	2.24	2.30		2.36
§2.25	—	2.30	2.39	2.42	2.55	§3.18	3.31	3.34	3.42		3.48
§3.20	—	3.25	3.34	3.37	3.50	§4.12	4.25	4.29	4.36		4.42
§4.15	—	4.20	4.29	4.32	4.45	§5. 3	5.16	5.19	5.26		5.32
§5. 5	—	5.10	5.19	5.23	5.35	5.58	6.11	6.14	6.20		6.26
6 0	—	6. 5	6.14	6.19	6.30			6.50	7. 0		7. 5
6.32	—	6.37	6.46	Per Birchir. sol		6.50	7. 3	7. 6	7.14		7.20
7.10	—	7.15	Si ferma	al Hamrun sol.							
7.30	—	7.35	"	"	"						

§ Treni si fermano a San Salvator a richiesta dei passeggieri.

a. Treno degli Operai— Questo treno si fermerà soltanto alle Stazioni, del Hamrun, Birchircara, Attard e Notabile ed alla Stazione del Museo. La mattina il treno degli operai parte dalla Stazione della Notabile e non da quella del Museo.

b. Treno degli operai nei Mercoledì e nei Sabati e nella vigilia dei giorni festivi.

c. Pei passeggieri che viaggiano con questo treno tra Valletta e Birchircara la tariffa rimane stabilita a 1d. in 3za. Classe, e 2d. in 1ma. Classe.

San Salvator. I Treni si fermano a San Salvator a richiesta dei passeggieri.

TARIFFA

	1ma. Classe	3za. Classe
Fra la Valletta e Birchircara ed un punto intermedio	3d.	1½d.
Fra Birchircara ed Attard ed un punto intermedio	3d.	1½d.
Fra Attard e Museo ed un punto intermedio	3d.	1½d.
Fra la Valletta ed Attard	5d.	2½d.
Fra la Valletta e Museo	7d.	3½d.
Fra Birchircara e Museo	5d.	2½d.
Treno degli operai — Fra la Valletta o Birchircara ed un punto intermedio	1d.	
Treno degli operai — Fra Birchircara e Notabile od un punto intermedio	1½d.	
Treno degli operai — Fra la Valletta o al Hamrun ed Attard o alla Notabile...	2d.	

Stazione della Valletta, 16 Ottobre 1912.

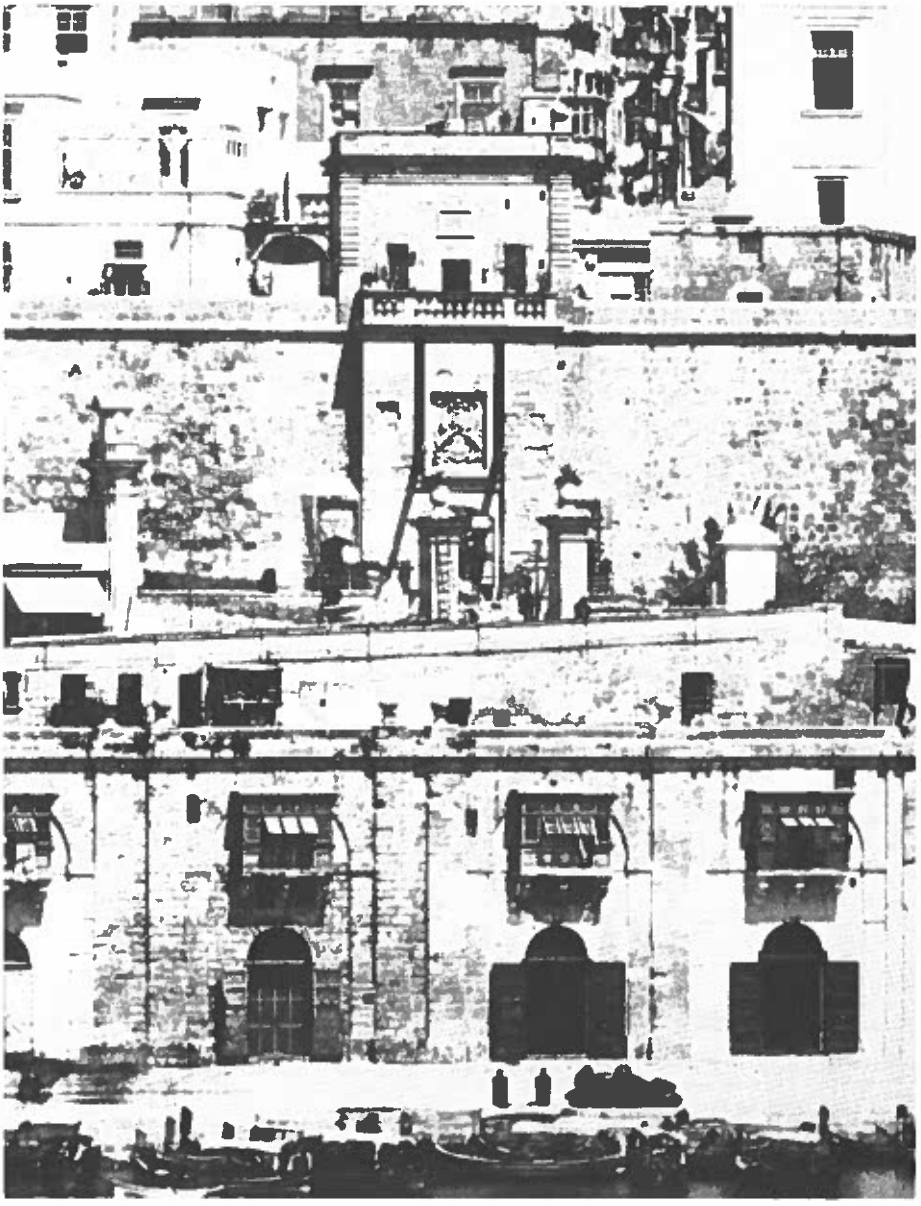
N. BUHAGIAR, *Direttore ed Ingegnere.*

A RAILWAY CHRONOLOGY

1870		J Scott Tucker lays plans for a railway before Council of Government.
1873	Mar 26	Hutchinson presents his scheme for a railway on the Fell System.
	Apr 21	C Andrews presents his scheme for an ordinary railway.
	May 4	Select Committee assisted by Major James, E L Galizia and G C Schinas appointed to examine schemes.
	June	James presents his report.
	Jul 24	E L Galizia and G C Schinas present their report.
	Dec 11	Hutchinson withdraws. Select Committee presents report, declares railway to be of public utility and recommends award of concession to Andrews.
	Dec 26	Council resolves to adopt Select Committee report.
	Dec 30	Andrews and Rosenbusch granted the concession.
1874	Dec 31	Expiry of Andrews's privilege. Scott Tucker and Mirabita involved in schemes of their own.
1875		Mirabita travels to London during the year to raise capital.
	Apr 15	Appointment of Select Committee to re-examine three schemes by Andrews, Scott Tucker and E Fernandes.
	Apr 30	Andrews's scheme chosen for second time.
1879	Feb 3	Government and W S Sharpe, on behalf of General Works, sign contract for concession. General Works transfer concession to G Crawley who files for bankruptcy in London. Mirabita and W S Sharpe sue General Works, contending that the concession holds.
	May 8	Ferdinand Mirabita writes to his father from London, introducing Gervase Elwes and the Malta Railway.
	May 26	Mirabita offers to obtain concession for Elwes and partners on payment of £2,500 commission. Elwes accepts.
	Jun 7	Mirabita writes to Acting Chief Secretary, introduces Elwes and partners instead of General Works.
	Jul 3	Mirabita invites Alfred Christian to the Board of Directors.
	Oct 24	The new Company grants Mirabita power of attorney to sign and draw money on its behalf.
	Nov 29	General Works contract cancelled by Commercial Court. Elwes publishes report on the Malta Railway.
1880	Jul 28	Government and Company sign new contract, E Micallef appearing instead of Mirabita as special attorney.
1880	Nov 16	Geneste hired as contractor.
	Dec 22	Prospectus published. Government notice authorises Company to survey and purchase land.
	Dec 29	Geneste subcontracts work to Francesco and Annibale Mirabita.
1881	Mar 3	Ordinance to prevent landlords from obstructing company.
	Jun 3	Garnishee warrant by Mirabita brothers of Company property.

	Jul 13	Works delayed until guarantees are given.
1882	Mar 2	Mirabita sues Company for £3,500 in Commercial Court.
	Mar 30	Wells-Owen leaves Malta after inspecting works. Complains of delays and obstruction in his report. "Gentleman" belies report in the *Malta Standard*.
	Apr 14	Company issues circular to shareholders, blaming Mirabita, the Supervision Board and the War Office for the delay.
	Apr 17	William Roebuck, Director, arrives, invites Mirabita to settle claims out of Court. Mirabita refuses quantum.
	May 6	Notabile residents petition against siting of station.
	Dec	Line nearly complete. Governor releases surety. Arrival of Engines 1 and 2. Mirabitas claim credit for the enterprise.
1883	Feb 28	Official inauguration. Staff rules and regulations published.
	Mar 1	Commencement of regular services.
	Sep 22	Geneste's first report.
	Oct 11	Commercial Court awards Mirabita £300 as commission.
1884	May 25	Commercial Court amends Mirabita award to £500 plus 6% interest from 11 October, 1883.
	Dec 5	Geneste's second report.
	Dec 23	Company's annual general meeting in London.
1885	Mar 1	Second anniversary of railway. Festival at Saqqajja.
	Sep 10	General Regulations published.
1889	Apr	Line shut temporarily.
	May 10	Service resumed with a single train.
1890	Apr 1	Government shuts down the line, sues for breach of contract.
	Jun 10	Debenture holders' lawyers write to Lord Knutsford offering to repair engines if concession is altered and compensation guaranteed. Knutsford asks Government to delay forfeiture.
1890	Dec 12	Railway forfeited to Government.
1891	Mar 2	Sale by alienation (subasta) of railway. Government steps in to stop piecemeal destruction of public asset.
	Apr	Porta Reale timber viaduct declared unsafe. Stone replacement authorised.
	Nov 25	Select Committee on railway reorganisation presents report.
	Dec	Arrival of Engine Nº. 5. William Shelford consulted about Nº 6.
1892	Feb 25	Line re-opened. L Gatt Acting Manager.
	May 2	New regulations published.
	Sept	Arrival of Engine Nº. 6
1893	Jan 2	Workmen's trains resumed.
	Apr 16	Proposal for siding between Notabile and Birkirkara.
	May 12	L Gatt, now manager, presents report on first year. Travels to England to acquire experience in railway management.
	Dec	Porte des Bombes timber viaduct declared unsafe. Stone replacement authorised. Overway at San Salvatore completed.
1895	Dec 31	Buhagiar succeeds Gatt. Railway school opened. Mtarfa extension authorised. Arrival of Engine Nº 7.
1896	Aug 5	Woodward Report on four proposed extensions. Notabile tunnel commenced. Arrival of Engine Nº. 8.

1898	Oct 15	Buhagiar asks for more money on account of clayey rock in Notabile tunnel. Valletta station improved.
1899	May 8	New regulations published. Old ones repealed. Arrival of Engine Nº 9.
1900		Mtarfa extension completed.
1901	Sep 4	Unsuccessful negotiations for the opening of a light railway to Sliema.
1903	Jan 14	Group charter rates published.
	Jul 2	Tramway concession signed.
1905	Mar 2	Tramway reduced fare to 1d. between 5.00 and 7.00am. Engine Nº 10 delivered.
1906	Dec 14	School pases introduced.
1911-12		Lt Governor admits that tramway was causing the railway deficit.
1915	Jul 11	Buhagiar offers railway workshop for manufacture of munitions.
1916		Buhagiar introduces loose underground drainage at the stations. A steep rise in the price of coal. Hand grenades manufactured in railway workshop. Carriages converted to carry Gallipoli wounded.
1917	June	Strickland proposes to sell the engines to the French for use on the Western Front.
1919-20		Wage increases for regular and substitute staff.
1923	Jul 22	Cattle incident at Santa Venera. Mgr. Ferris reproved for his conduct on the train earlier in the year.
1924	May	Rizzo succeeds Buhagiar.
1927		Engine Nº 3 retired.
1928	Feb 3	Bennett report.
	Mar 12	Rizzo replies to Bennett.
	Jun 12	Tenders for the railway.
	Oct 26	Beaumont, of Sentinel Wagons, writes to Sir Ugo Mifsud.
	Nov 16	The Grungo case.
	Dec 12	Motion to convert the line into a speedway.
1929	May 27	Motion to suspend services.
	Jun 25	Beaumont arrives in Malta.
	Dec 16	Tramway shut down.
1930	Jun 26	Constitution suspended. Strickland retained in consultative capacity.
	Jul 9	Strickland's unofficial memo on the railway.
	Jul 29	Committee on reorganisation of bus service meets.
	Aug 1	Rizzo's evidence before Motor Traffic Committee.
	Oct 15	Committee publishes its conclusions.
	Oct 20	Overseas Motor Transport offers to run railway if granted monopoly for a combined rail-bus service.
1930	Nov 21	Rizzo reports on the possibility of running the railway for a few more months.
	Dec 8	Traffic Control Board set up.
1931	Jan 16	Reduced service time-table.
	Mar 16	Notice Nº 98 announces closure of the railway.
	Mar 31	Railway closes down.
	Apr 7	Strickland's memo to Governor on disposal of railway assets.



A RAILWAY IS BORN

"The terms of concession possess no feature of attraction to English capital."
Edward Rosenbusch, in a letter to Sir Victor Houlton
December 31, 1874.

When J Scott Tucker first proposed a railway for Malta in 1870, the Island was perhaps one of the last countries in Europe without one. The railway revolution was nearly over and the world was on the threshold of newer, quicker, and more efficient means of transport. A railway on a 17-mile (27.2km) long island was illogical were it not for Malta's strategic position and dense population which, added to the thousands calling in ships or taking up local residence, made the railway seem a feasible proposition. The local Government did not want to invest in such a risky and costly enterprise; foreign capital was always welcome but the terms of the concession and their observation remained Government's prerogative.

The Island's gentle topography and association with Britain deceived experienced Victorian engineers into assuming that things were going to be easy.

In 1873, C Andrews, a construction engineer, surveyed the island and drew up plans. Andrews's partner was E Rosenbusch, the Engineer and General Superintendent of the Mediterranean Extension Telegraph Co. Ltd of Valletta. They submitted plans to the Council of Government on April 21. The Council was already examining another proposal submitted by Major Hutchinson on March 26, 1873. On May 4 the Council appointed a Select Committee made up of Messrs. Dingli, Trapani, Scicluna Barbaro and Decesare to examine both schemes and make recommendations. The Select Committee engaged the services of Major James RE, EL Galizia and GC Schinas to interview the promoters and submit two reports, James to work independently of the others. James's appointment was not capricious: as an officer of the Royal Engineers his superiors at the War Office would certainly veto any construction that would endanger the island's military prowess. Equally, the choice of two Maltese architects ensured that both schemes would be studied from a local perspective.

Both Andrews and Hutchinson proposed a narrow metre gauge railway which was widely used in underdeveloped countries since it was cheaper and easier to construct and required smaller and slower engines which were ideal for the steep gradients and uneven topography often encountered. Both reports differed substantially in content and conclusion and so deserve closer examination since they influenced the terms of the concession with dire consequences for the Malta Railway Company.

Facing page: The promoters conducted surveys of pedestrian and cab traffic through Porte des Bombes, Floriana. and the Marina Gate, Valletta in order to estimate potential traffic for the railway

The Major James Report

When James submitted his report in June 1873, he made no secret of his War Office brief. His introduction was followed by a description of the two schemes, Major Hutchinson's, which he named Railway Nº 1 and C Andrews's, Nº 2. This was followed by comparative remarks, conclusions and suggestions on the schemes.

Major Hutchinson's scheme - Railway Nº 1

Hutchinson's railway was based on Fell's Aldershot Railway where two continuous iron-girder rails were supported on a series of iron trestles. At Aldershot, the gauge was half that proposed for Malta, stability being obtained by the use of side friction wheels on engines and carriages. Hutchinson claimed that Maltese stone piers could replace the steel trestles to support the gauge and eliminate the side friction wheels. The engines and carriages would have a low centre of gravity for stability. He estimated the necessary capital at £42,000 or £6,000 per mile. Land purchased for his scheme would cost less than under the trestles. Valletta's Terminus was to be sited on the left side of Porta Reale in St John's Counterguard, a better site according to James, than Andrews's.

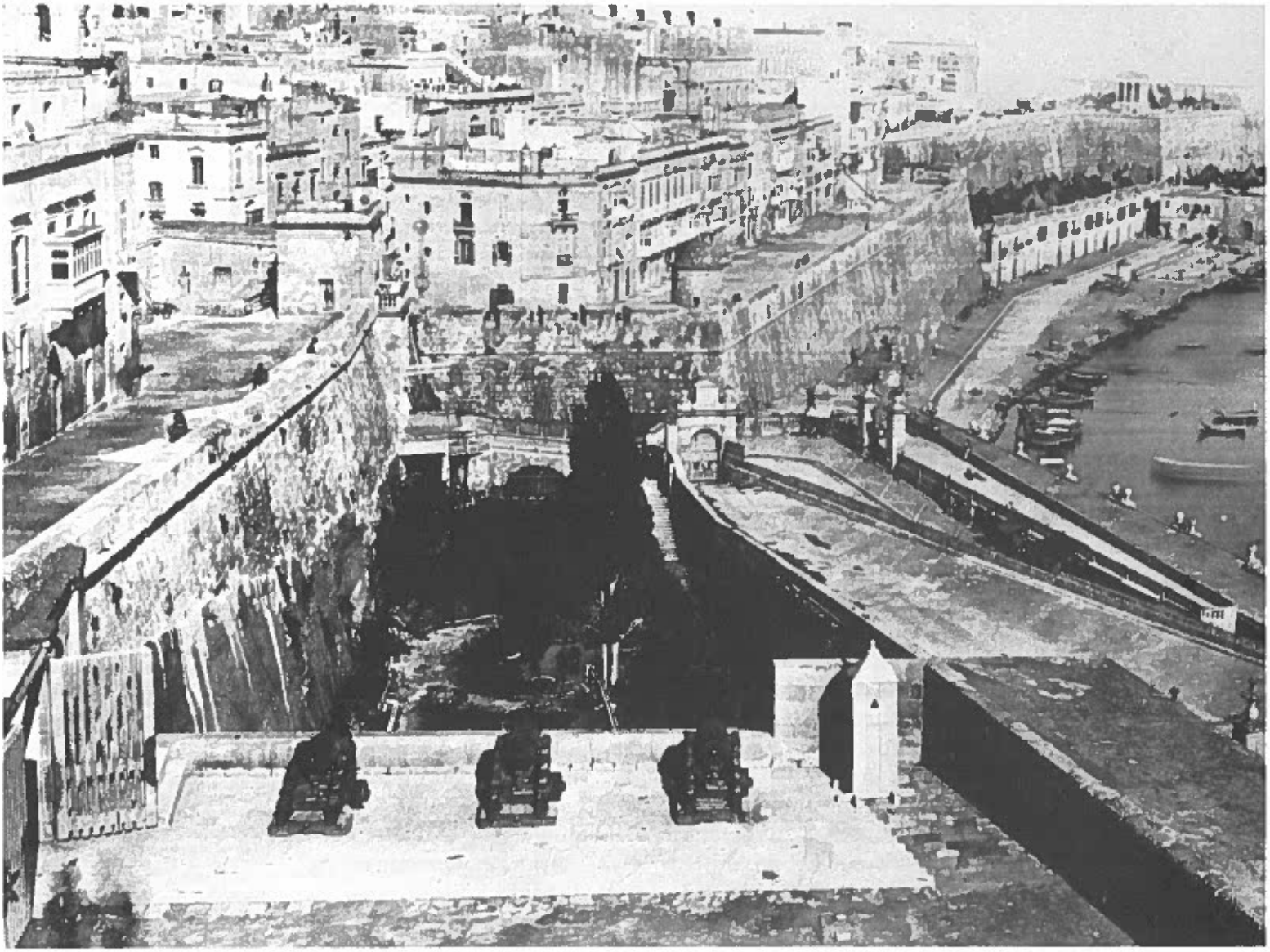
Hutchinson's line would then pass between Lintorn Barracks (Beltissebh) and the Ospizio (behind the Police GHQ), proceed to Salvatore Bastion in a 20ft (6.1m) long tunnel, traverse the road from Notre Dame and Porte des Bombes Gates to Pietà on 20ft (6.1m) high trestles, and arrive at a station to be built at Ta' Braxia, which would be called Porte des Bombes Station.

The line would then run parallel to St Joseph's Road, Hamrun with a station near Palazzo Leone. Another station would be placed to the south of Birkirkara's old church. The next station would be between Attard and Lija after which a right curve would take the line to the south of Mosta, with a station there. Here a left curve would take it to Notabile Terminus at the foot of the hill, near the Attard/Zebbug road junctions. Wignacourt's Aqueduct would be traversed between Mosta and Notabile. Hutchinson's minor stations would be mere stops without booking offices, and tickets would be issued on the train. He envisaged extensions from Mosta to Marfa and from Hamrun to the South and West of the island.

C. Andrews's scheme - Railway Nº 2

Whereas Hutchinson had submitted artist's impressions instead of detailed plans, Andrews produced a map of the route through the fortifications and calculations of the cutting and embanking required for the gradient proposed, the results of his own 1873 survey. His gradients were 1 in 70 at their steepest; the narrowest curves were to be of 10 chains (201.2m) radius. His line would require 40 tumoli (40ha) of land costing £1,530 in compensation, the land through the fortifications being given free at a nominal rate. James thought that Andrews's estimated track width of 5½ yards (5m) was excessive for a single metre gauge. Andrews's costs were estimated at £27,291 or £4,102 per mile; they were based on £6,320 for the first mile and £3,000 for each of the following. James doubted if Andrews's figure of £2,300 for rolling stock was adequate. The rails would resemble Indian Tramways', 3½ inches (0.09m) deep and weighing 35 pounds per linear yard (15.88kg per 0.91m).

Andrews sited Valletta Station at the Marina Curtain to the right of the



Andrews proposed a terminus for Valletta below the Marina Gate in the area known as Gnien is-Sultan (The Sultan's Garden)

drawbridge. The line would then penetrate the fortifications by a long tunnel which, as a contingent advantage, would carry the main sewer when drainage works in Valletta and Floriana commenced. Rubble from the tunnelling would be used to build the embankments along the line. After emerging at the rear of the re-entering angles of Magazine and St Francis Bastions, Floriana, an embankment would take the line to Bugeja's Stores (Coleiro's Winery) near the left face of the Crown Works (Sea Malta offices) until it reached the road from Marsa to Hamrun (Spencer Hill) which would be traversed by an oblique iron-girder bridge. From there a curve to the Northwest would bring it to the junction of roads leading to Marsa and Hamrun. The rest of the line to Notabile would be on surface.

There would be stations at Hamrun, between St Joseph and Msida, near Birkirkara's old church, and between Attard and Zebbug, where the line approached the Lunatic Asylum before arriving at Notabile. There were to be no level crossings, bridges and fences to be used where public safety required it. Wignacourt's Aqueduct would be traversed at Hamrun and San Anton.

Andrews proposed three extensions, the first to St Paul's Bay and Marfa "from whence a steam ferry to Gozo would be possible"; the second would connect Qormi, Zebbug and Siggiewi, while the third, clearly meant to please the War Office, would extend to Fort St Elmo from the War Department's Pinto Stores, for the conveyance of ordnance and military supplies.

Railway Nº 2A - James's modification of Andrews's plan for the first mile

James did not modify Hutchinson's plan since any objections to it would affect the entire Fell system. He proposed to modify Andrews's scheme to make it acceptable to the War Office. James proposed a goods station at the Marina Ditch to link the wharves along the Grand Harbour. Andrews's main tunnel would begin at the Marina Ditch and exit at Kalkara Gate (Crucifix Hill), after which a second tunnel carried the line to the re-entering angle of Magazine and St Francis Bastions, Floriana, as Andrews had proposed. Andrews's projected embankment behind Bugeja's Stores prejudiced the fortifications and would be removed from the plans by cutting a 50 yards (45.7m) long tunnel under the Crown Works.

Comparative remarks on schemes 1, 2 and 2A.

James favoured Hutchinson's site for the Valletta station at Porta Reale which was more socially acceptable for the upper classes than the Marina Ditch. Although Porta Reale was more central to the City and was eventually chosen, the Marina was the real gateway to Malta, and railway revenue estimates had calculated on several foreigners using the train for excursions to Notabile. A zig-zag footpath was later constructed from the Ditch below St John's Counterguard to Porta Reale Railway Station. James admitted that schemes nos 2 and 2A would be of better service to the population and there would also be the additional bonus of goods traffic.

Hutchinson's trestles would not prejudice the fortifications but, dismantling hundreds of tons of steel in the event of war would be a military liability. The plan held no prospect for goods traffic. Either system would serve the countryside though James preferred Nº 1's proximity to Mosta which he thought was larger than Zebbug. He refuted Hutchinson's theory of continued cultivation under the line. Farmers would suffer regular interruption, the ashes would set fire to their crops and consequently the area occupied by the line had to be written off for cultivation purposes. The Fell system eliminated bridges and level crossings but a headway of 11 feet (3.4m) over the main roads would be necessary.

In Andrews's criticism of Hutchinson's scheme, James said that, contrary to his allegations, Fell's trestles could be reversed instead of renewed after seven years, thus doubling their lifespan. It would not be difficult to repair the line because the structure was not as rigid as Andrews had stated. James dismissed Andrews's other objections to the Fell system: changes in temperatures, the difficulty of raising the outer rail on a curve, the size of the carriages, safety and wind exposure. Andrews alleged that the British Board of Trade would never authorise the construction of such a line, that at Aldershot being only an experiment by the British Government. James wrongly interpreted this as evidence that the system was acceptable. Since fares were a vital consideration in a railway operation, James argued that the cheaper Fell system would enable lower fares to be charged.

Conclusions and suggestions

James summed up as follows:

1 The tunnel route (Nº.2) chosen for the first mile.
2 The Mosta route for the countryside.
3 The Fell system, modified by the use of stone instead of iron piers

well adapted to Malta's needs.

While taking full responsibility for his opinions, James suggested that the promoters should be bound to:

a. guarantee completion of work by depositing a sufficiently large sum of money as surety;
b. forfeit the concession and works already completed if the project was not completed by a given time;
c. guarantee origin and security of capital;
d. be given power to purchase land;
e. allow inspection during and after construction;
f. submit to official regulations relating to fares, timetables, roads, aqueducts, speed and safety;
g. submit to seizure by Government in wartime and be compensated accordingly;
h. await ratification of the concession by the Secretary of State for War.

The Galizia/Schinas scheme

Galizia and Schinas submitted their report on July 24, 1873. While the first part resembled Major James's their observations and conclusions differed substantially from his.

Galizia and Schinas thought the public would be equally served at Porta Reale or the Marina though the latter would boost trade and benefit the Three Cities. They upheld Andrews's scheme for the line's approach to Zebbug, and refuted Hutchinson's allegation that Andrews would divide the island.

Hutchinson was criticised for the dearth of information supplied on plans, speed and manpower. (Incidentally Major James had taken the trouble to make his own calculations on behalf of Hutchinson.) Andrews's proposed curvature radii were too narrow for safety but his assertion that the Fell curves would be reduced into polygons was unfounded. Galizia and Schinas criticised Hutchinson for designing carriages without dimensions and scale. They praised Andrews's scale drawings of 35ft by 7ft (10.7m by 2.1m) carriages with seating based on the American system. These carriages would probably have some trouble in negotiating the short curves.

Galizia and Schinas condemned the Fell system for safety reasons. Their mind boggled at the consequences of derailment, boiler explosion, and engine breakdown or any other circumstance requiring a halt. They concurred with Andrews's assertion that, if panic ensued on a train, the first thing its passengers did was to rush out of carriages. In Fell's case they would have to abandon a train 10 to 30 feet (3m to 9.1m) above the ground! For this reason alone, if for none other, Galizia and Schinas chose Andrews's scheme.

The Select Committee decides

On December 11, 1873 the Select Committee presented its conclusions to the Council. Both promoters had initially requested Government aid but this was later renounced. The Governor sent the report to the Military authorities for vetting. In the meantime Major Hutchinson withdrew and the War Office communicated an amended plan to Andrews; he in turn submitted an amended plan which was acceptable to them save for some

minor modifications. Notabile Terminus was moved closer to Rabat to placate residents' protests about the new site.

The Committee concluded that the proposed work was of public utility and recommended that for the purposes of Ordinance IV of 1873, Andrews and Rosenbusch should be granted the exclusive concession for 99 years subject to the following conditions:

1. Work was to commence within a year from January 1, 1874 and be completed by January 31, 1875 failing which the promoters would forfeit the privilege granted to them.
2. That the proposed four extensions be completed by June 30, 1877, December 31, 1878, December 31, 1879, December 31, 1880 respectively, after which the promoters would forfeit their right to these extensions, with the privilege of selection passing on to the Government.
3. That, should the promoters delay completion of the works for any reason except force majeure, they would be liable to a penalty of £1 for every day up to the first two months, £1.10s daily for the next two and £2 for the subsequent two. After a delay of six months the work and the concession would be forfeited to Government.
4. That the railway was said to be complete when provided with the necessary engines and rolling stock.
5. That plans and drawings be submitted to a Board for approval.
6. That bridges or tunnels be built at intersections of the railway with public roads, streets or lanes.
7. That the promoters do not interfere with any public aqueduct or works, nor obstruct valleys or water courses except as sanctioned by the Board.
8. That the engines and rolling stock, platforms, signals, bridges and every part of the permanent way be subject to regular inspection and their continued use or otherwise to be decided by the Board.
9. That the promoters have a sufficient stock of spares and reserve engines and rolling stock for the running of the service.
10. That the engines be built on the principle of consuming their own smoke.
11. That, barring force majeure, the railway shall work uninterruptedly, failing which a penalty of £5 a day would apply for a stoppage lasting one month, £7 daily for any day during the next month and £10 daily for any subsequent days. After these three months, the whole of the railway will be forfeited ipso jure to the Government.
12. That postage bags and police officers be carried free.
13. That timetables and speed be subject to change by Government.
14. That fares shall not exceed: first class 1s.0d., second class 0s.8d, third class 0s.4d.

The Committee noted that the fares proposed by Mr. Rosenbusch were much too high; they hinted that it was in the promoters' interest to charge fares within the reach of all sections of the population.

On December 26, the Council approved the Select Committee report. Andrews and Rosenbusch had a year in which to form a Company, raise the necessary capital and commence work. While Andrews and Rosenbusch were sounding out capitalists, J Scott Tucker reappeared in May 1874 with a letter to the War Office and Sir Victor Houlton, in which he stated that

he had the money for the venture. He proposed to tunnel under Floriana starting from Porta Reale to Porte des Bombes, the first time that this route had been mooted. The railway was a vitally important project which would remove congestion in overcrowded Valletta whose citizens were constantly exposed to bad drainage and danger from several tons of ordnance.

Since shareholders' money was involved, Scott Tucker wanted full control of the construction and running of the railway except where military considerations were at stake.

He assured Government that the shareholders would not prejudice their own investment by defrauding the public. The War Office had approved his tunnel route. His line made extensive use of crossings since he alleged Andrews's bridges would be so expensive to construct and maintain that it would be impossible for the line to show a profit. Scott Tucker requested, gratis, 20 acres of Government land to be used for the creation of neighbourhoods along the line to generate traffic. He criticised the conditions imposed by the Select Committee which discouraged investors and denied the island the benefits of this "unquestionable public utility". Scott Tucker's forthright proposals were unacceptable and consequently ignored.

A Maltese businessman, Giuseppe Mirabita tried, unsuccessfully, to raise local capital to finance his own project. He even travelled to London to raise the money. It is likely that he was fully cognizant of his rivals' position. Mirabita's ambition to bring the railway to Malta and his subsequent role would create havoc during the construction of the line.

Andrews's partner, Rosenbusch, failed to raise capital before the concession expired. He offered Government free use of the railway in return for a subsidy and asked for a six-month extension during which the unattractive terms imposed by the Committee would hopefully be revised.

After expiry of Andrews's privilege, Scott Tucker and a German businessman, Fernandes, reapplied for a concession. The Council appointed yet another Select Committee on April 15, 1875 to examine these applications and Andrews's, and at once re-endorsed the latter, rejecting the former as unacceptable. Rosenbusch's request for a subsidy was rejected. Rosenbusch had offered Government free use of the line, but the Committee advised Government to pay the new Company for any service rendered.

The first contract - February 3, 1879

Although Andrews's and Rosenbusch's concession had been reaffirmed, their London associates were critical of Government's excessive control in the matter. However, a Malta Railway Company was formed on March 30, 1876 with a nominal capital of £100,000. The company name was changed to the Valletta-Notabile Railway Co Ltd. on November 24, 1877. It is not clear whether Mirabita was initially associated with this company or not. Mirabita had on his own account engaged a civil engineer, WS Sharpe to conduct surveys and draw plans. Sharpe, promised financial backing elsewhere, joined Mirabita to form the General Works Company to construct "Valletta and Notabile Railway". Mirabita promised to obtain the concession from Government in return for a fee of £2,500, his sons Francesco and Annibale being given the works contract based on Sharpe's plans. Mirabita paid Sharpe £1,035.10s. which included payment to the engineers Pickering, Ridley, Buchanan and Roebuck. Sharpe estimated that £18,000 would be sufficient to build the line.

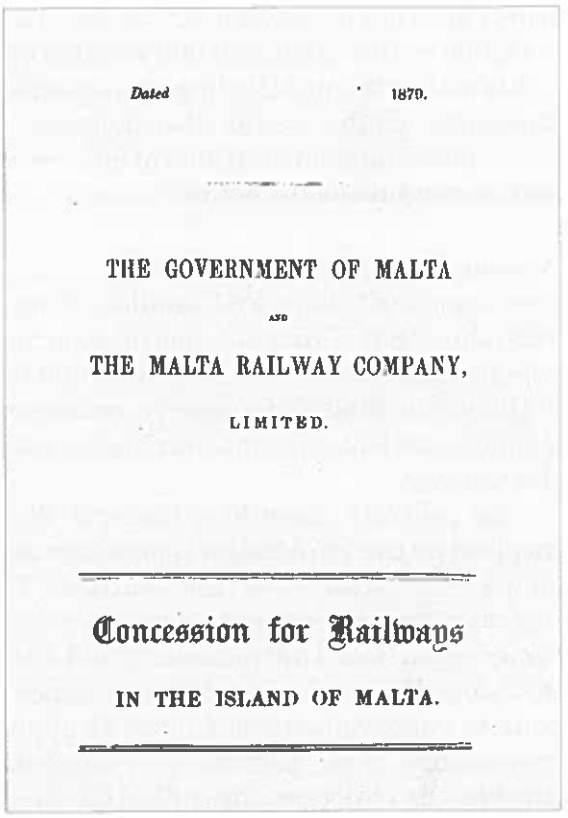
Giuseppe Mirabita (right) and his sons Annibale, Ferdinand and Francesco (left) were instrumental in bringing the railway to Malta

Andrews and Rosenbusch ceded their title to the concession and a contract was signed between Government and General Works who bound themselves to deposit a surety of £1,000 before commencing construction. They could rescind their claim to the title two months from the contract and be able to withdraw their surety. The contract was based on the Select Committee's recommendations which amounted to a virtual stranglehold by Government. The contract was signed on February 3, 1879, with WS Sharpe representing General Works. However, the promised capital was not proven and General Works transferred the concession to GB Crawley who rescinded the contract and applied for the return of the surety within the period stipulated. A liquidator was appointed in London but Mirabita and Sharpe sued General Works in Malta's Commercial Court affirming that the concession still held.

While the legal question awaited judgement in Malta and London, Mirabita, having no doubt written off General Works as a bad debt, tried to interest Richard Gervase Elwes,who had been introduced to him by his other son Ferdinand who lived in London. Mirabita wrote to Elwes on May 22, 1879 promising to obtain the concession from the Government in return for £2, 500 in cash or in bills drawn on London, his sons being preferred to build the line. Elwes confirmed the commission and subcontract of works to Mirabita's sons. Mirabita provided the Company with copies of the plans and drawings he had commissioned from WS Sharpe and a survey of estimated traffic. Edward Rosenbusch had commissioned a similar survey in 1876, policemen and other persons being engaged to compute pedestrian and carriage traffic through Porte des Bombes and Marina Gate over a number of days.

Mirabita introduced the new company to the Acting Chief Secretary on June 7, 1879. The Company accepted an amended contract which denied it the right to rescind and withdraw the surety before two months had elapsed. The Acting Chief Secretary hedged until General Works' legal

position had been clarified. Despite this the new company was registered in London on June 12, 1879. Elwes teamed up with another engineer, George Wells Owen; both secured an allocation of 100 shares each in the new company as a consideration for their work. The new company had a nominal capital of £60,000 and its first directors were OH Howath, GR Mitford, and GW Usill.


Dated 1879.

THE GOVERNMENT OF MALTA

AND

THE MALTA RAILWAY COMPANY,

LIMITED.

Concession for Railways

IN THE ISLAND OF MALTA.

On July 3, 1879, Mirabita wrote to Alfred Christian, the president of the Malta Chamber of Commerce and representative of James Bell and Co, inviting him on the Board of Directors.

Christian had acquired considerable knowledge of these matters in Switzerland, but he declined to accept and recommended his principals, Messrs James Bell, as bankers. On August 28, 1879, Mirabita and General Works were declared non-suited by the liquidator in London and the contract was cancelled by a decision of the Maltese Commercial Court on November 28, 1879.

The Elwes report - 1879

Late in 1879, Richard Gervase Elwes published a report on the Malta Railway, containing a map of the route and probable extensions. Elwes's figures were based on Mirabita's estimate of an average 4,700 pedestrians and 1,400 carriages using Porte des Bombes daily. His report emphasised the importance of Valletta as the focal point of the island; the railway would satisfy the needs of the rich who deserted Valletta in droves in summer, and the poor who went on Sunday outings. In addition to intercourse between town and country, thousands of foreigners arrived annually in ships as servicemen, tourists and businessmen.

According to Elwes, Valletta Terminus was within easy reach of both harbours and tunnelling underneath Floriana would be easy since the rock was soft and dry. The railway depot would be based at Hamrun and there would be stations at Msida, Birkirkara and Attard. Feeder traffic from nearby villages would be encouraged. A resident of Naxxar would find it convenient to walk to San Anton, one and a quarter miles (2km) away, and take a train, instead of walking the whole way to Valletta. Elwes estimated that every person served by the line would make an average of eight single journeys annually at an average fare of 3d. There would also be 10,000 visitors and 600 seasonal ticket holders who would pay 2d. daily for six days a week or £2.10s. annually. The annual income would be £12,000 or £35.5s. per mile per week. Working expenses of similar railways in Italy and the

Isle of Man did not exceed 50% of the income, so he estimated a net receipt of £6,000 or 10% of the £60,000 working capital. Elwes ignored goods traffic in his estimate until the line was extended to the Harbour wharves when passenger traffic would also increase. The railway could carry 1,300 passengers daily on 26 trains of 50 persons each, at half-hour intervals in both directions for 13 hours.

A second contract - July 28, 1880

The records of Notary FS Camilleri (Notary to the Government) of July 28, 1880 show that E Micallef, special attorney of the Malta Railway Company, was granted the 99-year concession and the exclusive privilege to make use of the public land and property, construct and operate a railway between Valletta and Notabile and purchase tracts of Government land required for the railway.

The contract resembled General Works' and imposed 25 conditions inspired by the 1873 Select Committee report. Clause 16 in the report was similar to Clause O of the contract. This imposed total forfeiture for interruptions in service exceeding three months. Other conditions gave the Supervision Board full regulatory and discretionary powers as, for example, in Clause P, to order the discontinuance of the service, in which case the penalty contemplated in Clause O applied. The Supervision Board was composed of three persons, two appointed by the Government, and the third by the Officer commanding the Royal Engineers in Malta. Clause N obliged the Company's engines to consume their own smoke, failing which a daily penalty of £5 would apply. Under Clause Z the Company had to deposit a surety of £1,000 in gold coin at the Receiver General's Office at 3% interest to ensure continuance of the works. The surety would be returned when the Company had spent £5,000 within the first year.

The Company had to get War Office authorisation for any alterations on military property. Government had the power to purchase the railway 15 years from the date of opening after giving six months' prior notice. The price would be equal to 17 years' purchase of the Company's average net receipts based on the three years preceding the notice with an additional 10% for compulsory purchase. If the market value of the Company was greater than the price ascertained, Government would pay the difference. Disputes would be referred to Her Majesty's Imperial Government according to the Railway Companies Arbitration Act. Forfeiture would apply if the Company's nominal capital was not proven satisfactorily within six months on the evidence of bankers' receipts showing that a minimum of 33% of the subscribed capital had been paid up.

Launching of the Malta Railway Company

With the contract signed, the Company published its prospectus and opened share application lists. The prospectus contained an amended report by Richard Gervase Elwes based on his earlier work. The share capital was made up of 6,000 shares of £10 each payable as follows: £1.0s per share on application; £1.10s per share on allotment; £2.10s per share on 10 January, 1881; £2.10s per share on 15 March, 1881; £2.10s per share on 15 May, 1881.

Subscribers were granted the privilege of paying the whole instalment on allotment, in which case interest at 5% would accrue on the full amount

from the date of payment. Prospectuses, application forms, engineers' reports and any other information were obtainable from the Company's Directors or Bankers at 18, St. Helen's Place, Bishopsgate Street, London.

The share application list closed on Monday, December 6, 1880 for London and on the following day for the counties. On December 10 letters of allotment of shares were sent, 4,683 shares of £10 each being subscribed initially, and another 300 later. This raised the Company's paid-up share capital to £49,830. A Government notice of December 22, 1880 authorised the Company to exercise for a year the right to survey, purchase and make use of private property.

On November 16, 1880, the Company appointed FAB Geneste to construct the railway for £58,000 and complete it by December 31, 1881. The contractor was obliged to pay 5% interest on the paid-up capital during construction and give guarantees for the fulfilment of the contract. On December 29, 1880 Geneste subcontracted the work to Francesco and Annibale Mirabita who at once asked for their father's commission plus interest. He gave them financial guarantees to enable work to begin. But all was not well between Mirabita and the Company. He had been slighted when the contract was signed, his commission had not been paid and his sons had to kowtow to Geneste.

After a decade of proposals, reports, committees, concessions, contracts, disputes and correspondence, Malta would finally join the narrow-gauge group of countries. The *Malta Standard* of December 1880 augured success and assumed that the Company would be using Andrews's 1873 survey and Rosenbusch's 1876 estimates. The English periodical *The Truth* of December 2 summed up the prevailing optimism before construction began: "This appears to us a fair investment for money. As the railway is to be constructed under concession from the Government and under the supervision of a Board of Officers and Engineers; and as the line seems to be in the nature of a suburban one, and pass through a thickly populated district; and the whole cost of construction is of £8,000 per mile including rolling stock, it certainly looks as if a good dividend would be earned."

FORM OF APPLICATION.

(TO BE PRESENTED ENTIRE TO THE BANKERS.)

THE MALTA RAILWAY COMPANY, LIMITED.

Issue of £30,000 Seven per Cent. Debentures.

No.

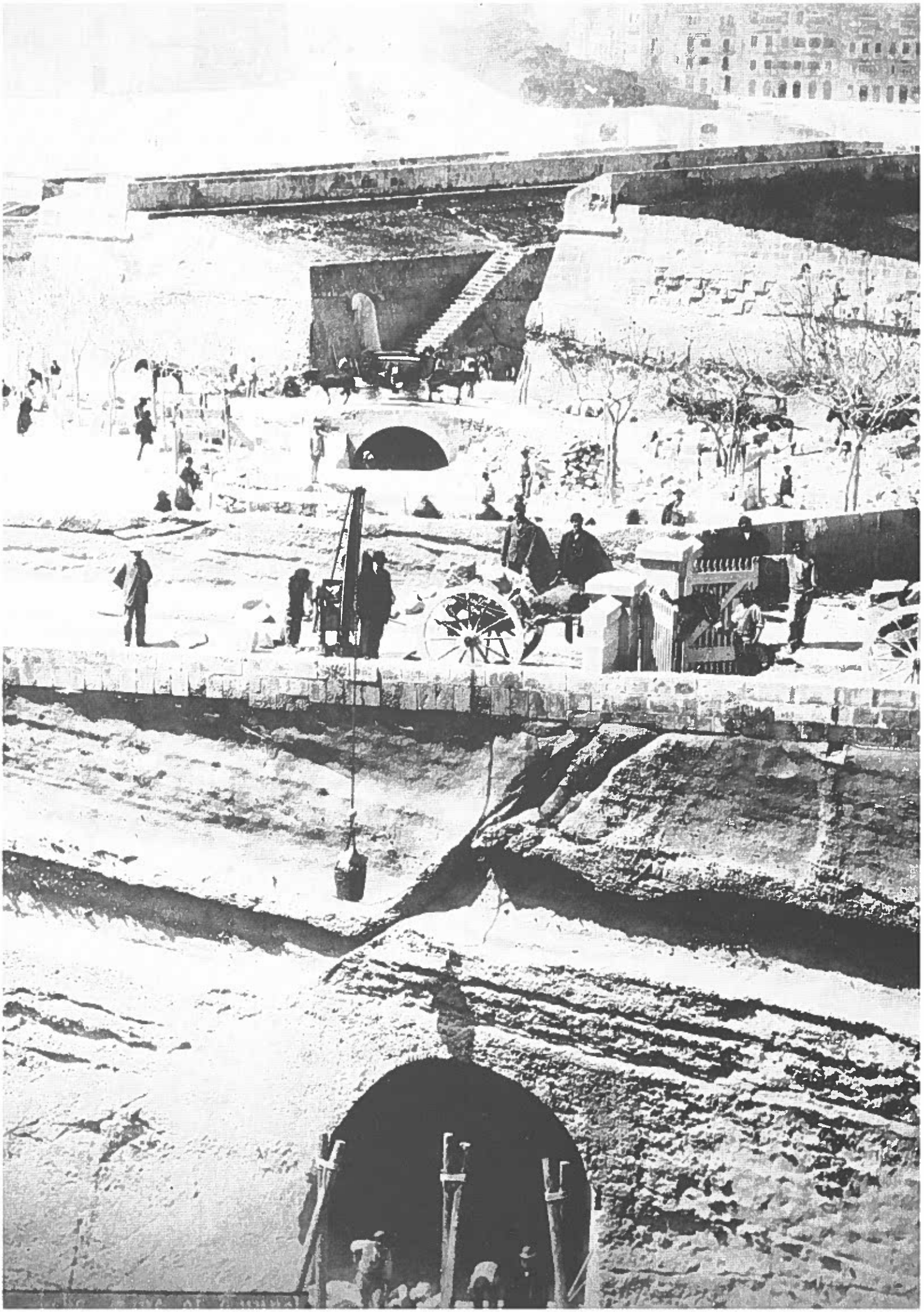
TO THE DIRECTORS OF THE MALTA RAILWAY COMPANY, LIMITED.

I hereby request you to allot me Seven per cent. Debentures of the Company, upon the terms of the prospectus, dated July 21st, 1880, and I engage to accept the said Debentures, or any less amount you may allot to me, and to pay the instalments thereon in accordance with the said prospectus.

Signature

Address

Date 1880.



CONSTRUCTION AND INAUGURATION

"I think that a quicker pulse will beat through the Island and the advantages of railway communication will force themselves on the people."

Sir Arthur Borton, Governor of Malta, February 28, 1883.

Geneste failed to complete the works by December 31, 1881 as stipulated in his contract due to disputes with the War Office, Mirabita, the Supervision Board and landowners. The Company obtained from the Government an extension up to July 28, 1882. Although costs exceeded Andrews's and Sharpe's original estimates, the Company hoped that, after the opening, it would be able to pay its debts and eventually show a profit.

The construction of the line presented several technical and legal problems. Acquisition of the land turned out to be a far more complex and expensive task than Andrews or Hutchinson had calculated, since landowners and farmers resented such an intrusion on a centuries-old landscape. No advantage could be perceived from the railway for this odious partitioning of their land. As soon as construction started in March 1881 landowners began to obstruct the company's engineers from surveying their properties, causing delays in the building schedule. Maltese law gave no power of entry on land to be used for construction before the execution of the deed of transfer. The Company appealed to the Crown Advocate on the matter with the result that an Ordinance was published "empowering Company officials, after giving notice, to enter any land which was to be used for purchase, or for mere surveying, or to take levels, probing or boring to ascertain the nature of the soil and setting out of line of work". The first mile was Government and War Office property and since much of it was in tunnel, it was bought for a nominal fee. The rest of the land from Porte des Bombes to Notabile had to be purchased from several whole- or part-owners represented by trustees and executors of families, religious orders and confraternities.

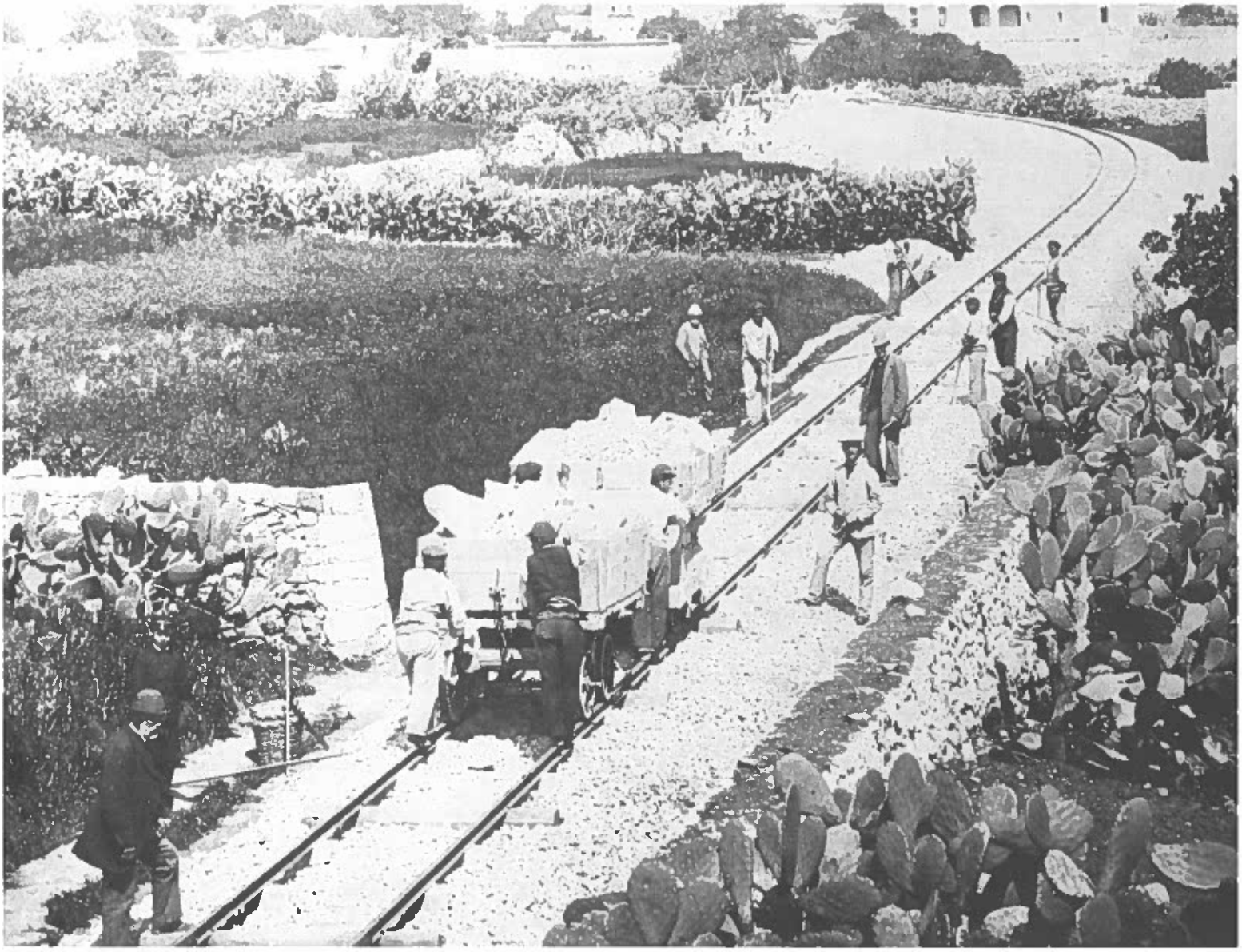
The first plot was bought on April 23, 1881; the last on June 6, 1883. A total of 117 blocks of land were bought, the lowest sum paid being 15s0d. (for an area below Tal-Plieri, limits of Notabile), the highest £375, for an area of 187 sq canes (748m^2) limits of Birkirkara at the junction with St Venera. The total sum paid for land acquisition was in excess of £5,000.

Facing page: Floriana tunnel excavations during the month of April, 1882. This is one of a series of photographs of the construction of the railway taken by HJ Davison, a Strada Reale (Republic Street) photographer

The works included the cutting of Valletta Terminus tunnel, shafts and tunnel from St James Counterguard to St Philip Curtain at Floriana, the building of stations, guard huts at level crossings and viaducts at Porta Reale, Porte des Bombes and Attard. Other works beyond the first mile included the excavation or construction of embankments, cuttings, masonry arches, parapet walls, steps, galleries, foot and cart crossings, ramps, boundary walls, open drains and siphons. Foot paths and aqueducts had to

LAND ACQUIRED BY THE COMPANY BETWEEN 1881 AND 1883

Date	Owner/Procurator	Area Description	Sum paid
1881			
4 Dec	GA & C Sciberras	"Ta' Bascal" limits of Attard near Ta' l-Imriehel	£85. 0s.0d.
22 Dec	M. Sant	Limits of Attard near San Anton Gardens	£1. 0s.0d.
1882			
7 Jan	Can G Magri Dr S Constantine Magri	Limits of Balzan near San Anton Gardens	£29. 0s.0d.
7 Jan	C & G Beiffa M Buhagiar	"Ta' Santa Venera" limits of B'Kara near Misrah il-Barrieri	£26. 0s.0d.
9 Jan	A, G & S Borg C Sciberras	"Ta' Marena", "Ta' Dwejra" limits of B'Kara near Misrah il-Barrieri	£13. 0s.0d.
10 Jan	Dun S Muscat	"Ir-Raggha" limits of Attard	£13. 16s0d.
19 Jan	Dr G Fenech	"Bur tal-Ghalqa il-Hamra" near ta' Misrah il-Barrieri	£39. 0s.0d.
19 Jan	G Caruana	"Tal-Harruba" limits of Attard near Mosta Road	£24. 0s.0d.
20 Jan	Can P Lebrun A Aquilina G Ferranti	"Tal-Imriehel" limits of B'Kara near ta' l-Imriehel	£50. 0s.0d.
20 Jan	Can D Matteo Hyzler	Part of a garden limits of B'Kara in Old Church Str	£18. 0s.0d.
24 Jan	Dun N Sciberras Gio Batta Azzopardi G Muscat	"Ta' Mghallak" limits of Attard	£33. 6s.8d
24 Jan	CEP & T Curmi	"Tal-Fgleni" & "Ta' Pantan" limits of Attard	£4 10s.0d.
27 Jan	C Falzon	"Tal-Funtanier" limits of B'Kara near Misrah il-Barrieri	£4. 0s.0d.
30 Jan	Dr G. Camilleri	"Tal-Qsajjem" limits of Attard	£13. 7s.0d.
30 Jan	Marq E Scicluna	"Ta' Cincina'" and "Ta' Braxia" St Joseph Rd, outside Porte des Bombes	£49. 10 0d.
31 Jan	Dr G M Debono	"Ta' Braxia" St Joseph Rd outside Porte des Bombes	£46. 6s.0d.
31 Jan	Dun N Mifsud	"Il-Qsajjem" limits of Attard near Mosta	£13. 7s0d
1 Feb	Can Dun Gio Batta Borg	B'Kara St Joseph Road	£23. 0s.0d.
1 Feb	Can Dun Gio Batta Borg	"Ta' Zuntier" limits of B'Kara	£42. 0s.0d.
8 Feb	T Bonnici	"Ta' Blakas" St Joseph Rd outside Porte des Bombes	£55. 0s0d.
15 Feb	Can Dun Gio Batta Borg/S Camilleri	"Tal-Fnlek" & "Ta' Ghar Ghomor" limits of B'Kara near Fleur-de-Lys	£16. 0s.0d.
24 Feb	Can Dun G Micallef	"Tal-Rikija" near B'Kara's old church at "Sqaq il-Hallelin"	£48. 10s0d.
28 Feb	Dr A Sammut	"Ta' Cini" limits of Attard near "Sqaq il-Hallelin"	£11. 0s 0d.
6 Mar	Dun P Xuereb	"Ta' l-Imriehel" limits of Attard	£7. 0s.0d.
6 Mar	G Ferrante	"Ta' l-Imriehel: limits of B'Kara	£20. 0s.0d.
11 Mar	GB Psaila	"Ta' San Pawl" or "Ta' Tabak" limits of B'Kara near Tal-Fnlek	£213. 19s.2d.
3 Apr	Dun GM Camilleri V Bugeja	Floriana near Hamrun	£20. 16s.0d.
22 Apr	Dun P Dimech	"Il-Qsajjem" or "Ta' Deguara" or "Ta' Spadafora" limits of Attard	£85. 0s 0d.
13 May	E Scicluna	Two portions of a yard at B'Kara near St Venera	£375. 0s.0d.
10 Jun	Dun P Cilia	"Ta' Bert" limits of Attard near Wied Incita	£12. 4s 0d.
10 Jun	M Brignone	"Ta' Bert" limits of Zebbug	£25. 0s.0d.
12 Jun	Dun EM Sayan	"Ta' Girasi" limits of Zebbug near Wied Gizara	£42 0s 0d.
15 Jun	Dun GM Manduca	"Ta' Bert" Limits of Zebbug near San Martin	£32 0s.0d.
20 Jun	M, G, C, M and L Mifsud	Houses limits of B'Kara, Strada Imriehel Nos. 21 and 22	£150. 0s.0d.
1 Jul	F Borg	"Ta' Girasi" limits of Notabile near Ta' Girasi	£49. 0s. 0d
1 Jul	Lucia dei Conti Manduca	"Habel Lebrin" limits of Attard near Wied Incita	£40. 0s.0d.
6 Jul	Dr A Caruana	"Ta' Bert" limits of Zebbug near San Martin	£50. 0s.0d.
14 Jul	Pascuale dei Conti Manduca	"Tar-Rmiedi" limits of Attard near Wied Incita or Ta' Vnezia	£84. 0s.0d.
15 Jul	Can Dun M Sammut	"Ta' Girasi" limits of Zebbug near San Martin	£66. 0s.0d.
18 Jul	P and A Fenech C Mattei, C Cilia, G Cachia, Dun F Gauci, G Gauchi, R Debono, M Grech	"Il Qsajjem" or Ta' Spadafori"limits of Attard near Ta' Rinedi	£65. 18s.0d.
27 Jul	Barone P Galea	"Ta' Bert" or Ta' Habel Lebrun" limits of Attard near Wied Incita	£33 10s.0d.
29 Jul	L Vallone	Section of a garden at B'Kara Nos.25,26,27 St Joseph Rd	£33. 10s 0d.
8 Aug	A Calania	"Ta' Misrah il-Barrieri" limits of B'Kara near Misrah il-Barrieri	£24 0s 0d.
9 Aug	C Grech/A Cremona	- do -	£24. 0s.0d.
11 Aug	Dun G Fabri	"Ta' Girasi" limits of Notabile near "Ta' Girasi"	£52 6s 8d
12 Aug	GB Borg	Limits of B'Kara, St Joseph Rd Nos. 25,26,27	£20. 0s.0d.
16 Aug	G Pullicino	"Tal-Plieri" limits of Notabile near Tal- Plieri	£0. 15s.0d.
17 Aug	Dun V Cremona	"Ta' Bert" or "Ta' Girasi" limits of Zebbug near San Martin	£2. 18s.0d.
21 Aug	Dr O Grech Mifsud	"Tal-Miksura" limits of B'Kara near San Pawl	£90. 0s.0d.
24 Aug	Dr G. Caruana	"Ta' Wilgia"/Tal-Plieri limits of Notabile	£48. 1s.8d
28 Aug	Dun P C Borg A Vella, A Zahra T Bonnici	"Ta' Bert" limits of Zebbug near Wied Incita	£34. 14s.0d.
2 Sep	C,E,P,T and R Curmi	St Joseph Rd, outside Porte des Bombes	£70 0s 0d
5 Sep	Conte PP Theuma Castelletti, L Farrugia	"Ic-Cimbir", Floriana outside Porte des Bombes, near Hamrun	£14 18s.4d.
6 Sep	T Xerri	Portion of garden, B'Kara Sda Mriehel No 17 and 21	£5 0s.0d
7 Sep	Dun SM Cassar	"Tal-Wileg", limits of Notabile near Sda Corsa	£17. 17s.0d.
12 Sep	Dr G Pullicino	"Ta' Bert" limits of Zebbug near Wied Incita	£55 0s 0d
14 Sep	Can Dun G Dingli	"Tal-Bata il-Bajda" St Joseph Rd outside Porte des Bombes	£18 16s 0d
18 Sep	Dun F Spiteri Agius	"Ta' Bert/Tal-Glin" limits of Attard near Wied Incita	£60. 0s.0d
19 Sep	C Pisani	"Tal-Gradu" limits of Notabile near Tal-Plieri	£111. 0s.0d
27 Sep	G Pace	"Ta' Dar Izzara" Notabile near Dar Izzara	£72 0s 0d.
28 Sep	A Schembri	"Ta' Misrah il-Barrieri" limitsof B'Kara near Sta Venera	£1 0s.0d.
5 Oct	A Chetcuti	"Ta' Cawla", Rabat near Tal-Plieri	£60 0s 0d
12 Oct	Dr P Mifsud Dun B Dimech	"Habel Bellu", Rabat near Dar Izzara	£210. 0s 0d
27 Nov	A Lanzon	"Ta' Cawla", Notabile near Tal-Plieri	£6 10s 0d.
8 Dec	Marq E Testaferrata Bonici Axiak	"Tal-Wilga" or "Tal-Plieri", Notabile	£81 2s 0d.
1883			
5 Jan	L Busuttil	"Tal-Plieri" or Tal-Wileg" limits of Notabile near Tal-Plieri	£100. 0s.0d.
20 Apr	Dun F Mifsud	"Il-Wilga" "Tal-Plieri" limitsof Notabile near the racecourse	£222 0s.0d.
18 May	Not G Frendo	"Tal-Imriehel" limits of Lija	£5. 15s 0d
18 May	Dun EM Sayan	"Tal-Girasi" limits of Zebbug near Wied Incita	£1 10s.0d.
6 Jun	N Gauci Azzopardi S Agius, G Vella	"Ta' Zelfa", Hamrun	£2. 6s.0d.



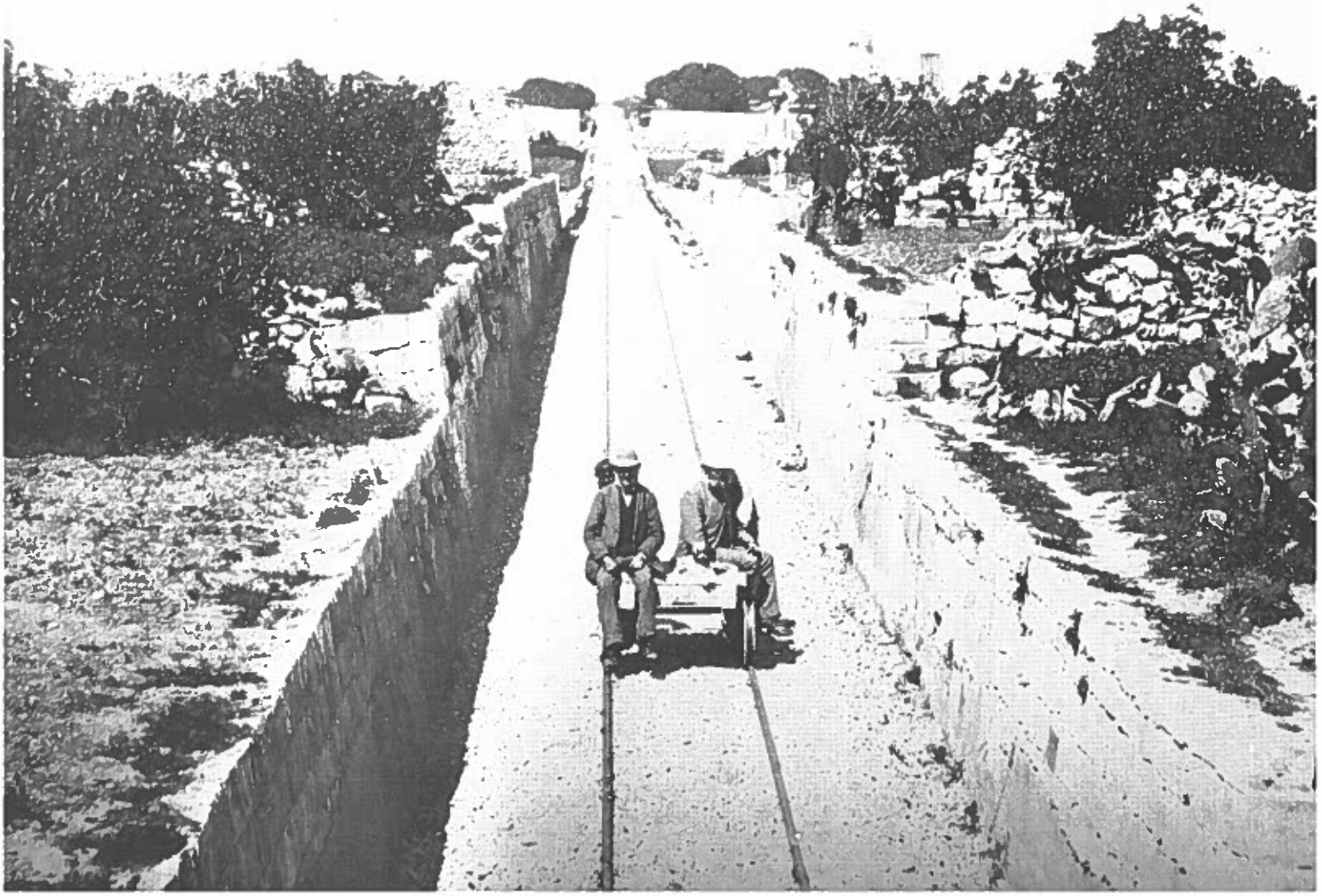
Davison's photograph of the line nearing completion near Tal-Fatati (now Villambrosa), Msida, in April 1882. Ballast wagons carry loose stones for packing in the embankment under construction in the background

be lowered or re-aligned. The War Office obliged the Company to use timber for the viaducts at Valletta and Porte des Bombes since these could be easily removed or destroyed in the event of an invasion.

The fairly large amount of cutting and embanking failed to resolve the problem of gradient. The line climbed to Valletta with a gradient of 1:50 at the Mile End (Blata l-Bajda) and 1:60 at Porta Reale (City Gate). At the other end the Notabile (Mdina) Terminus gradient was 1:40 having climbed all the way from Birkirkara at 1:90 to San Salvatore at 1:66. Cuttings were about 16ft (4.9m) at their deepest and 12ft (3.6m) wide at the bottom. Recesses were cut to provide shelter for the unwary walker along the line and steps were cut into their sides to give access to fields and lanes on both sides of the line. The embankments rarely exceeded 20ft (6.1m). They were raised with pitched slopes of 05:1 and lined on the outside with stone recovered from cuttings. Tunnels were built to enable farmers to cross the line without having to climb them. *The Engineer* of April 1883 reported that, seen from a distance, the train seemed to be running along a wall.

The metre-size narrow gauge consisted of vignoles steel rails rolled at Barrow-in-Furness in 1881 and weighing 45 pounds per yard (20.4kg per 91.4cm).

They were fish jointed and secured to the sleepers at the ends and the middle of each rail by fang bolts, which had their nuts at the top of the rail



flange to avoid the need of opening out the permanent way for screwing out. The rails were secured by dog spikes at intermediate sleepers. The dog spikes were cylindrical with blunt ends. The rail flanges were not notched but the fang bolt washers were placed chock up against the ends of the fish plates to avoid the rails creeping down the inclines.

Difficulties and delays

Although the line had to be completed by July 28, 1882, work proceeded slowly and Wells Owen, one of the Company's engineers, arrived at the beginning of 1882 to file a progress report on the works. He reported to his directors in London soon after leaving Malta on March 30, 1882. His report, which was also circulated locally, stated that the Floriana tunnel was half complete with all the shafts down to the required level. Apart from four plots at Birkirkara all the land as far as 4 miles 47 chains from Valletta had been acquired, the embankments, cutting and bridges were complete, and the permanent way was laid and ballasted. Wagons were already in use to carry stone to parts under construction. Wells Owen explained that the rest of the line was incomplete because the Supervision Board had refused to authorise new plans before a solution was found for Valletta Station, whose site, the Board said, was unsuitable due to its position at the bottom of St James Counterguard ditch. The Board ultimately conceded that the Company had no other alternative site and more plans were approved. Wells Owen reported that the 500-strong workforce could be increased to speed up the work and ensure completion by the end of the year.

The report was criticised in the *Malta Standard* by a correspondent using the pseudonym 'A Gentleman' who, according to the editor, could be relied on to give a true and unbiased picture of the situation. It is tempting to assume that 'A Gentleman' was none other than Giuseppe Mirabita who had by now sued the Company. 'A Gentleman' queried Owen's estimates, adding that work was proceeding slowly and the Floriana shafts had not yet reached the required level. Less than half the land had actually been purchased and the sleepers which had been sequestrated on arrival by the Mirabitas had not been laid despite their release by the Commercial Court following guarantees given to the creditors. 'A Gentleman' belied the manpower figure given by Wells Owen and said that it was much less. He also reminded Wells Owen of Dr Mizzi's petition on behalf of Notabile residents against the proposed site of the Terminus.

An embankment (facing page, top) under construction near San Anton Gardens. Embankments were made of packed stone lined with dressed stone on the outside. The wooden guides indicated the embankment's sloping angle. Tunnels in the embankment permitted farmers access to fields divided by the line

Frank Geneste, in white hat, (facing page, bottom) poses on a ballast wagon on a newly-completed section of the line at Attard

When another newspaper, the *Malta News,* criticised 'A Gentleman's' comments in the *Malta Standard*, it was accused of being in league with the Company in its efforts to mislead the shareholders. The *Malta Standard* alleged that the photographs of the line at Villambrosa and St Venera, which the Company exhibited at 18, King Street, Cheapside, London, showed the only part of the line that was complete.

The Company explains

On the basis of Wells Owen's report, the Company informed its shareholders in an April 14, 1882 circular of the obstructive requirements of the War Department, the Board of Supervision and the "abnormal nature" of Maltese law which had resulted in an eight-month delay which would retard the opening date. To add insult to injury, when the problems had been resolved Geneste intimated that he wished to relinquish his contract.

Above: A deep cutting near Tal-Mirakli, Attard. Steps cut in the sides as well as a stone bridge permitted access to fields and roads on both sides of the line. The bridge and the cutting lasted until the late 'Sixties (facing page, top) when both succumbed to extensive housing development
Below: The level crossing at the junction of the Mosta-Attard road proved to be one of the most hazardous on the route

This had caused consternation among the directors in London and Mr. Roebuck, one of the Directors, sailed to Malta at once with a brief to conclude, as far as local laws allowed, all court actions against the Company by persons who had delayed hearings by every possible method. These persons (not mentioned in the circular, but certainly the Mirabitas) had taken advantage of Malta's peculiar laws which made no distinction between the contractor and his principals in respect of debts due to them. As a result, they had obtained garnishee warrants on the property, and laid an embargo on Company funds and employees.

Mirabita vs. Burke, Roebuck and Geneste

Mirabita's sons, Francesco and Annibale, obtained garnishee orders on Company property on June 3, July 13, July 15 and October 6, 1881. The company owed their father £2,500 as commission for his role of mediator in negotiating the contract with the Maltese Government. Geneste managed to obtain release from these warrants by advancing guarantees. It was not until after the final warrant of March 2, 1882 that Mirabita sued in the Commercial Court in a case which was to drag on for two years.

The case had a number of important legal aspects. Was Elwes authorised to promise Mirabita a fee of £2,500, his appointment as special attorney and, to his sons, the works contract? Had the contract been negotiated and concluded thanks to Mirabita? Whose plans was Geneste using, Mirabita's or his own? Was Mirabita entitled to a commission?

As soon as William Roebuck arrived in Malta in April 1882, he asked Mirabita to present his claim against the Company. (Roebuck stayed at Dunsford's Hotel, Valletta while the Company's offices were at 58, Strada Mezzodì (now South Street.) Mirabita asked for a total of £3,500, £1,000 for the plans and £2,500 as commission, plus interest. Alfred Christian was brought in as mediator. Roebuck offered Mirabita £2,000 in cash and £1,500 in Company shares. Mirabita countered by requesting £3,000 in cash and £500 worth of shares.

The Directors then telegraphed a final offer of £2,250 in cash and £500 in shares. Mirabita refused and opted to continue the battle in court. The case had started with George John Burke (the resident engineer) as defendant, who was later replaced for a short time by William Roebuck. Geneste represented the Company thereafter, following his retention as manager when the line opened.

The Commercial Court decided that Mirabita was entitled to a Commission and appointed two referees to liquidate the sum. Mirabita was refused payment for the plans which he voluntarily supplied to the Company. The case continued in 1883 when the railway had already opened. Had Mirabita been aware of the final award, he would undoubtedly have accepted Roebuck's original offer.

While Roebuck was trying to sort things out with Mirabita, he wrote to

Sir Victor Houlton on April 21, 1882 requesting yet another extension, this time of nine months from July 28, 1882, it being clearly impossible to complete the works by that date. Roebuck reiterated that the last mile had only been started in April after the site for Notabile Terminus had been finally established and permission for construction being given by the Supervision Board.

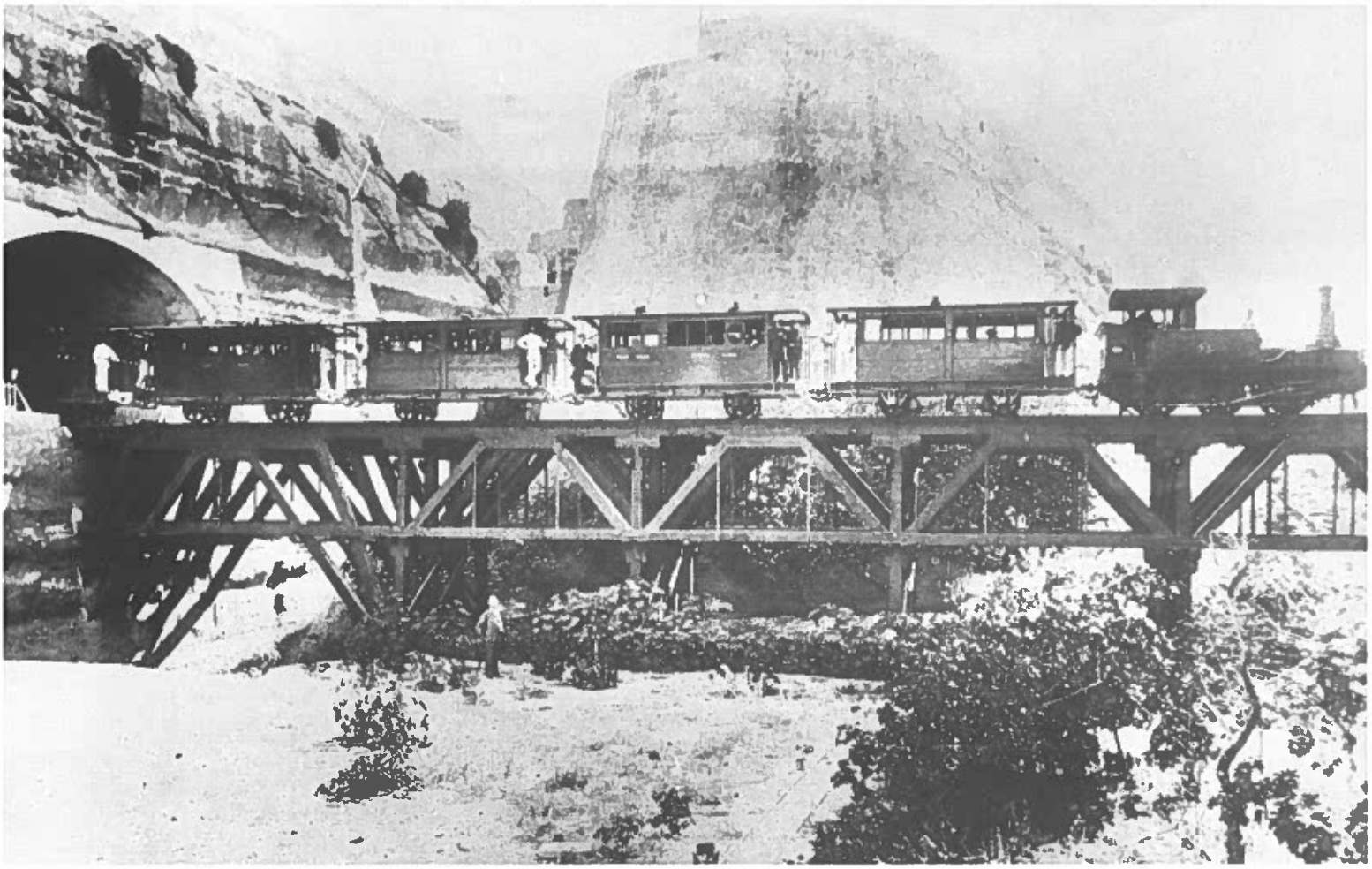
During July, the Supervision Board, on the advice of EL Galizia, Superintendent of Public Works, rejected GJ Burke's (the Company resident engineer) proposal to leave the keys of the gates at the minor level crossings in the custody of residents living in the vicinity. The Company was reminded that according to the terms of concession, safety at level crossings was its sole responsibility and no economies in manning would be tolerated.

Burke and Geneste were respectively appointed Resident Engineer and General Manager in August 1882. That same month Geneste requested permission to use telephones for communications between stations instead of an electric telegraph, as had been proposed earlier in the contract. The Supervision Board acceded to his request and also reminded owners whose land had been damaged by the railway that they were entitled to compensation from special funds which the Company had been obliged to allocate for that purpose.

On June 1, 1882 the Company informed Sir Victor Houlton that it had instructed its bankers, James Bell, to apply for the return of the £1,000 deposit and accrued interest. The Governor refused to authorise the release of the money. In August the bankers reiterated that by the end of July, more than £17,000 had been spent, well in excess of the £5,000 which the contract stipulated before the surety was restituted.The bankers pointed out that the Governor was cognizant of the reasons for the delay in completing the line and his refusal to authorise the release of the surety was all the more incomprehensible. The Governor at some stage probably believed that the works would not be completed but in December he authorised the release. On December 1, 1882 Alfred Christian, on behalf of Messrs. James Bell, received three bills totalling £1,070.2s.2d. drawn on the Crown Agents, being the surety and accrued interest.

The Mirabitas sensed that things were not going well for them, in and out of court. The railway was nearly complete, the engines were being tested and they had failed to slow or stop the works. They published a communique in the *Malta Standard* of December 23, 1882 in which they claimed credit for the completion of a beneficial project which they had first initiated in 1874. They explained that "following the collapse of their partners, General Works, they had been magnanimous enough to hand over their plans and drawings to the rival company set up by the same engineers whom they had previously employed and who gloated over the passing away of that Company". The Mirabitas said that "the new company had treated them unfairly, forcing them to act against their will". They exhorted the Maltese to recognise that the Mirabitas had spared no expense and effort to make this enterprise a reality!

The final cost exceeded Andrews's and Hutchinson's estimates. In 1884 the total cost was put at £76,971.14s.9d. Acquisition of the land alone had proved to be a painful, expensive exercise costing over £5,000, well in excess of Andrews's estimate of £1,500.



The military authorities insisted on the use of timber for the viaduct linking Valletta terminus tunnel with Floriana tunnel

A Description of the track

Valletta station was the starting point of the line. It was sited in the very centre of the City's commercial and social life at the junction of Strada Vittoria (also known as Strada Fianco, now Ordnance Street) and Strada Reale, or Kingsway (now Republic Street). The station was designed by Wells Owen and Elwes and was the most impressive of all the Company's stations. Its design harmonized with the adjacent Royal Opera House. The station building included a booking and a manager's office. From the main entrance hall a graded series of steps led passengers down to the gas-lit platform, 35ft (10.7m) below the street. The terminus was not built at street level since this would have meant breaching the fortifications of Valletta, which at that time had only three heavily guarded gate entrances (Porta Reale, Porta della Marina, Porta Marsamxetto). The terminus tunnel excavated underneath was 43ft (13.1m) wide, including two 10ft 9in (3.3m) platforms on either side of the double linked tracks to enable the down train to "run round" the carriages for the next up trip.

The original plans show a turntable where the track ended at the bottom of the stairs leading down from the station building, but this was never installed. The outer edge of the station tunnel was arched with masonry to a central height of 32ft 6in (9.9m) above the track. Valletta station was connected to the other stations by telephone, a set of coded rings being used to signify the position of a train on the line. The drop ditch outside the terminus was bridged by a timber viaduct of four 22ft 6in (6.8m) spans and one of 38ft (11.6m) at the terminus tunnel side. There was a water pipe for the boilers at the end of the viaduct. The double track merged into a single one on entering the 913yd (835m) Floriana tunnel.

THE MALTA RAILWAY.

MESSRS. WELLS OWEN AND GERVASE KLWES, M.S.L.C.E., WESTMINSTER, ENGINEERS.

(For description see page 289.)

FIG. 1. ELEVATION

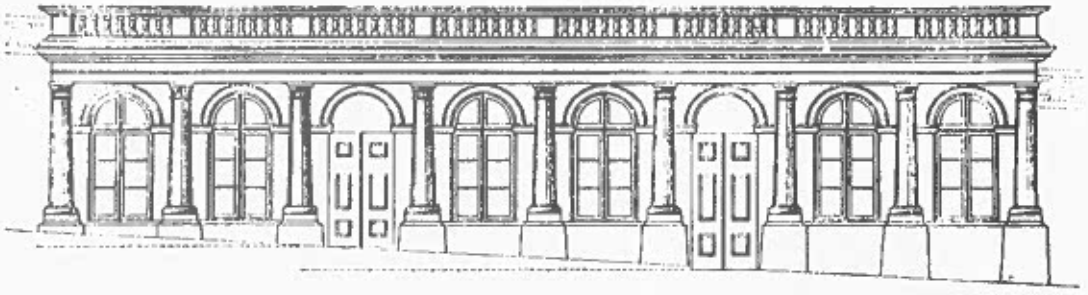


FIG. 3. SECTION ON AB.

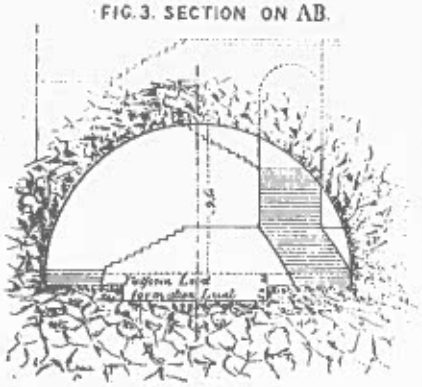


FIG. 2. PLAN

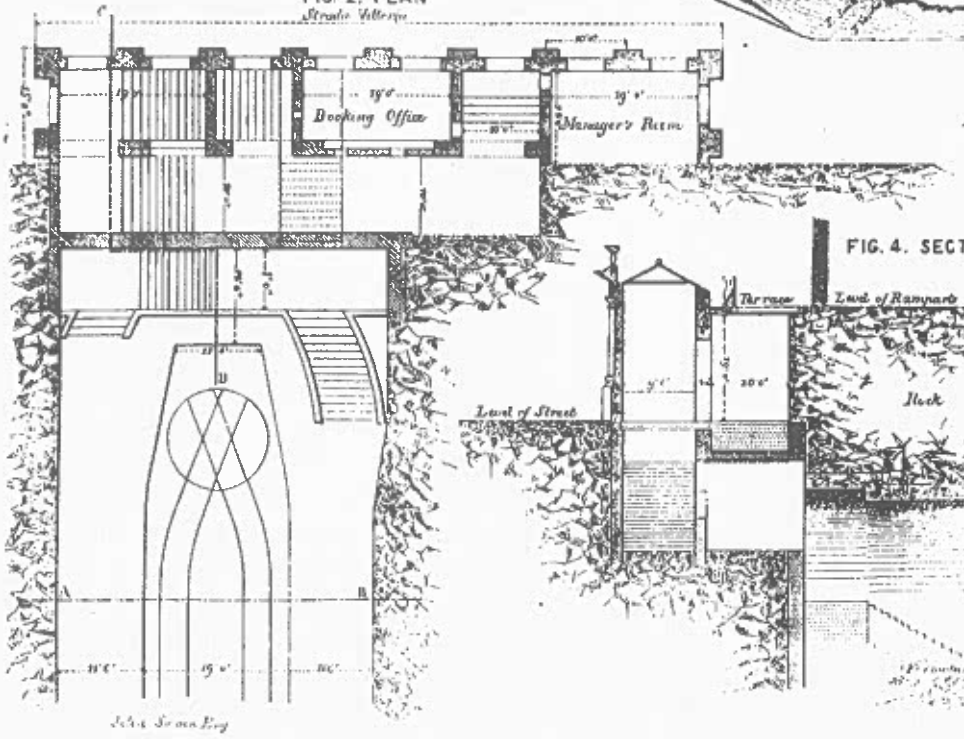
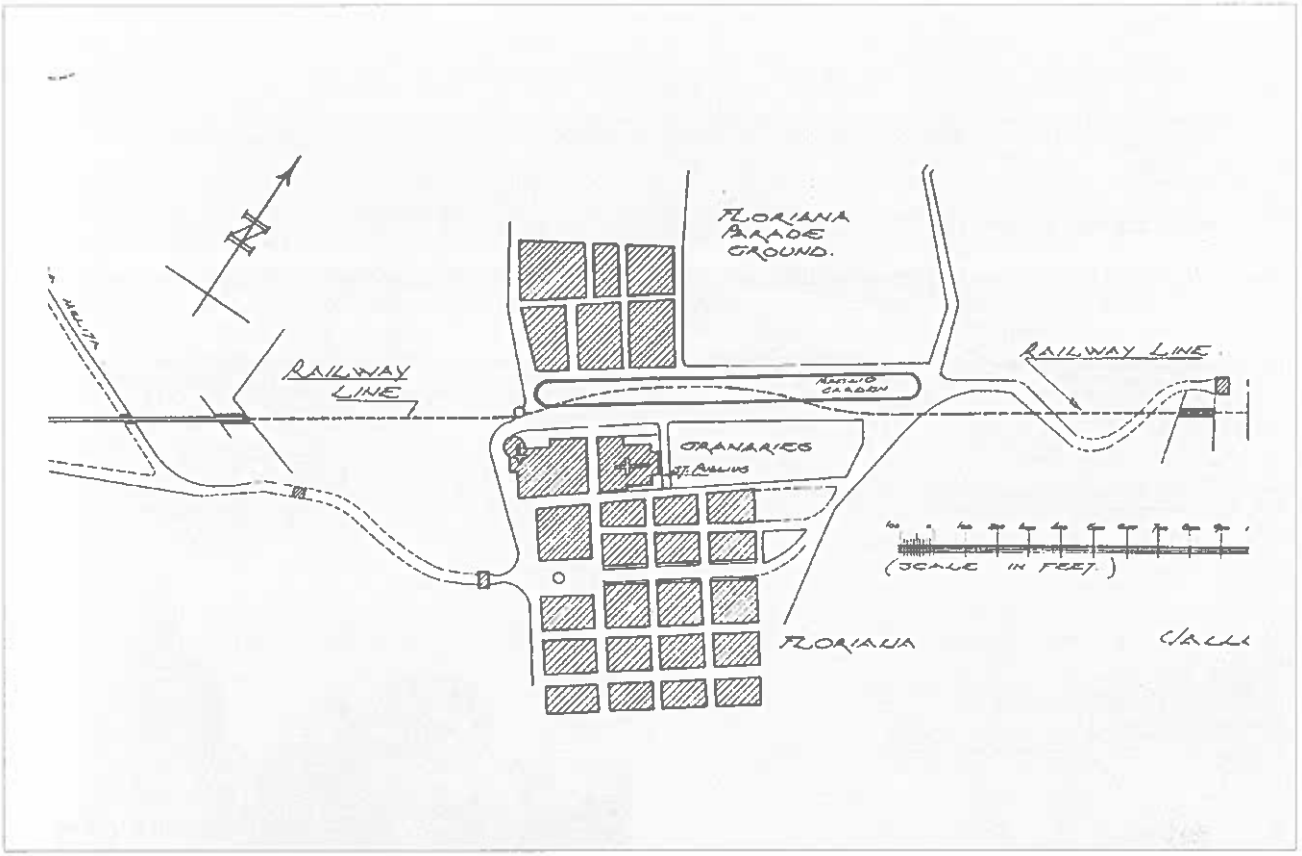


FIG. 4. SECTION ON CD.



Above: Map showing the curve in the tunnel made necessary by the discovery of a huge reservoir near Sarria Church

Facing page: The Engineer *of April 13, 1883, published drawings of Valletta station building and terminus tunnel*

Floriana tunnel was a feat of constructional engineering at a time when machinery and transport were limited to pick, spade, basket, hand winch and horse cart. It was cut at a down gradient towards Porte des Bombes and included a curve near Sarria Church. The work began in September 1881 and was completed by October 1882. Tunnelling proceeded from both ends and from a number of circular shafts which were used for ventilation and removal of spoils. These were hoisted to the surface in wicker baskets using hand operated winch cranes. The shafts were lined with stone and "blinded" to prevent material from falling on the trains. A metal grating and a round wooden fence were all one could see on the surface, though the noise, needless to say, was highly audible. The first shaft was close to St Magdalen Ravelin, (near the Tritons Fountain). Here the tunnel was so close to the surface that masonry arches had to be built over it before being covered with a layer of rubble. The tunnel reached a depth of 90ft (27.4m) at Wignacourt Fountain. It was 15ft (4.6m) wide and 14ft (4.3m) high except for the platform at Floriana Station.

While tunnelling was in progress, a large water reservoir dating back from the time of the Knights was discovered at a spot beneath St. Publius and Sarria churches. The straight downward course of the line had to be modified into a wide gentle curve starting from beneath the Maglio Gardens and ending at Floriana Station. *The Engineer* of April 13, 1883 described this slight deviation as a double "S" curve. However, few passengers ever recalled any abrupt turns during the three-minute candle-lit tunnel trip; what they did recall was the smoke and noise recoiling into the carriage after striking the low roof and the narrow sides of the tunnel.

At the end of the Sarria curve was Floriana Station, the only other underground station besides Valletta, its platform being reached after a 90ft. (27.4m) descent. The plain station building on the surface consisted of two rooms near Wignacourt's Fountain. There was a booking office and

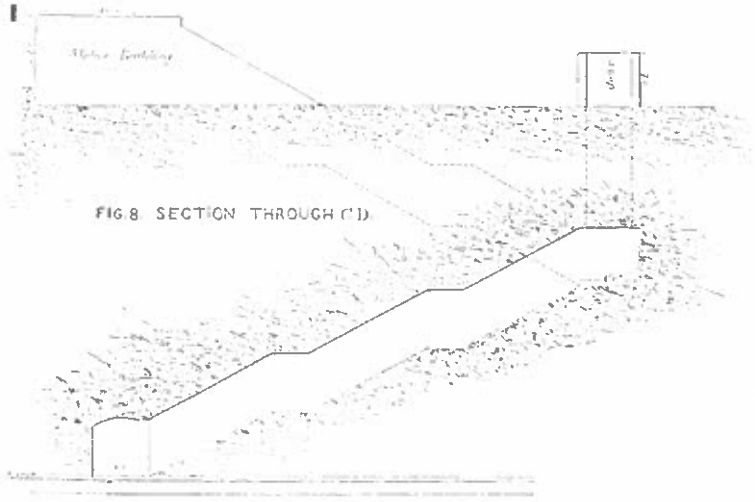


FIG.8 SECTION THROUGH CD

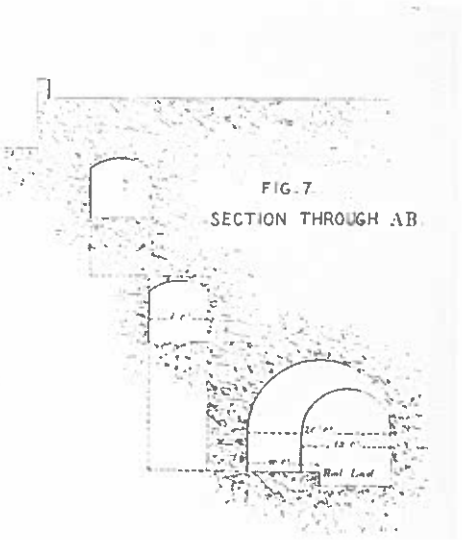


FIG.7
SECTION THROUGH AB

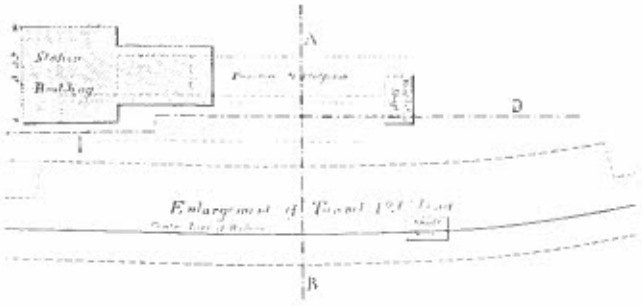
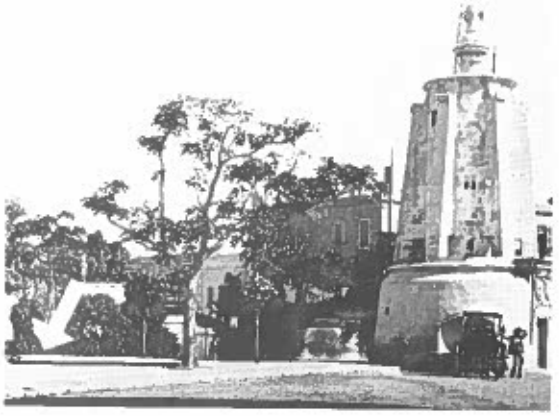
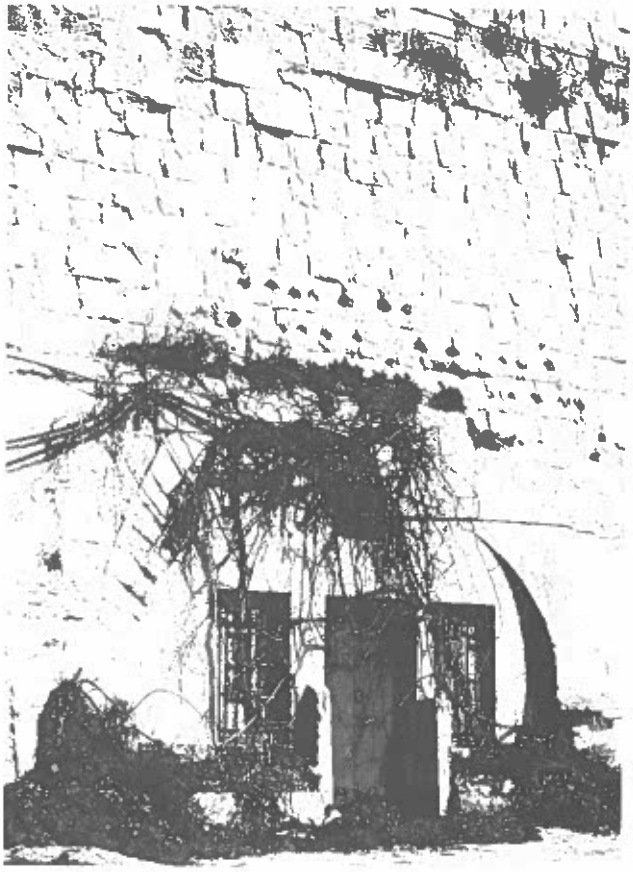
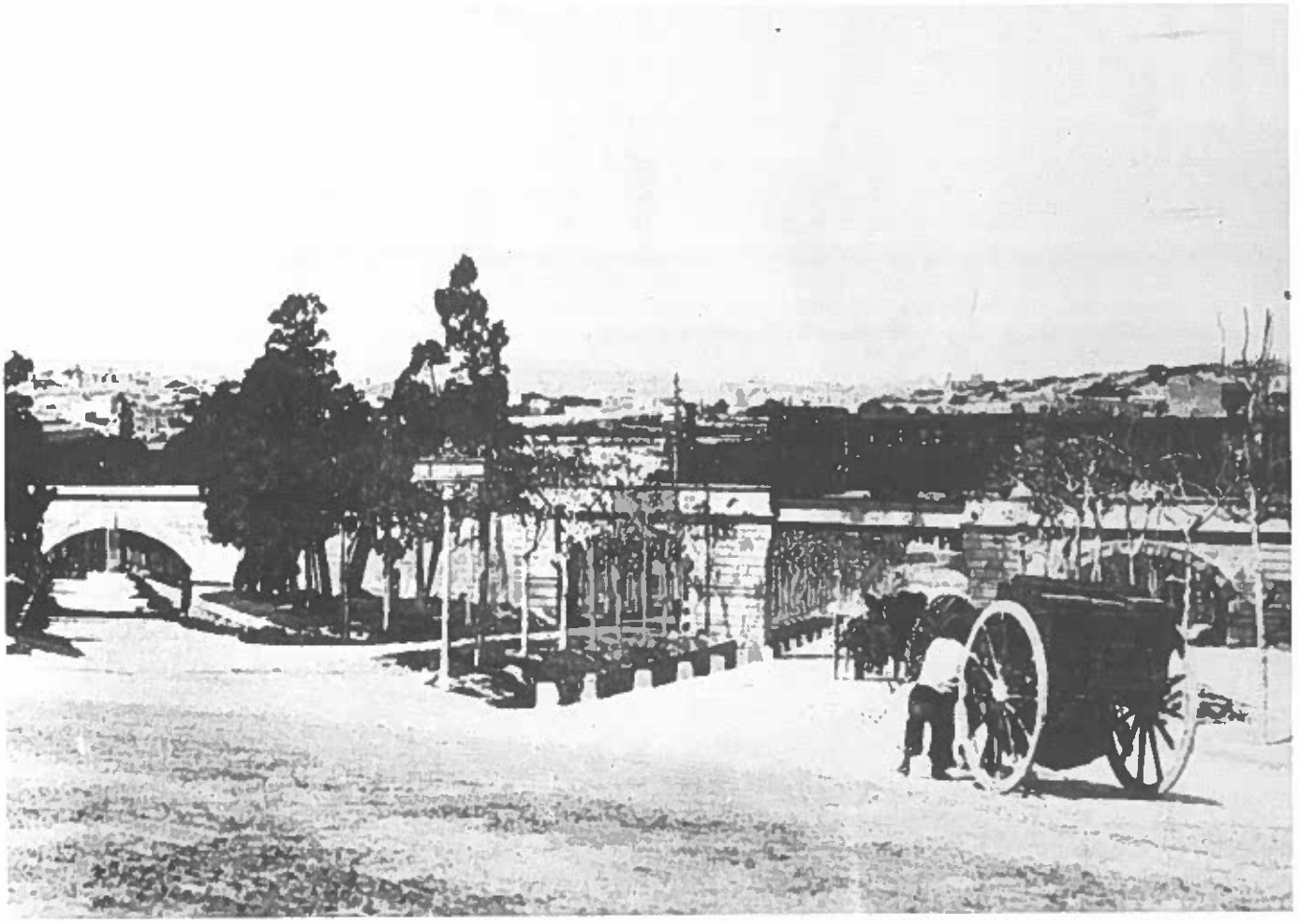


FIG.6 PLAN







Above: A Manning Wardle engine crossing the steel viaduct above the road which led to Pietà. The road on the left led to Ta' Braxia cemetery. The viaduct did not allow double decker motor buses (first imported in 1905) sufficient headroom; upper deck passengers on their way to Sliema were regularly warned by the bus conductor to duck their heads

Facing page (top): Plans of Floriana Station. The ventilation shaft and grating (arrowed in photograph inset) was close to the Wignacourt fountain. It is now covered up

Floriana tunnel ended at St Philip Curtain (facing page, bottom left) and thereafter pierced the fausse braye *(bottom right) before reaching the area outside Porte Des Bombes*

a room from which one descended to a shaft-ventilated landing situated half way down to the platform. From there a second series of steps in an opposite direction led to a 10ft (3m) platform excavated from the tunnel itself by increasing the span of the arch forming the roof. Tunnel and platform were 20ft (6.1m) wide. On leaving the station the line continued underneath St Philip Curtain before emerging into the light for the first time since Porta Reale. Here the tunnel breached the Curtain bastion at a very steep angle and defence works were undertaken to prevent access in war time. Guard Hut Nº 1 was sited here, the gradient at this point being 1:271. From here a final small tunnel breached the *fausse braye* leading to Porte des Bombes viaduct and the bridge over Princess Melita Road.

The viaduct at Porte des Bombes was also built of timber on War Office instructions. This viaduct carried the engine and carriages across the drop ditch before the line finally left the fortifications. Beyond this point was Princess Melita Bridge over the avenue of the same name leading down to Pietà. Plans for this triple-arched bridge and another single-arched one over the road near Ta' Braxia Cemetery were approved by the Railway Supervision Board on 29 January and 7 February 1881 respectively. The central span of Princess Melita Bridge was made of steel girders and was 27ft (8.2m) wide and 14ft (4.3m) high. There were two secondary stone arches on either side each 15ft (4.6m) wide and 12ft (3.6m) high. The avenue was lowered by 4ft (1.2m) to keep the railway track level and allow sufficient headroom for loaded carts passing underneath.

Beyond Princess Melita and Ta' Braxia bridges was the Mile End. Guard Hut Nº 2 was sited here, the line then curving gently towards Hamrun

Above: The steel viaduct which led to Attard Station, a short distance away

Facing page, top: The level crossing outside Birkirkara Station

Facing page, bottom: Birkirkara Station as originally built

parallel with St. Joseph High Road. Guard Hut Nº 3 was at Shepherd's Ditch about 100 yards (91.4m) from Hamrun Station.

As originally designed, Hamrun Station had two platforms with sidings leading to a carriage and engine shed. Passengers were provided with a shelter shed and there was a small booking office and a room for the Station Master. Hamrun Central Station, as it was known, was the place where the engines were coaled, washed, painted and repaired. Up and down trains were "made up" according to daily requirements. From the very start, Hamrun Central Station was considered as important a station as, if not more than, Valletta and Notabile. Beyond the station buildings was a semaphore signalling system some 20ft (6.1m) in height. In a horizontal position the semaphore arms indicated "caution", when both arms were hanging down it indicated "proceed". It was dismantled when the expansion of Hamrun prevented the signal from being seen from the other stations.

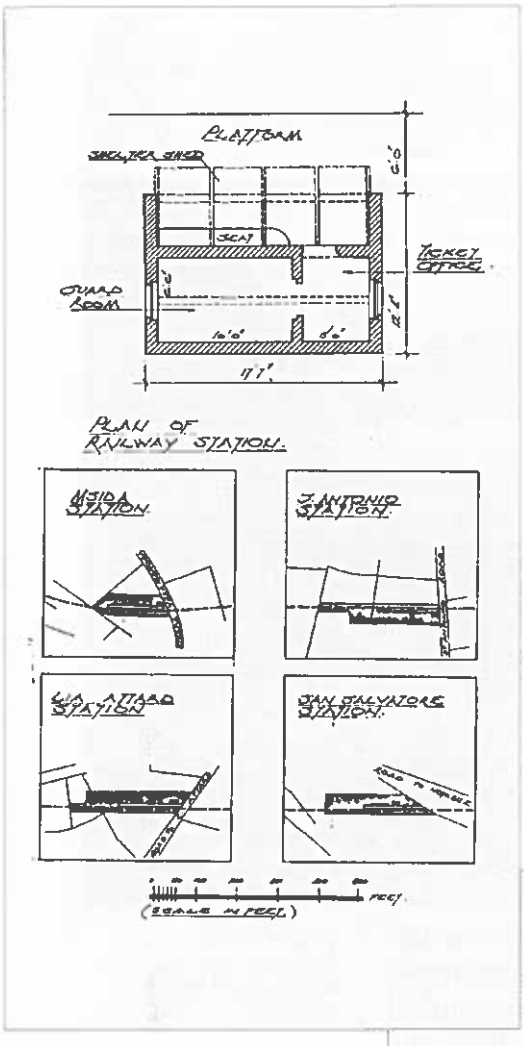
Beyond Hamrun the line climbed at 1:50 gradient to Msida Station. This was a tiny station, halts being arranged with the ticket collector. It was sited at the junction of the line with Strada Villambrosa (near the Franciscan Minors Priory) and overlooked Msida valley and creek. The simple station building consisted of a platform, a guard room and a shelter shed or open canopy for passengers. Not far from Msida Station was Guard Hut Nº 4 where the line traversed Strada Misrah il-Barrieri. The line here was on the level as it passed Guard Hut Nº 5 at Msida Road, Guard Hut Nº 6 at Santa Venera and Guard Hut Nº 7 at Wejter Street before the entry into Birkirkara Station.

Attard Station was set in idyllic surroundings. This engine has just arrived at the station on its way from Notabile to Valletta

Birkirkara Station was sited near Strada Fleur-de-Lys and the important level crossing here was manned by chainmen based at the station. The original plan for Birkirkara Station envisaged something not unlike Valletta, but the ensuing building had a central arched gate with a lamp above, flanked by two entrances on the sides for different paying classes of passengers. There was a large shelter canopy and a siding for early morning workmen's trains to Valletta. Birkirkara marked the end of the profitable part of the railway, because the rest of the line to Notabile was too thinly populated to generate lucrative returns on ordinary days.

Guard Hut Nº 8 was at Old Church Street just out of Birkirkara Station. The gradient here began its long ascent to Notabile. There were two more Guard Huts, Nº 9 and 10 before the line arrived at San Antonio Station which resembled Msida Station. However, this stop was very popular as the nearby Gardens which gave the station its name, were very popular. The station was sited at the junction of the line with San Antonio Road, and the level crossing was manned by station staff. Beyond San Antonio was the first really stiff 1:50 climb up an embankment to Attard, a steel viaduct being crossed just 50 yards (45.7m) from the station. The viaduct's girders were supported at the centre by a stone pillar to allow two-way traffic underneath. The bridge and embankments were at an angle of 35 degrees to the road.

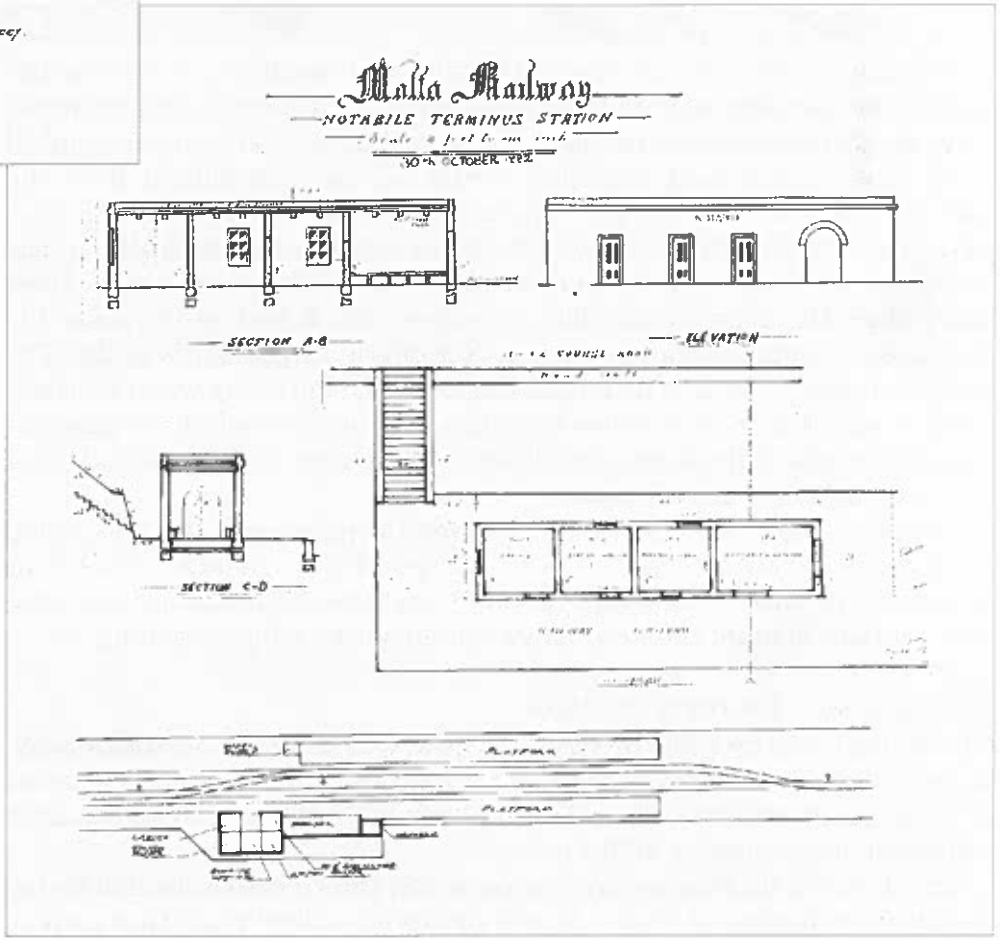
As originally built Attard Station resembled Msida and San Antonio but it was later embellished after Government take-over. Guard Hut Nº 11 was situated at Tal-Mirakli, at the junction of the line with the road to Mosta via Ta' Qali. The line here traversed the road at a steep angle and a number



of serious accidents later occurred here. The next stop was at San Salvatore Station at the junction of the line with Notabile Road. The station was similar to those of Msida, San Antonio and Attard.

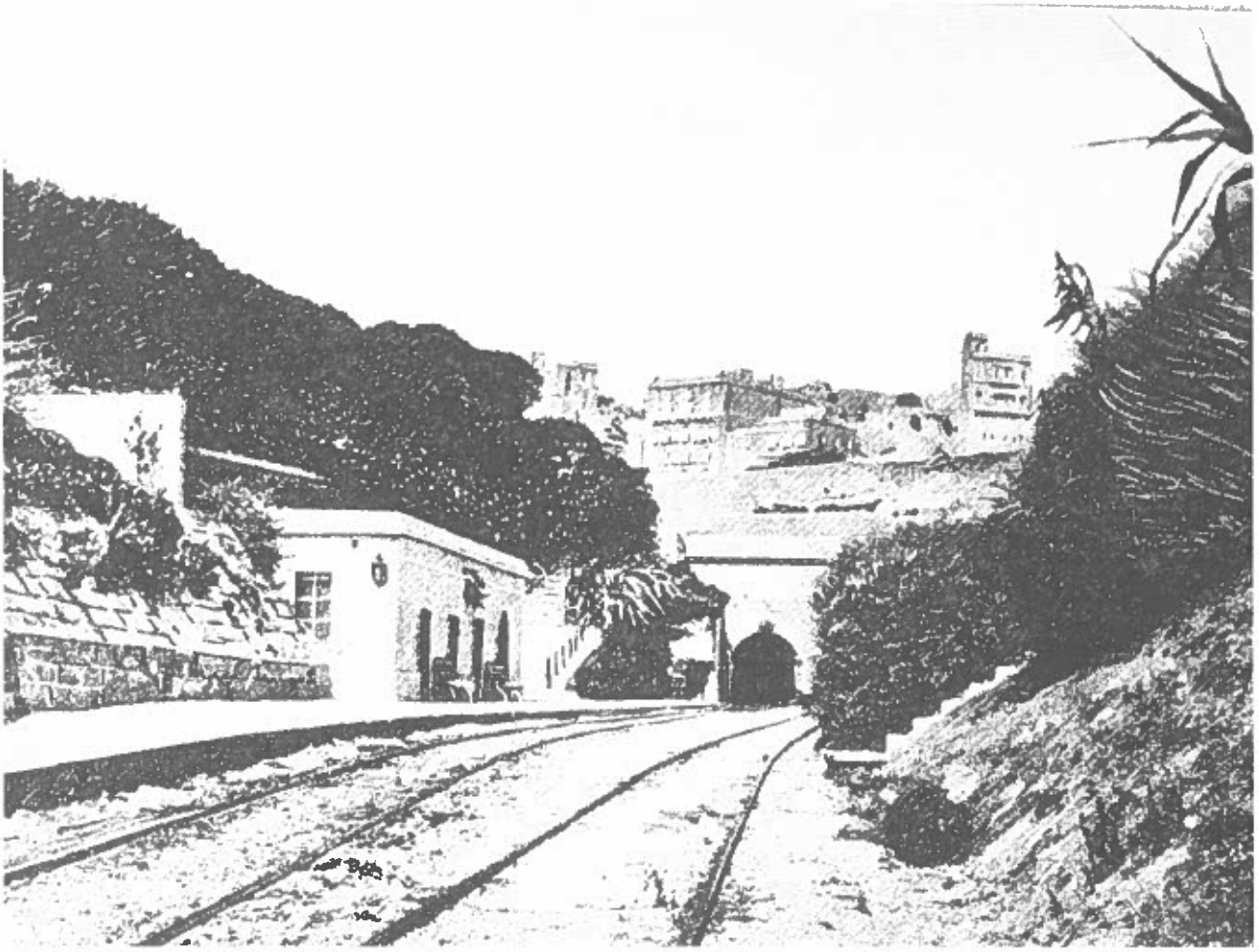
Beyond San Salvatore lay open countryside, Guard Huts Nº 12, 13 and 14, and the final stiff climb to Notabile Station at a gradient of 1:40. Guard Hut Nº 12 was just outside San Salvatore Station, Nº 13 was where the Qormi-Rabat Road crossed the line and Nº 14 was at the Zebbug-Rabat Road junction.

Notabile Station originally represented the end of the line. The station was built at the bottom of a cutting in the areas known as Il-Qanpiena, Tas-Saqqajja and Habel Polin. A siding was provided to enable the engine to "turn" round for the down trip. The station building was 48ft (14.6m) long and contained an arched entrance leading to a booking office, a ladies' room and the Station Master's office. Travellers complained of the small, damp and uncomfortable waiting rooms and the absence of public toilets. From the station, a few steps led up to Racecourse Road. A first-time visitor would have been sorely mistaken to think that he had arrived at Rabat. The engines did all the pulling up to Notabile Station, but the passenger did all the walking up to Saqqajja.



Above: The minor stations were of simple construction and consisted of a Guardroom, a Ticket Office and a canopied platform with seats

Right: Plans of Notabile Terminus Station



Notabile Station was the end of the line. Rabat and Mdina residents complained that the station was inconveniently sited; a steep uphill walk remained before one reached Rabat

Facing page: The distinguished guests alighting from the carriages after the inaugural trip from Valletta to Notabile on February 28, 1883

On May 6, 1882 the residents of Rabat and Notabile, as well as the Archpriest and Rectors of the Religious Orders, presented a petition to the Governor to protest about the site of the new station and the ensuing uphill walk. They complained that they would not get any benefit from the railway since the station was too far away from Rabat. Because of its site at the bottom of the hill, they would be constrained to hire cabs all the year round to take them to Rabat and the latter part of the journey would cost more than the train itself. The Governor was asked to convince the Company to build the station closer to Notabile at a more suitable site. The petition failed to achieve its purpose and one wonders why when Floriana Station was 90ft (27.4m) below the surface. A tunnel could have been cut under Saqqajja Hill (as was done later) and a station with steps built over it in the same way as at Floriana.

Construction problems, legal battles, land acquisition difficulties, siting of stations, financial troubles and the prevailing general excitement generated by this forthcoming novelty thus lasted throughout the three years it took to build the line. There remained the official opening.

Inauguration - February 28, 1883

The *Malta Times and United Service Gazette* looked forward to the railway, hoping that the cab drivers' monopoly would finally be broken. A number of trial runs preceded the official opening which was to be another milestone in the history of Malta.

At 11 o'clock on Wednesday, February 28, 1883 a procession led by the Archbishop, Bishop of Malta, Mgr C Scicluna, walked from Our Lady of

Victory Church to Valletta Station. He was met and escorted down to the platform by the General Manager, FAB Geneste. The Archbishop blessed the station, engines and carriages. The party then proceeded to Notabile and returned a short while later.

During the afternoon, several guests arrived at the station for the official ceremony. There were members of the Judiciary, the Nobility, Government Officials, the Press, the Army and the Navy. The guests were seated in three composite first/second class and four third class carriages to be taken to Notabile by engines Nº 1 and 2. These were decorated with flags and palm leaves. On arrival, Sir Arthur Borton, accompanied by the Chief Secretary, Sir Victor and Lady Houlton, and Colonel Crichton, the Military Secretary, were welcomed to the Station by Geneste who escorted them to the Governor's carriage. At 3 o'clock the train left for Notabile arriving there in about 25 minutes. Geneste then invited the Governor and the guests for refreshments in two marquees erected in Racecourse Road.

Sir Arthur Borton, Governor of Malta between 1878 and 1884 was responsible for a number of important public works on the Island, including the railway

The Governor delivered an inaugural speech in which he displayed a keen knowledge of Maltese history, customs and character. He congratulated Geneste for completing a work of public utility which had been financed by private enterprise. The Governor was aware that the project had met with several difficulties but these had been successfully overcome in the end. He reflected that if Notabile's founding fathers had been present, they would have been amazed "in drawing a parallel with the slow and painful traffic" of their era still in evidence in the cart ruts on the island. He hoped that both the public and the promoters would derive material benefit from the railway, but cautioned against excessive optimism about the prospects of this novelty, which he said might initially be misunderstood by "a somewhat conservative people (the Maltese), who may perhaps be excused if they are slow to admit that the ways of their forefathers are capable of much improvement". He feared that the Maltese would initially still prefer to walk to work and back, "rather than expend a few pence in order to obtain speedier and less laborious means of transit". However, he was sure that the railway would become popular and the Maltese would begin to use it to carry their produce to Valletta. He was confident that the proposed extensions to the north and south of the island would ensure that "a quicker pulse will beat through the island; villas will rise on all sides to which those who were chained to their desks during the day in Valletta will only be too glad to resort during the summer months, when the work is over in order to sleep in a more healthful atmosphere, and the value of property will be bound to increase".

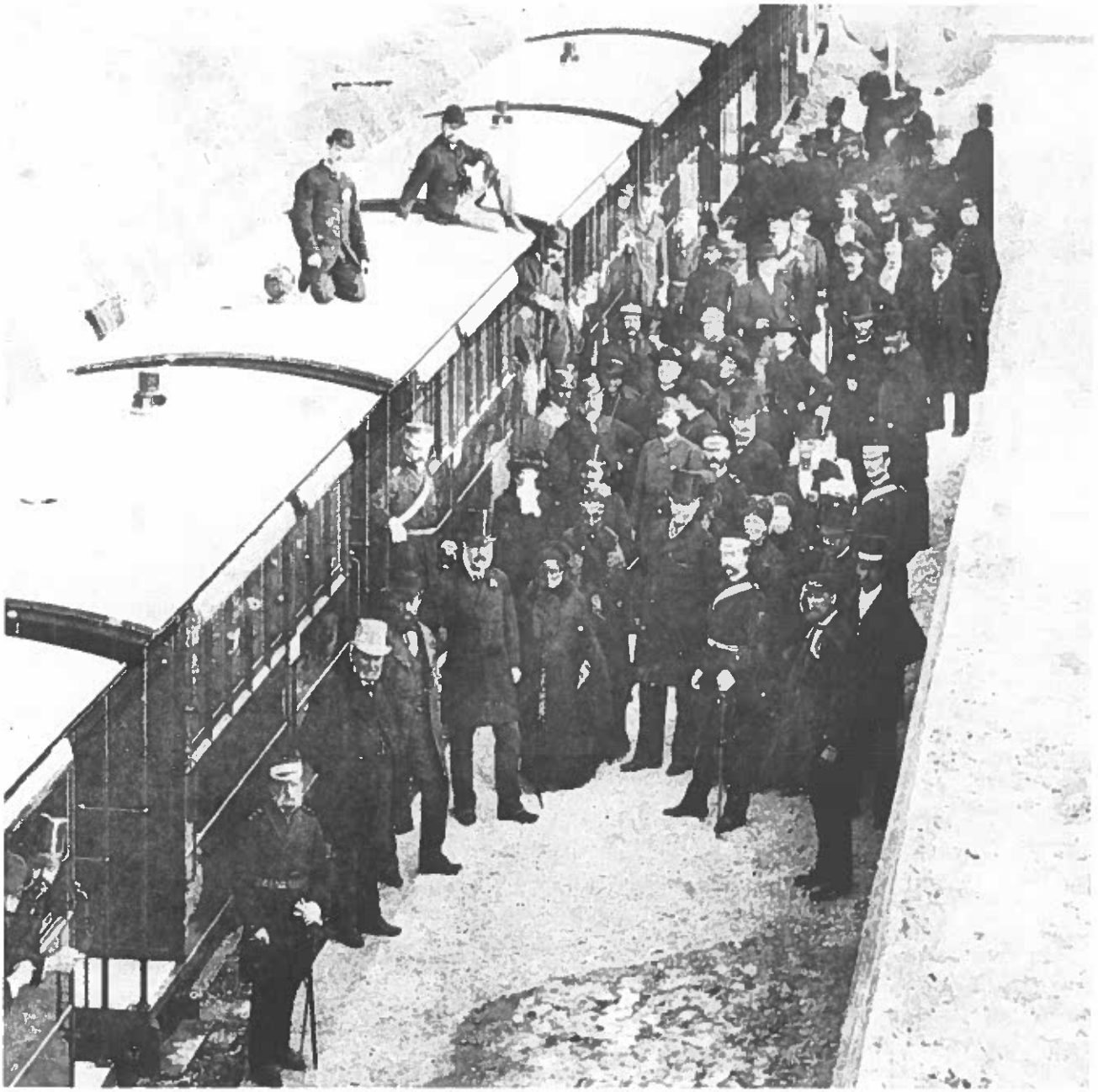
A toast was then proposed auguring the success of the railway. The party left for Valletta at 4.10pm and arrived there 23 minutes later. Crowds of people thronged the vantage points of Valletta and the cutting at Notabile Station to watch this memorable and successful event.

On the following day, March 1, the line was opened for the traffic, "the booking office being thronged before the departure of each train". The takings for the first day exceeded £120, no doubt reflecting the general eagerness to be amongst the first to sample the novelty.

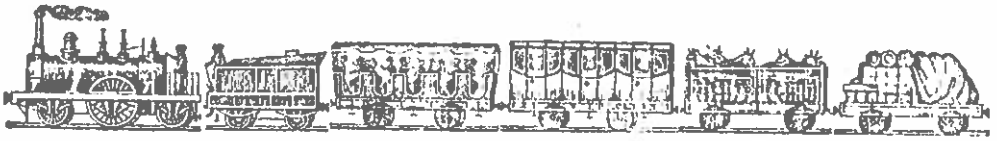
That evening Geneste was the guest of honour at a dinner given at the

Grand Hotel (now the Casino Maltese). After dinner, Geneste thanked his hosts for toasting the success of the Railway. He apologised for William Roebuck's (the Company Chairman) absence and said that without his energetic and able management the railway would not have opened to the public on that day. Roebuck had procured in England and then expedited to Malta the entire plant, engines and rolling stock. Geneste thanked his local staff, the contractors and workers. He said that he had built railways in many parts of the world but he could not wish to have better workers than the Maltese. Geneste thanked the gentlemen of the Railway Board, two of whom were present, and added that the construction of the railway had proceeded with great difficulty - field by field in fact.

Thus ended the official opening. After the champagne and the toasts Geneste would see that his earlier troubles would be superseded by even greater ones.



The distinguished guests at Notabile Station included the Governor, the Chief Secretary, the Bishop of Malta, members of the Judiciary, the Nobility, Government officials, the Press, the Army and the Navy and the man who built the railway, FAB Geneste

M.  R.

Between VALLETTA and NOTABILE

AND INTERMEDIATE STATIONS AT

Hamrun, Misida, Birchircara, Balzan, Attard and St. Salvatore

TRAINS WILL BE RUN AT THE UNDERMENTIONED TIMES.

UP TRAINS WEEK DAYS *DOWN TRAINS.*

Notabile	S. Salvatore	Attard	Balzan	Birchircara	Misida	Hamrun	Valletta
A M	A M	A M	A M	A M	A M	A M	A M
*5.30	..	5.42		5 50	..	6 50	6. 7
6.58		7. 8		7.16		7, 25	7.33
8.18		8.30		8.38		8 47	8,55
	..	Pass	enger	train	toVal,	9. 55	10 3
10.50		11, 2		11.10		11.19	11.27
P M	P M	P M	P M	P M	P M	P M	P M
12.12		12. 24	..	12 32	..	12 41	12 49
		Pass	enger	train	toVal.	2.12	2,19
	..		..				
3.13		3. 24		3 32		3 41	3. 49
4.42	..	4,45	..	5. 2	..	5,11	5,19
†6.12	..	6,24		6. 32		6.41	6,49

Valletta	Hamrun	Misida	Birchircara	Balzan	Attard	S. Salvatore	Notabile
A M	A M	A M	A M	A M	A M	A M	A M
6.10	6.22		6,31		6.39		6,51
						..	
7.30	7.44		7.53		8, 1		8.15
8.58	Pass	enger	Train	to Ha	mrun		
10. 8	10 16		0.25		0 33	..	10 47
11.30	11.38		11.47		11 55	..	12. 9
P M	P M	P M	P M	P M	P M	P M	P M
12.52	Pass	enger	train	to Ha	mrun		
2,30	2,36	..	2,47	.	2 55	.	3 9
				.		••	
4. 0	4. 8		4.17	.	4.25	••	4,39
				..		••	
*5 22	5.30	..	5.47		5.55	••	6. 9
6.52	Pass.	Train	to Ha	mrun		..	

* Workmen train.
† Return Workmen's Train.

All Trains may be stopped by Signal at Intermediate Stations.

SUNDAYS

A M	A M	A M	A M	A M	A M	A M	A M	A M
	...	Pass.	Train	to Va	lletta	7 43	7 50	
8 43	...	8 54	...	9 2	...	9 11	9 19	
10 14	...	10 24		10 32		10 41	10 41	
			P M	P M	P M	P M	P M	
11 45		11 57	...	12 6	...	12 14	12 22	
P M	P M	P M	Pass.	Train	to V	1 41	1 52	
			Pass	Train	to Va	1 1	1 8	
2 0		2 12	...	2 20	...	2 29	2 35	
2 45	...	2 57	...	3 5		3 14	3 22	
3 30	...	3 42	...	3 50	...	3 59	4 7	
4 15	...	4 27	...	4 35	...	4 44	4 52	
5 0	...	5 12	...	5 20	...	5 29	5 37	
5 45		5 57		6 5	...	6 14	6 22	

A M	A M	A M	A M	A M	A M	A M	A M
8 0	8 8	...	8 17	...	8 25	...	8 39
9 30	9 38	...	9 47	...	9 55	...	10 9
11 5	11 13	...	11 20	...	11 28	...	11 42
P M	P M	P M	P M	P M	P M	P M	P M
12 23	Pass	enge	r Tra	in to	Ham	run o	nly
1 18	1 26	...	1 33	...	1 43	...	1 57
2 3	2 11	...	2 20	...	2 28	...	2 42
2 48	2 56	...	3 5	...	3 13	...	3 27
3 33	3 41	...	3 50	...	3 58	...	4 12
4 18	4 26	...	4 35	...	4 43	...	4 57
5 3	5 11		5 20		5 28	...	5 42
5 42	Pass	enge	r Tra	in to	Ham	run	
6. 27	,,		,,	,,	,,	,,	

LIST OF PASSENGER FARES

Distance	Single 1st class	Single 2nd class	Single 3rd class	Return 1st class	Return 2nd class	Return 3rd class
From Valletta to Hamrun	4d.	3d.	2d.	6d	4d	3d
,, ,, ,, Misida	4d.	3d.	2d.	6d	4d	3d
,, ,, ,, Birchircara	5d.	4d.	2d.	7d	5d	3d
,, ,, ,, Balzan	6d.	4d.	2½d.	8d	6d	4d
,, ,, ,, Attard	7d.	5d.	3d.	10d	7d	4½
,, ,, ,, S. Salvatore	8d.	6d.	4d.	1s	9d	6d
,, ,, ,, Notabile	10d.	7d.	4d.	1s 3d	10d	6d

Workmen's Tickets	Single	Return
From Valletta to Notabile	2d	3d
,, ,, ,, Birchircara and vice versa ..	1½d	2d

Fares to be paid for in English Money.

F. A. B. GENESTE C.E.
General Manager.

IN THE RED

"I believe there is no country in the world where workmen are carried six miles for a penny or where first class passengers are carried six miles for four pence."
Strickland, during a Council Sitting, May 4, 1892.

After the inauguration, the Company endeavoured to "settle down" and give the public an efficient service, ensure profits and pay dividends. Regrettably, it failed and its brief seven years' existence was plagued by financial, legal and technical problems which hastened its eventual forfeiture to the Government according to the terms of concession.

The first three months of operation were excellent in terms of revenue and passengers carried because several Maltese wanted to try this novelty. After June traffic slackened and although this was attributed to the hot season, it did not pick up during the winter. The Company's best ever performance was recorded during those initial three months.

Meanwhile, the Company was sued by its creditors and the Commercial Court appointed a receiver to manage the undertaking. In a circular to its shareholders, the Company explained the circumstances which led to this. Geneste's first report came out in September 1883, his second on December 5, 1884 before the Company's second annual general meeting in London. The Company carried over half a million passengers in the first 12 months but the bulk of the fares was in the third-class category. Geneste complained that Malta's low wages had had an adverse effect on revenue.

The Company's directors echoed Geneste's sentiments in their report to the shareholders at the second annual general meeting held in London on December 23, 1884. The report gives some idea of the railway's first two years.

Extract from the Directors' report

The Directors submit to the shareholders the Balance Sheet of the Company, made up to the end of the financial year ending June 30, 1884.

The Shareholders have already been informed by circular that the undertaking is carried on by a receiver, and the circumstances which have led to this course have also been explained.

Since the Directors issued their last report the popularity of the railway in the Island has become assured, and the best evidence that can be given of this is the traffic returns for the past year, which show the passenger traffic to be beyond anticipation; but, owing to the lowness of the fares authorised, the net revenue is not at present sufficient to pay the interest on the debenture debt.

The Directors are glad to be able to report that the principal action against the Company brought in Malta, to which reference was made in the last report, has been decided very materially in favour of the Company, and the other actions, which are of less importance, are now believed to be on the eve of settlement. These actions have formed an unfortunate episode in the history of the Company, and by reason of the

Facing page: Malta Railway Time-table for October, 1885

unsatisfactory working of the law in Malta have caused great expense to the Company.

Negotiations are about to be opened with the Government of Malta which, it is hoped, will relieve the Company from its present difficulties and enable it to make an extension of its line to Sliema. This, if carried out as planned, cannot fail to be of great advantage to the Share and Debenture Holders of the Company, and will provide means of locomotion which the inhabitants of the Island are anxious to obtain.

The basis of the contemplated negotiations cannot, for obvious reasons, be made public at present.

The gross traffic return for the past financial year has been £5,774.12s.1d. The number of passengers conveyed was 374,235.

The Company's directors were G Cavendish Taylor, Wm Roebuck, and Major Craigie. The London Offices had been transferred to 31, Queen Victoria Street, EC.

The principal action against the Company alluded to by the Directors was Mirabita's two-year-old suit. On October 11, 1883, Mirabita's claim for £3,500 was finally quashed with the award of a mere £300 as commission for his role as mediator. When the case came up for appeal on May 25, 1884, this sum was increased to £500, interest at 6% being reckoned from October 11, 1883.

Geneste's mismanagement

The Company's best days were on Notabile or Birkirkara feast days like that of May 25, 1884, when 6,908 passengers were carried, 6,000 between 2.30 pm. and 8.30 pm. June was always a good month, the 29th being the feast of St Peter and St Paul (Imnarja) at Notabile. Receipts for June 1884 went up to £760, derived from 63,000 passengers. Between March 1, 1883 and November 30, 1884, 981,196 passengers were carried. Geneste reported no fatal accidents for that first year. Three slight injuries were reported to persons who had alighted while the train was still in motion. Weekends were also busy and profitable, two engines being used on Saturday nights to carry opera goers to Valletta. Expenditure in London and Malta exceeded revenue by £692.5s.8d.

Geneste organised popular events at Notabile to get people to use the Railway and increase revenue. The anniversary of the Railway was commemorated during the first years with a programme of sport at Saqqajja. The second year's anniversary programme was held on March 1, 1885. There were foot, sack, water-pail and greasy-pig races, amongst

ADVERTISEMENTS

MALTA RAILWAY

Eve of Festa at Birchircara. On Sunday August 17th,—During the morning the usual Sunday Train Service will be run, from 2 2 p.m. to 11. 46 p. m. Frequent; Trains, will be run, from Valletta and Birchircara stations every 21 minutes, during the afternoon Trains will leave Notabile, at 3.31 ; 4.34 ; 5.40 ; 6.46 ; 7.35 p. m.

Festa St. Elena Monday August 18th frequent trains during the Morning from Valletta station at 5. 55; 6. 14; 6. 32; 7. 17; 7. 36; 8. 58; 9. 88; 11. 20; a. m. and in addition to the usual afternoon Trains extra trains will run as under:

From Valletta	From Birchircara
2. 27 p.m.	2. 47 p.m.
7. 55 „	8. 15 „

M, R,

Plots of Surplus Land

to be sold, along the Line of the Railway, at or near Hamrun, Misida, San Antonio, Attard, Notabile etc. etc.

Plans of the Land and Conditions of Sale, can be seen at No. 111 Strada San Paolo, Valletta, between the hours of 9 a. m., and 12 a. m., and from 2 to 5 p. m.,

December 30th, 1886.

Adverts for the feast of St Helen at Birkirkara and the sale of plots of surplus land. The Malta Times & United Service Gazette *called this "present offer of land plots a very desirable and advantageous investment by those wishing to live out of town"*

other events, music being provided by a Birkirkara band. About 20,000 people attended this event, 5,000 of them travelling on special trains. The main attraction was the greasy-pig race. The terrified animal slipped through hundreds of people before finally being caught in the vicinity of Porta dei Greci (Greeks Gate), near the Roman Villa.

Later in the year Geneste organised May-pole and Greasy-pole feasts on the glacis near Porta dei Greci. The police were given free transport on the Railway.

Residents of Sliema petitioned the Governor in May 1885 to extend the railway to their town and to St Julians. Signatures were collected in Marich's tobacco shop in Palace Square, Valletta. Although the Sliema extension was highly desirable, the Company did not have the capital but, on the contrary, was plunging deeper into debt.

New bye-laws were published on September 10, 1885. The bye-laws stipulated that tickets were:-

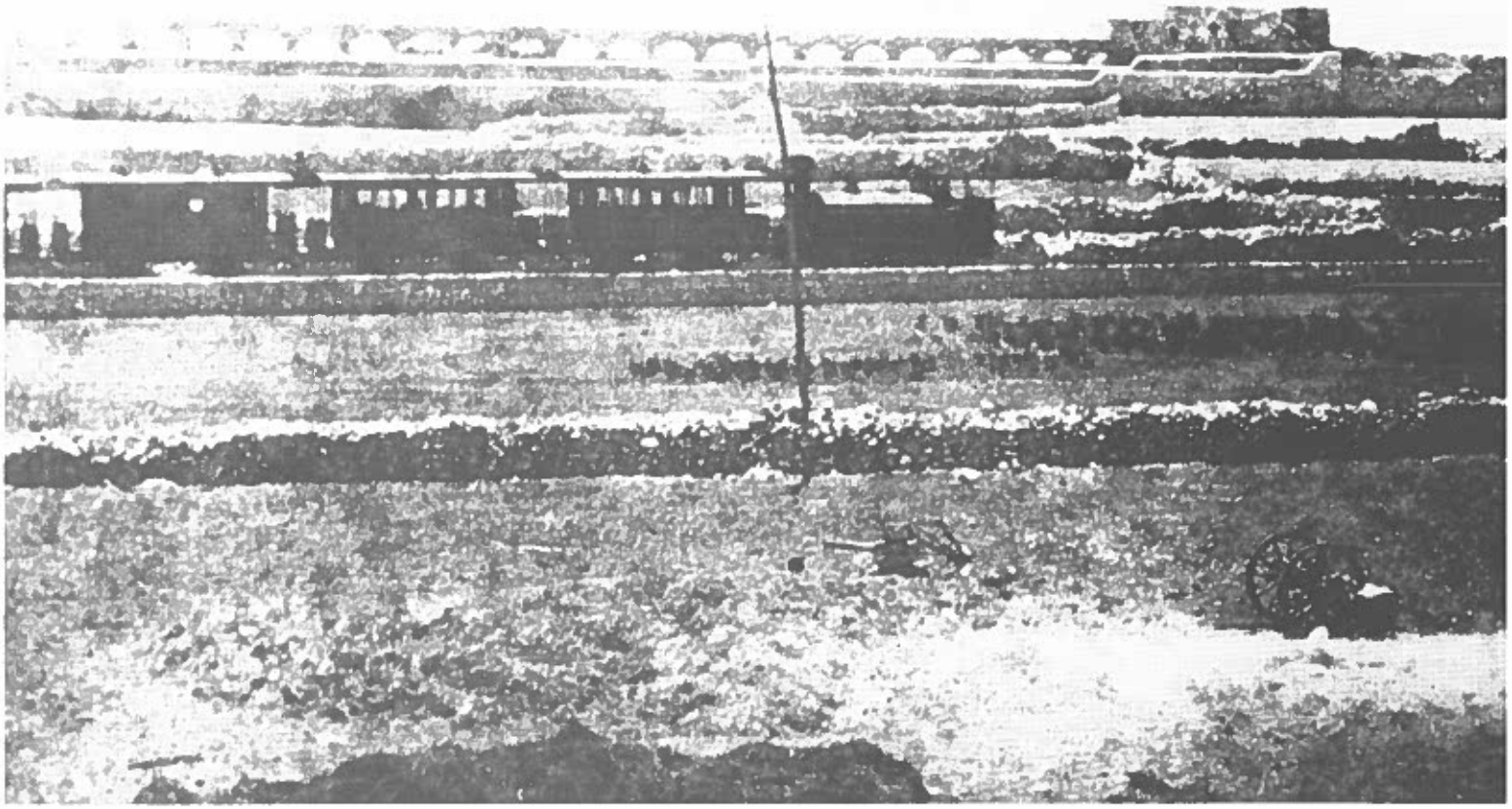
1. to be shown on demand
2. valid for day of issue only
3. to be checked on purchase
4. to be delivered at the end of the journey
5. valid for travel in class/carriage indicated
6. not transferable/re-usable
7. valid for the travel zone indicated
8. not to be mutilated or altered
9. subject to space being available

Passengers were prohibited from:-

1. being drunk
2. using obscene or abusive language
3. damaging railway property
4. travelling on the roof or steps of a carriage
5. entering or leaving a carriage while the train was in motion
6. disobeying orders given by railway staff
7. retaining a dog or animal in a carriage if objected to by fellow passengers
8. carrying loaded firearms
9. travelling if infected by contagious diseases
10. striking or molesting railway staff.

For all his efforts Geneste failed to balance revenue with the needs of an engineering enterprise. His small engines were soon overworked on the line's steep gradients. It was a matter of time before they fell into disrepair. Little maintenance was carried out on the permanent way especially at San Salvatore junction where 2,000 vehicles crossed the level crossing daily. Here the line traversed Notabile Road at a steep angle, something which would have been disallowed in England.

The Supervision Board was inactive in the first years. The Company was politely reminded of its contractual terms and the penalties involved. Geneste was already guilty of unauthorised overcharging, reduction of services, especially on Sundays, and improper maintenance. He was blamed for the engines' deterioration, allegedly caused by negligence and inexperience. 1886 was the last year in which the Railway ran regularly.



Although a turntable is shown in the plan of Valletta Station (page 36) this was never installed and engines 'ran round' the carriages at station sidings. Engine N° 4 which faced Valletta is here shown passing Wignacourt Aqueduct, Mriehel, on its way to Notabile

Geneste resigned in 1887 and management was taken over by the Company's Directors. This did not halt the decline in standards and after a serious boiler accident in the Floriana tunnel on March 20, 1889, the Supervision Board and Government acted upon a situation which was irreconcilable with public safety. Government at first hesitated to enforce its rights since the revenue figures were disturbing and less money was being earned over the years. £5,488 were earned in 1885, £4,667 in 1886, and £4,762 in 1887. No dividend was being paid on the capital since the interest on the 'A' and 'B' debentures had not been earned.

The Supervision Board finally acted and forbade the use of unsafe engines. It was found that out of four engines, N° 2 and N° 3 were under repair at the Dockyard. N° 1's boiler pressure had fallen to 80lbs (36kg) and the engine had been sequestrated by creditors. Engine N° 4 needed a five-week repair job, after which its performance remained uncertain. With no reserve engine the Company was obliged to run a single train service during March 1889 after which the lines shut down briefly from April 18 to May 9.

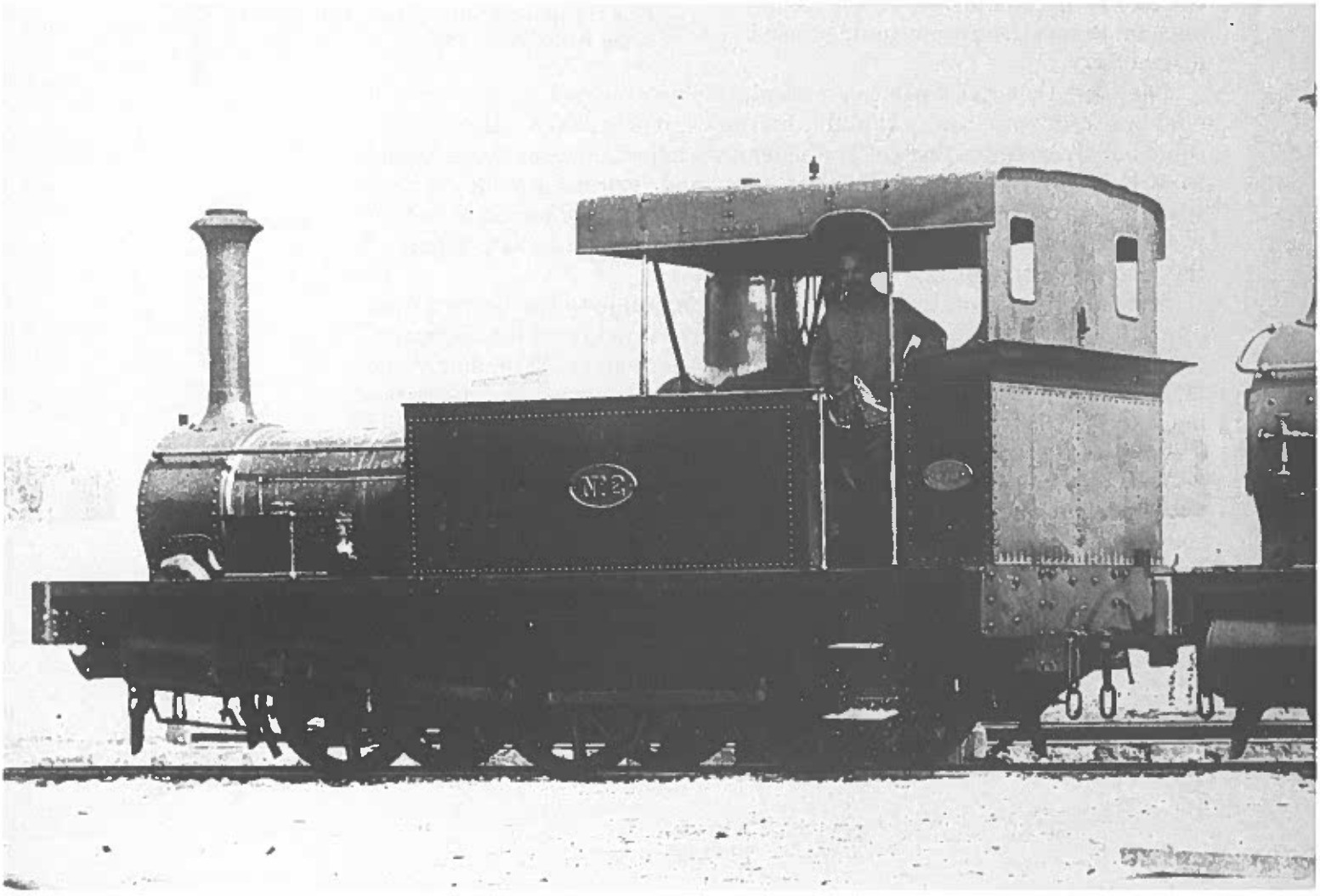
Clause 'O' of the contract empowered the Board to suspend the service and impose penalties for stoppages of less than three months, after which ipso facto forfeiture would apply. After the Board imposed its first penalties, JC Gilbert, the company's last General Manager, requested a deferment since he had "sent to London every available shilling for locomotive material". The Dockyard bill for the repair of the engines came to £399.3s.5d., but the Company could not honour it. Government decided to settle the bill out of public funds and sue the Company for payment later. Several extensions were granted but when it became clear that the Company was

bankrupt, the Board shut down the line on April 1, 1890. On May 10, 1889, a *Malta Times and United Service Gazette* correspondent writing under the pseudonym 'Progress' complained about the suspension, blaming Gilbert's predecessors for the deplorable state of the engines which had deprived the population of an "institution". While the suspension was in force, the Company continued to publish a timetable dismissed as a fraud by the Editor of *Public Opinion*. His colleague of the *Malta Times and United Service Gazette* advised him to support the railway in its hour of need or change to the cabs of the Malta Omnibus Company.

The Government sued Gilbert on April 5, requesting forfeiture according to the contract. The Company's London solicitors, Messrs Lane, Monro and Soutter, requested alterations to the concession but Government declined and threatened forfeiture by July 4, unless the necessary repairs had been executed. In June, Messrs Norton, Rose and Norton, solicitors to the Foreign American and General Investment Trust Company, debenture holders of the Malta Railway Company, appealed to Lord Knutsford, Secretary of State for the Colonies, expressing their clients' fear of losing their security through no fault of their own. The Company's engineer had estimated that £1,000 would be sufficient for repairs. The solicitors' clients offered to advance this sum provided that it would not be forfeited. The solicitors requested Lord Knutsford to communicate to the Malta Government their desire to defer forfeiture until its was ascertained that Government considered the advance of £1,000 as sufficient for repairs.

They also wished to modify the contract to protect their clients' mortgage rights by guaranteeing payment of the line's minimum value including securities advanced previously.

Neglect and poor maintenance on the Company's four engines, including N° 2 (below) led the Government Supervision Board to suspend the train service to Notabile



There were £30,000 worth of debentures issued on the railway, and the shareholders had already advanced another £7,000 which represented a first charge on the property. They were willing to advance another £4,000 for any future contingency apart from the £1,000 for repairs. This show of goodwill was intended to persuade Government to modify the contract to guarantee that, in the event of forfeiture, the shareholders would get their money back.

The solicitors informed Knutsford that the Company had sunk £97,000 in the project. This sum was not immediately realisable but the line was an asset of considerable value especially when repairs had been completed. Government was asked to guarantee a minimum refund of the £12,000 which would be advanced including interest for four years.

Messrs. Norton, Rose and Norton reiterated that the concession was unreasonable and onerous. While they accepted Government's right to exercise control of a public amenity, they pointed out that the public invested money in the assurance that executive power would be used discreetly.

M. R.

SUNDAY AFTERNOON FEBRUARY 13th
(Weather permitting)

Cuccagna

OR

Albero di Maggio

Bands will play during the morning and afternoon

FREQUENT TRAINS throughout the DAY. As under

	FROM VALLETTA
Morning	7.8—7.53—8.38—9.23
	10.8—10.53—11.38
Afternoon	12.23—1.8—1.53—2.38
	3.23—4.8—4.53—5.38
	6.23—7.8—7.53
	FROM NOTABILE
Morning	7.50—8.35—9.20—10.5
	10.50—11.35
Afternoon	12 20—1.5—1.50—2.35
	3.20—4 5—4.50—5.35
	6.20—7.50—4.50—8.35

Trains will stop only at Hamrun, Birchircara and Attard Stations

Single tickets only at usual rates

Particulars for those wishing to climb the Pole are posted up at the Valletta and Notablle Railway Stations.

They felt that the Executive's absolute power vested in the contract enabling it to expropriate a valuable line for want of £1,000 worth of repairs could hardly be called justice! The solicitors warned Government to desist from taking advantage of the concession and expropriate the railway without compensation. Such a unilateral uncivilised and unparalleled act would prejudice Government's credit, risk public censure and a debate in the House of Commons.

Knutsford communicated the solicitors' proposals to the Governor on June 12, 1890. He advised him to defer the forfeiture to give the Company, or the debenture holders, the chance to repair the engines. At the same time he informed Norton, Rose and Norton that he had suggested a postponement to the Governor but he had not recommended a modification in the terms of concession.

The July 4 deadline passed and Government deferred forfeiture while the Company fought for survival in court, Adolfo Sciortino, plaintiff, representing Government and G Scicluna and C Psaila defending Gilbert. Inevitably, forfeiture applied when it became apparent that the debenture holders would not risk more money on the same terms. On December 12, 1890 Judge P Gasan found against Gilbert, and the railway passed into Government hands.

Throughout 1890 local newspapers criticised Government for depriving Malta of the railway and persisting on a course whose inevitable end would

THE MALTA RAILWAY COMPANY, LIMITED

(UNDER CONCESSION FROM THE GOVERNMENT OF MALTA.)

Directors

George Cavendish Taylor, Esq., President of the Varna Railway Company, *Chairman;*
William Roebuck, Esq., C.E;
Major P. G. Craigie;
Frederick Thompson, Esq.

General Manager

Frank A. B. Geneste, Esq., C.E.

Board of Supervision in Malta

The Hon. Fred. P. Hanro, Director of Contracts, *Chairman;*
The Hon. E. L. Galizia, Superintendent of Public Works;
Major R. A. Livesay, R.E.

Agents and Bankers in Malta

Messrs. James Bell & Co.

The Line commences opposite the Grand Opera House, and passes underneath the fortifications by a tunnel 1,106 yards long. It continues six miles and three quarters across the island, through or near Hamrun, Misida, Curmi, Birchircara, Balzan, Lia, Attard, Zebbug, Musta, Naxaro, terminating at Notabile. There are two terminal and and seven intermediate stations.

LIST OF PASSENGER FARES.

DISTANCE	SINGLE			RETURN		
	1st class.	2nd class.	3rd class.	1st class	2nd class	3rd class.
From Valletta to Hamrun .	4d.	3d.	2d.	6d.	4d.	3d.
„ „ Misida .	4d.	3d.	2d.	6d.	4d.	3d.
„ „ Birchircara .	5d.	4d.	2d.	8d.	6d.	3d.
„ „ St. Antonio .	8d.	6d.	3d.	1s.	8d.	4½d.
„ „ Attard .	8d.	6d.	3d.	1s.	8d.	4½d.
„ „ St. Salvatore .	10d.	7d.	4d.	1s. 3d	10d.	6d.
„ „ Notabile .	1s.	8d.	4d.	1s. 6d	1s.	6d.

Workmen's tickets	Single 3rd class.	Return 3rd class.
From Valletta to Notabile .	2d.	3d.
„ „ Birchircara and vice versa	1½d.	2d.

Workmen's tickets only available by the first train in the morning and the 5.45 P.M. train at night

Fares to be paid for in English money.

REGULATIONS

for the service of the Steam Ferry Launches in the Marsamuscetto Harbour.

The Launches, two in number, are permitted to run only between the Marsamuscetto and the Sliema landing-places. Between 1st April and 31st October they run from 6 A.M. to 8 P.M. and between 1st November and 31st March, from 7 A.M. to sunset. They start punctually every twenty minutes, and take their course between the Government mooring-buoys and the Tignè shore both in going to, and returning from, Sliema.

The number of passengers is limited to forty-five, the fare being limited to not less than 1d. for each person, but it may be increased by one half on festival days, and doubled in stormy weather when the blue flag is hoisted at the Marsamuscetto Police Station.

MALTA GARRISON GUN CLUB.

Shooting generally takes place at the Malta Garrison Gun Club ground, on Fort Tignè glacis, once a week when birds are procurable.

Pigeons are charged 6d. each
Doves .. .. .. 4d. „

There is a charge made at each meeting of 1s. from each member who has been shooting to defray the rent of the House.

This House was built by Mr. M. Muscat of Strada Reale for the Malta Garrison Gun Club on the understanding that 6s. was paid to him at each meeting of the Club.

If therefore there happen to be less than six members present, the balance is charged against the funds of the Club, if more the balance goes to the credit of the Club.

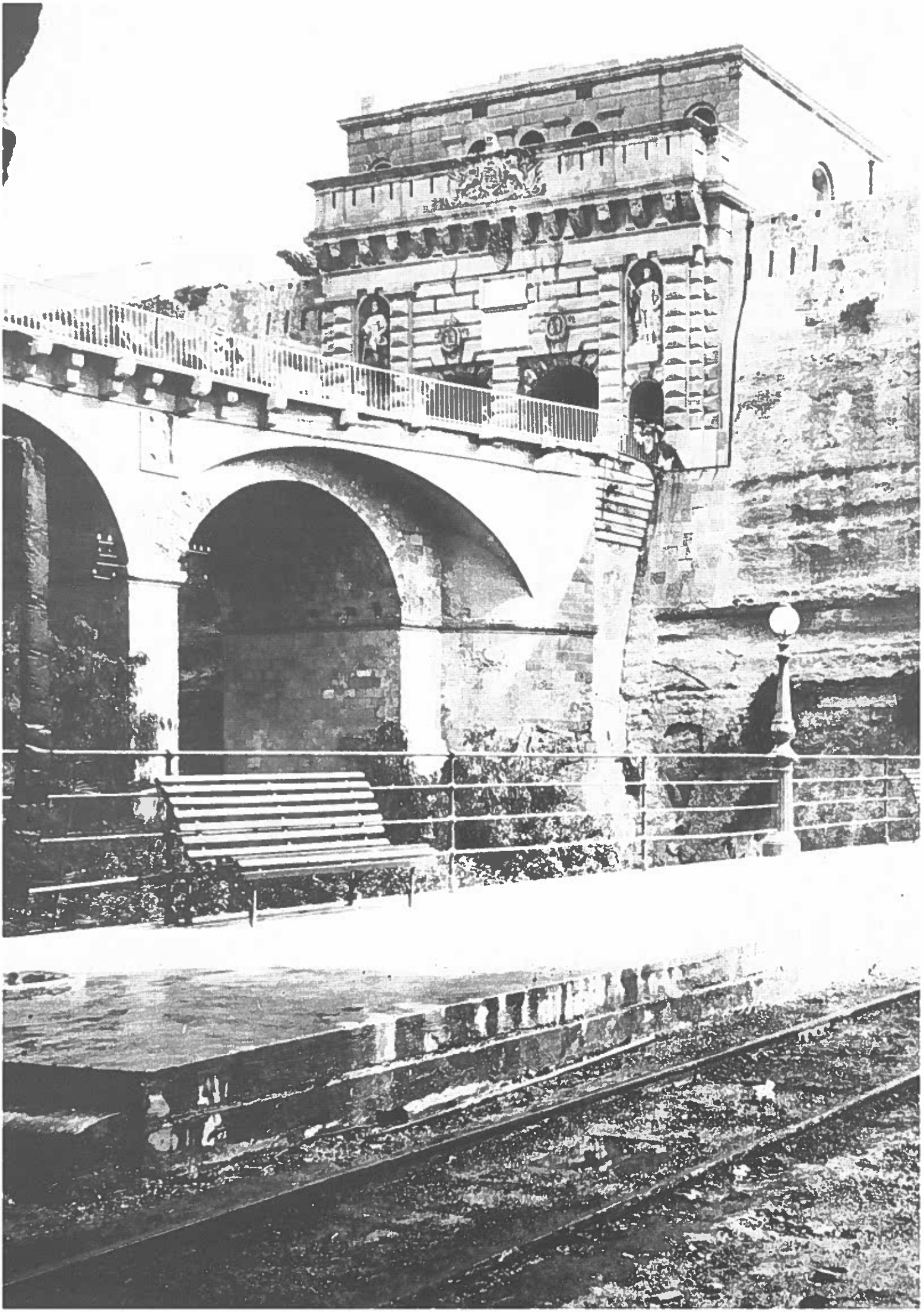
All Officers of the Army, Navy, Diplomatic and Civil Service are eligible to become members of the Club by the payment of an entrance fee of not less than 10s.

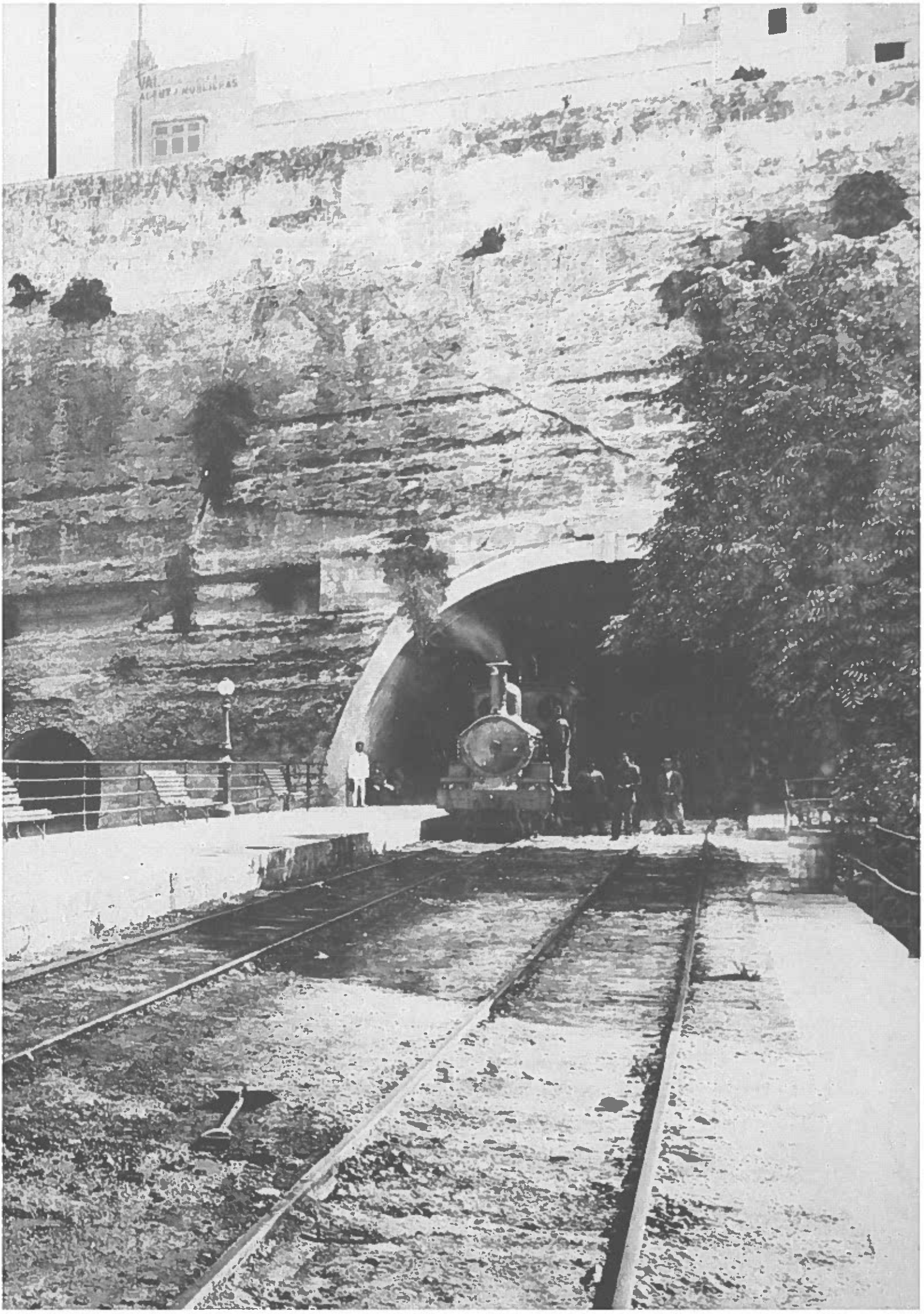
Facing page: Advertisement for the Cuccagna or Maypole, one of several festivals organised by Frank Geneste in order to augment railway revenue. The Malta Railway Company featured on p.106 (above) of the Malta Almanac and Directory *of 1884 next to the regulations for the Marsamuscetto Harbour Ferries and the Malta Garrison Gun Club*

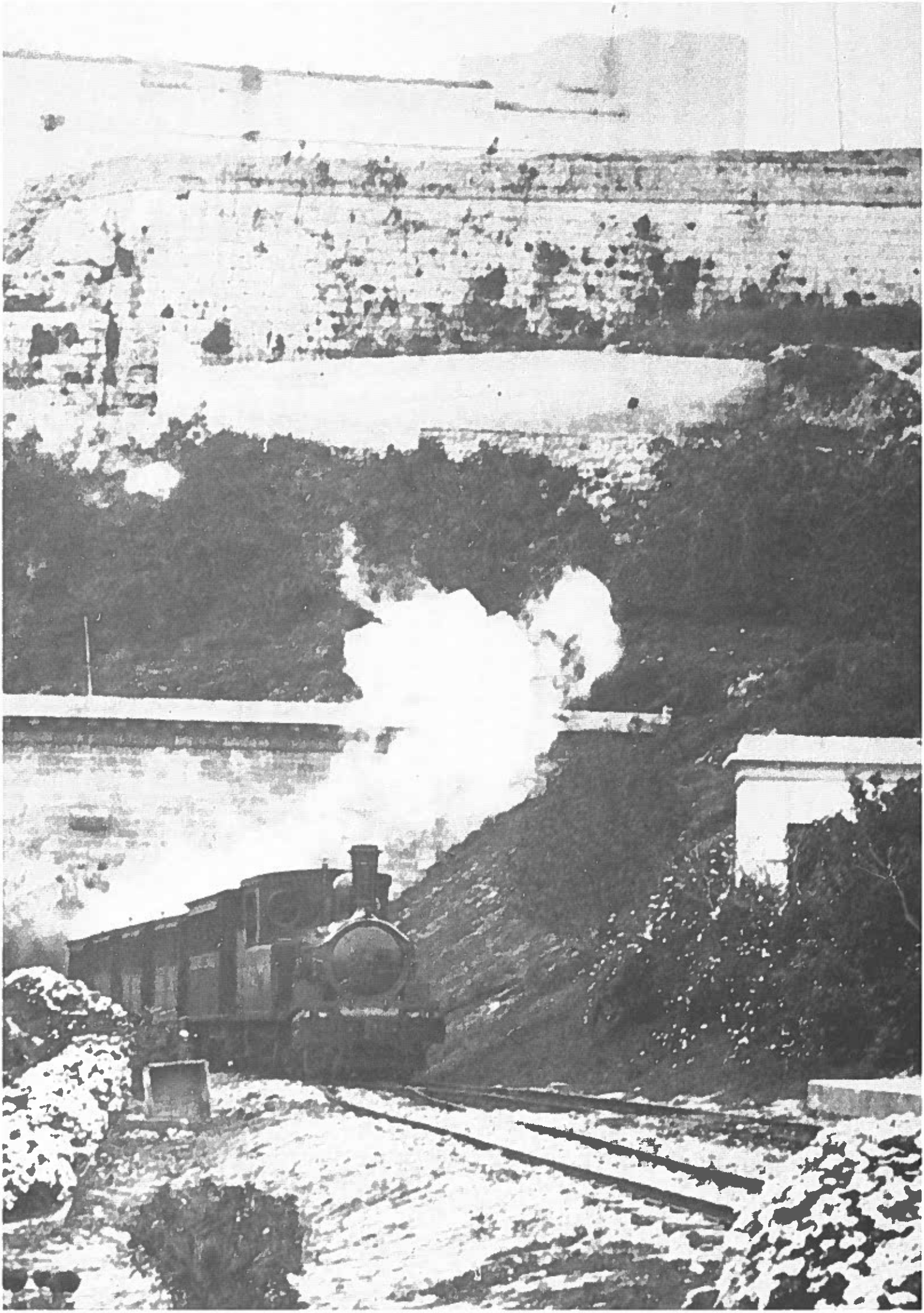
Following pages: A view of the terminus tunnel at Valletta and Porta Reale

be "the total ruin of the enterprise and the throwing upon the streets of over one hundred honest hands". Their editors were unaware of Government's plans to revive it. The closure of the railway was inconvenient since the public had got used to the service. The suspension was labelled "a calamity" and the editor of the *Malta Times and United Service Gazette* clamoured for a resumption of the service.

This October 1890 extract from the same paper sums up the frustration of many travellers: "We share the entire ignorance of the public and press as to what is being done in the matter of putting the Iron Horse on its legs again, and we think that it exhibits most unaccountably indifference on the part of Government that some satisfaction is not forthcoming. Why not come forward with a subsidy? We keep our tottering Theatre, why not keep on an infinitely more useful line of railway? English pluck and speculation have given us a capital plant and set the whole concern in working order. Are we to let the enterprise tumble to pieces for lack of our share of support?"







IN GOVERNMENT HANDS 1890-1918

"Malta ought to be proud that it can produce an instance of such painstaking services of which the results have reflected the highest credit upon our island, in having secured for us the municipal working of a railway which an English Company was not able to manage."

Strickland, during a Council sitting, February 28, 1894.

The takeover was engineered by the energetic Chief Secretary to the Council of Government, Gerald Strickland, who said that "Government had taken possession of the railway much in the same way as a salvage tug tows an abandoned ship to port". Government's duty now lay in making the line safe and efficient and had appointed itself as the trustee of the railway to safeguard the rights of the population. He admitted that the shareholders abroad had been deprived of their assets without receiving any compensation. Much as he regretted their fate and "although several of them were English friends of his, a contract had been signed and the Government had tolerated the company's unsafe practices for a very long time before it acted".

As soon as the railway passed into Government ownership a number of former employees of the old Company were re-employed to prevent further deterioration of the property until a decision was taken. Government had three options: to operate the railway itself, lease it by public tender, or auction it. Strickland decided against the last as this would merely add a sum of money to the Treasury, besides involving Government in further litigation with the Malta Railway Company. Apart from deciding on its future, Government had yet to resolve the problem of the company's debts, make an inventory of the property to assess its value, and verify creditors' claims. The company's books were impounded to prevent the possibility of their removal or destruction.

Facing page: Apart from making the railway profitable, albeit temporarily, the salient feature of the Government take-over was the Museum extension, via a tunnel dug underneath Notabile bastions. The extension was of mutual benefit to the railway and the British Army which had just completed a garrison town and barracks in Mtarfa, within walking distance from Museum Station

Right: Advert for the sale by auction of four carriages of the Malta Railway Company lying at Hamrun Station on Friday February 6, 1891

AVVISO.

REGISTRO DELLE CORTI SUPERIORI.

Il dì 15 Gennaio, 1891.

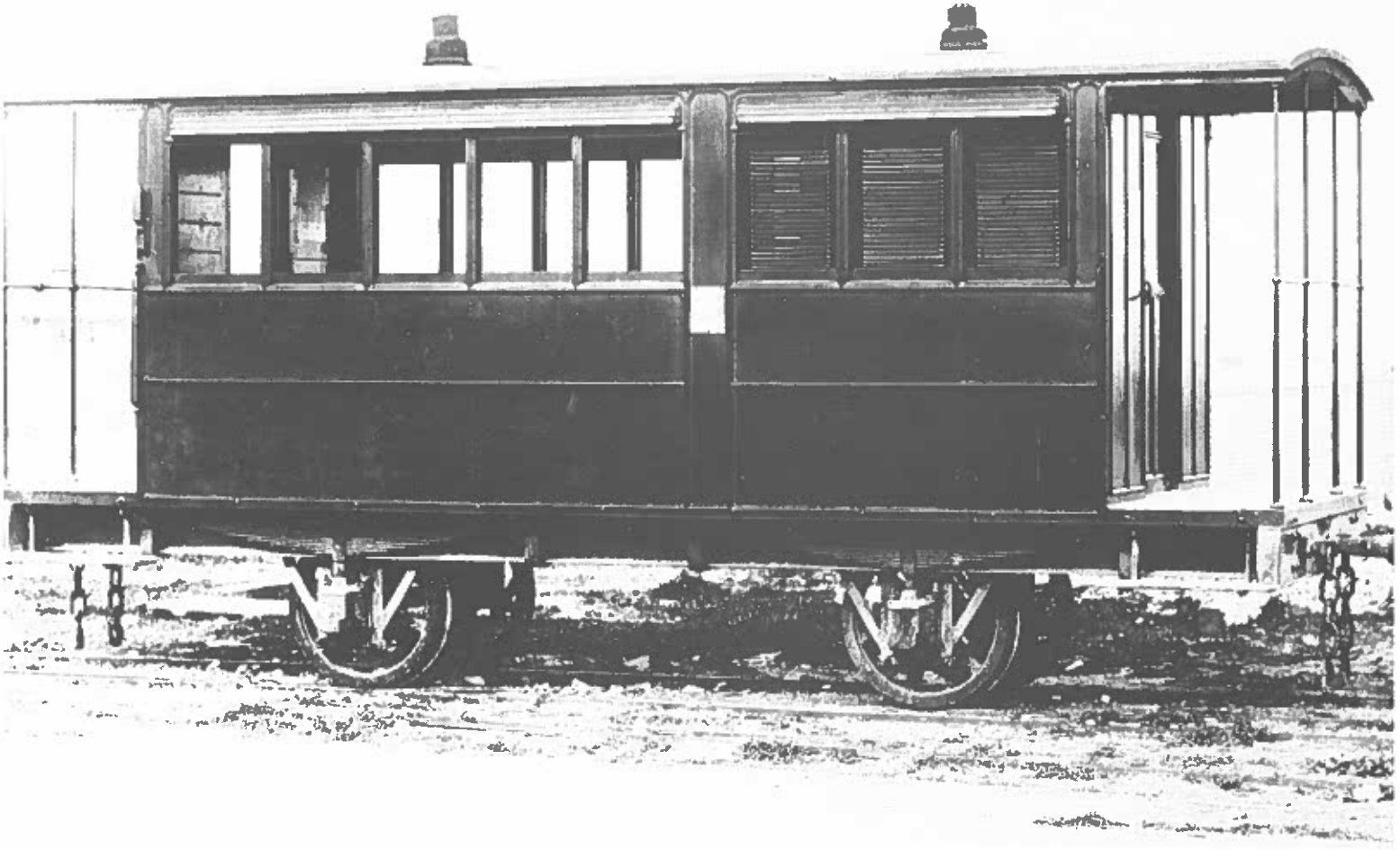
PER decreto dato il 23 Aprile 1890, dalla Corte di Commercio di Sua Maestà, sul ricorso del Neg. Giuacchino Serra, è stato destinato il giorno di Venerdì, 6 Febbraro 1891, per la vendita in subasta dei quattro vagoni ferroviari sottindicati, appartenenti alla "Malta Railway Company" cioè:

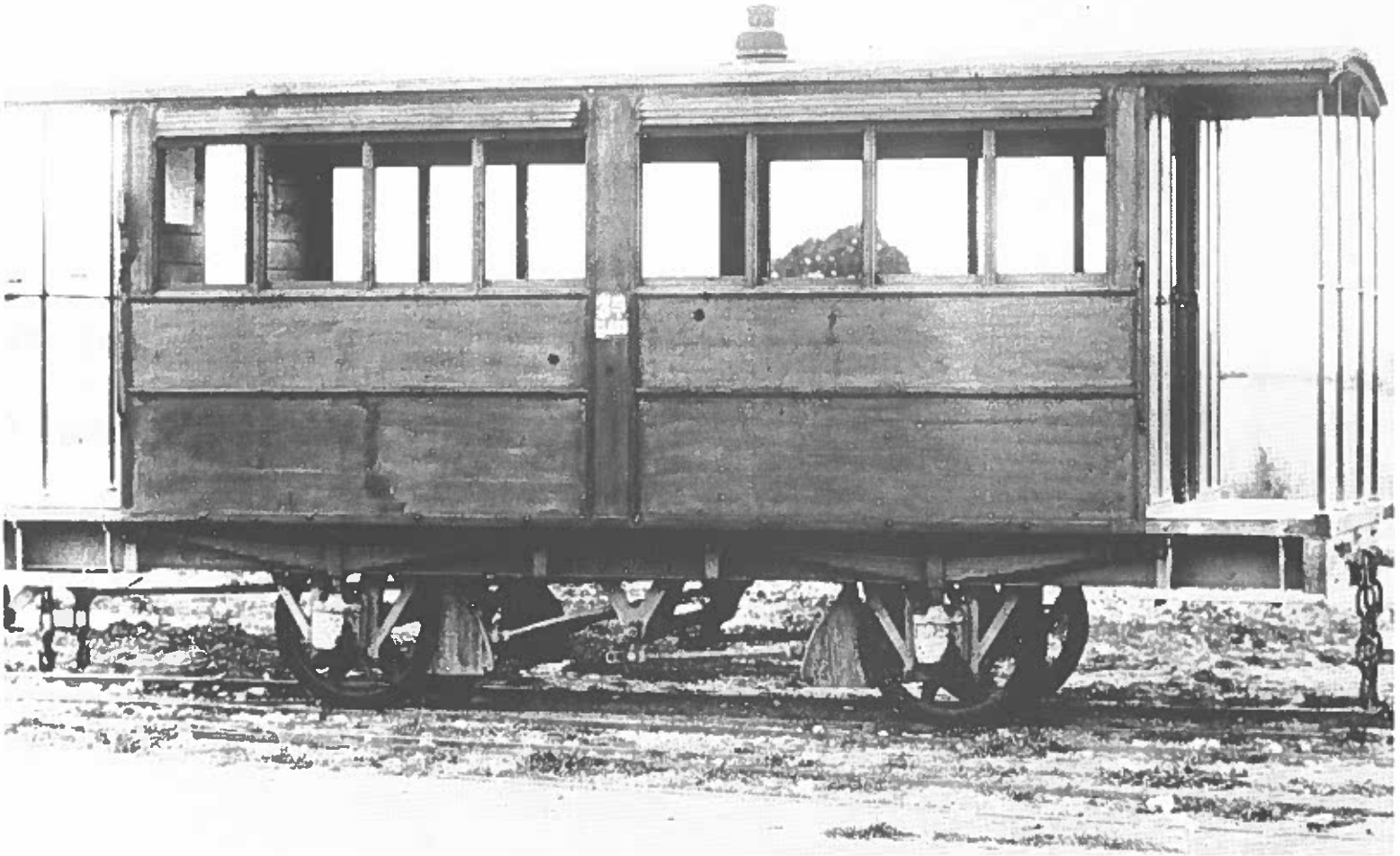
1.	Vagone di 1ma e 2da Classe segnato No.	9	stimato	£	130.
2.	Do. Do.	Do.	„ 10	„	„ 130.
3.	Do. di 3za Classe	Do.	„ 3	„	„ 110.
4.	Do. Do.	Do.	„ 4	„	„ 110.

La subasta avrà luogo dalle ore 2 p.m. in poi, per mezzo dei Pubblici Incantatori Charles Shaw Dalzel & Co., vicino la stazione ferroviaria del Hamrun.

CHARLES SHAW DALZEL & CO., *Pubblici Incantatori.* [20

Meanwhile some of the Company's creditors had obtained a decree from the Commercial Court on March 2, 1891, authorising the sale by alienation (subasta) of the Company's engines and rolling stock. Messrs S





Facing page: This composite First-Second Class carriage (top) awaiting the auctioneer's hammer in Hamrun in January 1891 was expected to realise £130. The estimated sale price of the Third Class carriage (bottom) was £110

Santucci and Company, Public Auctioneers, were appointed to auction these at Hamrun Station on Monday March 16, 1891, at 3pm. A certain Mr Downs had impounded cars numbered 18, 19, 20, 21, engine Nº 2, three ballast trucks and four platelayers' trolleys. Engine Nº 3 had been impounded by George Humphries, one of the employees, while a local businessman, Antonio Darmanin, had impounded cars Nº 22 and 23 and a quantity of timber.

Strickland had already decided that Government should operate the railway and felt bitter about this piecemeal sale which would destroy the line as an entity, the rolling stock being probably sold for scrap at a price below its market value. To prevent this, he authorised a Council Member, Mr Luigi Pace Balzan, to bid for the whole lot on Government's behalf. Strickland was delighted with the outcome because the creditors were paid and the railway remained intact. Strickland boasted that Government had obtained the railway for a song, paid all its debts, and in addition, recovered the sum of £584.10s.10d from the late Company by a decision of the Civil Court.

In the meantime, the Company filed for bankruptcy in London on November 26, 1891. The Chancery Court ordered the Company to be wound up and the Malta Railway Company was eventually struck off from the companies register on August 11, 1905.

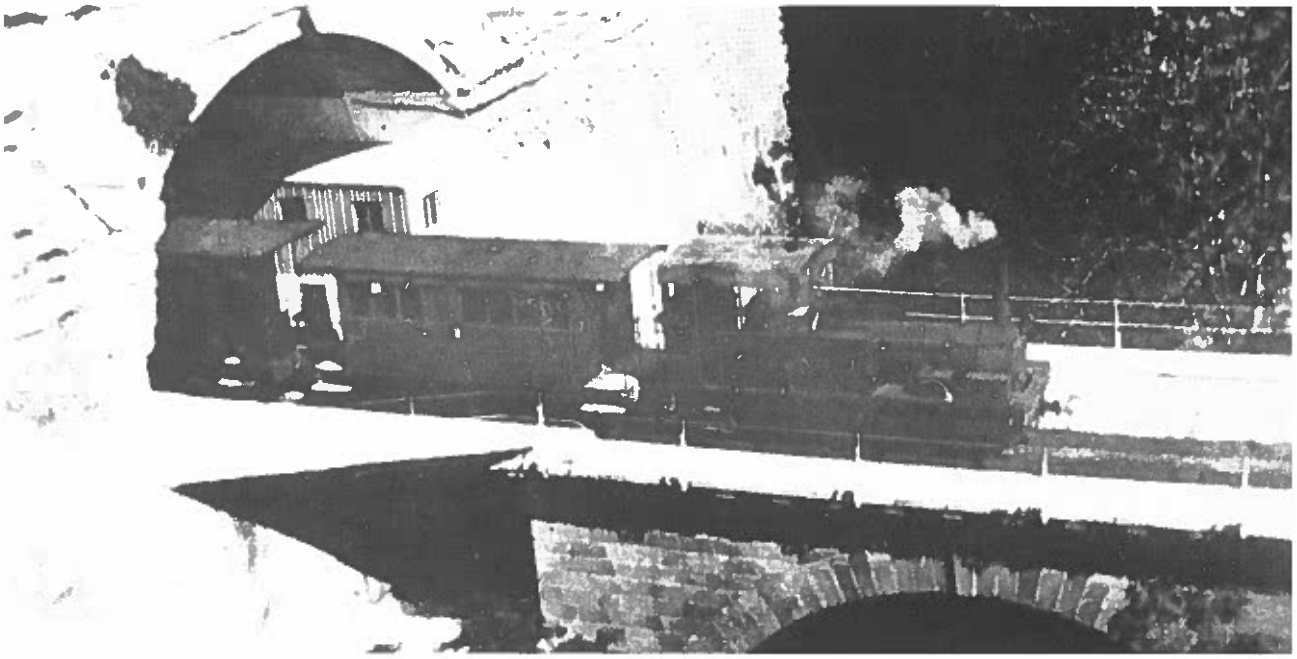
It had been decided not to lease the property by tender because it was unlikely that an entrepreneur would be found to take over the disorganised, debt-ridden railway. Government intended to run the railway on the co-operative system, profits being used to reduce fares, pay for repairs and maintenance and extend the service. The railway would function as an independent commercial concern but the manager would be a Government official. Tramway practice would be used and ticket clerks would travel on the train, Valletta's Station Master being responsible for collecting all the money at the end of the day.

Select Committee report on railway re-organisation

The Council appointed a Select Committee chaired by Strickland to report on the re-organisation of the railway. The Committee, composed of Strickland, Adriano Sciortino and E Ciantar, presented its report on November 25, 1891.

They recommended that:

1. The railway would be a Department under the responsibility of the Receiver General.
2. The Manager would have the assistance of a writer and be responsible to the Treasury for all receipts and expenditure.
3. The Superintendent of Public works would be in charge of the upkeep of the permanent way. He would appoint a Professional Officer to supervise any engineering undertaking connected with the railway.
4. The Manager and the Superintendent of Public Works would be answerable to Government.
5. The railway would be worked by a double train service. Not more than two trains at any time would be in motion on the line and not more than one train was to run on either of two sections (a) Valletta - Birkirkara and (b) Birkirkara - Notabile.



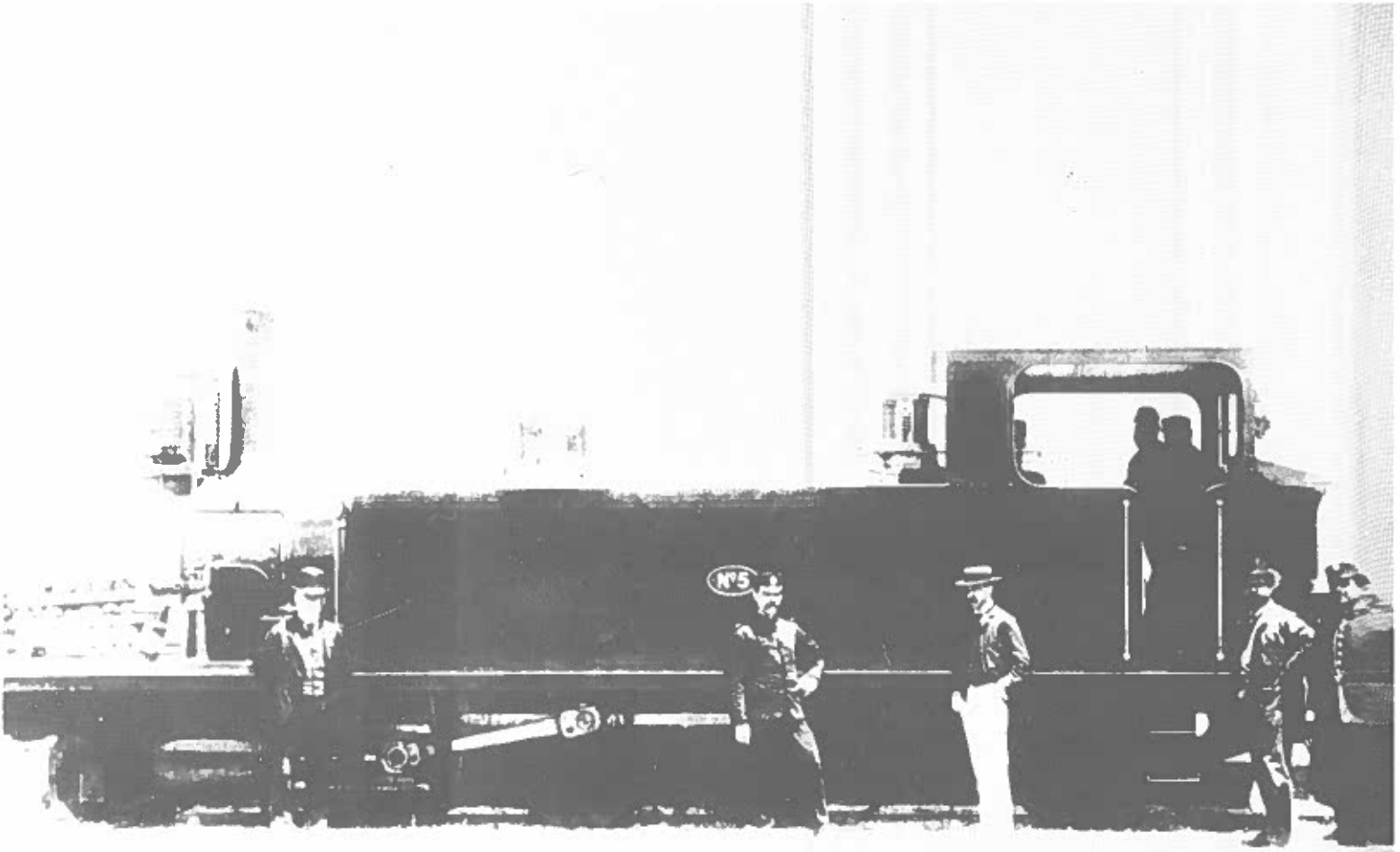
The new stone viaduct which replaced the old timber bridge at Porta Reale in 1891 cost £751

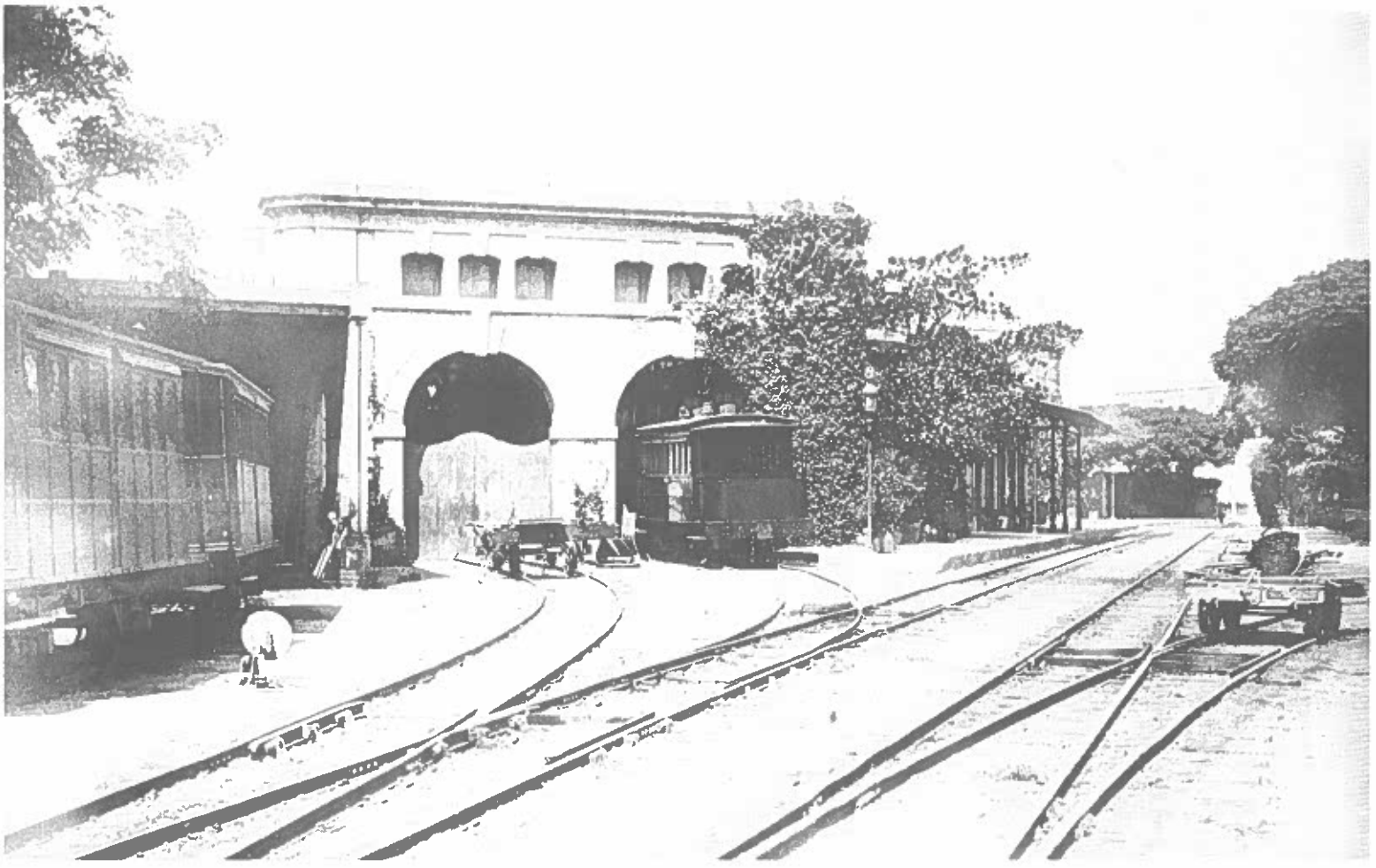
6. On days of exceptional heavy traffic two engines would be used to pull the same train.
7. An Engine-driver without a partner in the driving cabin would be liable to dismissal.
8. There would be two classes, First and Third, while a workmen's train would run the whole line at 1d in the following manner:- two trains early in the morning to Valletta, one train at 11.45am and another after sunset down to Notabile.
9. There would be two zones for reckoning fares, (a) Valletta-Birkirkara (tickets to be printed on white paper) and (b) Birkirkara - Notabile (tickets to be printed on pink paper). The tickets for two zones would be at double the fare for one zone and printed on blue paper.
10. The fares per zone would be:- 1st class - three pence, and 3rd class - one penny. There would be no return tickets. The fares on Sundays would be double the above. On exceptional occasions special fares would be charged.
11. Tickets would be issued by the travelling Ticket Issuing Clerks while the trains were in motion between each zone.
12. Each train would be provided with one or two Ticket Issuing Clerks and one Ticket Checking Clerk.
13. The Ticket Clerks were to see that no passengers left the train at any intermediate station before tickets had been issued and checked.
14. Ticket Clerks could, on Sundays or on any other day be called upon to perform duty as station masters, issue tickets or conduct ticket checks at Valletta or Notabile or at any other station as directed.
15. Ticket Clerks would be appointed on probation.
16. Tickets would be numbered progressively and issued to the clerks in books of 100 each.
17. Every Ticket Issuing Clerk would be responsible to the Manager. At the end of each working day, all unissued tickets and money

collected from ticket sales were to be returned to him.

18. There would be at Valletta Station a sufficient number of boxes wherein Ticket Issuing Clerks should deposit the money collected and each Clerk would be provided with a key for his respective box.
19. To avoid delay and confusion no change would be given by the Ticket Issuing Clerks for a period of three months from the opening of the line.
20. Tickets would be issued with a check and a counterfoil.
21. The check would be collected by the Clerk as soon as practicable after purchase and before the passenger left the train. The passengers were to retain the tickets and hand them back to the Manager or any authorised Inspector to ascertain that tickets were being properly issued, checked and defaced by the detaching of the check.
22. Clerks would deliver to the Manager at the end of every day's work the checks detached from the tickets examined by them.
23. No train would stop to take water as this service would only be performed at Valletta between the arrival and departure.
24. The railway tunnel would be sufficiently lit to prevent confusion and possible bodily harm in case of an accident and would be duly inspected every morning before the commencement of traffic.
25. The proposed Board of Management was not considered by the Committee to be necessary.

In 1894 the timber viaduct outside the fausse braye *at Porte des Bombes was replaced by a stone bridge costing £655. Like the one at Porta Reale, its timbers had rotted*


Nº5



26. The Committee recommended the following Railway Staff positions and their respective salaries:-

Manager: £180 a year.
Accountant: not less than £90 a year.
One Storekeeper at £50 a year.
Two labourers at 1s.8d. per day each.
A writer mentioned in para 2.
The Professional Officer would have extra remuneration.
Six travelling Ticket Clerks at 4s.0d per day.

There was disagreement within the Committee because Strickland believed that Management should be responsible for both the financial and engineering aspects of the operation, while a Committee member opined that combining these separate functions could result in a conflict of interests. He suggested that the Manager handle the commercial aspect and an Engineering Superintendent the technical, a practice used by the old Company. Strickland had the final say and the new Manager, Gatt, was made responsible for both. Gatt, Buhagiar and Rizzo would henceforth write, "Manager and Engineer" under their names.

The charging of double fares on Sundays and holidays was also raised in the Council before the line reopened. Some members criticised double fares as socially unjust, since they denied the lower classes use of the train on specific days. Strickland argued that supply could never match demand on these days and double fares would stand. The old Company also charged double fares on feast days and it was in the public's own interest that safety should not be prejudiced by overcrowding.

Improvements prior to reopening

While the railway was shut down, several works were undertaken to overhaul the entire system. The Public Works Department estimated that about £8,000 would be required to overhaul the line. The permanent way was in a bad state and several rails had to be replaced. The number of new bolts used exceeded 30,000. Some of the embankments had to be raised because a settlement of over 9 inches (23cm) had been measured on parts of the line. 1,200 new oak sleepers were laid to replace the older uncreozoted ones of common fir. The line was reballasted and repacked. Sleepers and rail fastenings were added at curves and underways were rebuilt. Cracks had been discovered in Princess Melita Bridge and it had to be shored up by masonry shoulders on either side, to bear the thrust of the arch.

Facing page top: The re-opening of the railway service was postponed to February, 1892 to allow for the arrival and commissioning of engine N^{o} 5, the first to be purchased by the Government

Lorenzo Gatt enlarged Hamrun Station (left) by building engine and carriage shelter sheds and an engineering workshop (bottom)

In April 1891, the timber viaduct at Porta Reale was declared unsafe as the wood had decayed. A stone replacement costing £751 was built, the plans being approved by the military authorities. The new bridge had steel railings on the sides, electricity lamps, waiting benches and twin tracks. Strickland was censured three years later over the enormous cost of this bridge. He explained that when the foundations were being dug an enormous hole was discovered in the ditch. He gibed that it had apparently been dug on some Grandmaster's whim to occupy his unruly slaves by making them dig holes and refilling them!

Meanwhile, an impatient public was awaiting the resumption of the service. In November 1891, Strickland, replying to a Council member's question, said that the railway would reopen in January 1892 to allow for

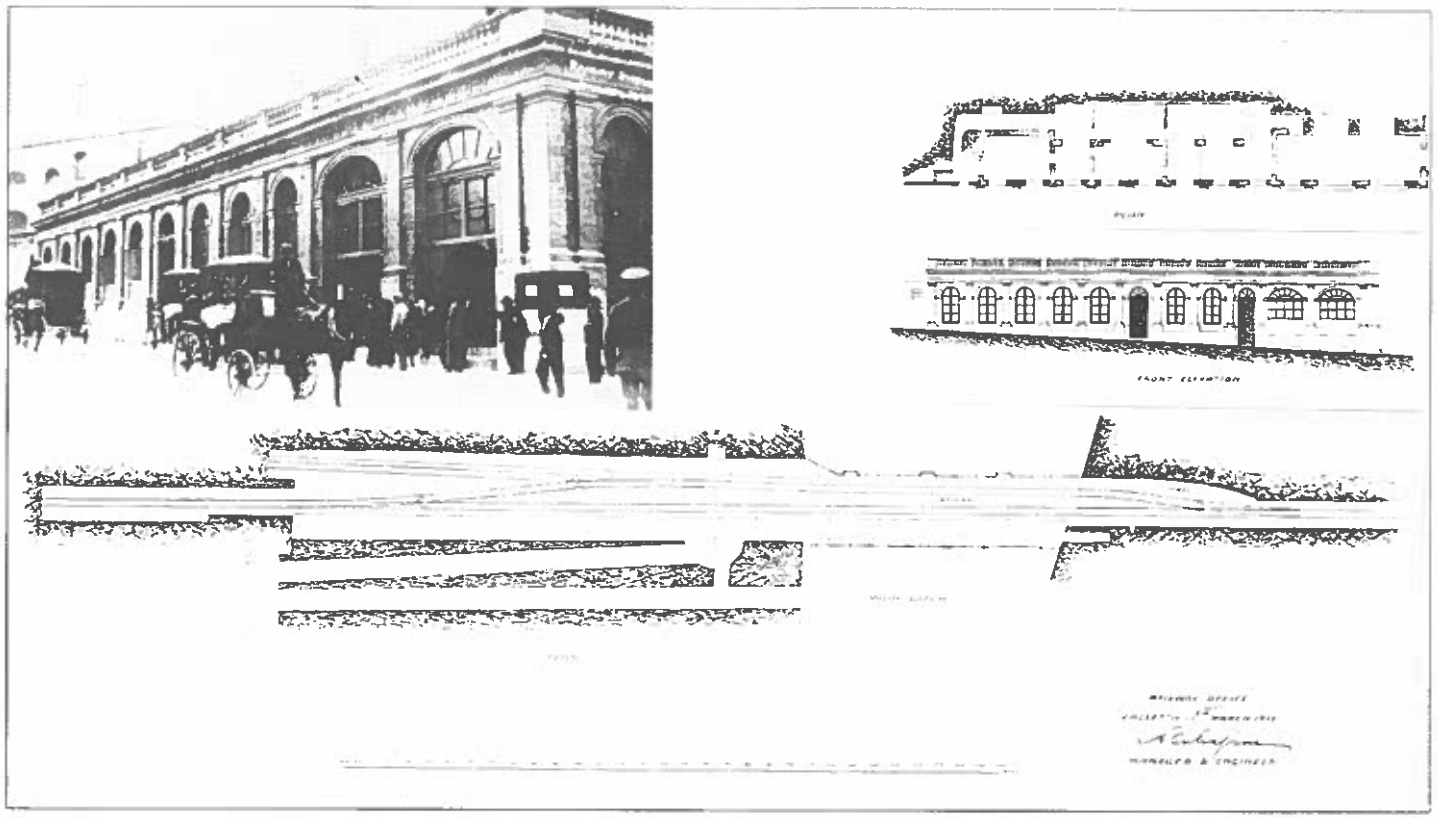
the arrival of the new engine (N° 5) from England in December and the completion of lengthy repairs on the company's old engines which had extensive internal damage after being overworked on the line's steep gradients. The idea of electrification was mooted but was abandoned at once since this would have delayed the resumption of services.

By the time the line reopened on January 25, 1892 the estimated sum of £8,000 had been spent. When Strickland moved the vote for this sum in the Council, Sigismondo Savona told him: "You are asking for £8,000 to put the railway in order; I give you this sum on two conditions - that it be run as a commercial concern and that it should pay its own way". Prophetically he added: "I am convinced that the country would get neither the one nor the other". Strickland budgeted for an annual sum of £4,325: £1,547 for salaries, £1,745 for materials, £713 for renewals and £320 interest on the loan of £8,000 for works undertaken to renew the line. Prospects were excellent because the British Army intended to build a new barracks and town at Mtarfa and this was certain to increase traffic and revenue.

Back in service

The Government appointed L Gatt as manager of the Railway and N Buhagiar as his assistant. Despite the large sum spent on improvements Gatt soon requested another £1,385 for the purchase of engine spares. In a March 28, 1892 memorandum sent to Strickland through the Superintendent of Public Works, GC Schinas, Gatt urgently requested the money for the upkeep of the permanent way and to enable him to operate double train services on weekdays.

Gatt observed that N° 5, the new engine, was already being overworked and until a relief engine arrived it would not be possible to effect inspection and repairs. If it broke down the brunt of the traffic would be borne by the old locos. Gatt wanted two new powerful engines to enable him to operate half-hourly train services and increase traffic. He listed £80 worth of materials needed for renewals on the permanent way.



Improvements at Valletta Terminus Station included wider gates at the corner of Victory Street and Strada Reale and a ramp (reminiscent of a London Tube Station) leading to the trains

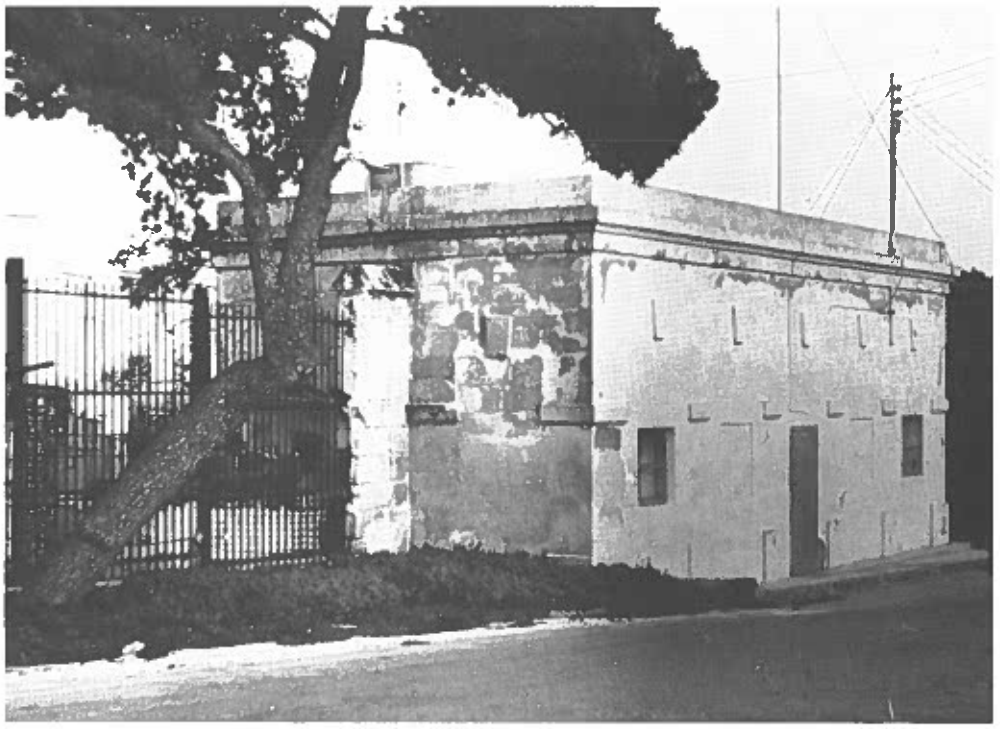
The masonry -lined Valletta Terminus tunnel. The Government improved facilities at the station by putting waiting benches and installing electric lighting. A short viaduct led to the Floriana tunnel which was widened here to enable a longer siding to be laid. In the centre is the water stand pipe for the engines.

Gatt stressed that the following works at the stations had to be undertaken urgently for the convenience of passengers (the figures in parenthesis show the estimated cost):

1. Alteration of steps and opening of a skylight in Valletta Station (£135)
2. Construction of engine and carriage sheds at Hamrun to protect idle carriages from exposure to sun and dust (£400)
3. Construction of latrines at Hamrun Station (£80)
4. Provision of a planing machine (£180)
5. Provision of a portable forge (£25)
6. Construction of a room near the gate of Hamrun Station (£15)
7. Rebuilding of a portion of the retaining wall on the north side of Hamrun Station (£180)
8. Drainage of the line at Hamrun, Notabile and Valletta Tunnel (£120)
9. Station improvements (£100)
10. Provision of 600 sleepers for strengthening of the line (£600)

Gatt built a first class engineering workshop at Hamrun. The engine shed which had been cramped and badly lit in the company's time was enlarged and ventilated. The Public Works Department loaned a portable engine to work the lathe and the drilling machines.

On May 2, 1892, the Government published a new set of Railway Regulations. These were similar to those of 1885 except for the newly introduced prohibition of smoking in carriages and the repeal of the clause on infected persons.



The new ticket office built on Racecourse Road above Notabile Station. To the left are the iron railings requested by Lorenzo Gatt to enable him to control the crowds on Rabat feast days

That same month Gatt wrote to Strickland proposing to tunnel into the rock behind Notabile Station to provide shelter for workmen's carriages for the morning train to Valletta. While the original sleepers at the station were being replaced the engines were shunted by a dozen workmen. The Hon Savona asked Strickland for an explanation during a Council sitting. Savona also referred to overcrowding on Good Friday and recalled incidents in the old Company's time when fatalities had occured.

Gatt asked for £100 to improve the station before the feast of St Peter and St Paul (L-Imnarja) in June. Like Savona, Gatt was well aware of tragic occurences when crowds had rushed to the station as soon as the races were over, climbing over the walls and swamping the trains. Several passengers had not bought a ticket and the carriages were so crammed that ticket collectors were unable to enter. Gatt proposed the erection of a 10ft (3m) boundary wall at the cutting. He wanted the steel railings at Racecourse Road to be extended to prevent people from walking across the nearby fields and getting into the station. Gatt also requested police reinforcements to patrol and protect the station entrances and ensure that the number of people passing through the gates matched the passenger capacity of the train.

In the Council, Strickland moved a vote for the £100 requested by Gatt and the "Imnarja problem" was solved to everyone's satisfaction. The day after Imnarja Strickland congratulated Gatt for his successful handling of that day's "exceptionally heavy traffic" and praised the precautions he had taken to control the situation.

On January 2, 1893 workmen's trains resumed service. They had also been run in the Company's time but Strickland intended to increase their number. These trains carried bona fide workmen and had no first or third class accommodation. The bye-laws for these trains, published on December 1, 1892, stipulated that only workmen would be permitted to buy penny tickets and offenders would be expelled from the stations and penalised.

Trains for 1st and 3rd Class passengers would follow after the workmen's trains. The fares were to be:-

1st Class

Between Valletta and Birkirkara or any intermediate point. .....2d.
Between Birkirkara and Attard or any intermediate point. .....2d.
Between Attard and Notabile or any intermediate point. .....2d.

3rd Class

Between Valletta and Birkirkara or any intermediate point. .....1d.
Between Birkirkara and Attard or any intermediate point. .....1d.
Between Attard and Notabile or any intermediate point. .....1d.

Workmen's

Between Valletta and Birkirkara or any intermediate point. .....1d.
Between Birkirkara and Notabile or any intermediate point. .....1d.
Between Valletta or Hamrun and Attard or Notabile .....1½d.

Strickland boasted that there was no other railway in the world which charged fares as low as Malta's.

Gatt's report

A year after services resumed, Gatt published his "Report on the Management and Working of the Malta Railway from the 25th February 1892 to the 24th February 1893". It contained his recommendations for the improvement of the line, estimates, details of revenue, expenditure, passenger traffic, an examination of the state of the permanent way and the state of the engines.

Among the many improvements already made or planned Gatt listed: the addition of 3,000 sleepers and 1,500 cubic yards of ballast; the replacement of 2,000 feet (610m) of rail; the drainage of the stations; the lining with masonry of Notabile embankment and the widening of Floriana tunnel at the Valletta end which made it possible for engines to "run round" trains of nine or ten carriages as against the original six.

Boundary walls were also built at Hamrun and Notabile. A new ramp was constructed at Valletta Terminus, the station was extended and its offices enlarged. The technical school building was nearing completion and was expected to be furnished with machinery shortly. The old Company had used "Armier" water for its engines. Gatt found that it was brackish and changed over to "Wignacourt" water. He proposed the employment of a casual draughtsman to assist the Manager in taking the necessary levels and preparing the drawings required for a scheme to extend the line.

Gatt summed up the following 12 recommendations and their respective estimated costs:

1 Purchase of two locomotives £4,000
2 Construction of two verandahs at Racecourse Road, Notabile Station £380
3 Construction of a latrine at Notabile Station £163
4 Building a boundary wall and a ticket office at Birkirkara Station £200
5 Extension of Valletta Terminus towards Strada Regina .£550
6 Widening part of Floriana tunnel to create a siding £770

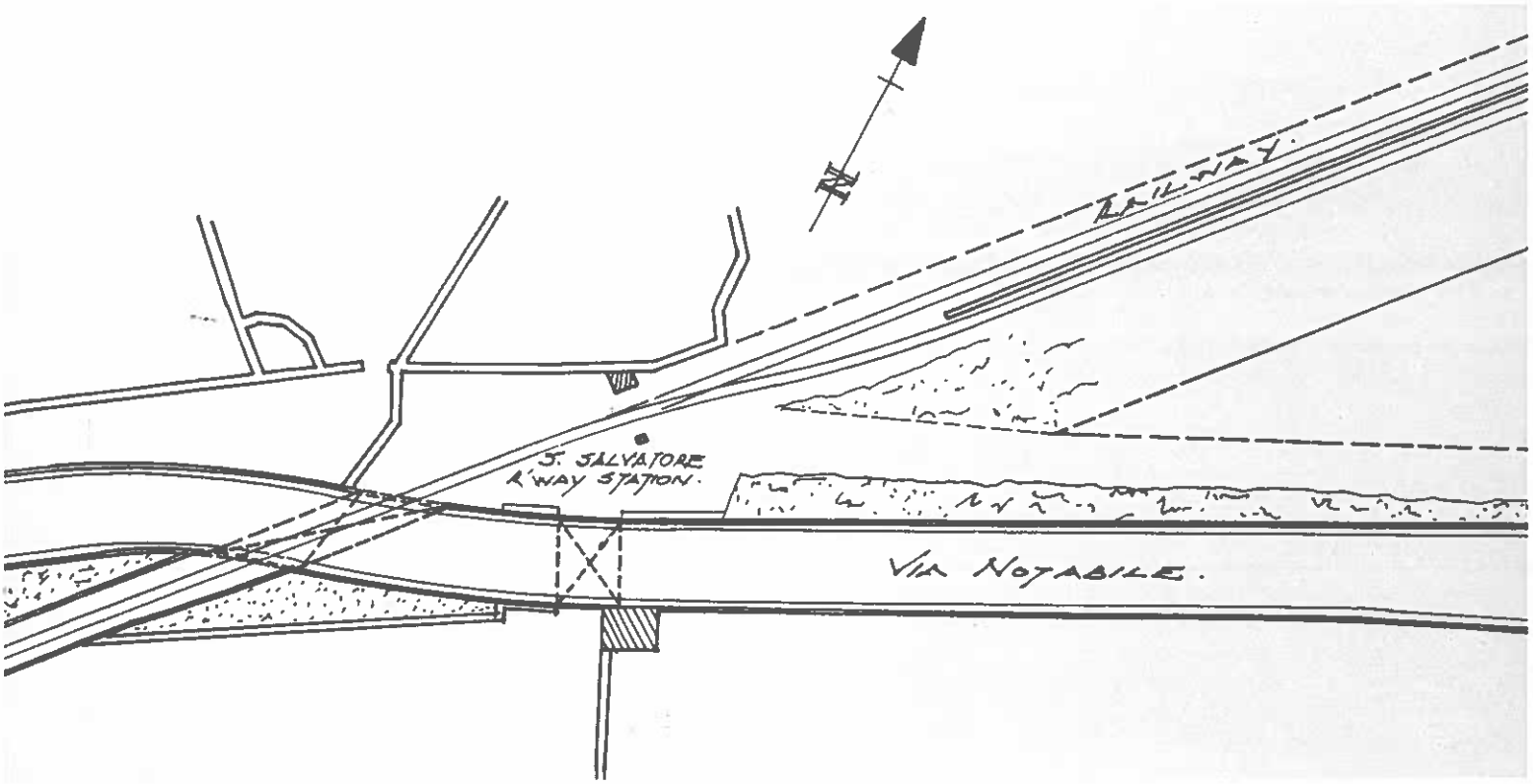
7 Cutting near the Argotti Gardens and construction of a station for Floriana £550
8 Construction of a ticket office and a latrine at Hamrun .. £210
9 Building of overways near Msida Station and at N° 6, 12, 14 Guard Huts £800
10 Completion of the overway near San Salvatore Station (Lunatic Asylum) £350
11 Construction of a back shunt at Birkirkara £95
12 Construction of a new station for Rabat and Notabile at Porta dei Greci (Greeks Gate). The driving of the tunnel and the laying of the rails included £5,000

Gatt hoped that his recommendations would be accepted and more money would be budgeted to enable more trains to be run so that the railway could look to the future with optimism.

The Governor, Sir HA Smyth, sent his report to Lord Ripon, the Secretary of State at Downing Street in London who congratulated Gatt for the satisfactory results (there had been a profit of £168.19s 0½d.) obtained in the first year.

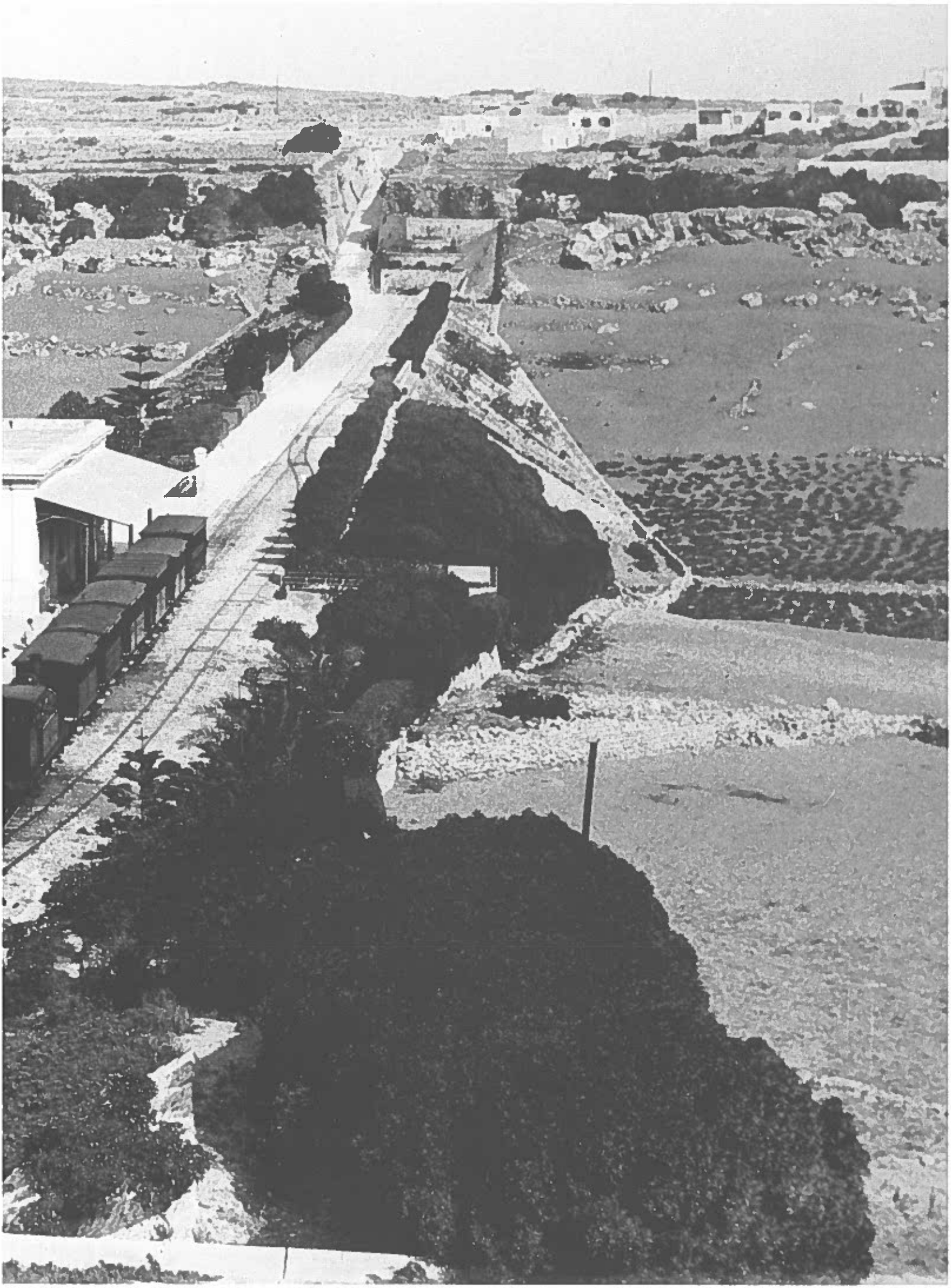
In January 1884 Gatt reiterated his proposals. With the exception of proposal no 9, the building of overways, his recommendations were implemented by the end of the decade. The site of the new station for Rabat (no 12) was changed to a location beneath the Roman Villa to bring the railway closer to Mtarfa Barracks.

In March Gatt pressed Strickland for the urgent construction of an overway at San Salvatore's notoriously steep junction with Notabile Road. The line was regularly damaged by cab wheels and Gatt, together with Lt Hoare, of the Royal Engineers, decided that the only solution was to build a bridge over it. Cab drivers complained that their cab wheels were being broken between the chocks and the rails. In 1890 the wheels of Chief Justice Sir Joseph Carbone's carriage were wrenched off while he was at



The overway or bridge near San Salvatore Station (above, below and facing page) at the junction of the line with Notabile Road. Regular damage to the permanent way by carriage wheels was eliminated after the building of the overway. Strickland's critics alleged that he built the overway to enable the British Army to take its heavy guns to Imtarfa

Following pages: Museum Station was also allegedly built for the benefit of the British Army. The line came to an end at the foot of Imtarfa Hill. Twin sidings enabled the station to handle a number of long trains at the same time

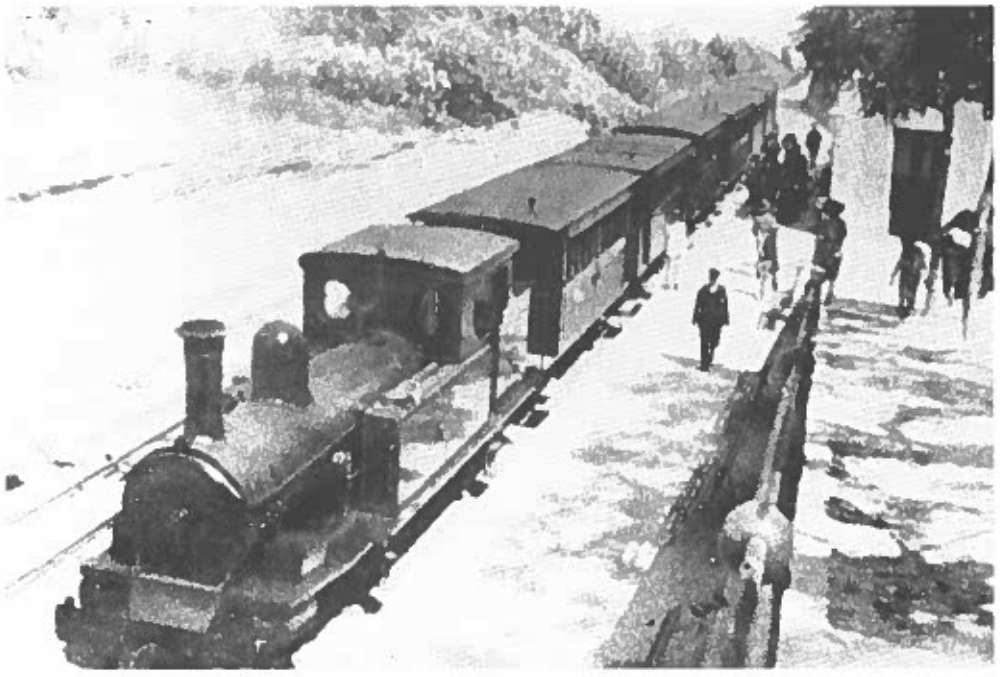


the level crossing. Gatt estimated that £27 were being spent annually in wages and materials to maintain the level crossing in good repair. This sum represented a capital of £675 over 25 years which was in excess of what the overway would cost.

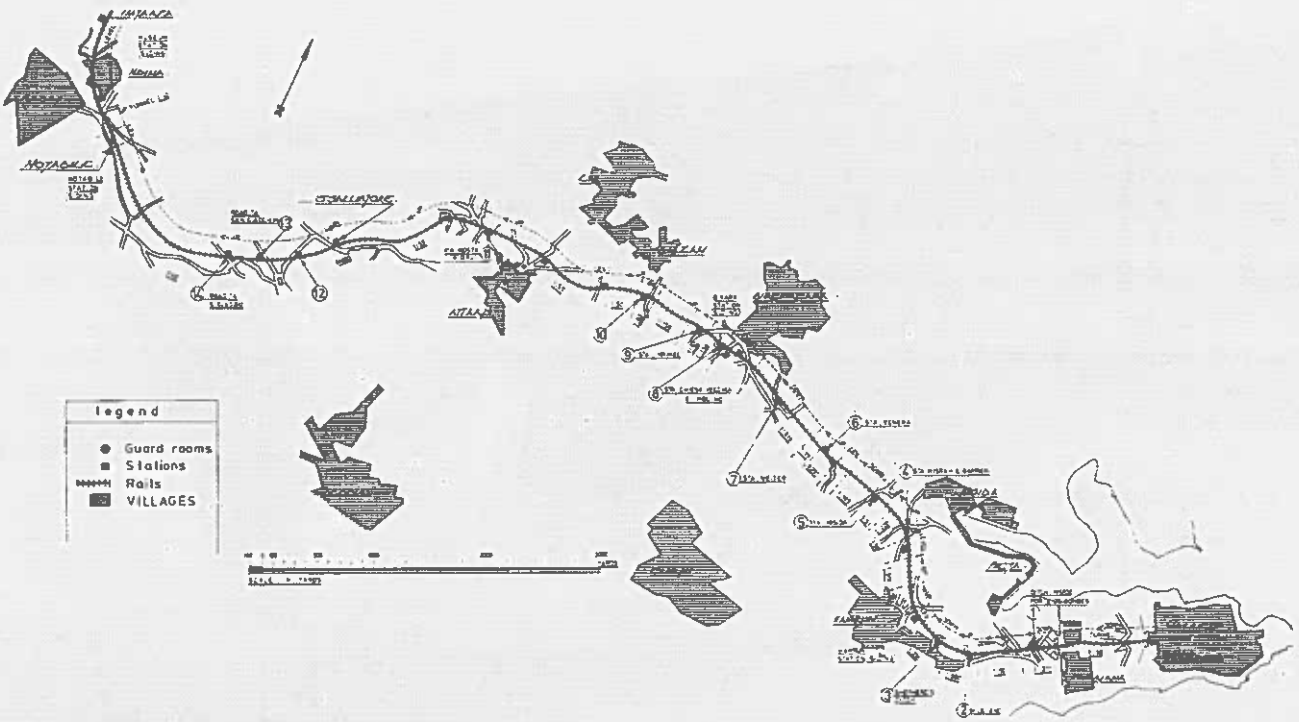
Proposal Nº 5, the tunnelling into Valletta, embodied Strickland's dream of bringing the railway into the City and the building of a central station under the food market in Merchants Street. He later changed the location of the proposed station to Piazza Tesoreria (Republic Square), beneath the statue of Queen Victoria, with a stop at Great Siege Square in front of the Law Courts. By tunnelling inwards from Porta Reale, space would initially be provided for idle carriages. When the new station was complete, Strickland envisaged a corkscrew tunnel leading down to the Marina and Marsamxett to link the people of the Three Cities and Sliema by eliminating the need to climb Valletta's notorious steps.

A start was made towards the realisation of proposal Nº 7, the new station for Floriana, with the cutting of a ramp leading down to St Philip's Garden. With its location at the end of the Sarria curve, the original station was never liked by the engine drivers. Although Floriana was on the railway timetable for some years the most likely stop for the suburb was at Porte des Bombes by Guard Hut Nº 1 (near St Philip's Curtain). This is borne by the complaint raised by Council member Mr Vallone in April 1894 on behalf of Floriana residents who, he said, were being denied the use of the railway and had to go either to Porte des Bombes or Valletta to board the train. Strickland promised to find an "alternative site for a station after consulting the military authorities, the present one near the Wesleyan Church being incommodious and dark".

The energetic Gatt also advised Strickland on the proposed siding between Birkirkara and Notabile. Gatt was against a siding at Attard Station which was built on an incline. He argued that a down train with a braking defect on slippery rails would continue to run beyond the siding and block the line for another train. Gatt preferred the new siding to be constructed at gradient-free San Salvatore which was also favourably



With the Museum extension, Notabile Station (left) ceased to be the end of the line. Museum Station was as inconveniently sited as Notabile, where travellers had to climb from the cutting up to Racecourse Road and thence uphill to Saqqajja



The extension to Museum marked the end of the line for the railway. This map shows the gradients along the entire route, the stations, guard huts and level crossings

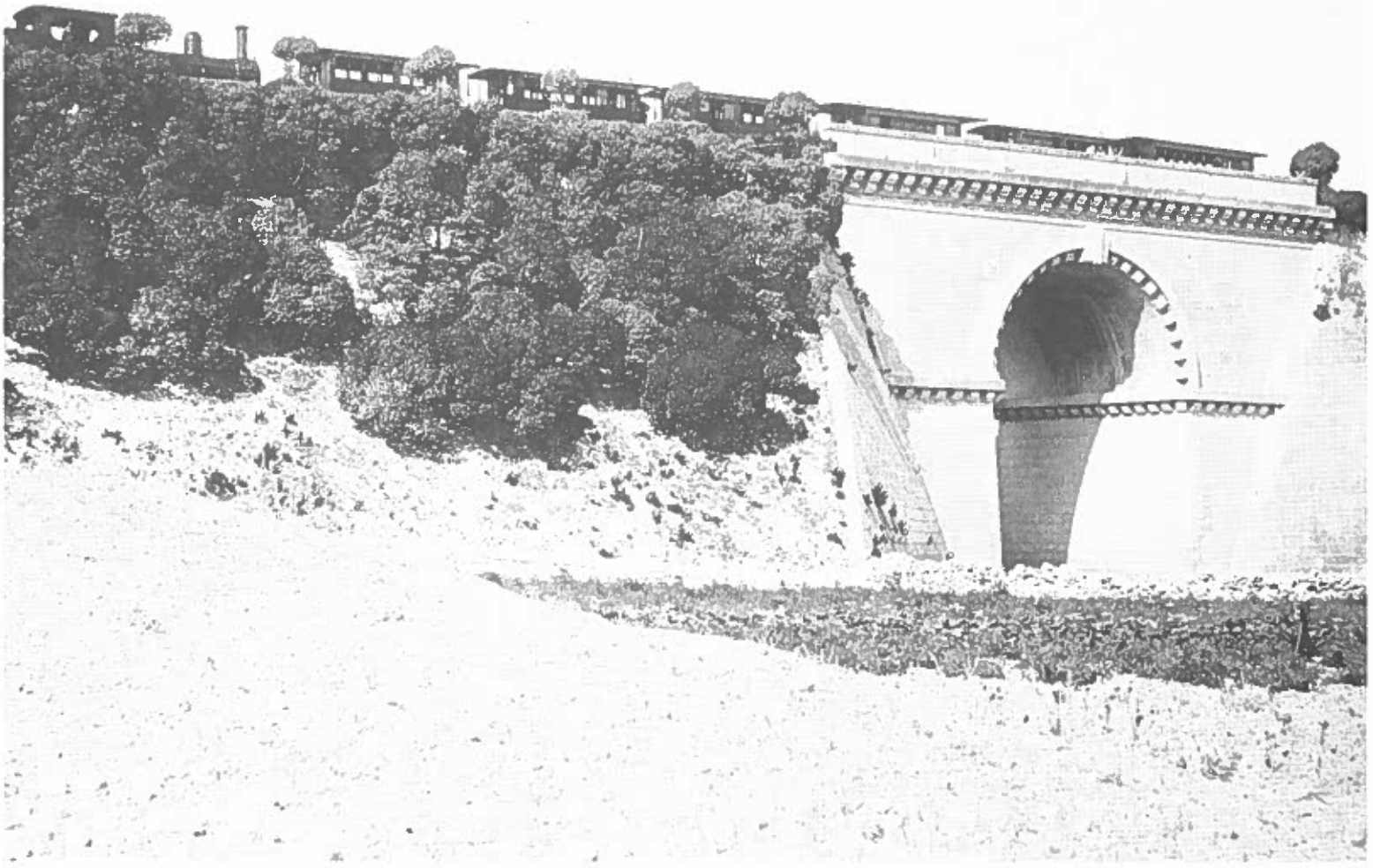
placed at the junction of any future extension towards Mosta or Zebbug. In December, at the end of what had been a busy year for Gatt, he reported on the condition of the last timber viaduct at Porte des Bombes which, like the one at Porta Reale, had decayed. The sum of £655 was voted in 1894 for the construction of a stone replacement.

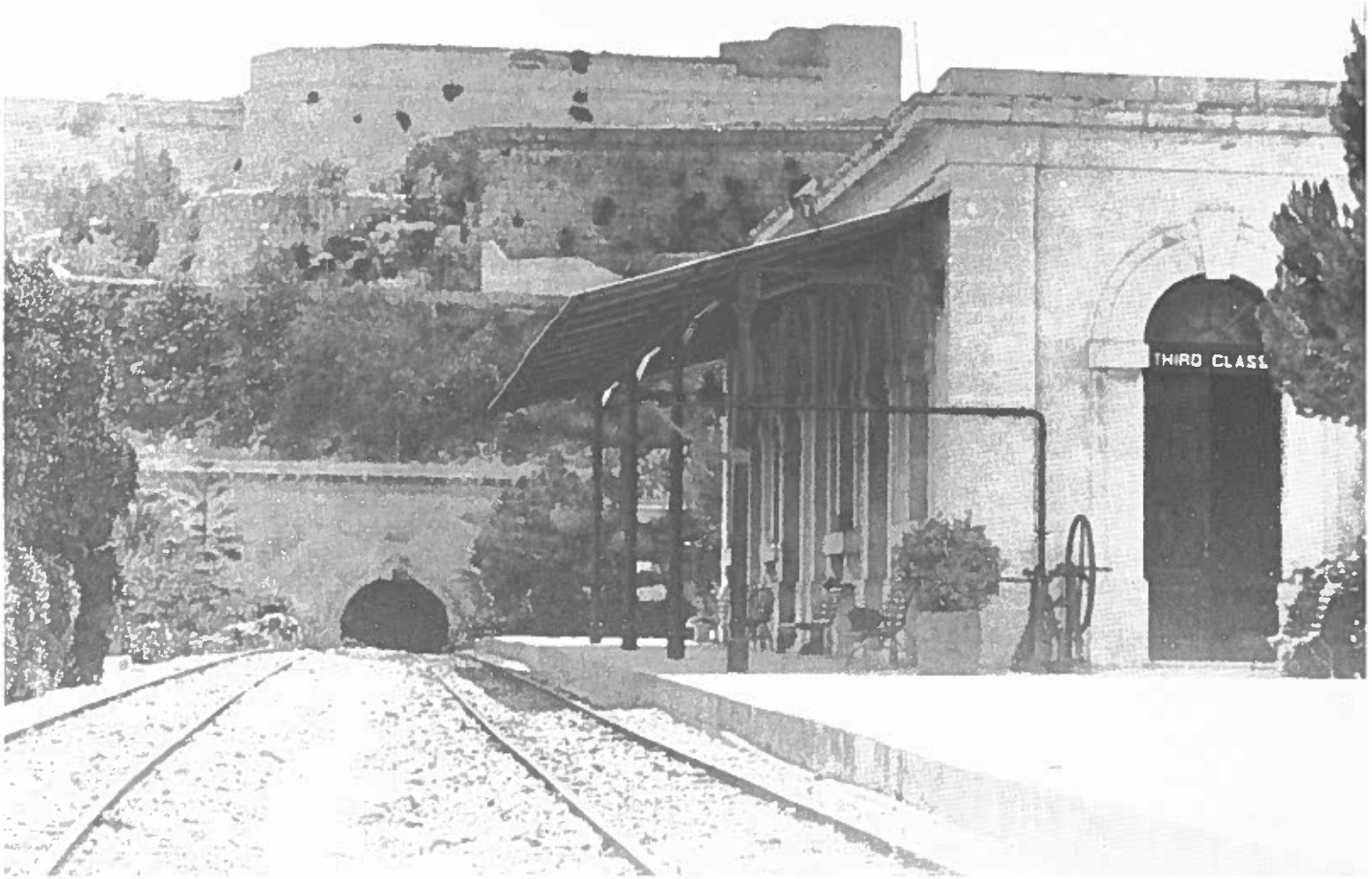
The sum of £490.7s.10d was also voted for improvements at Porta Reale Station. An inclined ramp now led to the platform, the stairs becoming a ventilating shaft. The station building was also modified. Instead of having entrances in the middle of the building, the long windows at the corner with Strada Reale were converted into two large doors fitted with steel gates to regulate crowds on Sundays and feast days. The old doors became windows and the interior was converted into offices.

The Mtarfa extension

In 1895 the Council authorised the Mtarfa extension. A tunnel would be cut beneath the outer walls of Mdina close to Porta dei Greci (Greeks Gate, Bieb tal-Gharreqin in Maltese) emerging under the bastions overlooking Gheriexem Valley. A bridge and embankment would be raised out of the spoils from the 770-yard (704m) long tunnel and the new station built at some distance from the tunnel exit. The station was named Museum, after the site of the Roman Villa overlooking it. Tunnelling began in 1896 and tracts of land belonging, amongst others, to Count Sant Cassia, D Testaferrata Viani, M Camilleri and F Manduca were expropriated. The estimated cost of the works was £15,000 which the Government financed by obtaining a loan in England. The Military Authorities were concurrently spending £100,000 on the nearby Mtarfa Barracks.

Speaking at a Council sitting, Strickland said that the extension would increase railway revenue because Mtarfa servicemen would be enticed

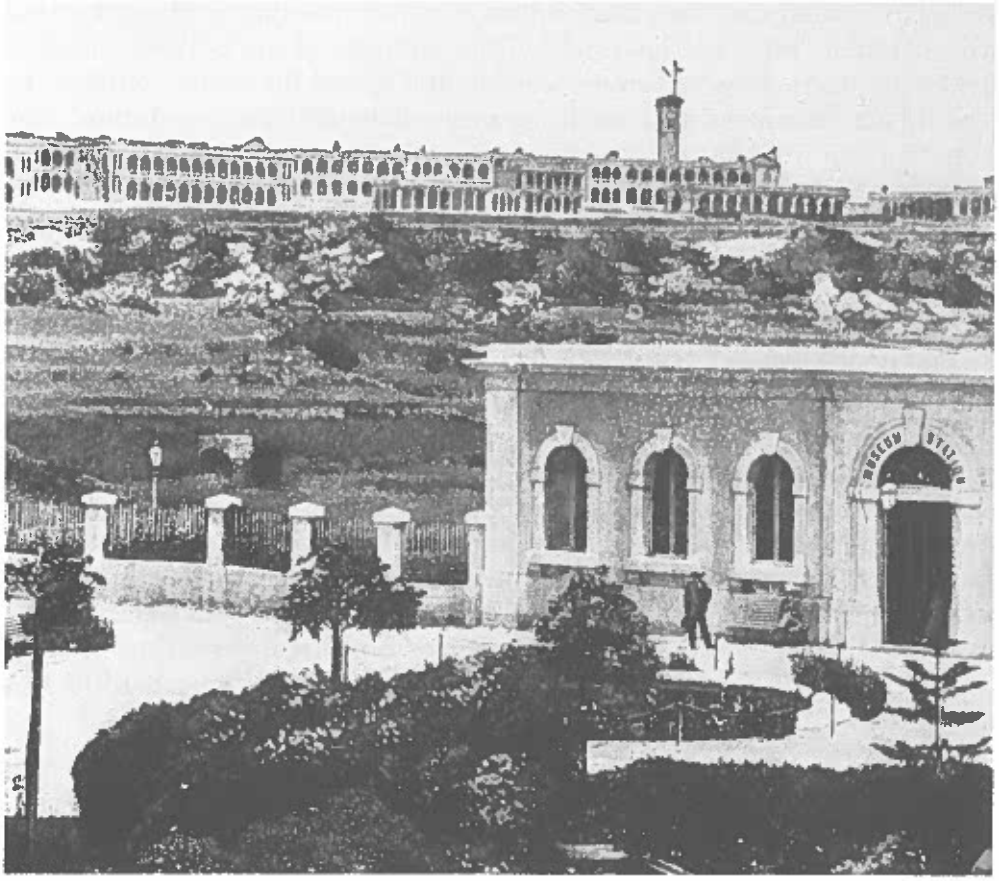


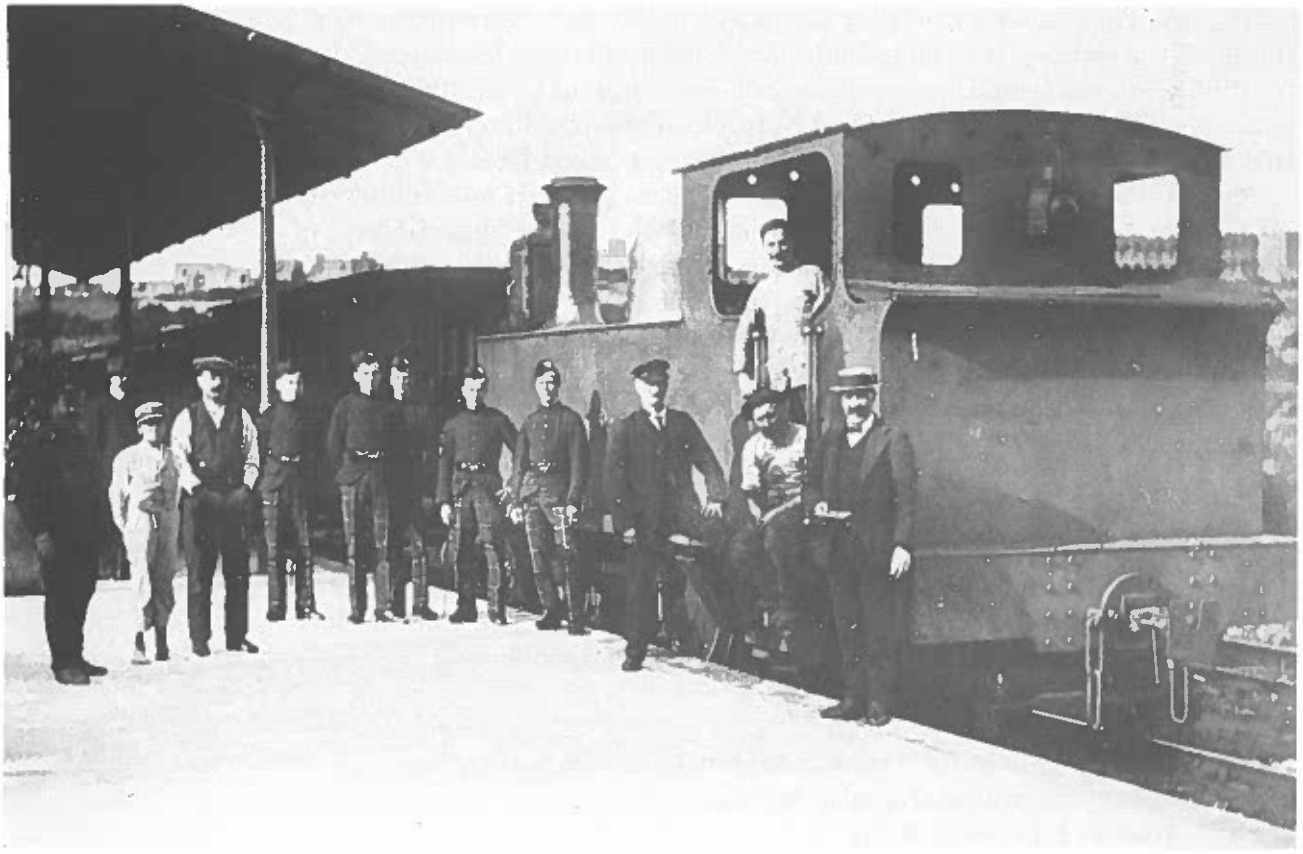

THIRD CLASS

Facing page: Museum Station, Notabile tunnel and Gheriexen Valley bridge showing an engine which is about to turn round a train made up of six carriages

Right: Another view of Museum Station showing its raison d'etre, *Mtarfa Barracks*

Below: Strickland's critics alleged that he extended the line to Museum for the sole benefit of the British Army some of whose regiments, including the Jocks in the photograph, were stationed at Mtarfa Barracks. Strickland denied the allegation and insisted that the extension would generate business in Valletta and Sliema, because servicemen would be lured away from their barrack canteens





away from their canteens to spend their money in Valletta. He added that Government "must not lose sight of the instincts of the British soldier to leave his barracks as often as possible and spend his money outside; he should not be refused such facilities as would benefit the population". The construction would also generate employment for several workers who, if they don't eat all they earn, would invest them in the banks and increase the country's wealth". Strickland foresaw the extension as an investment from which tradesmen, workers and the railway would benefit as much as, if not more than the British Army and its soldiers.

By the time the extension was completed in 1900, the cost had escalated to £20,000. At the Notabile end of the tunnel a new verandah and ticket office were erected on Racecourse Road at the top of the old station building situated in the cutting. Both Notabile and Museum tunnel exits were lined with impressive arched masonry, the latter having "1900" above the keystone. Gheriexem Bridge was originally planned to have 15 arches but the design was later amended to a large single arch 49ft (15m) high above the valley. The bridge and embankment were necessary to contain the new station and siding. The line came to a dead end at the foot of the barracks. It was said that Strickland had built the extension for the Army's benefit but he stressed that Mtarfa was a logical step in the extension of the line to Marfa via Bingemma, as originally planned.

Buhagiar succeeds Gatt

Under Gatt's management the Railway flourished. Manpower had been reduced; there were 14 daily departures and profits were registered. The permanent way was changed to heavier rails in order to take new, heavier engines. Fares and management costs were reduced. During a Council sitting, the Hon Savona said that the people of Notabile were prospering thanks to the railway, new shops had opened and property values increased. In 1895 Gatt reiterated his need for two more engines, the building of latrines at Hamrun, Birkirkara and Notabile, and a boundary wall round Birkirkara Station to prevent people from taking free rides.

Mr N Buhagiar, the assistant manager, succeeded Gatt on January 1, 1896. Gatt was appointed Chief Engineer to the Joint Department of Electric Light and Water Works. His three-year tenure of office had seen the decayed railway rise, Phoenix-like from the ashes.

The railway's only competitors were the cabs and omnibuses which were cheaper, but slower. The Maltese got used to the railway and admired Buhagiar's stations which he transformed into miniature gardens reminding many an Englishman of home.

The Woodward Report

The prevailing optimism prompted Government to consider extensions to other parts of the island, as had been proposed initially. Capt EM Woodward was commissioned to report on the feasibility of four branch lines under consideration. His report was published on August 5, 1896.

The proposed branch lines were:

1. Zebbug - Qormi - Hamrun
2. Zebbug - Salvatore (Lunatic Asylum)
3. Mosta - Salvatore (Lunatic Asylum)
4. Mosta - Lija - Birkirkara

Woodward opined that it would be impossible to lay a direct line between Qormi and Zebbug owing to the short distance of 1.5 miles (2.4km) and the gradient of 300ft (91.4m) involved. However, it would be possible to branch out from the main line near Spencer Monument (Blata l-Bajda) to the southern extremity of Hamrun, proceed through Wied il-Handaq to the south eastern extremity of Zebbug.

Woodward felt that proposals 2 and 3 would not be economically feasible since they passed through a rural area and traffic generated between Zebbug and Mosta would be negligible. The routes presented no engineering problems, the difference in level not exceeding 70ft (21m) in three miles (4.8km).

The fourth proposed extension, to Mosta and Lija from Birkirkara, was feasible from an engineering point of view but the junction with the main line at Birkirkara would have to be determined. The topography did not favour the line to approach Naxxar but a station could be built at the northern extremity of Lija at the junction of the Mosta/Naxxar roads, to attract traffic from those villages. Woodward concluded by recommending extension 1 to Zebbug-Qormi-Hamrun and 4 to Mosta-Lija-Birkirkara as drawn on a plan which he submitted with his report. The plan marked the roads which would be traversed by these extensions; these would require level crossings or bridges.

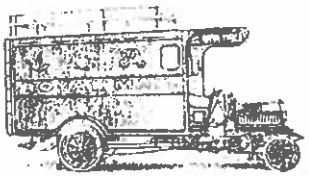
Woodward's report was never acted upon and the line retained its original form till the end. In May 1899 the 1892 regulations were repealed in favour of a new set which included a newly introduced provision which gave trains the right of way over persons, vehicles and animals at level crossings and prohibited the handling of chains by unauthorised persons.

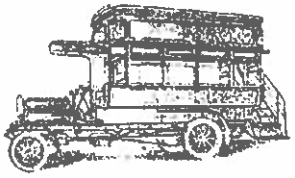
The beginning of the end

At the turn of the century the Tramway, a new form of mechanical competition for the railway, arrived in Malta. Earlier intimations of a tramway had been resisted by Strickland but his departure in 1902 to take up the post of Governor of the Leeward Islands left the railway without its truest ally who, according to General FH Grenfell, Governor of Malta, "brought his great knowledge not only of finance but of practical engineering to bear".

Before the tramway arrived a group of promoters were pressing for a concession to build a light railway from Valletta to Sliema. The main stumbling block stemmed from investors' bitter recollection of the Government's shabby treatment of the Malta Railway Company in 1890. The promoters' local representative, Arthur Barbaro Sant, requested Government to take "consideration of what happened to the old Railway so that in the interests of the English investing public, attention should be given to the necessary revision of certain clauses (sic) to be made understandable and clear and which surely it is not the intention of Government to give the present unsatisfactory meaning". Government was asked to revise the terms of concession after the company had submitted proof of the requried capital. Barbaro Sant pointed out that it was incomprehensible that Government should guarantee the authorised debentures of the Hydraulic Dock at Pietà and yet refuse to revise the concession of a useful public utility which had not asked for a subsidy but would actually pay £20 annually into the Treasury.

ALL COMMUNICATIONS MUST BE ADDRESSED TO THE COMPANY.
CUSTOMERS CARS ARE DRIVEN BY OUR STAFF AT CUSTOMERS RISK AND RESPONSIBILITY





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Works & Stores, ALFRED PLACE, TOTTENHAM COURT ROAD.

London, W.C. 26th June, 1911.

27 JUN 1911
FOR THE CROWN AGENTS

The Crown Agents for the Colonies,
Whitehall Gardens,
S.W.

Dear Sirs,

With reference to our Tender for Railway Motor Coaches for Malta, reference W/Malta Railway/394/1, we beg to inform you that we have supplied similar cars to:-

Friedrich Krupp, Essen a/Ruhr
The Royal Railway of Wurttemberg
and a Railway Company of Mexico.

and further at the present time we are manufacturing the motors and gears for Railway Coaches manufactured by:-

Gebr. Hofmann & Co. A.G., Breslau III

The Chassis etc., are made by this firm, we supply the motor and gear which are tested and mounted in our Works.

Yours faithfully,

FOR MILNES-DAIMLER, LD.

Manager of the Commercial Vehicle Department

BW/AML.

Facing page: Milnes-Daimler Ltd was one of five firms which tendered for the supply of petrol-engined cars for the Malta Railway in 1911. The other four firms were the Drewry Motor Car Co, McEwan Pratt & Co, the Brush Electrical Engineering Co, and the Wolseley Tool & Motor Car Co. Milnes-Daimler's tender was the most expensive. The Crown Agents recommended the acceptance of the lowest, tendered by Drewry Motors. The proposal was never taken up

Right: Railway timetable for September 28, 1908

MALTA RAILWAY.

Train Service from October, and until further notice.

WEEK DAYS.

VALLETTA—NOTABILE.						NOTABILE—VALLETTA.					
Valletta.	Floriana.	Hamrun.	Birchcara.	Attard.	Notabile (Museum) Station.	Notabile (Museum) Station.	Attard.	Birchcara.	Hamrun.	Floriana.	Valletta.
a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.
								a 5.20	5.30	... ...	5.36
		4 26	4.28	4.36	4.50	a 5.20	5.30	5.38	5.46	... ...	5 54
		5. 5	5.14	To Birchcara only				d 5.58	6. 6	6.10	6.14
								d 6.40	6.48	6.51	6.54
5.40	5.43	5.46	5.54	To Birchcara only		d b 6.45	6.57	7. 4	7.12	7.15	7.18
6. 0	6. 3	6. 6	6.16	6.21	6.40						
6.20	6.23	6.26	6.35	To Birchcara only				d 7.24	7.32	7.35	7.40
7. 4	7. 7	7.12	7.23	To Birchcara only							
7.25	7.27	7.32	7.40	7.46	8. 2			8. 5	8.13	8.17	8.20
7.45	7.47	7.52	8. 0	To Birchcara only		b 8.10	8.21	8.26	8.33	8.38	8.42
8.23	8.26	8.33	8.38	8.44	9. 2						
b 9.30	9.33	9.38	9.48	9.54	10.12	9.10	9.25	9.30	9.38	9.42	9.46
10.40	10.43	10.48	11. 0	To Birchcara only		10.20	10.34	10.40	10.48	10.53	10.58
								11.10	11.18	11.22	11.26
b 11.10	11.13	11.18	11.27	11.33	11.51						
						p.m.	p.m.	p.m.	p.m.	p.m.	p.m.
p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	b 12. 0	12.14	12.20	12.28	12.32	12.38
b 12. 5	12. 8	12.12	12.20	12.26	12.44						
						12.48	1. 2	1. 8	1.16	1.20	1.25
									2.10	... ...	2.18
1.10	1.13	1.16	1.24	1.30	1.48	2. 4	2.16	2.23	2.32	2.36	2.40
1.30	... ...	1.36	To Hamrun only								
2.25	2.28	2.32	2.42	2.48	3. 6	b 3.15	3.27	3.35	3.43	3.47	3.52
b 3.20	3.23	3.28	3.35	3.41	4. 0	b 4.10	4.22	4.30	4.38	e 4.44	4.47
d b 4.15	4.18	4.24	4.30	4.30	4.54	5. 0	5.12	5.20	5.28	... ...	5.37
c d 5. 5	5. 8	5.13	5.20	5.26	5.44	b 5.55	6. 7	6.15	6.23	6.27	6.32
								7. 0	7. 8	7.12	7.15
a 6. 0	... ...	6. 8	6.15	6.21	6.40	6.55	7.10	7.17	7.25	7.29	7.33
d 6.30	6.39	6.45	6.55	To Birchcara only							
d 7.20	... ...	7.25	... ...	To Hamrun only							
d 7.38	... ...	7.45	... ...	To Hamrun only							

SUNDAYS AND FESTIVALS.

FORENOON.

									8.50	... ...	8.55
7. 0	7. 3	7.10	7.20	7.26	7.45	7.50	8. 2	8.10	8.18	8.21	8.24
8.30	8.33	8.40	8.50	8.56	9.15	9.20	9.32	9.40	9.50	9.53	10. 0
10.30	10.33	10.40	10.50	10.56	11.15	11.20	11.32	11.40	11.50	11.53	12. 0
12. 2	... ...	12.10	To Hamrun only								

AFTERNOON.

									1. 0	... ...	1. 5
									2. 0	... ...	2. 8
1.10	... ...	1.16	1.27	1.35	1.53	2. 0	2.12	2.23	2.32	2.35	2.38
2.25	... ...	2.32	2.42	2.48	3. 6	3.15	3.27	3.35	3.43	3.47	3.52
3.20	... ...	3.28	3.33	3.41	4. 0	4.10	4.22	4.30	4.38	4.44	4.47
4.15	... ...	4.23	4.30	4.36	4.54	5. 0	5.12	5.20	5.28	... ...	5.37
5. 5	5. 8	5.13	5.20	5.26	5.44	5.55	6. 7	6.15	6.23	... ...	6.32
								7. 0	7. 8	... ...	7.15
6. 0	6. 3	6. 8	6.15	6.21	6.40	6.55	7.10	7.17	7.25	... ...	7.33
6.36	6.39	6.45	6.54	To Birchcara only							
7.20	... ...	7.25	To Hamrun only								
7.38	... ...	7.45	To Hamrun only								

a Workmen's Train: This train stops only at Hamrun, Birchcara, Attard, Notabile and Museum Station. The forenoon workmen's train starts from Notabile and Museum Station.
b Stops at Balzan Station at the request of passengers.
c Workmen's train on Wednesdays, Saturdays, and on the eve of every holiday.
d Penny tickets are issued for Workmen travelling by this train between Valletta and Birchcara.
e This train does not stop at Floriana Station on Saturdays, Wednesdays, and on the eve of every holiday.

SAN SALVADOR.—Trains will stop at St. Salvator (Sundays and Festival afternoons excepted) at the request of passengers.

FIRST CLASS.—No First Class accommodation will be provided on Mondays and Thursdays and on the days following a public holiday, on the following trains:—
4.20 a.m. from Hamrun to Notabile.
5.20 a.m. from Notabile to Valletta.
8. 0 a.m. from Valletta to Hamrun.

FARES.

Between Valletta and Birchcara or any intermediate point ...	1st Class 3d.	3rd Class 1½d.	
Between Birchcara and Attard or any intermediate point	" 3d	" 1½d.	
Between Attard and Museum Station or any intermediate point ...	" 3d.	" 1½d.	
Between Valletta and Attard	" 5d.	" 2½d.	
Between Valletta and Museum Station	" 7d.	" 3½d.	
Between Birchcara and Museum Station	" 5d.	" 2½d.	
WORKMEN'S TRAIN—Between Valletta and Birchcara or any intermediate point			1d.
Between Birchcara and Notabile Station or any intermediate point ...			1½d.
Between Valletta or Hamrun and Attard or Notabile Station			2d.

Valletta Station,
28th September, 1908.

N. BUHAGIAR,
Manager and Engineer

Negotiations were deadlocked over the Government's unwillingness to revise terms. An exchange of correspondence followed on what Governor Sir FW Grenfell was purported to have said to Lord Beresford in support of the enterprise. The project eventually failed because the Company did not prove its capital.

The other company which cast covetous eyes on Malta succeeded in obtaining a favourable concession thanks to Strickland's absence and perhaps, to some degree of manipulation. Macartney and McElroy were

renowned constructors and operators of municipal tramways. When Strickland drafted their concession he added the nefarious forfeiture clause already used with lethal effect on the Malta Railway Company. Strickland objected to any form of parallel mechanised competition for a railway which he had managed to recuperate. Macartney and McElroy bided their time until his departure for the Leeward Islands. With him out of the way, they obtained the concession by means which Strickland himself later described as "dubious and fraudulent".

The 99-year Tramway concession was signed on July 2, 1903. It gave the Company the right to construct and operate a Tramway from Valletta to the Three Cities, Zebbug and Hamrun (up to Fleur-de-Lys Gate, near Vincenzo Bugeja Institute). Strickland's worst fears materialised because the Hamrun route robbed the railway of its traffic. The railway skirted Hamrun up to the Central Station, leaving there for thinly populated, rural Santa Venera. Since trams passed through Hamrun's High Street it was not unreasonable for people to stop using the railway. Two years later the tramway was extended to Birkirkara, signalling the railway's first deficit since the old Company's days. Government was impotent since the Tramway concession precluded forfeiture and prevented the railway from electrifying. The concession hampered the railway till the end, exacerbated its problems and rendered Strickland helpless in his dealings with the Tramway Company.

Soon the railway succumbed to the tram competition. A check by Buhagiar for the month between March 20 to April 19 during the years 1903-5 revealed that railway receipts had gone down from £827.6s. in 1903 to £732 in 1905. On March 20, 1905 the Tramway lowered its fares to 1d (half-penny less than the railway for the same distance). Buhagiar conducted surveys of tram passengers at Birkirkara and soon realised why he was losing money!

Betwen 1903 and 1914 the railway began, predictably, to lose money at an average of £575 annually. During the discussion of the Colonial Estimates for 1911-12 the Lieutenant Governor observed that the public purse would have to continue to bail out the railway to keep it in operation. He observed that the tramway was making 2d profit out of every 3d earned, while the railway was losing 4d!

The Lieutenant Governor also referred to the cabs at Porta Reale which charged 6d a head to Notabile; by paying 3d on the railway the public was subsidising its own transport!

Buhagiar began to economise though not at the expense of safety and regular maintenance. Handrails and lamps were installed at Museum in 1903 and one carriage was fitted with electric light. The Hamrun workshop and yard were enlarged. Buhagiar looked askance at the Tramway and tried to upstage it with all the means at his disposal. His heavier engines (Nº 7, 8, 9, 10) pulled nine to ten carriages, enabling him to lower workmen's fares in 1906. Group charter rates on special trains were started in 1903. The relevant bye-laws stated that:

1. five hours' notice had to be given;
2. there would be a minimum charge of £2 for 130 passengers or less;
3. the ordinary fare would be charged for a number exceeding 130 in addition to the minimum charge;
4. they were available during railway working hours only.

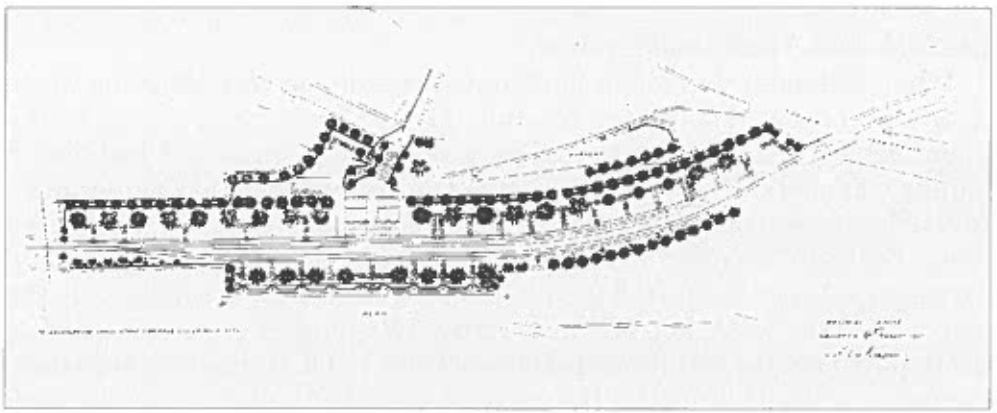
On February 19, 1905 600 tourists from the *SS Arabia* were taken to Notabile on special trains chartered by Mr Clarke, a New York travel agent. Several charitable organisations and voluntary societies asked Buhagiar for rebates. These were usually granted, but Buhagiar had to account for the reduction in revenue in memos to the Lieutenant Governor. Buhagiar later rejected a request by the Boy Scout Movement to allow uniformed scouts to travel at half fare.

School passes were introduced in 1907, permitting children from Notabile and other villages along the line to attend the Lyceum in Valletta or the Seminary in Floriana. The relative notice was published on December 14, 1906. It stated that from January 2, 1907 and until further notice railway tickets at reduced fares would be issued to children and youths living in the country and attending schools at Valletta and Floriana. Between Valletta and Birkirkara or any intermediate point - one penny; between Valletta and Attard or any intermediate point - one and a half pence; between Valletta and Museum or any intermediate point - two pence.

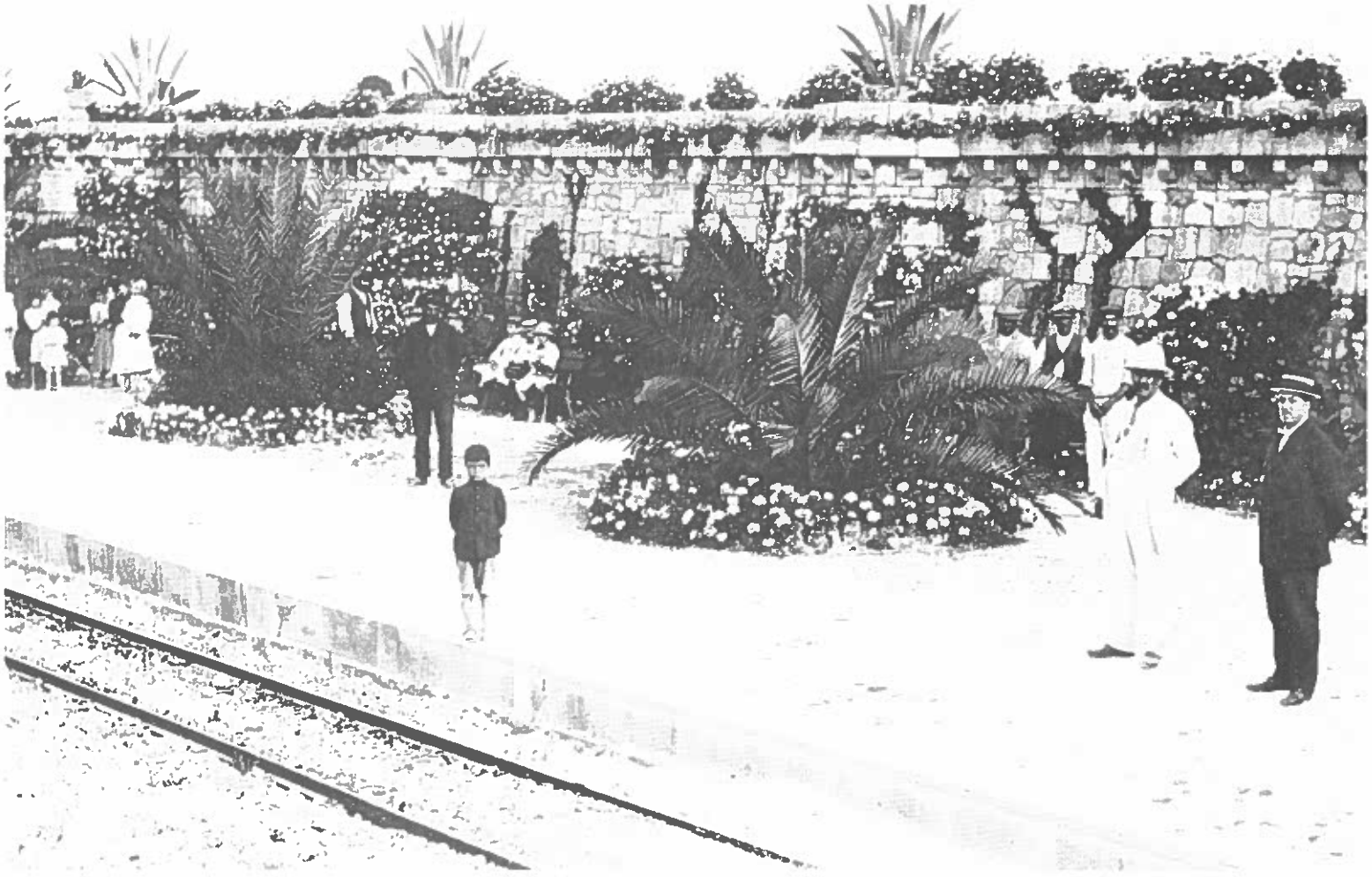
The following bye-laws applied:-

a. School Directors who wished their pupils to travel at reduced fares had to send to Buhagiar's office a list of pupils who lived in the country, and attended their schools.
b. The Director of each school had to forward the names of pupils who ceased to attend school.
c. Each scholar would be provided with a permanent non-transferable pass authorising him to travel at reduced fares.
d. The student lists would be checked occasionally; if any school Director declined to co-operate the passes issued to his pupils would be withdrawn.
e. Passes were not valid on Sundays and Festivals.
f. All passes would be signed by the Railway Manager and by their respective holders; if any holder failed to show his pass on demand, he would be charged full fare.
g. If holders of passes attempted to defraud the railway, their passes would be immediately withdrawn.

If the energetic Buhagiar's methods did not always endear him to his staff, his economy measures guaranteed their continued employment and ensured a lower deficit. Coal clinkers were sold at Valletta Station for use in stone stoves (fuklari) and savings on coal bills were achieved by the manufacture of briquettes (a mixture of coal dust and tar baked in two



Details of the underground loose-stone drainage system which Nicola Buhagiar built at Birkirkara Station in 1917. The system permitted year-round irrigation by rainwater collected in pits beneath the station



Above: Buhagiar's handiwork at Birkirkara was reminiscent of British branch line stations. The railway gardens were a boon for adults and children including the single-sandalled boy on the platform edge

ovens at Hamrun workshop). Buhagiar planted Myoporum trees along the line. Their prunings as well as the wood of the old sleepers were used as substitute fuel for the boilers. Birkirkara and Attard stations were enlarged in 1910, the former becoming the only two-storey station on the line.

The First World War

The unprecedented rise in the price of coal during the Great War exacerbated the Railway's financial problems. Ironically enough more passengers were carried, since the island became a massive transit centre during the Gallipoli Campaign, thousands being hospitalised in Malta, earning the island the appellation "Nurse of the Mediterranean". The Government authorised Buhagiar to carry the so-called walking wounded free of charge. However, the railway could not cope and several were being left stranded, there being no space in the comparatively tiny carriages. The number of wounded carried averaged 106 daily but on Saturday, September 18, 1915, a record number of 409 travelled on the railway. As the railway was losing money, it was decided to charge the wounded half fare, a practice used on London's buses and Underground.

When Buhagiar decided to contribute towards the War effort, he wrote to the Munitions Committee on July 11, 1915 asking to assist in the manufacture of arms. His workshop was well equipped and included a foundry (cupola). The Munitions Committee commissioned the manufacture of hand grenades at the rate of 1s. 1d. each. About 100 were produced daily. Buhagiar ensured that normal maintenance work on engines and carriages was not hampered in any way by this profitable sideline. By the end of 1915 the workshop had produced 4,700 plugged grenades, earning his Department the sorely needed sum of £264.7s.6d. Buhagiar's assistant, Caruana, praised his men for the great interest they had shown in the work

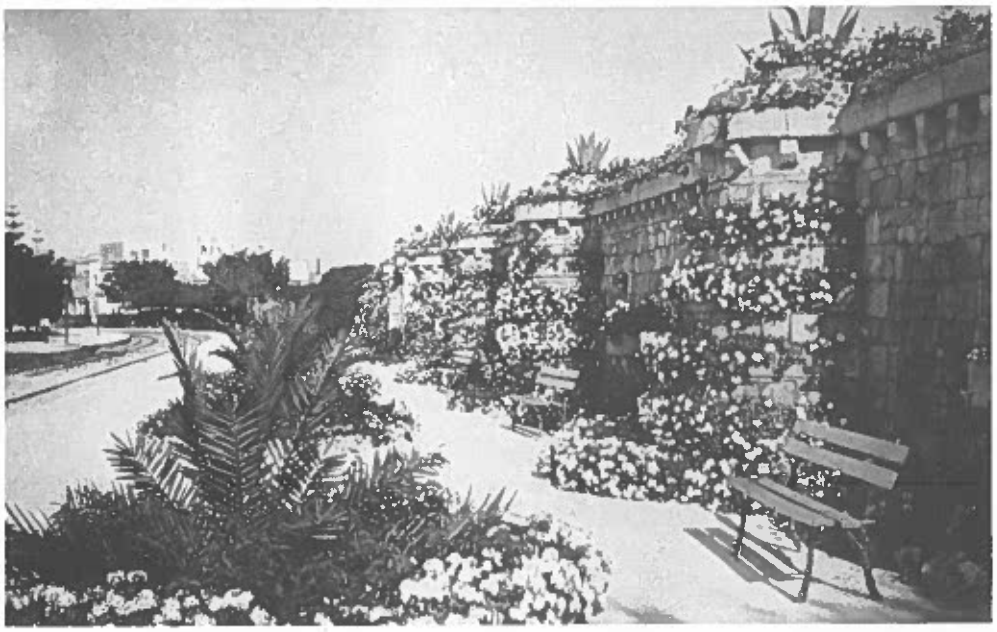
and their pleasure in doing their bit. He hinted that his men would welcome a medal or citation similar to that awarded to civilians on war service in England!

In 1916, Buhagiar introduced a system of loose underground drainage at all stations with the double objective of removing rain water run off from the permanent way, and using it to irrigate his railway gardens.

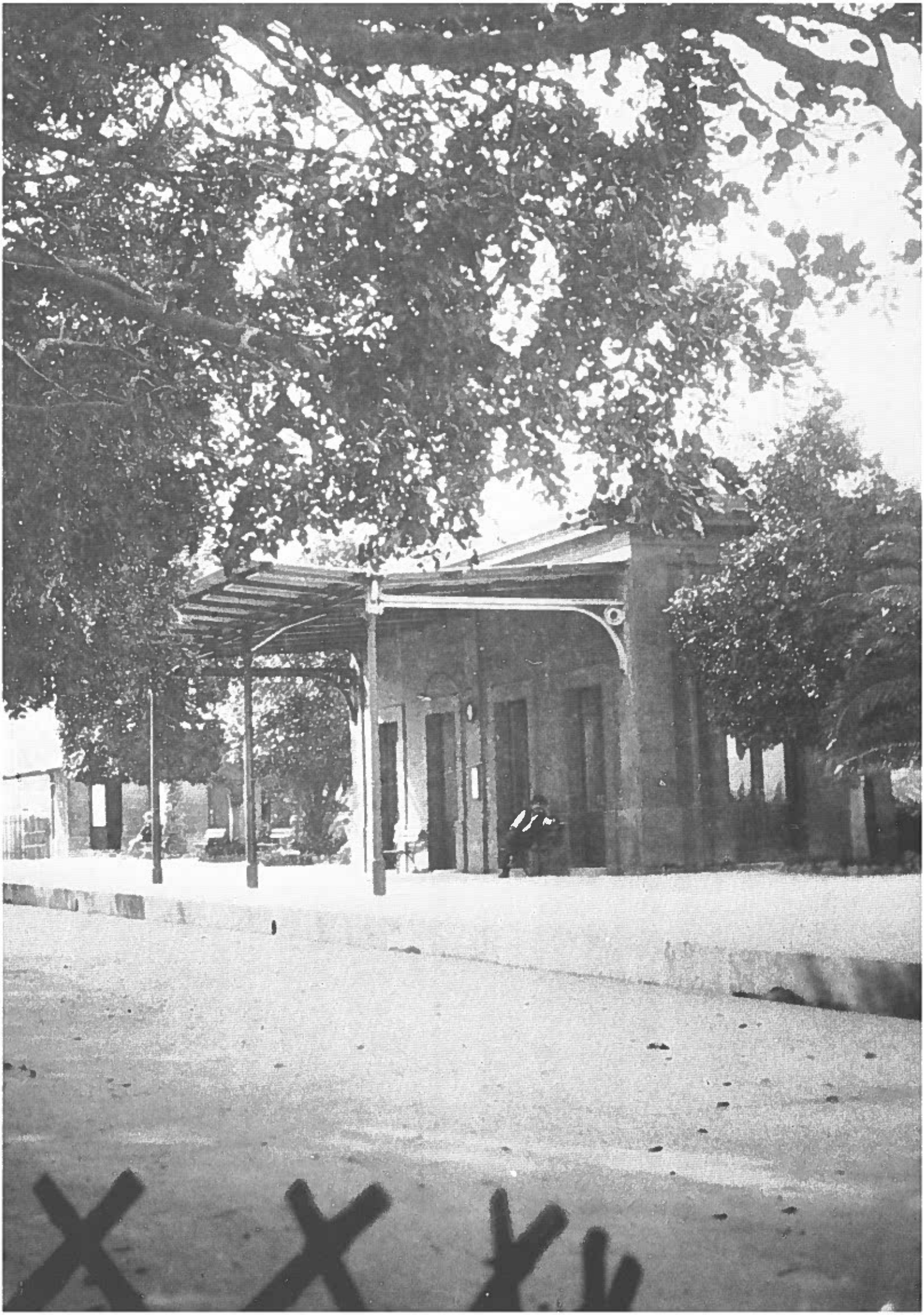
No sooner had Strickland returned to Malta in 1917 than he wrote to the Lieutenant Governor about the railway. In a July 4, 1917 letter he observed that the trains were often late and that the engines which he "caused to be bought at scrap-iron prices more than 20 years ago were still running". Furthermore, "the Railway is evidently suffering from want of capital because the Government allowed a Tramway to be laid parallel to the most remunerative portion of the line under conditions which may deserve further enquiry".

Strickland suggested electrification (in defiance of the Tramway clause) to ensure faster and frequent services. The Railway would be best administered by an independent Board of Commissioners as was done in Australia. These would be appointed for five years to administer the Electricity and Railway Departments. The Board would be empowered to borrow capital, invest in extensions and improvements and buy the Tramway at a fair price fixed by the Courts with an added percentage for compulsory purchase. In his opinion steam engines had no future and the Maltese engines had better be sold to the French Army for service on the Western Front.

In October 1917 he reiterated his earlier observations and referred to rumours circulating about the suspension of the Tramway service. He viewed this as an exceptional opportunity "to bring the Railway and the Tramway under one economical administration instead of having them in competition which is detrimental to both". Compulsory purchase of the Tramway would be used and the Company's power station at Zammit Dock, Marsa, would be used to power both trams and trains. Strickland urged immediate action since "it would cost comparatively little to run the Malta Railway by electricity and the financial and technical advantages appeared to justify action without waiting until the War is over".



Another view of the miniature garden Nicola Buhagiar created at Birkirkara Station



THE END OF THE LINE

"Everything considered, therefore, the railway undertaking can by no means, in my opinion, be turned into a paying concern."

C. Rizzo, Acting Manager,
March 12, 1928

After the First World War several motor bus chassis were imported; within the following decade they would deal the railway its *coup de grace.*

The railway became the subject of intense political bickering in the new Legislative Assembly created under the 1921 Constitution. Strickland retained his position as the authority on the subject. He had taken it over in 1890, made a success of it for a time and, pragmatist that he was, would now be the first to realise that it was doomed.

The Rider Report on electrification

In 1920, following a wage increase, electrification was mooted as a solution to the problems of the railway. Mr JH Rider of Preece, Cardew and Rider, consulting engineers of London, arrived in Malta to report on the Malta Electricity Undertaking and the possibility of electrifying the railway. The railway had made a profit of £1,049 in 1918 and £902 in 1919 after an increase in the price of coal. Rider advised the Company to reduce its operating expenses by introducing electric coaches on the line.

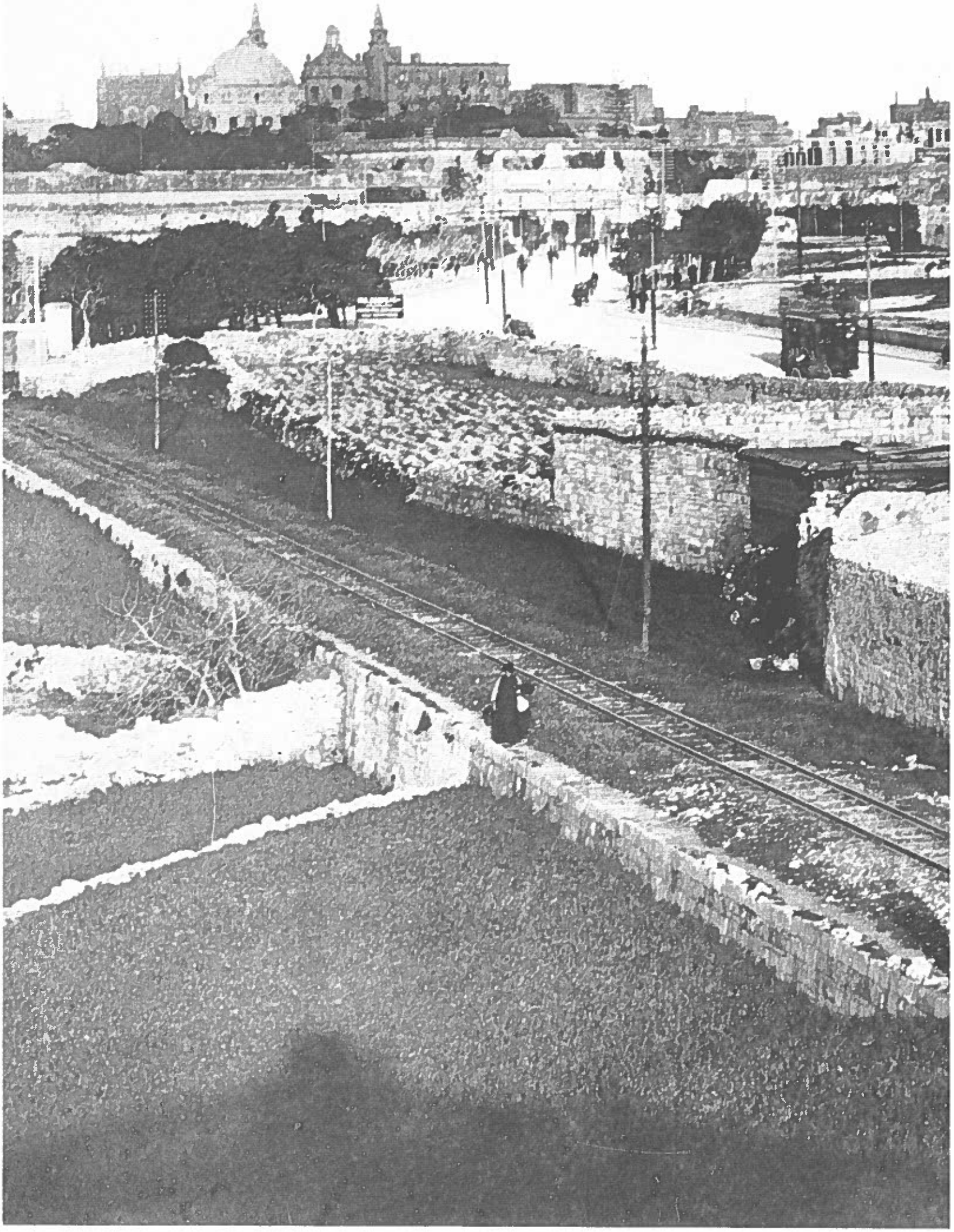
A short train made up of an electric coach and two trailer coaches would be used during peak hours. The electric coaches Rider was proposing would reduce the journey time between Valletta and Mtarfa from 35 minutes to 25. On the basis of local traffic, Rider advised that a total of four electric and eight trailer coaches would be required. The 42lbs (19kg) per linear yard weight of the permanent way was considered sufficient for the electric coaches Rider was proposing.

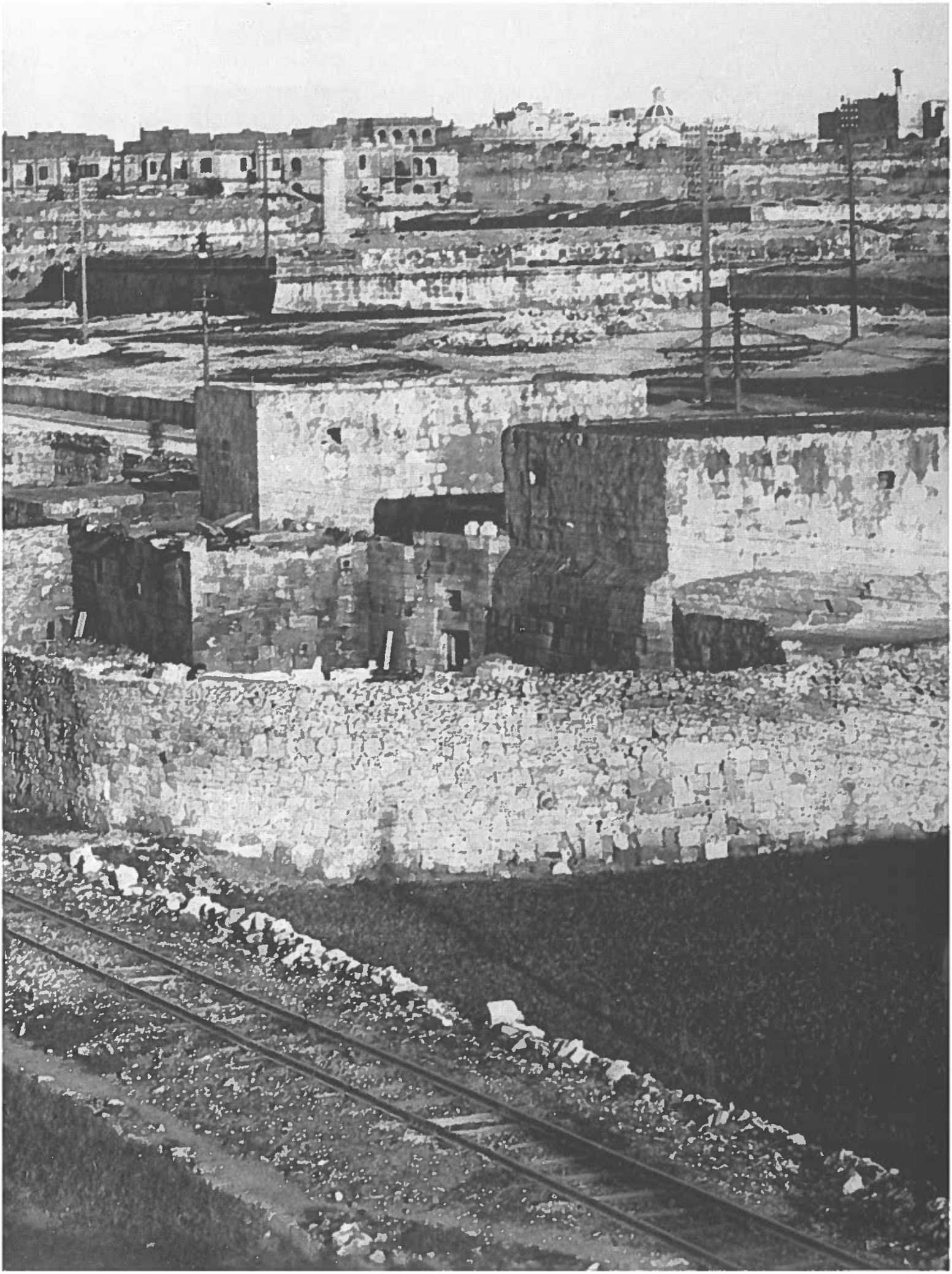
The proposed coaches would consume one million units of electricity annually. Receipts would rise to £31,200 if the number of passengers were increased from 1.5 to 2.5 million without raising the fares. After deducting expenses there would be a profit of £8,200.

Had the Rider Report been implemented, the importation of several additional buses during the decade would have made electrification a dubious investment. However, Government had neither the will nor the capital and Malta was saddled with an ageing railway which Strickland defined as a "Haereditas damnosa". Strickland viewed the railway as a charitable institution run for the benefit of landowners who lived along the line, himself included. He admitted that it was very convenient for him to leave Villa Bologna on hearing the whistle and board a train to Valletta, but that was simply an unfair public subsidy. His detractors censured him for

Facing page: Although Attard Station was conveniently situated for Lord Strickland (he lived at Villa Bologna, across the road from the station gates, at left) he argued against retaining the railway because he was against unfair subsidies and because he believed that motorised traffic would be the best solution for a small island like Malta

Following pages: All roads lead to Porte Des Bombes. In this photograph near Blata l-Bajda is the railway line and Guard Hut N° 1 (extreme right). Also visible is one of Macartney McElroy's trams and a matchbox bus





twice repairing his car in the railway workshop, but he defended his right as a taxpayer to repair his car there against payment.

In 1922, he proposed an extension to Sliema, something which the Tramway had always desired, in exchange for a merger. Other extensions were mooted for Mosta and St Paul's Bay. Advertising space in the carriages and stations was also offered as a source of revenue, but the response was disappointing.

Carmel Rizzo succeeded N Buhagiar in May 1924. He was appointed as acting manager. This downgrading at managerial level was either an austerity measure or an indication of Government's indecision. Rizzo's immediate request for £19,000 worth of new equipment was turned down. From the opposition benches Strickland urged the Government to stop equivocating and make up its mind - either decide to improve the railway or else "sell the engines to the Italians in Tripoli or make a present of them to the Indian Government".

Although Lord Strickland (1861-1940) was the railway's best friend, he realised that the advent of motor traffic had doomed the railway and advocated its early closure

The Bennett Report

In 1928, Mr AP Bennett, former vice-president of the Institute of Locomotive Engineers, arrived in Malta to advise Government on the Railway and Telephone departments. Bennett stayed at the Great Britain Hotel in Strada Reale (Republic Street).

In his February 3 report, he compared Malta's railway to Jersey's in the Channel Islands. The Birkirkara-Notabile section resembled that beyond St Aubin's where a frequent service became unprofitable after peak hours. When buses started on Jersey in 1922, the railway operated five steam locomotives each drawing 7-8 carriages; only one train in every two or three continued beyond St Aubin's to maintain a low train mileage and reduce expenditure. Profits plummeted when a regular bus service commenced between St Helen's, the capital, and St Brelade's. As it would have been uneconomic to match motor buses' frequent departures, another solution had to be found.

In 1924, Jersey Railway tried out a Sentinel boiler and engine on a coach seating 46 passengers. The 30lbs/mile of coal consumed by the old locos fell to 7lbs/mile. This successful and profitable experiment was followed by an order for two coaches from Sentinel. Another Jersey railway, the Eastern, followed suit and eventually Sentinel coaches were exported to 20 different countries. In England, the London, Midland and Scottish Railway and the North Eastern Railway, themselves engine and carriage builders, purchased 32 Sentinel coaches. The Egyptian Light Delta Railway purchased 49 and all Sentinel users had reported reductions of 50% in coal consumption.

Bennett extolled Sentinel machines. He mentioned a similar type of coach built by the Clayton Waggon Co but this had not been as widely tried out. Sentinel boiler pressure could be raised in 45 minutes without any "nosing" being caused by the alternating pull and push of the cranks. Sentinels were steadier and kinder to the track, had a lower axle load and were faster and safer. Bennett felt that steam was superior to petrol, oil or electrically powered coaches, it being less prone to breakdowns.

Bennett concluded his report by recommending solutions to the problem

facing Malta's railway. He asserted that local trains were irregular and far in between. There was no evening service for residents living beyond Birkirkara who were therefore unable to tarry in Valletta. Bennett suggested that Malta adopt the Jersey and the Egyptian Light Railway practice and abandon its heavy, irregular trains in favour of fast, short and regular service. For a start two engines could be converted into Sentinel models which had a speed of 45 miles per hour and could cover 200 miles a day or 70,000 annually without strain.

Sentinels could draw, on the level, loads of 50 tons, the equivalent of seven carriages containing 180 passengers. He hinted that Maltese engineers could travel to Egypt to watch the Sentinels at work or alternatively, Company engineers could be invited to Malta to give free advice about the conversion. Since the demise of the railway would be deplorable, he urged Government to examine all possible means of retaining it.

Rizzo's views on the Bennett Report

C Rizzo, the Acting Manager, was asked for his views on Bennett's report. Rizzo, who had inherited the unenviable job of managing an obsolete railway, demonstrated an acute awareness of the line's irreversible fate. He conceded Sentinel wagons' superiority over his engines but he was sceptical of their ability to tip the scales in competition with the buses.

Rizzo accused Bennett of deliberate distortion when basing his revenue figures on a half penny per passenger mile. In reality 31% of Maltese passengers paid a quarter of a penny, 62% half and only 2% (the first class) paid one penny per mile. If fares were increased less people would use the railway. Bennett had also conveniently forgotten that Malta's seven-and-a-half mile railway had 23 stations or level crossings manned by 32 pointsmen, chainmen, gatekeepers and substitutes costing the Company £1,640 annually. The relatively large number of level crossings stemmed from Andrews's original plans being largely ignored. Andrews wanted to abolish these and Gatt had concurred by building San Salvatore overway and planning others. Rizzo advised that, if the service was to be retained, one or two Sentinel locos and one steam rail coach could be bought to replace engines Nº 1 and Nº 2. Rizzo argued that Bennett's criticism of the railway timetable was unfair because late evening trains on Sundays and feast days had not been patronised.

Strickland concurred with Rizzo. He moved a vote for a remuneration of £50 for Bennett but reiterated his conviction that the railway was past its time. He had travelled to Jersey to see for himself and found that "a person there had succeeded in prolonging the life of a decaying railway such as ours". Strickland thought that the Sentinels would also require a subsidy and the only solution was to cut the losses and sell. He said that Bennett, for all his praise of steam rail coaches, was an expert and "an expert, of course, wants a job like everybody else".

Sale by tender

There was an attempt to privatise the Railway. A call for tenders was published in the *Government Gazette* of June 1928. The tenderers had to observe these conditions:

1. The use of the existing workshops, rolling stock and engines, would be applied for railway purposes only.

2. It would be transferred as a going concern for 100 years as such or for tramway or other transport service at a nominal fee of £1 per annum.
3. It would revert to Government without compensation should the railway stop the service for a total of 30 days in a year.
4. There would not be any reduction of service than at present and any fare increases were subject to approval by the Legislative Assembly.
5. No transfer or disposal of stock, land etc. would be allowed. The permanent way, engines and rolling stock would be kept in good working order and safe condition. The Government reserved the right of inspection at any time, and any equipment declared unsafe or unsatisfactory would not be used until repaired to the satisfaction of the Government.
6. The Railway School would remain open and no less than 15 apprentices in trades indicated by Government were to be inducted annually for training. Each apprentice was to be attached to an instructor.
7. Tenderers had to state whether they intended to operate the line as a railway, tramway or any other form of transport.

Government showed its benevolence by promising "an equitable consideration to any *force majeure* that would render any condition impossible". The Tramway's imminent demise had not yet been made public, or the electrification clause would not have been added in small print at the bottom of the tender. This clause gave the Tramway the exclusive right to

In 1928 there was a proposal to convert the line into a highway to reduce congestion at Hamrun and Birkirkara

electrification. Rider had suggested a Railway-Tramway merger, but the owners of the latter refused, unless they were granted an extension to Sliema. The Government had later refused an invitation to buy the Tramway. Before closing down, the Tramway offered to take over the railway in an attempt to rationalise competition but Strickland had never forgiven the Tramway for undercutting the railway from 1903 onwards.

Meanwhile Sentinel followed up Bennett's report by lobbying the pro-railway Nationalist Party knowing that they could not count on Strickland's support. Although Sentinel Waggons were primarily locomotive makers they evinced an interest in tendering.

Sentinel enlist Sir Ugo Mifsud's help

In October 1928 Sir Ugo Mifsud, the Leader of the Opposition, was in London on his way home after a visit to Australia. Sentinel invited Sir Ugo to visit their impressive works. Mr Beaumont of Sentinel Waggons then visited him at the Mayfair Hotel and requested an interview. Sir Ugo asked Beaumont to put his proposals in writing.

Beaumont informed Sir Ugo that they were not putting in a tender because the terms were unrealistic since nobody could foresee the shape of transport in a century's time. He admitted that Sentinel wagons would bring about redundancies. Sentinel offered to send a representative to Malta to study the railway set-up.

A Motion to convert the line into a highway

Two unacceptable tenders were received from a Mr Mamo and a Mr Zammit. One of them was brazen enough to ask for a sum of money to operate the railway. Strickland, now in Government, decided to convert the line into a road for fast traffic. In a December 1928 motion he proposed that "the conversion of the railway into a concreted speedway reserved for motor traffic is preferable to the sale thereof".

When moving the motion he said that the House had a golden opportunity to reduce congestion in St Joseph High Road, Hamrun. This had become almost impassable during peak hours with trams, buses, cabs and pedestrians jostling for space at different speeds. He recalled his days as Chief Secretary, when he had made the bankrupt railway work and fend for itself. He admitted that if he were as young in 1928 as he was in 1890, he would still be unable to make it pay because motor cars would shortly displace railways in the same way as steam had replaced sail. The railway had competed with cabs by charging low fares on long trains pulled by heavy engines, a policy which would now fail in competition with buses.

He envisaged the Floriana tunnel as a one-way road (it was not practical to widen it), buses driving through for Valletta and leaving by the new Marsamxett Road. He reiterated his utopian and ambitious plan to adopt the engineering precedent of Switzerland's Saint Gothard tunnel to bring the railway from Strada Reale (Republic Street) to Piazza Regina (Castille Square), then continuing to Victoria Square (Piazza Tesoreria or Republic Square) before finally corkscrewing down to the Marina (Grand Harbour). However, the steep gradients and curves had precluded his plan from becoming a reality. The motion was intended to conclude several years' equivocation but the Opposition filibustered and the debate was adjourned for the final inevitable act.

A motion to suspend railway operations

On May 27, 1929 Strickland moved the following resolution: "That it is advisable to offer the railway under suitable conditions for a 20-year lease and that if no acceptable offer is returned by the 1 August, 1929 the working of the railway by the Government shall be suspended".

During the debate on the motion members exchanged several jibes and insults. A member rose to deliver the "funeral oration" of a public service on that fateful day, while another queried the merits of a Government of technocrats with a half-baked engineer *(mezzo ingegnere)* at its helm. Here Strickland reacted to this personal allusion and interrupted the member with "Tinker, as they say in our language". It was common knowledge that Strickland took a great interest in engineering and few in the Legislative Assembly could vie with his technical knowledge. When both Nationalist and Constitutional members of the House continued to equivocate, Strickland accused them of putting self-interest and votes before the real needs of the country.

Sir Ugo Mifsud then begged leave to lay Beaumont's letter on the table of the House. Strickland objected vehemently, indicating his antipathy towards members who, when in London, were approached by interested parties to plead on their behalf. Sir Ugo said that he was fully cognizant of parliamentary ethics to allow himself to be manipulated. He stressed that Beaumont's letter was relevant to the resolution being discussed, and quoted certain parts to prove it.

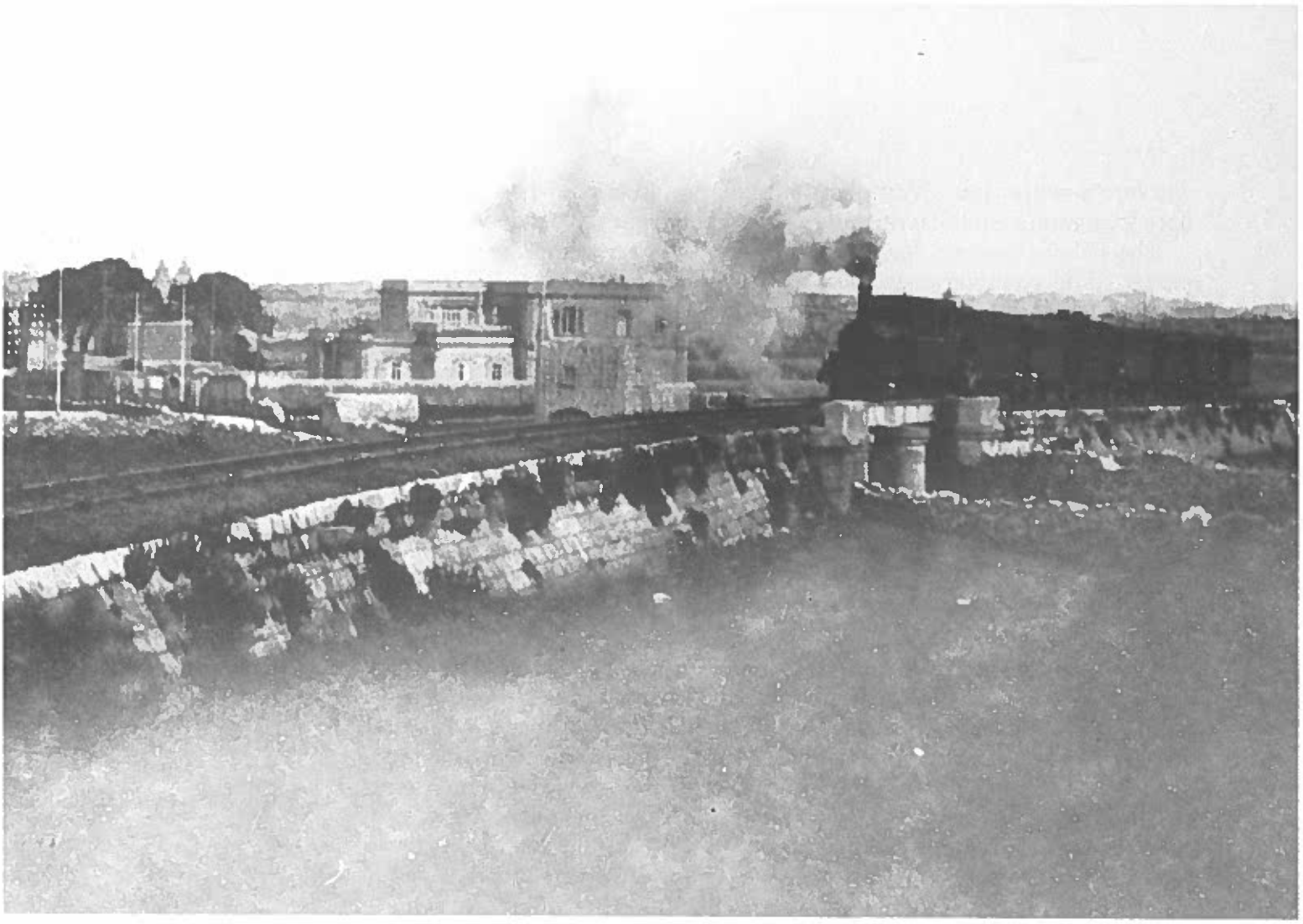
Dr Adami was not surprised that the tenders had been unacceptable since railways were in the red everywhere. He pleaded for a final attempt to reprieve the railway by experimenting with Sentinel coaches. If that failed they would shut the railway forever. Dr Adami also quoted the pro-Government *Ix-Xemx* (The Sun) which wanted to abolish the first-class category as a way of reducing the deficit.

Dr DeGiorgio blamed Government for the deficit which was being caused by the indiscriminate licensing of bus owners competing with the railway. Strickland accused DeGiorgio of being, like himself, one of the subsidised (those who lived next to the line and for whom the railway was very convenient). DeGiorgio denied that he used the railway any more, now that he had a second-hand Ford which he fully intended to continue using when the Hon Prime Minister had passed the capital sentence!

Dr Mizzi accused Government of squandering public funds, citing the £6,500 paid to the British architect responsible for the construction of St Luke's Hospital. Strickland said he would only be offering Sentinel £50 "in the hope that they may tender". Sentinel would have to tender in public, without boodle, reservations and hints of redundancies. £50 was not a high price to pay to mould public opinion and Strickland offered the same amount "to any firm that wrote a letter of weighty description as that presented by the Hon Sir Ugo Mifsud, in fact to any firm from whom we could expect a bona-fide tender". He was convinced that no firm would tender after looking at the gradient.

It was odd that Strickland should raise the problem of the gradient in 1929 when the first surveys had been made in 1873! Gradient or not, Strickland had shown that he had not been taken in by Sentinel's overtures to the Opposition.

Strickland rebutted Dr DeGiorgio's reference to motor coaches at



While the fate of the railway was being debated in the Legislative Assembly, the service continued uninterruptedly although patronage was on the decline

Clintonville in the United States. This railway was 24 miles (38.6km) to our eight. The real determining factor was the gradient, the American line rising 800ft (244m) in 24 miles, or a gradient of about 1%. Ours was 1 in 33, which absolutely eliminated the possibility of running a railway. The railway's first engines resembled Sentinels and would lack sufficient adhesion to pull the heavy trains. Strickland said he had solved the problem thirty years earlier by using heavy engines to give adhesion to the driving axle whilst going uphill. With or without Sentinel wagons, the problem would remain the same from an engineering point of view and Sentinel Wagons would definitely want a subsidy because our railway was too short. He emphatically denied that Salvatore Bridge and Mtarfa had been built for defence purposes; they had served to increase railway revenue. Our railway could have prospered had it been extended to St Paul's Bay; Mtarfa had been a start in that direction. It was time to spend the railway's £8,000 annual deficit on education or roads. No Government had the right to grant itself, or anybody else, a monopoly in the railway, if somebody else could provide a cheaper service. If he had his way he would allow charabancs unlimited travel as long as they were organised. During the debate, Strickland jibed at Mgr Dandria offering the £8,000 for his education, holding Dr DeGiorgio morally responsible for eventual railway accidents and pointing out Dr Montanaro Gauci who, he said, was already leaving the House to avoid voting against the railway. On a more serious note he added: "It is a very troublesome and difficult question, but it is much better to grasp the nettle and do the right thing than go on playing with it".

He was convinced that a frequent charabanc service would increase

workers' leisure time. Waiting at stations would cease when our "out of date, dangerous and disgraceful" railway had been replaced by buses.

The debate was not leading anywhere and Strickland, by now exasperated, offered to withdraw the motion, but the Constitutional member for Notabile, Dr Montanaro Gauci, hedged by tabling a compromise amendment, changing the words "shall be suspended" in the original motion to "shall be considered by the House". The amendment was carried. Equivocation had won the day, but this was no permanent breathing space for the railway. The following year a new bus service to Saqqajja would render the railway's position irretrievable and indefensible.

A Beyer-Peacock engine crosses Princess Melita Bridge on its way to Museum Station. Beneath the central span is Venezia, *one of several attractive matchbox buses which pioneered motor-bus services to all parts of Malta and forced both the tramway and the railway into decline and eventual demise*

Beaumont comes to Malta

Strickland telegraphed Sentinel two days later, offering their representative £50 to visit Malta in case his Company decided to tender. He instructed Rizzo to deal with Mamo and Zammit, the two local tenderers, to see that they would also be given £50 if they should tender again.

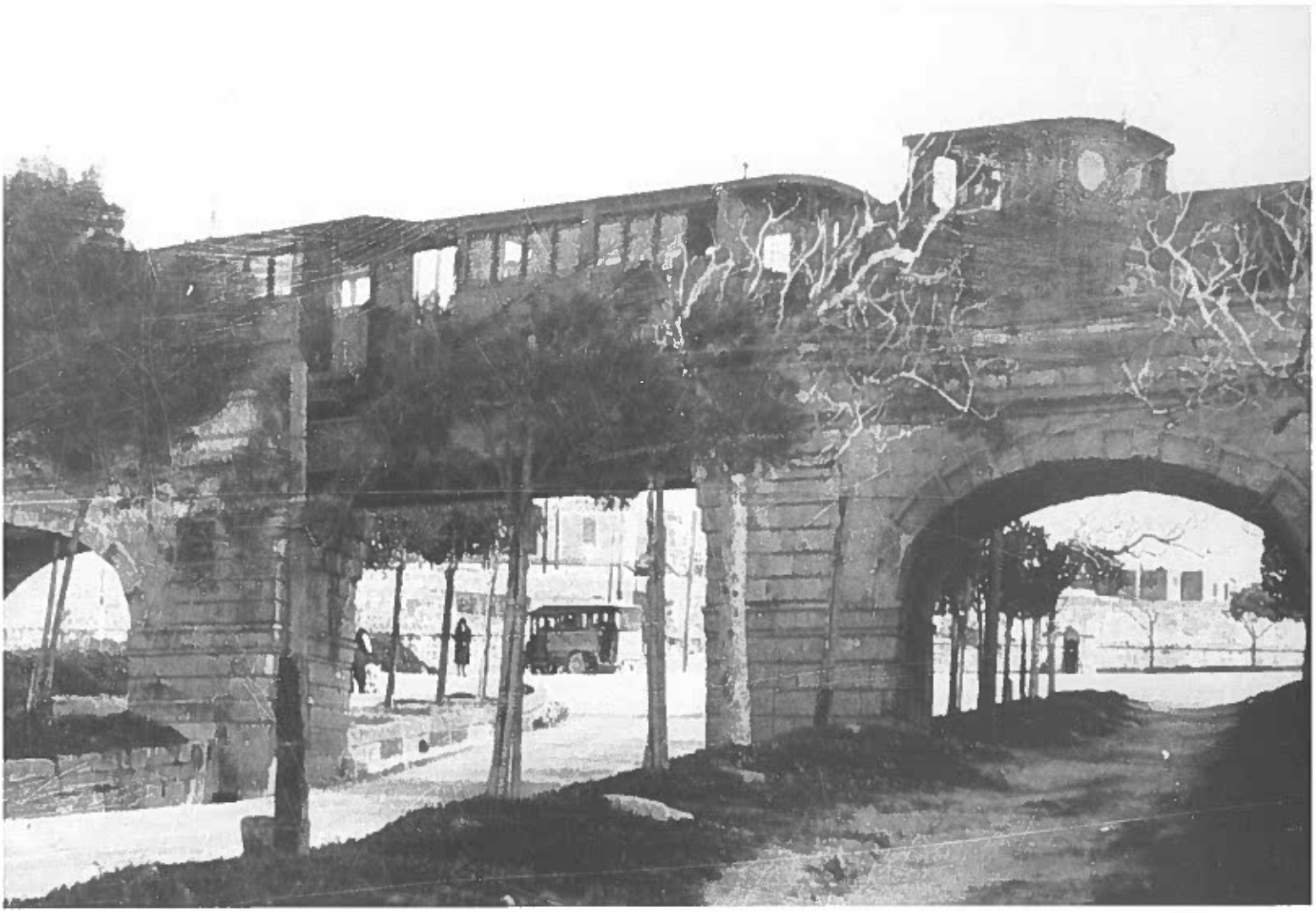
On June 5, 1929 Sentinel informed Strickland that they were unable to accept his offer because the situation did not warrant it even if they retained an interest in the case. Sentinel boasted that since the Bennett Report they had expanded considerably and the London and North Eastern Railway was using 75 of their rail cars, 51 of which were of their latest gear-driven type. They reiterated that their rail cars, inclusive of the local alterations to facilitate operation and staffing, would turn the tide in favour of the Malta Railway. If this was leased they would endeavour to interest the operating company in their engines. They offered to send to Malta a member of their staff who had recently been an executive with British Railways.

Their representative was none other than the same JW Beaumont who had met Sir Ugo Mifsud in London. Since Strickland was away from Malta when he arrived, Beaumont met Sir Augustus Bartolo on June 25. He was given every facility to study the problems and operations of the local line. On July 26, Beaumont sent Strickland a copy of his report. It contained his observations on the Malta Railway, a description of the Sentinel-Cammell rail car and its blueprint, together with the timetables and diagrams of the proposed alterations.

Rizzo opined that Beaumont's recommendations were basically similar to AR Bennett's. He added that his views on Bennett's report also held true for Beaumont's. With the engines at his disposal, the only way to reduce costs was to work a single train up and down throughout the day to reduce coal consumption, personnel and, subject to police approval, manning at some of the level crossings. Frequent trains and lower fares would not improve matters since buses brought passengers closer to their homes than the train. If Government desired to retain the railway, Rizzo suggested a two-year trial period using his old engines in conjunction with a Sentinel car and locomotive.

Rizzo was against the disposal of the Hamrun workshop and cessation of training of the apprentices as Beaumont had recommended. He was also against Beaumont's proposed restriction on bus owners who, in their majority, were poor and burdened with families.

Once Strickland was adamant that the future lay with buses, there was nothing else Sentinel could offer or do. Rider, Bennett, Sir Ugo Mifsud,



Beaumont, Sentinel, all had tried to save the railway. Their motives may not have been exactly altruistic but it was the indomitable Strickland who had his way in the end.

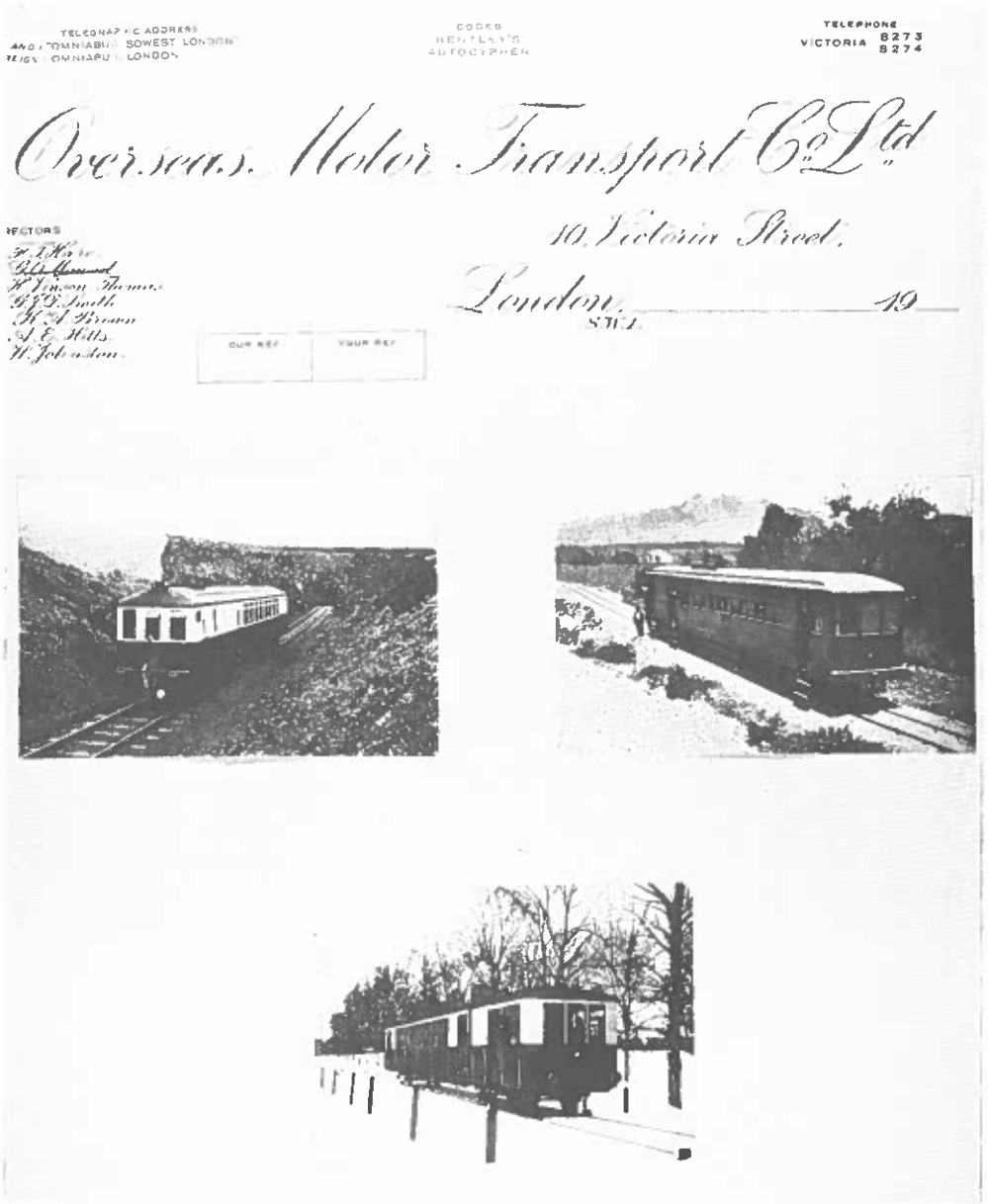
The Tramway winds up

If the railway was ever on the Members' lips, the Tramway's affairs were somewhat obscure. The Company lawyer, Professor A Bartolo, had just deputised for Strickland during Beaumont's visit. It is not clear where his loyalties lay but Strickland had enough confidence in him to trust him with railway affairs during his absence.

The railway's arch-rival also succumbed to motorised transport and closed down on December 16, 1929. Its 200 employees were sacked and Strickland commented that "it is inopportune to shut the railway now - there ought to be a little delay in accepting the inevitable". He had compared the tram and the railway to "two sharks choking each other to death in a fountain". Before the first motor buses appeared the tramway was blamed for the railway deficit. Strickland was against the tramway from the start because its route ran parallel to the train up to Birkirkara and its concession denied the railway electric traction. Had Government decided on electrification, it would have had to usurp this clause, either by buying or expropriating the tramway (as Strickland once suggested) or by going ahead and risking an injunction by the Company.

The Railway bows out - formation of the Traffic Control Board

In June 1930 the railway problem was eclipsed by the far more serious political situation. The May general elections were suspended after the



Overseas Motor Transport Co Ltd., the parent company of the local British Motor Company, proposed to take over the railway and operate new steam-rail coaches similar to the ones shown at left provided they were granted a monopoly of the parallel bus routes. Their proposals echoed earlier suggestions by AP Bennett and JW Beaumont

Bishops issued a pastoral letter which the British Government regarded as a corrupt practice. On June 26 the situation worsened when an Order in Council suspended the Constitution giving the Governor absolute power and authority to legislate for the "peace, order and good government of Malta". The Executive (Strickland and his cabinet) was retained in a consultative capacity for whatever service the Governor, without any obligation, required of them.

On July 9, 1930 Strickland sent the Governor an unofficial memorandum suggesting an urgent reorganisation of the Island's burgeoning, if chaotic, transport system. He urged that the vacuum left by the railway be examined within the context of a comprehensive transport plan for the Island, which would delineate routes, establish fares and safety regulations, issue licences and ensure fair competition. Several of his observations were subsequently embodied in the terms of reference of the Transport Committee and its final offshoot, the Traffic Control Board. The main points of Strickland's memorandum were:-

1. The locally-built bus business involving the owners-drivers had got out of control.
2. A superior type of bus imported by the British Motor Co. (BMC) could be used to fill the railway vacuum.
3. Fares charged by the owners-drivers were lower than those of the BMC which had higher overheads and restrictions on wages, speed, and stopping places.
4. The situation had got beyond control of the Police since owners-drivers could not be relied upon to observe the traffic rules and avoid cut-throat competition.

It would be necessary to estimate the required number of buses of standard construction, capacity and upkeep, and the enforcement of rules on fares, stages, routes, speed and timetables. With the railway gone, buses would have a monopoly and consequently their licences would have to be increased considerably to finance new road works. The railway would have to be shut down immediately since repairs were being neglected to the detriment of public safety.

On July 23, 1930 the Governor appointed a committee to inquire and report on the motorbus service. Dr Pullicino, a committee member, suggested that the railway Manager be asked to submit his views on staff redundancies. Although the railway was not within their terms of reference, its closing date had to be communicated to the public. The Transport Committee also examined the Bennett report and concluded that it was similar to that of Major Wilson, Royal Engineers, who was interviewed after C Rizzo.

On August 1, 1930 Rizzo submitted to the Committee a complete list of employees who were to be absorbed in other Government departments. He attributed the railway deficit to buses and the low fares, adding that, if these were reduced to a penny, they would only get £1 for every 240 passengers and that would hardly improve matters. He published figures for passenger traffic and annual losses incurred in the final decade.

Passengers carried:

1926-27:	134,000 per month
1927-28:	83,000 per month
1928-29:	69,000 per month
1929-30:	56,000 per month

(In June 1930 there were 51,000 passengers against the 109,000 carried in June 1927.)

Annual losses:

1920-21:	£8,865	1925-26:	£3,238
1921-22:	£5,558	1926-27:	£3,700
1922-23:	£2,358	1927-28:	£7,025
1923-24:	£2,675	1928-29:	£4,820
1924-25:	£1,325	1929-30:	£5,336

These figures have to be read in conjunction with various explanatory notes which Rizzo included in his report. For example, in 1927 there were discharges from the Royal Naval Dockyard, whilst in 1930 a regular bus service to Saqqajja was introduced.

MALTA RAILWAY.

TIME TABLE

From 1st November, 1930 and until further notice

Train Service on WEEK DAYS

VALLETTA NOTABILE.

Valletta	Hamrun	Birchircara	Attard	Notabile (Museum) Station
a.m.	a.m.	a.m.	a.m.	a.m.
	4.40	4.46	4.50	5.10
6.6	6.10	6.16	6.20	6.30
7.35	7.40	7.48	7.52	8.10
10 0	10 5	10 13	10.17	10 35
p.m.	p.m.	p.m.	p.m.	p.m.
12.15	12.20	12.28	12.32	12.50
2.0	2.5	2.13	2.16	2.35
4.15	4.20	4.27	4.31	4.45
5.25	5.30	5.37	5.41	6.0
6.40	6.45	6.53	6.56	7.10
7.50	7.55	to Hamrun only		

NOTABILE VALLETTA.

Notabile (Museum) Station	Attard	Birchircara	Hamrun	Valletta
a.m.	a.m.	a.m.	a.m.	a.m.
6.30	6.42	6.51	6.53	7 0
7.7 0	7.16	7.18	7.23	7.30
8.15	8.29	8.37	8.43	8.50
11 0	11 12	11 18	11.23	11.30
p.m.	p.m.	p.m.	p.m.	p.m.
1 0	1 14	1 18	1 23	1 30
3 0	3 14	3.18	3.23	3.30
4.50	5.2	5.6	5.10	5.20
6.5	6.19	6.23	6.30	6.35
7.15	7.19	7.23	7.30	7.35

b. WORKMEN'S TRAIN. This train starts from Notabile and not from Museum.

b No 1st Class accommodation will be provided on this train.

N.B. With the exception of the 4.40, 5.30 and 6.45 a.m. and the 5.20 p.m. trains, all other trains will stop at Msida, Sta. Venera, Balzan and San Salvatore Stations at the request of passengers.

Train Service on SUNDAYS and FESTIVALS

a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.
								6.30	6.35
7. 0	7. 5	7. 13	7. 17	7. 35	7. 15	7. 32	8. 1	8. 9	8. 14
9. 0	9. 5	9 13	9. 17	9. 35	9 45	9 52	10. 1	10. 9	10. 14
							p.m.	p.m.	p.m.
11. 0	11. 5	11. 13	11. 17	11.35	11.45	11. 52	12. 1	12. 9	12. 14
p.m.	p.m.	p.m.	p.m.	p.m.	p.m	p.m.			
12. 20	12. 25	to Hamrun only						1. 0	1. 5
								1. 52	2. 0
1. 15	1. 20	1 28	1 32	1 50	2. 5	2. 12	2. 23	2. 30	2 35
2. 10	2. 15	2. 23	2. 27	2. 45	3. 5	3. 12	3. 23	3. 30	3 35
3. 10	3. 15	3. 23	3. 27	3. 45	4. 5	4. 11	4 23	4. 30	4. 35
4. 10	4. 15	4. 23	4 27	4 45	5. 5	5 12	5 23	5. 30	5. 35
5. 10	5. 15	5. 23	5. 27	5. 45	◆ 6. 5	6. 12	6. 23	6. 30	6. 35
6. 10	6. 15	6 23	6. 27	6. 45	◆ 7. 5	7. 19	7. 23	7. 31	7. 36
6. 10	6. 45	to Hamrun only							
7. 30	7. 45								

N.B. Forenoon trains will stop at Msida, Sta. Venera, Balzan and San Salvatore Stations at the request of passengers.

◆ Trains marked with this asterisk will not stop at Intermediate Stations. All other afternoon trains will stop only at San Salvatore Station at the request of passengers.

FARES: 1st. CLASS

Between Valletta and Birchircara or any Intermediate point 4d.
Between Birchircara and Museum Station or any Intermediate point 4d.
From Valletta or Hamrun to Attard or viceversa - - - 6d
From Valletta or Hamrun to Museum Station or viceversa - 8d
Half fares will be charged for children up to the age of 12 years.

3rd. CLASS

Between Valletta and Birchircara or any Intermediate point 1d.
From Birchircara to Attard or viceversa - - - - - 1d.
From Valletta or Hamrun to Attard or viceversa - - - 2d.
From Attard to Museum or viceversa - - - - - 2d.
From Birchircara to Museum or viceversa - - - - 3d.
From Valletta or Hamrun to Museum or viceversa - - 4d.

CHILDREN (up to the age of 12 years).

Between Valletta and Attard or any Intermediate point - 1d
Between Birchircara and Museum or any Intermediate point 1d.
From Valletta or Hamrun to Museum or viceversa - - 2d.

WORKMEN'S TRAIN.

Single Tickets.

From Notabile to Attard or Birchircara - - - - - 1d.
From Attard to Hamrun or Valletta - - - - - - 1d.
From Notabile to Hamrun or Valletta - - - - - 2d.

Return Tickets.

(Tickets for the return journey may be used on any train from Valletta).

From Notabile (Museum) to Attard or Birchircara and back 2d.
From Attard to Hamrun or Valletta and back - - - 2d.
From Notabile (Museum) to Hamrun or Valletta and back - 4d.

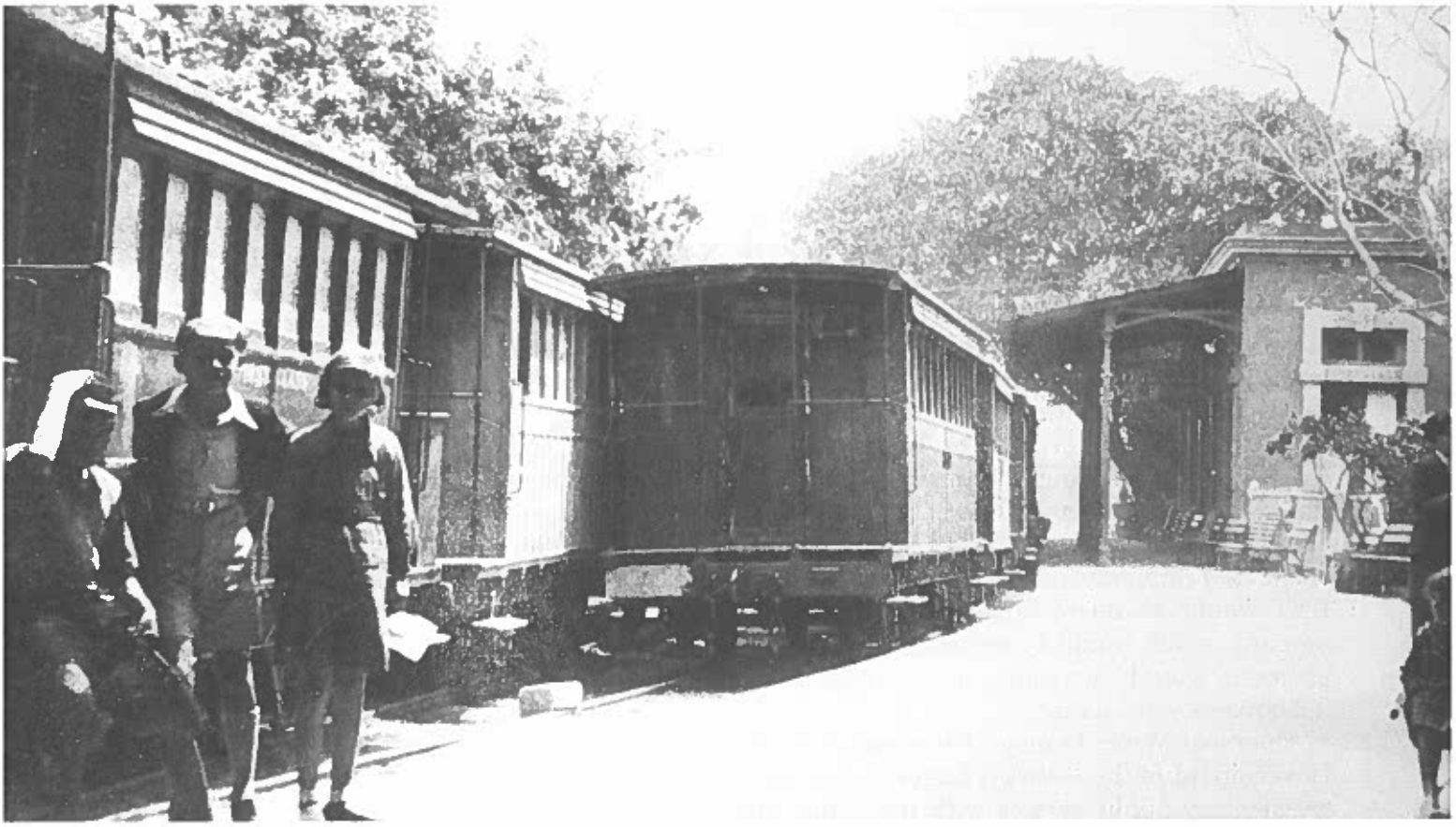
DOGS, BICYCLES AND PERAMBULATORS

Full Fares will be charged for dogs, bicycles and perambulators.

Valletta Station
29th October, 1930.

C. Rizzo,
Acting Manager and Engineer.

Reduced service time-table for the railway's last three months



Above: Idle rolling stock lying at Hamrun Station soon after the railway shut down in March, 1931. Lord Strickland warned against abuse of railway property by third parties and urged the immediate sale of the rolling stock before further decay and depreciation set in

In 1923 the cost of a working mile stood at £33.6s.1d. per week and in 1930 £31.18s.4d. Rizzo's large engines could pull nine carriages of 30 passengers each, or 270 per train. The line was very narrow and doubts existed about the use of Floriana Tunnel for buses. The rolling stock was old and dangerous and would last less than a year without reconditioning and extra expenditure. The engines had to be re-boilered every nine months while a new engine cost £6,000 and a first class carriage £4,000. Rizzo advised Government to dispose of the whole system in Italy or Algiers.

The Committee then heard the evidence of Major GR Wilson. Wilson's idea was to scrap all the steam engines (except two to be kept in reserve) and substitute them with steam rail cars as had been done in England where short railways had met with similar competition from buses. The steam rail cars were lighter, faster, more economic and reduced staff by 40 per cent. He thought that the Malta Railway should be retained as it was very well built, equipped and maintained. A private company could profitably run it if no purchasing price was asked for. Conversion to steam or petrol rail coaches would cost about £10,000. The old trains could be used at peak hours and the economic steam coaches for the rest of the time, with one ticket collector instead of the two normally employed. Wilson dispensed with level crossings since steam coaches had better braking and could be stopped or slowed to a walking pace. In England, Ministry of Transport regulations permitted light trains to dispense with manning crossings.

On October 13, 1930 the Committee approved a draft report which established an organised bus service to be monitored by a Traffic Control Board. Since the number of passengers using the railway was in steady decline, they agreed that it should be shut at once.

The Governor, General Sir John Du Cane, convened a meeting at the Palace on November 6 to discuss their report. The members were told that in the interim period a letter had been received from the British Motor Company, on behalf of the Overseas Motor Transport Company, of London, with proposals on the railway and bus service.

Overseas Motor Transport said that the solution to Malta's chaotic bus service would be to centralise road and rail transport to provide satisfactory services to the public and to eliminate cut-throat competition. The Company argued that free, unbridled competition denied the public safety, cleanliness and good timekeeping. The railway could be run economically with rail coaches provided that the company also had control of the parallel bus routes. Bus and rail would complement rather than compete against each other, a system used by London's Underground and the London General Omnibus group. The Company proposed to run the railway and the main bus routes, if Government assisted in the purchase of new rail coaches and bought out local bus owners who would be willing to sell their interest to the new company, an exercise which was estimated to cost £40,000. The BMC would advance 5% debentures to the Malta Government to cover the amount which would be secured on the whole BMC undertaking. Government would own most of the Island's transport system until the debentures were paid.

Overseas Motor Transport stressed that their scheme would relieve the Government of the railway, turn it into a good investment and provide a satisfactory public service with the trains and the buses making use of interchangeable tickets. It would also increase employment by using double shifts on buses and garage staff while retaining the railway employees, the Hamrun workshop and its apprentices. They added that their Company had recently been granted a concession by the Egyptian Government to run the Cairo Bus Service. The success of the scheme depended on the routes being safeguarded by Government against unfair competition.

The Governor outlined the various options proposed by the Transport Committee and the BMC letter. A monopoly as proposed by the latter was undesirable and was sure to be adversely criticised. Equally, Government ownership and control was a costly socialist measure which would result in heavy losses similar to those being sustained by English municipal tramways. The remaining option was to grant monopoly routes to companies or organised groups of bus owners and shut the railway.

On November 21, 1930, acting on the Lieutenant Governor's instructions, Rizzo advised on ways of continuing to operate the railway for a few more months. Rizzo reported that he had five worn out locomotives in service, Nº 2,4,7,8 and 10. He said it was unwise to use Nº 2 and 4 without exposing employees and passengers to considerable danger. The remaining engines could be relied upon but were still liable to breakdown. The actual number of engines at his disposal was between three and four and, on one occasion two, after the other two engines broke down simultaneously. He withdrew a call for tenders for spares to repair his engines following Government's declared intention to close down the railway.

Rizzo also submitted a list of railway employees made redundant as a result of the reduction in services approved by the Governor on January 16, 1931. It was thought that by that date an organised bus service would be functioning. Rizzo informed the public of the reduction in services as a preliminary to final shutdown. On March 2, 1931 the Governor approved a scheme for dismantling the railway service and to organise a substitute bus service network for the whole island. On March 13, Notice Nº. 98 was published in the *Malta Government Gazette*:

THE PASSING OF THE MALTA RAILWAY.

To-day many people are making a last pilgrimage to Notabile ; the day upon which the railway ceases to be. To morrow the platforms will be deserted ; no longer will the comic little trains ply to and fro along the line ; the Malta Railway will have passed into the limbo. But not yet shall we forget our railway. Soon we shall be pointing out the stations to newcomers and saying pridefully, "Oh, yes, we had quite a decent little railway. Closed down a few months ago. Pity ! But of course it didn't pay ; couldn't with all this bus traffic."

We shall generously forget the railway's shortcomings and remember only its merits. We shall look back indulgently upon its fussy meanderings along the few miles of its length and forget all the minor discomforts attached to the journey.

Numbers of recent arrivals who have not yet made a trip on the railway are doing so to-day. One party is starting just before lunch from Valletta, halting at San Antonio for lunch and an hour in the gardens among the flowers, thence to Notabile and back by the last—the very last—train. A whole day dedicated to the passing of the Malta Railway.

It is safe also to assume that many residents of the old city will regret the passing of the railway which has served them faithfully for many years, and has maintained faith : that has made a trip to the city an enjoyable if slow excursion and not, as to-morrow will make imperative, a hair-raising and perilous descent.

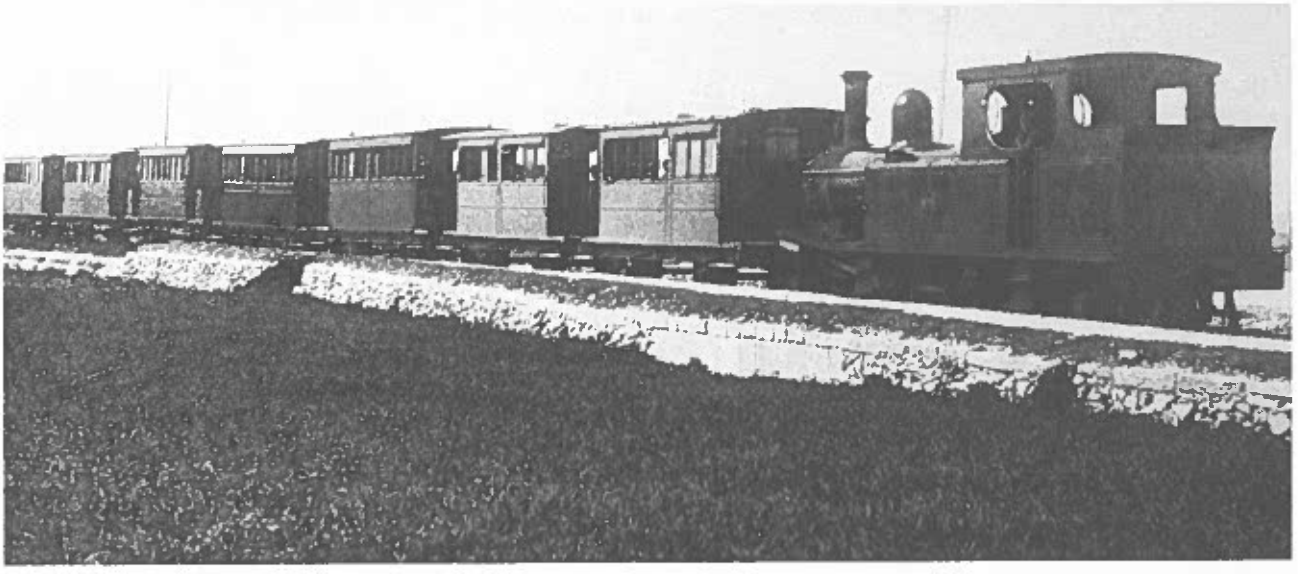
"His Excellency the Governor has been pleased to direct that the Malta Railway shall close down at the end of the present financial year, namely on the 31st instant.

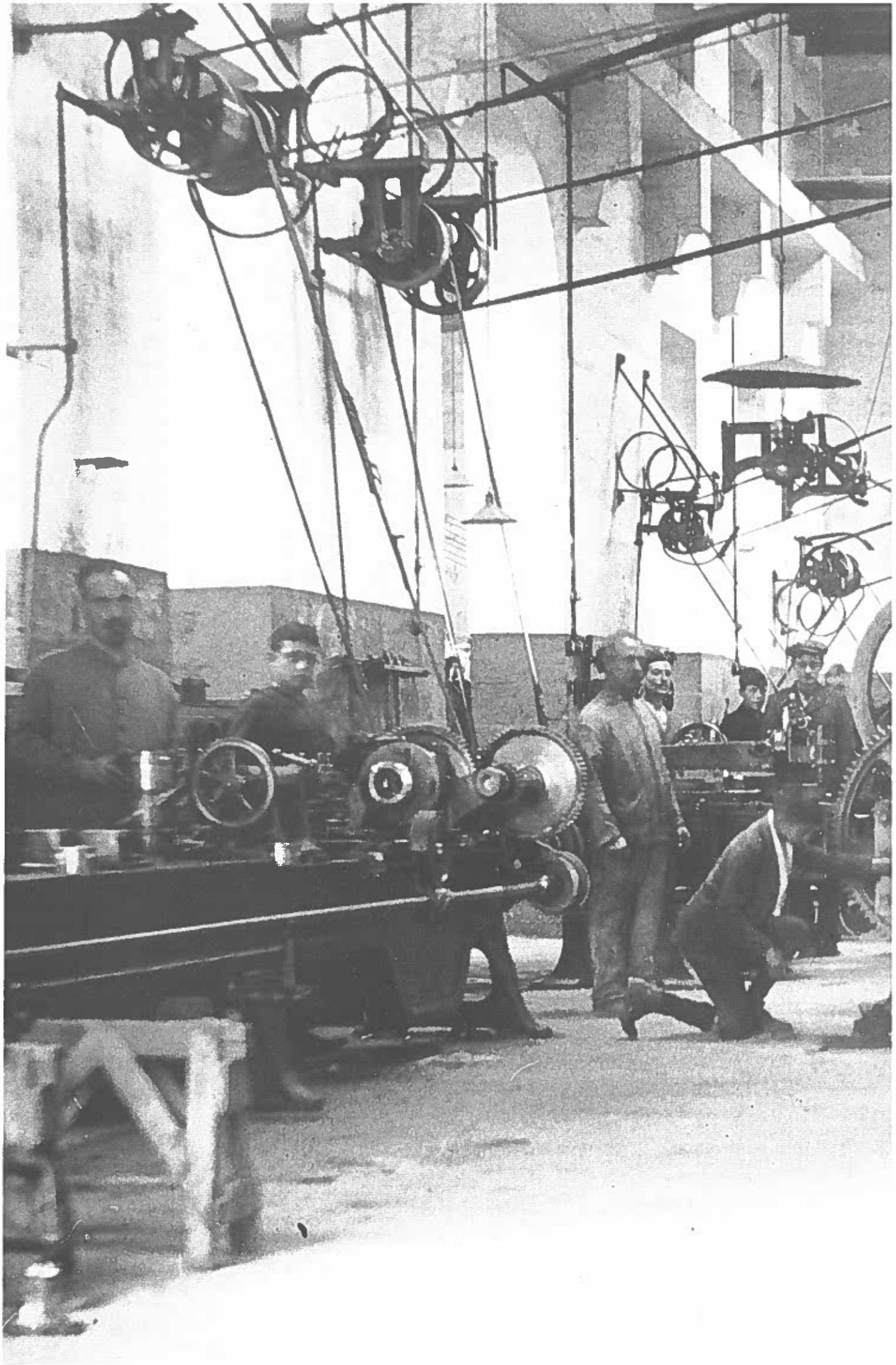
"The railway has for some time past been running at an increasing financial loss owing to the use of other and more convenient means of transport by the public. His Excellency trusts that the organised motor bus services will be able to meet the demands of the travelling public. Those railway employees who will not be given employment in other Government Departments will be retired on pension or gratuity".

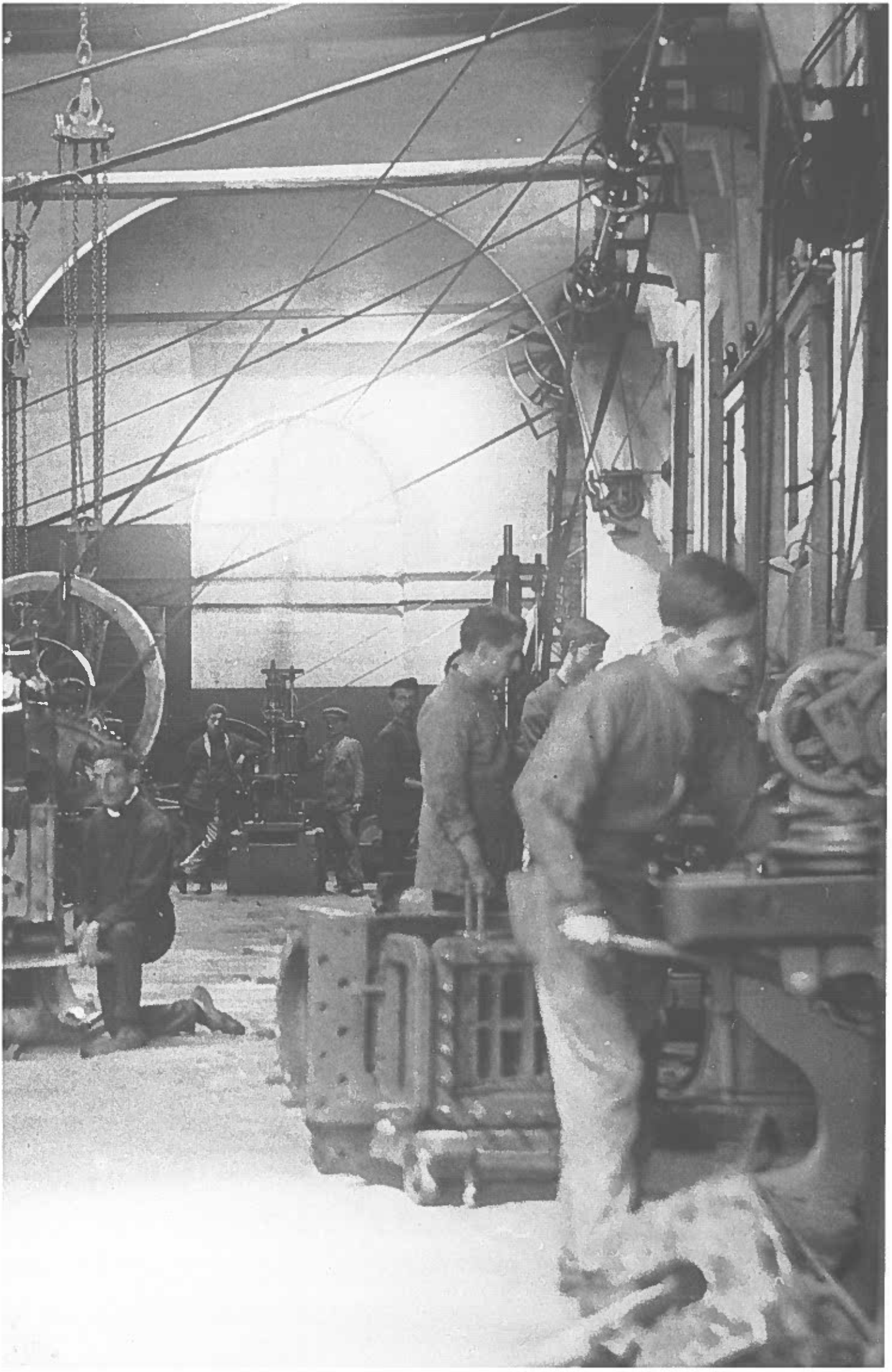
The line closed down on March 31, largely unnoticed and unmourned except for this fitting tribute (left) in *The Malta Chronicle and Imperial Services Gazette*. On April 7, 1931 Strickland submitted a lengthy memorandum on the closing down of the railway. He urged that a committee be formed to reorganise the Technical School and safeguard against abuse of railway property by individuals who created troublesome servitudes that would depreciate the property. Strickland suggested that the land on each side of the line could be turned into carefully planned building sites and advocated the demolition of the bridge at San Salvatore since it was no longer necessary.

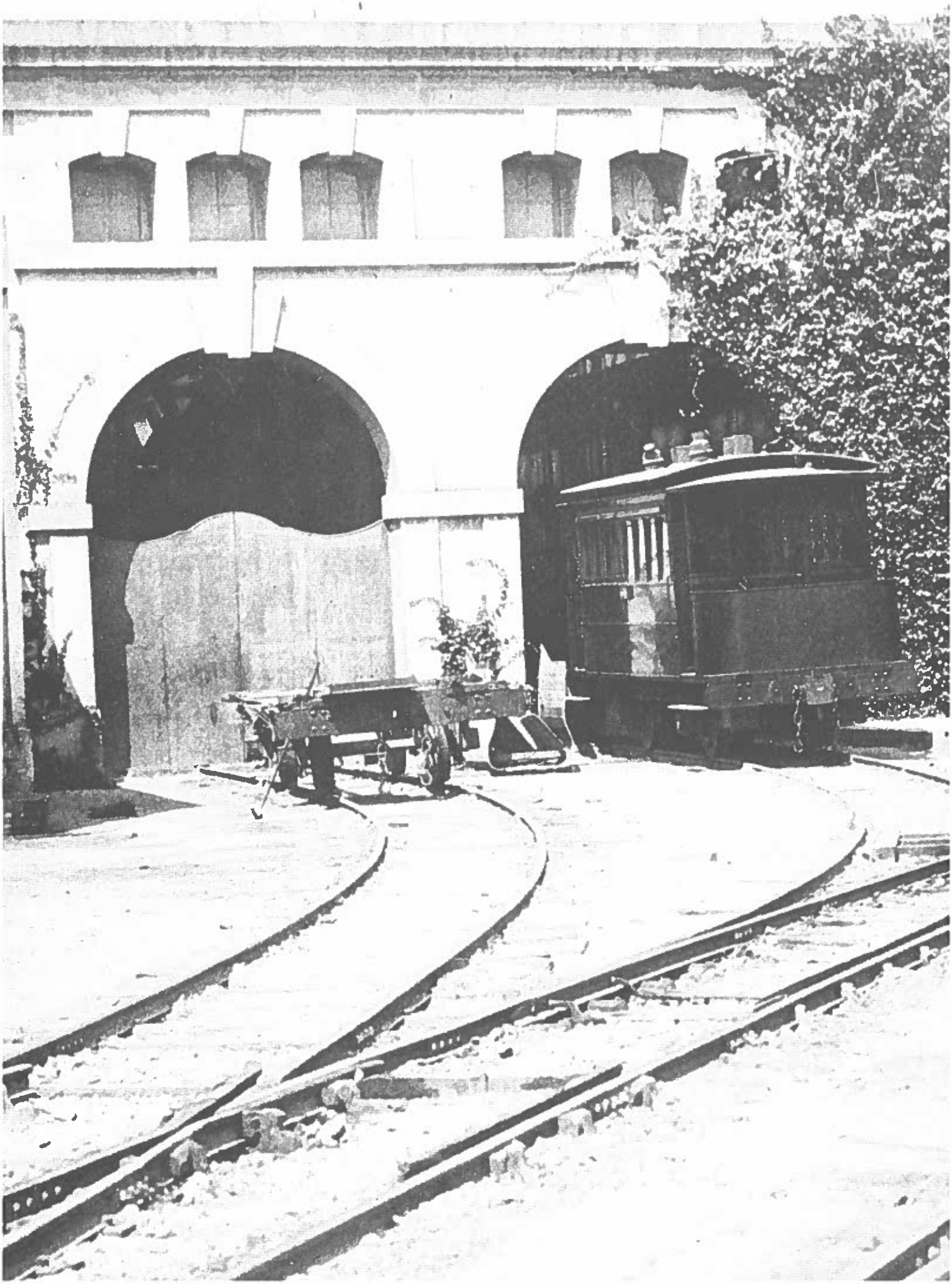
He advised the Government to sell the rolling stock at once before further decay and depreciation set in and to estimate the letting value of the stations except for Valletta which could be converted into an all-weather terminus for long-distance buses by constructing a ramp off the railway bridge leading to the main ditch emerging through Marsamxett Road.

Sir Harry Luke, on behalf of the Government, thanked Strickland for his memo and informed him that some of his observations were being studied whilst others would receive the required attention in due course.









THE TECHNICAL SCHOOL AND ENGINEERING TRAINING WORKSHOP

"The Technical School has been of immense utility for Malta and it is the only place where Maltese youths can obtain indentures after having served their apprenticeship."

Strickland, in the Legislative Assembly, February 3, 1926

While the railway lay dormant between April 1890 and February 1892, the Select Committee chaired by Strickland recommended the setting up of an engineering training workshop and technical school at Hamrun Central Station to make the railway independent of the Naval Dockyard and initiate a professional approach to technical training for youths.

Strickland and Gatt procured the necessary machinery from Government Departments and from England. The workshop was equipped with two lathes, a drill press and boring mill, a power hammer and forges.

A foundry or *cupola* was also set up. A siding at Hamrun Station led engines and rolling stock through the wide doors of the workshop to be inspected and repaired. The rails extended over a pit used by fitters for undercarriage repairs.

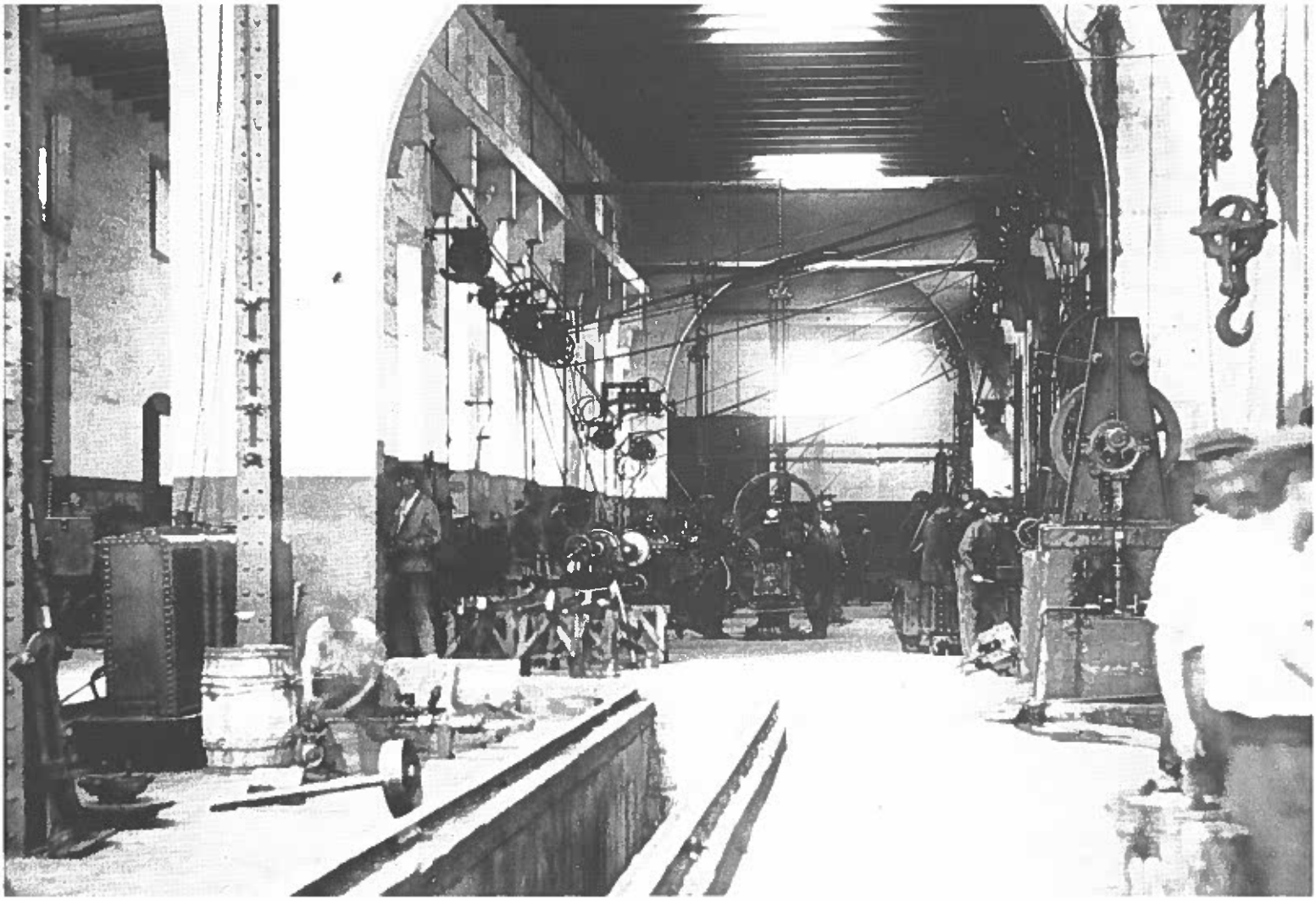
The workshop's regular staff included a foreman fitter, two boilermakers, two carpenters, a blacksmith, a moulder, a saddler, an electrician, a tin- and coppersmith, a painter and a storekeeper. The staff took on apprentices for instruction in various trades while regular work was being carried out.

Admission to the technical school was by examination after a call for applications issued in the *Malta Government Gazette*. Applications were authenticated by the father or guardian of the applicant, and required a birth certificate and a recommendation signed by two persons known to the Railway Manager. Candidates took a medical test and were examined in English, Italian, reading and dictation, Arithmetic (the four rules) and Elementary Drawing. The school commenced with a modest intake of four apprentices in 1895.

Facing page: An exterior view of the Hamrun Workshop showing the Governor's carriage and a ballast wagon outside the double gates

Preceding pages: Apprentices learning various trades at the Engineering Training Workshop. Demand for places always exceeded the number of vacancies because indentures obtained at the workshop invariably led to lucrative jobs at HM Dockyard, on HM ships or aboard sea-going merchantmen

The workshop had already rebuilt engine Nº 4 when Government Departments commissioned engineering works which had previously been done elsewhere in Malta or in England. During the November 20, 1895 Council sitting Strickland praised the workshop and referred to a job that had just been completed for Mr Chadwick, the British expert who was in Malta to advise on the water supply. Chadwick required a piston rod which the Crown Agents estimated at £40. A bar of steel was bought from the Dockyard and the piston rod was turned at Hamrun for a mere £13. Chadwick was satisfied with both price and work while the workshop had gained experience in the manufacture of large piston rods of unusual length. The busy workshop became the envy of the nearby Vincenzo Bugeja



Another view of the engineering training workshop at Hamrun. The workshop fulfilled Strickland's ambition to turn out skilled young men to enhance the country's industrial base. The pit in the foreground was used for undercarriage works

Institute which begged for work despite its low prices.

Strickland wanted youths to serve their apprenticeship and obtain their indentures in a real workshop on real engines. When the Council proposed that the best apprentices completed their studies in England, he warned: "These youths should not be encouraged to go to England with the idea of becoming desk-bound engineers; rather, they would return as trained men who would not be ashamed to take off their coats and work on a lathe, bench or on the foot board of a locomotive if necessary".

On November 24, 1897 the Council debated a sum of £240 budgeted for the "appointment of a lecturer in practical engineering". Strickland was urged to drop the high-sounding term "lecturer" and employ a Maltese for far less, preferably by retaining one of the persons who had been instructing the 12 apprentices since the school's opening.

The Hon Savona jibed that the nomination of a lecturer would not automatically make an engineering school; Strickland retorted that the students were of Lyceum standard and £75 was being provided to enable the best of them to proceed to England to complete their studies. On return they would pass on their knowledge to others. The Superintendent of Public Works and L Gatt had given their best to the school but the time was ripe for qualified outside help.

It proved to be a wise decision and Professor Nixon, the man who was engaged, was to make an inestimable contribution to the railway and to technical education for the next 40 years. Under his direction the school flourished and there was a great demand for places at the school.

Buhagiar's memo to Strickland dated March 21, 1902 was a far cry from the Hon Savona's jibe five years earlier:

"As the final examination for the theoretical course of engineering is about to take place at the beginning of next month and as it was suggested by this Department and approved by the Government that the first apprentices who would obtain the highest number of marks at this examination (provided that their practical examination turns out satisfactory) will be awarded the Scholarship to proceed to England, I would urge that the Government may approach the marine engineering firms which it thinks suitable and make arrangments as early as possible.

"As the three years' workshop service has already been performed according to the Board of Trade Regulations and as the apprentices are anxious to perform the one-year sea service in order to take the examination for the 2nd Class Engineer's Certifiate before January 1, 1904 since after that date, as Mr Nixon informs me, an extra year qualifying service will be required and the whole service will be under more rigid conditions as regards time spent in workshop as is the case at present, it would be well that the apprentices who will have to go to England would serve in the workshop there until September next (about 5 months) thence to proceed on board ship for one year. By these arrangements the apprentices would be able to take their examination under the present Board of Trade Regulations.

"The vote available for these Scholarships is £225 and the number of apprentices who may proceed to England will depend on the terms agreed upon with the Firms.

"As there may be some of the apprentices who will not receive the Scholarship I would suggest that the Government should help any such apprentice in going on board ship for one year's sea-time".

The existence of the school overruled any drastic decision to counter the continued railway deficit. During the 1911-1912 debate on the Colonial Estimates the Lieutenant Governor stressed "the great advantage that the island is deriving from the school to afford practical technical instruction to lads who are anxious to learn engineering. Working in a real workshop with real engines a boy can equip himself with the knowledge to be able to launch himself into the wide world with a good measure of success. Students have even obtained first class certificates from the Board of Trade". He urged Council Members to "bear this in mind when the time came to consider the future of the Railway, and that the benefits derived from the school could not be shown under the £ s.d. column but it was none the less an incalculable advantage to the youth of the Island".

Council Member Mr Howard, who was President of the Malta Society of Arts, Commerce and Manufacture, wanted to enlarge the school and increase its votes. Other members, however, opposed the principle of retaining an enterprise for the only reason that it had a useful appendage. It was also suggested that the railway budget would be better spent on a reorganised and enlarged technical school independent of the loss-making concern.

Demand for places continued to exceed supply and in 1917 Strickland noted that the school lacked sufficient funds and offered to loan interst-free capital to enlarge the school and admit a larger number of students.

The railway deficit increased while the school continued to turn out fully fledged engineers who found immediate employment in Government Departments, the Dockyard and overseas. Such was the protection given

MALTA RAILWAY.

I hereby certify that **Dominic Vella** , son of John

born on **17th.November,1900,** at **Valletta, Malta** entered the Railway

Workshops as **Apprentice Engineer** on **29th.May,1918.**

He served at

(*a*) Fitting and erecting **8 months 9 days (15 July-14 Sept,1918,&c).**

(*b*) Pattern making

(*c*) Foundry work

(*d*) Smith's shop work **16 days (9-15 Dec,1918,&c).**

(*e*) Boilershop work **11 days (10-21 Dec,1918,&c).**

(*f*) Coppersmith's work **7 days (10-13 July,1918,&c).**

(*g*) Electrical work

(*h*) Stationary engine driving, &c

(*i*) Locomotive driving, &c

(*j*) Drawing

Total time served at the Works **9 months 13 days.**

He was on leave from the works (a) 18 days for study and private affairs, and (b) 7 days for the purpose of gaining experience on the local mail steamer.

At fitting and erecting he was engaged chiefly on the repairing and refitting of locomotives and at times on repairs to the metal work of railway carriages; in the fitting shop he had experience with machine tools in addition to the work at the vice. He had a little elementary experience at steam testing.

He made satisfactory progress in practical skill and his conduct was very good.

He left the works on 5th.April,1919, for the purpose of proceeding to H.M.Dockyard for further experience.

Railway Office,
Valletta, Malta **12th.July,1922.**

Countersigned

Minister for Public Works.

~~Lieutenant Governor~~
~~and Chief Secretary to Government.~~

Manager and Engineer.

Above: One of the major jobs carried out at the workshop was the rebuilding of engine N° 4. Nicola Buhagiar strikes a deserved pose in front of the reconstructed engine. The workshop was also equipped to replace driving wheels and bogies and some sources believe that a number of carriages were built there

Facing page: Dominic Vella obtained his indentures on July 12, 1922 after a three-year apprenticeship at the workshop

to the school that a clause in the 1928 tender ensured its continuance. Mr Beaumont of Sentinel Wagons did not endear himself to Strickland when he boasted that his motor rail coaches would make apprentices and instructors redundant.

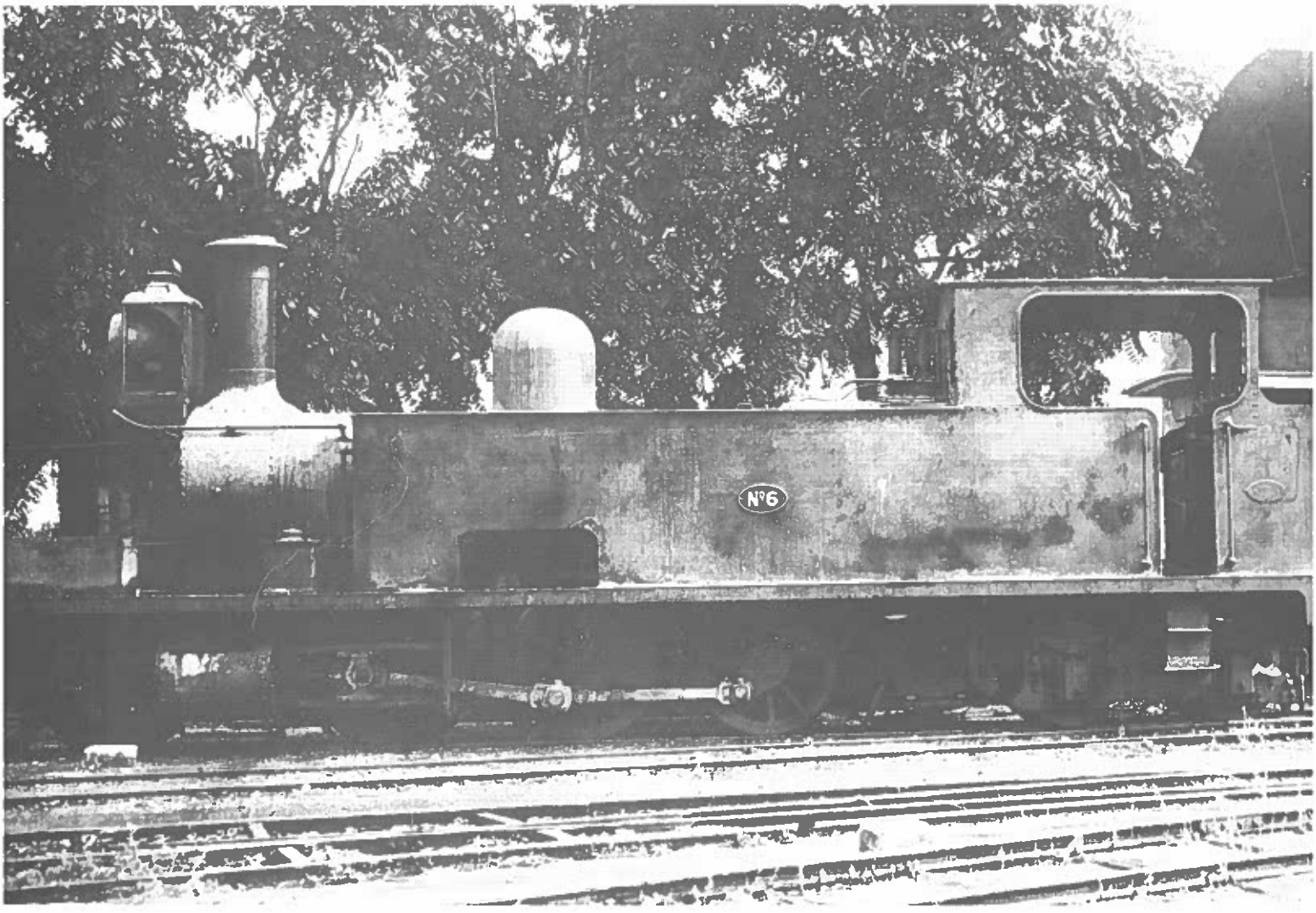
Conditions of work

Apprentices' gratuities varied from 1s.0d to 1s.3d. daily while those assisting in the construction and overhauling of accumulators received an extra remuneration of 6d. In no case did the gratuity and extra remuneration exceed 1s.6d. daily.

Students attending the Marine and Electrical Engineering classes of the Lyceum were admitted as apprentices in the railway workshop for a technical course lasting five years including sick and vacation leave and optional holidays. Apprentices received no gratuity on entry but after a three-month probation period the minimum rate was paid. Maximum gratuity was attained in order of seniority, as vacancies occurred.

The gratuities were as follows:- 1s.3d. per day to 6 apprentices; 1s.0d. per day to 11 apprentices; 9d per day to 6 apprentices; 6d. per day to 7 apprentices.

Apprentices engaged on accumulator, motor and workshop engine work were paid an extra 6d. daily. Overtime was paid at the rate of 6d. per hour. Mr J DeGiorgio and several former apprentices also recall their work experience outside the workshop with the Department of Electric Light, the Water Works Department and aboard the Malta-Syracuse steamer "Knight of Malta".


Nº6

Right: William F Nixon set up the Engineering Training Workshop and Technical School and was one of the pioneers of technical education in Malta. Strickland called him "a father to our boys" and one of the "most deserving officers in Government service"

Facing page, top: The apprentices of the Technical School pose with Nicola Buhagiar and Professor William Nixon in 1924. Sitting in the second row (lft to right) are G Cordina, C Grech, N Buhagiar, W Nixon, E Mangion and C Degiorgio

Facing page, bottom: When not serving as a relief engine, N° 6 and her sister N° 5 were relegated for the training of apprentices at the workshop

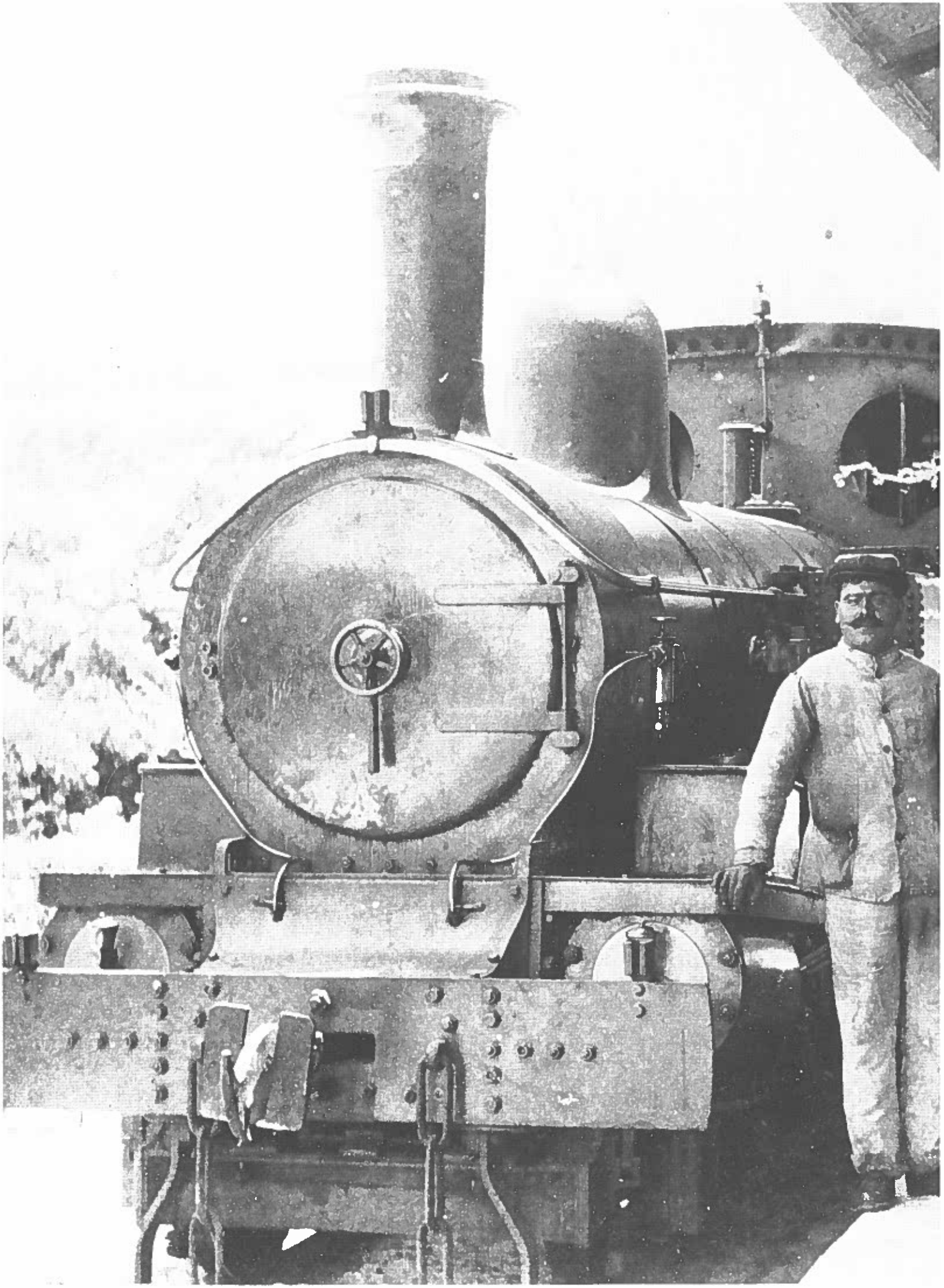
During the final decade, Strickland defended the school's sound professional base which gave its apprentices a fundamental education derived from tangible work experience. He wanted the school equipped with the latest machinery so that Maltese youths "may understand modern machinery and know their adjustments and intricacies". Precision engineering was virtually unknown outside the Dockyard at the time and Strickland envisaged the railway workshop as a place in which apprentices would be trained to use instruments of fine measurements.

With the imminent demise of the railway, Professor Nixon urged the Government to retain the workshop and make it commercially viable by undertaking repair work and manufacturing. Strickland planned to amalgamate it with other Government Departments.

After March 31, 1931 the Education Department took over responsibility for the school and Professor Nixon asked the Government for permission to retain three engines and a carriage for teaching purposes.

When official plans to sell the entire rolling stock misfired Nixon was given Engines N° 2, 3 and 5, a Metropolitan Third Class carriage and the entire machinery and tools at the workshop.

Between 1895 and 1950 the engineering workshop turned out hundreds of skilled craftsmen. With the benefit of hindsight it is possible to view the establishment of the school as a wise and generous move at a time when Maltese technical education was still in its infancy.



THE RAILWAY STAFF

"It is hoped that it may be possible to show the employees further consideration than might be shown by a commercial concern that is unable to pay its way."

Strickland, in the Legislative Assembly, April 15, 1927

After expropriating the railway the Government found that it had to retain the old company's manning levels and set-up. Government reduced expenditure by trimming the excessive salaries paid to the old management, an exercise which also lessened the substantial wage gap. The Company had paid Geneste £660 a year, later raising this to £760. The Traffic Superintendent was paid £280.

Despite the reduction, the new manager's salary was still substantial when one considers that the remaining staff had to wait for the Great War to end to get a wage increase. The post of Traffic Superintendent of Locomotives was abolished and the manager undertook responsibility for the running of the line. Unlike Geneste, Gatt had no direct experience of railway operation but he had scrutinized the old Company's operation and, with Strickland's help avoided its pitfalls.

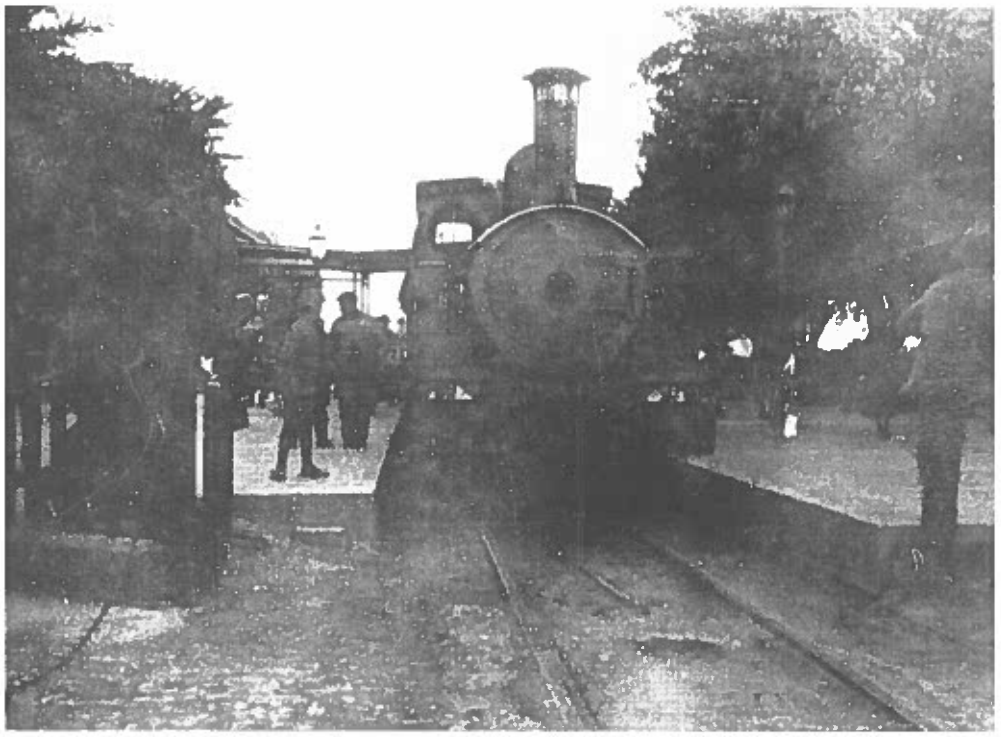
Next in rank to the manager were the Station Masters who were responsible for ticketing, departures, passengers and staff at their stations. The Company had had ten Station Masters who were paid £36 annually, but after 1892 their number was reduced because the ticket clerks, who travelled on the trains, were made responsible for departures at the minor stations. By the time the line closed down, the Manager doubled as a Station Master at Valletta Station and the Senior Engine Driver was paid an allowance to take charge of Hamrun Station.

Below the Station Master's rank were two ticket clerks who were paid £35 annually. Government, with more engines and carriages to run, increased their number so that by 1931 there were nine full-time clerks and seven substitutes. It is not known how the old Company had selected its ticket clerks but the Government held a qualifying examination.

From the 104 who applied for the first examination, 60 were short listed. After a medical examination, 31 sat for the written examination. Six full-time and two substitute clerks were initially employed. Ticket clerks were required to deposit a sum of money to ensure the proper discharge of their duties, the senior clerk's bond being of £100, and for the rest £50. The earliest bond was secured in January 1894. Bonds were guaranteed by priests, lawyers and businessmen.

The engines were manned by a driver and a stoker. Their number never exceeded 20 during the railway's lifetime. "Stoker" was a misnomer of "fireman", a logical extension of the appellation "vapur ta' l-art". If the Maltese called the train "land steamer", the fireman was a stoker!

Facing page: The engine driver of a Beyer Peacock



The level-crossing chain or catena *outside Attard Station. Most chainmen (later known as gate-keepers) led a lonely life at remote guard huts like N° 11 (facing page). They spent their free time between trains making straw plaits or repairing shoes. Despite the low wages, the job was extremely popular with middle-aged men and there was always a long waiting list*

The pointsmen were responsible for the inspection of the line before the first morning train. There were three poinstmen in 1892 but their number was increased to fifteen by 1910. Pointsmen's jobs included early rising and long hours. They also shunted the trains and cleaned the stations.

At the lowest end of the scale were the chainmen, also called gatekeepers or *catena*. The chainmen were stationed at guard huts near level crossings. They had two days leave every month and 14 days vacation leave. There were 21 chainmen in 1896 and 23, including substitutes, in 1931. When a train was due to arrive they received a coded ring. They sealed off the line with a chain supported on stone stancheons in the ground. Their elementary signalling system consisted of white and red flags in daytime and lamps of the same colour at night. "White" signalled the driver to proceed, whilst "Red" indicated a halt. When the train passed the level crossing, the chain was stored by the roadside to let cabs, carts, and later, cars through.

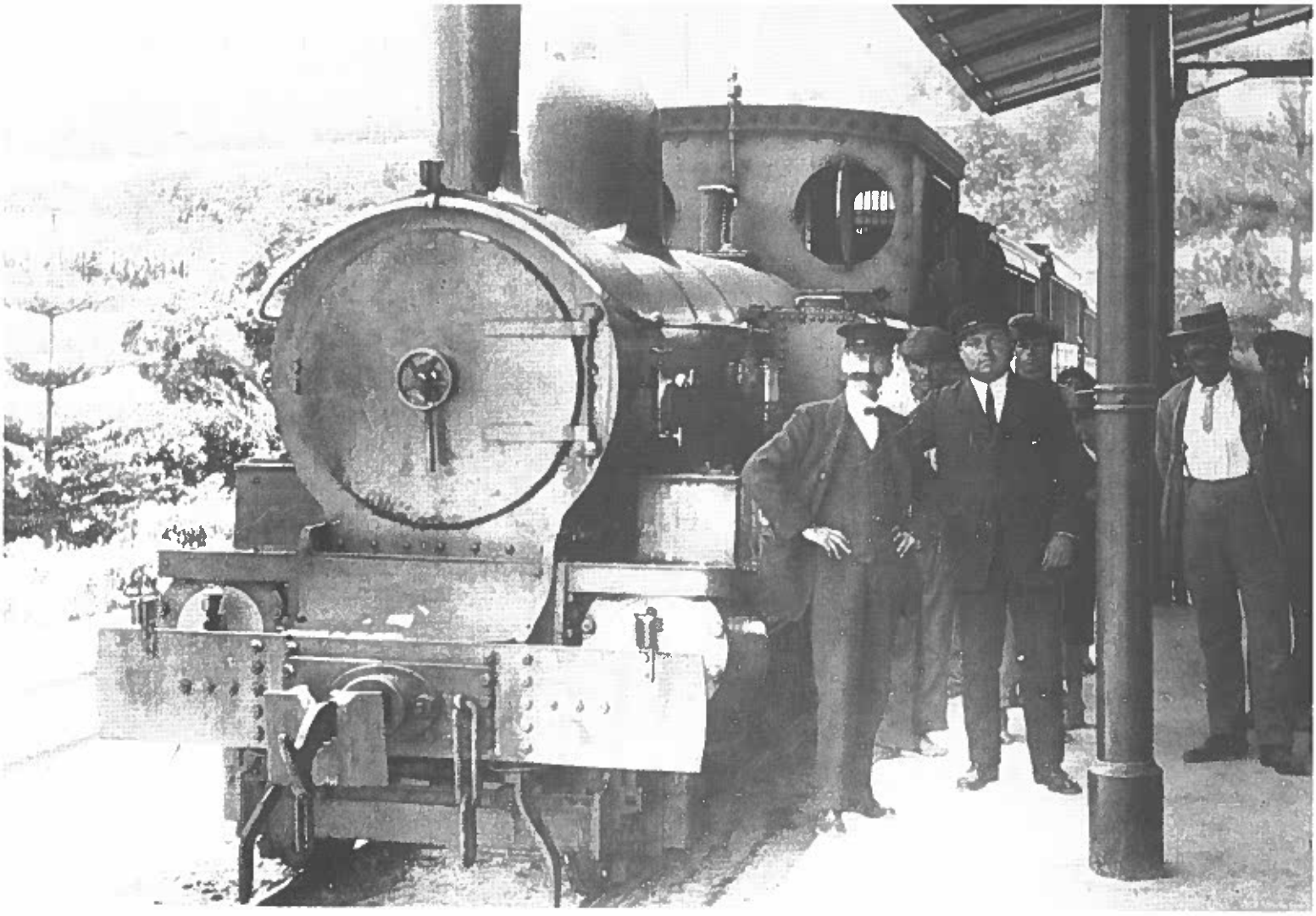
Other ranks included two platelayers, two gardeners, a storekeeper and a watchman. When Hamrun opened, the number of employees was increased. Most were paid "piece" wages.

The Company's rules and regulations

Very little is known about the Company's relations with its staff. However, Geneste's 1883 "Rules and Regulations" are indicative of what was expected from the employees. The rules stated that:

1. Every person employed by the Company must devote himself exclusively to the service, attending at such hours as may be required, and pay prompt obedience to all persons placed in authority over him.
2. Every servant is required to assist in carrying out the rules and regulations and must immediately report to his superior officer any infringement thereof or any occurrence affecting the safe and proper working of the traffic which may come under his notice.

3. The address of each person employed by the railway must be registered so that in case of emergency he may be readily found.
4. No employee is allowed under any circumstances to absent himself from duty or alter his appointed hours or exchange duty with another worker without the permission of his superior officer. In case of illness he must report the circumstances to his superior officer.
5. Every person is to appear on duty in a clean and neat uniform provided by the Company. No servant is allowed to convert to his own use any article the property of the Company, and if guilty will be severely punished.
6. The actions of all servants must be prompt, and their conduct civil and obliging. They must at all times afford every proper civility for the business to be performed, be careful to give correct information, and when asked, give their names without hesitation.
7. All servants must exercise proper care in getting between carriages for the purpose of coupling and uncoupling them.
8. Special trains or engines have frequently to be run without previous notice of any kind; it is therefore necessary for the staff along the line to be at all times prepared for extra trains and engines.
9. No passenger train must be stopped at a station where it is not timed to call, for the purpose of taking up or setting down passengers, without the special authority of the General Manager or the Traffic Superintendent.
10. When an accident or obstruction of any kind occurs on any part of the line, it must be immediately reported by the most expeditious means to the Traffic Superintendent.



Ticket clerks E Lapira and E Mangion at Museum Station. When the railway passed into Government hands, ticket clerks acted as station masters at the minor stations

11. The Company, or its representative in Malta, reserves the right to punish any servant by immediate dismissal, fine, or suspension from duty, for intoxication, disobedience of orders, negligence, misconduct, or absence from duty without leave, and to deduct from the pay of their servants, and retain the sums which may be imposed as fines, and also their wages during the time of their suspension or absence from duty for any cause.
12. No servant who has entered the Company's service in the Island of Malta is allowed to quit the service of the Company without giving at least ten days' notice to the Traffic Superintendent.
13. No trespassing upon the railway must be allowed, and no person must be permitted to walk on the line unless provided with a written permission to do so, signed by the General Manager of the Company. In the event of any person trespassing, and refusing to quit when requested to do so, the name and address of such person must be obtained, and the circumstances reported to the nearest Station Master.
14. A Station Master must not be absent from his station during the train service without leave from the General Manager or Traffic Superintendent, except for illness, in which case he must immediately inform the Traffic Superintendent and take care that some competent person is entrusted with his duties.
15. No train must be started before the time stated in the timetable. The signal to the Engine Driver to start must be given by the Guard, upon receiving instructions from the person in charge of the station that all is right for the train to proceed.

16. Each person stationed at the level crossings must, as far as practicable, prevent any trespassing on the line at or near his crossing, and report every case of the kind to the nearest Station Master.
17. No engine must be allowed to be in motion on the main line unless both the Engine Driver and Fireman are upon it.

Government and staff

After 1892 relations between the management and staff fell under public scrutiny and questions were regularly tabled in the Council, initially, and later in the Legislative Assembly, on staff grievances, working conditions and pay. Government's intention to operate the railway on a minimal budget was often at variance with employees' wage aspirations.

On June 13, 1894 the Council granted £20 overtime allowance for engine drivers and stokers for extra time on Good Friday, St Joseph, Corpus Domini and St Peter and St Paul (Imnarja). Strickland reckoned overtime at the rate of a fifth of a day's pay for every hour beyond ten hours. Overtime was paid on days when these workers incurred "great personal anxiety and some hardship while working overtime at night and with immense responsibility weighing on their shoulders". This provision was criticised since it discriminated against the other men. Council members said it was unjust that a profitable enterprise which had passed its experimental stage, and was amortizing its debts, should reward a section of its staff and ignore the others.

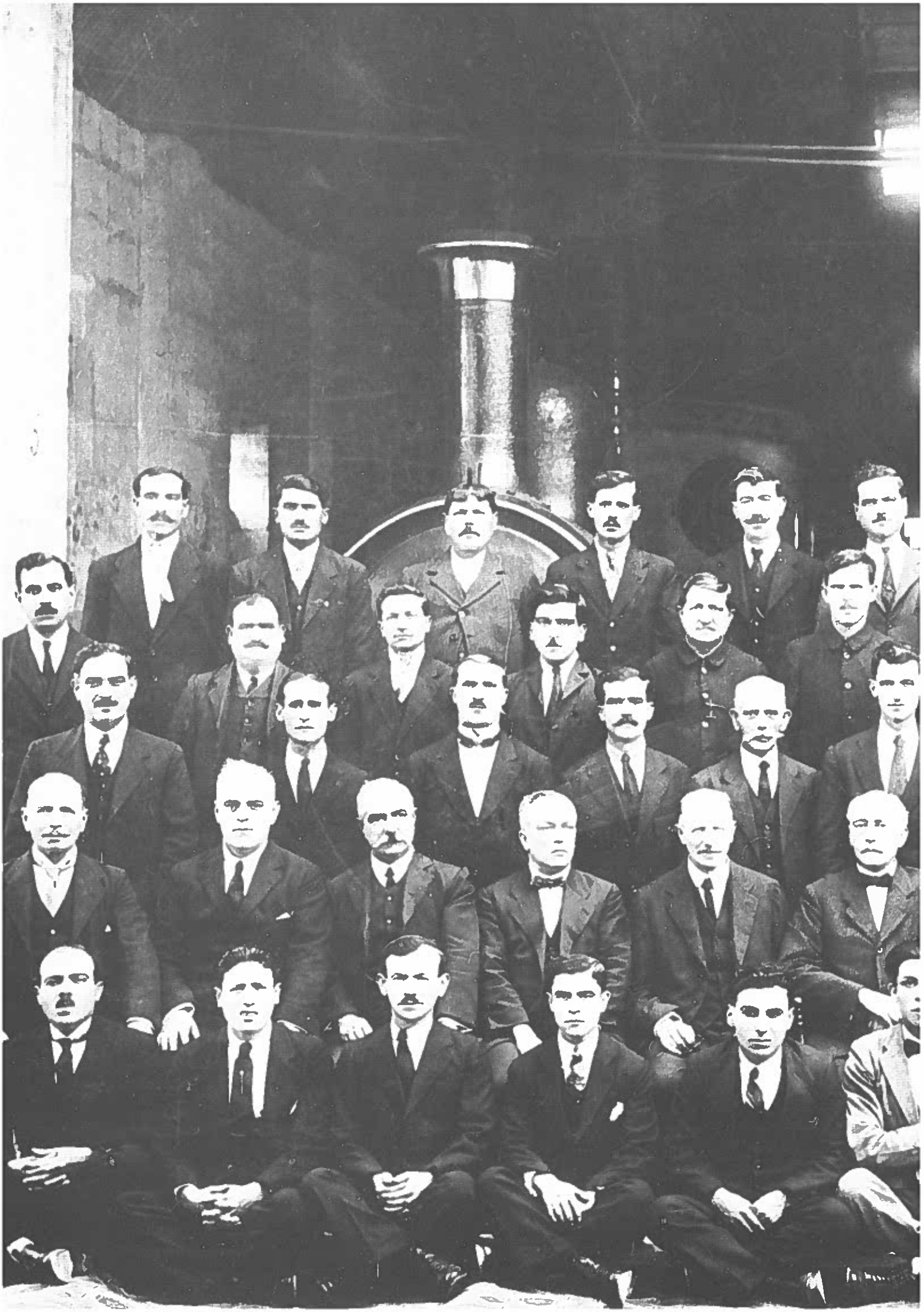
The Chainmen get a pay rise

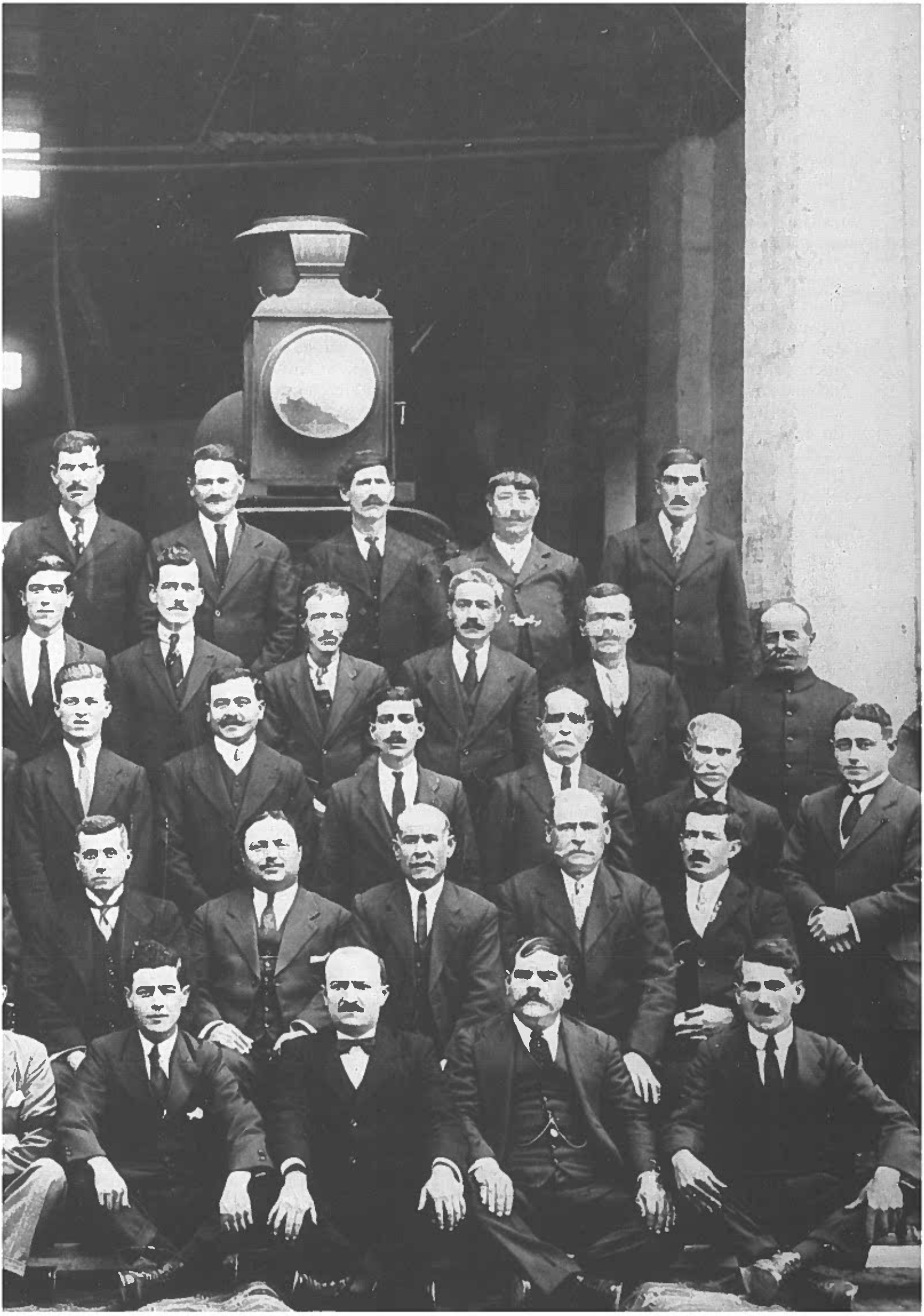
Claims in favour of 18 chainmen were reiterated in November 1895. The Hon Savona asserted that they worked 18 hours a day at a time when workers were clamouring for eight, and this for 10d! They worked in all weathers for a pittance and an increase of five pence daily was requested on their behalf.

The pointsmen were slightly better off at 1s.8d. to 2s.0d. daily. In reply, Strickland said that both categories had been provided with water-proof coats and their wages and working conditions were exactly similar to those of the old Company. He reiterated that the railway was a commercial concern and not a charitable institution and chainmen's wages were commensurate with what other Maltese earned and proportionate to their duties. Chainmen were usually middle-aged, unfit for heavy work and satisfied with a job which only involved about two hours intermittent work daily.

Only one had complained and he was dismissed after being discovered drunk on duty. The job was so popular that there was a waiting list of 42 and, besides, the chainmen earned extra money by making straw plaits in between trains. Strickland parried by hinting at the continental system of entrusting chainmen with the repair and supervision of their area of line, in which case the gatekeepers would be dismissed because they would have to employ able-bodied men at higher wages. It was estimated that shorter hours for the chainmen and the employment of double gangs would increase expenditure by £250 annually.

The Hon Savona was not so easily dissuaded. He contrasted Government's intransigence with the increase of £120 which had just been given to Gatt,





the Railway Manager, which did not include an extra £50 for his post of Chief Engineer in the Department of Electric Light. Strickland explained that this was a temporary increase until Gatt's substitute was appointed. He praised Gatt for making the railway run at a profit and said that his transfer to the Electric Light Department was meant to ensure an equal success there.

Council members' pressure on behalf of chainmen persisted and in April 1896 Strickland hedged by offering them a 6d. a day increase on condition that they prepared ballast for the railway, but none accepted. Strickland promised to reduce their hours when the Mtarfa extension was completed and two shifts would be employed. Later that year he relented and increased their pay to a shilling a day. Dr Vella joined the fellow Council members in expressing approval but took the opportunity to suggest that uniforms be provided for the "bare-footed, shirt-sleeved youngsters who lit the carriage lamps".

The post of Assistant Driver was created that year because Engine Drivers were hard to find, and the engines were being driven by the stokers whom Strickland called "a very deserving class of men". He proposed to call them Assistant Drivers "to encourage and give them a lift in the world". Two stokers were promoted to Assistant Drivers and the post lasted until 1916.

Buhagiar vs Staff

Gatt's successor, Nicola Buhagiar, was to be the longest-serving Railway Manager. In 1902 Strickland raised his £180 salary to £300. Buhagiar's job was exceedingly difficult especially on festas and holidays. He was also responsible for the training of the apprentices and Strickland thought it fair that his pay should equal his predecessor's. When some Council members contended that Buhagiar's actual pay was adequate, Strickland reiterated his pride and satisfaction in Buhagiar's management adding that he would have been paid a much larger salary for similar work in England.

Buhagiar enforced strict discipline on his staff. He issued terse memoranda which they had to read and sign. He made up the duty rosters with drivers' names and the engines they were to drive. Staff were told when to report to work, knock off, standy by, or relieve colleagues.

Drivers bore the brunt of his management because their negligence could cause accidents, delays or unnecessary expenditure in repairs and spares. He ordered them to reduce speed near pointsmen at work, when it was raining or in the Floriana tunnel. They had to open the regulator gently to prevent engine damage by jerking and prising, apart from inconvenience to passengers. On one occasion he reprimanded assistant driver A Si Tajeb for failing to rectify a fault on engine Nº 4 at Birkirkara prior to its departure for

Nicola Buhagiar gave 27 years of sterling service to the railway. He made it run profitably and subsequently strove to stem mounting losses as a result of tramway and motor-bus competition

Preceding pages: The railway staff pose for a final photograph with Nicola Buhagiar at Hamrun Station in 1924. In the shelter-shed behind are a Beyer Peacock engine and a Manning-Wardle

Nicola Buhagiar was also responsible for the safe running of the line. In the above photograph he is examining the flanges on the line at Museum Station

Valletta. The engine had begun to knock near guard hut Nº 9 and Si Tajeb's negligence had caused the connecting rod to become loose after the headpin had fallen off.

Staff were not allowed to smoke on the trains and stations. Sickness was to be reported at once and drivers were held responsible for buffer stop accidents. Chainmen were not allowed to leave their post at any time. In October 1913 gatekeeper Carmelo Agius was fined a day's pay for not hearing the train's whistle, resulting in a donkey cart being dragged under the train.

Wage increase after the war

In 1920, following a cost of living increase and the revision of Government employees' salaries, Buhagiar recommended that substitute ticket clerks, chainmen and skilled labourers who were paid out of open votes, be given a wage increase since they were serving his department in an efficient and dutiful manner.

The increase was approved subject to the following conditions:-

1. The ten substitute ticket clerks were to be available on call for immediate duty in decent dress, as they were not provided with a uniform. They would replace ticket clerks who were sick or on leave and work the heavy traffic on Sundays and holidays. Their wage was to be raised from 3s.0d. to 5s.0d. daily. They would be paid a total increase of £79.4s. from October 1, 1919.
2. Substitute chainmen were to replace gatekeepers and chainmen who were sick or on leave. The proposed rise in pay was from 1s.6d. to 2s. daily.

3. Skilled labourers were to be employed in addition to the regular staff of fitters, stokers and labourers.

The first two proposals cost the department an extra £180 annually and the third £390. These increases reflected the rebate on the price of bread which at the time amounted to £122 annually.

As an incentive to raise working standards and benefit the Department, apprentices' gratuity rose to 1s.0d. daily. This increase entailed an extra expenditure of £100 annually.

Buhagiar and Nixon

When Nicola Buhagiar retired in 1924 after 27 years of service, Strickland recommended an extra addition of £50 to his pension. Members of the House paid tribute to Buhagiar for his efficiency and Strickland praised his "Railway gardens which were a labour of love that had changed foreigners' opinion that Malta was a barren Island". People took their children to play in the railway gardens where the astute Buhagiar planted bitter Seville orange trees to discourage picking!

Strickland said that it was not Buhagiar's fault that the railway had failed. He had given "a splendid account of his ability and artistry despite his being an underpaid and overworked civil servant".

That same year, Strickland asked for an understudy to Professor Nixon who was about to retire in England. He praised Nixon for being "a father to our boys whose work had been inestimable". He urged the Nationalist Government not to hesitate to employ an Englishman who would teach apprentices English besides engineering, to enable them to work abroad. In the event, Nixon stayed on as Principal of the School.

Facing page: Nicola Buhagiar and the railway ticket clerks photographed at Valletta Station in 1924

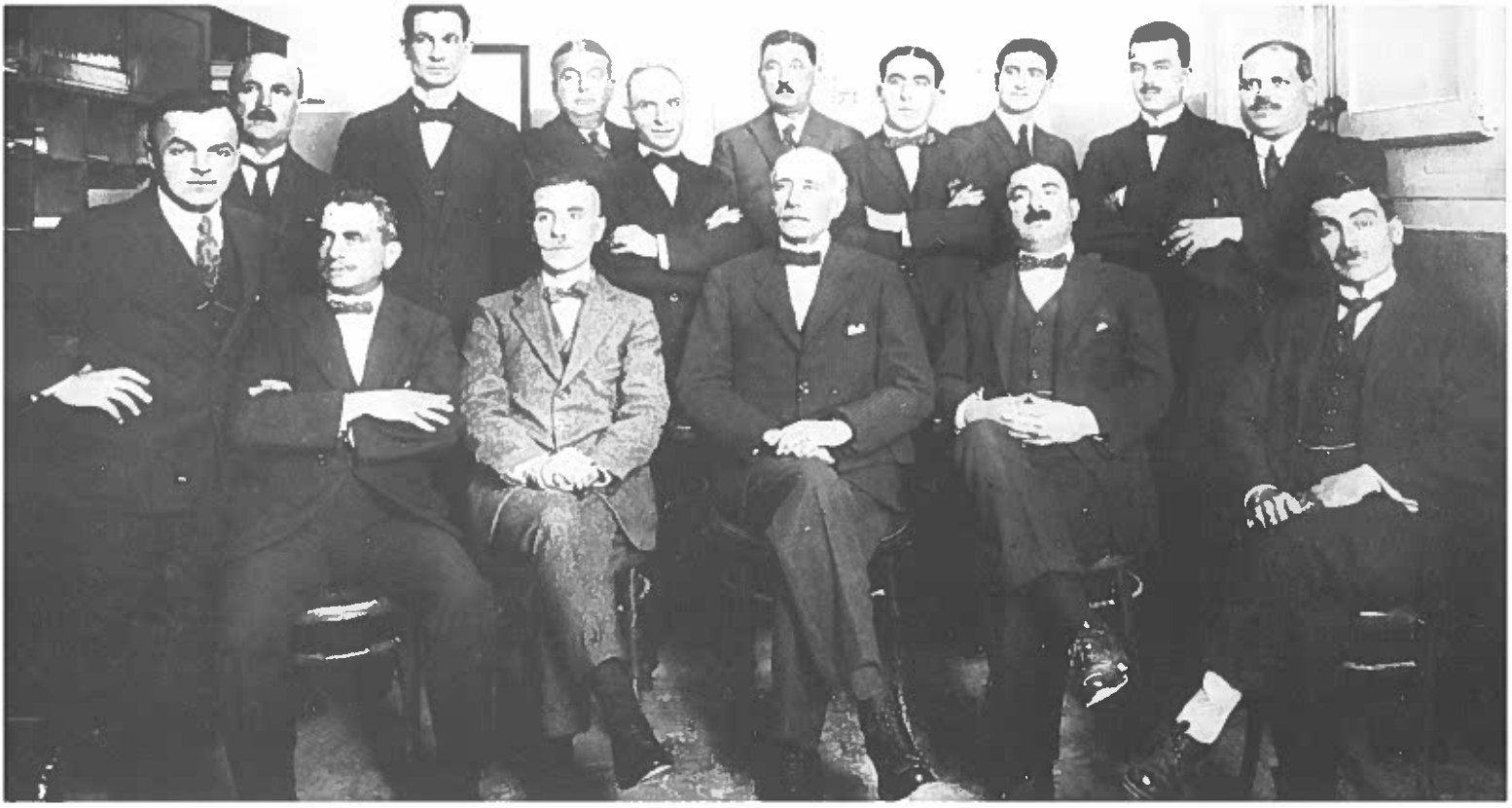
Below: Ticket Collectors U Bruno and A Gera showing the tools of their trade: a whistle, a timepiece and a railway timetable

Ticket Collectors - the final decade

Ticket collectors had an eventful life, what with crossing the moving planks from one carriage to another, checking and issuing tickets and tackling drunks, card sharps and children.

Clerks had a thick, blue serge uniform for winter and one of thinner material in summer. Khaki was never used because of the smoke. Substitute ticket clerks were not provided with a uniform since this would have saddled a cost-conscious management with an additional expenditure. However, they had the same caps and straw hats worn by the regulars. Established clerks obtained a pension after 40 years' service. In 1917 they petitioned for a pension equal to 40 years' service, but obtained after 30 years, a concession then granted solely to police constables. Government was reluctant to create a precedent with other categories of workers and dismissed their claim.

By the end of the decade, the threat of re-



dundancy led to a decline in standards and Strickland deplored the fact that schoolchildren were being allowed to board workmen's trains which were so overcrowded that passengers even travelled hanging on the steps and chains.

The Ferris scandal

Monsignor Francesco Ferris was Minister of Public Instruction in 1923. That year, he boarded the train and, since he could not find a seat in the third class carriage, he went to the first class compartment without paying the difference. The ticket collector insisted on the difference being paid, but Ferris refused. From the opposition, Strickland asked that the Railway Bye-laws be amended to avoid a repetition of the incident. According to Regulation 9 it always fell on the incumbent to pay the difference.

Ferris, in his own defence, said that several of his acquaintances had travelled in the same manner. It was also intimated that the Manager occasionally allowed persons to travel in the first class carriages when the third class was full without having to pay the difference. Ferris denied intimidating the ticket collector. Members' consensus was that Ferris should have paid under protest and reported the matter to the Manager afterwards. His status precluded him from giving an example of high-handedness in public.

Spies all over the place

Later in the decade, in December 1928, the situation was reversed. This time the Nationalists alleged that Strickland's Government had planted spies everywhere, including the trains where a lady clad in a faldetta was spying on the ticket clerks and reporting them to their superiors. Strickland ordered Rizzo, Buhagiar's successor, to investigate the allegations. The 17 full-time and substitute clerks declared that the allegations were unfounded and none of them had ever been hounded for his political convictions or public utterances against the Government. The ticket clerks' written declaration was laid on the table of the House, but Dr DeGiorgio was not satisfied; he alleged that a ticket clerk had been demoted for wearing a

Left: Topping the tiny bunkers with coal at Hamrun Station, before the start of another journey

Nationalist Party badge under his coat lapel. Strickland doubted whether that was where the badge had been worn, otherwise how could it have been seen and the report made?

Report against Mr Grungo

On November 16, 1928, a Mr Antonio Scerri from Rabat reported to the Manager that a man, his wife and son had been allowed to travel on the train for a penny. He alleged that this event had been witnessed by the checker at the top of Valletta Station and that this was not the first time that the collector in question had defrauded the Railway. Scerri threatened to report the matter to the Hon Minister of Public Works if Mr Grungo, the ticket collector in question, was not brought to book.

Grungo denied the allegation and the Minister directed him to sue Scerri for slander. Scerri was advised to retract his allegations in a letter of apology to Grungo, who accepted it on condition that his Department vindicated his conduct in the affair or he would continue with the slander case.

Redundancies and re-employment

On April 15, 1929 the Hon Orlando Smith enquired about the fate of the employees. Strickland felt it premature for him to make an announcement; he reminded the members that the railway was a commercial concern and although its employees had no vested rights, he hoped to "show them further consideration than might be shown by a commercial concern that is unable to pay its way".

He had already advised the Governor, in an unofficial memo, that it was

Ticket Collector P Grungo cleared his name after a passenger alleged that he was defrauding the Government

PERSONNEL EMPLOYED BY THE MALTA RAILWAY, MAXIMUM PAY IN EACH GRADE AND CONDITIONS OF WORK FROM 1892 TO 1931

Grade	Hours of work per day	1892		1900-1901		1910-1911		1920-1921		1930-1931		Notes
		Compl.	Payt	Compl.	Payt	Compl.	Payt	Compl.	Payt	Compl.	Payt	
MANAGER	-	1	*210	1	275	1	300	1	470	1	**50	*£30 included as Prof. Officer. **Acting Manager from 1924.
CLERK	8	1	*50	1	60	2	100	1	270	1	290	*Known as Writer. 2 in 1911-13.
TICKET CLERKS	8.5	6	4s0d	10	4s0d	10	85	10	145	9	145	2 were Station Masters, other 4 were known as Guards.
EXT TICKET CL.	8.5	2	3s0d	--	--	--	--	--	--	--	--	Became Ticket Clerks in 1897.
STOREKEEPER	8	1	5s	1	75	1	83	1	190	1	*215	*£25 as Station Master from 1929
STOREMAN	8	--	--	--	--	--	--	1	90	1	90	Introduced in 1920.
DRIVERS	8	3	5s0d	4	5s0d	4	5s2d	6	9s0d	5	9s0d	
ASST DRIVERS	8	--	--	--	--	2	3s0d	--	--	--	--	Introduced in 1903. Abolished in 1916
STOKERS	8	3	2s4d	4	2s4d	5	2s6d	4	5s8d	4	5s8d	Also called Asst Fitters
FITTER	8.5	1	5s6d	1	6s0d	1	6s3d	1	163	1	163	Also called Foreman Fitter
PLATELAYER	8.5	1	5s6d	1	6s0d	1	6s0d	1	7s0d	1	7s5d	Also called Foreman Platelayer
ASST PLATELAYER	8.5	--	--	--	--	1	3s6d	1		1		Introduced in 1911
CARPENTER	8.5	1	2s4d	1	2s9d	1	2s9d	1	7s0d	1	7s0d	
BOILERMAKER	8.5	1	2s6d	1	3s0d	1	3s0d	1	10s5d	1	10s5d	
CHIEF POINTSMAN	9-13	--	--	--	--	--	--	1	90	1	90	Introduced in 1915
POINTSMEN	9-13	1	1s6d	4	2s4d	15	2s6d	13	4s10d	13	4s10d	Increased to 5 in 1902, to 15 in 1910, reduced to 13 in 1915.
PORTER/ ATTENDANT	8	--	--	--	--	2	1s9d	2	90	2	90	Introduced in 1904
GATEKEEPERS	14	18	10d	21	1s6d	21	1s8d	20	3s8d	20	3s8d	Increased to 21 in 1896, reduced to 17 in 1920.
MESSENGERS	N/A	--	--	1	1s9d	--	--	--	--	--	--	Pointsmen in 1903.
CLEANER	N/A	2	1s8d	2	1s9d	--	--	--	--	--	--	Pointsmen in 1903.
LABOURERS	N.A	2	1s8d	4	1s9d	--	--	--	--	--	--	Pointsmen in 1903.
WATCHMAN	N/A	--	--	1	1s9d	--	--	--	--	--	--	Pointsmen in 1903.
GAUGER	N/A	2	2s0d	2	1s9d	--	--	--	--	--	--	Pointsmen in 1903.
LAMPMAN	N/A	1	1s8d	--	--	--	--	--	--	--	--	Abolished in 1897
BOY	N/A	--	--	1	10d	--	--	--	--	--	--	Introduced in 1896. Abolished in 1903.

†Annual Salary/Weekly Wage

NOTE: This list does not include personnel employed under open votes.

inopportune to consider redundancies before the General Election. The staff deserved gratuities but were not entitled to a pension. In 1930, as a result of the memo, Heads of Departments were directed not to fill any vacancies in minor subordinate posts as these would later serve to absorb redundant railway employees.

The absorption of railway personnel was also discussed during meetings of the committee for the reorganisation of the bus service chaired by the Hon R Strother Stewart. The Committee finally reported that it was impossible to present a detailed scheme for the absorption of the railway

A LIST OF ALL THE RAILWAY EMPLOYEES ON MARCH 31, 1931, SHOWING THEIR TRANSFER TO OTHER GOVERNMENT DEPARTMENTS OR SUPERANNUATION

REF	GRADE	NAME	PAY	DATE OF EMPLOYMENT	AGE	SER	DISPOSAL
1	Ticket Clerk	R Mallia	£145	22/5/94	59	36	Retirement
2	"	S Buhagiar	£145	27/11/95	61	35	Superannuation
3	"	A Lapira	£145	1/2/1900	55	30	Account Keeper W & E Dept.
4	"	O Lubrano	£145	1/2/1900	41	14	Account Keeper W & E Dept
5	Actg Foreman Fitter	C Degiorgio	£163	11/9/1891	56	39	Head Fitter Eng Training Workshop
6	Attendant	A Vella	£90	2/10/1900	50	30	Messenger Parliament
7	"	E Vella	£90	21/6/05	44	25	Messenger Charitable Institutions
8	Storeman	J Meilak	£90	27/5/07	47	23	Storeman Eng Training Workshop
9	Carpenter	L Degiorgio	42s	20/10/95	50	25	Carpenter Eng Training Workshop
10	Engine Driver	E Barbara	54s3d	17/7/05	44	25	Engine Driver Public Works Dept
11	"	A Fenech	54s3d	1/4/96	54	34	Engine Driver W & E Dept
12	"	L Bartoli	51s4d	24/1/17	36	13	Mechanic Eng Training Workshop
13	"	G Farrugia	51s4d	25/0/07	42	23	Engine Driver Public Works Dept
14	Boiler Maker	G Cachia	62s5d	2/1/92	61	38	Superannuation
15	Foreman Platelayer	L Sciortino	41s5d	5/2/92	65	38	Superannuation
16	Stoker	P Rizzo	33s10d	1/12/03	57	27	Retirement
17	"	S Caruana	33s10d	2/12/03	41	27	Stoker Public Works Dept
18	"	L Galea	29s2d	10/10/18	28	12	Stoker Public Works Dept
19	Pointsman	C Pace	29s2d	9/12/99	63	31	Superannuation
20	"	L Formosa	29s2d	15/2/01	48	29	Fattgueman Eng Training Workshop
21	"	C Debono	29s2d	10/12/00	52	30	Pensioned off
22	"	G Parnis	29s2d	15/5/94	61	36	Superannuation
23	"	L Grech	29s2d	16/12/04	53	26	Pensioned off
24	"	G Spiteri	29s2d	19/9/01	62	29	Superannuation
25	Labourer	L Sant	29s2d	6/10/05	52	25	Pensioned off
26	"	P Micallef	29s2d	15/7/08	41	22	Labourer Public Works Dept
27	Pointsman	N Muscat	28s0d	22/11/05	47	25	Labourer Public Works Dept
28	"	G Fenech	28s0d	24/10/19	29	11	Fattgueman Tourist Bureau
29	Labourer	L Falzon	28s0d	1/6/19	55	11	Labourer Public Works Dept
30	Asst Platelayer	C Muscat	29s2d	20/10/95	64	34	Superannuation
31	Gatekeeper	L Borg	23s4d	7/1/26	54	6	Labourer Public Works Dept
32	"	S Aquilina	23s4d	9/1/17	65	13	Watchman Public Works Dept
33	"	P Micallef	23s4d	12/5/21	61	9	Watchman Public Works Dept
34	"	G Grech	23s4d	23/6/00	51	30	Pensioned off
35	"	P Formosa	21s0d	9/3/08	46	22	Labourer Public Works Dept
36	"	C Vassallo	21s0d	5/1/23	52	7	Labourer Public Works Dept
37	"	C Farrugia	21s4d	31/7/34	40	6	Labourer Public Works Dept
38	"	G Vassallo	21s0d	7/1/08	49	22	Labourer Public Works Dept
39	"	C Magro	21s0d	6/8/13	58	17	Gardener Eng Training Workshop
40	"	F Soltana	21s0d	26/5/18	58	11	Gardener Attard & Salvatore Stations
41	"	G Cali	21s0d	29/10/19	56	11	Watchman Agricultural Dept
42	"	P Vassallo	21s0d	17/6/20	37	10	Stoker W & E Dept
43	"	C Camilleri	21s0d	17/3/21	38	9	Labourer Public Works Dept
44	Skilled Labourer	C Calleja	36s0d	30/12/14	40	11	Handyman Public Works Dept
45	Engine Driver	G Grimaud	56s6d	21/9/20	35	20	Fitter W & E Dept
46	Ass Fitter & Driver	G Farrugia Ebejer	48s0d	17/1/21	29	9	Mechanic Eng Training Workshop
47	Stoker	F Spiteri	36s3d	17/7/02	43	8	Stoker/Handyman Public Works Dept
48	Stoker &	E Darmanin	36s3d	14/9/22	28	8	W & E Dept
49	Labourer	G Elliot	36s0d	4/8/20	38	10	Labourer Public Works Dept
50	"	E Theuma	36s0d	23/10/23	46	7	Watchman Agricultural Dept
51	Watchman	S Agius	45s2d	4/8/20	52	10	Night Watchman Eng Training Workshop
52	Labourer	L Grech	45s2d	25/5/22	31	8	Watchman Agricultural Dept
53	Skilled Labourer	C Bonello	36s0d	29/9/11	33	19	Labourer W & E Dept
54	Saddler	E Frendo	36s0d	5/12/21	47	9	Engineering Training Workshop
55	Tin & Coppersmith	C Galea Vella	36s0d	17/12/63	36	7	Coppersmith W & E Dept
56	Gardener	C Galea	45s0d	6/11/03	43	27	Gardener Agricultural Dept
57	Skilled Labourer	G Schembri	36s0d	11/9/06	47	23	Labourer Public Works Dept
58	"	G Galea	36s11d		58	13	Labourer Public Works Dept
59	"	S Zerafa	36s8d	31/10/14	42	26	Gardener Agricultural Dept
60	"	F Cantar	36s8d	30/8/05	39	25	Labourer Public Works Dept
61	"	C Borg	36s8d	8/5/18	39	12	Gardener Agricultural Dept
62	"	E Ebejer	29s9d	28/11/19	26	11	Labourer Public Works Dept
63	Watchman	A Calleja	29s9d	29/11/20	52	10	Watchman Museum Stations
64	Stoker	D Cachia	36s0d	1/2/24	55	6	Handyman W & E Dept
65	Moulder	G Abela	75s0d	16/3/95	63	32	Retirement
66	Blacksmith	F Caruana	56s0d	23/11/03	69	27	Retirement
67	Skilled Labourer	E Theuma	36s0d	8/2/23	33	7	Driver Public Works Dept.
68	Carpenter	S Cutajar	48s0d	22/12/25	36	5	Carpenter Schools Dept
69	Skilled Labourer	G Cassar	29s9d	7/5/25	28	5	Labourer Public Works Dept
70	"	M Frendo	29s9d	18/5/25	25	5	Labourer Public Works Dept
71	Boiler Maker	C Schembri	36s6d	22/2/27	32	3	Labourer Public Works Dept
72	Skilled Labourer	V Calleja	29s9d	30/4/26	49	4	Plumber W & E Dept
73	"	N Ferro	24s0d	18/1/27	22	3	Labourer W & E Dept
74	"	S Catania	29s6d	1/5/26	45	4	Labourer Public Works Dept
75	"	A Azzopardi	36s0d	6/12/26	50	4	Labourer Public Works Dept
76	Substitute Gatekeeper	G Milsud	24s0d		49	5	Labourer Public Works Dept
77	"	C Fenech	24s0d		49	4	Labourer Public Works Dept
78	Subs Ticket Clerk	E Caruana	56s0d		33	12	Inspector Traffic Control Board
79	"	A Vella	56s0d		39	13	Inspector Traffic Control Board
80	"	W Xuereb	56s0d		40	6	Inspector Traffic Control Board
81	"	P Grungo	56s0d		51	6	Inspector Traffic Control Board
82	"	A Aquilina	56s0d		28	5	Inspector Traffic Control Board
83	Labourer	G Cauchi	36s0d		16	1	Labourer Public Works Dept

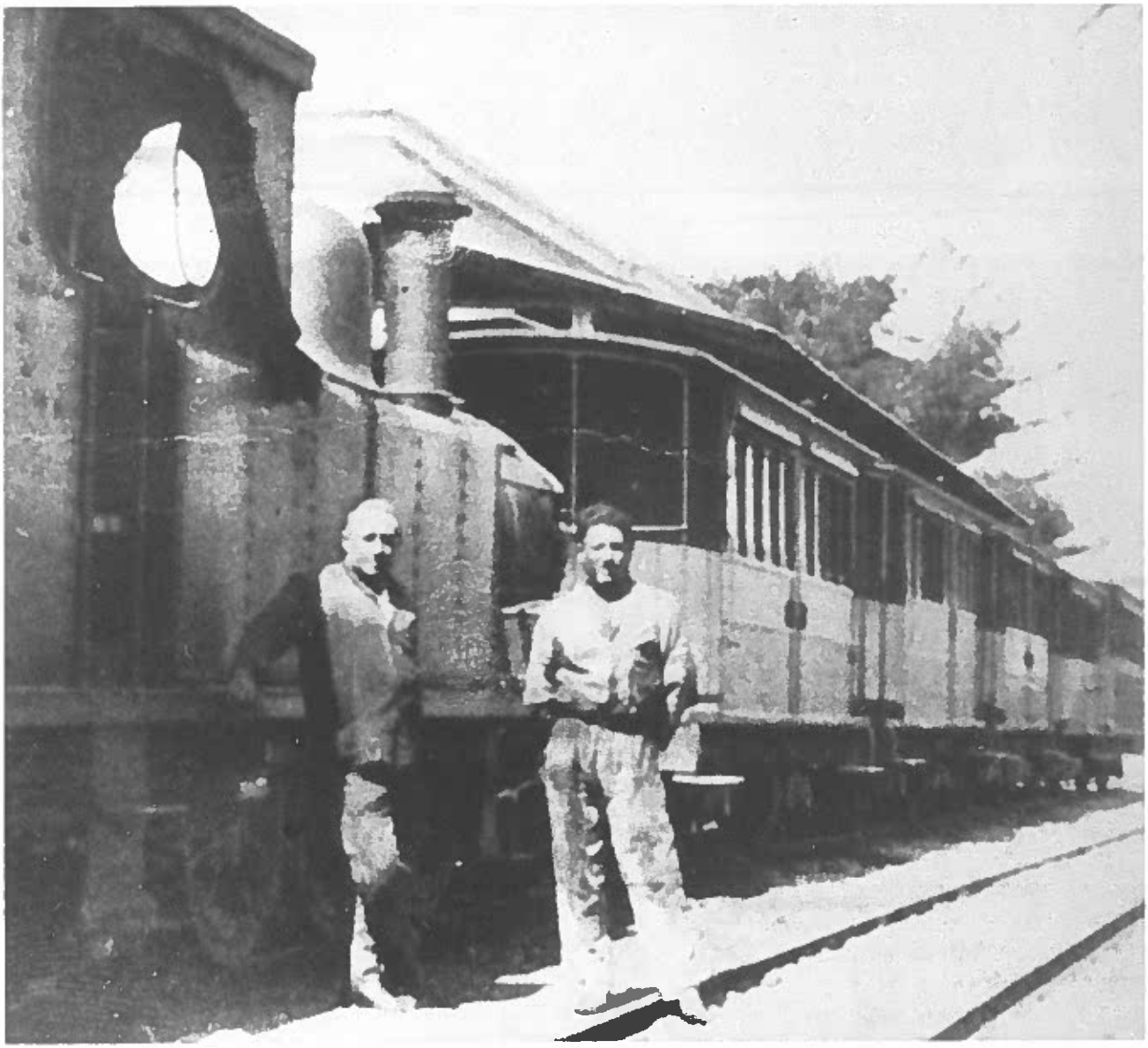
OBSERVATIONS

1. Persons close to 60 years of age or over who were not pensionable or on open votes were superannuated i.e. retired on reaching an age limit (e.g. Nos. 1, 2, 14, 19, 22, 24, 65 and 66).

2. Those on the subordinate establishment were given alternative employment except for Nos. 15 and 30, who were both platelayers. These two were pensioned off since no alternative employment corresponding with their grade could be found.

3. The remaining non-pensionable officers or those on open votes were given alternative employment with the following exceptions:

No.16	Physically unfit
Nos. 21, 23, 25 and 34	Pensioned off

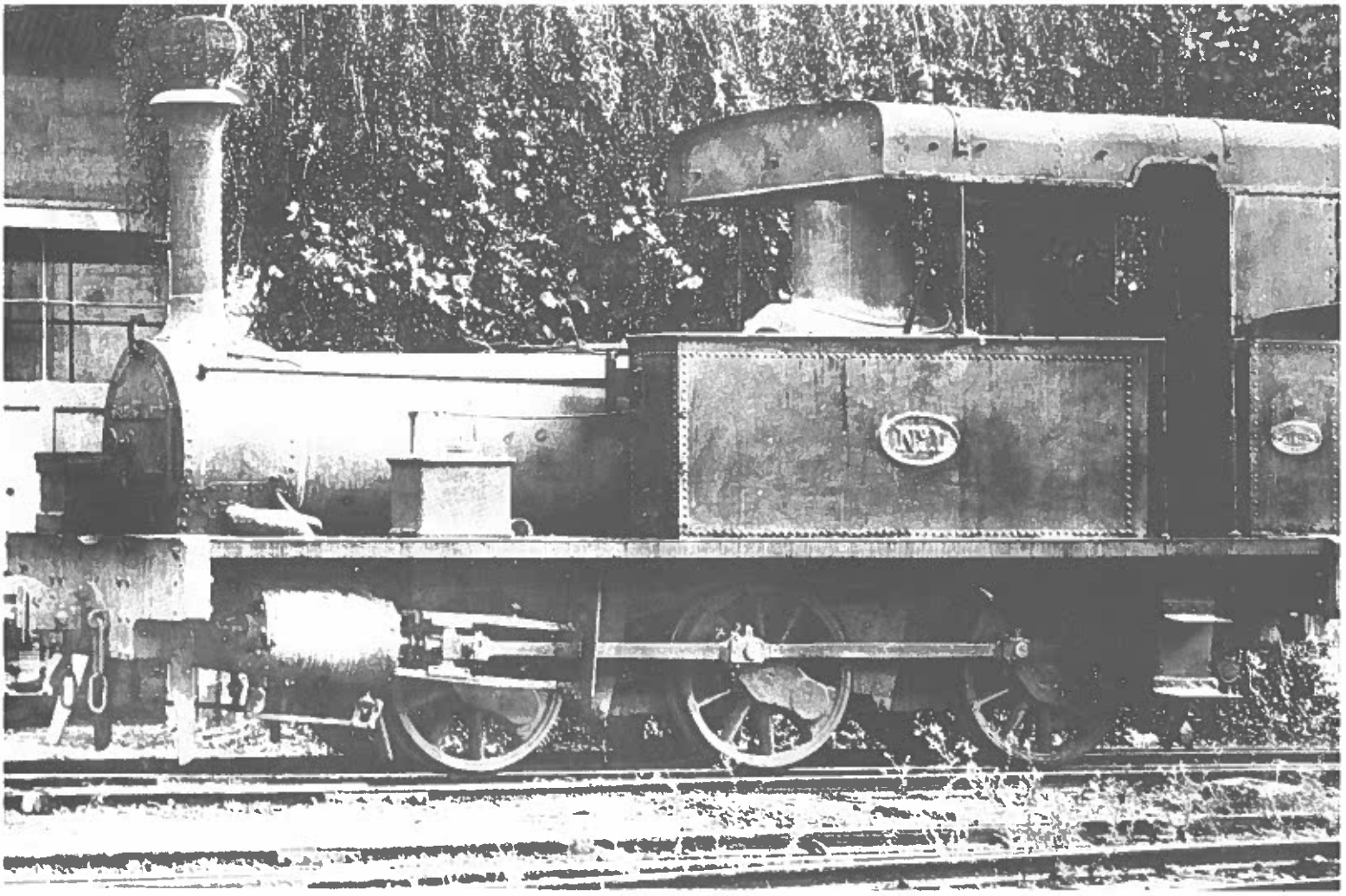


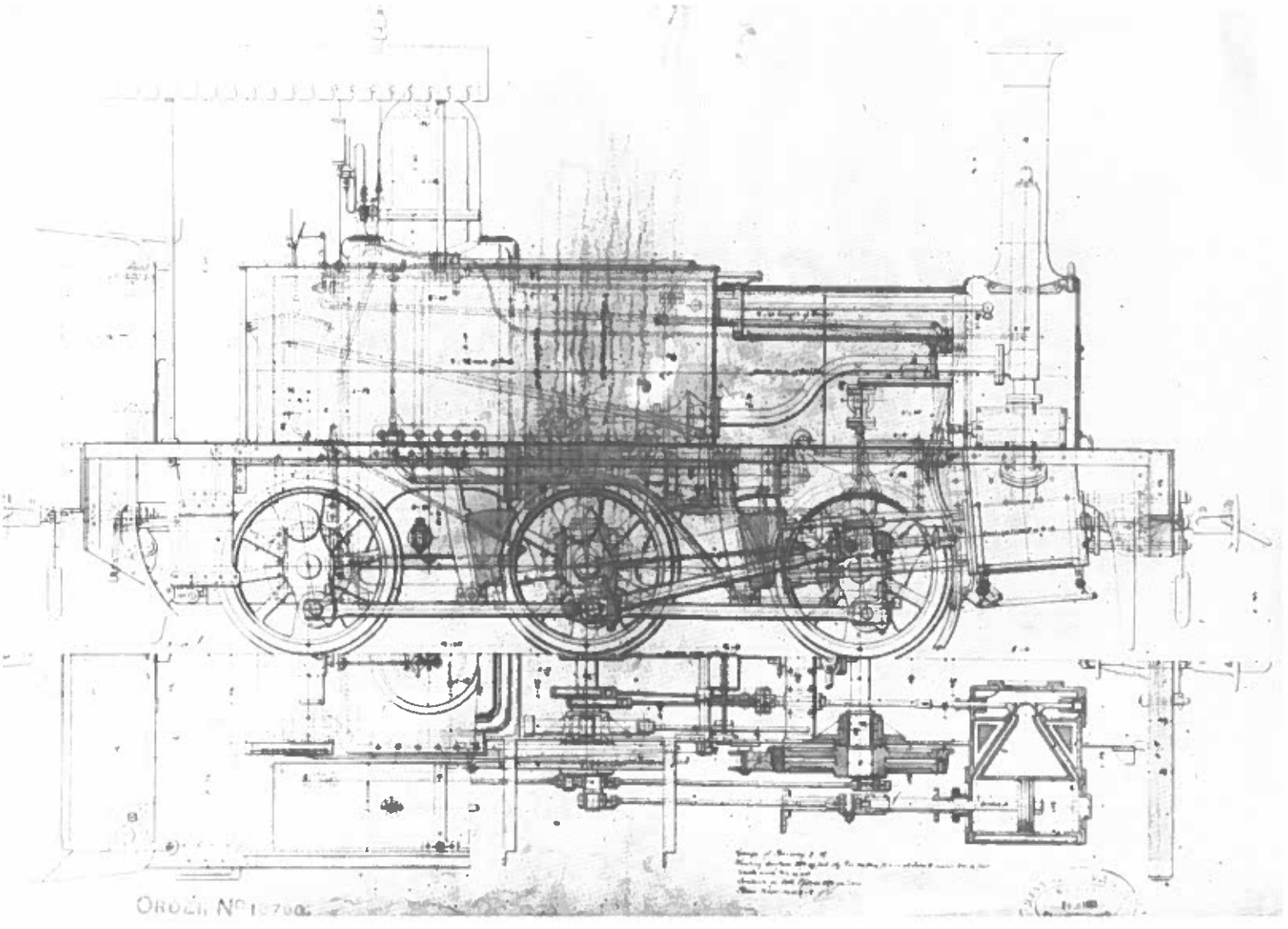
Driver and stoker at Hamrun Station the day after the railway shut down. Despite the uncertainty about their future most of the men were subsequently absorbed in other Government departments

staff until the exact configuration of the Island's bus traffic was determined. One of the proposals was for a national bus company which would employ the railway staff. In the event, the only staff who found employment in the bus service were five substitute ticket clerks who were taken on as Inspectors by the Traffic Control Board.

New regulations for chauffeurs and conductors, including the prohibition of boy conductors under 16 years of age, were likely to absorb more employees. The Committee advised the Traffic Control Board to ask monopoly route owners to give preference to redundant railway staff. Other suggestions included the retention of the Hamrun workshop, employment in various Government Departments and retirement of staff over 60 years of age.

On December 22, 1930, Heads of Departments were informed of the final disposition of the railway employees as a result of the reduction in the train service which started on January 15, 1931.




ORDER No 1070a

ENGINES AND ROLLING STOCK

"It is also observable that the engines which I caused to be bought at scrap-iron prices and repaired more than twenty years ago, are still running."

Strickland, to the Lt. Governor, July 4, 1917.

In July 1881 William Roebuck ordered three identical engines from Manning Wardle Ltd at their Boyne Engineering Works, Leeds. Roebuck's order (Nº 18,700) was begun at once because the engines were required urgently, the line being nearly completed. The three 0-6-0 tank types were amongst the few engines to leave the works without a name and were simply known as Nº. 1, 2 and 3. Roebuck unintentionally began a system of nomenclature which was continued with the other engines. The first engine, maker's number 842, was tried in steam on October 6, 1882 and sent away on October 31. Both 2 and 3, maker's numbers 843 and 844, were tried in steam on December 15 but Nº 2 was despatched on December 20 while Nº 3 was sent on March 10, 1883.

Specifications of these three engines were as follows:

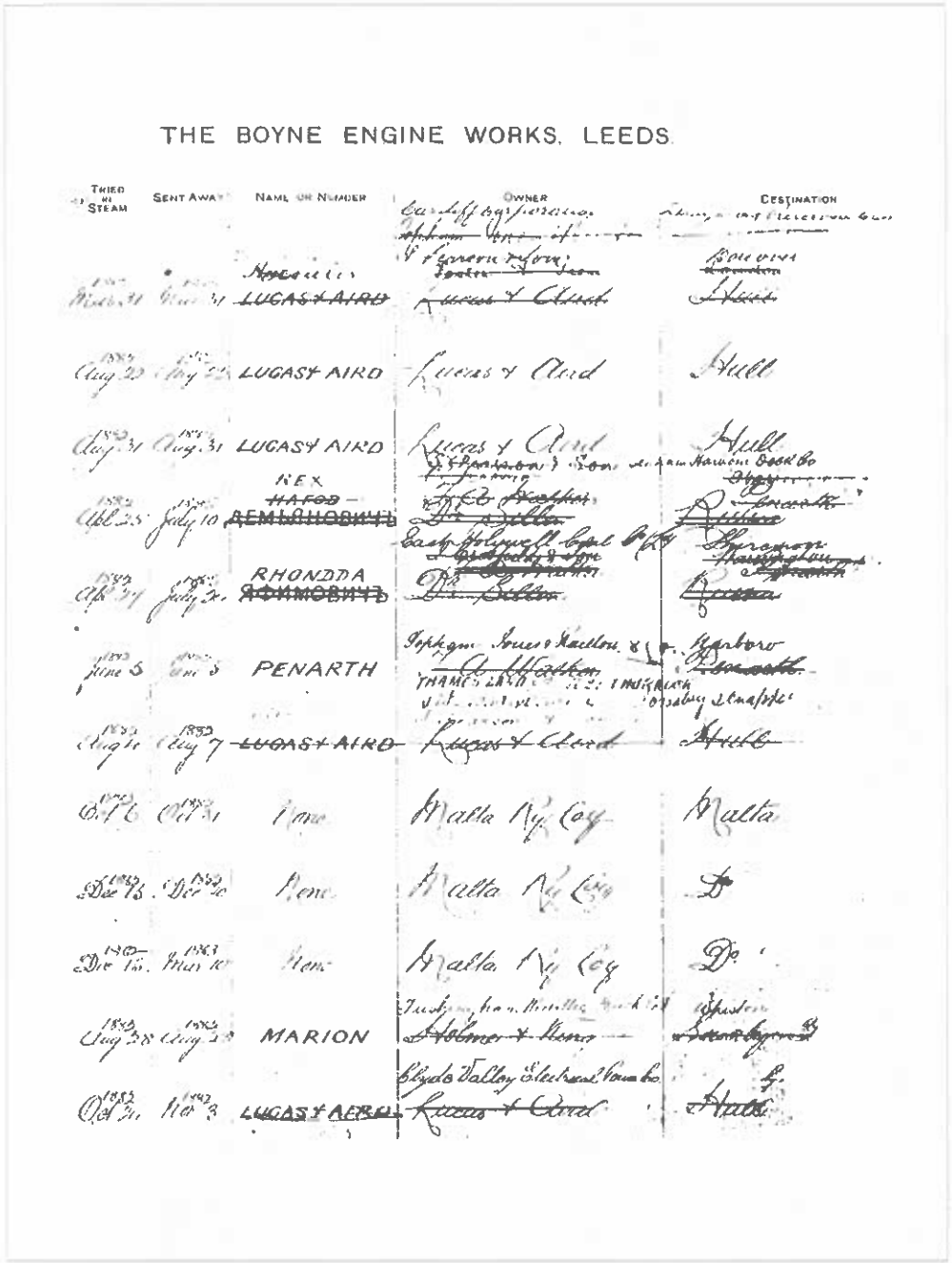
Overall length	22'	(6.7m)
Maximum height	10'6"	(3.2m)
Outside cylinders	10.5" by 18"	(26.7 by 45.7cm)
Rigid wheelbase	9'7"	(2.9m)
Diameter of coupled driving wheels	3'5"	(1.03m)
Grate area	4.5 sq. ft	(0.4181m²)
Heating surface, Bibby firebox	84 sq. ft	(7.8m²)
Heating area, Elliott tubes	240 sq. ft	(22.3m²)
Side tank total capacity	350 gals.	(1591 lt.)
Weight (empty)	17 tons	(17.27 tonnes)
Weight (full)	22 tons	(22.35 tonnes)
Gross carrying capacity	20 tons	(up to 1:40 gradient)

The boiler plates were manufactured by Coopers and the wheels were of Bessemer steel. The driving cabin was open to the elements except for a metal canopy supported on four struts, the rear pair doubling as hand rails. A rear wall with two rectangular windows above the bunker was fitted after 1891. The bunker extended to the rear of the chassis.

Facing page: Engine Nº 1, the first of three to be delivered to the Malta Railway Company by Manning Wardle & Co. Ltd, Boyne Engineering Works, Leeds. She was ordered in 1882, tried in steam on October 6 and sent away on October 31, 1882

Single front and back buffers with twin chain and hook coupling links were placed in the centre of the buffer beams. The smoke box door was flat and the cylinders were slightly inclined towards the rear end. The steam dome was positioned well aft on the boiler barrel and the safety valve was behind it.

Sand tubes were fitted near the front wheels and slightly further back



THE BOYNE ENGINE WORKS, LEEDS.

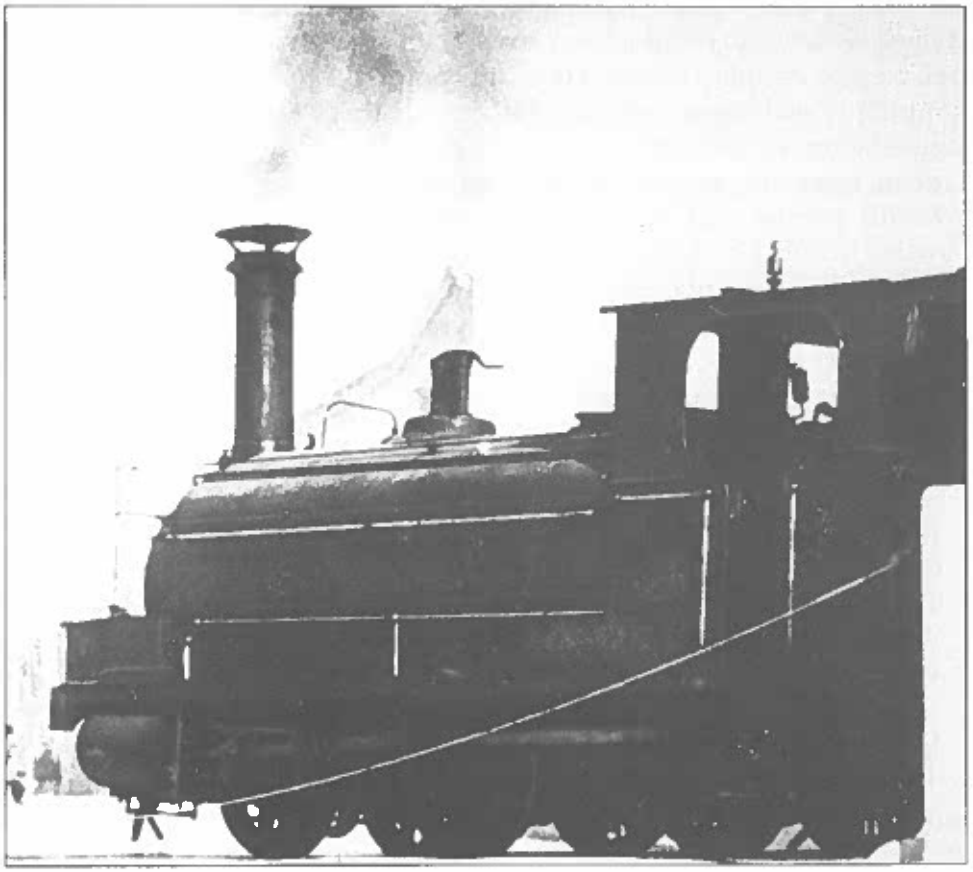
Tried in Steam	Sent Away	Name or Number	Owner	Destination
		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	LUCAS & AIRD	Lucas & Aird	Hull
Aug 22	Aug 22	LUCAS & AIRD	Lucas & Aird	Hull
Aug 31	Aug 31	LUCAS & AIRD	Lucas & Aird	Hull
[illegible]	July 10	REX	[illegible]	[illegible]
[illegible]	July 24	RHONDDA	[illegible]	[illegible]
June 5	June 5	PENARTH	[illegible]	[illegible]
Aug 16	Aug 7	LUCAS & AIRD	Lucas & Aird	Hull
Oct 6	Oct 31	Name	Malta Ry Coy	Malta
Dec 13	Dec 20	Name	Malta Ry Coy	Do
Dec 15	Mar 16	Name	Malta Ry Coy	Do
Aug 28	Aug 28	MARION	[illegible]	[illegible]
Oct 31	Nov 3	LUCAS & AIRD	Lucas & Aird	Hull

Manning Wardle's order book lists the Malta Railway's first three engines. They were sent away within three months of each other and were the only ones to leave the works without a designated name

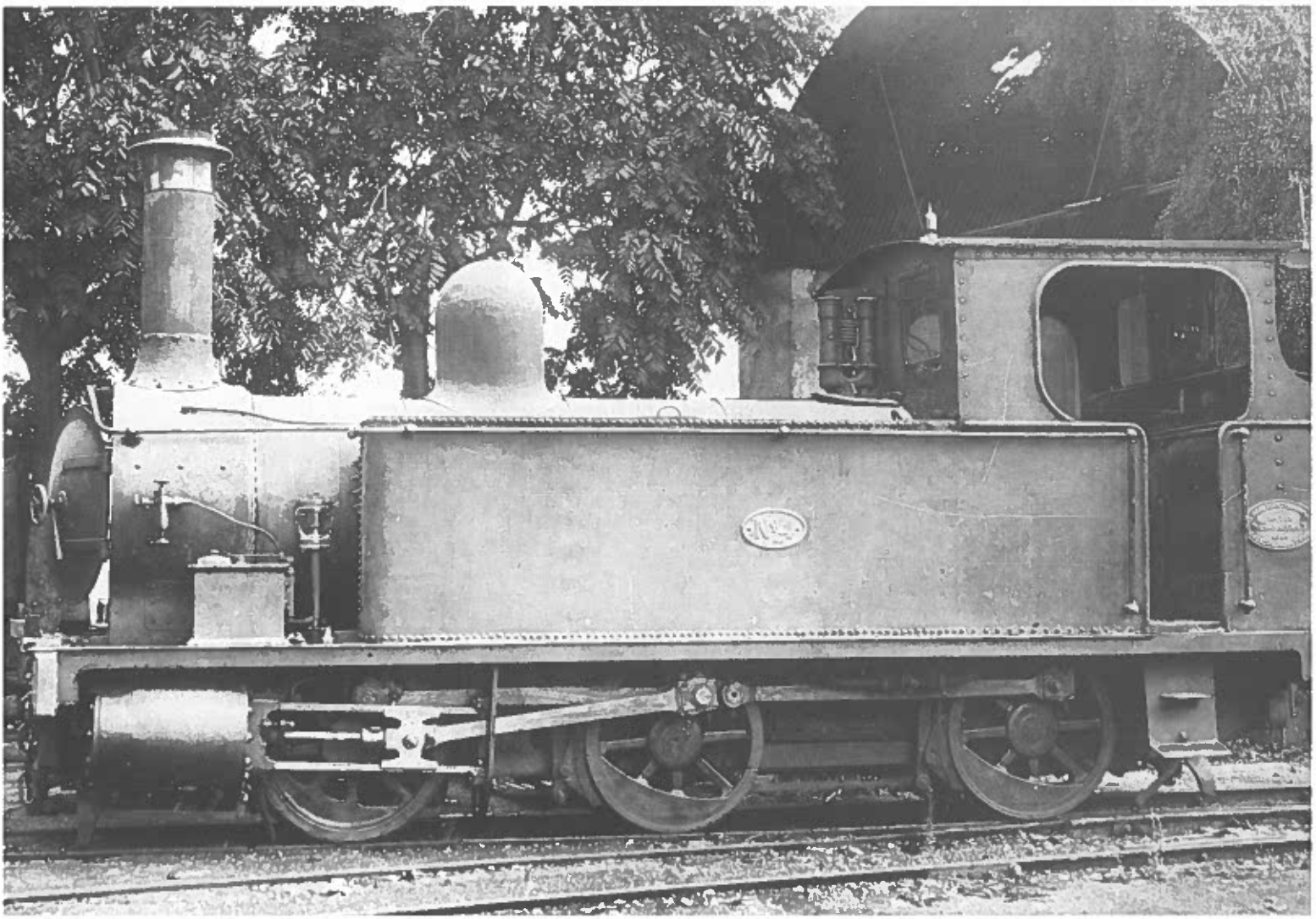
behind the rear pair. Guard irons were provided at the front and back above each track since, like all the other engines, they could not be turned and either of the "up" and "down" trips would be in reverse. Engines Nº 1 and Nº 3 faced Notabile while Nº 2 faced Valletta.

Although spark-arresting baskets were fitted during the dry season, this did not prevent the occasional cornfield fire. Oval number plates (Nº 1, Nº 2, Nº 3) were fitted to the centre of the side tanks and the manufacturer's plates were fitted aft on the sides of the bunker.

Despite clause N of the contract which bound the Company's engines to consume their own smoke, several complaints were made about this nuisance at Floriana tunnel and Porta Reale station soon after the service began. In August 1883, the Inspector of Machinery at the Dockyard advised Geneste to use Welsh smokeless coal which only emitted white smoke and



Engine N° 4 before (right) and after (below) her rebuilding at the Hamrun railway workshop. When the Government took over the railway, N° 4 lay at Hamrun with a damaged fire-box, broken tube plates and cracked rivet holes



was readily and cheaply available in naval stations like Malta. He also advised Geneste to build a brick arch and baffle plate in the two engines' fireboxes to enable the smoke to be contained during the tunnel trip. Manning Wardle were instructed to include these alterations in the third engine before its delivery.

Soon after the service commenced it became obvious that a fourth powerful engine was required and an order was placed with Black, Hawthorn and Co. Ltd. of Gateshead, Newcastle-on-Tyne. The fourth engine, maker's number 753, arrived in 1884. Like the Manning Wardles it was a 0-6-0 tank but with the following dimensions.

Cylinders (2)	13" by 19"	(33 by 48.3cm)
Diameter of coupled wheels	3'2"	(96.5cm)
Total wheelbase	11'6"	(3.5m)
Minimum curve radius	130'	(39.6m)
Saddle tank capacity	620 gals	(2818lt)
Bunker capacity	38 cu ft	(10.76m^3)
Grate area	8.5 sq ft	(0.79m^2)
Total heating surface	498 sq ft	(46.3m^2)
Weight (empty)	18.75 tons	(19.05 tonnes)
Weight (full)	23 tons	(23.37 tonnes)

Its saddle tank was carried over the entire length of the boiler barrel up to the smoke box which was enclosed by a flat door and surmounted by a funnel-shaped spark-arresting chimney. The safety valve was positioned half way along the top of the saddle tank and the steam dome was embedded in the tank near the driver's cabin. This had open side windows and narrow access doors. Two circular portholes were fitted to both front and rear bulkheads. Single buffers were positioned in the middle of the front and rear buffer beams with twin coupling links, and guard irons and sand tubes were provided at the front and back. The side panels carried the manufacturer's plate and the engine number (Nº 4) was fitted to the middle of the saddle tank, half way along its length below the walkway handrail.

The rolling stock

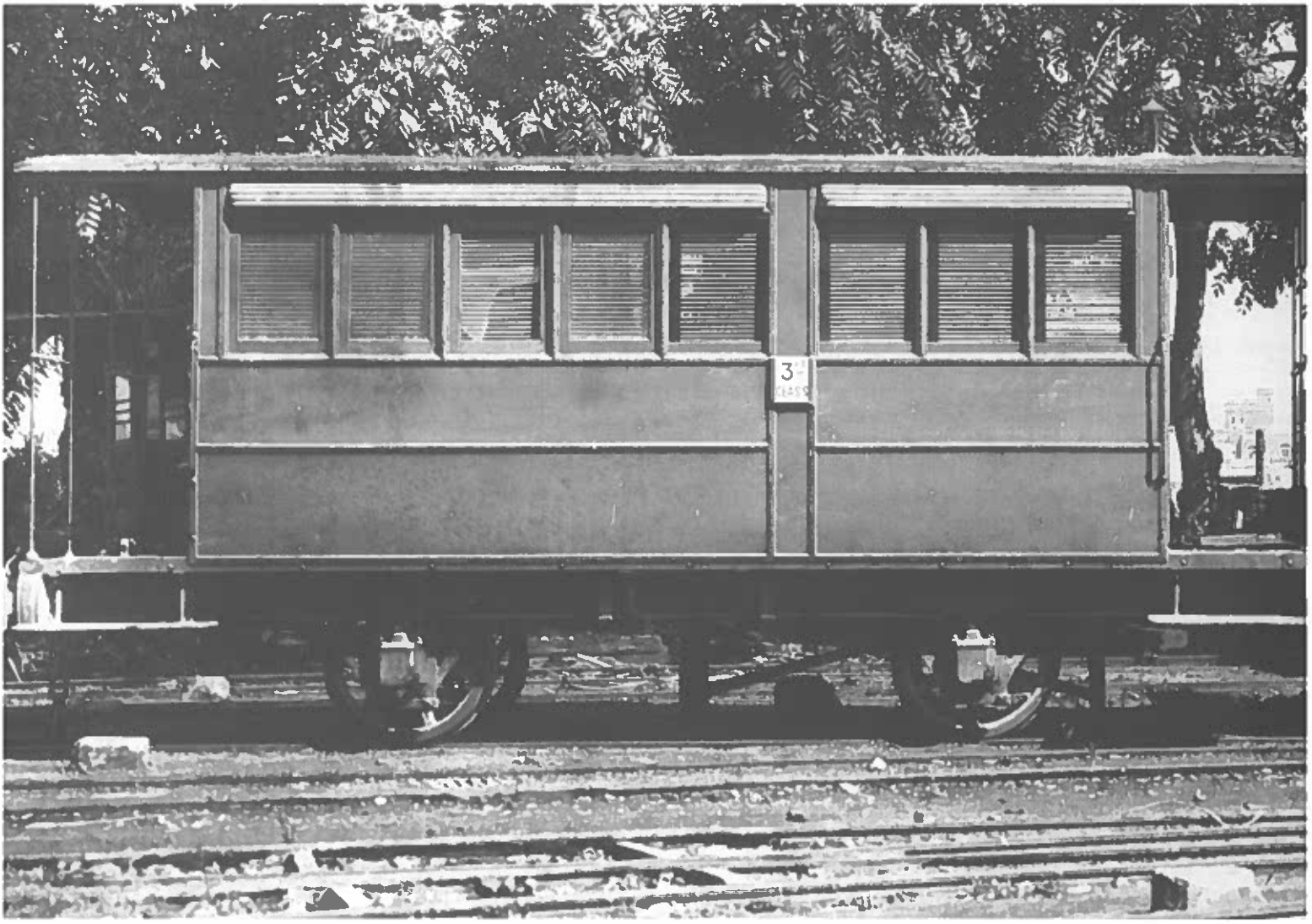
The carriages were built by Swansea Wagon Builders and Company. There were six composite 1st/2nd Class carriages each carrying about 14-18 passengers, partitioned by an internal, glazed sliding door. Each of the ten 3rd Class carriages had a capacity of about 23 passengers. All the carriages had an open verandah at each end. The carriages were lit by two candle lamps hanging from the roof. The distribution of light was uneven and depended on the size and make of the candles.

Apart from these there were three workmen's carriages; two ballast wagons, two platelayer's trolleys and a luxury saloon carriage for the Governor and visiting dignitaries.

Facing page: A composite First / Second Class carriage (top) built for the company by Swansea Wagon Builders & Co. Classes were separated by an internal partition. This carriage was later converted into Third Class, Second having been abolished upon Government takeover. Swansea Wagon Builders also delivered this open or workmen's carriage (bottom)

Neglect and decline

When Geneste resigned in 1887, his mismanagement had ruined the engines. In 1888 the Inspector of Machinery and Chief Engineer at the Dockyard was engaged to report on the state of the Company's engines and rolling stock. He found that engines Nº 1 and Nº 3 and their boilers were in a deplorable state and were unfit for service. The boiler of Nº 2 engine would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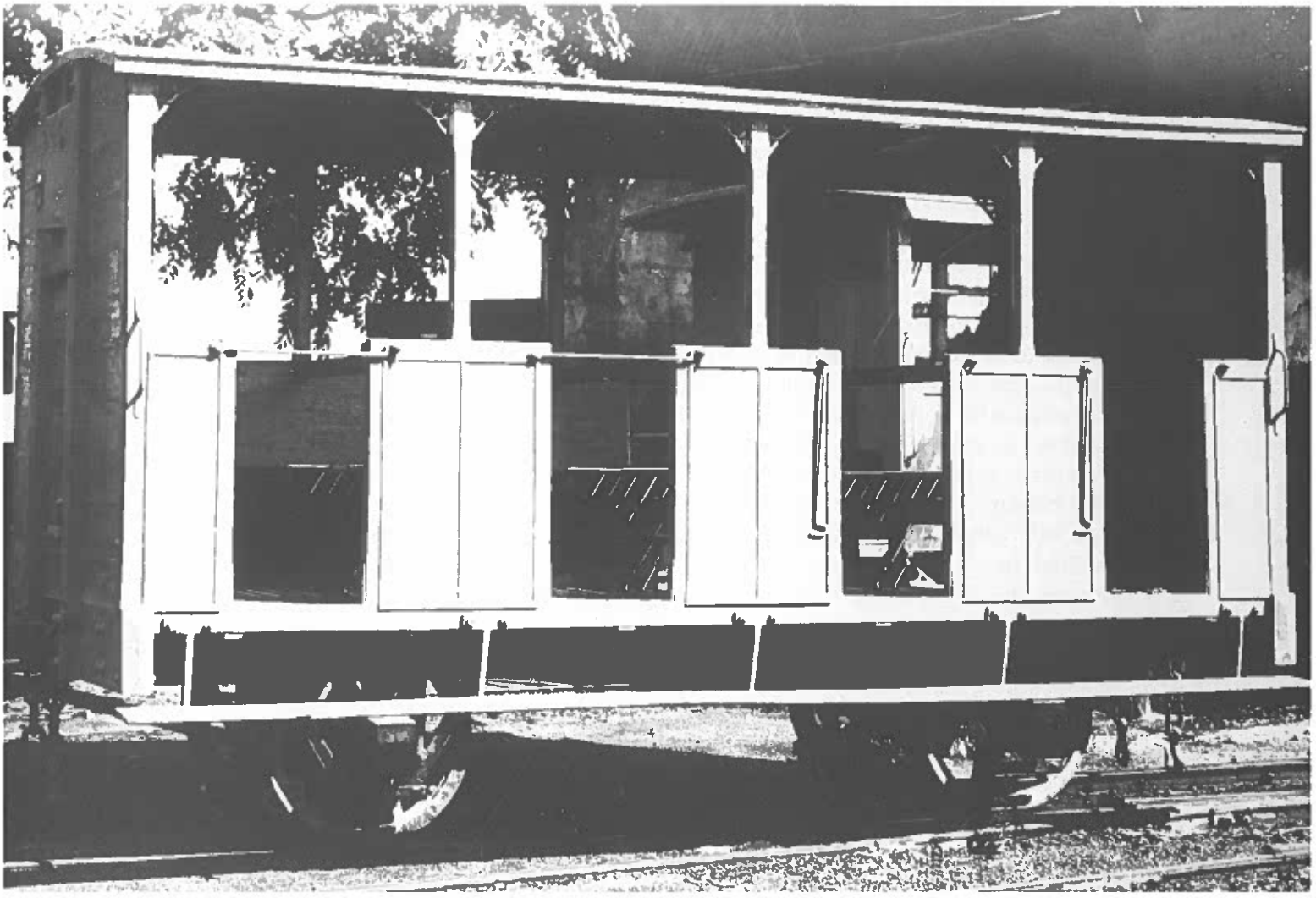


Schedule A.

LOCOMOTIVES AND SPARE PARTS THEREOF (all of th

Lot.	Engine No.	Makers and Works No.	Year of building	Dimensions overall L. W. H.	Wheel arrangement	Driving wheel Diameter	Total wheel base	Cylinders	Grate area	Total heating surface-tubes & fire-box.	No.
									Sq ft.	Sq ft.	
1.	1.	Manning Wardle & Co. Leeds, England, No. 842 ...	1882	21'.10"×7'.6"×10'.9"	0-6-0	3'.0"	9'.9"	10½"×18"	4½	324	68
2.	4.	Black Hawthorn & Co. Gateshead-on-Tyne Newcastle No. 758	1884	23'.9"×7'.0"×12'.0"	0-4-0	3'.2"	11'.7½"	13"×19"	6	550	122
3.	6.	Manning Wardle & Co. Leeds, England, No. 1261 ...	1892	35'.0"×8'.4"×12'.4"	2-6-4	3'.3"	25'.9"	15"×20"	10	754	126
4.	7.	Beyer Peacock & Co. Garton Foundry, Manchester, No. 3678.	1895	31'.3"×7'.6"×11'.7"	2-6-4	3'.3"	32'.2"	14½"×20"	12	700	160
5.	8.	Beyer Peacock & Co. Garton Foundry, Manchester No. 3852	1896	31'.3"×7'.6"×11'.7"	2-6-4	3'.3"	32'.2"	14½"×20"	12	700	160
6.	9.	Beyer Peacock & Co. Garton Foundry, Manchester No. 4163	1899	31'.3"×7'.6"×11'.7"	2-6-4	3'.3"	32'.2"	14½"×20"	12	700	160
7.	10.	Beyer Peacock & Co. Garton Foundry, Manchester No. 4719	1905	31'.3"×7'.6"×11'.7"	2-6-4	3'.3"	32'.2"	14½"×20"	12	700	160
8.		6 pairs wheels and axles for engines Nos. 7, 8, 9 and 10. 1 connecting-rod for engine No. 6. 1 slide crank and bush for engine No. 6. 2 chimneys for engine No. 7. 1 smoke box for engine No 7. 150 steel ferrules for boiler-tubes for engines Nos. 7, 8, 9 and 10. 70 bearing springs for engines, assorted.									

(a) Unserviceable.
(b) Requires re-boilering otherwise in good running order.
(c) In good running order.

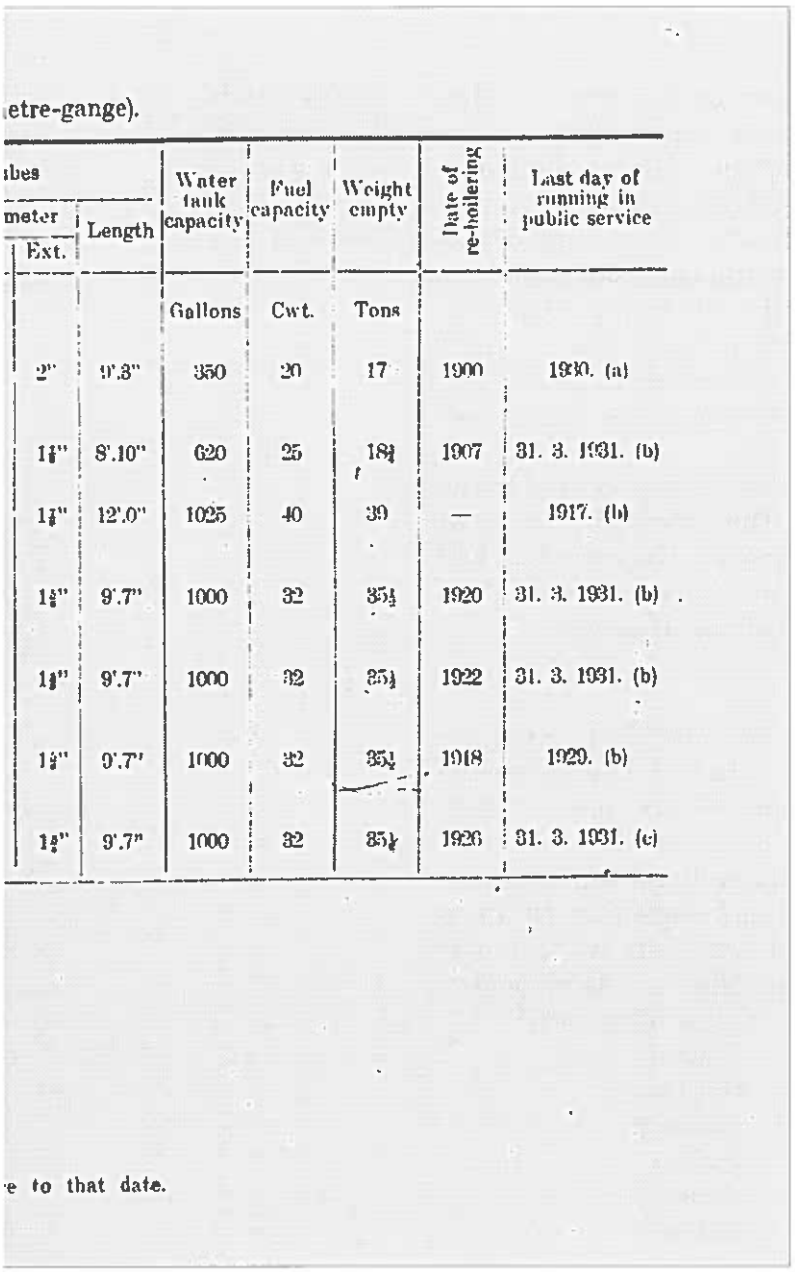
N.B. Railway service was closed down on the 31st March, 1931. Engines No. 4, 7, 8 and 10 were maintained in

require a five-week repair job. Nº 4 was in a fair condition but repairs would also be necessary. The wheels, bolts and springs of some of the carriages were in a poor state as the equipment had been strained to the utmost and there seemed to be no one capable of looking after the locos.

In March 1889, Nº 4's boiler exploded while the train was in Floriana tunnel and engine Nº 1 broke down at Birkirkara. Services were suspended or curtailed while expensive repairs were made at the Dockyard. By the time the service was finally closed down, Nº 1 was the only serviceable engine, the boilers of Nº 2 and Nº 3 being at the Dockyard, while Nº 4 lay at Hamrun with a badly bulged firebox, its tube plates broken and the rivet holes cracked in various places. Its boiler and firebox leaked under pressure and the foundation rings at the bottom of the firebox were defective.

Government take-over

When Strickland took over the railway, he decided to repair the old engines,



etre-gange).

ubes		Water tank capacity	Fuel capacity	Weight empty	Date of re-boilering	Last day of running in public service
meter Ext.	Length					
		Gallons	Cwt.	Tons		
2"	9'.3"	350	20	17	1900	1930. (a)
1¾"	8'.10"	620	25	18¾	1907	31. 3. 1931. (b)
1¾"	12'.0"	1025	40	39	—	1917. (b)
1⅝"	9'.7"	1000	32	35½	1920	31. 3. 1931. (b)
1⅝"	9'.7"	1000	32	35½	1922	31. 3. 1931. (b)
1⅝"	9'.7"	1000	32	35½	1918	1929. (b)
1⅝"	9'.7"	1000	32	35½	1926	31. 3. 1931. (c)

e to that date.

This table is taken from the tenders issued on February 3, 1933. Engines N° 2 and 3 (specifications as N° 1) and N° 5 (specifications as N° 6) are not listed because they were retained by the Engineering Training Workshop for teaching purposes

set up a workshop and reorganise the whole operation. To make the railway profitable, more people had to be carried in longer trains at lower fares. This would require heavier and more powerful engines, several additional carriages and the conversion of the line to heavier rails.

The purchasing system for new equipment and spares became complicated and protracted. The manager usually discussed his needs and specifications with Strickland who promised to get the necessary vote approved in the Council. The Crown Agents were then asked to procure quotations from British firms. The final decision on purchase rested with the Contracts Committee which often overruled the manager's suggestions on quality and price. The manager's estimate was regularly exceeded by fairly large amounts and he would then be asked to account for this.

Repairs to the old engines

In 1891 the Council approved votes for the repair of the Company's four engines. Engines N° 1, 2 and 3 had their boilers repaired at the Dockyard and the original water heating feed pumps were replaced by injectors. After 1892 the three engines were fitted with additional boiler barrels and tubes without altering the slide bars. These new barrels and tubes were 6" (15.2cm) longer than the original 12'6" (3.8m), giving an additional heating surface. In May 1893 the sum of £319.10s. was voted for the first new boiler to be installed in Engine N° 3.

Engine N° 4 was in an equally sorry state, and work on it was taken in hand at the newly set up Railway Workshop at Hamrun. Temporary repairs were effected but the engine continued to worry Strickland and Gatt. Its weight tore open the gauge and its vibrations caused it to leak.

Gatt improved its capacity to hold steam and water by changing its tubes and building a fire-brick bridge. He finally succeeded in getting the engine to work satisfactorily after repairing the firebox. The repairs included an external rebuilding which transformed her beyond recognition. The faulty saddle tank, to which the uneven weight distribution was attributed, was removed. New side tanks were integrated with the cab-front panels to extend over the truck chassis. As with Nº 2 and 3 the feed pumps were replaced by injectors. The safety valve was relocated close to the cab-front wall and a new steam dome was fitted in front of the barrel centreline. The smokebox was enclosed by a considerably bulged door and a "stovepipe" chimney with a copper band was fitted.

The engine's number and manufacturer's plates were relocated to the side tanks and bunker side panel respectively. The entire job cost about £600 and apart from saving the railway a lot of money, the workshop had gained invaluable experience which was put to good use in later years. The engine lasted until 1931 and gave several years of useful service.

Manning WArdle's works drawings of Engine Nº 5. She was the first of two bought by the Crown Agents on behalf of the Malta Government soon after the takeover

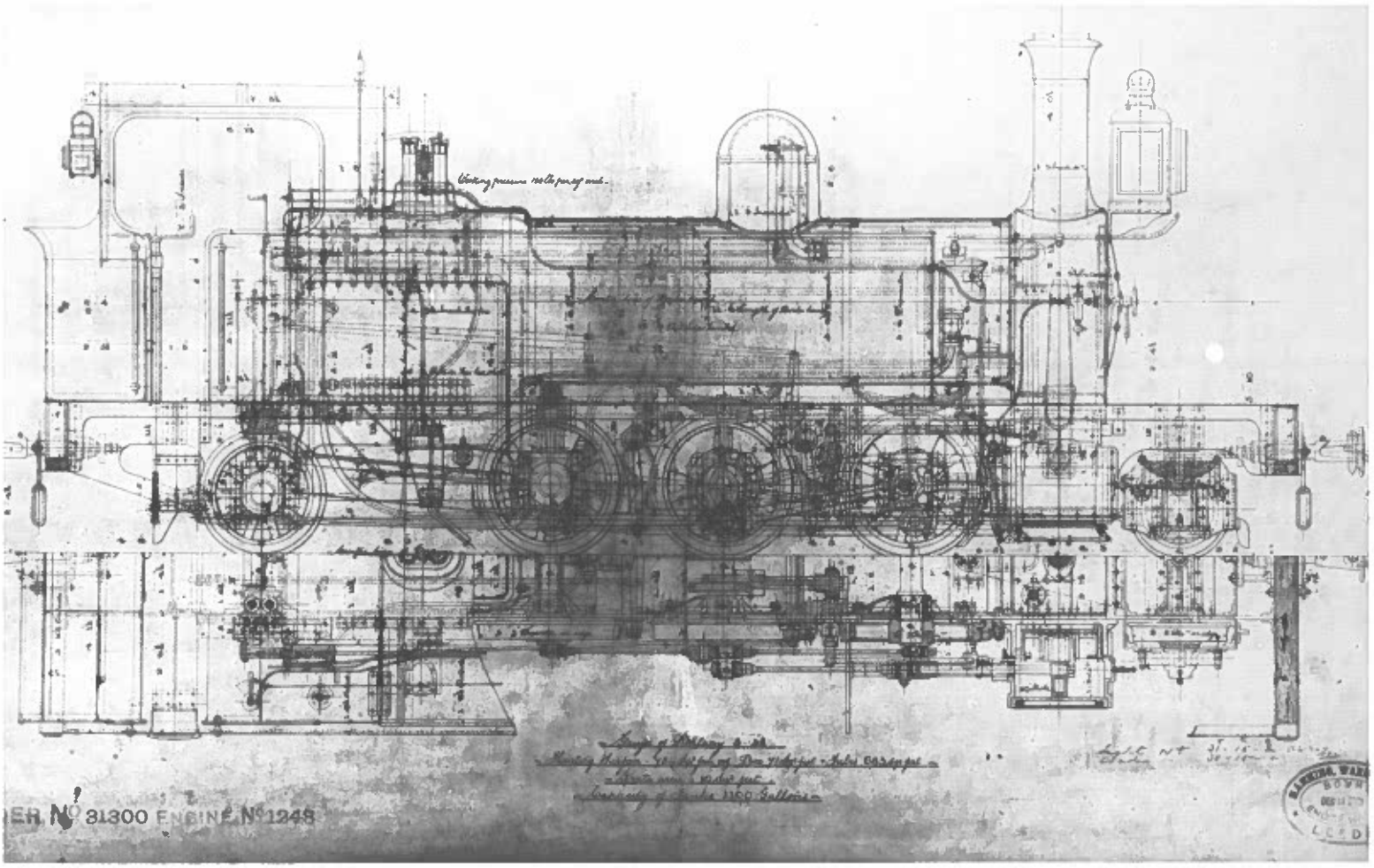
Engines Nº 5 and 6

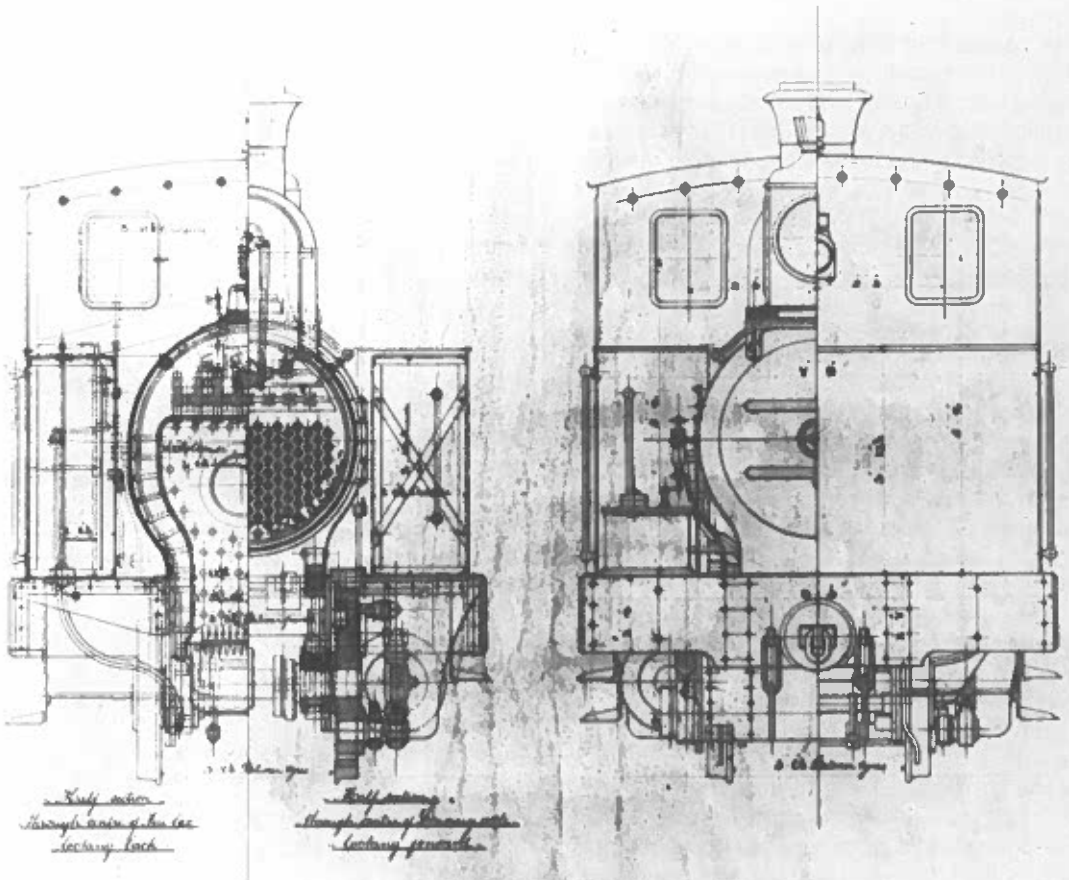
Besides repairing the old engines, Government was advised to purchase two more engines to enable a double train service to be run. These were the first engines to be ordered through the Crown Agents. Nº 5 (Order Nº 31300) was ordered from Manning Wardle on August 12, 1891 for delivery on December 12. She was tried in steam on December 2 and sent away on December 21, arriving in Malta in time for the line's reopening. Nº 5 was maker's number 1243 and, like 1, 2, 3 and 6, it was built at the Boyne Works, Leeds. She was a 2-6-2 side tank with the following dimensions:

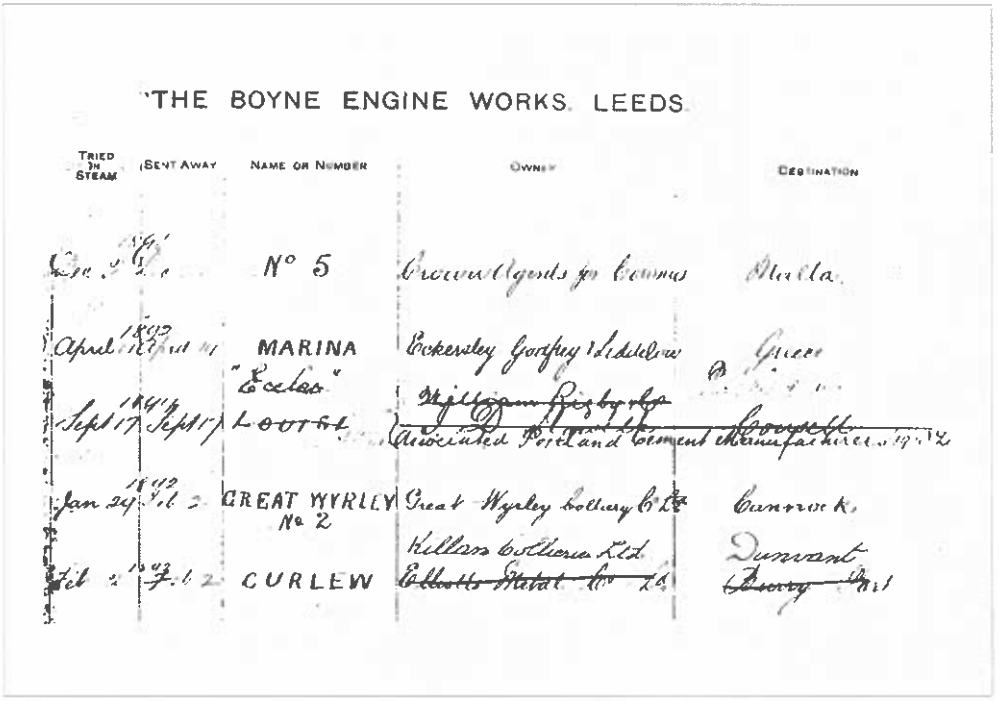
Cylinders (2)	15" by 20"	(38.1 by 50.8cm)
Front bogie wheel diameter	2'2"	(66cm)
Coupled drive wheel diameter	3'3"	(99.1cm)
Trailing axle wheel diameter	2'9"	(83.8cm)
Total wheelbase length	21'6"	(6.6m)
Rigid wheelbase length	8'6"	(2.6m)
Overall length	34'4"	(10.5m)
Overall height	12'	(3.7m)
Firebox area	21 sq ft	(1.95m^2)
Tube area	383 sq ft	(35.58m^2)
Total heating surface	745 sq ft	(69.2m^2)
Grate area	10 sq ft	(0.9m^2)
Tank capacity	1000 gals	(4546lt)
Total weight	39 tons	(39.62 tonnes)

Excerpt from Manning Wardle's records on Engine Nº 5

1. This is a special 15" x 20" outside cylinder Side Tank engine on 10 wheels of which 6 are coupled and a two-wheeled bogie at the leading end and a pair of uncoupled wheels at the trailing end have translation slides of ½" play each side. The trailing uncoupled wheels have springs of Timmis' Patent, 2 on each side of the engine. The trailing coupled wheels have a transverse. Draw gear is also fitted with Timmis' Patent same as Order Nº 29500. Head lamp American type same as Order Nº 27850 class Kalt. Special mixture for gun and wheel axles of crucible cast steel. Coupling rods of Bessemer steel. Cross-head and slide bars of mild cast steel. Working pressure of engine is 150lbs per square inch. For test of boiler, cylinders see copybook pages 764 to 775. For further particulars see full list Tracings Order Nº 31300.
   Timmis' springs for trailing uncoupled wheels with a load of 2⅛ tons on each spring







THE BOYNE ENGINE WORKS. LEEDS.

Tried in Steam	Sent Away	Name or Number	Owner	Destination
		N° 5	Crown Agents for Colonies	Malta
April 1892		MARINA "Eccles"	Eckersley Gorfrey Liddelow	Greece
~~Sept 17 1892~~	~~Sept 17~~	~~LOUISE~~	~~William Rigby & Co~~ Associated Portland Cement Manufacturers Ltd	~~Bonnyrigg~~
Jan 24 1893		GREAT WYRLEY No 2	Great Wyrley Colliery Co Ltd	Cannock
			Kellam Colliers Ltd	Dunvant
~~Feb 2 1893~~	~~Feb 2~~	CURLEW	~~Elliotts Metal Co Ltd~~	~~Bonny Bridge~~

Manning Wardle's order book listing Engine N° 5, the owner being given as the Crown Agents for the Colonies with Malta as its destination

supplied September 2nd, 1892. One set of Timmis' springs 50% stronger than those supplied in September 1892 supplied under Order Nº 33426. One set of Timmis' springs 2" inside and 4¾" outside diameter and 50% stronger than Order Nº 33426, also new spring pillars and guide pins to suit the springs, supplied under Order Nº 34774, November 15, 1893. Note the transverse for their springs was altered by themselves.

2. Timmis' springs for trailing uncoupled wheels as recommended by Mr Shelford to particulars and tracing sent here March 8, 1894 and to our Tracing Nº 7225. Mr Shelford's tracing and letter to be found in specification roller. Bogie springs with 10 plates supplied under Order Nº 35331. Timmis' springs 50% stronger than originally put on, supplied Order Nº 35928 (see copybook). Driving axle of Siemens steel and flangeless tyres 5¼" supplied Order Nº 36050 November 1894. This engine had a four-wheel bogie fixed at the trailing end with brake arrangement altered to suit as Order Nº 48281, November 30, 1900. For tracings see Nº 5 duplicate book page 136. Axle box pads supplied Order Nº 57647, July 1, 1905, see Nº 5 copybook page 136.

Excerpt from Manning Wardle's records on Engine Nº 6

This is a special 15" x 20" outside cylinders loco, side tank engine on 6 coupled wheels and a four-wheeled trailing bogie at the trailing end and a two-wheeled bogie at the leading end. The coupled wheels are 3'3½" diameter and bogied 2'2½" diameter in many respects same as Nº 1243. Tank capacity 1025 gallons. The tyres are all 2½" thick and 5¼" wide with special lip on outside, except the driving which are 5¼" wide and flangeless. The springs are all special for loads, see copybook page 864. Special cab, buffing and draw gear with Timmis' patent spring. Safety chain, buffer beams of mild steel same as frames. Air vessel on feed pump, delivery pipe. Axles and tyres of Siemens steel. Piston rod and crosshead of best mild steel (annealed) and side bars of best mild crucible cast steel (annealed). All the plates were steel in place of merchant iron and the whole of the material was subject to test. All the mud plugs above the firebox crown on chalk sides were reversed by mistake in the shop (viz. high came low and low high). For duplicate work and further particulars see full list of drawings and tracings Order Nº 32700. Working pressure 150lbs per square inch. Note: The levelling cock for this engine should have been same as used for Engine Nº 1243 but by mistake in the shop, the class H.K.M. and O. levelling cock was put on. For driving wheel splashers see copybook page 872. Axle box pads supplied Order Nº 57647 July 1st, 1905, see Nº 5 copybook page 138.

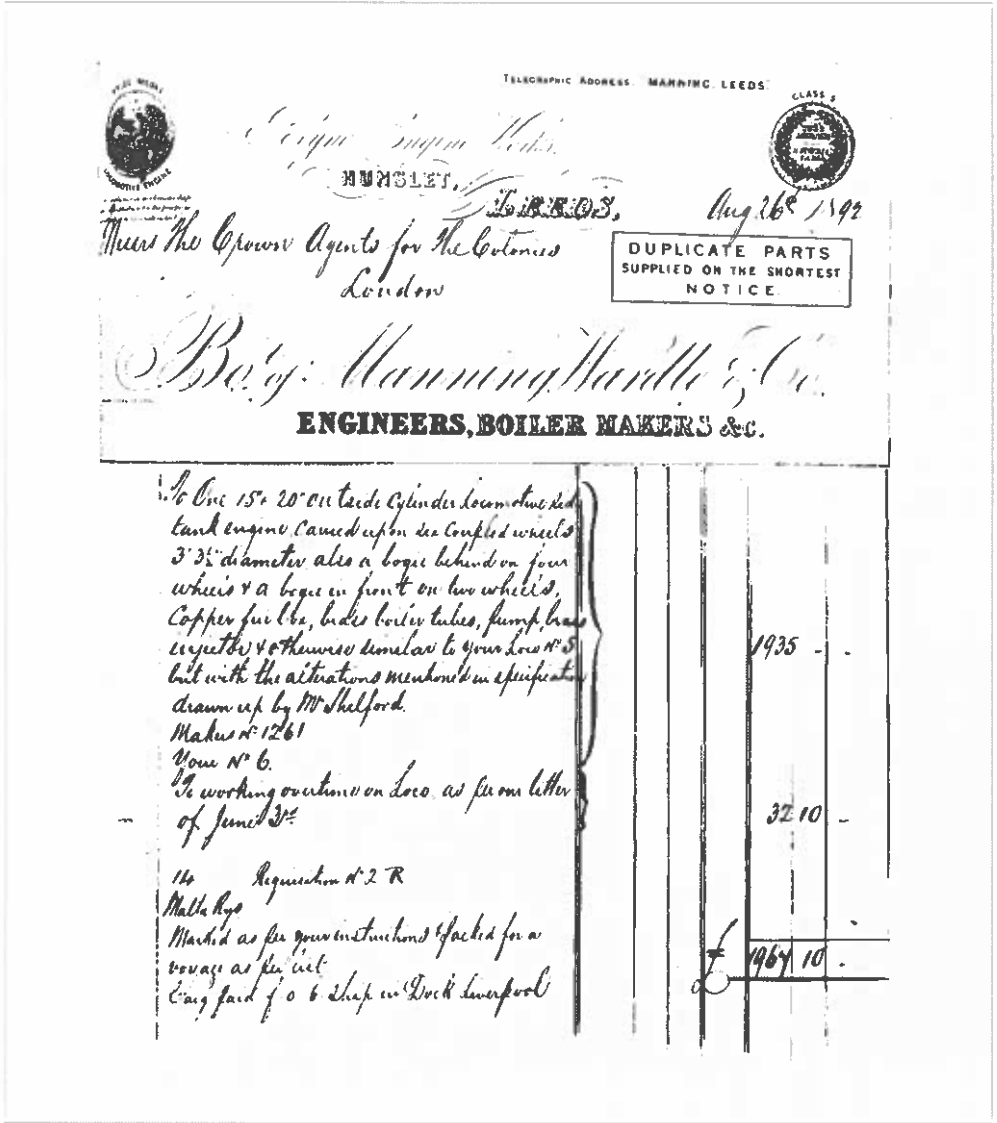
Government was pinning its hopes on its first purchase but it was in for a great disappointment. In May 1892 Gatt complained that it consumed too much coal, was too long and heavy, damaged the track and had to be kept permanently on steam. Government's adviser on engines and rolling stock purchases was William Shelford who was a council member of the Institute of Civil Engineers and consulting engineer for the new railway in West Africa. Shelford was asked to eliminate Nº 5's problems and prevent their recurrence in Nº 6. Shelford ascribed Nº 5's faults to the uneven distribution of weight on the whole wheelbase. He suggested substitution of the twin trailing bogie wheels by a four wheeled trailing one to redistribute the weight. This would change its configuration to a 2-6-4 tank with a longer 25'9" (7.8m) wheelbase and an increase in weight to 41 tons (41.7tonnes). These modifications would be incorporated on Nº 6. Shelford suggested that the driving wheel flanges be omitted to make the engine run easily on curves and crossings. He recommended that an opening be made in the tank foreparts to improve access and inspection besides reducing the excessive water capacity by 90 gallons (405lt). His modifications added £35 to Manning Wardle's price of £1900. The Crown Agents upheld Shelford's advice and Nº 6 was ordered from Manning Wardle on May 16, 1892 for delivery on August 8. She was tried in steam on August 19 and sent away on the 26th arriving here early in September. The new bogie for Nº 5 was also ordered for fitting at the Hamrun workshop.

Both engines had an enclosed cab with large side windows and two rectangular portholes in the front and rear walls, the former with internally hinged glazed panels. The original side tanks were exceptionally long

Engine Nº 6 incorporated the modifications recommended by William Shelford after problems were encountered with Nº 5. Despite these modifications neither engine endeared itself to the railway managers who complained that both were overlong, heavy and uneconomic

at 17'(5.2m) causing the uneven distribution of weight and running nearly along the whole length of line of the boiler barrel. The smoke box had a slightly bulged door surmounted by a 4'2" (1.3m) chimney. In front of the chimney was an American-style acetylene lamp. A smaller oil lamp was fitted to the rear of the cab wall. The copper steam dome was in the centre. The safety valves were placed further back on the boiler barrel. Whilst guard irons were positioned just in front and at the back of the bogies, the tubes were placed close to the front and rear of the coupled wheel sections. Engine number was fitted to the centre of the side tanks and the manufacturer's plates were positioned on the bunker side parts.

Despite the modifications, the two sisters never endeared themselves to Gatt and Buhagiar and were only used as relief engines or for the training of apprentices. They were not mentioned at all in annual reports after 1918, Nº 6 being laid up in 1917. When they arrived the permanent way had just been changed to heavier rails of 56lbs per yard from Ebbw-Vale Steel Co. of Wales and therefore their poor performance could no longer be ascribed to their weight. They spent most of their time in semi-retirement at Hamrun. The success of the Beyer Peacock quartet which followed sealed the fate of these unlucky engines.



TELEGRAPHIC ADDRESS "MANNING, LEEDS"

HUNSLET, LEEDS, Aug 26th 1892

Messrs The Crown Agents for the Colonies
London

DUPLICATE PARTS SUPPLIED ON THE SHORTEST NOTICE

Manning Wardle & Co.

ENGINEERS, BOILER MAKERS &c.

To One 15" x 20" outside Cylinder Locomotive tank engine Coupled on the Coupled wheels 3'3½" diameter also a bogie behind on four wheels & a bogie in front on two wheels, Copper fire box, brass boiler tubes, pump, brass injector & otherwise similar to your Loco Nº 5 but with the alterations mentioned in specification drawn up by Mr Shelford.
Makers Nº 1261
Your Nº 6.
To working overtime on Loco as per our letter of June 3rd

1935 - -

32 10 -

1 do Requisition Nº 2 R
Malta Rys
Marked as per your instructions packed for a voyage as per list
Carriage paid f o b Ship in Dock Liverpool

£ 1967 10 -

Manning Wardle's bill for Engine Nº 6. She was identical to Nº 5 but William Shelford's modifications increased its price by £35 and a further £32.10s was charged for overtime work on the engine

The Beyer Peacock quartet

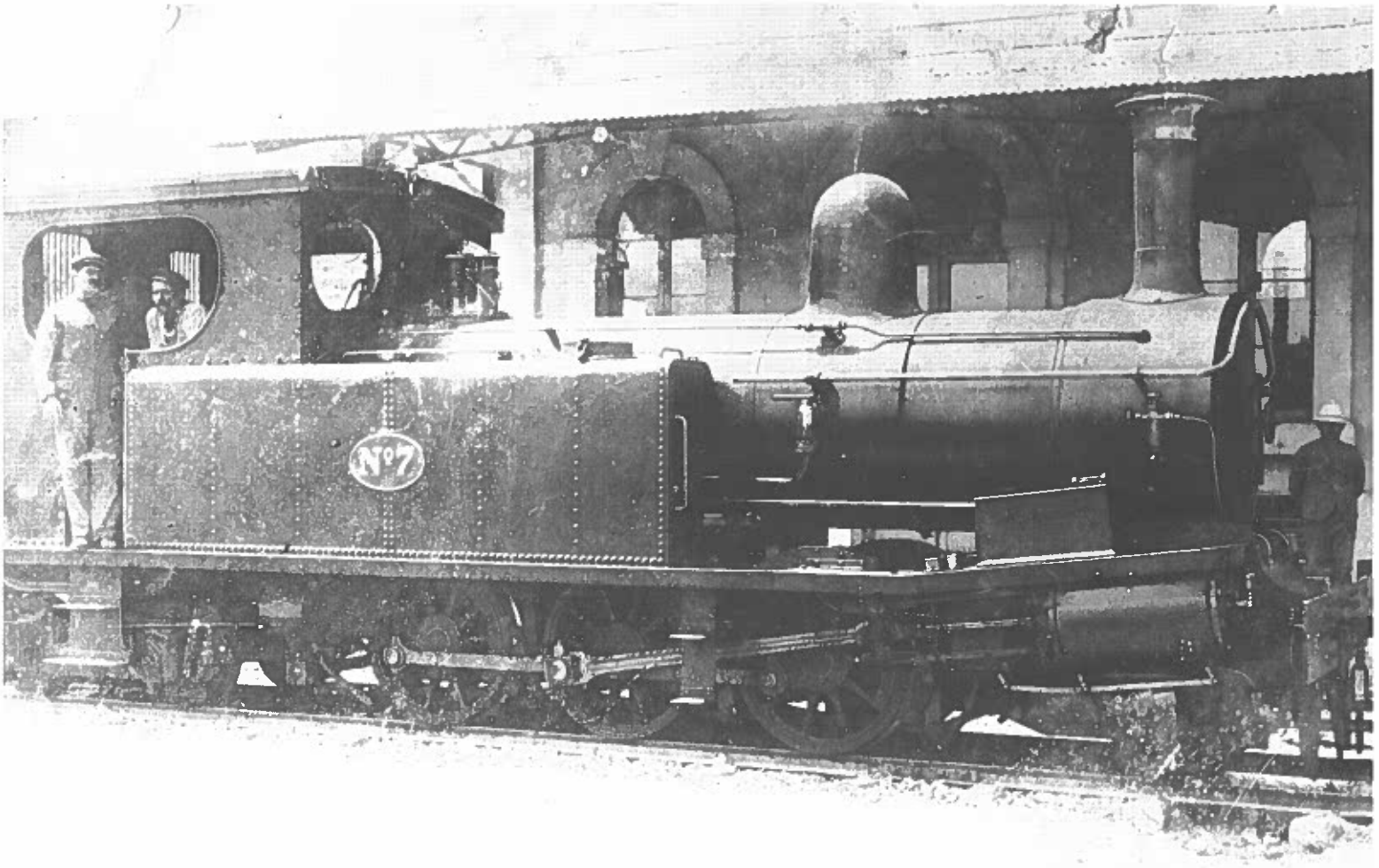
After the disappointing performance of the new engines, Strickland and Gatt decided to shop elsewhere for the next pair of engines. The Crown Agents suggested Beyer Peacock and an order was made. Gatt asked Beyer Peacock for a price list of spares and suggested that they left out the flanges on the driving wheels of the new engines. Beyer Peacock were against this since the engine's short rigid wheelbase would have no trouble around the curves. They offered to remove the flanges on the middle pair of coupled wheels, if Gatt wished, as these were not vital to the engine's safety and their removal would be advantageous during overhauls. The estimated cost of the engine was £1740.

When Nº 7 arrived in 1895, it was found that it combined economy and efficiency with the service's requirements. Strickland soon proposed to purchase a sister engine since buying in pairs was economical, repairs were easier and spare parts interchangeable. Nº 8 arrived in 1896, having cost £1910. The two Beyer Peacocks were performing so well that a final pair was ordered, Nº 9 arriving in 1899 and Nº 10 delivered in 1905 for a cost of £1979 each. The Beyer Peacock quartet carried maker's numbers 3678, 3852, 4162 and 4719 respectively. The basic layout resembled that of Nº 5 and 6 but they were better designed with less weight on the coupled wheels and a slight increase on the main drive wheels to give additional traction. The dimensions of these engines were:-

Inclined cylinders (1 in 8.5) under the Bissel truck front frame inclined at the same angle	14 ½" by 20"	(36.8 by 50.8cm)
Diameter of front/rear bogies	2' 0⅛"	(61.3cm)
Diameter of coupled wheels	3' 3⅜"	(1m)
Total wheelbase	23' 2"	(7.1m)
Rigid wheelbase	7' 6"	(2.3m)
Boiler barrel length	9' 1"	(2.8m)
Boiler tube length	160' 1⅝"	(48.8m)
Grate area	12 sq ft	(1.1m²)
Tube heating area	635 sq ft	(59m²)
Total heating area	700.7 sq ft	(65m²)
Tank capacity	1000 gallons	(4546lt)
Total weight	35 tons 11cwt	(36.07 tonnes)

The smoke box had a slightly bulged door with a 3' 6" (1.1m) chimney mounted on top. A lamp attachment was provided above the smoke box but this was never fitted. The brass steam dome was positioned in a slightly forward position but the safety valves were placed well aft, though not as close to the cabin as in Nº 5 and 6. The driving cabin was large and fully enclosed, with large side windows and narrow access doors. Two round, glazed portholes hinged on a vertical axis were fitted to the front wall while the rear portholes were rectangular and fitted with internal grills. The bunker extended well behind the gear of the cab and was larger than that on previous engines.

Guard irons above each rack were placed well in front while the rear pair formed part of the buffer beam. On the beams were single buffers with chain coupling links. An interesting feature was the additional footplate on both sides of the Bissel truck positioned between the first and second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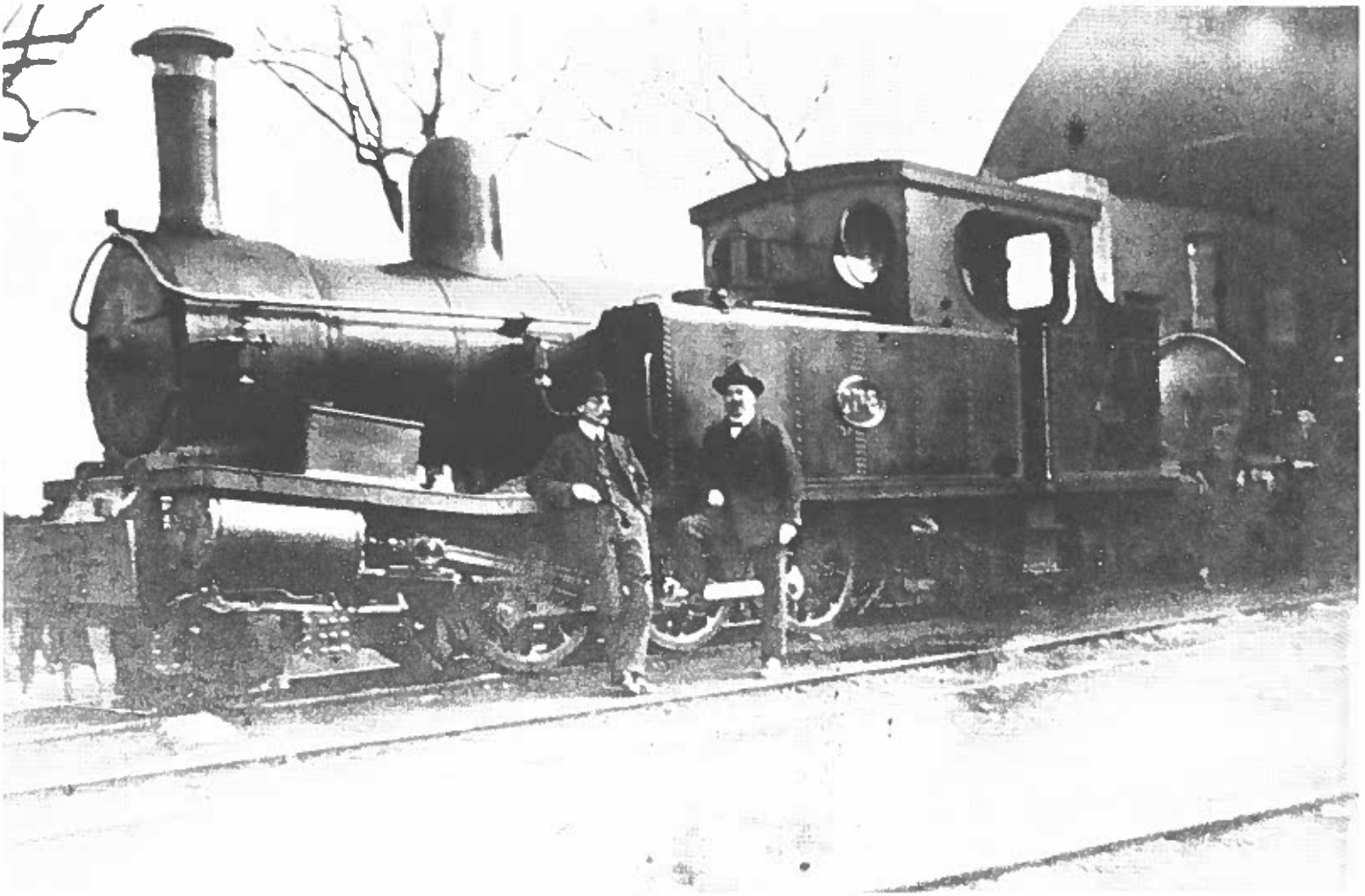


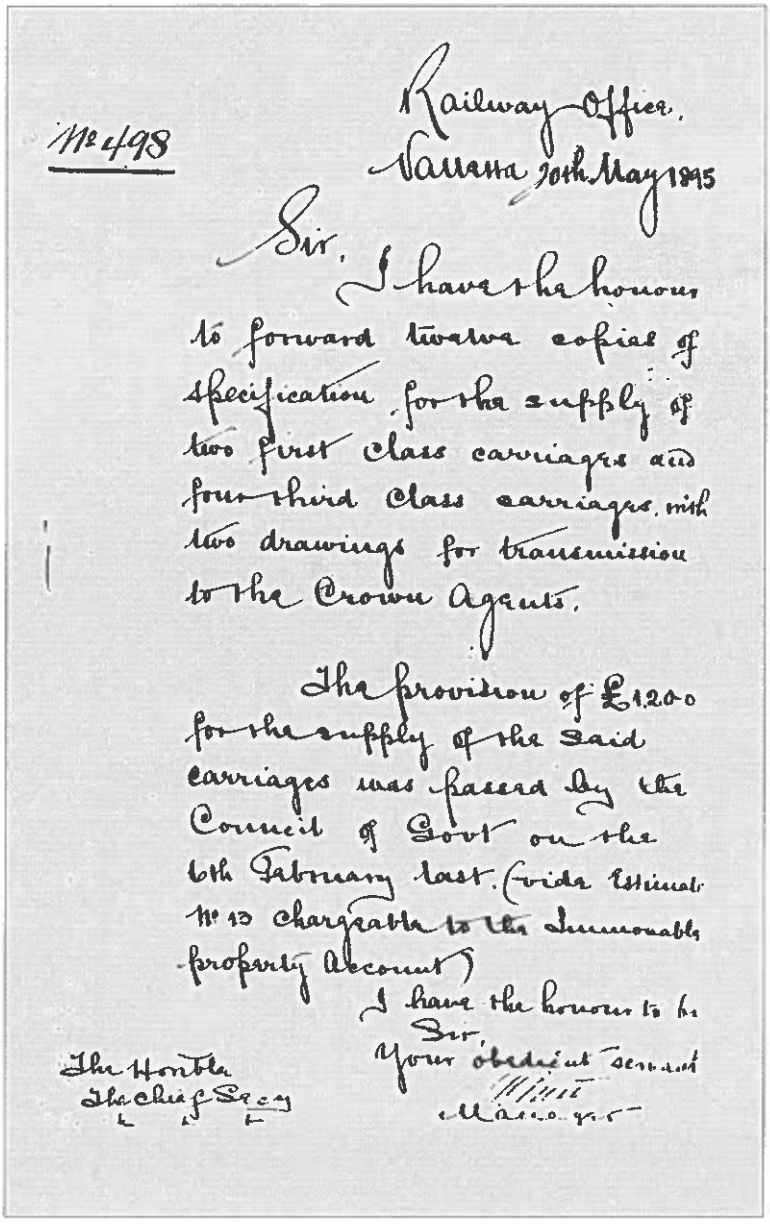
Facing page: With engines Nº 7 and 8, the first of four Beyer Peacocks the railway finally found the right engines suitable for local needs. Nº 7 (top) is shown at Museum Station while Nº 8 (bottom) is shown at Hamrun with Mr Lapira and Mr Grech posing next to the saddle tank, the sand box and the Bissel truck

Below: Letter by Lorenzo Gatt to the Chief Secretary enclosing specifications for the supply of two 1st Class and four 3rd Class carriages costing £1200

coupled drive wheels. There were other lamp attachments on the bunkerhead and on the extremities of the front and rear sides. These were intended for a twin-line operation which never materialised in Malta.

Colour scheme

The plain, unadorned engines were alien to the instinctive Maltese flair for colourful decoration which was lovingly lavished on motor buses in later years. The overall uniform scheme was a dark olive green (Federal Standard 595a Ref 24096 - Methuen Ref 30-F-4) with black sub-frame and wheels (Federal Standard 595a Ref 27038 - no Methuen Ref). Buffer beams were in dark red (Federal Standard 595a Ref 21136 - Methuen Ref 10-D-8), cream or light yellow striping appears on the earlier engines on the tank sides, cab/bunker side panels and boiler strappings but these were painted over during overhauls and never replaced. Oval numbers and manufacturer's plates were in natural brass with red (Federal Standard 595a Ref 21105 - Methuen Ref 9-C-8), the steam domes were in natural brass while the chimney banks were left in natural copper.



Nº 498

Railway Office.
Valletta 10th May 1895

Sir,

I have the honour to forward herewith copies of specification for the supply of two first class carriages and four third class carriages with two drawings for transmission to the Crown Agents.

The provision of £1,200 for the supply of the said carriages was passed by the Council of Govt on the 6th February last. (vide Estimate Nº 13 chargeable to the Immovable property Account)

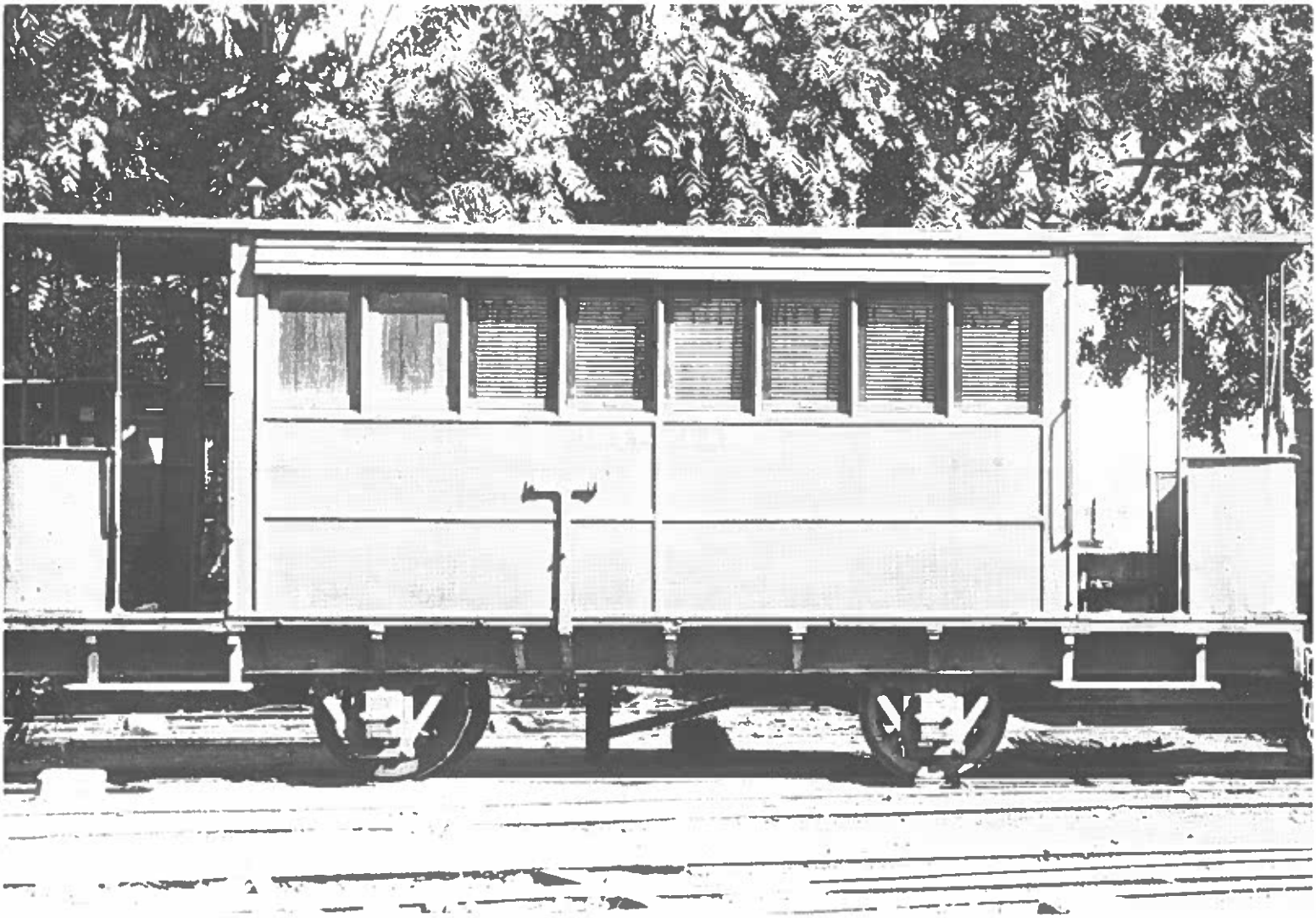
I have the honour to be
Sir,
Your obedient servant
[illegible]
Manager

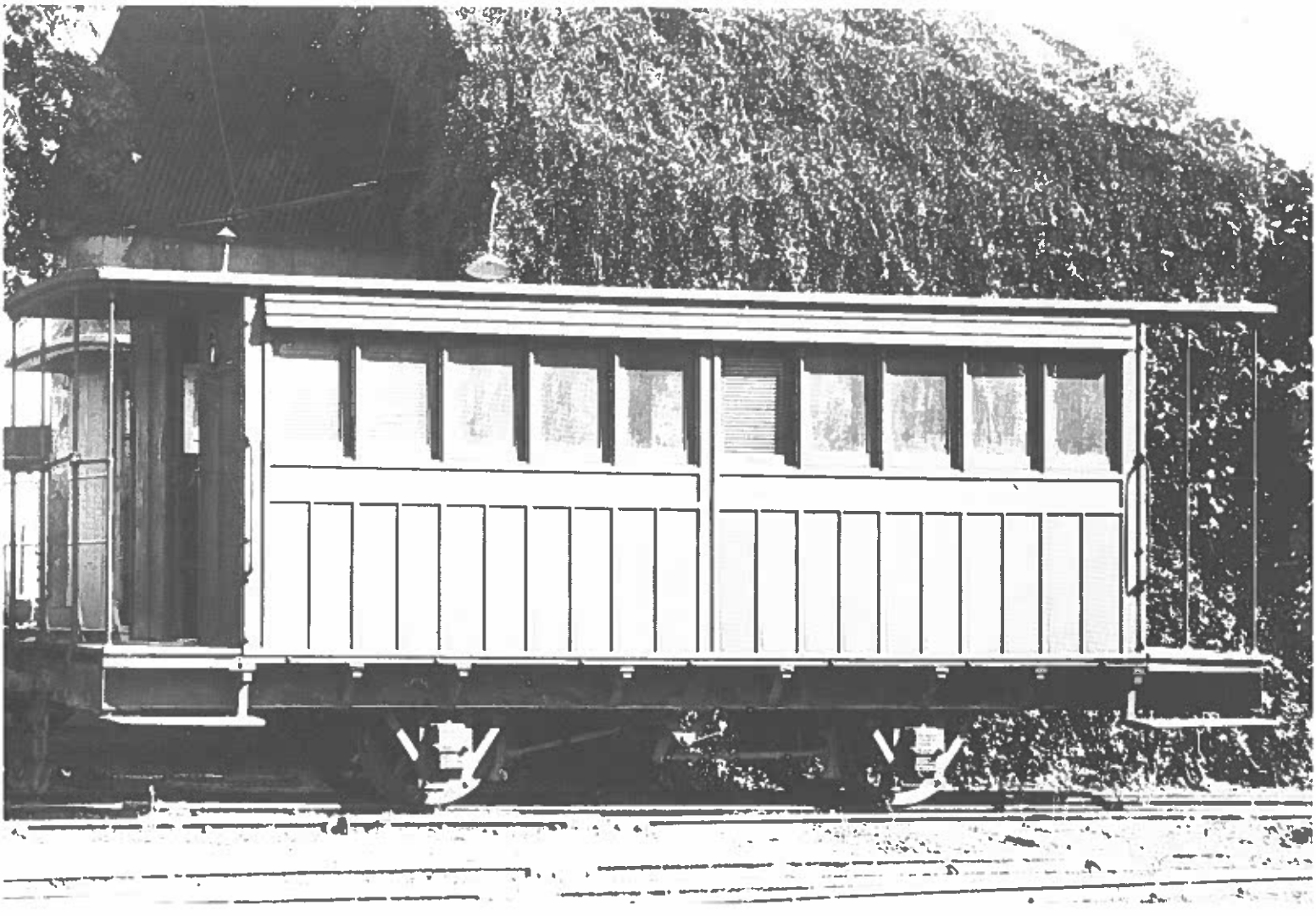
The Hon'ble
The Chief Secy

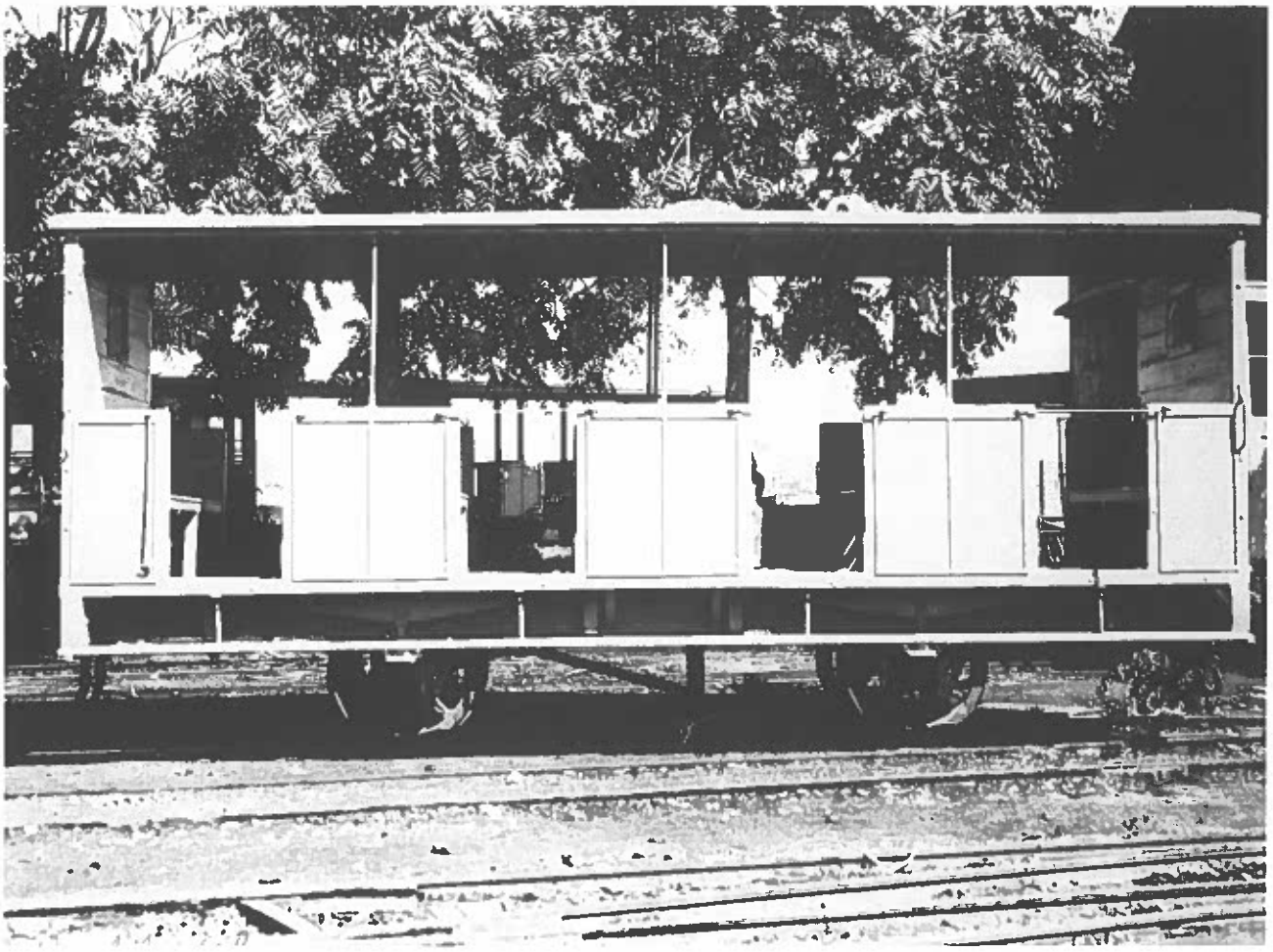
Rolling stock

Government bought the old company's rolling stock in 1891, through Council member Mr Luigi Pace Balzan. The sum of £289 was paid for the 1st and 2nd Class carriages, £567 for the 3rd and £204 for the workmen's. The composite carriages were converted into 1st or 3rd Class after the suppression of the 2nd Class. The original six 1st Class, ten 3rd Class and five workmen's carriages were augmented in 1893 when a tender for two 3rd, two workmen's, two ballast wagons and two trolleys was awarded to Swansea Wagon Builders Co. Ltd., suppliers to the old Company. William Shelford preferred Metropolitan Railway Carriages but the Contracts Committee opted for the cheaper tender.

A further call for tenders for two 1st and four 3rd Class carriages was issued in 1895. The Council approved the sum of £1,200 for the new carriages in February. The lowest tenders received were from Brown Marshall at £1,218. Gatt, like Shelford, preferred Metropolitan Railway's carriages which had an earlier delivery date, superior workmanship but a marginally higher price. Once again the Contracts Committee opted for the cheaper tender and







Above: A workmen's carriage built by the Railway Carriage Co. of Oldbury

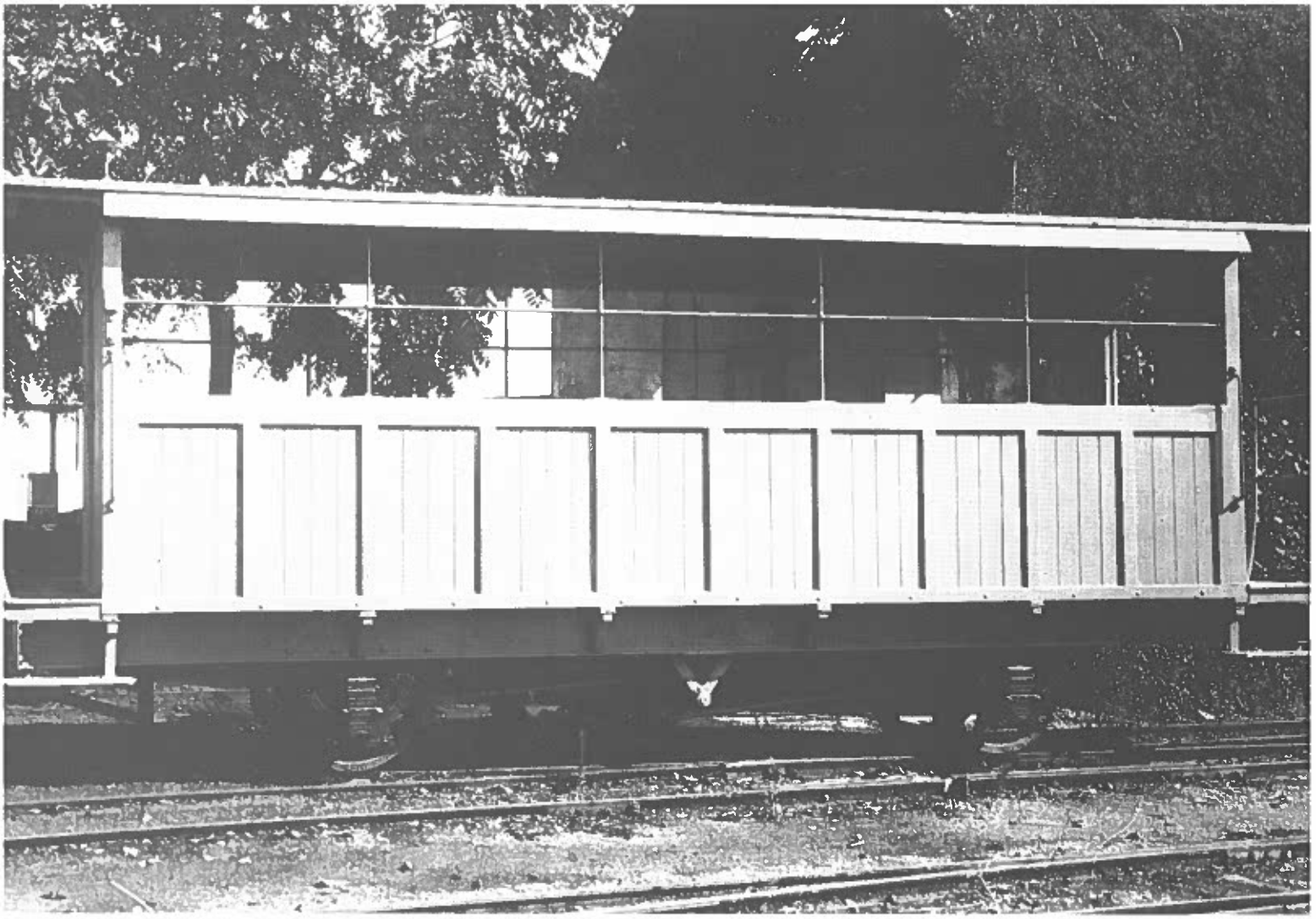
Facing page: A 1st Class carriage built by Brown Marshall & Co. (top). It had enclosed verandahs and a mail box attachment near the centre
A large 3rd Class carriage (bottom) with ten drop windows on each side. This was built by the Metropolitan Railway Carriage Co.

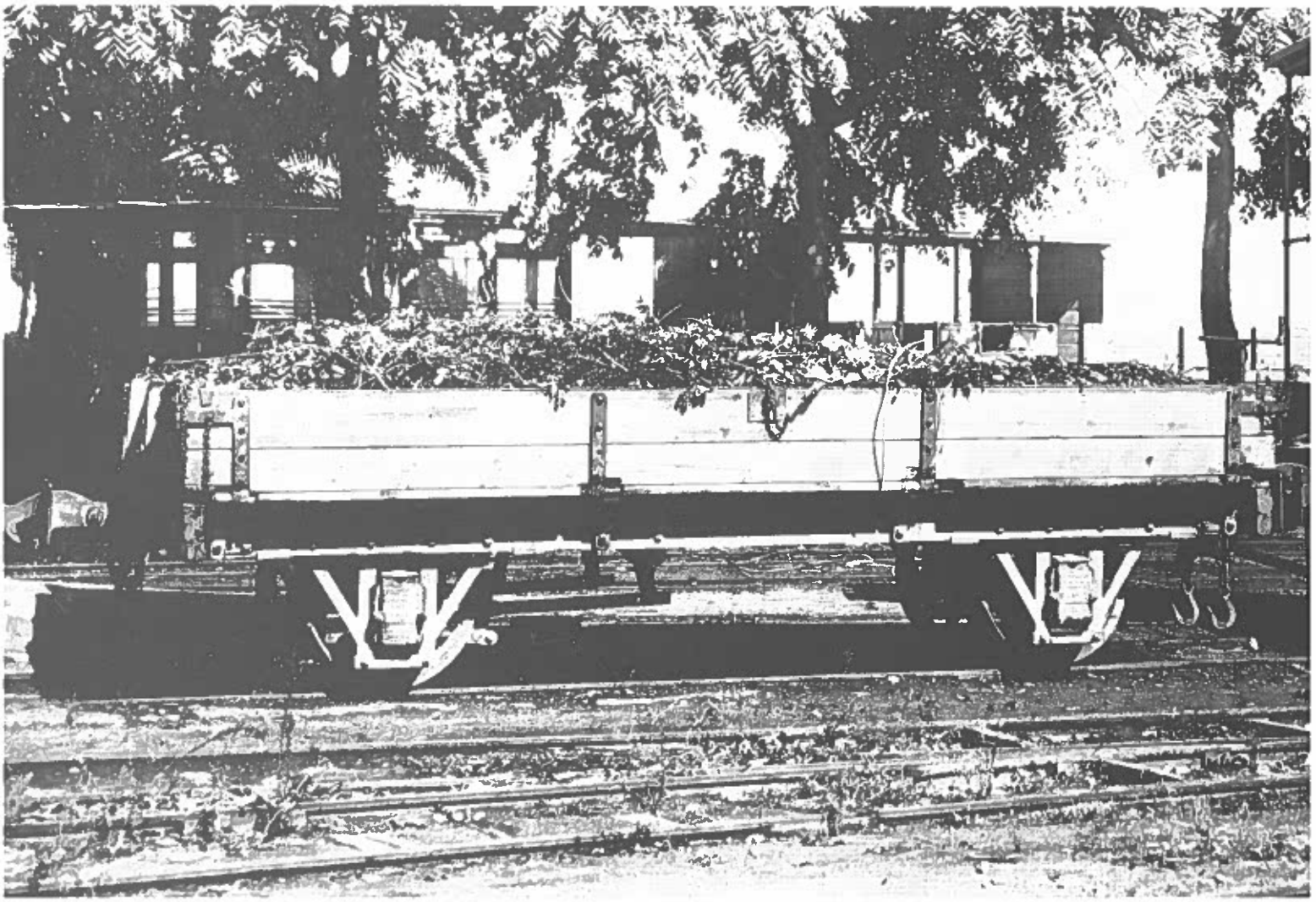
chose Brown Marshall. Metropolitan were later awarded the contract for the large third class carriages. The carriages' minor differences gave made-up trains an uneven appearance when seen from a distance.

The carriage bodies

The Crown Agents stipulated that all materials used in the carriages were to be of the highest quality, free from defects and subject to testing, inspection and approval by their consulting engineers. The materials used were timber and steel. The whole of the scantlings of the bottom framing and outside panelling were of the best Moulmein teak, while the inner bottom sides and cant rails, seat rails and hoop sticks were of the best St Clair white oak. The floors and roofs were made of red deal, the roof being 3/8in (.95cm) thick, and the floor 1 3/4in. (4.4cm). The latter was made of two thicknesses of diagonal boarding each 3/8in (.95cm) thick, secured with wood screws. The upper sides of the roofs were painted with two coats of thick lead and covered with a single piece of canvas, rubbed down into the paint, overlooking roof edges and secure under the cornice rails so as to be fully waterproof. The roof then received five coats of white lead paint. India-rubber body cushions were placed between the body and underframe to absorb the vibrations from the wheels and rails.

The 1st Class carriage bodies were 14'6" (4.4m) long with a 4' (1.2m) platform at each end, over which the roof extended. They were 6'10" (2.1m) wide at the outside and 6'11 1/4" (2.1m) high. There was a single compartment with seats along each side. Seats were also provided on the platform verandahs. The sliding doors were glazed with 3/16" (0.48cm) and the win-





Facing page: An improved type of workmen's carriage (top) with narrow end verandahs built by the Railway Carriage Co. of Oldbury.
A ballast wagon (bottom) built by the Metropolitan Railway Carriage & Wagons Co.

dows with 1/8" (0.32cm) plateglass. The eight windows were also fitted with sliding Venetian teak shutters 5/8" (1.59cm) thick, working independently of the windows. There were end handrails of 1" (2.54cm) diameter held by standards reaching to the roof and fitted with a lock to allow the ticket collectors access to the carriages. Commode rails were fixed at the corners. The seats were made of Wood's patented woven wire covered with India-rubber cushions. Brass brackets on the carriage sides held rods and string nets running the whole length. On the roof were hung hat cords. The external woodwork had four coats of the best body varnish and four coats of finishing varnish. This was later changed to green. The interior was painted and grained in mahogany and twice varnished. The underside of the floor boards and the framing beneath them was coated twice with boiled oil. All bright and working parts were coated with white lead and tallow.

The brass lamp's position was an improvement on the old Company's carriages. Instead of being fitted on the roof, unevenly distributing the light, the lamps were fitted into the framing of the ends without projecting inside or outside the framing. The lamps were fitted with cisterns and burners for paraffin oil and the outside lenses were fitted so as to be screened and to show a red light when required to do so. Candles and lamps were both used.

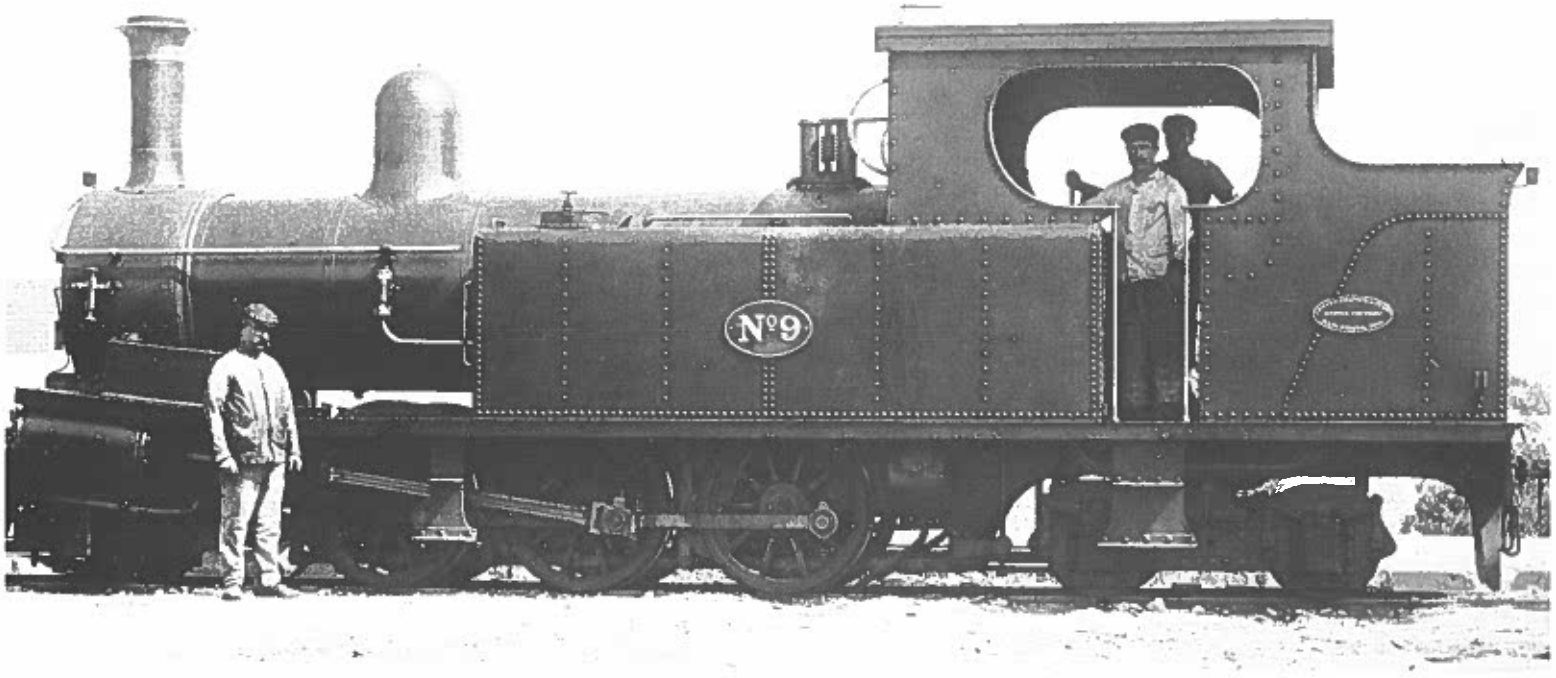
The 3rd Class carriages were similar. They were 18' (5.4m) long over body with a platform of 2'6" (76cm) (without seating) over which the roof extended. They were 7' (2.1m) wide on the outside and 6'10" (2.1m) in height from the ground to the centre of the roof. There were ten windows and the seats and backs were of perforated birch wood fixed with brass screws and French polished. The interior was painted and grained in oak colour, except for the floors and the hidden parts, which had four coats of lead colour.

The carriage underframes

The underframes were made of steel. The solebars, headstocks, cross bars and longitudinals were 9" x 3" x 3/8" (22.8cm x 7.6cm x 0.95cm) long. They were joined together by 3" x 3" x 1/2" (7.6cm x 7.6cm x 1.3cm) angle irons stiffened at the ends and over the crossbars with 3/16" (0.48cm) plates. The wrought-iron brackets were 2" x 3/4" (5.1cm x 1.9cm) long bolted to the solebars with 3/4" (1.9cm) diameter rivet holes drilled to 13/16" (2.1cm) diameter.

The axle boxes were suitable for journals 6 1/2" (16.5cm) long by 3 1/2" (8.9cm) in diameter, lubricated by oil or grease and made of Bessemer or Siemens steel. The movable oil trays had malleable cast-iron lids. These trays were removed when grease was used as they had teak packing beneath. The words "MALTA RAILWAY", the maker's name and year of manufacture were cast on the face of each axle box. The axle guards were secured to the solebars with 3/4" (1.9cm) bolts. The Bessemer steel wheels had six pairs of welded spokes and wrought-iron nave. The bearings were finished 1" (2.5cm) thick at the corner.

The buffing and draw gear was an improvement on the old Company's carriages. These had too much slack with the result that they ran ahead or stopped on a change of incline and often bumped into each other, annoying passengers in the process. Modifications in the workshop eliminated these defects. The drawbars, hooks, pins, safety chains and eyebolts were made of Yorkshire cable iron, the remainder of the buffing and draw gear being



Facing page: This hefty spares bill from Beyer Peacock highlighted the dubious wisdom of retaining obsolete equipment after the First World War. The spare parts were to be fitted on engine N° 9 (shown above) and engines N° 7 and 8.

made of Yorkshire iron. All similar parts were interchangeable and the forgings were neatly made and finished. The holes were drilled through approved templates and the bolts and nuts were screwed and tapped to Whitworth's standard thread. The safety links and springs were stamped with the maker's brand. The whole of the underframe was finished in Japan black.

Packing and shipment

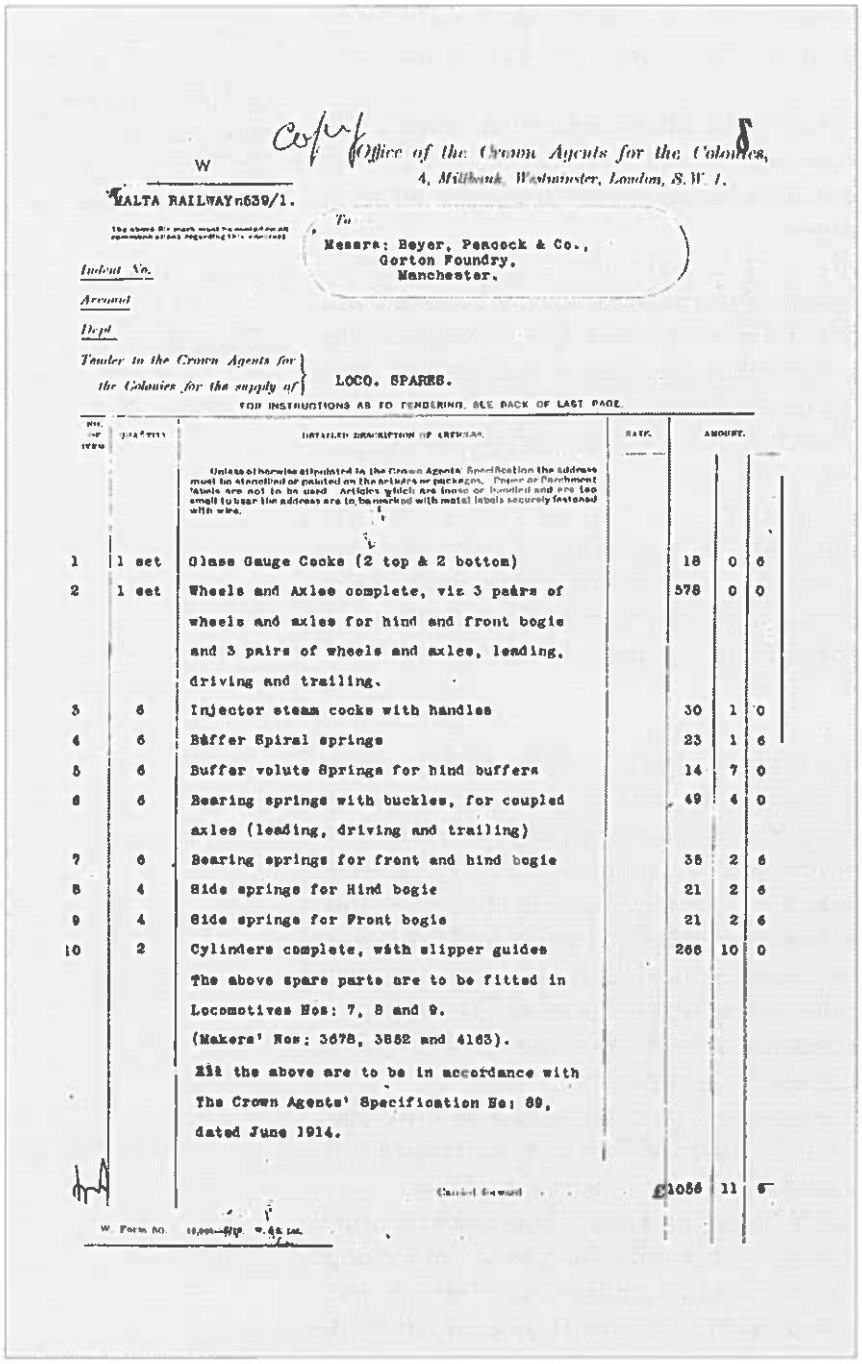
When completed, the carriage bodies were taken apart and packed for shipment. Incidentally, all the engines and rolling stock arrived in Malta in this manner for assembly at Hamrun. Every part was carefully packed, all small and loose parts being put in extra-strong, battened and bound wooden cases, the joints being covered with canvas laid in marine glue. Each case or pack had a distinguishing mark or number and each delivery contained a given number of complete sets. A list of articles with explanatory numbered reference notes to aid assembly was enclosed in each box.

Other rolling stock

The workmen's service started by the old Company was expanded after 1892 with the purchase of larger carriages. There was no verandah on the original Swansea Wagon Co. carriage, boarding being through four side entrances above a running step extending the whole 20'5" (6.2m) length. Steel bars blocked the entrances while the train was in motion. If the fare on these carriages was cheap, conditions were hardly ideal as workmen sat on hard wooden benches at the mercy of the elements protected only by 3' (92cm) high sides and solid walls at the front and back.

The other workmen's carriages were larger. They were made by the Railway Carriage Company of Oldbury and resembled a third Class carriage without windows. Boarding was through narrow end verandahs. These carriages were 24' (7.3m) long with 3'6" (1.1m) high sides.

Unlike the original carriages, they were fitted with shoe brakes acting on all four wheels and applied by a wheel lever at one end of the verandah. Both types were painted in a medium grey. Their general appearance was unpleasant and Strickland wanted to dispose of them, but there were not enough third Class carriages available to include workmen, and the



Office of the Crown Agents for the Colonies,
4, Millbank, Westminster, London, S.W. 1.

W

MALTA RAILWAY n639/1.

To
Messrs: Beyer, Peacock & Co.,
Gorton Foundry,
Manchester.

Indent No.
Account
Dept.

Tender to the Crown Agents for the Colonies for the supply of LOCO. SPARES.

FOR INSTRUCTIONS AS TO TENDERING, SEE BACK OF LAST PAGE.

No. of item	Quantity	Detailed description of articles. Unless otherwise stipulated in the Crown Agents' Specification the address must be stencilled or painted on the articles or packages. Paper or Parchment labels are not to be used. Articles which are loose or bundled and are too small to bear the address are to be marked with metal labels securely fastened with wire.	Rate.	Amount.
1	1 set	Glass Gauge Cocks (2 top & 2 bottom)		18 0 6
2	1 set	Wheels and Axles complete, viz 3 pairs of wheels and axles for hind and front bogie and 3 pairs of wheels and axles, leading, driving and trailing.		578 0 0
3	6	Injector steam cocks with handles		30 1 0
4	6	Buffer Spiral springs		23 1 6
5	6	Buffer volute Springs for hind buffers		14 7 0
6	6	Bearing springs with buckles, for coupled axles (leading, driving and trailing)		49 4 0
7	6	Bearing springs for front and hind bogie		35 2 6
8	4	Side springs for Hind bogie		21 2 6
9	4	Side springs for Front bogie		21 2 6
10	2	Cylinders complete, with slipper guides		266 10 0
		The above spare parts are to be fitted in Locomotives Nos: 7, 8 and 9. (Makers' Nos: 3678, 3852 and 4163).		
		All the above are to be in accordance with The Crown Agents' Specification No: 89, dated June 1914.		
		Carried forward		£1056 11 6

W. Form 80. 10,000—8/19 W.45 Ltd.

financial position precluded the railway from acquiring more.

The remaining non-passenger rolling stock consisted of four ballast wagons and two platelayers' trolleys. Two of the wagons had been bought in August 1894 for £61 each, the trolleys costing £10.8s. The four-wheeled manual-braked ballast wagon had a 9'4" (2.8m) wheelbase, an overall length of 15'6" (4.7m) and a width of 7' (2.1m). The box was 1' 6" (46cm) deep. The platelayers' trolleys had no buffer coupling links or brakes. They had no end axle boxes and were pushed along the track. Their wheelbase was 3'6" (1.1m) long, and had an overall length of 8' (2.4m) and a width of 4'6" (1.4m).

Engines and rolling stock at work

When the line opened in 1883, engines Nº 1 and 2 hauled eight carriages to Notabile and back. This was uneconomic for a scheduled train service and Geneste's Manning Wardles had been overtaxed, pulling loads exceeding their capacity over the line's steep gradients. The rest of the engines could pull nine to ten carriages with a supporting engine at the rear.

Coal was bought after an annual call for tenders. In 1895 the price paid was 18s.0d per tonne, rising to 19s.11d. in the following year. The price of coal made severe inroads into the company's expenditure and various fuel-saving schemes were tried with limited success. After salaries and coal bills, the railway budget went on spares and renewals. The short, stop-start route quickly wore out the boilers and a number were bought over the years and changed at Hamrun. Engines Nº 7 and 8 were reboilered in 1907, Nº 7 again in 1920 and Nº 10 in 1926. Apart from reboilering, major overhauling to engines and carriages was regularly undertaken. Seven carriages were overhauled and painted in 1907 and two were fitted with new wheels. In 1908-9 engines Nº 1, 4, 9 and nine carriages were overhauled and painted. This was probably the period when the carriages' external varnish disappeared forever. The railway operation required the purchase of several hundred

items ranging from boilers and axles to bolts and cotton waste. In 1913 a copper firebox for engine Nº 1 from Manning Wardle cost £79 while 5 cwts of cotton waste cost £5.15s.

In the first two decades of the twentieth century, water was supplied to farmers along the line from an iron water tank containing 800 gallons (3632lt) mounted on a ballast wagon. Two labourers were paid 2s.0d. daily to man the water and irrigation pipes.

In 1908 a carriage was fitted with electric light for the enormous cost of £74.2s.8d at a time when a Young's patent paraffin lamp cost £1.4s.6d. and a box containing 125 Price's patent candles cost 7s.6d. It is no wonder that the change to electric lighting in carriages was never completed, some carriages being candle- or lamp-lit till the very end. In 1926 Strickland admitted that this was disgraceful, adding that "the British were laughing at us because a boy lit candles in the carriages".

However, a new carriage lit by electricity would cost between £1,000 and £2,000, or about the same as a motorbus. In the 20's, the price of a new engine rose to £7,000 while a set of wheels, axles and cylinders for Nº 8 cost £1,200. New purchases would have been a sheer waste of public funds at a time when factories were mass producing low-priced bus chassis.

Facing page top: Engine Nº 10 photographed raising steam at Hamrun on October 19, 1932. This shows that care and maintenance of the rolling stock went on for some time after the railway shut down

Bottom: Table listing carriages, ballast wagons and other materials offered for sale in February, 1933

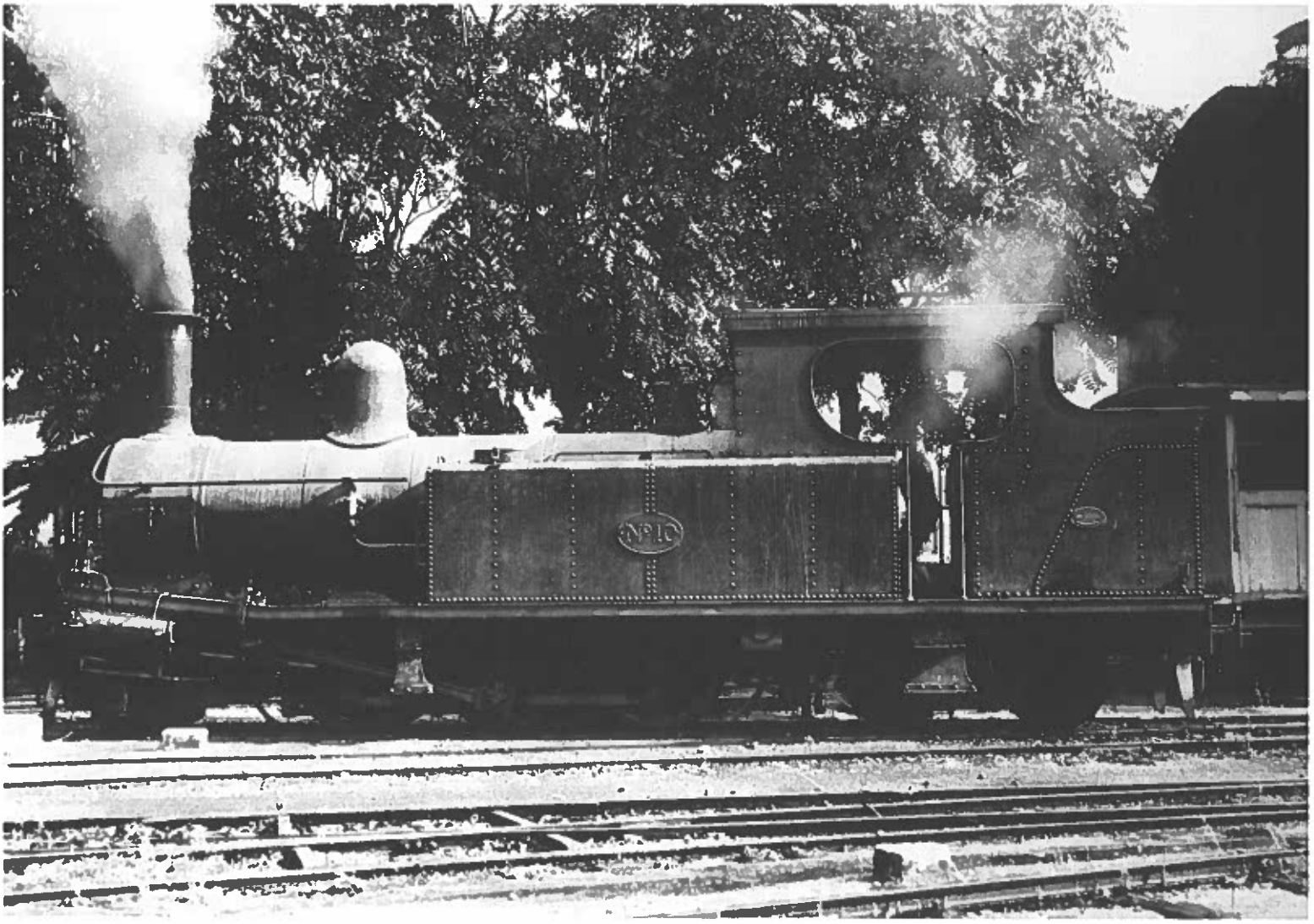
The final years

In November 1930 Rizzo submitted a report on the possibility of the railway continuing to run for a few more months. Rizzo had five engines at his disposal (Nº 2, 4, 7, 8 and 10), all of which were considerably worn out.

Engines Nº 2 and 4, the smaller engines, were not safe and were being employed on secondary, off-peak trains with three or, at the most, four carriages. Their use had only been made possible by regular and expensive repairs. Rizzo doubted whether they could be used for much longer without exposing both staff and passengers to considerable danger. The interior of their boiler shells could not be inspected without the removal of all tubes, a lengthy operation which would disrupt his timetable.

The larger engines (7, 8 and 10) were only partially reliable since they were often subject to breakdowns, particularly Nº 7, which was the oldest. These engines pulled seven, eight and nine carriages respectively.

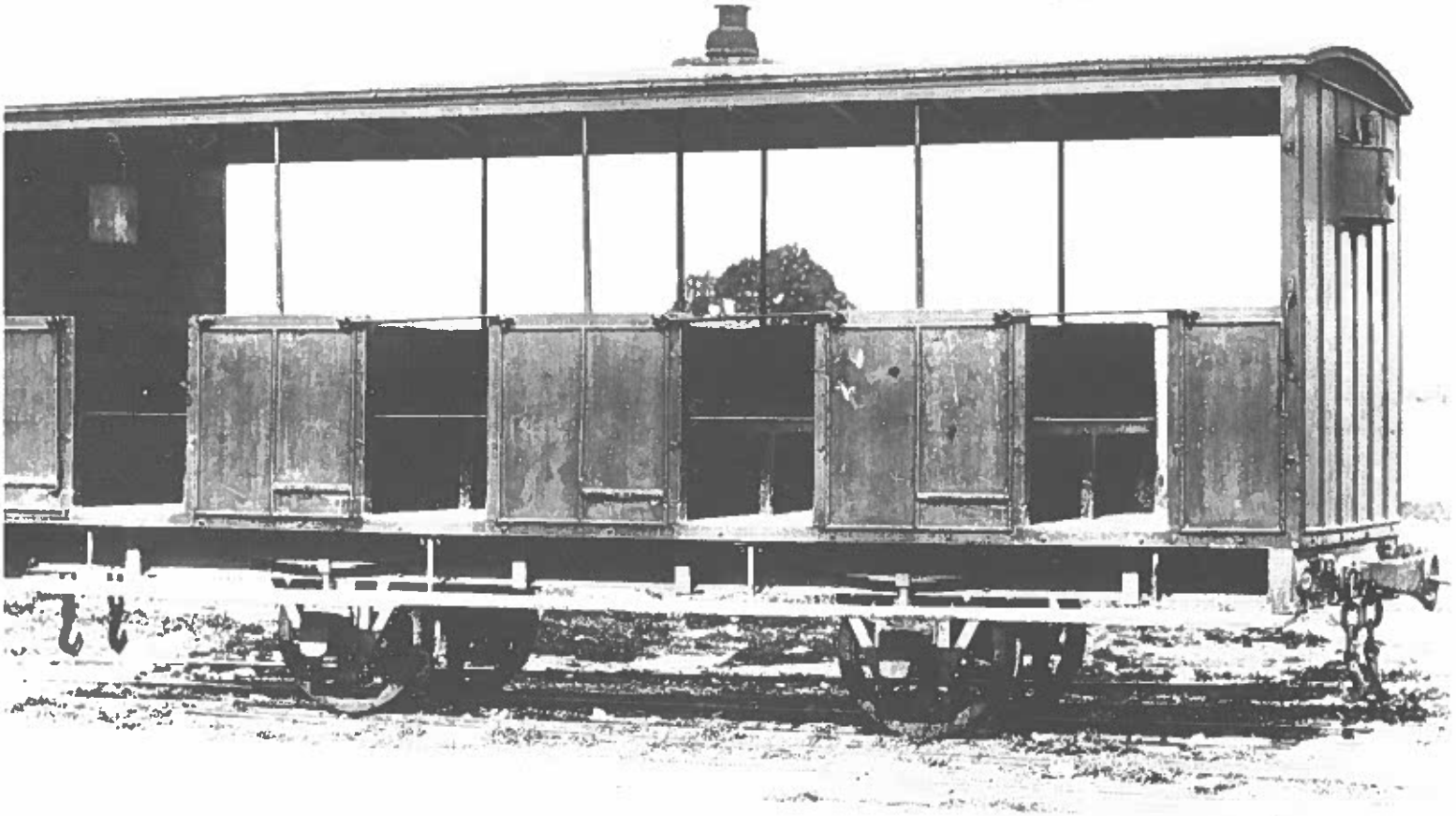
When the line shut down, engines Nº 2, 3, 5 and a carriage were retained by the Engineering Training Workshop for teaching purposes. In October 1932, EA Gouder photographed the remaining engines and rolling stock and copies of the photographs were supplied to potential tenderers in Malta and abroad. However, very few tendered and the sums offered were well below Treasury Department estimates. The engines finally went for scrap in 1937 most probably to Italy and most likely returned in a different, deadlier guise during the Second World War. The 'teaching' engines were cannibalised beyond recognition and finally scrapped at Hamrun soon after the War ended.

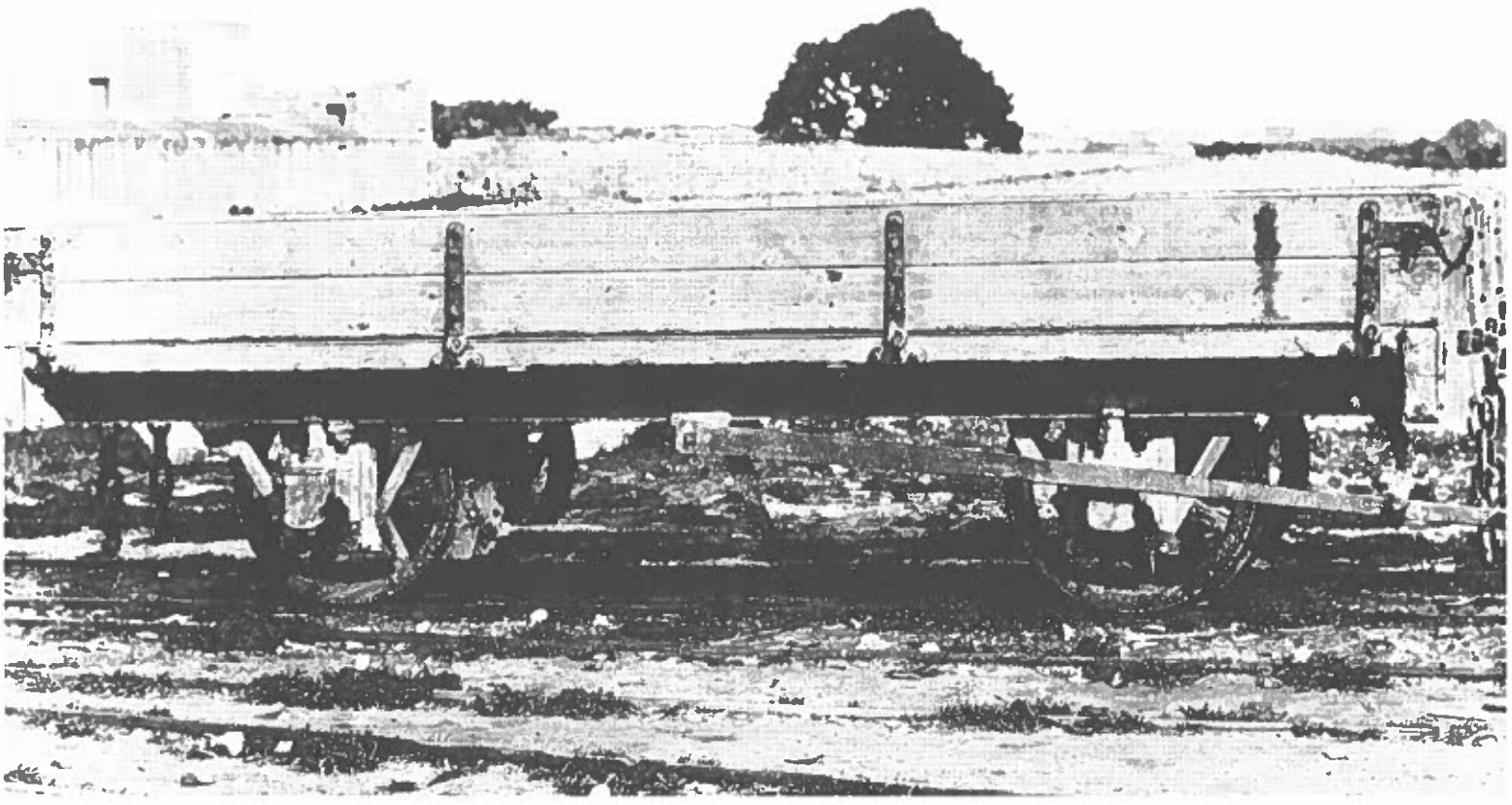


Schedule B.

RAILWAY CARRIAGES AND SPARE PARTS THEREOF (all of the metre-gange)

Lot.	No.	Description	Maker	Wheelbase approximate	Approx. Overall Dimensions Length × Breadth × Height
1.	1.	1st class carriage (saloon)	Oldbury & Co.	9'.0"	25'.2" × 7'.11" × 9'.7"
2.	2.	1st class carriage, large	Brown Marshall & Co. ..	9'.6"	25'.8" × 8'.0" × 10'.7"
3.	1.	1st class carriage small	Swansea Wagon Co. ...	9'.0"	22'.10" × 7'.11" × 9'.8"
4.	2.	3rd class carriages large	Brown Marshall & Co. ...	9'.6"	25'.10" × 8'.1" × 10'.0"
5.	4.	do. do. do.	Metropolitan Co. ...	12'.1"	25'.10" × 8'.1" × 10'.0"
6.	9.	3rd: class carriages small	Oldbury & Co.	9'.0"	22'.11" × 8'.0" × 9'.8"
7.	3.	do. do. do.	Swansea Wagon Co. ...	9'.0"	22'.10" × 7'.11" × 9'.8"
8.	1.	do. do. do.	do. do.	9'.0"	18'.0" × 8'.0" × 9'.8"
9.	2.	Open cars large	Metropolitan Co. ...	12'.1"	25'.10" × 8'.0" × 10'.0"
10.	1.	Open car small	Oldbury & Co.	8'.6"	22'.11" × 7'.11" × 9'.8"
11.	3.	do. do.	Swansea Wagon Co. ...	8'.6"	17'.10" × 8'.1" × 9'.6"
12.	2.	Trucks	Metropolitan Co. ...	9'.8"	18'.3" × 7'.0" × 4'.3"
13.	2.	Trucks (one of which with iron tank) ...	Brown Marshall & Co. ...	8'.6"	18'.3" × 7'.0" × 4'.3"
14.	4.	Steel girders frames with wheels and axles complete for third class carriages.			
15.	10.	Pairs carriage wheels and axles.			
16.	7.	Pairs trolley wheels and axles.			
17.	3.	Single wheels (carriage)			
	30.	Bearing springs (carriage)			
18.	500.	India rubber cushions for carriage window shutters			
	80.	Cork body pads for carriages.			





THE FINANCIAL ANGLE

"You are asking for £8,000 to put the Railway in order. Well, I give you this sum on two conditions: that the Railway should be run as a commercial enterprise and that it should be made to pay, but I am convinced that the country would get neither one nor the other."

Sigismondo Savona, to Strickland, 1891.

Financial data for the seven-year period of private company operation is complicated by the dichotomous administration of a local Receiver General and the Directors in London. The Directors' first and only report available locally is concise, businesslike and resembles contemporary reports of companies of comparable size. The Company's choice of address and auditors indicated prestige, earnestness and an aspiration for growth. Queen Victoria Street, London E.C. lies within the financial hub known as The City. Their auditors were Cooper Bros & Co, forerunners of Coopers and Lybrand, one of the world's largest auditing firms.

Data collation for the period of public ownership is easier because the railway, as a Government department, published annual reports and, besides various statistics can be gleaned from the so called "Blue Books". Between 1892 and 1904, the financial data was presented in the form of a Profit and Loss Account and Balance Sheet. The Profit and Loss Account contained a brief statement of expenditure on Personal Emoluments, Interest and other materials. The Profit and Loss Account would nowadays be called a Receipts And Payment Account because all the expenses therein were recorded on a cash basis and capital expenditure was also charged to this account. Capital expenditure would nowadays be included in the Statement of Source and Application of Funds.

The salient features of these years' Balance Sheets reveal that:

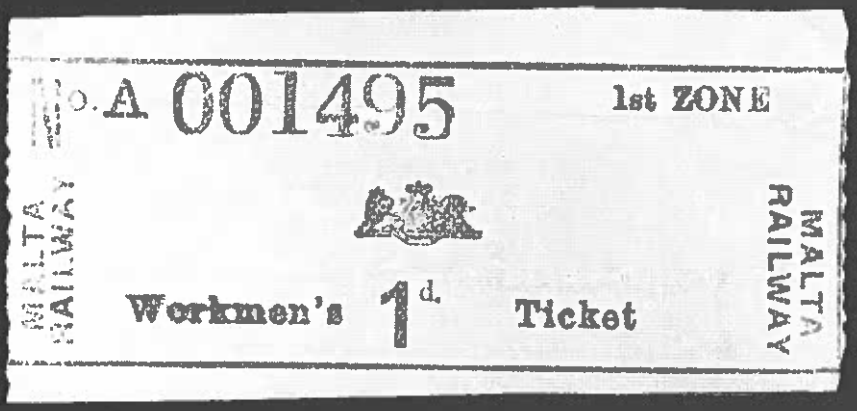
1. The expenditure voted by the Government but not used by the financial year's end was shown in the Balance Sheet as both an asset and a liability, what would today be noted in the accounts under Capital Commitments.
2. No details of cash in hand are given. This is incomprehensible for a company which retained cash floats at its major stations, from which change to travellers was given.
3. No figures for accumulated profits or losses are given, the annual net results being credited to the Receiver General.

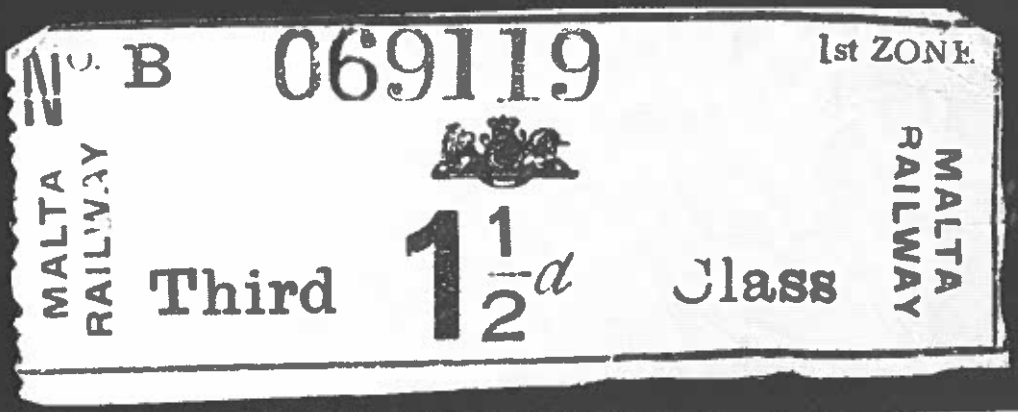
In 1892 the Malta Railway Company's assets, including this workmen's carriage and ballast wagon (facing page), had an estimated book value of £10,000

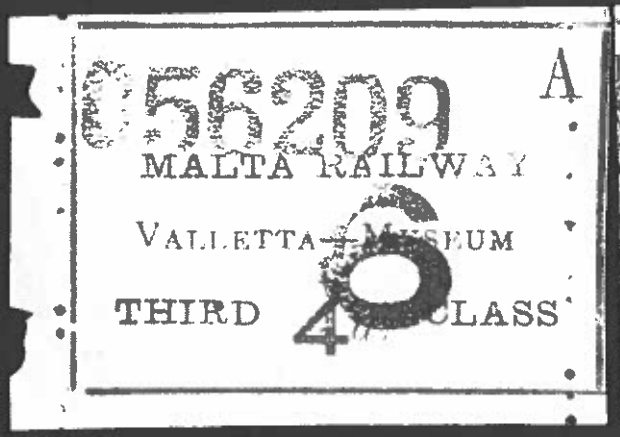
It would appear that the Railway tried to retain the format used by the old company for its reports but the constraints resulting from its changed status of a Government department made the presentation irregular.

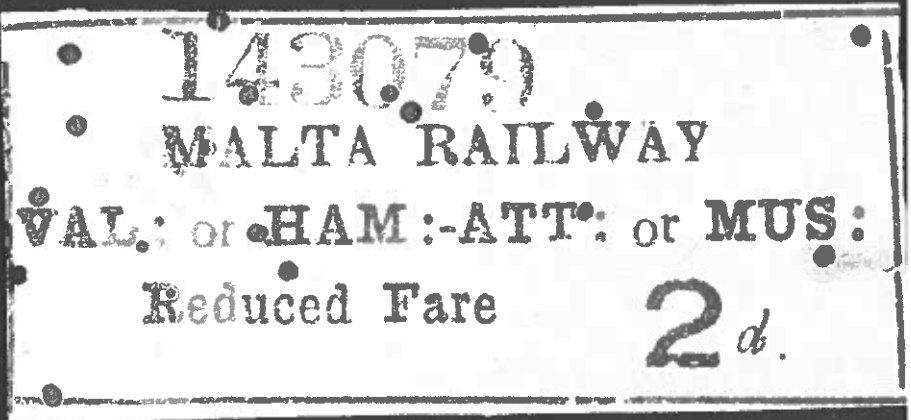
Between 1905-1906 the financial data are presented in a Manager's Report giving a summary of the year's activities and highlighting items of

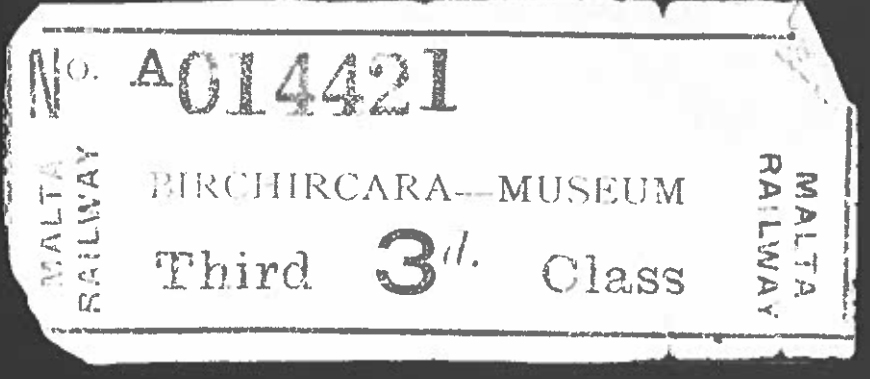

No A 003181
1st & 2nd ZONE
1ma e 2da ZONA
MALTA RAILWAY
FERROVIA DI MALTA
First Class 4d. Prima Classe


No. A 001495
1st ZONE
MALTA RAILWAY
MALTA RAILWAY
Workmen's 1d. Ticket


No. B 069119
1st ZONE
MALTA RAILWAY
MALTA RAILWAY
Third 1 1/2d Class


No. 56209 A
MALTA RAILWAY
VALLETTA—MUSEUM
THIRD 4 CLASS


No. 143079
MALTA RAILWAY
VAL.: or HAM:-ATT: or MUS:
Reduced Fare 2d.


No. A 014421
MALTA RAILWAY
BIRCHIRCARA—MUSEUM
MALTA RAILWAY
Third 3d. Class

interest like the price of coal, exceptional costs, rolling stock additions and improvements to the permanent way. The manager also tried to explain the discrepancy between the actual figures and budgets as well as movements in income and expenditure compared to the preceding year. The report included a detailed Profit and Loss Account containing full breakdown figures of expenditure.

Between 1907 and 1931 the Profit and Loss was left out of the Manager's Report and these four new schedules were introduced:

1. Comparison of Estimated and Actual Income
2. Comparison of Estimated and Actual Expenditure
3. Comparison of Current and Previous Year's Income
4. Comparison of Current and Previous Year's Expenditure

In 1908 a further statement gave additional information on the train mileage recorded during the year, the relation between working expenses and gross receipts and the working expenses per train mile. This format was retained for the rest of the railway's life.

The Manager's Report also included a Statement of Revenue and Expenditure, and a breakdown of passenger traffic at each station. Before 1921, the manager addressed his report to the Lieutenant Governor or the Chief Secretary; after that year, the manager's immediate superior was the Minister of Public Works. Up to 1901, the railway's financial year ended on December 31, after that year it was changed to March 31, to conform with other Departments. The only record of an audit being performed is by the Auditor General, Adolfo Sciortino, on the 1897 Balance Sheet. Being a Government department, it is certain that the reports for the other years were audited too.

Capital investment

Capital investment by the old company amounted to £97,000. This included purchase of land, construction and laying of the permanent way, four engines, a variety of rolling stock and legal expenses. This substantial expenditure exceeded the company's estimates and liquidity problems arose at once, giving rise to sequestrations by creditors and the appointment of a Receiver by the Commercial Court.

Ticket sales were the railway's only source of revenue, earlier proposals for goods traffic having been shelved. Some of these tickets (facing page, shown slightly larger than actual size), give an idea of the zoning system used initially. There was a 2d military ticket (not shown) valid for travel on all zones. The workmen's ticket was valid on working days at certain times of the day. The reduced fare ticket was issued to holders (mainly students) of a special pass issued by the Railway Manager on application by the student's head of school

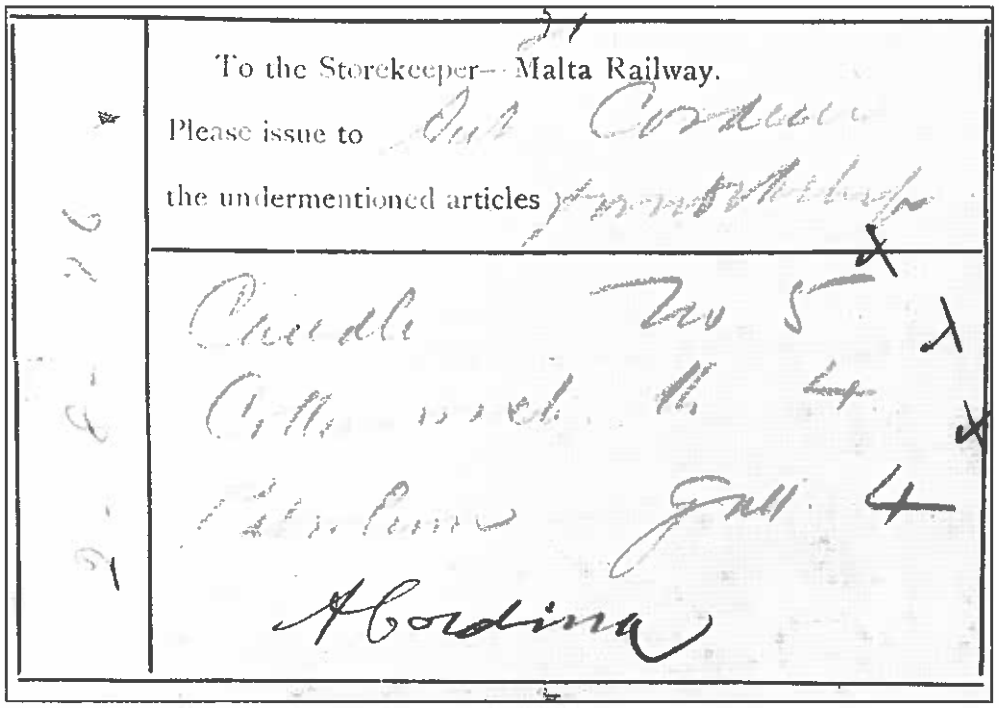
When Government expropriated the railway, it estimated its book value at £10,000 and included this figure in the books of the new concern. Government itself invested £62,055 (Appendix IV) on the railway to put it in working order, purchase new engines and rolling stock, finance the Mtarfa extension and improve the permanent way and stations.

The bulk of this sum, £44,297, was spent between 1891 and 1910, the first two decades of Government ownership. Part of the investment made available by the Government was borrowed at interest rates varying from 1¼% to 3%. The sum of £13,650 was lent without interest, though £10,000 of this represented the book value of the old assets. To finance the investment the Council passed Ordinance V on February 25, 1891, authorising Government to dispose of certain investments and use the proceeds for the Immovable Property Account. After 1906 new investment dried up because the railway operation was yielding negative results which did not justify the purchase of new equipment. Henceforth any new expenditure went to keep the ageing equipment in service.

Income

The viability of an enterprise depends on sufficient income being earned to pay its recurrent capital expenditure in the short run and recoup the capital investment over the years. Unlike other railways, Malta's line derived its entire income from passenger traffic, earlier proposals for goods traffic, however small, having been largely ignored. Revenue from passenger traffic depended on the different social classes' disposable income which in turn determined the quality of the service given by the Company. It was uneconomical to have carriage space in excess of the actual number of regular travellers in any given class. As the managers from Geneste to Rizzo discovered, the bulk of the fares were collected at the lower end of the social scale. Any attempt to increase fares was checked by Government and popular resistance initially, and by tram and bus competition eventually. The railway only managed to raise its fares once, in 1901, when an adjustment of between 17% to 50% was forced on commuters by the sudden escalation in current expenditure at the turn of the century.

Though popular reaction was immediate and traffic decreased by about 20%, income increased by 7%. The railway had a monopoly, commuter resistance weakened as time went by and passenger traffic picked up until the Tramway arrived. That presaged the end of the railway as a feasible, economic form of transport. Buhagiar's defensive measures stemmed but failed to stop the tide. The First World War reprieved the railway and traffic increased until the end of the decade. The twenties saw a period of social upheaval, with the nation finally starting to govern itself. Passenger traffic was on the swings: down by 44% in 1921 due to labour discharges, up again in 1923 with a lowering of fares, and the final slide which began with the burgeoning bus service in the middle of the decade, Dockyard discharges in 1927, the Tramway's last-ditch attempt in 1928 by lowering its fares, cheaper bus fares to Birkirkara in 1929 and finally, after many a


To the Storekeeper— Malta Railway.

Please issue to

the undermentioned articles

hard climb from Notabile Station, an organised bus service to Saqqajja! During the decade, the competition trapped the railway into a vicious circle which the ageing equipment only survived by dint of regular expensive repairs. But the railway had fulfilled its great social purpose and, if it was superseded by other forms of transport, that only went to prove the mutability of things, Malta being richer for having had a railway.

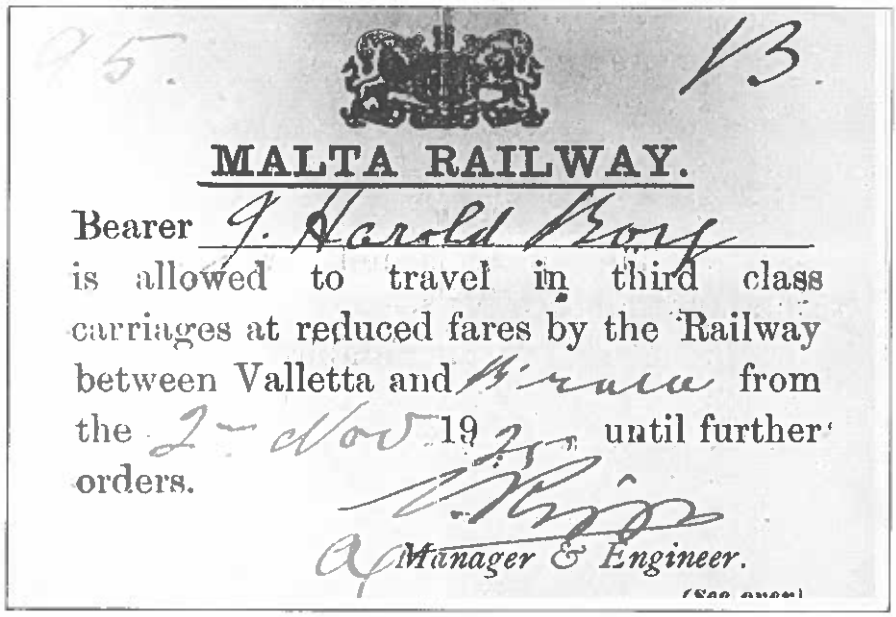
Facing page: A stores requisition order for the issue of candles, cotton wool and petroleum. Stringent economy by the railway managers meant that some carriages were candle-lit right up to the end, shaming us, according to Strickland, in front of visitors travelling on the train

Below: Reduced fare pass issued to J Harold Borg in 1925

Recurrent expenditure

The major cost centres of the railway operation were coal, emoluments, repairs, maintenance and interests on loans (Appendix II). Coal had to be used at all hours irrespective of the number of passengers on the train. Emoluments increased by about 68% in 1921. Equally, the decision not to invest in new equipment meant that the staggering sum of £84,372 was spent over the years on spares, repairs and maintenance. The older the equipment, the more expensive these became. In the end it almost worked out as if new equipment had been bought.

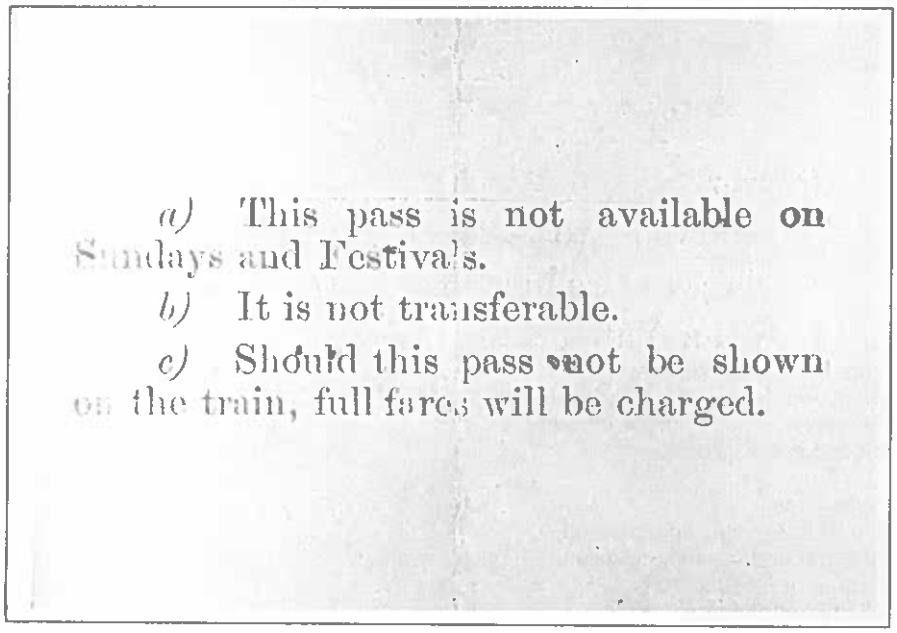
In 1906 interest on earlier investment was waived after a total of £15,652 had already been paid (Appendix II). It was clear that the railway would need a subsidy and an indirect way of giving this was to waive interest which the Receiver General charged the railway on the Government's outlay in the operation.



MALTA RAILWAY.

Bearer J. Harold Borg is allowed to travel in third class carriages at reduced fares by the Railway between Valletta and Rabat from the 2nd Nov 19 27 until further orders.

Manager & Engineer.



a) This pass is not available on Sundays and Festivals.

b) It is not transferable.

c) Should this pass not be shown on the train, full fares will be charged.

APPENDIX I
SUMMARISED PROFIT AND LOSS ACCOUNT

Year	Income	Recurrent Expenditure	Profit/ (Loss)
1892[1]	3,751	3,582	169
1893	4,752	5,234	(482)
1894	5,615	5,009	606
1895	5,963	5,746	217
1896	7,020	5,656	1,364
1897	6,818	5,947	871
1898	7,109	6,284	815
1899	7,319	6,642	677
1900	7,735	7,555	180
1901	8,332	7,447	885
1902[2]	2,074	1,772	302
1903	9,020	7,228	1,792
1904	9,272	8,166	1,106
1905	9,929	8,095	1,834
1906[3]	8,758	9,125	(367)
1907[4]	8,224	10,161	(1,937)
1908	8,419	8,375	44
1909	7,165	7,368	(203)
1910	6,864	7,412	(548)
1911	6,507	7,562	(1,055)
1912[5]	6,712	7,027	(317)
1913	6,322	6,768	(446)
1914	6,564	7,136	(572)
1915	6,314	6,560	(246)
1916[6]	8,688	8,229	459
1917	8,712	8,881	(169)
1918[7]	10,439	9,389	(1,050)
1919	14,293	15,067	(774)
1920	15,038	12,871	2,167
1921	12,276	20,833	(8,557)
1922	11,813	17,068	(5,255)
1923[8]	11,444	13,545	(2,101)
1924	12,248	14,582	(2,334)
1925	13,055	14,013	(958)
1926	13,136	15,963	(2,827)
1927[9]	12,719	15,978	(3,259)
1928[10]	9,800	16,401	(6,601)
1929[11]	8,170	12,562	(4,392)
1930	7,092	12,002	(4,910)
1931[12]	4,706	10,621	(5,915)
	340,187	379,864	-39,677

All figures are in pounds Sterling

NOTES TO APPENDIX I

1 Figures for a ten-month period.
2 Figures for a three-month period.
3 Workmen's fares reduced to 1d. to compete with Tramway.
4 Students fares introduced. 130 students made use of this facility during the year.
5 £200 from the sale of unserviceable articles included in the income.
6 £298 from the sale of munitions included in the income.
7 Tramway temporarily suspended.
8 Decrease in third class and workmen's fares.
9 Heavy discharges from the Dockyard. Bus services commenced.
10 Reduction in Tramway fares. Buses expanded service on Valletta-Birkirkara route.
11 Bus fares on the Valletta-Birkirkara route reduced to 1d.
12 Organised bus service between Valletta and Saqqajja.

APPENDIX II
RECURRENT EXPENDITURE

Year	Coal	Wages	Maintenance	Interest	Others	Total
1892[1,2]	—	1,537	—	429	1,616	3,582
1893[1]	—	2,046	—	500	2,688	5,234
1894[1]	—	2,311	—	600	2,098	5,009
1895[1]	—	2,534	—	800	2,412	5,746
1896[1]	—	2,544	—	900	2,212	5,656
1897[1]	—	2,573	—	1,007	2,367	5,947
1898[1]	—	2,654	—	1,135	2,495	6,284
1899[1]	—	2,687	—	1,275	2,680	6,642
1900[1]	—	2,650	—	1,396	3,509	7,555
1901[1]	—	2,826	—	1,419	3,202	7,447
1902[1,3]	—	657	—	355	760	1,772
1903[1]	—	3,100	—	1,222	3,006	7,228
1904[1]	—	3,105	693	1,429	2,939	8,166
1905	1,281	3,284	1,512	1,307	711	8,095
1906	1,231	3,271	2,550	1,311	762	9,125
1907[4]	1,312	3,380	3,990	667	812	10,612
1908[5]	1,302	3,700	2,632	—	741	8,375
1909	1,086	3,705	2,009	—	568	7,368
1910	1,094	3,721	2,001	—	586	7,412
1911[6]	1,294	3,640	2,050	—	578	7,562
1912[7]	1,376	3,660	1,411	—	582	7,029
1913[8]	1,548	3,507	1,222	—	491	6,768
1914[9]	1,760	3,475	1,340	—	561	7,136
1915[10]	1,398	3,622	1,118	—	422	6,560
1916[11]	2,781	3,683	1,160	—	605	8,229
1917	3,118	3,646	1,558	—	559	8,881
1918[12]	n/a	3,446	1,585	—	4,358	9,389
1919	7,099	3,639	3,625	—	704	15,067
1920[13]	4,431	4,009	3,511	—	920	12,871
1921[14]	7,559	6,723	5,561	—	990	20,833
1922[15]	3,298	6,729	6,274	—	767	17,068
1923	2,206	6,793	3,665	—	881	13,545
1924	2,808	6,984	3,973	—	817	14,582
1925	2,608	6,597	4,066	—	742	14,013
1926[16]	2,675	6,739	5,748	—	801	15,963
1927	3,320	6,840	4,954	—	864	15,978
1928	2,267	6,562	6,662	—	910	16,401
1929	1,868	6,456	3,516	—	722	12,562
1930	1,865	6,162	3,302	—	673	12,002
1931	1,263	5,968	2,674	—	716	10,621
	63,848	**161,165**	**84,372**	**15,652**	**54,827**	**379,864**

All figures are in pounds Sterling

NOTES TO APPENDIX II

1 No further details on recurrent expenditure between 1892 to 1904 are available.
2 1892 covers a 10-month period.
3 1902 covers a 3-month period.
4 Two boilers were replaced and locomotives Nº 7,8 and 10 were overhauled and painted
5 Locomotives Nº 1,4 and 9 and nine carriages were overhauled and painted.
6 There was an increase in the price of coal.
7 Higher price of coal added £200 to the coal bill. Locomotives Nº 1, 4, 6 and 7 were overhauled and four carriages were completely renewed.
8 Four locomotives and eight carriages were overhauled.
9 There was another increase in the price of coal. Five locomotives and twelve carriages were overhauled.
10 The price of coal decreased. Other supplies increased due to the war. Four engines and six carriages were overhauled.
11 Cost of material for manufacturing war munition added £120 to sundry costs. Cost of coal reached unprecedented levels.
12 Detailed figures not available.
13 Cost of coal decreased.
14 New boilers were purchased for locomotives Nº 7 and 8. Salaries were revised during year.
15 New boiler for locomotive Nº 8 (additional costs). Cost of coal decreased.
16 Purchase of new boiler for locomotive Nº 10. General renewing of permanent way and rolling stock.

APPENDIX III
PASSENGER TRAFFIC

Year	Passengers
1892[1]	534,833
1893	628,741
1894[2]	808,523
1895[3]	881,738
1896[4]	1,015,738
1897[5]	995,289
1898[17]	1,037,769
1899[17]	1,068,425
1900	1,081,471
1901	860,263
1902[1/17]	214,137
1903	924,350
1904	959,130
1905	1,045,398
1906[6]	935,613
1907[7]	909,772
1908[8]	914,903
1909[8]	769,440
1910[8]	754,615
1911[8]	742,585
1912[8]	737,585
1913[8]	731,112
1914[8]	744,918
1915[8]	715,666
1916	888,272
1917	972,268
1918[9/17]	1,165,003
1919	1,451,154
1920	1,451,182
1921[10]	785,738
1922[11]	826,567
1923[12]	1,359,389
1924	1,546,371
1925	1,649,175
1926	1,664,428
1927[13]	1,615,154
1928[14]	1,111,131
1929[15]	799,174
1930[16]	681,200
1931	497,297

NOTES TO APPENDIX III

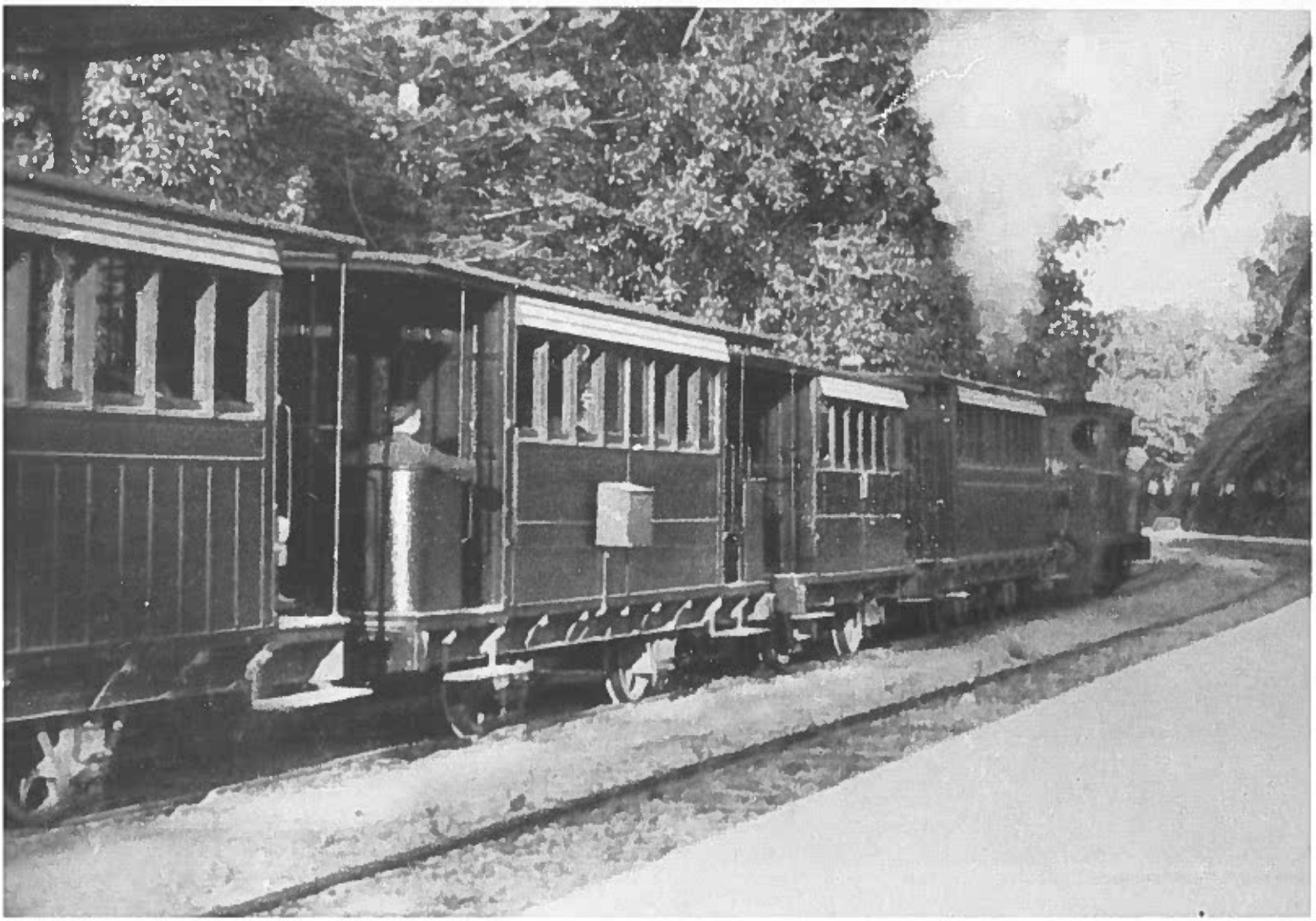
1 1892 figures cover a 10-month period, whilst 1902 figures cover a three-month period.
2 Valletta-Birkirkara service introduced.
3 Additional traffic attributed to more passengers on Sunday and certain festivals.
4 Mtarfa barracks fully occupied.
5 Reduction attributed to less passengers on certain festivals.
6 Tramway service introduced.
7 Heavy unemployment in Malta and decrease of garrison stationed at Mtarfa.
8 Fall in traffic attributed to "general crises on the island".
9 Temporary suspension of Tramway service.
10 Heavy unemployment in Malta.
11 Decrease in traffic on longer routes was offset by an increase on the shorter routes.
12 Decrease in third class and workmen's fares.
13 Heavy discharges from the Dockyard.
14 Reduction in Tramway fares. Buses expanded their service on the Valletta-Birkirkara route.
15 Bus fares on the Valletta-Birkirkara route reduced to 1d.
16 Buses organised their service on the Valletta-Saqqajja route.
17 Traffic for this year is estimated using previous year's income/passenger ratio.

APPENDIX IV
CAPITAL EXPENDITURE

Year	Permanent Way	Rolling Stock	Tools	Furniture	Total
1892	15,555	8,953	276	15	24,799
1893	300	20	—	—	320
1894	2,605	1,064	—	—	3,669
1895	2,378	1,943	238	6	4,565
1896	3,828	1,111	—	—	4,939
1897	3,354	1,788	—	—	5,142
1898	5,095	—	—	—	5,095
1899	3,975	470	—	—	4,445
1900	3,170	161	—	—	3,331
1901	974	—	—	—	974
1902	302	—	—	—	302
1903	531	—	—	—	531
1904	716	74	—	—	790
1905	315	—	—	—	315
1906	628	1,980	—	—	2,608
1907-1909	—	—	—	—	—
1910	49	—	—	—	49
1911	181	—	—	—	181
1912-1931	—	—	—	—	—
	43,956	**17,564**	**514**	**21**	**62,055**

All figures are in pounds Sterling.

The 1892 figures include £10,000 being the net book value of the assets appropriated from the Malta Railway Company Limited.



A Third Class carriage with a mail box on a train leaving Birkirkara Station for Valletta. No revenue was derived from the carriage of mail or of Government employees in uniform

LIFE ON THE LINE

"Thirty four bulls ran under the engine, thirty two were killed and two injured. The line was cleared at 1.45am and the train removed to Hamrun Station."

Hamrun Police Station, Report, July 23, 1923.

With the defunct railway now well on its way into oblivion, and the absence of reliable written or oral evidence, the sociologist will find it difficult to assess the social impact of the railway on the population.

Unlike the ubiquitous horse-cart and motor-car, the railway was limited to within the seven-and-a-half-mile line track passing through the centre of the Island. It is not unreasonable to suppose that to the north and south of the railway, life remained largely unaffected by this new phenomenon and few people ever used the train or worried about level crossings. However, people living close to the railway had to adapt to what was for them a new and perilous invention. The railway increased the danger to life and limb, but land values soared when the urban sprawl it set in motion commenced. The railway was the harbinger of the motor-car and our predecessors' attitudes to it were probably similar to ours towards a comfortable speedy utility for which we pay a price in human, financial and environmental terms.

If it were possible to travel back and forth on a railway time machine, the episodes would make interesting reading. As it is, we can only glean an insight of life on the line from newspapers and official files, veterans' recollections being more often than not apocryphal.

A boon to children - or a bane?

While adults derived comfort and speed from the railway, children discovered in it a regular fountain of delight and entertainment.

Valletta and Notabile children were privileged with aerial views of the train. Twelve-year-old Salvatore Borg thought the train too good a target to miss and threw a stone from Porta Reale Bridge down to the railway viaduct. An example was set of him and on May 12, 1887 he was sentenced, rather severely, to two days imprisonment which included corporal punishment.

Hamrun Station platform showing the down-train to Valletta. In the background is the station exit leading to Tal-Fatati (near what is now Villambrosa), close to where a train killed 34 bulls in July, 1923

The commonest childhood reminiscence is flattening pennies on the line. This shows that several children played along and on the line. Nine-year-old Rosina Bugeja slipped and fell while crossing the line near Birkirkara on January 22, 1906. She was hit by the footboard of the 5pm down train, but luckily was uninjured. The arm of a twelve-year-old boy was amputated by the 9.13am Museum train on May 12, 1919. Engine driver Alfred Fenech and stoker Spiridione Mamo saw the boy lying flat on the ground near San Salvatore Station. They gave several blasts of the

The Floriana tunnel shafts were surrounded by high wooden slats (bottom left-hand corner) to prevent objects from being thrown on to the trains

whistle and braked but the train ran over the boy and severed his arm. Ticket clerks Edgar Borg and Edgar Schranz got help for the unconscious boy from the nearby lunatic asylum. The inquest exonerated the Company's staff from any culpability after it was established that the boy had been taken ill on the permanent way before the train arrived.

A fatality was recorded on November 18, 1918, when Carmelo Zerafa, a boy cleaner employed by the Railway, attempted to board the 2.05pm Museum train at Birkirkara while it was still in motion. He fell and was killed instantly. Ironically enough, the boy had left his post without permission.

When decline set in during the final decade children were often allowed to travel without a ticket, hanging on to the footboards and chains. Eight-year-old Edgar Willis dropped some money while boarding the 9.30am train which was entering Museum Station. He attempted to dive under the train to retrieve it but was held back by a certain Giuseppe Galea who was a passenger on the train. Willis was taken to Mtarfa hospital by Police Sgt Enrico Busuttil and was later released, uninjured. A twelve-year-old girl, Evelyn Packman, was similarly injured while trying to join her mother aboard a moving train. She slipped, her foot was caught by the wheels and one of her toes was amputated.

Wait until the train stops

The first recorded fatality occurred on Monday, March 29, 1886 when James Rockford of HMS *Superb* fell between the wheels at Valletta Station. Three carriages passed over his body and two of them were derailed. The Station Master was charged with involuntary homicide but was subsequently released when it was ascertained that the victim had died through his own negligence.

The injured occasionally included female passengers and it is not unreasonable to suppose that the *faldetta*, the balloon-shaped dress of the period, was to blame. A fatality occurred at Hamrun Station on February 26, 1906, when a woman alighted from the 3.20pm Notabile train while it was still in motion. It took thirty minutes to remove her corpse from beneath the train.

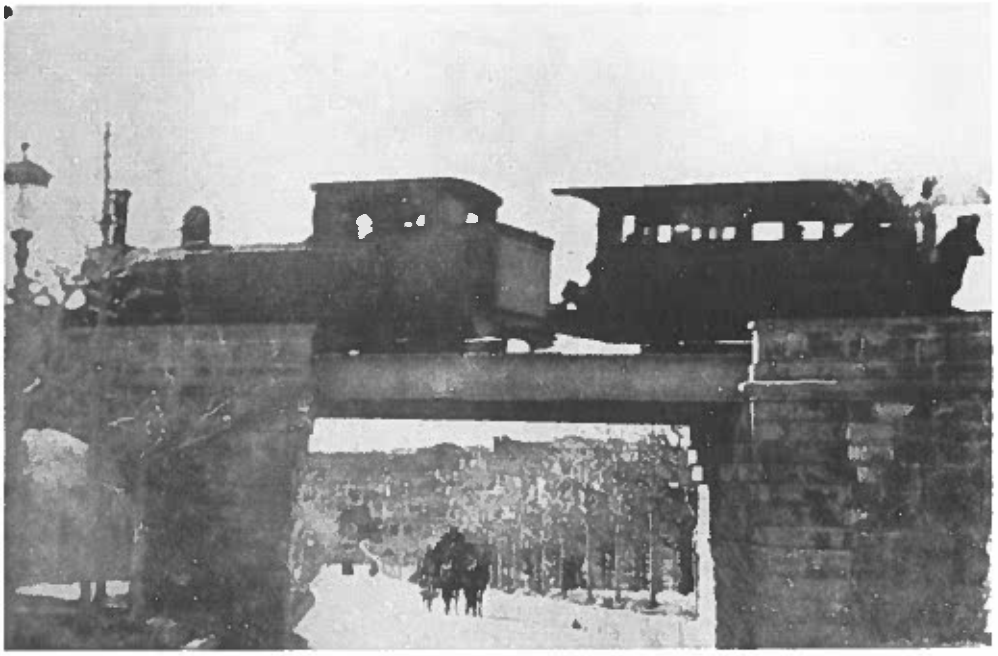
That same year Maria Caruana, born in Gozo and residing at Birkirkara, slipped whilst alighting from a first class carriage of the 6.50pm down train which was still in motion. She was dragged under the train and later conveyed to the Central Hospital at Floriana with both legs broken.

During the Great War, Elena Reynaud lost her footing and her life, while boarding the 5.45am Museum train at Valletta. One of the few male fatalities was that of Lorenzo Sammut who fell between two workmen's carriages after leaving the 6.05pm Valletta train at Birkirkara Station on February 15, 1918. Sammut suffered grievous injuries and expired at his residence at midnight.

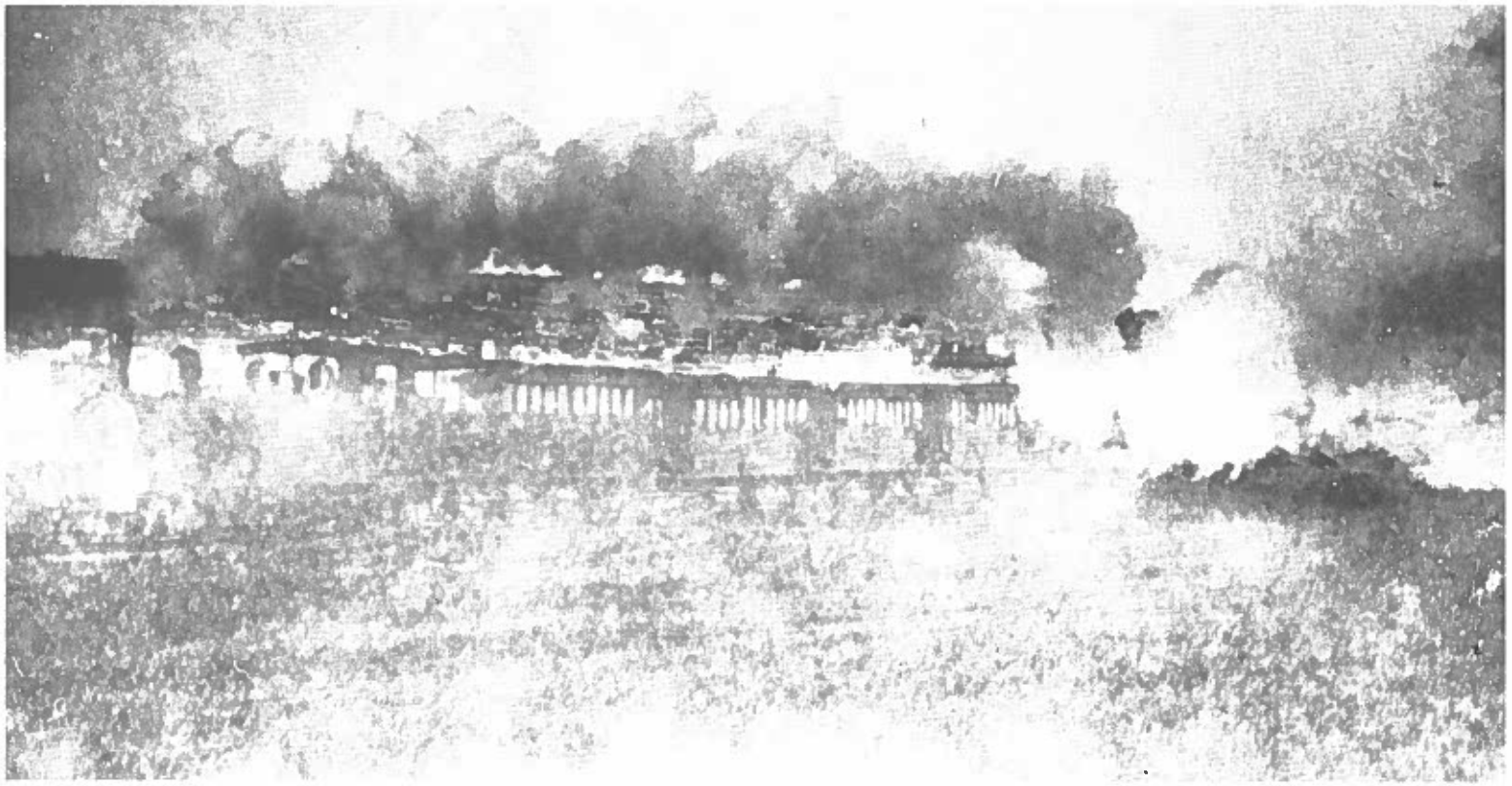
Accidents were also reported in the final decade. Marianna Refalo of Kalkara, lost the fingers of her right hand at Valletta; Maria Elena Scicluna barely missed being run over at Notabile and 25-year-old Carmela Degiorgio succumbed to injuries at Hamrun while boarding the 8.15am Museum train. On March 20, 1928 Giovanni Attard Lisano of Paola died of severe injuries sustained during the previous day at Notabile. Attard Lisano lived long enough to exonerate the engine driver and the ticket collector from any culpability.

No smoke without a fire

The people of Valletta and the Three Cities were no strangers to smoke. The Navy's coal-burning warships constantly emitted various shades of smoke while their engines were tested or steam was being raised. In the countryside smoke meant fires, accidental or deliberate. The engines introduced into the countryside the spectacle of a cloud of moving smoke which was to prove a nuisance to farmers. The spectacle was, however, not without its aesthetic



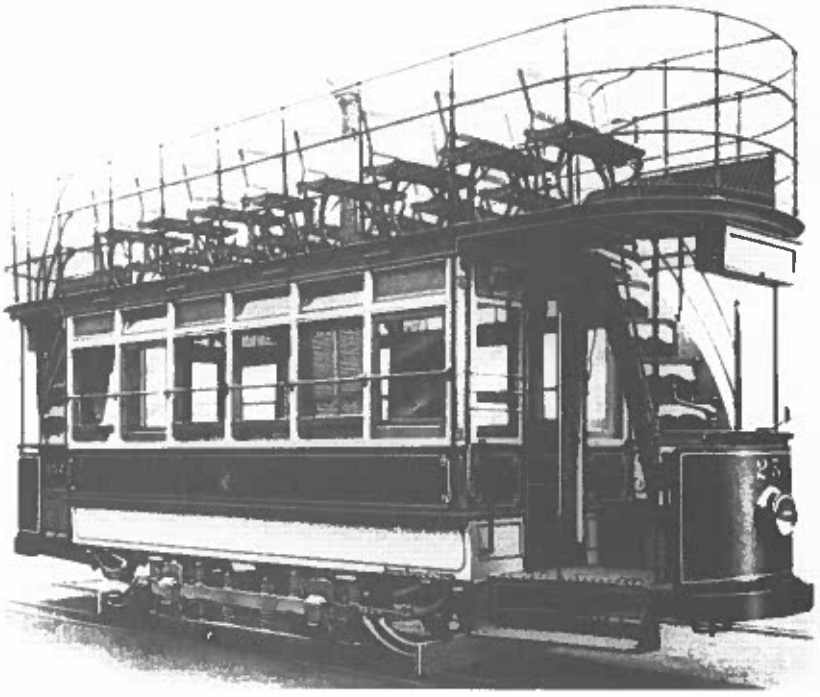
The railway occasionally injured third parties by default. Malta's first buses were double-deckers on the Valletta-St Julians route. When buses arrived near Princess Melita Viaduct, the conductor warned passengers on the upper deck to lower their heads. In 1906 a corporal of the Essex Rgt either forgot, or else tried to duck at the last moment. The result was a particularly nasty bump on the head



merits, and one veteran's unforgettable pleasant memory is a view of this trail of smoke creeping up to Notabile while he was having tea and biscuits with his parents at Saqqajja's Point de Vue Hotel.

It was decidedly unpleasant to be seated in the open carriages while passing through the Stygian gloom of the Valletta and Notabile tunnels. Despite several attempts to control the emission of smoke, the problem remained and passengers had to pull up the windows or endure this short trip to Hades where the only light came from two candles lit before the journey by scruffy, barefooted boys wearing long shirts. Workmen fared worse because their carriages were windowless. Passengers must have greeted the emergence from the tunnel with more than a sigh of relief. Few commuters probably paused to reflect that they had just passed a subterranean reservoir beneath Floriana's Granaries.

Above: Farmers were not so sanguine about the benefits of the railway. Their fields were initially partitioned — then they were set on fire. The advancing plumes of smoke heralded an oncoming train and the possibility of fires to their crops in the dry season



Left: In 1919 Malta Tramway Car N° 23 broke the chain outside Birkirkara Station while the 6.40pm was arriving from Valletta

But there was another aspect to smoke — and the victims were not passengers on the train! Malta's fields are tinder dry during summer and it was with this in mind that spark-arresting baskets were fitted to the engine funnels. Despite this safeguard, escaping sparks still set fire to nearby fields on several occasions. Fires were observed as soon as the train had passed so there was no doubt about culpability and the Department had to pay farmers compensation for loss of crops.

On May 22, 1917 the gatekeepers of Guard Huts Nos 12 and 13 tried to extinguish a fire started after the passage of the 12.10pm Valletta train. The Railway Department had to pay the owner, Filippo Mifsud of Strada Muxi, Zebbug, £5 in damages.

The Railway strikes back

Near misses or collisions between trains and carts were sometimes reported at level crossings. When the problem at the San Salvatore level crossing was solved, there remained two other danger spots on the line: at Birkirkara and Guard Hut Nº 11. It was here that collisions were reported involving the railway's competitors, the tram and the motor-car.

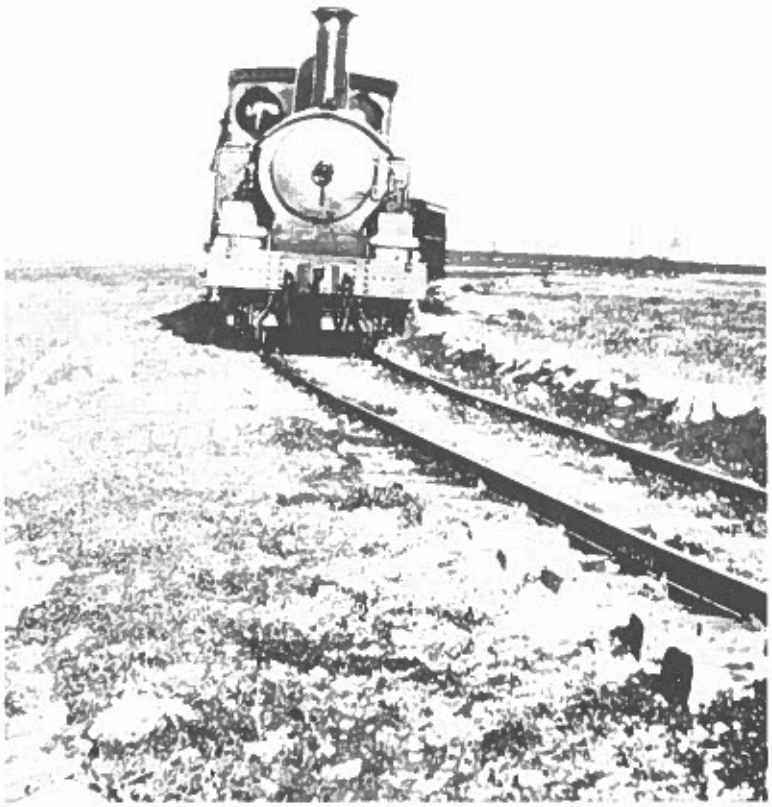
Level crossing and Guard Hut Nº 11 were situated on the sharp curve in a cutting, at a steep gradient. The guard hut had been built in a raised position to enable drivers of down trains to look out for the signals from afar, especially at night. This precaution did not prevent the 9.30am Museum train from hitting a British Red Cross Society motor-car driven by Harold Bailey on January 9, 1917. Bailey and his passengers, Mrs Carlsberg and Mrs Price of Mtarfa Hospital, were badly injured, the car was a total loss and the train suffered £20 worth of damage.

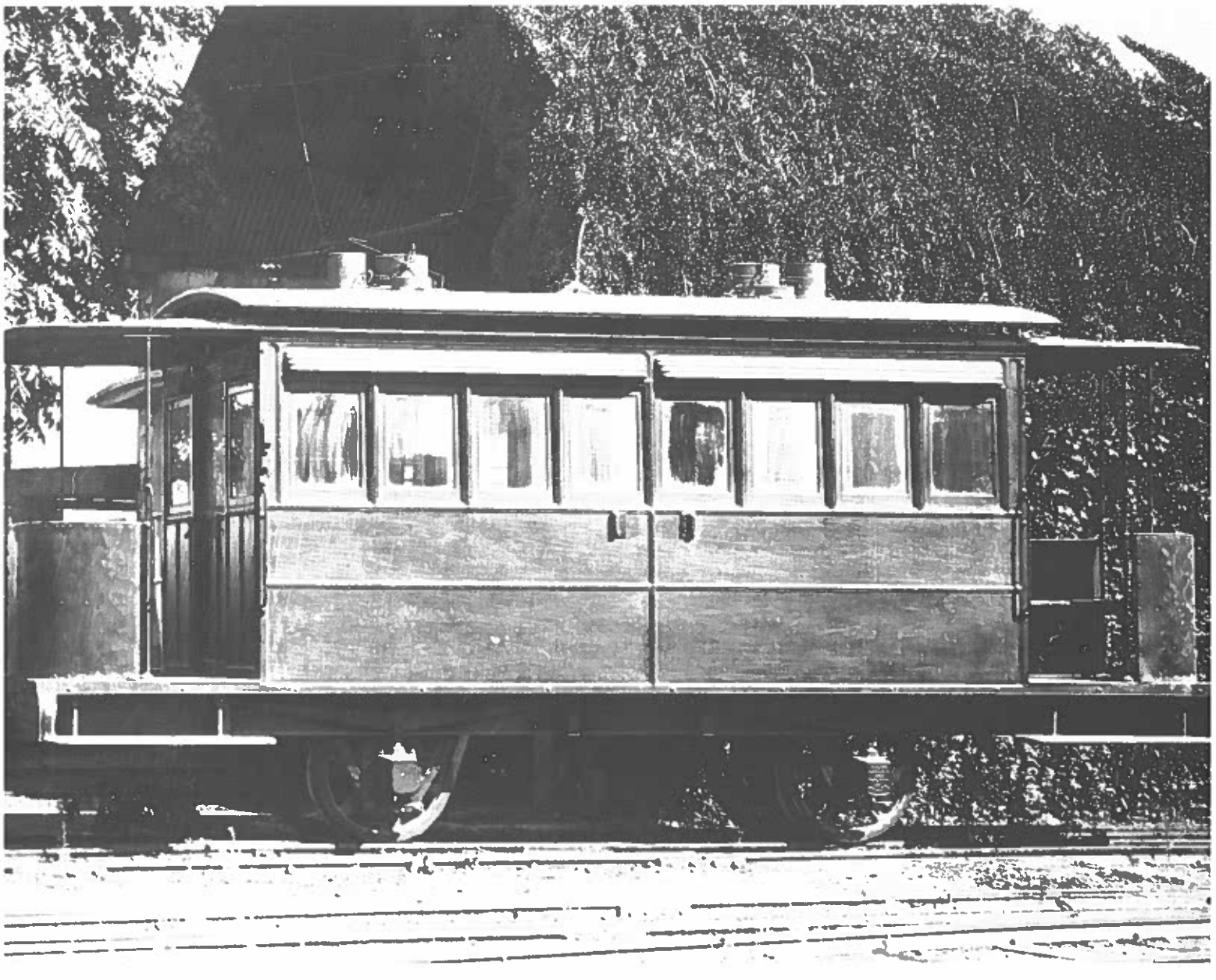
An accident at Birkirkara involving Tram Nº 23 could have had very serious consequences. The tram derailed while approaching the station at speed. It broke the chain at the level crossing and continued on the railway line while the 6.40pm Valletta train was arriving at Birkirkara. Fortunately the engine driver braked in time and the Tramway's liability amounted only to 5s.0d worth of chains.

Cattle beware! - or echoes of the Far West

While none of the company's engines were fitted with cow chasers, it is doubtful whether these would have been of any use on July 22, 1923. That evening there was a cow too many to chase! The ensuing accident would have been worthier of America's Far West than tiny Malta where cattle are rather thin on the ground.

Although the day had been uneventful, Riccardo Meilaq, the chainman at Guard Hut Nº 4 at Santa Venera, had had a busy day with traffic crossing his part of the line on the way to the feast of St Joseph at Msida. Earlier on, a herd of 136 bulls had been unloaded at Marsa for Carmelo Chetcuti, known as "Ix-Xieref" (literally "the tough"), of Qormi. Chetcuti and several drovers led the bulls from Marsa to Misrah il-Barrieri near Santa Venera. When the bulls arrived at the level crossing at 8.00pm, one of the drovers asked Meilaq whether a train was due since such a large herd would take some time to cross the line. The down train from Museum Station had just left at 7.55pm. The herd began to press on the chain and began the unauthorised crossing without Meilaq and the drovers being able to do anything about it. Meilaq had evidently panicked since the proper proce-





Facing page top: Fields on both sides beyond Attard and plenty of opportunities for flattening pennies, racing the train and the occasional inexplicable attempt to derail the train by placing large stones on the line

Bottom: The ultimate in luxury railway travel was the Governor's carriage: it had special ventilation arrangements and electric lighting

dure would have been to show the red lamp to indicate danger. At about 8.15pm, the train crashed into the herd with a loud thump. The driver and his stoker got the fright of their lives, thinking at first that they had hit a cab with people returning from the feast at Msida.

The train cut a gory swath through the herd before derailing and coming to a stop. Frightened passengers left their carriages to mingle with the carcasses of dead and dying beasts. News of the hideous slaughter brought the Police from Hamrun Station. The senior railway fitter, Carmelo Degiorgio, and Alex Macfarlane, a veterinary surgeon, were called. 32 bulls were killed on the spot and two were so badly mauled that they had to be put down. All 34 bulls were removed to the abattoir and the rest were driven to a nearby farm, known as 'Tal-Madonna'. Luckily, nobody was injured but the badly shocked engine driver was unfit to drive the engine by the time it was shunted back on to the rails and the line cleared at about 12.45am. A substitute driver drove the engine to Hamrun Workshop for examination and repairs. The next day the owner and the drovers were charged in Court with having led a herd of bulls which had been insufficiently secured and negligently driven.

It had been an incredible and unusual accident and would have been immortalised in country music and legend had it occurred in America's Far West. Such wholesale slaughter of animals through an accident had never occured in Malta, yet it only got a bare mention in the newspapers and very little was heard of it afterwards.

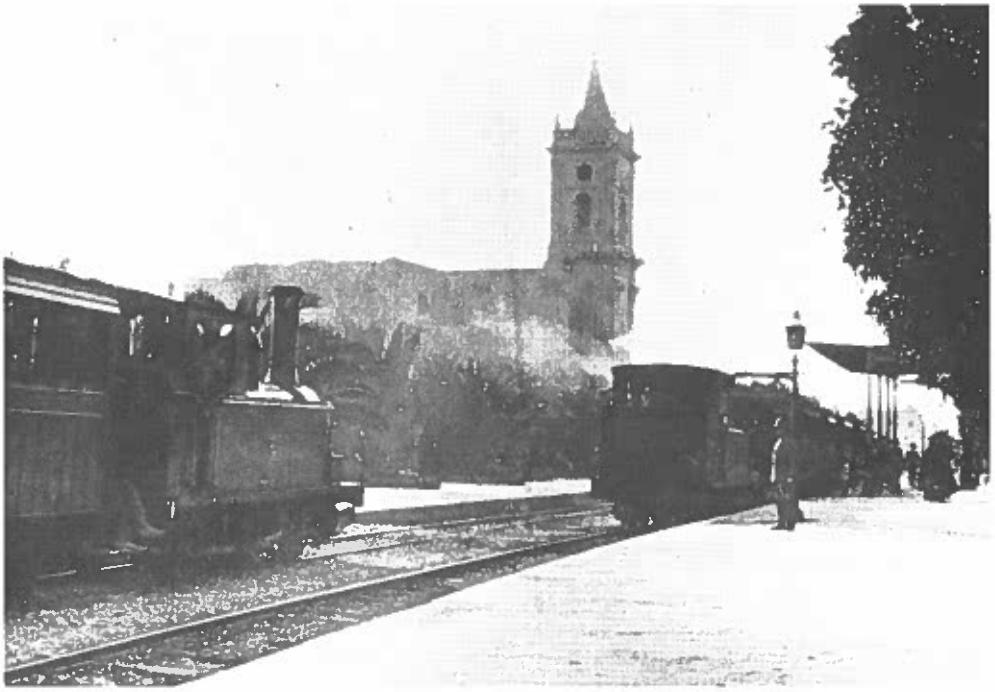
Buffer stop accidents of 1896

Strickland's policy of charging lower fares on longer trains had one snag: the sidings at Hamrun and Birkirkara could not contain an engine and its carriages and leave the main line clear for another train. It often happened that the stationary train was hit by the buffer end of another train entering the station. Carmelo Degiorgio, an engine driver, was fined one month's pay after one of these collisions and was suspended from duties after a second occurrence while driving Engine Nº 1. Injuries were also reported to passengers who, in defiance of Railway regulations, had left their seats to be among the first to leave the carriages. The matter was raised in the Council of Government during the December 16, 1896 sitting. Strickland explained that this kind of accident, which was common enough in England, was also happening in Malta due to the Government's policy. These accidents ceased after the sidings were lengthened and Buhagiar instructed drivers of down trains to give way to up trains by waiting outside the stations until the latter had safely entered.

All in a train's work

On September 16, 1900 there was an inexplicable attempt to derail the 7.55pm train from Notabile. The train hit a barrier of stones which was heaped on the rails near San Salvatore Station, causing an estimated £3. 12s. worth of damage. The authorities were worried about the consequences of such an act and offered a £50 reward for information leading to the arrest of the culprits. The money was never claimed, the crime was not repeated and the motives behind the act remained a mystery.

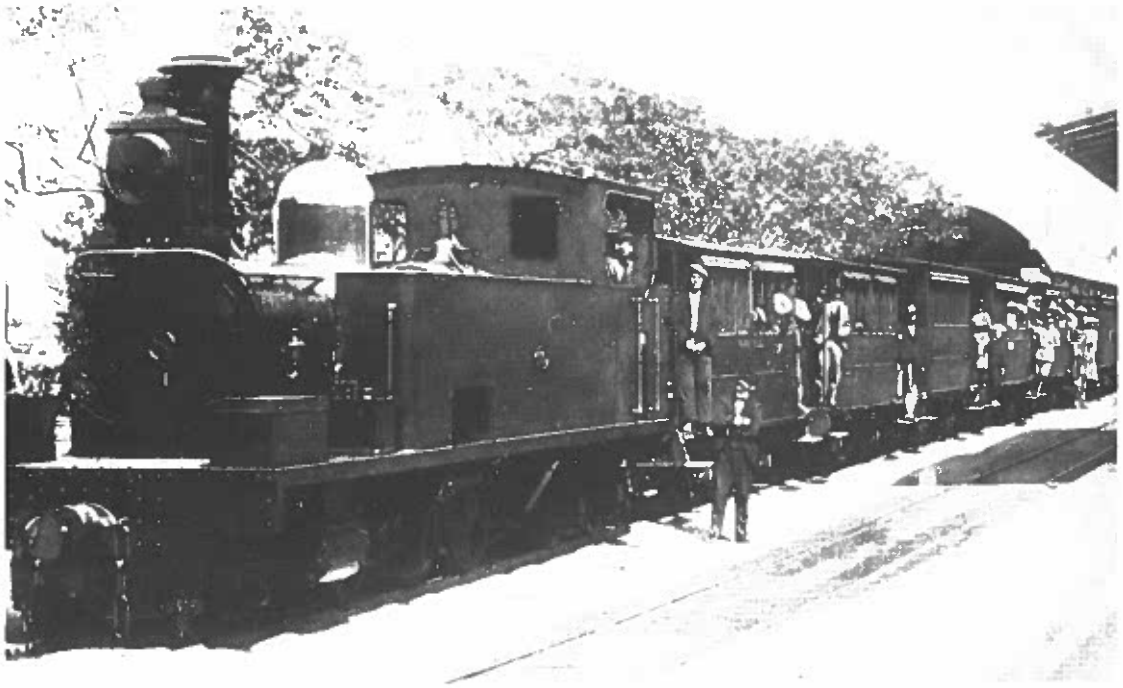
Equally mysterious was the senseless death of a man on April 27, 1914. While the down train was approaching Birkirkara, the driver observed a



man reading a newspaper, with his head bent down, walking across the fields toward the line. The driver gave a blast of the whistle and applied the brakes, but the man kept walking across the line before meeting his inevitable end. The impact knocked him into a field and he died on the way to hospital. The inquest established that the driver was not to blame and had taken all the precautions to prevent the accident.

The Railway and the Military

The opening of Mtarfa Barracks augmented traffic on the railway but created problems on the trains. Soldiers who were a model of decorum on the down train proved to be quite the opposite on their way back to the



Down and up trains meet at Birkirkara Station (above). Strickland's policy of longer trains (such as Nº 6 shown at left at Hamrun with at least eight carriages) made the railway profitable but did not prevent the odd buffer-stop accident because the sidings were not sufficiently long to take the extra carriages

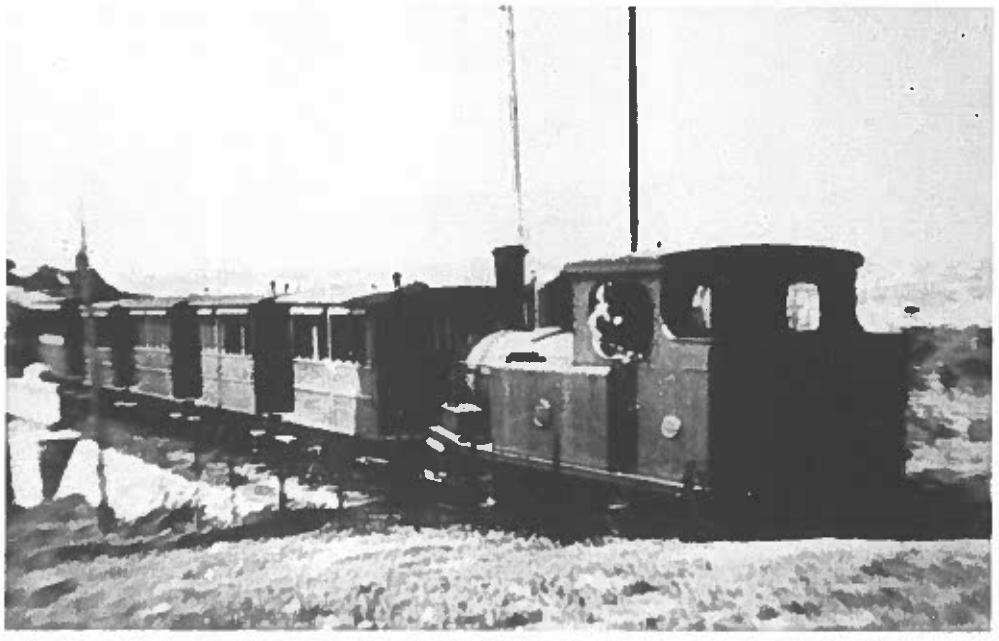
Barracks after sampling the delights of Valletta, Sliema or the Three Cities. Valletta Terminus was placed within a short, albeit hilly distance of the Grand Harbour and Marsamxett ferries. The soldiers' inebriated return to barracks gave ticket collectors many a headache. Damage to railway property was usually paid on presentation of an official claim. One ticket clerk took the matter into his own hands at journey's end. When a carriage full of rowdy soldiers arrived at Notabile, he instructed the candle boy to make a pretence of lighting their carriage for the short tunnel passage to Museum. As soon as their journey resumed, he punched one of the soldiers and made a hasty exit to the next carriage. All hell was let loose, and by the time the train emerged at Museum, the duty Military Police had quite a job separating the soldiers while the station guard totted up the damages.

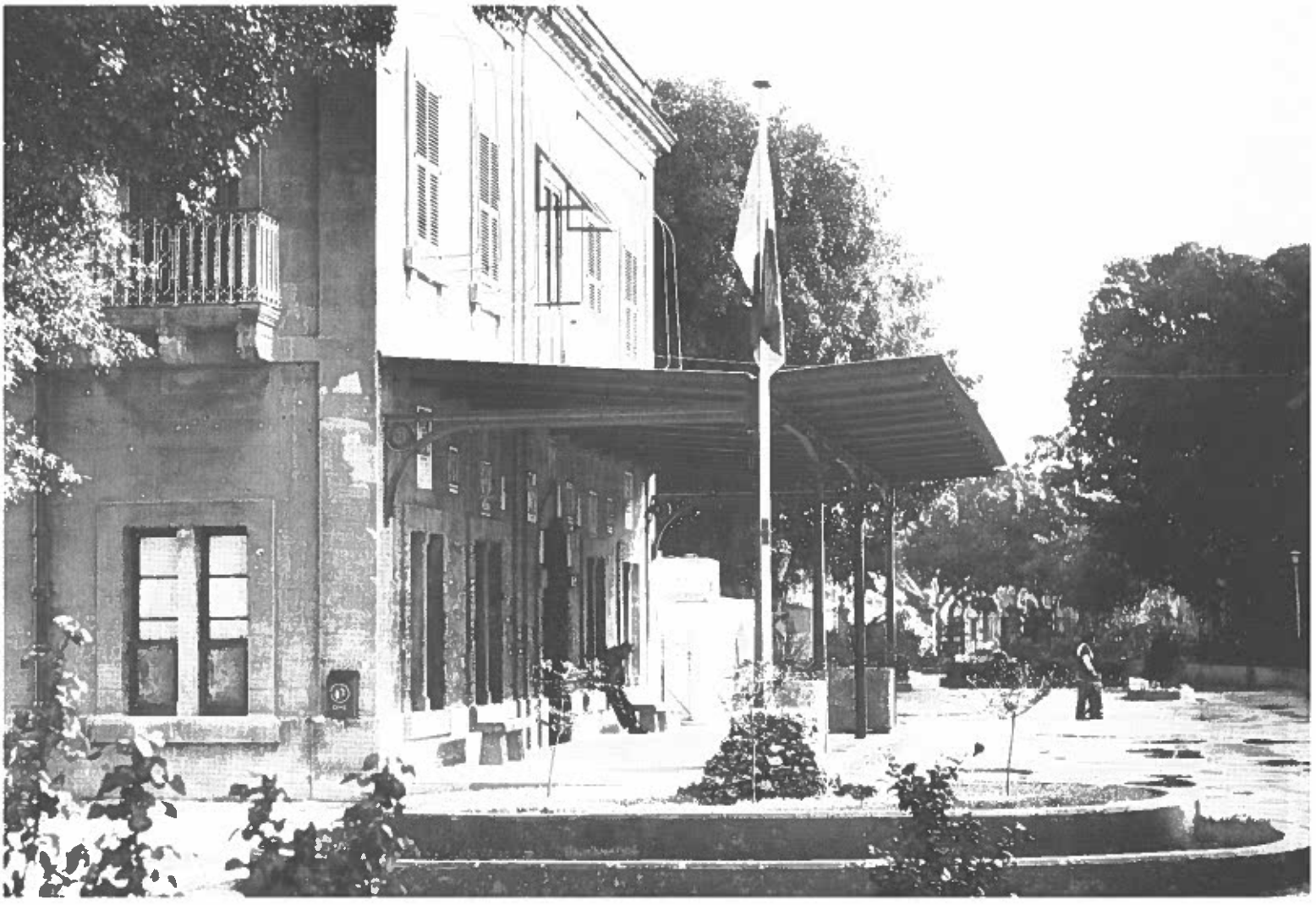
That Tommy, Jock or Paddy was well and truly drunk is revealed by the probably apocryphal story of a double engine breakdown at a station. When a third engine arrived, a bewildered soldier decided that he had had a drink too many when he saw three engines pulling the four carriages of the evening train!

Conclusion

The railway preceded the car as a means of communication. The dearth of adequate transport at the time is recalled by a Dockyard veteran who used to walk from Dingli to Notabile and then board the train to Valletta. From there he would take a short walk down the Zig-Zag to the Marina before boarding the ferry to Senglea. It was impossible for him to return home that same evening, so, together with some friends, he had rented a bedsitter at Cospicua. Having stayed there from Monday to Saturday he would then make the journey home in reverse at the weekend.

Things have come a long way since then, but the memory of overcrowding, free rides, feasts, arguments over fares, short-changing, waiting at the level crossings and card sharps will at least survive in print long after those who remember the railway have passed on.





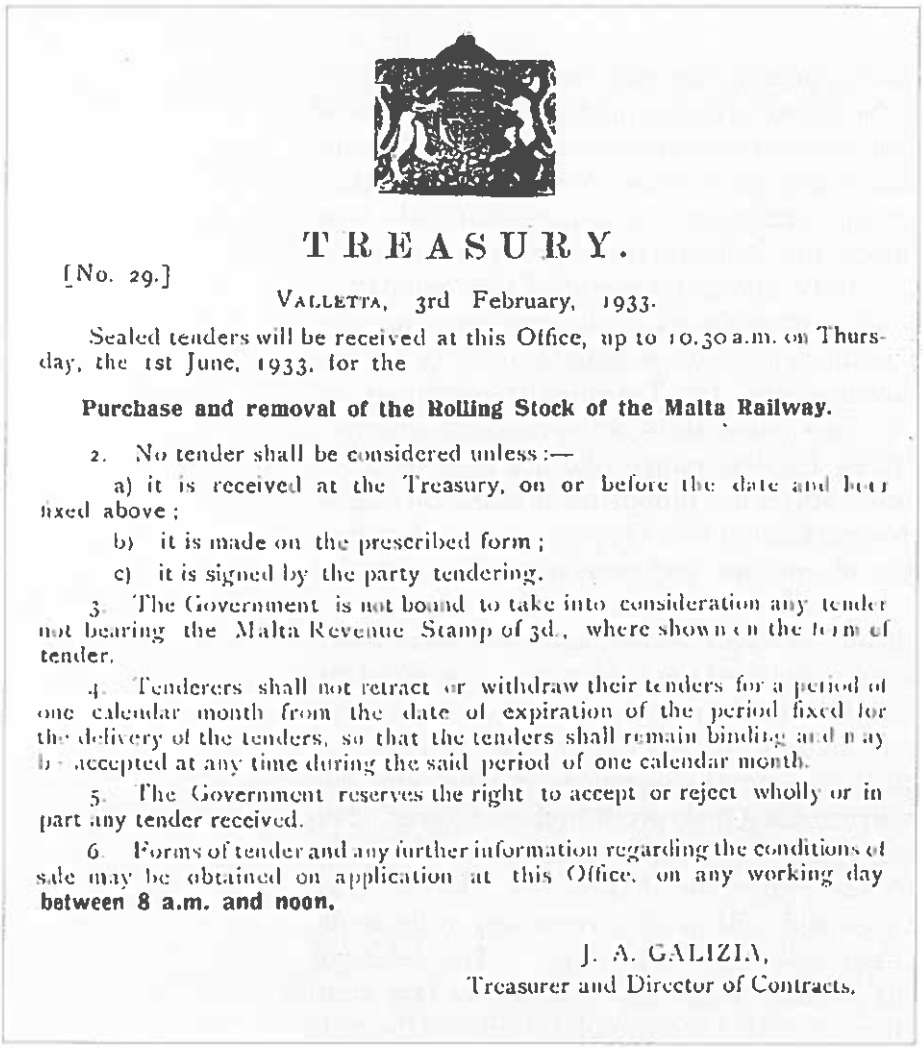
EPILOGUE

Ten days after the railway shut down, a conference was held at the Palace, Valletta to decide on the disposal of the immovable property, the rolling stock and the rails. The conference was chaired by Sir Harry Luke and included the Superintendents of Agriculture and Public Works, the former railway manager, Mr Sillitoe, a horticultural adviser and Professor William Nixon. Sillitoe had earlier presented a report on the future of the railway stations. He listed the various trees, shrubs and hedges and made recommendations on their upkeep or removal.

Facing page: Museum (top) and Birkirkara (bottom) are among the best preserved station buildings

The conference decided to transfer the station gardens at Hamrun, Birkirkara, Attard and Museum to the custody of the Department of Agriculture. Professor Nixon retained the Engineering Training Workshop at Hamrun with all its machinery and tools. In addition the conference upheld his request for three engines and a carriage to be used for practical teaching. The Superintendent of Public Works was asked to draw up estimates for the demolition of San Salvatore Bridge and to commence removing rails at the level crossings and the stations. The former railway manager was instructed to draw up specifications for the sale by tender of the remaining engines and rolling stock.

In 1932, Nixon offered to waive his request for three engines and a carriage after the International Harvester Export Co of Geneve, Switzerland, showed an interest in the purchase of all the engines and rolling stock. The proposal subsequently fell through and Nixon retained Engines Nº 2, 3, 5 and a Third Class carriage built by Metropolitan.



TREASURY.

[No. 29.]

VALLETTA, 3rd February, 1933.

Sealed tenders will be received at this Office, up to 10.30 a.m. on Thursday, the 1st June, 1933, for the

Purchase and removal of the Rolling Stock of the Malta Railway.

2. No tender shall be considered unless:—

a) it is received at the Treasury, on or before the date and hour fixed above;

b) it is made on the prescribed form;

c) it is signed by the party tendering.

3. The Government is not bound to take into consideration any tender not bearing the Malta Revenue Stamp of 3d., where shown on the form of tender.

4. Tenderers shall not retract or withdraw their tenders for a period of one calendar month from the date of expiration of the period fixed for the delivery of the tenders, so that the tenders shall remain binding and may be accepted at any time during the said period of one calendar month.

5. The Government reserves the right to accept or reject wholly or in part any tender received.

6. Forms of tender and any further information regarding the conditions of sale may be obtained on application at this Office, on any working day **between 8 a.m. and noon.**

J. A. GALIZIA,
Treasurer and Director of Contracts.

SCHEDULE C.

RAILS, SLEPEERS ETC.

Lot		Unit	Approx. Quantity
1	About 7¼ miles of single railway track (about 15 miles of rails) still in position on the permanent way between Porta Reale Ditch and the Museum Railway Station, consisting approximately of 1½ miles of track (3 miles of rails) of 60-lbs. steel flat bottom rails (viz. rails weighing 60 lbs. per yard); 2 miles of track (4 miles of rails) of 42-lbs. rails; and 4 miles of track (8 miles of rails) of 32-lbs. rails—with short lengths of double track and short gaps wherefrom the rails have already been removed—all spiked to oaken sleepers at intervals averaging about one yard from axis to axis; exclusive of all rails still in position within the boundaries of the Hamrun Station and Yard; and inclusive of all the sleepers (about 13,200) obtainable from the removal of the above mentioned rails	Tons	175
2	391 assorted rails measuring 27 to 30 ft. in length and weighing 32 to 60 lbs. per yard, 3 points, 3 crossings, 13 rail-guards, and 4 ramps for carriages, all steel, deposited at the Hamrun Works (Hamrun Old Railway Station). ...	Tons	58
3	136 assorted rails similar to those described in lot 2, deposited at the Valletta end of the Floriana Railway tunnel.	Tons	29
4	A quantity of assorted fang-bolts	No.	2400
	A quantity of fish-bolts	,,	1050
	A quantity of fish-plates	,,	124

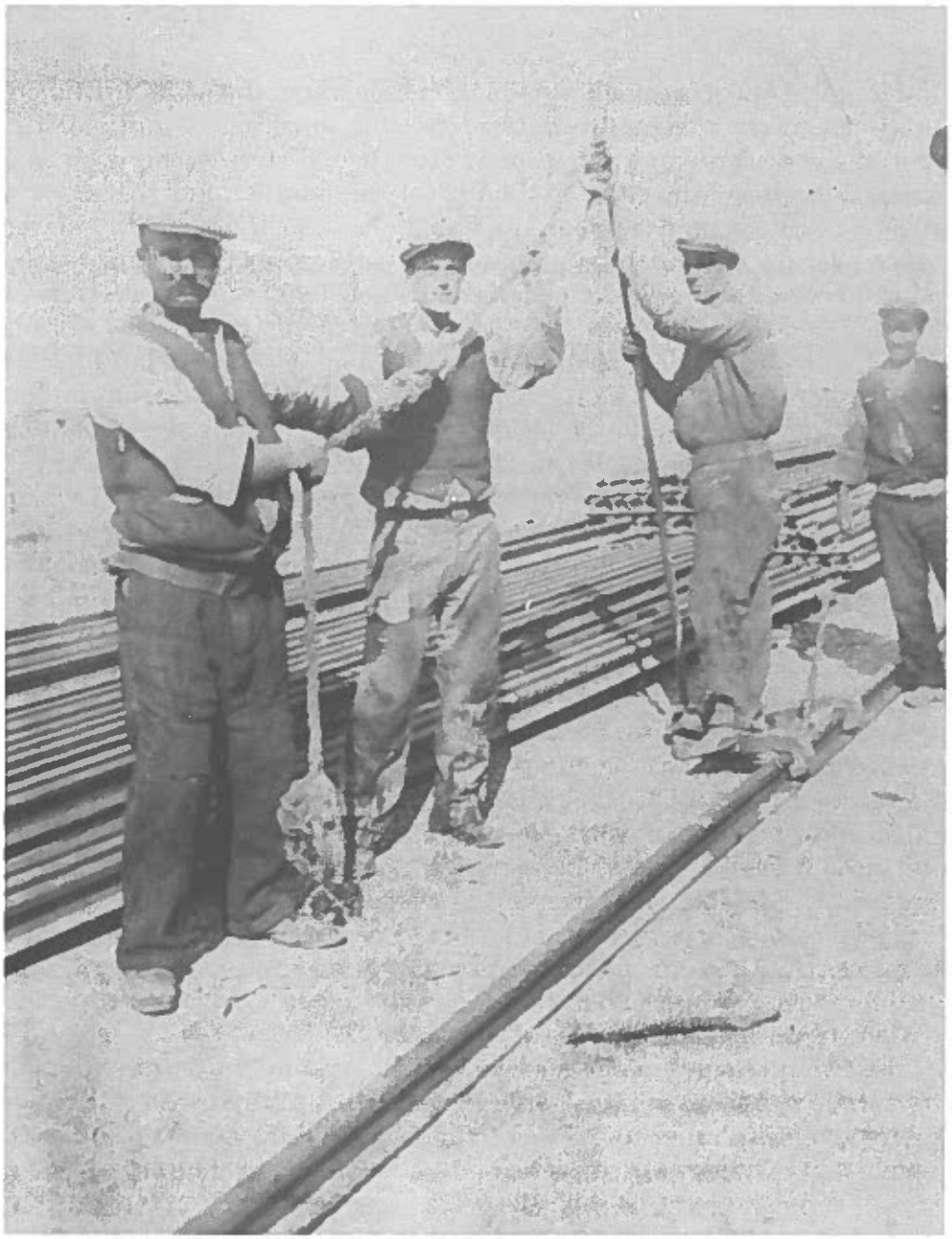
In the meantime Rizzo drew up inventories and drafted the specifications and conditions of tenders for the remaining engines, rolling stock and rails. Excluded from the tenders were the movable contents of the stations which had already been transferred to other Government departments.

Rizzo listed the surplus material under three headings: Schedule A for the engines, B for the rolling stock and C for the rails, sleepers, fishplates and fang bolts. Tenderers were to be allowed a period of four months in which to inspect and measure the materials and make overseas contacts.

Although the Government induced the Crown Agents to try to sell the material to other Colonial Governments, the Treasury Department expected unattractive tenders, "in view of the state of the material offered". Rizzo faced an additional problem: his department did not possess drawings of the engines and there were only a few blueprints of some carriages. He was therefore authorised to commission E.A. Gouder, a local photographer, to photograph a number of engines and carriages as per tender schedules.

Tenders were issued on February 3, 1933 (Schedules A and B are listed on pp 136-137, 153). Eleven firms submitted tenders for part or whole lots. Carmelo Minuti's highest bid of £595 for the engines was rejected as being well below the £950 the Treasury had estimated. Other bids were rejected because they barely covered the scrap metal value of the engines and "the wooden body of the carriages will remain a total profit to the tenderer". The rails (3 miles 4½"/60lbs per yard, 4 miles 4"/42lbs per yard, 8 miles 3½"/32lbs per yard) were sold to Vincenzo Falzon for £1110 11s. Falzon also successfully tendered for 391 assorted rails, points, crossings, railguards, carriage ramps, fang bolts, fish bolts and fish plates. The tenderer subsequently complained that he had recovered 3155 yards less than expected. When a public weigher was called in to weigh samples of the rails

Lorenzo Falzon of the Firm Vincenzo Falzon supervising the removal of the rails (Schedule C, facing page) from the permanent way



recovered, it was found that Falzon, who tendered for a total weight of 475 tons had recovered an additional 3.6 tons, despite the lesser length! The Treasury waived payment for this excess weight, amounting to £8 8s 4d.

Fresh tenders for the engines were issued in September 1937. Although the relative file has not been traced, it is certain that the seven engines were finally sold (perhaps to Bernard Zammit, one of the original tenderers) and the scrap exported to Italy before the Second World War. Some carriage bodies were used by the Traffic Control Board as bus shelters and were eventually broken up. A Third Class carriage, the only one of its kind, survived in a private garden and was subsequently donated to the Government. After restoration it was placed at Birkirkara Station.

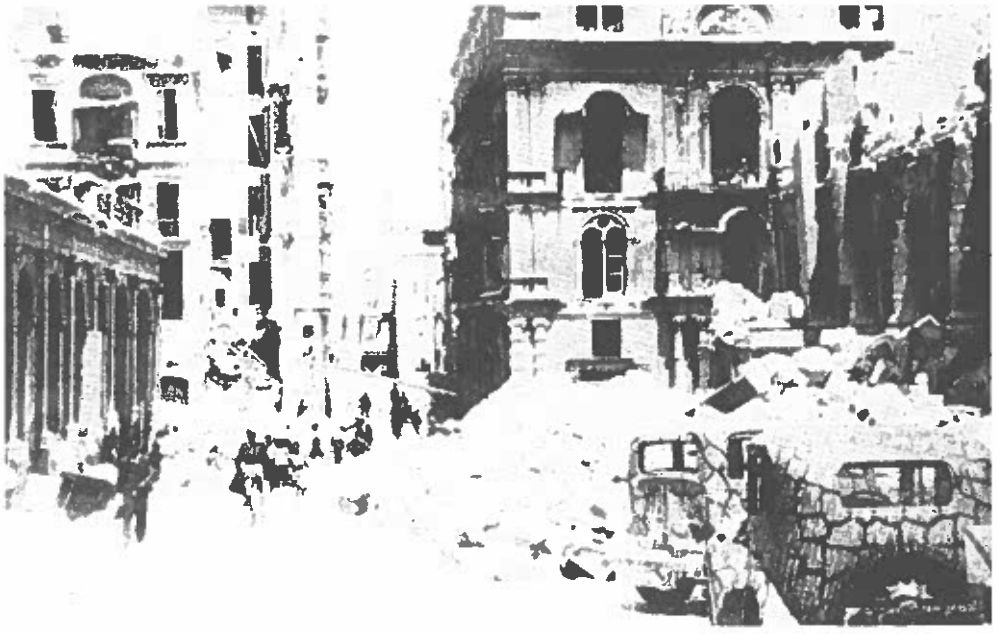
Valletta Station buildings later housed the Electoral Office, the Traffic Control Board and a permanent exhibition before being bombed during the Second World War. Plans for the tunnel (a factory, bus terminus, a skating rink) never materialised and in April 1971 it was leased to the Yellow Garage.

Floriana tunnel became a wartime bomb shelter and school and in 1966, the Department of Agriculture tried growing mushrooms in it. At the Floriana end, this same department uses the old station buildings as a mustering office while the St Philip Curtain tunnel end served as a wartime underground telephone exchange. In 1936, Hamrun Station was taken over for the construction of a milk bottling plant. The workshop machinery and tools were transferred to a new technical school set up at Mriehel and the remaining rails were sold to Mamo Bros. Several rails ended as roofing beams for houses at Marsa or in construction projects around the island, such as the bridge at Wied il-Kbir. Hamrun Station building is now leased to the local Boy Scout troop while the remaining grounds are used by the Malta Dairy Products (successors to the Milk Marketing Undertaking) whose address is proudly given as Hamrun Railway Station!

The station buildings at Birkirkara are used by various Government departments, the surrounding area retaining its original purpose — that of a public garden. Most of the minor stations, embankments and cuttings have disappeared but a most interesting raised embankment still curves its way to nowhere behind the Corinthia Palace Hotel. Beyond the wasteland that was Attard Station is Old Railway Road, where villas line what was perhaps the longest straight stretch of permanent way. San Salvatore Bridge was demolished in 1932 and Notabile Station cutting was filled up to make way for a vegetable market, a project which literally collapsed due to the clay foundations! The upper station building in Racecourse Street can however still be seen, as is the Notabile tunnel exit.

The slightly curved tunnel is however inaccessible because a private firm uses the Museum end for mushroom growing. After lying derelict for years, the nearby Museum Station was reopened in 1986 as a restaurant, enticing diners with memories of the railway.

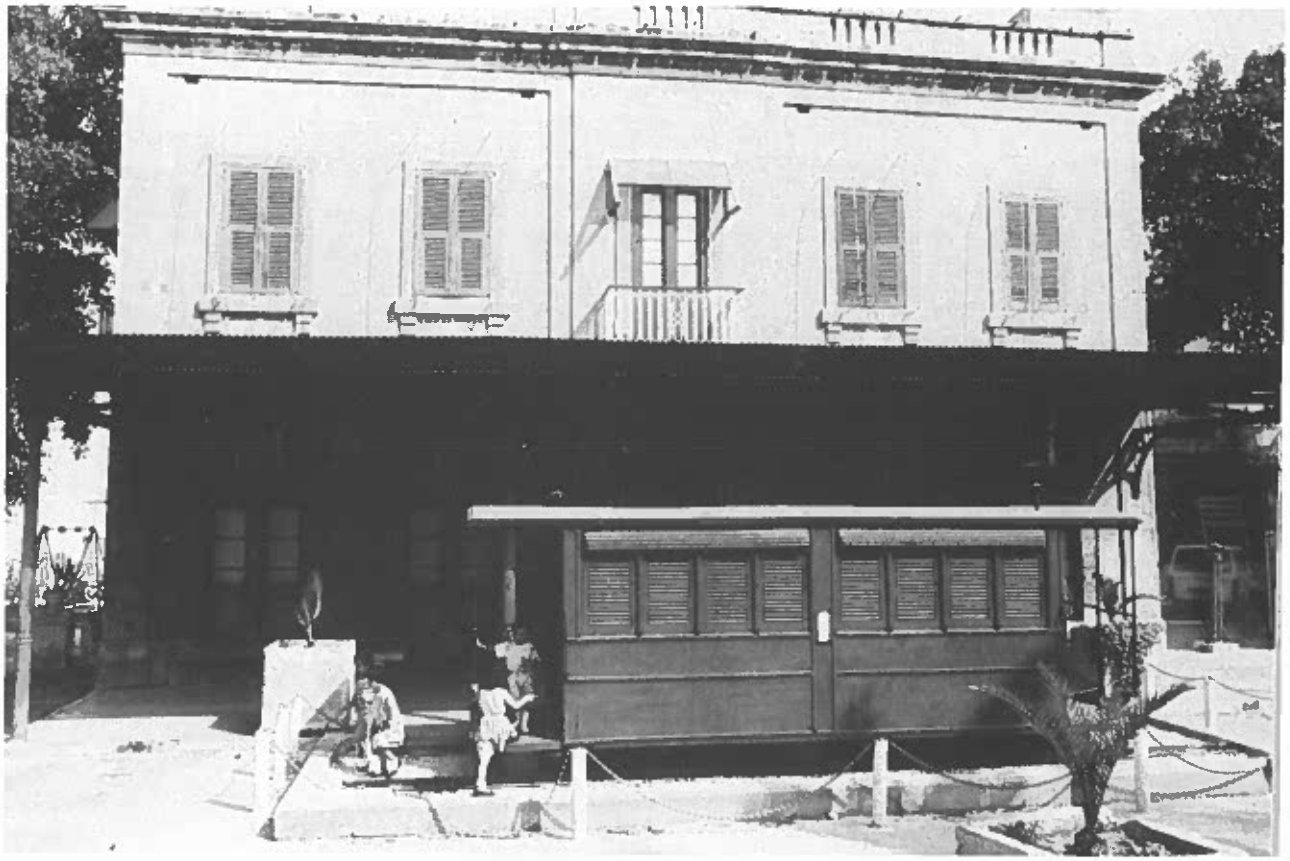
Gheriexem Bridge is journey's end. While it is now hard to believe that here was a main line and two long sidings, several graffiti beneath the huge arch survive as mute witnesses to soldiers, lovers and visitors who carved immortality while *Il-Vapur ta' l-Art* thundered above their heads!

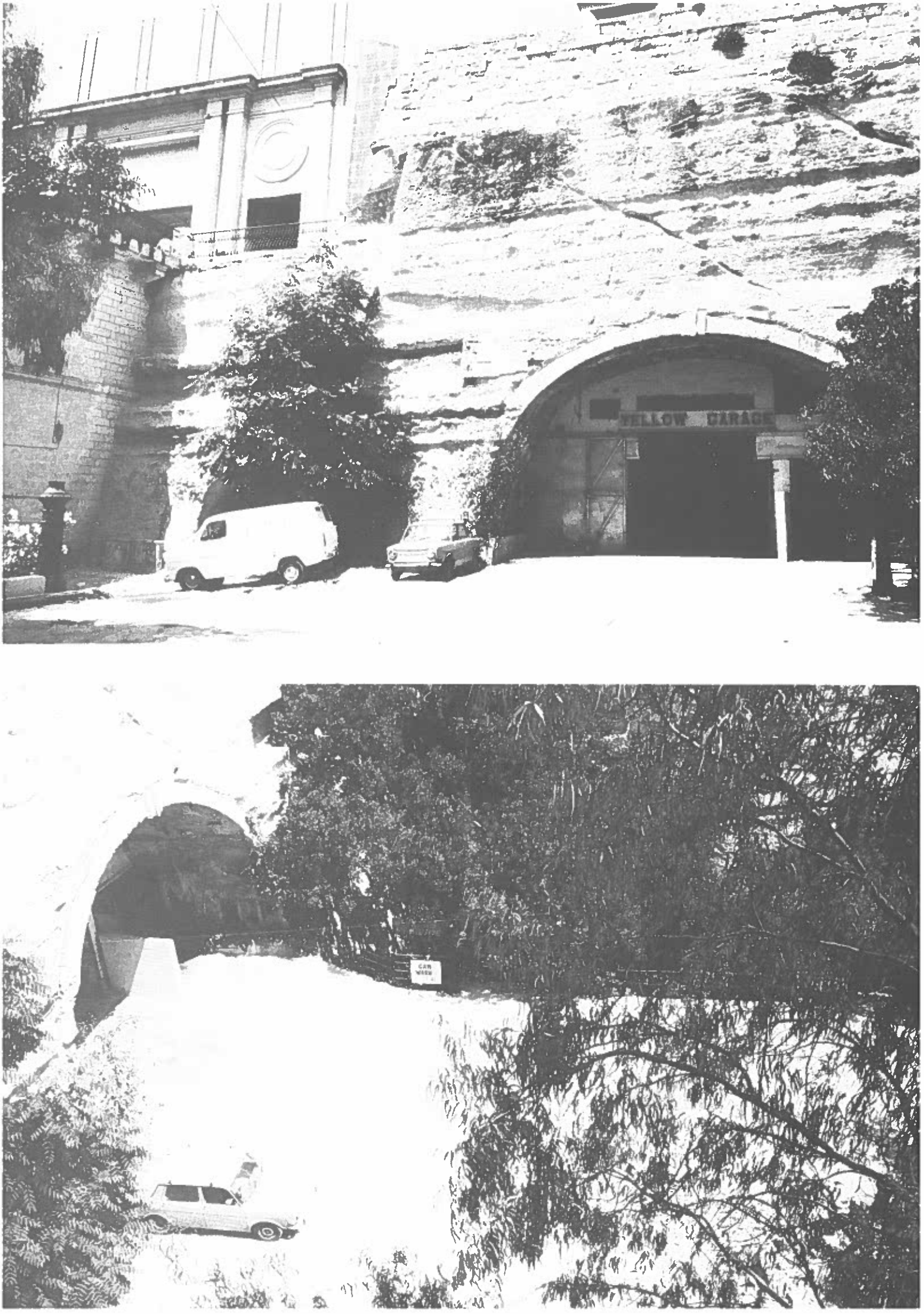


Facing page top: A former railway carriage, truck removed, on Castille Square. It later served as a traffic police post

Lone survivor: After restoration, the Third Class carriage (facing page, bottom) was placed at Birkirkara Station

Left: Valletta Station was destroyed by aerial bombing during World War II along with several other buildings in the area including the Royal Opera House




YELLOW GARAGE

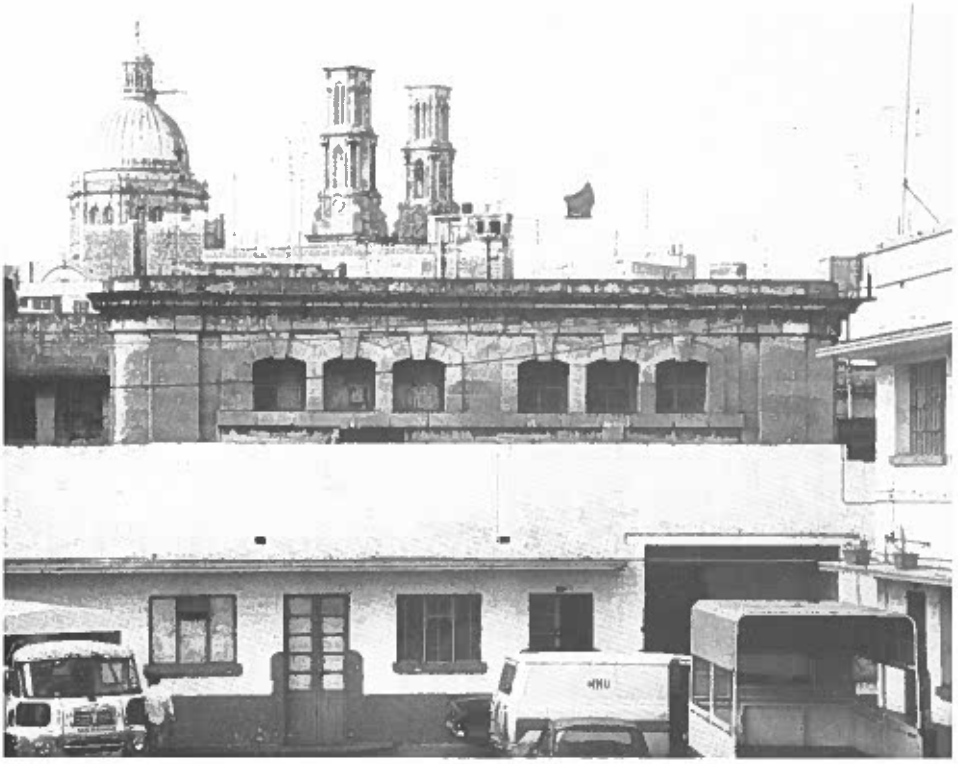
Echoes of a Forgotten Railway — a Visitors' Guide* to the Railway Relics

**The numbers in brackets refer to pages in the text showing the locations as they were before March, 1931*

Facing page: The Valletta Terminus tunnel (56-57) and viaduct now being used as a vehicle garage (62)

Above right: Part of Floriana Station building near the Argotti Gardens is now used as a health office

Right: The embankment outside Hamrun Station



Top: Hamrun Station (64) now used by Malta Dairy Products, formerly MMU

Above: The workshop building (106)

Right: The station building (101) at the rear end of the workshop is now used by the Hamrun Boy Scouts

Above: The level crossing outside Birkirkara Station (40)

Left: Flower vase with 'MR 1912' at Hamrun

Above: Steel rail rolled at Barrow-in-Furness in 1881, now used as a fence post at Birkirkara

Left: Birkirkara Station gates

Left: Birkirkara Station, the gate leading into the town

Below: Birkirkara Station (2)

Top: The embankment (95) near San Anton

Centre: Site of Attard Viaduct (41)

Right: Site of Attard Station (55)

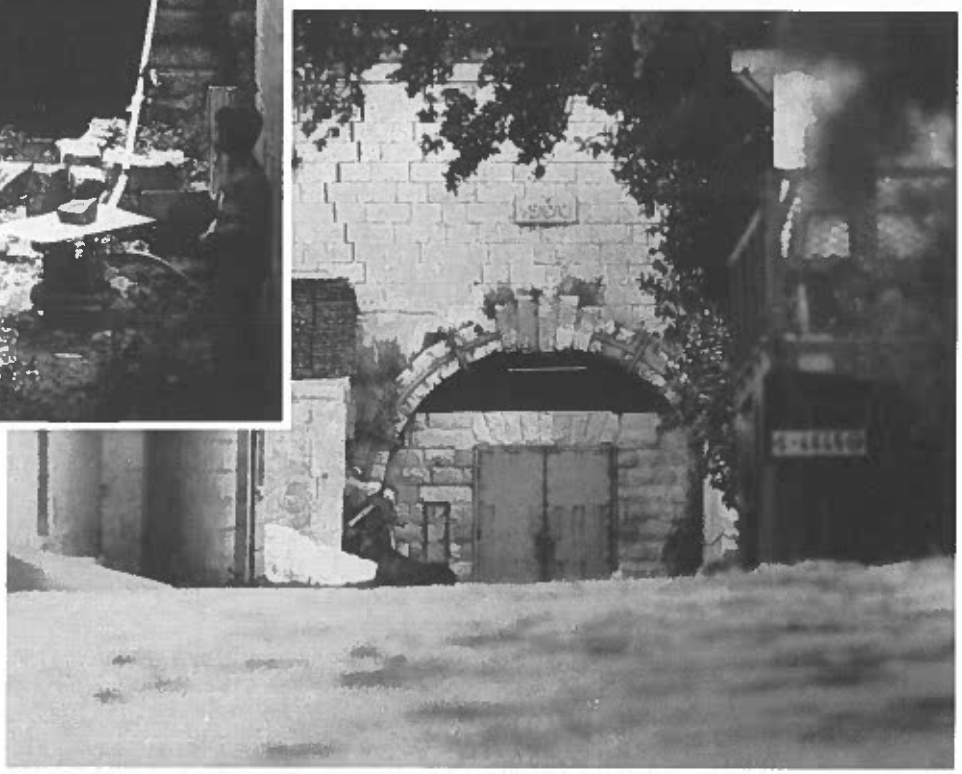
Top: Old Railway Road and former site of Attard Station (42)

Above: Cutting at Attard (32)

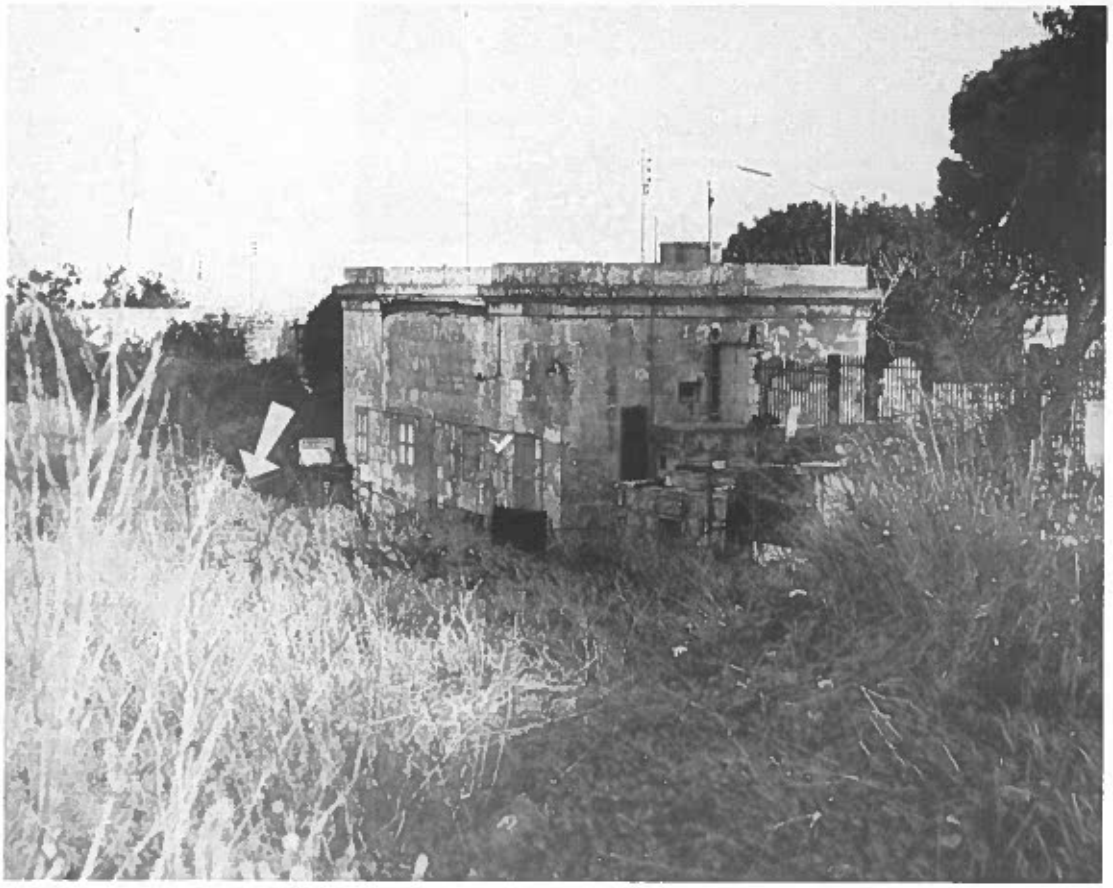
Right: Site of San Salvatore Station at the junction with Notabile Road (70)

Left: Notabile tunnel entrance (44)

Below: Notabile tunnel exit (58, 123)



Below: Site of Notabile Station (45, 74). The station used to be in the cutting (arrowed)



Top: Museum Station as a restaurant (76)

Above: A view of the station from the bastions of Mdina (72, 73)

Right: Gheriexem Viaduct (76)

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(N.B. Page references in **Bold** type denote illustrations)