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Government of Madras.

Publications DEPARTMENT.

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Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
6th March 1871.*

No. 145. Read the following Memorandum from the Assistant Secretary to the Government of India, Public Works Department, (Railway,) to the Secretary to the Government of Madras, Public Works Department, (Railway,) dated Fort William, 8th February 1871, No 193-R —

THE undersigned is directed to forward for information copy of letter, No. 159-G, dated 24th January 1871, from the Government of Bengal, enclosing an extract from the Minutes of Official Meeting, No. 67, held on 1st December 1870, between the Board of Agency, East Indian Railway, and the Consulting Engineer to the Government of Bengal, on the subject of the establishment of a scale of premiums to encourage Locomotive Drivers and Firemen to economize in working

(Signed) K C PYE,
Assistant Secretary

From the Joint Secretary to the Government of Bengal, Public Works Department, Railway Branch, to the Secretary to the Government of India, Public Works Department, dated Fort William, 24th January 1871, No 159-G

IN reply to your letter, No. 1,541-R, dated 7th September 1870, calling for a copy of the new scheme for the establishment of a scale of premiums with a view to encourage locomotive drivers and firemen to economize in working, I am directed to forward, for the information of the Government of India, the accompanying extract from the Minutes of Official Meeting, * No 67, held on the 1st December last, on the subject of an experimental system of premiums on economy.

Extract from Minutes of a Meeting, No 67, dated 1st December 1870, between the Board of Agency, East Indian Railway, and the Consulting Engineer to the Government of Bengal, on the subject of the establishment of a scale of premiums to Drivers and Firemen of the Locomotive Department, for efficiency and economy in working, and in proportion to the saving effected in value of stores and materials consumed

WITH reference to Resolution 228 of Official Meeting No 14, held on 6th February 1868, and Resolution 698 of Official Meeting No 55, held on 11th August 1870—
868 —Resolved, that the following Resolution No 1,557 of Agency Meeting No 42, held on the 22nd ultimo, be sanctioned and recorded —

“ Read the following letter No 1,333 A, of 8th instant, from the Locomotive Superintendent, forwarded with Chief Engineer's letter No 2,260, of 16th idem —

“ “ In continuation of my letter No 1,333 A, of the 28th June last, I beg to submit for sanction of the Board of Agency, the following scheme with a view to economize the use of coal stores on the East Indian Railway, which items of expenditure form a considerable sum in the accounts of the Locomotive Department

“ “ In the first place I propose limiting the engines according to their class, condition, and the nature of the trains drawn by them in the use of coal, oil, and grease to what I have carefully considered a maximum, at the same time consistent with safe working

“ “ All enginemen and firemen, who by dint of watchfulness and care of their engines will consume less coal, oil, and grease than the prescribed quantities, should be paid a premium monthly equal to half the cost of those articles

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6th March 1871

“ The limit for the use of stores, and the award of premium will be as follows —

Description of Trains	Maximum load	Allowance per vehicle coal	For entire road	For Engine	Total per mile	Allowance of oil per 100 miles,	Allowance of grease per 100 miles	PREMIUM FOR DRIVERS IN			PREMIUM FOR FIREMEN IN		
								Coal	Oil	Grease	Coal	Oil	Grease
	No	lb	lb	lb	lb	pts	lb	Per Ton RS.	Per Gal AS	Per Cwt RS	Per Ton RS	Per Gal AS	Per Cwt. RS
Fast Mail	16	14	20	10	30	5	1 1/2	2	6	4	1	3	2
Slow Passenger	30	1	30	10	40	6	1 1/2						
Goods	35	1 1/2	39 1/2	10	50	6	1 1/2						
“ 6-wheeled	35	1 1/2	39 1/2	13	53	7	1 1/2						
Tank Engine	10	1 1/2	12 1/2	10	22	5	1						

“ It will be seen by a reference to the monthly accounts submitted from this office that the average consumption of coal by all engines has been 66 lbs per mile, whereas by holding out the inducements of rewards (assuming every driver competed, and if my limits were attained), the saving to the Company will be Rupees 31,911

“ Average consumption of coal per month, taken from the past half years, is cwt 308,604, and average miles per month 523,692 = 66 lbs per mile, cost of coal at Rupees 6 per ton = Rs 92,580

“ Assuming the same mileage for the future at 43 lbs of coal per mile per month = Cwt 202,229, cost of coal at Rupees 6 per ton .. 60,669

Saving .. 31,911

“ Now if a driver run his engine with the Fast Mail successfully for a month, the highest mileage that he could attain under our present working arrangements would be 2,700, assuming also that in coal he used 28 lbs a mile, it would give 675 cwt, or tons 33 15 0

at 30 lbs. per mile the limit = 723 cwt, or tons 36 3 0

thus saving per month 48 cwt, or tons 2 8 0

at Rupees 6 per ton, Rupees 14-6-0 Of this one-half the Company would benefit by, being Rupees 7-3-0, the remaining half would be divided between the driver and firemen in the proportion of two-thirds to the former, and one-third to the latter

“ Caster Oil — The average consumption of this article per month, taken from the past three half-years, is .. Gals 7,155
Do per 100 miles .. Pints 11 1/2

Value of oil at 1-4-0 per gallon .. RS A P
Do by the proposed scheme, allowing 6 pints per 100 miles, the consumption of oil over the same distance will be 3,927 gallons, 4,909 0 0
at 1-4-0 per gallon

Net monthly saving 4,035 0 0

Proceedings of the Madras Government, Public Works Department,
6th March 1871.

“ A Mail train driver running 100 miles per day, consuming 5 pints oil, would save 30 pints in a month, or 3 gals 3 qrs at 1-4-0 per gallon, Rupees 4-11-0, half of which is Rupees 2-5-6 This sum is to be divided between the driver and fireman as arranged for coal

“ I am of opinion that such a scheme would work more advantageously than the one we tried in 1868, as every man would stand a chance of getting some reward for his extra exertion, and the Railway Company would in the same manner derive some benefit by the exertions of each

“ In submitting this for favourable consideration and sanction of the Agency to take effect from 1st January 1871, I would point out that as I have been most careful in fixing the limits of expenditure of stores, so that the award of premiums may not be excessive, I may possibly have placed them beyond the reach of all. If such is found to be the case, I will submit the question for revision after six months' trial ”

“ The Chief Engineer recommends that the amended scheme proposed by the Locomotive Superintendent be sanctioned for six months from 1st January 1871, and that at the expiration of this period a report upon the working of the scheme be submitted by the Locomotive Superintendent, and the details, if necessary, be revised

“ No 1,557 — RESOLVED, that the Chief Engineer's recommendation be approved and laid before the Official Committee for sanction ”

No 146. ORDER THEREON, 6th March 1871, No 661.

RAILWAY, No. 21

COMMUNICATED to the Consulting Engineer for Railways for communication to the Agents of Railways in this Presidency

(True Extract)

Colonel, R E.,

Secretary to Government.

To the Acting Consulting Engineer for Railways

Exd E C Shunka

No 159G

FROM MAJOR F. S TAYLOR, R. E.,

Joint-Secy. to the Government of Bengal,

P. W. Dept., Railway Branch,

TO THE SECY TO THE GOVT OF INDIA, P W. DEPT.

Fort William, the 21th January 1871

SIR,

In reply to your letter No. 1541R, dated 7th September 1870, calling for a copy of the new scheme for the establishment of a scale of premiums with a view to encourage locomotive drivers and firemen to economise in working, I am directed to forward, for the information of the Government of India, the accompanying extract from the Minutes of Official Meeting* No. 67, held on the 1st December last, on the subject of an experimental system of premiums on economy.

* Resolution No 868

I have the honor to be,

SIR,

Your most obedient Servant,

F S TAYLOR, Major, R. R.,

Joint-Secy. to the Govt. of Bengal.

P. W. Dept., Railway Branch.

(2)

holding out the inducements of rewards (assuming every driver, competed, and if my limits were attained), the saving to the company will be Rs 31,911

"Average consumption of coal per month, taken from the past half-years, is
cwt 308,604, and average miles per month 523,692=66lbs per mile, cost
of coal at Rs. 6 per ton=Rs. 92,580

"Assuming the same mileage for the future at 43 lbs of coal per mile per
month=Cwt 202,229, cost of coal at Rs 6 per ton
" 60,669

Saving Rs 31,911

"Now if a driver run his engine with the Fast Mail successfully for a
month, the highest mileage that he could attain under our present
working arrangements would be 2,700, assuming also that in coal he
used 28lbs a mile, it would give 675 cwt, or tons
at 30 lbs per mile the limit=723 cwt, or tons
.. 33 15 0
.. 36 3 0

thus saving per month 48 cwt, or tons
2 8 0

at Rs 6 per ton, Rs 14-6-0 Of this one-half the Company would benefit by, being
Rs 7-3-0, the remaining half would be divided between the driver and fireman in the
proportion of 2/3 to the former, and 1/3 to the latter

"Custor-Oil—The average consumption of this article per month, taken from the
past three half years, is .. Gls 7155
Ditto per 100 miles .. Pints 11 1/2

	Rs	A	P
Value of oil, @ 1-4-0 per gallon	8,944	0	0
Ditto by the proposed scheme, allowing 6 pints per 100 miles, the consump- tion of oil over the same distance will be 3,927 gallons, @ 1-4-0 per gallon ..	4,909	0	0

Net monthly saving 4,035 0 0

"A Mail train driver running 100 miles per day, consuming 5 pints oil, would save
30 pints in a month, or 3 gals 3 qts @ 1-4-0 per gallon, Rs 4-11-0, half of which is
Rs 2-5-6 This sum is to be divided between the driver and fireman as arranged
for coal

"I am of opinion that such a scheme would work more advantageously than the
one we tried in 1868, as every man would stand a chance of getting some reward for
his extra exertion, and the Railway Company would in the same manner derive some benefit
by the exertions of each

"In submitting this for favorable consideration and sanction of the Agency, to take
effect from 1st January 1871, I would point out that as I have been most careful in fixing
the limits of expenditure of stores, so that the award of premiums may not be excessive,
I may possibly have placed them beyond the reach of all If such is found to be the case,
I will submit the question for revision after six months' trial"

"The Chief Engineer recommends that the amended scheme proposed by the Loco-
motive Superintendent be sanctioned for six months, from 1st January 1871, and that at the
expiration of this period a report upon the working of the scheme be submitted by the
Locomotive Superintendent, and the details, if necessary, be revised

"No 1557—RESOLVED, that the Chief Engineer's recommendation be approved and laid
before the Official Committee for sanction"

All communications
should be addressed to
the Secretary

No 193 R
GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.

RAILWAY

To
The Secretary to the Government.
of Madras
Public Works Department (Railway)

Fort William, 8 February 1871.

The undersigned is directed to
forward for information copy of letter No. 1557
dated 24 January 1871 from the Government
of Bengal enclosing an Extract from the
Minutes of Official Meeting No. 67 held on 1st
December 1870 between the Board of Agency,
East Indian Railway, and the Consulting
Engineer to the Government of Bengal, on
the subject of the establishment of a scale
of premiums to encourage locomotive drivers
and firemen to economize in working.—

Wm. C. E.
Assistant Secretary

V. J. 1871
Govt. of 1871 Madras.

PUBLIC WORKS.

To
*The Acting Consulting
Engineer for Railways*

From
G. O. 6 March 1871, No 664.

Nos. 115-116
Enclosed. Memo from
Works of India for
sending a copy of papers
on the subject of establishing
a scale of premiums &
discourage locomotive
drivers & firemen & economize
working, Com. to the
Congress for Rays with instructions