

# REPORT

ON THE MANAGEMENT AND WORKING

OF THE

# MALTA RAILWAY

FROM THE

*25th. February 1892 to the 24th. February 1893.*



*Printed for the Malta Railway*  
BY  
JOHN MUSCAT

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BY

JOHN MUSCAT

RAILWAY OFFICE  
12th May 1883.

Sir,

I have the honour to submit the following report on the Malta Railway for the year 1892-93, the first year that the line has been worked by the Government, with statements showing the receipts, working expenses, traffic &c. in the said period.

I also submit a programme of works for the improvement and extension of the Railway, it being, in my opinion, desirable that a definite project should be determined beforehand, and, as far as possible, adhered to, subject always to modifications suggested by additional experience.

*Engines.*

When the Malta Railway was reopened to the public, on the 25th February 1892, the number of Locomotive Engines available for work was four : three old ones and the new Engine (No. 5) which the Government had ordered, through the Crown Agents, of Messrs. Manning Wardle & Co.

Two of the old locomotives, No. 1 and 2, which belonged to the late Malta Railway Company, have cylinders of 10 inch diameter. Another Engine No. 4, although more powerful, is so defective in construction that it cannot safely be kept at work for a whole week, without requiring some repairs.

The boiler of this Locomotive proved as defective, at the beginning of our work, as it had done at the time the line was worked by the Company, and for reasons, due to its peculiar construction, it had to be sent to England to be repaired. It took the makers of that Engine three months to carry out this work. During this time the running of the trains had to be carried on with only three Engines of which the old ones, at first, would not work continuously without some hitch in one or other of their parts.

With this very limited number of Engines the work of keeping a double train service, every day, was so hard that it required great perseverance and endurance on the part of the Railway servants.

A few months after the opening of the line I had reported to Government that, in order to run two train services, in the afternoon, all the week, it was necessary that at least two other Locomotive Engines should be provided.

My report was laid upon the Council table and a vote for the purchase of one Engine only was passed.

Now we have five Engines, in all, two of which are new.

The old Engines are kept for light traffic and the new ones, when not required instead of the others, are sent out with the workmen's or other heavy trains.

To keep the Engines in a proper working order inspection of all their parts is constantly required together with a thorough washing out and cleaning of their boilers.

When engines are left running for months without being thoroughly overhauled and without renewals or repairs, as we are sometimes obliged to do with some of our Locomotives, their life is considerably diminished.

The Railway Companies on the Continent and in England work their Locomotive Engines on this principle, and they provide, from 20 to 30 per % of spare Engines, according to the type and efficiency of the Engines and the nature of the traffic, on the number of locomotives they ordinarily require to work their lines.

Besides the cleaning of the boilers which, when thoroughly done, takes not less than thirty hours and which, in view of the very hard water used, should be done, every twenty days, the engines, require frequent repairs for which they have to be kept in the shed sometimes for weeks.

It may happen that at the same time even three engines are not in a condition to work.

In this case the number of Locomotives available for work is reduced to two only and there being no other "stand-by" engine to replace, in

case of a breakdown, any one of these two, which, in the afternoon are both at work, the repairs of the Locomotives, in the shed, have, therefore, to be completed hurriedly and sometimes with feverish haste—

Whatever may be said of this sort of repairs it can in no case be associated with good work and the proper despatch of business. In the long run it is not economical.

#### *Permanent Way.*

When the Government took over, from the Company, the Railway, some six months after that it had been closed to traffic, the line was found to be in such a bad state of repairs that it was necessary to take out all the rails many of them being completely worn out; to rebalast and repack the whole line; to renew the greater number of sleepers, which, being of common fir and not-creozoted, were found almost all rotten; to strengthen the line, at the curves, by adding sleepers and strenghtening the fastenings of the rails (especially of the leading rails); to take down the wooden bridges and reconstruct them with new timber and on better designs; to strengthen and raise all the embankments (on some of which a settlement of over 9 inches had taken place); to rebuild some of the under-ways and to repair the stone bridges. The bridge over the "Principessa Melita" Road had shown signs of weakness which made it advisable that shoulders of masonry should be built, at either side of it, to bear the thrust of the skew arches.

We laid down over 12,000 new sleepers of oak and the number of bolts and dogs used was not under 30,000.

The repairs that have been made, during the year, on the line, consisted in the addition of about 3,000 sleepers and about 1,500 cubic yards of ballast; in the lifting of the line which, on the banks and after the unusually heavy rains, had settled down 12 inches more; in the changing of the points and crossings at the Notabile, Hamrun and Valletta Stations, which work was very important, as the old points were dangerous and the crossings had too short a lead; and in replacing about 2,000 ft of rails.

Among the improvements that were made in connexion with the line I may mention the lengthening of the siding in the Notabile station; the driving of a tunnel, 132 ft. long, in that station for the

shelter of carriages; the drainage of some of the stations, which has been very necessary for the good maintenance of the sidings; the construction of a back-shunt in Notabile and another in the Valletta station; the building of the stone bridge, in the main ditch, near the Valletta terminus, the lining with masonry of the sides of the Notabile embankment, and the widening of the mouth of the long tunnel at the Valletta End.

This latter work, owing to some difficulties in negotiations with the Military Authorities, had not been proceeded with.

When this work will be completed a train of nine or ten carriages could be taken in the Valletta terminus without interfering with the running of the Engines round the points.

At present, by reason of the want of room, the Engines cannot go round the points, in that station, with more than six carriages, and any train, with more than six carriages, has to be run, from Valletta to Hamrun, with the Engine behind instead of in front of the carriages, and the Engine has to be shunted in the latter Station. This moreover causes waste of time and besides is very inconvenient and undesirable.

### *Stations.*

The improvements that have been carried out in the stations, besides the general repairs to the stone work and woodwork, are the following:—

1. The building of a boundary wall on three sides of the Hamrun Station. This station, which is the working yard of the Railway and where all the Railway materials and coals are kept, was, at the time of the Company, unenclosed and was used by the people of Hamrun as a public thoroughfare, it being the shortest way to Misida from the lower end of Hamrun. This short cut has been stopped and none but passengers and men connected with the Railway are allowed to enter that station.

2. The extension and improvement of the Engine Shed. This Shed, as constructed by the Company, was small and so badly lighted that, even at mid-day, when cleaning the locomotives, in the inner part of the shed, the labourers could not work without two or three lighted lamps. Now this shed has been made a little larger and is well lighted and ventilated as five large windows and six arched passages have been opened in its walls.

### 3. Building of Carriage Sheds.

In the time of the Company almost all the carriages were left in the open air as only one small carriage shed was provided.

The result of the want of such sheds must have been either that the expense for the repairs of the carriages cost a good deal too much, or that the exposure to the sun and dust, for over seven years, must have caused considerable damages to the rolling stock.

The cost of repairs, including the painting, of the carriages, last year, represented a capital value much higher than the amount that is going to be spent on the construction of the Sheds.

### 4. The building and equipment of a small workshop, adjoining the Engine Shed.

A lathe, 19 inch: centre with a special gap (in which all the work, even the turning of the tyres of the coupled wheels of the big Engines can be done), a drilling machine, and other smaller tools, have been provided.

The lathe and the drilling machine are worked by a portable Engine, kindly lent by the Supt. of Public Works. This Engine has, for want of sufficient room, been put under a temporary wooden shed, outside the workshop.

With these tools and in this workshop we have carried out all the repairs that were required on the rolling stock and on the line, during the year.

### 5. Construction of a ticket-office and a boundary wall at the Notabile Station.

The rush that used to be made to the trains, in the time of the Company, from all sides of this Stations, on festivals, when the traffic was heavy, was uncontrolable. By the enclosing of this station any pressure of traffic can be easily checked and dealt with.

### 7. Construction of an ash-pit in the Notabile Station.

This pit enables the Enginemen to go under the Locomotive to inspect, without difficulty, any part of the same.

### 8. Improvement of the road of approach to the Notabile Station.

### 9. Rebuilding of retaining walls at the Hamrun Station.

10. Laying of water mains from the Water Works to the Hamrun and Birchircara Stations.

Formerly, at these Stations, the water was taken from the aqueduct through stone channels and impounded in underground tanks from which it was pumped, by hand, to stone cisterns, some twelve feet, above the level of the Stations, and from those cisterns, it was drawn off by a shoot and a hose, for the use of the Engines. Now the water is drawn directly, under pressure, from the Water Works.

The Company used "Armier" water for their Engines. This water is brackish and has now been substituted by "Wignacourt" water.

11. A store in the Hamrun Station is a requirement the want of which is very much felt for the suitable storing and proper classification of tools and materials.

For want of funds this has not been provided for as yet. What has been done, as a temporary measure, is simply the erection of a platform in the carriage shed where the brass and other articles have been stored. This platform has been constructed with old girders and planks.

12. Construction of a new ramp in the Valletta terminus; extension of the Valletta Station, and some alterations in the offices.

13. Building of a technical School.

The object of this school, in connexion with the Railway, is to lay the foundation of a practical system of technical instruction in a manner which will turn the Railway Workshop to the best and most economical advantage.

From such a School subsequent development, on acquired experience, will be easily attainable. The building of this school is very nearly completed and the machinery and tools for its equipment will be soon supplied.

#### *Traffic.*

Table No. I. Shows the number of passengers of each class that have been carried, on each zone, in each month, from February 1892 to February 1893, with the monthly receipts, as compared with the monthly average receipts, on three years, of the working of the line by the Company.

I annex a diagramatic table on which I have indicated by lines the number of passengers carried and the relation between the revenue and the working expenses.

*Working Expenses.*

The working expenses and interest on capital account chargeable to Government Immoveable Property have turned out to be £ 3582. 0. 9½, leaving a profit of £ 168. 19. 0½.

This being the first year of the working of the line, the expenses incurred for its maintenance, last year, cannot be taken as the real and ordinary working expenses of the Railway, as many works, which were necessary for making the permanent way more fit to carry the traffic, and for improving the Stations, will not be again required for several years to come.

An important item of the expenditure is the consumption of materials required for the working of the Engines, such as coals, oils &c.

Owing to the very limited power of some of our Engines and to the necessity of keeping, whenever possible, one or two Engines, in the shed, under steam, ready to go out to work instead of others which might be found inadequate for certain trains or which might be disabled, the consumption of coal and oil has been much greater than what it would have been if better Engines, instead of the old ones, were available.

The work of lifting, repacking and better fastening of the rails has also been a heavy item in the maintenance of the line.

The working expenses of the line, as managed by the Government, are much smaller than those incurred by the Company. Not to mention the high salaries of the very numerous staff of the Company, the system adopted by the Government, in the management of the Railway, is much simpler and more convenient, both to the management and the public, than that of the Company.

The Company had a General Manager at £ 660 a year; a Superintendent of traffic at £350 a year; another Superintendent of Locomotives; ten Station masters, two guards, two gangs of workmen for the repairs of the line and other labourers.

Now the whole management of the Railway is being carried on by a Manager at £ 180, a year; a writer at £ 60; six ticket-clerks at £ 72, each; a platelayer, 3 labourers; one fitter; 3 drivers; 3 stokers, and 18 chainmen, at the level crossings.

If, in the afternoon, only one train were run, as in the time of the Company, the number of these men could be still reduced

*Revenue.*

The receipts have turned out at £3750. 10. 10. Compared with the receipts of the Company, on an average of five years, it will be seen that our revenue over expenditure, in the first year of our work, warrants a feeling of confidence in the further success of the Railway as a commercial undertaking.

*Accidents.*

With the exception of the sad occurrence, on an afternoon train from Notabile, on the 25th Jan: last, which resulted in the death of a passenger, no other accidents had to be recorded in the first year of the working of the line. No injuries have occurred among the Railway servants so serious as to need mention in this report.

Considering the very long hours our men are obliged to work, every day, one would be tempted to doubt whether the long hours of work need be the cause of accidents.

If a railway servant does his duty to avert danger he can, in my opinion, discharge his work well, for a much longer time, than eight hours with perfect immunity.

## RECOMMENDATIONS

### FOR THE IMPROVEMENT OF THE LINE AND TRAFFIC.

One of the principles on which railway works are undertaken is that what is done for the interest of the public is for the interest of the Railway.

If we will improve our stations and run faster trains to offer greater comfort and convenience to the public, the receipts of the Railway will be considerably increased.

Our policy must be to promote, as far as we possibly can, in the speediest and easiest way, the good working of the line.

Since the Railway has been reopened for traffic, for reason of economy, nothing has been done to increase the comfort of the passengers at the stations.

### *Stations.*

At the Notabile station the waiting rooms are very small and damp and uncomfortable. There is not even a latrine nor a urinal.

A verandah over the platform and another outside the new office are much required, as the passengers, whilst waiting for their turn to get the ticket, or if they find no room in the waiting sheds, are obliged to remain out in all sorts of weather.

The other stations also require to be improved.

The Attard Station is too small and very uncomfortable.

The Birchircara Station, besides being inconvenient for the passengers, requires to be enclosed by a boundary wall and to have a ticket office on the main road.

With the ticket office inside the Station, the passengers, on days of heavy traffic, might, as they sometimes did, in the time of the Company, go on the train without being furnished with a ticket. On festivals I always leave a man at Birchircara Station to prevent this and to show those passengers, who do not apparently know, where the tickets can be got from.

The Hamrun Station requires better waiting rooms, a new ticket office for days of heavy traffic and a latrine.

The Valletta terminus. If this terminus were extended under Piazza Regina, even with a smaller section, and a skylight opened in that Piazza, the station would be much better lighted and ventilated from either side.

There would be provided, at the same time, more room for carriages. Now that the work of the ramp is completed this could be carried out easily without interfering with the traffic.

### *Tunnels.*

The long tunnel from Valletta to Porte des Bombes has been driven with a very small section which causes many inconveniences to the passengers when the trains to Valletta are running under it. This tunnel being very low and narrow the exhausted steam from the Engines, striking against the roof and sides of the gallery, recoils on

the train which becomes enveloped in thick clouds of steam throughout the length of the tunnel to the great discomfort of the passengers.

I propose that three or four large openings, like the one outside Porta Reale, should be made in the length of the tunnel: one to be excavated near the Wesleyan Church at Floriana, with flights of steps or ramps at its sides, to be used as a station for that town.

*Overways and underways.*

The level-crossings should, as it is done in other countries, be suppressed and overways or underways, according to the nature of the ground, constructed instead. Thus the danger to the public, crossing the line, would be put a stop to, and the expense of the maintenance in good order of the level crossings and the wages of the chainmen would be saved.

I am aware that the construction of overways as that which has been begun near the Salvatore Station is opposed to the received popular opinion. But this popular opinion is always against new ideas and never does realize their importance until after they are completely carried out.

*Back-Shunt at Birchircara.*

A carriage line, besides the siding, at Birchircara, would enable us to keep, there, a few carriages which, when required, could be coupled up with the train, for the accommodation of passengers.

*Extension of the line.*

The distance and the very steep road from the Railway Station to Rabato and Notabile is so tiresome and inconvenient, in the hot season and in rainy weather, that many of the passengers are obliged to make the ascent from the station to the town in cabs, thus paying for the latter part of their journey (a few hundred yards) more than what they pay for the Railway fare.

Many persons do not travel on the line to Rabato because of the distance of the town from the Railway Station and of the steepness of the road therefrom.

A much better place for a railway station would, in my opinion, be in the ditch near Porta dei Greci, which would be only a few yards distant from Notabile and Rabato.

To make a station there the line would have to be extended, under a tunnel, about 2,100 feet long.

By keeping the gradient of the line of 1 in 45 the level of the new station would be some 47 feet below the ditch.

A straight ramp or a large shaft, say 30 feet diameter, having a winding ramp recessed in its sides, would be sufficient to give an easy access to the new station. The latter plan would be preferable to the first as it would take less room in the ditch and the passage would be better lighted.

Other extensions of the line towards Zebbug, Musta and Sliema would be very desirable. This matter has engaged my attention a good deal and I would be disposed to recommend to Government a definite proposal about such a scheme, but not having the necessary data, such as levels &c. at my disposal, I will make these works the subject of other reports.

#### *Traffic.*

At the time of the Malta Railway Company the number of cabs and public vehicles was much smaller than at present. The omnibuses, then, were not running between Valletta, Hamrun, Curmi and Birchircara.

To-day for a penny you can go to Hamrun and even to Birchircara in an omnibus or a cab. Competition, as in other countries, has increased.

Our rates are also very low but we must give better facilities to the people to get the traffic for ourselves.

This could be done easily by running more trains throughout the day.

In the morning we might run a double train service as we do in the afternoon with an extra train, between, to Birchircara only.

Thus there would be a departure of a train, every half an hour from Valletta which, I am sure, would be a boon to the people of Hamrun, Birchircara and the neighbouring casals—

If we were to undertake such a service with the small number of engines we now have, we should be running some risk of interrupting the traffic in case of breakdowns, requiring repairs.

To sum up, therefore, I recommend as follows:

1. That other two locomotives should be provided;
2. That two verandahs and a latrine should be erected at the Notabile station;
3. That the Birchircara station should be enclosed by a wall and that a new ticket-office should be built on the main road in that station;
4. That the Valletta terminus be extended under Piazza Regina;
5. That at least three large openings be made along the tunnel;
6. That a station should be constructed at Floriana;
7. That a new ticket office and a latrine be built in the Hamrun Station;
8. That the level crossings should be suppressed;
9. That the work of the overway near San Salvatore Station be completed;
10. That a back-shunt be constructed at Birchircara Station;
11. That a new station for Notabile and Rabato be provided in the ditch near the Porta de' Greci;
12. That a draughtsman be employed, for about two months, to assist the Manager of the Railway in taking the necessary levels and preparing the drawings required for a scheme of extension of the line;

I will not be venturing on any prophecy to state that, if my recommendations will be approved and the necessary means for running more trains will be provided, brighter days are in store for the Malta Railway which the Government has undertaken to work on cooperative principle, on the public account.

I have the honour to be  
Sir,  
Your obedient servant  
L. GATT

To the Honble and Most Noble  
Count G. STRICKLAND, C.M.G., LL.B., B.A.  
Chief Secretary to Government  
&c.            &c.            &c.

# APPENDIX.

## ESTIMATES—

1.	Purchase of two Locomotives ... ..	say	£ 4000
2.	Construction of two verandahs in the Notabile Station	,,	380
3.	Construction of a latrine in the Notabile Station	,,	163
4.	Building of a Boundary wall and a ticket-office in the Birchircara Station ... ..	,,	200
5.	Extension of the Valletta Terminus ... ..	,,	550
6.	Openings on the long tunnel ... ..	,,	700
7.	Opening near the Argotti Garden and construction of a Station for Floriana ... ..	,,	550
8.	Construction of a ticket-office and a latrine at Hamrun	,,	210
9.	Building of overways &c. ... ..	say ,,	800
10.	Completion of the overway near San Salvatore Station	,,	350
11.	Construction of a back-shunt at Birchircara ... ..	,,	95
12.	Construction of a new Station for Rabato and Notabile (the driving of the tunnel under Rabato and Notabile and the laying of the rails included)	,,	5000

## DETAILS OF ESTIMATES.

1. Purchase of two locomotives at say £ 2000 each £ 4000

2. Construction of two verandahs in the Notabile Station.

a) Verandah in strada Corsa near the new ticket-office.

Foundation of pilasters (excavation and levelling of rock included.)			
$6'0'' \times 3'0'' \times 3'0'' = 54 \times 20$			
$= 1280 @ -/9d.$	£	48.	0. 0
Building of Do. $15'0'' \times 2'0'' \times 2'0'' = 60 \times 20$			
$= 1200 @ 1/-$	„	60.	0. 0
Iron joists 40 @ 10/- each	„	20.	0. 0
Roofing 140 sq. yards @ 3/-	„	21.	0. 0
		£ 149.	0. 0
Contingencies		10.	0. 0

£ 159 0. 0

b) Verandah over the platform of the Station.

Foundation of pilasters (excavation and levelling of rock included.)			
$2'0'' \times 3'0'' \times 3'0'' = 18 \times 35$			
$= 630 @ -/9d.$	£	23.	12. 6
Building of Do. $15'0'' \times 2'0'' \times 2'0'' = 60 \times 35$			
$= 2100 @ 1/-$	„	105.	0. 0
Iron joists 75 @ 10/-	„	37.	10. 0
Roofing 244 sq. yards @ 3/-	„	36.	12. 0
		202.	14. 6
Contingencies		18.	5. 6

221. 0. 0

£ 380. 0. 0

## 3. Construction of a latrine in the Notabile Station.

Laying foundation of walls 50'0" × 4'0" × 1'6" = 300 cft. @ -/9	£ 11. 5. 0
(Excavation &c. included.)	
Building walls 50'0" × 15'0" × 1'0"	
750 cft. @ -/6	„ 18. 15. 0
Iron joists 10 @ 10/-	„ 5. 0. 0
Roofing 15 sq. yards @ 3/-	„ 2. 5. 0
Paving 15 sq. yards @ 2/-	„ 1. 10. 0
2 Doors @ £ 2.	„ 4. 0. 0
4 Windows @ 1. 10.	„ 6. 0. 0
Laying earthenware pipes 500 ft. @ 3/--	„ 75. 0. 0
Providing basins, flushing tank &c. say	„ 25. 0. 0
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	£ 148. 15. 0
Contingencies	14. 5. 0

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£ 163. 0. 0

## 4. Building a boundary wall and a ticket-office in the Birchircara Station.

a) Boundary wall 7000 cft. @ -/4	£ 116. 10. 4
b) Ticket office.	
Foundation of walls (excavation and levelling of rock included.)	
90'0" × 5'0" × 1'6" = 675 @ -/6	£ 16. 17. 6
Buildings walls 90'0" × 15'0" × 1'0" = 1350 @ -/4d.	22. 10. 0
Iron joists 8 @ 10/-	4. 0. 0
Roofing 35 sq. yards @ 3/-	5. 5. 0
Paving 35 sq. yards @ 3/-	5. 5. 0
Doors 3 @ £ 1. 10. 0	4. 10. 0
Windows with iron gratings	10. 0. 0
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	£ 68. 7. 6
Contingencies	4. 19. 2

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£ 200. 0. 0

## 5. Extension of the Valletta Terminus.

Driving 80 feet of tunnel of the section of the old tunnel @ £ 3	£ 240. 0. 0
Sinking shaft 20'0" x 10'0" in Piazza Regina 30 ft. deep @ £ 1	„ 30. 0. 0
Lining with masonry the roof of the tunnel and the sides of the shaft say 3500 cft. @ 1/-	„ 175. 0. 0
Iron grating and glass	say „ 50. 0. 0
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	£ 495. 0. 0
Contingencies	55. 0. 0

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£ 550. 0. 0

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## 6. Openings in the long tunnel (2 in No. )

Cutting rock for one opening 70'0" x 20'0" x 30'0" = 42,000 cft. (removal of rubbish included) @ -/2d. = £ 350 x 2 =	£ 700. 0. 0
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£ 700. 0. 0

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7. Opening in the long tunnel near the Argotti Garden  
and construction of a Station for Floriana.

Cutting rock 70'0" x 20'0" x 30'0" = 42000 cft. @ -/2d. £ 350. 0. 0	£ 350. 0. 0
Construction of ramp 250 ft. @ 10/-	„ 125. 0. 0
Building of walls &c. 2050 cft. @ -/4d.	„ 34. 3. 4
Laying Concrete 300 @ -/6d.	„ 7. 10. 0
	<hr/>
	£ 516. 13. 4
Contingencies	„ 33. 6. 8

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£ 550. 0. 0

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## 8. Construction of a ticket-office and a latrine in the Hamrun Railway Station.

### a) Construction of a ticket-office.

Foundation of walls (excavation and levelling of rock included.)

90'0" × 15'0" × 1'6" = 2025 @ -/6      £ 50. 12. 6

Building of walls

90'0" × 30'0" × 1'0" = 2700 @ -/4      „ 45. 0. 0

Iron joists 8 @ 10/-      „ 4. 0. 0

Roofing 35 sq. yards @ 3/-      „ 5. 5. 0

Paving 35 sq. yards @ 3/-      „ 5. 5. 0

Doors 3 @ £ 1. 10      „ 4. 10. 0

Windows with iron gratings      „ 10. 0. 0

£ 124. 12. 6

### b) Construction of a latrine in the same station.

Foundation of walls (excavation and levelling of rock included.)

45'0" × 12'0" × 1'0" = 540 @ -/6d.      £ 13. 10. 0

Building of walls

45'0" × 15'0" × 1'0" = 675 @ -/4d.      „ 10. 15. 0

Roofing 10 sq. yards @ 5/      „ 2. 10. 0

Paving 10 sq. yard @ 3/-      „ 1. 10. 0

Laying pipes &c. 280 ft. @ 2/-      „ 28. 0. 0

£ 56. 5. 0

£ 180. 17. 6

Contingencies

„ 29. 2. 6

£ 210. 0. 0

## 9. Building of overways &c.

Underway near Misida guardroom say £ 250. 0. 0

— Do. —near No. 6 guardroom say „ 130. 0. 0

— Do. —near No 12 Do. say „ 100. 0. 0

Overway near No. 14 Do. say „ 300. 0. 0

£ 780. 0. 0

Contingencies

„ 20. 0. 0

£ 800. 0. 0

## 10. Completion of the overway near San Salvatore Station.

Building of retaining walls. 10050 cft. @ -/4d.		£ 167.	0.	0
Removing and ramming rubbish	say	„ 80.	0.	0
Metalling the new road	say	„ 70.	0.	0
		£ 317.	0.	0
Contingencies	„	33.	0.	0

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£ 350. 0. 0

## 11. Construction of a back-shunt at Birchirara.

Providing and laying sleepers 200 @ 2/-		£ 20.	0.	0
Providing & laying points and crossings	say	£ 30.	0.	0
Providing and laying rails 120 ft.	say	£ 25.	0.	0
Alteration to platform	say	£ 20.	0.	0

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£ 95. 0. 0

12. Construction of a new station in the ditch near  
Porta dei Greci, at Rabato.

Driving tunnel 2100 ft. @ 10/-		£1050.	0.	0
Sinking 5 ventilation shafts 590 ft. @ 5/-	„	147.	10.	0
Lining with masonry, where necessary, the tunnel and shafts say 30,000 @ 1/-	„	1500.	0.	0
Constructing the formation level of the road and drainage in the tunnel 2100 ft. @ 2/-	„	210.	0.	0
Sinking shaft for station 30 ft. diamer, 45 ft. deep @ £ 3	„	135.	0.	0
Forming ramp in the sides of shaft 650 ft. @ £ 1	„	650.	0.	0
Providing and laying rails 4200 ft. = 80 tons @ £ 10	„	800.	0.	0
		£4492.	10.	0
Contingencies		507.	10.	0

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£ 5000. 0. 0

TABLE I.

Number of Passengers Carried.													Totals.	Receipts.	Company's receipts Average on 3 years.			
1892																		
MONTH	I. Class.			III. Class.			Workmen							£ s. d.	£ s. d.			
	ZONES			ZONES														
	1	2	1 & 2	1	2	1 & 2												
Feb.	25	20	59	354	151	282	1137						2,028	12. 11. 7				
Mar.	801	199	2746	13089	4749	18813	13475						53,872	440. 19. 1	380. 2. 9			
Apr.	691	151	2673	12496	4799	16908	13288						51,006	393. 7. 2	401. 0. 3			
May	732	147	2544	15291	3215	14749	15506						52,184	357. 15. 4	362. 3. 0			
June	360	2077	2453	10433	5851	15942	14843						51,959	456. 15. 4	423. 11. 5			
July	285	135	1992	11450	3384	13714	19102						50,062	322. 3. 4	329. 2. 6			
Aug.	347	124	1757	15729	4232	15420	20390						57,999	375. 1. 5	385. 0. 0			
Sept.	254	157	1752	9948	3319	15023	21539						51,992	322. 2. 0	335. 0. 0			
Oct.	482	178	2142	11556	3787	15450	21332						54,927	357. 12. 8	319. 1. 11			
Nov.	463	133	2131	11954	4162	15542	19697						54,082	357. 14. 8	328. 3. 4			
Dec.	546	115	2183	13293	4053	15383	19149						54,722	365. 13. 8	363. 19. 3			
1893																		
MONTH	I. Class.						III. Class.						Workmen					
	ZONES						ZONES											
	1	2	3	1 & 2	2 & 3	1,2&3	1	2	3	1 & 2	2 & 3	1, 2 & 3	1	2	1 & 2			
Jan.	648	11	140	667	26	1233	16008	196	1793	4186	1840	10539	2792	1387	7932	49,398	372. 7. 7	364. 2. 3
Feb.	748	6	93	708	53	1366	16562	144	1636	3979	1331	8538	2617	1521	6521	45,823	339. 5. 9½	328. 11. 4
													Grand Totals	630,054	4473. 9. 7½	4319. 18. 0		

# MALTA RAILWAY.

Dr.

Balance Sheet—31st December 1892.

Cr.

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">To Capital a/c.</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>  Bearing Interest... ..</td> <td>£</td> <td>14,653</td> <td>8</td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>  Not bearing Interest ... ..</td> <td></td> <td>12,481</td> <td>4</td> <td>3<math>\frac{1}{4}</math></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>27,134</td> <td>12</td> <td>11<math>\frac{1}{4}</math></td> <td></td> <td></td> </tr> <tr> <td>„ Reserve Fund ... ..</td> <td></td> <td></td> <td></td> <td></td> <td>208</td> <td>18</td> <td>8</td> <td></td> <td></td> </tr> <tr> <td></td> <td>£</td> <td>27,343</td> <td>11</td> <td>7<math>\frac{1}{4}</math></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	To Capital a/c.										Bearing Interest... ..	£	14,653	8	8						Not bearing Interest ... ..		12,481	4	3 $\frac{1}{4}$											27,134	12	11 $\frac{1}{4}$			„ Reserve Fund ... ..					208	18	8				£	27,343	11	7 $\frac{1}{4}$						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">By Permanent Way... ..</td> <td style="width: 10%;">£</td> <td style="width: 10%;">15,551</td> <td style="width: 10%;">15</td> <td style="width: 10%;">8<math>\frac{1}{4}</math></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>  „ Rolling Stock ... ..</td> <td></td> <td>8,953</td> <td>1</td> <td>10<math>\frac{1}{4}</math></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>  „ Tools ... ..</td> <td></td> <td>276</td> <td>4</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>  „ Furniture ... ..</td> <td></td> <td>15</td> <td>1</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>24,799</td> <td>3</td> <td>5<math>\frac{1}{2}</math></td> <td></td> <td></td> </tr> <tr> <td>„ Receiver General, Imbble. Property a/c.</td> <td></td> <td></td> <td></td> <td></td> <td>2,335</td> <td>9</td> <td>5<math>\frac{3}{4}</math></td> <td></td> <td></td> </tr> <tr> <td>„ Receiver General ... ..</td> <td></td> <td></td> <td></td> <td></td> <td>208</td> <td>18</td> <td>8</td> <td></td> <td></td> </tr> <tr> <td></td> <td>£</td> <td>27,343</td> <td>11</td> <td>7<math>\frac{1}{4}</math></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	By Permanent Way... ..	£	15,551	15	8 $\frac{1}{4}$						„ Rolling Stock ... ..		8,953	1	10 $\frac{1}{4}$						„ Tools ... ..		276	4	7						„ Furniture ... ..		15	1	4											24,799	3	5 $\frac{1}{2}$			„ Receiver General, Imbble. Property a/c.					2,335	9	5 $\frac{3}{4}$			„ Receiver General ... ..					208	18	8				£	27,343	11	7 $\frac{1}{4}$					
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Dr.

Profit and Loss Account for the year ending 31st December 1892.

Cr.

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">To working Expenses... ..</td> <td style="width: 10%;">£</td> <td style="width: 10%;">3,153</td> <td style="width: 10%;">9</td> <td style="width: 10%;">0<math>\frac{1}{2}</math></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>  „ Interest:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    For interest on £ 14,653-8-8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>  Chargeable to Government Imbble.</td> <td></td> <td>428</td> <td>11</td> <td>9</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    Property</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3,582</td> <td>0</td> <td>9<math>\frac{1}{2}</math></td> <td></td> <td></td> </tr> <tr> <td>„ Receiver General, for balance transferred</td> <td></td> <td></td> <td></td> <td></td> <td>168</td> <td>19</td> <td>0<math>\frac{1}{2}</math></td> <td></td> <td></td> </tr> <tr> <td>  to the credit of the Receiver General's a/c.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>£</td> <td>3,750</td> <td>19</td> <td>10</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	To working Expenses... ..	£	3,153	9	0 $\frac{1}{2}$						„ Interest:										For interest on £ 14,653-8-8										Chargeable to Government Imbble.		428	11	9						Property															3,582	0	9 $\frac{1}{2}$			„ Receiver General, for balance transferred					168	19	0 $\frac{1}{2}$			to the credit of the Receiver General's a/c.											£	3,750	19	10						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">By Head 5 A. Railway</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>  For sale of Railway tickets ... ..</td> <td>£</td> <td>3,750</td> <td>19</td> <td>10</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>£</td> <td>3,750</td> <td>19</td> <td>10</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	By Head 5 A. Railway										For sale of Railway tickets ... ..	£	3,750	19	10							£	3,750	19	10					
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(signed) Jos. Huber, accountant

Office of the Malta Railway  
Valletta, 28th January 1893  
(signed) L. GATT  
*Acting Manager*



Table showing in black lines the number of passengers carried, in red lines the revenue, and in blue lines the working expenses—

