Public Works (1899) Department.

RAILWAY BRANCH.

G.O., No. 295. Ry

DATED 15th March 1899

[Despatch Abstract.]

Return of Accidents on Indian Railways.

Coming to the Ry Secy for information, order of the Govt of India on the note by the Director of Railway Traffic. With the abstract — for the six months ending the 30th June 1898.

Indexed. 24/3/99

[P. W. Ry.]

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Public Works (1899) Department.

Railway.

CURRENT No. 324

Bp

From The Govt. of India.

Order No. 295. Rly dated 15/3/99.

Communicated to the Railway Administrations for information.

No. 139 R. Stat

Dated 24th February 1899

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Spare copies

11.3.99.

SUBJECT.

Returns of Accidents on Indian Railways.

To ward's reg for information

note by the Director of Railway Traffic, with the abstract _____ for the six months ending with the 30th June 1898.

To The Agent & Secy E.I.R. ✓
" " S.M.R. ✓
" Chief Engr for Rys ✓

Despatched on 18/3/99

A.D. 14/3/99.

BACK PAPERS.

No.	Date.

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JOINT SECRETARY TO
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GOVT. OF MADRAS RYS.

No. 139 R. Stat.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY STATISTICS.

Simla, the 24th February 1899.

Returns of accidents on Indian Railways for the six months ending with the 30th June 1898.

Read again—

Government of India order No. 242 R. Stat., dated the 9th July 1896.
Government of India order No. 42 R. Stat., dated the 16th January 1897.
Government of India order No. 40 R. Stat., dated the 18th January 1898.

Read also—

The following note by the Director of Railway Traffic dated the 17th February 1899, with abstract returns of accidents to trains, etc., on the open lines of railway in India for the six months ending with the 30th June 1898.

I.—Accidents to trains, rolling-stock, permanent-way, etc.

Accidents to trains, rolling-stock, permanent-way, etc., during the six months ending with the 30th June 1898, as shown under abstract No. 4 on pages 16 and 17 of the accompanying returns, caused the death of 22 and injury to 67 persons. The table below shows that the number of deaths was in excess and the number injured below the average of the corresponding periods of the three previous years. The increase in the number killed was mainly due to the collision on the North Western State railway on the 25th April 1898 at Jhimpir station, in which four passengers were killed and six passengers and three servants were injured. The total number of accidents was also above the average.

	Number.			Number of passengers and others.		Number of servants.		Total all classes.	
	Accidents reported to Local Governments under section 83 of the Indian Railways Act (IX of 1890).	Other accidents	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Standard gauge.									
Six months ending with the 30th June 1898	38	1,832	1,870	(*a*) 9	(*b*) 40	9	18	18	58
Average of the corresponding periods of the three previous years	46	1,385	1,431	(*a*) 11	(*b*) 50	4	17	15	67
Metre gauge.									
Six months ending with the 30th June 1898	67	1,116	1,183	(*c*) 1	(*c*) 1	3	8	4	9
Average of the corresponding periods of the three previous years	52	1,142	1,194	(*c*) 1	(*a*) 8	1	4	2	12
Special gauges.									
Six months ending with the 30th June 1898	7	40	47	...	...	...	...	...	...
Average of the corresponding periods of the three previous years	5	34	39	...	...	...	1	...	1
Total all gauges for the six months ending with the 30th June 1898	112	2,988	3,100	(*d*) 10	(*e*) 41	12	26	22	67
Average of the corresponding periods of the three previous years	103	2,561	2,664	(*d*) 12	(*f*) 58	5	22	17	80

(*a*) Out of these, three were not passengers.
(*b*) Out of these, five were not passengers.
(*c*) Not a passenger.
(*d*) Out of these, four were not passengers.
(*e*) Out of these, six were not passengers.
(*f*) Out of these, eight were not passengers.

2. The following table compares the variations in the mean mileage worked, the train-mileage run and the number of accidents with the average, and shows that, with an increase of 7·53 per cent. in the mean mileage worked and of 9·06 per cent. in the train-mileage run during the six months ending with the 30th June 1898, the number of accidents increased by 436 or 16·37 per cent., as compared with the average of the corresponding periods of the three previous years:

	INCREASE OR DECREASE AS COMPARED WITH THE AVERAGE OF THE THREE PREVIOUS YEARS.					
	ACCIDENTS.		MEAN MILEAGE.		TRAIN-MILEAGE.	
	Number.	Per cent.	Miles.	Per cent.	Miles.	Per cent.
Standard . .	+439	+30·68	+945	+8·30	+2,510,556	+10·54
Metre . . .	— 11	— 0·92	+489	+6·11	+615,368	+5·72
Special . . .	+ 8	+20·51	+ 46	+17·29	+30,330	+11·98
Total .	+436	+16·37	+1,480	+7·53	+3,156,254	+ 9·06

3. The following table shows the principal increases and decreases in the number of accidents of different classes on the standard and metre gauge lines, as compared with the average of the corresponding periods of the three previous years. No noticeable variations occurred on the special gauge railways:

GAUGE AND CLASSIFICATION.	INCREASE OR DECREASE.			Percentage of increase or decrease.
	Serious.	Minor.	Total.	
Standard gauge.				
Trains running over cattle on the line . .	...	+127	+127	+19·69
The bursting of tubes, etc., of engines . .	...	+62	+62	+91·18
The failure of machinery, springs, etc., of engines	...	+67	+67	+35·45
The failure of couplings	...	+51	+51	+124·39
Under the head "Other accidents" . .	—1	+101	+100	+113·64
Metre gauge.				
Goods trains or parts of goods trains, engines, etc., leaving the rails	+2	—16	—14	—27·45
Trains running over cattle on the line . .	—4	—24	—28	—4·14
The failure of machinery, springs, etc., of engines	+3	—22	—19	—21·59
The failure of axles	+2	+11	+13	+54·17
Under the head "Other accidents" . .	+1	+15	+16	+31·37

It will be observed from the foregoing that the increases on the standard gauge lines occurred under "Trains running over cattle on the line," 127 accidents or 19·69 per cent.; under "The bursting of tubes, etc., of engines," 62 accidents or 91·18 per cent.; under "The failure of machinery, springs, etc., of engines," 67 accidents or 35·45 per cent.; under "The failure of couplings," 51 accidents or 124·39 per cent.; and under the head "Other accidents," 100 accidents or 113·64 per cent. On the metre gauge railways the noticeable increases occurred under "The failure of axles," 13 accidents or 54·17 per cent. and under the head "Other accidents," 16 accidents or 31·37 per cent.

4. Under the head "The bursting of tubes, etc., of engines," the largest number, *viz.*, 53, occurred on the Madras railway; next to that line comes the North Western State railway with 42 accidents; under the head "The failure of machinery, springs, etc., of engines," the largest number, *viz.*, 85, occurred on the North Western State railway; next to that line come the East Indian with 42, the Madras railway with 40 and the Great Indian Peninsula railway with 38 accidents; under the head "The failure of couplings," the largest number, *viz.*, 43, occurred on the Bombay, Baroda and Central India railway; and under the head "Other accidents," the largest number, *viz.*, 68, occurred on the East Indian Railway, and next to that line come the North Western State and the Great Indian Peninsula railways with 55 and 29 accidents on each, respectively.

5. The number of cattle accidents was largest on the South Indian railway, *viz.*, 165; next comes the Southern Mahratta railway with 156, then the Eastern Bengal State railway (standard gauge section) with 144 accidents, the East Indian railway with 125, the Bombay, Baroda and Central India railway with 106 and the North Western State railway with 97.

In relation to the train-mileage run, the highest proportion was on the Bengal-Dooars railway, which gives an average of 1 accident in 4,751 train-miles run; the Assam-Bengal railway coming next with an average of 1 in 5,172; then the Eastern Bengal (standard gauge section), the Jorhat, the Rajpipla and the East Coast State railways with averages of 1 in 6,504, 1 in 7,470, 1 in 7,944 and 1 in 8,024, respectively. The lowest proportion was on the Great Indian Peninsula railway, *viz.*, 1 in 303,268 train-miles run, the Bombay, Baroda and Central India railway coming next with 1 in 87,722, then the North Western State railway with 1 in 58,963, the East Indian railway with 1 in 57,026, the Rajputana-Malwa railway with 1 in 42,857 and the Indian Midland railway with 1 in 39,704.

6. Taking the total number of accidents to trains, rolling stock, permanent-way, etc., on each railway as given in table No. 3, the proportion of accidents to train-mileage run was highest on the Cooch Behar railway, on which 1 accident occurred on an average in 2,451 train-miles; next comes the Assam-Bengal railway with 1 accident in 3,152 train-miles; then the Bengal Dooars, the Rohilkund and Kumaon (including the Lucknow-Bareilly section) the Tezpur-Balipara and the Dibru-Sadiya railways with averages of 1 in 3,156, 1 in 3,407, 1 in 3,846, and 1 in 4,672, respectively. The lowest proportion was on the Oodeypore-Chitor railway, *viz.*, 1 in 23,188, the Great Indian Peninsula railway coming next with 1 in 23,016, then the East Indian railway with 1 in 21,536, the Gaekwar's Dabhoi railway with 1 in 18,006, the Jodhpore-Bickaneer railway with 1 in 16,974 and the Rajputana-Malwa railway with 1 in 16,667.

II.—Accidents from other causes not involving accidents to trains, etc.

7. The casualties to passengers, servants in the employ of railways or of contractors, and to others, from causes not involving accidents to trains (which

are detailed in abstract No. 2) are compared separately, for each gauge, with the average of the corresponding periods of the three previous years in the table below :

Gauges.	Six months ending with the 30th June 1898.								Average of the corresponding periods of the three previous years.							
	Passengers.		Servants.		Others.		Total.		Passengers.		Servants.		Others.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Standard	28	77	64	121	195	56	287	254	24	63	59	119	184	44	267	231
Metre	9	31	19	39	88	27	116	97	9	28	21	43	70	23	100	94
Special	...	1	1	1	2	...	3	2	...	...	...	2	1	1	1	3
Total	37	109	84	161	285	83	406	353	33	96	80	164	255	68	368	328

It will be seen from the foregoing table that the number of persons killed and injured, excepting in the case of servants injured, compares unfavourably with the average of the corresponding periods of the three previous years. The increase is attributable, to some extent, to the opening of new lines.

III.—Accidents in which the movement of vehicles used exclusively upon railways was not concerned.

8. The following table shows, for the several gauges, the number of persons reported to have been killed or injured by accidents, in which the movement of vehicles used exclusively upon railways was not concerned. Comparative average figures of the corresponding periods of the two previous years are also given:

	Six months ending with the 30th June 1898.		Average of the corresponding periods of the two previous years.	
	Killed.	Injured.	Killed.	Injured.
Standard	24	87	22	75
Metre	9	20	11	27
Special	1	3	...	1
Total	34	110	33	103

IV.—Statistical results.

9. The following table gives certain statistical results for the period under review, comparing the number of passengers killed and injured by accidents to trains and from all causes with the number carried and the number of passenger-units carried one mile. Comparative results, based on the average figures of the corresponding periods of the three previous years, are also given :

Particulars.		Six months ending with the 30th June 1898.				Average of the corresponding periods of the three previous years.			
		Standard.	Metre.	Special.	Total.	Standard.	Metre.	Special.	Total.
Mean mileage worked	Miles	12,328	8,493	312	21,133	11,383	8,004	266	19,653
Train-mileage run	Miles	26,326,635	11,381,834	283,476	37,991,945	23,816,079	10,766,466	253,146	34,835,691
Number of passengers carried	No.	48,659,749	27,504,594	398,876	76,563,219	46,715,947	28,651,646	471,080	75,837,773
Number of passenger-units carried one mile	No.	1,997,195,411	981,386,387	(a) 9,267,713	(a) 2,987,849,511	2,117,443,303	1,137,777,066	12,805,496	3,268,025,865
Number of accidents	No.	1,870	1,183	47	3,100	1,431	1,194	39	2,664
Do. do. per 100,000 train-miles run	No.	7·10	10·39	16·58	8·16	6·01	11·09	15·41	7·65
Number of passengers killed by accidents to trains	No.	6	...	...	6	8	...	...	8
Proportion of above to number carried	No.	1 in 8,109,958	...	...	1 in 12,760,536	1 in 5,839,381	...	...	1 in 9,479,722
Number of passengers injured by accidents to trains	No.	35	...	...	35	45	5	...	50
Proportion of above to number carried	No.	1 in 1,390,279	...	...	1 in 2,187,521	1 in 1,038,112	1 in 5,730,329	...	1 in 1,516,756
Number of passengers killed from all causes	No.	34	9	...	43	32	9	...	41
Proportion of above to number carried	No.	1 in 1,431,169	1 in 3,056,066	...	1 in 1,780,540	1 in 1,459,845	1 in 3,183,516	...	1 in 1,849,702
Number of passengers injured from all causes	No.	112	31	1	144	113	33	...	146
Proportion of above to number carried	No.	1 in 434,462	1 in 887,245	1 in 398,876	1 in 531,689	1 in 413,407	1 in 868,232	...	1 in 519,437
Number of passengers killed and injured from all causes	No.	146	40	1	187	145	42	...	187
Proportion of above to number carried	No.	1 in 333,280	1 in 687,615	1 in 398,876	1 in 409,429	1 in 322,173	1 in 682,182	...	1 in 405,550
Proportion of passengers killed and injured from all causes to number of passenger-units carried one mile	No.	1 in 13,679,421	1 in 24,534,660	1 in (a) 9,267,713	1 in (a) 15,977,805	1 in 14,603,057	1 in 27,089,930	...	1 in 17,476,074

It will be seen that, except in the case of number of accidents per 100,000 train-miles run, proportion of passengers killed from all causes to number carried and proportion of passengers killed and injured from all causes to the unit mileage of passengers, the results generally compare favourable.

(a) Excluding the Tezpur-Balipara railway.

V.—Number of persons killed and injured by accidents to trains, rolling-stock, etc., during the second quarter of 1898.

10. The following table gives the number of accidents, as classified in abstract No. 4 of the returns, which resulted in loss of life or injury to persons, and shows the railways on which they occurred:

Railway.	Number of accidents reported during the second quarter of 1898.	Passengers and others.		Servants.		Total.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured
Standard gauge.							
East Indian	4	1	14	1	...	2	14
North Western State	3	4	8	2	3	6	11
Oudh and Rohilkhand State	2	...	3	...	...	...	3
East Coast State	1	1	...	...	...	1	...
Great Indian Peninsula	1	...	1	...	1	...	2
Bombay, Baroda and Central India	1	...	1	...	...	...	1
Madras	1	...	7	...	...	...	7
Metre gauge.							
Bengal and North-Western	1	...	...	...	1	...	1
South Indian	1	...	...	...	1	...	1
Assam-Bengal	1	...	...	...	1	...	1
Burma	1	...	...	...	1	...	1
Bhávnagar-Gondal-Junágad-Porbandar.	1	...	1	...	...	...	1
Total	17	6	35	3	8	9	43
Average of the three corresponding quarters of 1895, 1896 and 1897.	19	9	30	2	10	11	40

11. A brief description of some of the accidents which resulted in loss of life, or injury to persons, is given below:

East Indian railway.—On the 4th May 1898, the down Punjab mail train collided with a wagon standing foul of the points at Ásansol station. Two passengers were injured and the rolling stock was damaged.

On the 17th May 1898, some wagons while being shunted on to an up Patna-Gya train at Jehanabad station, collided with the coaching stock of the train. Three passengers were slightly injured.

On the 18th June 1898, an up goods train, which had been shunted into the up siding at Jámtára station to enable the up Bombay mail train to pass, was signalled to come out, but the driver instead of doing so backed his train, and before he had discovered his mistake a low-sided truck next the brake-van, containing cases of heavy machinery, telescoped into the latter, and both vehicles were thrown down the bank. The guard was killed and rolling-stock considerably damaged.

On the 23rd June 1898, seven vehicles of the up Bombay mail train, when passing over points on entering the station at Raneegunge ran off the line and five

of them were overturned. The accident was due to the breakage of the heel block caused in all probability by the flange of the leading wheel of the engine. One passenger was killed and nine were injured; and rolling-stock was considerably damaged.

North Western State railway.—On the 25th April 1898, an up mail train was admitted on the down main line at Jhimpir station through the carelessness of the pointsman and collided with a down goods train standing there. Four passengers were killed and six passengers and three railway servants were injured, and rolling stock was considerably damaged. *A detailed report of this accident will be found in appendix A to the abstract returns of accidents.*

On the 14th June 1898, a down goods train, while entering Gíllawála station against signals collided with the coupled engines of an up goods train which were shunting in the yard and the latter were hurled against a truck which was being hand shunted. Two coolies were killed and rolling-stock and permanent-way were considerably damaged. *A detailed report of this accident will be found in appendix B to the abstract returns of accidents.*

East Coast State railway.—On the 11th June 1898, a cart, while crossing the line through the level-crossing gate at mileage 361-4 near Sómpéta station, was run into by the engine of a down mixed train. The cartman was killed and the cart smashed.

Great Indian Peninsula railway.—On the 25th May 1898, a down Nágpur mail train collided with some wagons standing foul of a crossing at Wardha station. The head guard and a railway mail sorter were injured.

Bombay, Baroda and Central India railway—On the 9th April 1898, a third class carriage of an up ordinary train, while entering the loop platform siding at Grant Road station, was derailed at the points. One passenger was injured.

Madras railway.—On the 16th April 1898, a mail train, while entering Jalarpet station, was admitted into the second instead of the main line and collided with some standing vehicles. Seven passengers were injured.

ORDER.—Ordered that the above note, with the abstract returns and appendices thereto, be communicated, for information, to the Local Governments and Administrations, and to the officers noted in the margin.

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, the Punjab and Burma.
The Chief Commissioners of the Central Provinces, Assam and Coorg.
The Resident at Hyderabad.
The Resident in Mysore.
The Agents to the Governor General for Rajputana, Central India, and Baluchistan.
The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, and Assam.
The Managers, North Western State, Oudh and Rohilkhand State, Eastern Bengal State and East Coast State Railways.
The Engineers-in-Chief, Mari-Attock Railway, Indus Bridge Works, Bezwada-Madras, Hardwar-Dehra and Ghaziabad-Moradabad Railways

Ordered also, that copies be forwarded for the information of Her Majesty's Government.

Ordered, further, that the above note, with the abstract returns, be published in the Supplement to the *Gazette of India*.

Wm. McCleverty *Captain, R.E.,*
Offg. Under Secy., to the Govt. of India.

Documents accompanying.

1. Abstract returns of accidents for the six months ending with the 30th June 1898 with appendices thereto

G. C. Press, Simla.—No. 2537 P. W. D.—27-2-99.—30.

To the Joint Secretary to the Government of Madras Public Works Department Railway Branch

Enclosure to Government of India Order No. 139 R. Stat., dated the 24th February 1899.

INDIAN RAILWAYS.

ABSTRACT RETURNS OF ACCIDENTS DURING THE SIX MONTHS ENDING WITH THE 30TH JUNE 1898.

G. I. C. P. O.—No. 426 P. W. D.—28-2-99.—50.—J. S. D M.

ABSTRACT No. 1.

General Total.

Number of persons reported, during the six months ending with the 30th June 1898, as killed or injured on all railways open for traffic in India, distinguishing between passengers, railway servants and other persons; and distinguishing also, in the case of the two former classes, between accidents caused by accidents to trains, rolling stock, permanent-way, etc., and accidents happening otherwise.

	Standard gauge lines.		Metre gauge lines.		Special gauge lines.		Total all gauges.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Passengers:—								
From accidents to trains, rolling stock, permanent-way, etc.	6	35	...	...	...	...	6	35
By accidents from other causes, including accidents from their own want of caution or misconduct	28	77	9	31	...	1	37	109
Servants:—								
From accidents to trains, rolling stock, permanent-way, etc.	9	18	3	8	...	...	12	26
By accidents from other causes, including accidents from their own want of caution or misconduct	64	121	19	39	1	1	84	161
Other persons:—								
Whilst passing over railways at level-crossings	13	4	4	...	...	...	17	4
Trespassers	148	45	74	24	2	...	224	69
Suicides	36	5	9	...	...	...	45	5
Miscellaneous, not included in either of the above	1	7	2	4	...	...	3	11
Total	305	312	120	106	3	2	428	420

ABSTRACT No. 2.

NUMBER of PERSONS reported during the SIX MONTHS ending with the 30th June 1898, as KILLED or INJURED in INDIA by the TRAVELLING of TRAINS or the MOVEMENT of VEHICLES used exclusively upon RAILWAYS, distinguishing between PASSENGERS, RAILWAY SERVANTS, and OTHER PERSONS, and classifying, as far as practicable, the nature and causes of the ACCIDENTS occasioning the DEATH or INJURY.

PASSENGERS. (Columns 1–6: From causes other than accidents to trains, etc.)

Classification Number.	RAILWAY.	From accidents to trains, etc.—See Abstracts Nos. 3 and 4. Killed.	Injured.	1.—From falling between trains and platforms. Killed.	Injured.	2.—Falling on to the platform, ballast, etc., when getting into or out of trains. Killed.	Injured.	3.—Whilst crossing the line at stations. Killed.	Injured.	4.—By closing of carriage doors. Killed.	Injured.	5.—Falling out of carriages during the travelling of trains. Killed.	Injured.	6.—Other accidents. Killed.	Injured.	Total. Killed.	Injured.	Total Passengers. Killed.	Injured.
	Standard gauge.																		
	State lines worked by companies.																		
I	East Indian (a)	1	14	2	3	8	6	...	2	...	...	2	12	2	2	14	25	15	39
II	Bengal Central (b)	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
III	Bengal-Nágpur	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	1	1	1
IV	Indian Midland (c)	...	...	1	...	...	...	...	1	...	...	...	...	...	...	1	1	1	1
	State lines worked by the State.																		
XI	North Western (d)	5	11	2	2	...	...	...	...	...	...	4	19	...	1	6	22	11	33
XIII	Oudh and Rohilkhand	...	...	...	...	...	1	...	...	...	...	...	4	...	...	...	5	...	5
XIV	Eastern Bengal	...	...	...	...	...	4	...	...	...	...	1	1	...	...	1	5	1	5
XVI	East Coast	...	...	...	...	1	1	...	...	...	...	...	2	...	...	1	3	1	3
	Lines worked by guaranteed companies.																		
XVIII	Great Indian Peninsula (e).	...	1	1	...	...	...	...	...	...	...	...	6	...	...	1	6	1	7
XIX	Bombay, Baroda and Central India (f).	...	1	...	1	...	1	1	...	...	...	2	2	...	...	3	4	3	5
XX	Madras (g)	...	7	...	1	...	2	...	...	...	...	...	1	...	...	...	4	...	11
	Line owned by native state and worked by company.																		
XXXII	The Nizam's Guaranteed State (h).	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
	TOTAL	6	35	6	7	9	15	1	3	...	...	10	49	2	3	28	77	34	112
	Average of the three previous corresponding periods	8	45	3	4	5	13	1	2	...	1	13	44	2	4	24	68	32	113
	Metre gauge.																		
	State lines worked by companies.																		
XXXIX	Bengal and North-Western— Tirhoot section. Company's "	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
XLI	Rajputana-Malwa (i)	...	...	1	...	...	...	...	...	...	...	...	12	2	...	3	12	3	12
XLIII	Southern Mahratta (j).	...	...	...	...	...	1	...	...	...	...	...	4	...	...	...	5	...	5
XLVI	South Indian (k).	...	...	...	...	2	...	...	...	...	...	...	2	...	...	2	2	2	2
XLVIII	Assam-Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XLIX	Burma	...	...	...	...	1	...	...	...	...	...	...	4	...	...	1	4	1	4
	Carried over	...	...	1	...	3	1	...	...	...	...	...	23	2	...	6	24	6	24

SERVANTS. (Columns 1–19: From causes other than accidents to trains, etc.)

Classification Number.	RAILWAY.	From accidents to trains, etc.—See Abstracts Nos. 3 and 4. Killed.	Injured.	1.—Whilst coupling or uncoupling vehicles. Killed.	Injured.	2.—By coming in contact, whilst riding on vehicles during shunting, with other vehicles, etc., standing on adjacent lines. Killed.	Injured.	3.—Whilst passing over or standing upon buffers during shunting. Killed.	Injured.	4.—When getting on or off, or falling off, engines, wagons, etc., during shunting. Killed.	Injured.	5.—Whilst braking, spragging, or chocking wheels. Killed.	Injured.	6.—Whilst attending to ground points, marshalling trains, etc. Killed.	Injured.
	Standard gauge.														
	State lines worked by companies.														
I	East Indian (a)	1	3	...	3	...	...	1	...	...	1	...	3	...	...
II	Bengal Central (b)	5	2	...	...	...	...	...	...	...	...	...	...	...	...
III	Bengal-Nágpur	...	...	...	...	...	...	...	...	...	1	...	...	...	...
IV	Indian Midland (c)	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	State lines worked by the State.														
XI	North Western (d)	3	7	2	4	...	...	1	...	...	2	...	...	...	2
XIII	Oudh and Rohilkhand	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XIV	Eastern Bengal	...	...	...	...	...	...	...	...	...	1	...	...	...	1
XVI	East Coast	...	...	...	1	...	...	...	...	...	...	...	...	...	...
	Lines worked by guaranteed companies.														
XVIII	Great Indian Peninsula (e).	...	6	1	...	...	...	...	...	...	...	...	...	...	...
XIX	Bombay, Baroda and Central India (f).	...	...	...	1	...	...	...	...	...	2	...	...	...	...
XX	Madras (g)	...	...	...	...	...	...	...	1	...	...	...	1	...	...
	Line owned by native state and worked by company.														
XXXII	The Nizam's Guaranteed State (h).	...	...	...	1	...	...	...	...	...	...	...	...	...	1
	TOTAL	9	18	3	10	...	...	2	1	...	7	...	4	...	5
	Average of the three previous corresponding periods	4	17	4	13	...	2	...	1	1	12	...	4	1	2
	Metre gauge.														
	State lines worked by companies.														
XXXIX	Bengal and North-Western— Tirhoot section. Company's "	...	1	2	...	...	...	...	...	...	...	...	...	...	...
XLI	Rajputana-Malwa (i)	...	1	...	3	...	...	...	...	...	...	...	...	...	...
XLIII	Southern Mahratta (j).	...	...	...	...	...	...	...	...	1	2	...	...	...	...
XLVI	South Indian (k).	...	1	...	...	...	...	...	...	...	...	...	...	1	...
XLVIII	Assam-Bengal	...	2	...	1	...	...	...	...	...	...	...	...	...	...
XLIX	Burma	...	1	...	1	...	...	...	...	...	1	...	...	...	...
	Carried over	...	6	2	5	...	...	...	...	1	3	...	...	1	...

Classification Number.	RAILWAY.	7.—Whilst moving vehicles by capstans, turntables, props, etc., during shunting. Killed.	Injured.	8.—By other accidents during shunting operations not included in the preceding. Killed.	Injured.	9.—From falling off engines, etc., during the travelling of trains. Killed.	Injured.	10.—By coming in contact with overbridges, or erections on the sides of the line during the travelling of trains. Killed.	Injured.	11.—When getting on or off engines, vans, etc., during the travelling of trains. Killed.	Injured.	12.—Whilst attending to or by the failure of machinery, etc., of engines in steam. Killed.	Injured.	13.—Whilst working on the permanent-way, sidings, etc. Killed.	Injured.
	Standard gauge.														
	State lines worked by companies.														
I	East Indian (a)	...	1	...	4	...	5	...	...	3	1	...	...	2	1
II	Bengal Central (b)	...	...	...	...	...	...	...	1	...	...	...	...	...	...
III	Bengal-Nágpur	...	...	...	...	...	3	...	...	...	1	...	...	...	...
IV	Indian Midland (c)	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	State lines worked by the State.														
XI	North Western (d)	...	1	2	...	1	1	1	...	2	3	1	4	1	...
XIII	Oudh and Rohilkhand	...	...	...	1	...	...	...	...	...	...	...	...	...	...
XIV	Eastern Bengal	...	...	1	...	...	...	...	...	...	2	...	...	1	...
XVI	East Coast	...	...	2	1	...	...	...	...	...	...	...	...	...	...
	Lines worked by guaranteed companies.														
XVIII	Great Indian Peninsula (e).	...	...	1	2	1	1	1	...	...	1	...	3	...	...
XIX	Bombay, Baroda and Central India (f).	...	...	1	...	...	1	...	...	...	...	...	...	1	...
XX	Madras (g)	...	...	...	...	1	...	...	1	1	...	...	...	...	...
	Line owned by native state and worked by company.														
XXXII	The Nizam's Guaranteed State (h).	...	...	...	...	...	...	...	...	...	1	...	...	...	...
	TOTAL	...	2	7	8	3	11	2	2	6	9	1	7	5	2
	Average of the three previous corresponding periods	1	...	5	12	3	11	2	1	3	14	...	3	3	7
	Metre gauge.														
	State lines worked by companies.														
XXXIX	Bengal and North-Western— Tirhoot section. Company's "	...	...	...	1	...	...	...	...	...	...	...	...	...	...
XLI	Rajputana-Malwa (i)	...	...	...	1	...	1	...	...	1	...	...	...	...	...
XLIII	Southern Mahratta (j).	...	...	1	...	...	1	...	...	1	1	...	...	1	...
XLVI	South Indian (k).	...	...	...	...	1	...	...	...	...	...	...	...	...	1
XLVIII	Assam-Bengal	...	...	...	...	1	...	...	...	...	...	...	...	...	...
XLIX	Burma	...	...	...	1	...	1	...	...	...	...	...	1	...	...
	Carried over	...	...	1	3	2	3	...	...	2	1	...	1	1	1

Classification Number.	RAILWAY.	14.—Whilst attending to gates at level-crossings. Killed.	Injured.	15.—Whilst walking, crossing, or standing on the line on duty. Killed.	Injured.	16.—From being caught between vehicles. Killed.	Injured.	17.—From falling or being caught between trains and platforms, walls, etc. Killed.	Injured.	18.—Whilst walking, etc., on the line on the way home or to work. Killed.	Injured.	19.—Miscellaneous. Killed.	Injured.	Total. Killed.	Injured.	Total Servants. Killed.	Injured.
	Standard gauge.																
	State lines worked by companies.																
I	East Indian (a)	1	...	8	6	1	3	...	1	...	1	1	3	17	33	18	36
II	Bengal Central (b)	...	...	...	...	...	...	...	...	...	...	...	...	...	1	5	3
III	Bengal-Nágpur	...	...	1	2	...	...	...	...	...	...	...	...	1	7	1	7
IV	Indian Midland (c)	...	...	...	1	...	...	1	...	1	...	...	...	2	3	2	3
	State lines worked by the State.																
XI	North Western (d)	...	...	4	5	...	1	...	1	...	...	2	3	17	27	20	34
XIII	Oudh and Rohilkhand	...	1	...	...	...	...	...	...	...	...	1	1	1	3	1	3
XIV	Eastern Bengal	...	...	4	1	...	...	...	...	1	1	...	3	7	9	7	9
XVI	East Coast	...	...	...	...	1	...	...	...	...	...	...	...	3	2	3	2
	Lines worked by guaranteed companies.																
XVIII	Great Indian Peninsula (e).	...	...	1	8	...	...	1	...	1	...	2	...	9	15	9	21
XIX	Bombay, Baroda and Central India (f).	1	...	...	2	...	...	...	...	...	...	2	...	5	6	5	6
XX	Madras (g)	...	...	...	2	...	...	...	...	...	...	...	...	2	5	2	5
	Line owned by native state and worked by company.																
XXXII	The Nizam's Guaranteed State (h).	...	...	...	...	...	...	...	...	...	...	...	7	...	10	...	10
	TOTAL	2	1	18	27	2	4	2	2	3	2	8	17	64	121	73	139
	Average of the three previous corresponding periods	3	1	17	12	4	4	2	2	5	2	5	16	59	119	63	136
	Metre gauge.																
	State lines worked by companies.																
XXXIX	Bengal and North-Western— Tirhoot section. Company's "	...	...	1	...	...	1	1	...	...	...	...	...	4	2	4	3
XLI	Rajputana-Malwa (i)	...	...	...	...	...	1	...	...	...	...	...	3	1	9	1	10
XLIII	Southern Mahratta (j).	...	...	1	...	...	...	...	...	...	...	...	2	5	6	5	6
XLVI	South Indian (k).	1	...	...	1	...	...	...	1	...	...	...	...	3	3	3	4
XLVIII	Assam-Bengal	...	...	...	1	...	1	...	...	...	...	...	...	1	3	1	5
XLIX	Burma	...	...	...	...	...	...	...	...	...	...	...	2	...	7	...	8
	Carried over	1	...	2	2	...	3	1	1	...	...	...	7	14	30	14	36

OTHERS.

Classification Number.	RAILWAY.	Whilst passing over the railway at level-crossings. Killed.	Injured.	Trespassers. Killed.	Injured.	Suicides. Killed.	Injured.	Miscellaneous. Killed.	Injured.	Total Others. Killed.	Injured.	Total all Classes. Killed.	Injured.	Classification Number.
	Standard gauge.													
	State lines worked by companies.													
I	East Indian (a)	3	2	60	6	12	1	...	2	75	11	108	86	I
II	Bengal Central (b)	...	...	1	...	1	...	...	...	2	...	7	4	II
III	Bengal-Nágpur	...	...	8	3	4	...	...	...	12	3	14	11	III
IV	Indian Midland (c)	...	...	5	2	6	...	...	...	11	2	14	6	IV
	State lines worked by the State.													
XI	North Western (d)	2	1	22	16	4	...	...	2	28	19	59	86	XI
XIII	Oudh and Rohilkhand	...	1	12	2	5	4	...	2	17	9	18	17	XIII
XIV	Eastern Bengal	2	...	10	8	1	...	1	...	14	8	22	22	XIV
XVI	East Coast	2	...	3	...	1	...	...	...	6	...	10	5	XVI
	Lines worked by guaranteed companies.													
XVIII	Great Indian Peninsula (e).	1	...	14	4	2	...	...	...	17	4	27	32	XVIII
XIX	Bombay, Baroda and Central India (f).	3	...	9	1	...	...	...	...	12	1	20	12	XIX
XX	Madras (g)	...	...	2	1	...	...	...	1	2	2	4	18	XX
	Line owned by native state and worked by company.													
XXXII	The Nizam's Guaranteed State (h).	...	...	2	2	...	...	...	...	2	2	2	13	XXXII
	TOTAL	13	4	148	45	36	5	1	7	198	61	305	312	
	Average of the three previous corresponding periods	6	6	125	37	52	3	4	3	187	49	282	298	
	Metre gauge.													
	State lines worked by companies.													
XXXIX	Bengal and North-Western— Tirhoot section. Company's "	1	...	23	10	4	...	...	...	28	10	32	14	XXXIX
XLI	Rajputana-Malwa (i)	...	...	11	3	...	...	1	2	12	5	16	27	XLI
XLIII	Southern Mahratta (j).	...	...	3	...	1	...	...	1	4	1	9	12	XLIII
XLVI	South Indian (k).	1	...	3	2	1	...	...	...	5	2	10	8	XLVI
XLVIII	Assam-Bengal	...	...	1	...	3	...	...	...	4	...	5	5	XLVIII
XLIX	Burma	1	...	9	3	...	...	1	...	11	3	12	15	XLIX
	Carried over	3	...	50	18	9	...	2	3	64	21	84	81	

(a) Including the Delhi-Umballa-Kalka and the Tarkessur railways.
(b) Although for convenience classed amongst state railways, this line is the property of the Bengal Central Railway Company.
(c) Including the Bhopal-Itársi, the Bina-Goona and the Bhopal-Ujjain railways.
(d) " the Hyderabad-Shadipalli, the Rájpura-Bhátinda, and the Jammu and Kashmir railways.
(e) Including the Wardha Coal, the Dhond-Manwád, the Khámgaon, and the Amráoti railways.
(f) " the Godhra-Rutlam-Nágda, the Nágda-Ujjain and the Gaekwar's Petlád railways.
(g) " the Madras-Ennur section of the Bezwada-Madras railway and the Kolar Gold-fields railway.
(h) Including the Bezwada Extension (East Coast State railway).
(i) " the Pálanpur-Deesa, the Ahmedabad-Parantij, and the Gaekwar's Mehsána railways.
(j) " the Guntakal-Mysore frontier, the Mysore section (Southern Mahratta), the Kolhapur, the Yesvantpur-Mysore frontier, and the Mysore-Nanjangád railways.
(k) " the Máyavaram-Mutupet railway.

ABSTRACT No. 2—*concluded.*

NUMBER of PERSONS reported, during the SIX MONTHS ending with the 30th June 1898, as KILLED or INJURED in INDIA by the TRAVELLING of TRAINS or the MOVEMENT of VEHICLES used exclusively upon RAILWAYS, distinguishing between PASSENGERS, RAILWAY SERVANTS and OTHER PERSONS, and classifying, as far as practicable, the nature and causes of the ACCIDENTS occasioning the DEATH or INJURY—*concluded.*

PASSENGERS. (From causes other than accidents to trains, etc.: 1.—From falling between trains and platforms. 2.—Falling on to the platform, ballast, etc., when getting into or out of trains. 3.—Whilst crossing the line at stations. 4.—By closing of carriage doors. 5.—Falling out of carriages during the travelling of trains. 6.—Other accidents.)

Classification Number	Railway	From accidents to trains, etc.—See Abstracts Nos. 3 and 4. Killed	Injured	1. Killed	Injured	2. Killed	Injured	3. Killed	Injured	4. Killed	Injured	5. Killed	Injured	6. Killed	Injured	Total. Killed	Injured	Total Passengers. Killed	Injured
	Brought forward	...	...	1	...	3	1	...	...	...	...	...	23	2	...	6	24	6	24
	Metre gauge—concld. State lines worked by the State.																		
L	Eastern Bengal (a)	...	...	...	...	1	...	...	...	...	...	...	2	...	...	1	2	1	2
LI	Cawnpore-Burhwal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Assisted companies.																		
LIII	Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LIV	Rohilkund and Kumaon (Company's section)(b)	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	1	1	1
LV	Bengal Dooars	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LVI	Dibru-Sadiya (c)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lines owned and worked by native states.																		
LXIX	Jodhpore-Bickaneer—Jodhpore section, Bickaneer „	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...	3	...	3
LXX	Oodeypore-Chitor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXXI	Bhávnagar-Gondal-Junágad-Porbandar (d)	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1	1	1	1
	TOTAL	...	...	2	1	5	2	...	...	...	...	...	28	2	...	9	31	9	31
	Average of the three previous corresponding periods	...	5	1	2	1	2	...	...	...	...	5	24	2	...	9	28	9	33
	Special gauges. State line worked by the State.																		
LXXX	Jorhát (2′ 0″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Assisted companies																		
LXXXI	Darjeeling-Himalayan (2′ 0″)	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
	Tezpur-Balipara (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned by native state and worked by company.																		
LXXXIII	The Gaekwar's Dabhoi (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXXXIV	Rajpipla (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned by native state and worked by state railway agency.																		
LXXXVI	Cooch Behar (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned and worked by native state.																		
LXXXVII	Morvi (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	TOTAL	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
	Average of the three previous corresponding periods	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	GRAND TOTAL	6	35	8	8	14	17	1	3	...	...	10	78	4	3	37	109	43	144
	Average of the three previous corresponding periods	8	50	4	6	6	15	1	2	...	1	18	68	4	4	33	96	41	146

SERVANTS. (From causes other than accidents to trains, etc.: 1.—Whilst coupling or uncoupling vehicles. 2.—By coming in contact, whilst riding on vehicles during shunting, with other vehicles, etc., standing on adjacent lines. 3.—Whilst passing over or standing upon buffers during shunting. 4.—When getting on or off, or falling off, engines, wagons, etc., during shunting. 5.—Whilst braking, spragging, or chocking wheels. 6.—Whilst attending to ground points, marshalling trains, etc.)

Classification Number	Railway	From accidents to trains, etc.—See Abstracts Nos. 3 and 4. Killed	Injured	1. Killed	Injured	2. Killed	Injured	3. Killed	Injured	4. Killed	Injured	5. Killed	Injured	6. Killed	Injured
	Brought forward	...	6	2	5	...	...	...	...	1	3	...	...	1	...
	Metre gauge—concld. State lines worked by the State.														
L	Eastern Bengal (a)	...	...	...	...	...	...	...	1	...	1	...	...	...	...
LI	Cawnpore-Burhwal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Assisted companies.														
LIII	Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LIV	Rohilkund and Kumaon (Company's section)(b)	...	...	...	...	...	...	...	...	1	...	...	...	...	...
LV	Bengal Dooars	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LVI	Dibru-Sadiya (c)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lines owned and worked by native states.														
LXIX	Jodhpore-Bickaneer—Jodhpore section, Bickaneer „	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXX	Oodeypore-Chitor	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXXI	Bhávnagar-Gondal-Junágad-Porbandar (d)	3	2	...	...	...	...	...	1	...	...	...	1	...	...
	TOTAL	3	8	2	5	...	...	...	2	2	4	...	1	1	...
	Average of the three previous corresponding periods	1	4	3	5	...	1	...	1	3	3	...	...	1	...
	Special gauges. State line worked by the State.														
LXXX	Jorhát (2′ 0″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Assisted companies														
LXXXI	Darjeeling-Himalayan (2′ 0″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tezpur-Balipara (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned by native state and worked by company.														
LXXXIII	The Gaekwar's Dabhoi (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXXXIV	Rajpipla (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned by native state and worked by state railway agency.														
LXXXVI	Cooch Behar (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned and worked by native state.														
LXXXVII	Morvi (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	TOTAL	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Average of the three previous corresponding periods	...	1	...	...	...	...	...	1	...	...	...	...	...	...
	GRAND TOTAL	12	26	5	15	...	...	2	3	2	11	...	5	1	5
	Average of the three previous corresponding periods	5	22	7	18	...	3	...	3	4	15	...	4	2	2

SERVANTS (continued). (7.—Whilst moving vehicles by capstans, turntables, props, etc., during shunting. 8.—By other accidents during shunting operations not included in the preceding. 9.—From falling off engines, etc., during the travelling of trains. 10.—By coming in contact with over-bridges or erections on the sides of the line during the travelling of trains. 11.—When getting on or off engines, vans, etc., during the travelling of trains. 12.—Whilst attending to or by the failure of machinery, etc., of engines in steam. 13.—Whilst working on the permanent-way, sidings, etc. 14.—Whilst attending to gates at level-crossings.)

Classification Number	Railway	7. Killed	Injured	8. Killed	Injured	9. Killed	Injured	10. Killed	Injured	11. Killed	Injured	12. Killed	Injured	13. Killed	Injured	14. Killed	Injured
	Brought forward	...	...	1	3	2	3	...	...	2	1	...	1	1	1	1	...
	Metre gauge—concld. State lines worked by the State.																
L	Eastern Bengal (a)	...	...	1	...	...	...	...	...	2	1	...	...	...	...	...	...
LI	Cawnpore-Burhwal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Assisted companies.																
LIII	Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LIV	Rohilkund and Kumaon (Company's section)(b)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LV	Bengal Dooars	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LVI	Dibru-Sadiya (c)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lines owned and worked by native states.																
LXIX	Jodhpore-Bickaneer—Jodhpore section, Bickaneer „	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXX	Oodeypore-Chitor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXXI	Bhávnagar-Gondal-Junágad-Porbandar (d)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	TOTAL	...	...	2	3	2	3	...	...	4	2	...	1	1	1	1	...
	Average of the three previous corresponding periods	...	1	2	4	3	7	...	1	3	4	...	2	1	1	1	...
	Special gauges. State line worked by the State.																
LXXX	Jorhát (2′ 0″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Assisted companies																
LXXXI	Darjeeling-Himalayan (2′ 0″)	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
	Tezpur-Balipara (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned by native state and worked by company.																
LXXXIII	The Gaekwar's Dabhoi (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXXXIV	Rajpipla (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned by native state and worked by state railway agency.																
LXXXVI	Cooch Behar (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned and worked by native state.																
LXXXVII	Morvi (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	TOTAL	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
	Average of the three previous corresponding periods	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
	GRAND TOTAL	...	2	9	11	5	14	2	2	10	12	1	8	6	3	3	1
	Average of the three previous corresponding periods	1	1	7	16	6	19	2	2	6	18	...	5	4	8	4	1

SERVANTS (concluded). (15.—Whilst walking, crossing, or standing on the line on duty. 16.—From being caught between vehicles. 17.—From falling or being caught between trains and platforms, walls, etc. 18.—Whilst walking, etc., on the line on the way home or to work. 19.—Miscellaneous.)

Classification Number	Railway	15. Killed	Injured	16. Killed	Injured	17. Killed	Injured	18. Killed	Injured	19. Killed	Injured	Total. Killed	Injured	Total Servants. Killed	Injured
	Brought forward	2	2	...	3	1	1	...	...	...	7	14	30	14	36
	Metre gauge—concld. State lines worked by the State.														
L	Eastern Bengal (a)	...	1	...	...	...	...	...	...	1	1	4	5	4	5
LI	Cawnpore-Burhwal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Assisted companies.														
LIII	Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LIV	Rohilkund and Kumaon (Company's section)(b)	...	...	...	...	...	...	...	...	...	1	1	1	1	1
LV	Bengal Dooars	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LVI	Dibru-Sadiya (c)	...	...	...	1	...	...	...	...	...	...	...	1	...	1
	Lines owned and worked by native states.														
LXIX	Jodhpore-Bickaneer—Jodhpore section, Bickaneer „	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXX	Oodeypore-Chitor	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LXXI	Bhávnagar-Gondal-Junágad-Porbandar (d)	...	...	...	...	...	...	...	...	...	...	...	2	3	4
	TOTAL	2	3	...	4	1	1	...	...	1	9	19	39	22	47
	Average of the three previous corresponding periods	2	3	...	1	...	...	...	...	2	8	21	43	22	47
	Special gauges. State line worked by the State.														
LXXX	Jorhát (2′ 0″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Assisted companies														
LXXXI	Darjeeling-Himalayan (2′ 0″)	...	...	...	...	...	...	...	...	...	...	...	1	...	1
	Tezpur-Balipara (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned by native state and worked by company.														
LXXXIII	The Gaekwar's Dabhoi (2′ 6″)	...	...	...	...	...	...	...	...	1	...	1	...	1	...
LXXXIV	Rajpipla (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned by native state and worked by state railway agency.														
LXXXVI	Cooch Behar (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Line owned and worked by native state.														
LXXXVII	Morvi (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	TOTAL	...	...	...	...	...	...	...	...	1	...	1	1	1	1
	Average of the three previous corresponding periods	...	...	...	...	...	...	...	...	...	...	...	2	...	3
	GRAND TOTAL	20	30	2	8	3	3	3	2	10	26	84	161	96	187
	Average of the three previous corresponding periods	19	15	4	5	...	2	5	3	7	21	83	164	...	136

OTHERS.

Railway	Whilst passing over the railway at level-crossings. Killed	Injured	Trespassers. Killed	Injured	Suicides. Killed	Injured	Miscellaneous. Killed	Injured	Total Others. Killed	Injured	Total all classes. Killed	Injured	Classification Number
Brought forward	3	...	50	18	9	...	2	3	64	21	84	81	
Metre gauge—concld. State lines worked by the State.													
Eastern Bengal (a)	...	...	15	1	...	...	...	...	15	1	20	8	L.
Cawnpore-Burhwal	...	...	...	3	...	...	...	...	...	3	...	3	LI.
Assisted companies.													
Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	LIII.
Rohilkund and Kumaon (Company's section)(b)	...	...	8	2	...	...	...	...	8	2	10	4	LIV.
Bengal Dooars	...	...	...	...	...	...	...	...	...	...	...	...	LV.
Dibru-Sadiya (c)	...	...	1	...	...	...	...	...	1	...	1	1	LVI.
Lines owned and worked by native states.													
Jodhpore-Bickaneer—Jodhpore section, Bickaneer „	...	...	...	...	...	...	...	...	...	...	...	3	LXIX.
Oodeypore-Chitor	...	...	...	...	...	...	...	...	...	...	...	...	LXX.
Bhávnagar-Gondal-Junágad-Porbandar (d)	1	...	...	...	...	...	...	1	1	1	5	6	LXXI.
TOTAL	4	...	74	24	9	...	2	4	89	28	120	106	
Average of the three previous corresponding periods	5	4	52	19	12	1	2	2	71	26	102	106	
Special gauges. State line worked by the State.													
Jorhát (2′ 0″)	...	...	...	...	...	...	...	...	...	...	...	...	LXXX.
Assisted companies													
Darjeeling-Himalayan (2′ 0″)	...	...	...	...	...	...	...	...	...	...	...	2	LXXXI.
Tezpur-Balipara (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	
Line owned by native state and worked by company.													
The Gaekwar's Dabhoi (2′ 6″)	...	...	2	...	...	...	...	...	2	...	3	...	LXXXIII.
Rajpipla (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	LXXXIV.
Line owned by native state and worked by state railway agency.													
Cooch Behar (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	LXXXVI.
Line owned and worked by native state.													
Morvi (2′ 6″)	...	...	...	...	...	...	...	...	...	...	...	...	LXXXVII.
TOTAL	...	...	2	...	...	...	...	...	2	...	3	2	
Average of the three previous corresponding periods	1	...	...	1	...	...	...	...	1	1	1	4	
GRAND TOTAL	17	4	224	69	45	5	3	11	289	89	428	420	
Average of the three previous corresponding periods	12	10	177	57	64	4	6	5	259	...	385	408	

(a) Including the Kaunia-Dharlla 2′ 6″ gauge branch.
(b) „ the Lucknow-Bareilly section (Rohilkund and Kumaon.)
(c) „ the Ledo and Tikak-Margherita Colliery railway.
(d) „ the Jetalsar-Rájkot and Jamnagar railways.

ABSTRACT No. 3.

ACCIDENTS to TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS AND OTHERS and of RAILWAY SERVANTS KILLED or INJURED in each class of accident.

STANDARD GAUGE.

	East Indian (a).								Bengal Central (b).								Bengal-Nágpur.							
	Number.			Number of passengers and others.		Number of servants.		Total all classes.				Number of passengers and others.		Number of servants.		Total all classes.				Number of passengers and others.		Number of servants.		Total all classes.	
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line		3	1	4	...	5	...	...	...	5	1	...	1	...	1	5	2	5	3	...	...	...	...	...	...	...	...	...
3. Collisions between goods trains or parts of goods trains		4	9	13	...	...	...	3	...	3	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
4. Collisions between light engines	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Passenger trains or parts of passenger trains leaving the rails		2	1	3	1	9	...	...	1	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Goods trains or parts of goods trains, engines, etc., leaving the rails		1	11	12	...	...	1	...	1	...	...	1	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points	...	...	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9. Trains running over cattle on the line	...	...	125	125	...	...	...	...	...	...	...	12	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Ditto over obstructions on the line		...	7	7	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	73	73	...	...	...	...	...	...
11. Trains running through gates at level-crossings		...	12	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...
12. The bursting of boilers of engines		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12(a). Ditto of tubes, etc., of engines		...	5	5	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13. The failure of machinery, springs, etc., of engines		...	42	42	...	...	...	...	...	...	...	6	6	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
14. The failure of tyres		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of wheels		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles		...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17. Ditto of brake apparatus		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings		...	12	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...
19. Ditto of tunnels, bridges, viaducts, culverts, etc.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails		...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...
21. The flooding of portions of permanent-way		...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
22. Slips in cuttings or embankments		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23. Fire in trains		...	10	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts		...	9	9	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25. Other accidents		1	67	68	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
TOTAL ALL CLASSES		11	320	331	1	14	1	3	2	17	1	27	28	...	1	5	2	5	3	3	84	87	...	...	...	...	...	...

	Indian Midland (c).								
	Number.			Number of passengers and others.		Number of servants.		Total all classes.	
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line		...	...	...	...	...	...	...	...
3. Collisions between goods trains or parts of goods trains		2	2	...	...	...	...	...	...
4. Collisions between light engines	...	3	3	...	...	...	...	...	...
5. Passenger trains or parts of passenger trains leaving the rails		...	...	...	...	...	...	...	...
6. Goods trains or parts of goods trains, engines, etc., leaving the rails		2	2	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points		4	4	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed		3	3	...	...	...	...	...	...
9. Trains running over cattle on the line	...	...	...	...	...	...	...	...	...
10. Ditto over obstructions on the line		26	26	...	...	...	...	...	...
11. Trains running through gates at level-crossings		1	1	...	...	...	...	...	...
12. The bursting of boilers of engines		1	1	...	...	...	...	...	...
12(a). Ditto of tubes, etc., of engines		...	...	...	...	...	...	...	...
13. The failure of machinery, springs, etc., of engines		8	8	...	...	...	...	...	...
14. The failure of tyres		6	6	...	...	...	...	...	...
15. Ditto of wheels		...	...	...	...	...	...	...	...
16. Ditto of axles		...	...	...	...	...	...	...	...
17. Ditto of brake apparatus		...	...	...	...	...	...	...	...
18. Ditto of couplings		...	...	...	...	...	...	...	...
19. Ditto of tunnels, bridges, viaducts, culverts, etc.		5	5	...	...	...	...	...	...
20. Broken rails		...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way		...	...	...	...	...	...	...	...
22. Slips in cuttings or embankments		...	...	...	...	...	...	...	...
23. Fire in trains		...	...	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts		...	...	...	...	...	...	...	...
25. Other accidents		1	1	...	...	...	...	...	...
TOTAL ALL CLASSES		67	67	...	...	...	...	...	...

(a) Including the Delhi-Umballa-Kalka and the Tarkessur railways.
(b) Although for convenience classed amongst state railways, this line is the property of the Bengal Central Railway Company.
(c) Including the Bhopal-Itarsi, the Bina-Goona and the Bhopal-Ujjain railways.

ABSTRACT No. 3.—ACCIDENTS to TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS AND OTHERS and of RAILWAY SERVANTS KILLED or INJURED in each class of accident—*contd.*

STANDARD GAUGE—*contd.*

	North Western (a).								Oudh and Rohilkhand.								Eastern Bengal.							
	Number.			Number of passengers and others.		Number of servants.		Total all classes.				Number of passengers and others.		Number of servants.		Total all classes.				Number of passengers and others.		Number of servants.		Total all classes.	
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line		1	1	2	4	6	...	3	4	9	...	1	1	...	...	...	...	...	...		2	...	2	...	...	...	...	...	...
3. Collisions between goods trains or parts of goods trains		2	3	5	...	...	2	3	2	3	...	...	...	...	...	...	...	...	...		...	6	6	...	...	...	...	...	...
4. Collisions between light engines	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	1	1	...	...	...	...	...	...
5. Passenger trains or parts of passenger trains leaving the rails	...	...	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	...	28	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		1	...	1	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points	...	...	1	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...		...	1	1	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed		...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		2	7	9	...	...	...	...	...	...
9. Trains running over cattle on the line	...	...	97	97	...	...	...	...	...	...	...	69	69	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
10. Ditto over obstructions on the line		1	6	7	(b)1	(d)2	1	...	2	2	...	...	...	...	...	...	...	...	...		1	143	144	...	...	...	...	...	...
11. Trains running through gates at level-crossings		...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	6	6	...	...	...	...	...	...
12. The bursting of boilers of engines		...	...	...	...	...	...	...	...	...	1	...	1	...	(b)1	...	..	...	1		...	...	...	...	...	...	...	...	...
12(a). Ditto of tubes, etc., of engines		...	42	42	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
13. The failure of machinery, springs, etc., of engines		...	85	85	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...		...	4	4	...	...	...	...	...	...
14. The failure of tyres		...	1	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
15. Ditto of wheels		...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
16. Ditto of axles		...	1	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
17. Ditto of brake apparatus		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
18. Ditto of couplings		...	5	5	...	...	...	...	...	...	...	4	4	...	...	...	...	...	...		...	5	5	...	...	...	...	...	...
19. Ditto of tunnels, bridges, viaducts, culverts, etc.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
20. Broken rails		...	1	1	...	...	...	...	...	...	...	6	6	...	...	...	...	...	...		...	5	5	...	...	...	...	...	...
21. The flooding of portions of permanent-way		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
22. Slips in cuttings or embankments		...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
23. Fire in trains		1	5	6	1	5	...	...	1	5	...	1	1	...	...	...	...	...	...		...	2	2	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts		...	11	11	...	...	...	...	...	...	1	...	1	...	(d)2	...	...	...	2		...	1	1	...	...	...	...	...	...
25. Other accidents		...	55	55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	3	3	...	...	...	...	...	...
TOTAL ALL CLASSES		5	353	358	(c)6	(e)13	3	7	9	20	2	86	88	...	(d)3	...	...	...	3		6	184	190	...	...	...	...	...	...

	East Coast.								
	Number.			Number of passengers and others.		Number of servants.		Total all classes.	
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line		...	..	...	...	...	...	...	...
3. Collisions between goods trains or parts of goods trains		1	1	...	...	...	...	...	...
4. Collisions between light engines	...	...	...	...	...	...	...	...	...
5. Passenger trains or parts of passenger trains leaving the rails		1	1	...	...	...	...	...	...
6. Goods trains or parts of goods trains, engines, etc., leaving the rails		1	1	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points		6	6	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed		7	7	...	...	...	...	...	...
9. Trains running over cattle on the line	...	1	1	...	...	...	...	...	...
10. Ditto over obstructions on the line		63	63	...	...	...	...	...	...
11. Trains running through gates at level-crossings		1	1	2(d)2	...	...	...	2	...
12. The bursting of boilers of engines		...	...	...	...	...	...	...	...
12(a). Ditto of tubes, etc., of engines		...	...	...	...	...	...	...	...
13. The failure of machinery, springs, etc., of engines		..	...	...	...	...	...	...	...
14. The failure of tyres		1	1	...	...	...	...	...	...
15. Ditto of wheels		...	...	...	...	...	...	...	...
16. Ditto of axles		...	...	...	...	...	...	...	...
17. Ditto of brake apparatus		...	...	...	...	...	...	...	...
18. Ditto of couplings		...	...	...	...	...	...	...	...
19. Ditto of tunnels, bridges, viaducts, culverts, etc.		7	7	...	...	...	...	...	...
20. Broken rails		...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way		...	...	...	...	...	...	...	...
22. Slips in cuttings or embankments		...	..	...	...	...	...	...	...
23. Fire in trains		...	...	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts		...	...	...	...	...	...	...	...
25. Other accidents		4	14	...	...	...	...	...	...
TOTAL ALL CLASSES	2	102	104	(d)2	...	...	...	2	...

(a) Including the Hyderabad-Shadipalli, the Rájpura-Bhátinda and the Jammu and Kashmir railways.
(b) Not a passenger.
(c) Out of these, one was not a passenger.
(d) Not passengers.
(e) Out of these, two were not passengers.

ABSTRACT No. 3.—ACCIDENTS TO TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS AND OTHERS and of RAILWAY SERVANTS KILLED or INJURED in each class of accident—*contd.*

STANDARD GAUGE—*concld.*

	GREAT INDIAN PENINSULA (a).								BOMBAY, BARODA AND CENTRAL INDIA (b).								MADRAS (c).								THE NIZAM'S GUARANTEED STATE (d).								
	Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line	...	2	1	3	...	1	...	4	...	5	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2
3. Collisions between goods trains or parts of goods trains	...	...	7	7	...	...	...	2	...	2	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
4. Collisions between light engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
5. Passenger trains or parts of passenger trains leaving the rails	...	...	1	1	...	...	...	...	...	...	2	...	2	...	1	...	...	...	1	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	5
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	...	13	13	...	...	...	...	...	...	...	6	6	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	1	...	...	...	...	6
7. Trains or engines travelling in the wrong direction through points	...	...	24	24	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
8. Trains running into stations or sidings at too high a speed	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	7	...	...	...	7	...	...	...	...	...	...	...	8
9. Trains running over cattle on the line	...	...	17	17	...	...	...	...	...	...	...	17	17	...	...	...	...	...	...	...	106	106	...	...	...	...	...	...	...	...	23	23	...	...	...	...	9
10. Ditto over obstructions on the line	...	...	10	10	...	...	...	...	...	...	...	6	6	...	...	...	...	...	...	...	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
11. Trains running through gates at level-crossings	...	...	5	5	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	4	4	...	...	...	...	...	...	...	...	1	1	...	...	...	...	11
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
12(a). Ditto of tubes, etc., of engines	...	...	10	10	...	...	...	...	...	...	...	10	10	...	...	...	...	...	...	...	53	53	...	...	...	...	...	...	...	...	1	1	...	...	...	...	12(a)
13. The failure of machinery, springs, etc., of engines	...	...	38	38	...	...	...	...	...	...	...	31	31	...	...	...	...	...	...	...	40	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13
14. The failure of tyres	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
15. Ditto of wheels	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
16. Ditto of axles	...	...	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
18. Ditto of couplings	...	...	6	6	...	...	...	...	...	...	...	43	43	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
20. Broken rails	...	...	1	1	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20
21. The flooding of portions of permanent-way	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21
22. Slips in cuttings or embankments	...	...	6	6	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
23. Fire in trains	...	...	46	46	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23
24. Fire at stations, or involving injury to bridges or viaducts	...	2	6	8	...	...	...	...	...	...	2	6	8	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
25. Other accidents	...	2	2	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
	...	29	29	...	...	...	...	...	...	...	...	8	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	
TOTAL ALL CLASSES	2	222	224	...	1	...	6	...	7	4	138	142	...	1	...	...	...	1	...	220	220	...	7	...	...	...	7	2	29	31	...	...	...	...	...	...	

(a) Including the Wardha Coal, the Dhond-Manmád, the Khámgaon, and the Amrsoti railways.
(c) Including the Madras-Ennur section of the Beswada-Madras railway and the Kolar Gold-fields railway.
(b) Including the Godhra-Ratlam-Nágda, the Nánde-Hingoli, and the Gaekwar's Baroda railways.
(d) Including the Bezwada extension, East Coast State railway.

ABSTRACT No. 3.—ACCIDENTS TO TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS and OTHERS, and of RAILWAY SERVANTS KILLED or INJURED in each class of accident—*contd.*

METRE GAUGE.

	BENGAL AND NORTH-WESTERN (TIRHOOT AND COMPANY'S SECTIONS).								RAJPUTANA-MALWA (a).								SOUTHERN MAHRATTA (b).								
	Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
2. Ditto ditto and goods or mineral trains, engines and vehicles standing foul of the line	...	1	1	2	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2
3. Ditto goods trains or parts of goods trains	...	3	...	3	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	3
4. Ditto light engines	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
5. Passenger trains or parts of passenger trains leaving the rails	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	...	13	13	...	...	...	...	...	...	1	3	4	...	...	...	...	...	...	...	...	...	...	...	...	...	6
7. Trains or engines travelling in the wrong direction through points	...	...	1	1	...	...	...	...	...	...	...	7	7	...	...	...	...	...	...	1	1	2	...	...	...	...	7
8. Trains running into stations or sidings at too high a speed	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	4	4	...	...	...	...	8
9. Ditto over cattle on the line	...	...	36	36	...	...	...	...	...	...	...	77	77	...	...	...	...	...	...	...	156	156	...	...	...	...	9
10. Ditto over obstructions on the line	...	2	4	6	...	...	...	...	...	...	...	12	12	...	...	...	...	...	...	...	4	4	...	...	...	...	10
11. Ditto through gates at level-crossings	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	11
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
12(a). Ditto of tubes, etc., of engines	...	...	...	...	...	...	...	...	...	...	...	18	18	...	...	...	...	...	...	...	10	10	...	...	...	...	12(a)
13. The failure of machinery, springs, etc., of engines	...	...	14	14	...	...	...	...	...	...	...	12	12	...	...	...	...	...	...	...	9	9	...	...	...	...	13
14. Ditto of tyres	...	...	...	...	...	...	...	...	...	...	...	6	6	...	...	...	...	...	...	...	2	2	...	...	...	...	14
15. Ditto of wheels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
16. Ditto of axles	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13	13	...	...	...	...	16
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
18. Ditto of couplings	...	...	7	7	...	...	...	...	...	...	...	15	15	...	...	...	...	...	...	...	21	21	...	...	...	...	18
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
20. Broken rails	...	...	1	1	...	...	...	...	...	...	...	10	10	...	...	...	...	...	...	...	...	...	...	...	...	...	20
21. The flooding of portions of permanent-way	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	6	...	...	...	...	21
22. Slips in cuttings or embankments	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
23. Fire in trains	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	23
24. Fire at stations, or involving injury to bridges or viaducts	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4	...	...	...	...	24
25. Other accidents	...	2	3	5	...	...	...	1	...	1	...	27	27	...	...	...	1	...	1	...	2	2	...	...	...	...	25
TOTAL ALL CLASSES	8	85	93	...	...	...	1	...	1	5	193	198	...	...	...	1	...	1	1	234	235	...	...	...	...		

(a) Including the Pálanpur-Deesa, the Ahmedabad-Parantij and the Gaekwar's Mehsana railways.
(b) Including the Guntakal-Mysore frontier, the Mysore section (Southern Mahratta), the Kolhapur, the Yesvantpur-Mysore frontier, and the Mysore-Nanjangúd railways.

ABSTRACT No. 3.—ACCIDENTS to TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS and OTHERS, and of RAILWAY SERVANTS KILLED or INJURED in each class of accident—*contd.*

METRE GAUGE—*contd.*

	SOUTH INDIAN(a).									ASSAM-BENGAL.									BURMA.									
	Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
2. Ditto ditto and goods or mineral trains, engines and vehicles standing foul of the line	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
3. Ditto goods trains or parts of goods trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	2
4. Ditto light engines	1	...	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	5	2	7	...	...	...	...	...	3
5. Passenger trains or parts of passenger trains leaving the rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	5	...	...	...	...	...	4
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	1	1	...	...	...	...	...	...	2	...	2	...	...	...	1	...	1	1	2	3	...	...	...	...	...	5
7. Trains or engines travelling in the wrong direction through points	...	2	2	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	2	9	11	...	...	...	...	...	6
8. Trains running into stations or sidings at too high a speed	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	7
9. Ditto over cattle on the line	...	165	165	...	...	...	...	...	...	1	38	39	...	...	...	...	...	...	...	2	2	...	...	...	...	...	8
10. Ditto over obstructions on the line	...	2	2	...	...	...	1	...	1	...	2	2	...	...	...	...	...	...	1	41	42	...	...	...	...	...	9
11. Ditto through gates at level-crossings	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	(b)1	...	...	...	1	10
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
12(a). Ditto of tubes, etc., of engines	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
13. The failure of machinery, springs, etc., of engines	...	4	4	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	2	2	...	...	...	...	...	12(a)
14. Ditto of tyres	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	3	4	7	...	...	...	...	...	13
15. Ditto of wheels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
16. Ditto of axles	1	6	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	15
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	5	...	...	...	...	...	16
18. Ditto of couplings	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	...	...	...	...	...	...	...	...	...	4	4	...	...	...	...	...	...	1	1	2	...	...	...	...	...	18
20. Broken rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
21. The flooding of portions of permanent-way	...	3	3	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	1	...	1	...	...	...	...	...	20
22. Slips in cuttings or embankments	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	21
23. Fire in trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
24. Fire at stations, or involving injury to bridges or viaducts	...	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	22	...	...	...	...	...	23
25. Other accidents	...	1	1	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
TOTAL ALL CLASSES	...	2	2	...	...	...	...	...	...	...	7	7	...	...	...	1	...	1	6	...	6	...	...	...	...	...	25
	2	196	198	...	...	...	1	...	1	6	58	64	...	...	...	2	...	2	34	98	132	(b)1	...	...	1	1	1

(a) Including the Mayavaram-Mutupet railway.

(b) Not a passenger.

ABSTRACT No. 3.—ACCIDENTS to TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the [illegible]th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS and OTHERS, and of RAILWAY SERVANTS KILLED or INJURED in each class of accident—*contd.*

METRE GAUGE—*contd.*

	EASTERN BENGAL (a).									CAWNPORE-BUNHWAL.									DEOGHUR.									
	Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
2. Ditto ditto and goods or mineral trains, engines and vehicles standing foul of the line	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
3. Ditto goods trains or parts of goods trains	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
4. Ditto light engines	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
5. Passenger trains or parts of passenger trains leaving the rails	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
7. Trains or engines travelling in the wrong direction through points	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
8. Trains running into stations or sidings at too high a speed	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
9. Ditto over cattle on the line	...	51	51	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
10. Ditto over obstructions on the line	1	7	8	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
11. Ditto through gates at level-crossings	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
12(a). Ditto of tubes, etc., of engines	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
13. The failure of machinery, springs, etc., of engines	...	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12(a)
14. Ditto of tyres	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13
15. Ditto of wheels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
16. Ditto of axles	3	3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
18. Ditto of couplings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
20. Broken rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
21. The flooding of portions of permanent-way	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20
22. Slips in cuttings or embankments	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21
23. Fire in trains	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
24. Fire at stations, or involving injury to bridges or viaducts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23
25. Other accidents	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
TOTAL ALL CLASSES	...	6	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
	9	84	93	...	...	...	...	...	...	1	5	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

(a) Including the Kaunia-Dharila (2' 6" gauge) branch.

ABSTRACT No. 3.—ACCIDENTS TO TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS and OTHERS, and of RAILWAY SERVANTS KILLED or INJURED in each class of accident—*contd.*

METRE GAUGE—*contd.*

	ROHILKUND AND KUMAON (COMPANY'S SECTION) (a).										BENGAL DOOARS.										DIBRU-SADIYA (b).									
	Number.			Number of passengers and others.		Number of servants.		Total all classes.			Number.			Number of passengers and others.		Number of servants.		Total all classes.			Number.			Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
2. Ditto ditto and goods or mineral trains, engines and vehicles standing foul of the line	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2
3. Ditto goods trains or parts of goods trains	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	3
4. Ditto light engines	...	1	1	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	4
5. Passenger trains or parts of passenger trains leaving the rails	...	2	2	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	5	...	3	3	...	...	...	...	...	...	5
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	3	3	...	...	...	...	...	...	6	...	1	1	...	...	...	...	...	...	6	...	1	1	...	...	...	...	...	...	6
7. Trains or engines travelling in the wrong direction through points	...	2	2	...	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	7
8. Trains running into stations or sidings at too high a speed	...	...	...	...	...	...	...	...	...	8	...	...	...	...	...	...	...	...	...	8	...	...	...	...	...	...	...	...	...	8
9. Ditto over cattle on the line	...	29	29	...	...	...	...	...	...	9	...	6	6	...	...	...	...	...	...	9	...	12	12	...	...	...	...	...	...	9
10. Ditto over obstructions on the line	...	2	2	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	10
11. Ditto through gates at level-crossings	...	...	...	...	...	...	...	...	...	11	...	...	...	...	...	...	...	...	...	11	...	...	...	...	...	...	...	...	...	11
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	12	...	...	...	...	...	...	...	...	...	12	...	...	...	...	...	...	...	...	...	12
12(a). Ditto of tubes, etc., of engines	...	3	3	...	...	...	...	...	...	12(a)	...	...	...	...	...	...	...	...	...	12(a)	...	...	...	...	...	...	...	...	...	12(a)
13. The failure of machinery, springs, etc., of engines	...	13	13	...	...	...	...	...	...	13	...	...	...	...	...	...	...	...	...	13	...	2	2	...	...	...	...	...	...	13
14. Ditto of tyres	...	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	14
15. Ditto of wheels	...	1	1	...	...	...	...	...	...	15	...	...	...	...	...	...	...	...	...	15	...	...	...	...	...	...	...	...	...	15
16. Ditto of axles	...	2	2	...	...	...	...	...	...	16	...	...	...	...	...	...	...	...	...	16	...	...	...	...	...	...	...	...	...	16
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	17	...	...	...	...	...	...	...	...	...	17	...	...	...	...	...	...	...	...	...	17
18. Ditto of couplings	...	9	9	...	...	...	...	...	...	18	...	...	...	...	...	...	...	...	...	18	...	5	5	...	...	...	...	...	...	18
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	...	...	...	...	...	...	...	...	19	...	...	...	...	...	...	...	...	...	19	...	...	...	...	...	...	...	...	...	19
20. Broken rails	...	...	...	...	...	...	...	...	...	20	...	...	...	...	...	...	...	...	...	20	...	...	...	...	...	...	...	...	...	20
21. The flooding of portions of permanent-way	1	...	1	...	...	...	...	...	...	21	...	...	...	...	...	...	...	...	...	21	...	1	1	...	...	...	...	...	...	21
22. Slips in cuttings or embankments	...	...	...	...	...	...	...	...	...	22	...	...	...	...	...	...	...	...	...	22	...	...	...	...	...	...	...	...	...	22
23. Fire in trains	...	8	8	...	...	...	...	...	...	23	...	...	...	...	...	...	...	...	...	23	...	...	...	...	...	...	...	...	...	23
24. Fire at stations, or involving injury to bridges or viaducts	...	2	2	...	...	...	...	...	...	24	...	1	1	...	...	...	...	...	...	24	...	...	...	...	...	...	...	...	...	24
25. Other accidents	...	7	7	...	...	...	...	...	...	25	...	1	1	...	...	...	...	...	...	25	...	...	...	...	...	...	...	...	...	25
TOTAL ALL CLASSES	1	84	85	...	...	...	...	...	...		...	9	9	...	...	...	...	...	...		3	21	24	...	...	...	...	...	...	

(a) Including the Lucknow-Bareilly section, Rohilkund and Kumaon railway.

(b) Including the Ledo and Tikak-Margherita Colliery railway.

ABSTRACT No. 3.—ACCIDENTS TO TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS and OTHERS, and of RAILWAY SERVANTS KILLED or INJURED in each class of accident—*contd.*

METRE GAUGE—*concld.*

	JODHPORE-BICKANEER (JODHPORE AND BICKANEER SECTIONS).										ODDEYPORE-CHITOR.										BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR (a).									
	Number.			Number of passengers and others.		Number of servants.		Total all classes.			Number.			Number of passengers and others.		Number of servants.		Total all classes.			Number.			Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
2. Ditto ditto and goods or mineral trains, engines and vehicles standing foul of the line	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2	...	1	1	...	...	3	2	3	2	2
3. Ditto goods trains or parts of good trains	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	3
4. Ditto light engines	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	4
5. Passenger trains or parts of passenger trains leaving the rails	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	5
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	6	...	2	2	...	...	...	...	...	...	6
7. Trains or engines travelling in the wrong direction through points	...	...	...	...	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	7
8. Trains running into stations or sidings at too high a speed	...	...	...	...	...	...	...	...	...	8	...	...	...	...	...	...	...	...	...	8	...	...	...	...	...	...	...	...	...	8
9. Ditto over cattle on the line	...	10	10	...	...	...	...	...	...	9	...	1	1	...	...	...	...	...	...	9	...	22	22	...	...	...	...	...	...	9
10. Ditto over obstructions on the line	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	10	...	1	1	...	...	...	...	...	...	10
11. Ditto through gates at level-crossings	...	...	...	...	...	...	...	...	...	11	...	...	...	...	...	...	...	...	...	11	...	1	1	...	...	...	...	...	...	11
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	12	...	...	...	...	...	...	...	...	...	12	...	...	...	...	...	...	...	...	...	12
12(a). Ditto of tubes, etc., of engines	...	1	1	...	...	...	...	...	...	12(a)	...	...	...	...	...	...	...	...	...	12(a)	...	1	1	...	...	...	...	...	...	12(a)
13. The failure of machinery, springs, etc., of engines	...	...	...	...	...	...	...	...	...	13	...	...	...	...	...	...	...	...	...	13	...	1	1	...	...	...	...	...	...	13
14. Ditto of tyres	...	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	14
15. Ditto of wheels	...	...	...	...	...	...	...	...	...	15	...	...	...	...	...	...	...	...	...	15	...	...	...	...	...	...	...	...	...	15
16. Ditto of axles	...	...	...	...	...	...	...	...	...	16	...	...	...	...	...	...	...	...	...	16	...	2	2	...	...	...	...	...	...	16
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	17	...	...	...	...	...	...	...	...	...	17	...	...	...	...	...	...	...	...	...	17
18. Ditto of couplings	...	...	...	...	...	...	...	...	...	18	...	...	...	...	...	...	...	...	...	18	...	...	...	...	...	...	...	...	...	18
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	...	...	...	...	...	...	...	...	19	...	...	...	...	...	...	...	...	...	19	...	...	...	...	...	...	...	...	...	19
20. Broken rails	...	...	...	...	...	...	...	...	...	20	...	...	...	...	...	...	...	...	...	20	...	...	...	...	...	...	...	...	...	20
21. The flooding of portions of permanent-way	...	...	...	...	...	...	...	...	...	21	...	...	...	...	...	...	...	...	...	21	...	1	1	...	...	...	...	...	...	21
22. Slips in cuttings or embankments	...	...	...	...	...	...	...	...	...	22	...	...	...	...	...	...	...	...	...	22	...	...	...	...	...	...	...	...	...	22
23. Fire in trains	...	...	...	...	...	...	...	...	...	23	...	...	...	...	...	...	...	...	...	23	...	...	...	...	...	...	...	...	...	23
24. Fire at stations, or involving injury to bridges or viaducts	...	...	...	...	...	...	...	...	...	24	...	...	...	...	...	...	...	...	...	24	...	1	1	...	(b)1	...	...	...	...	24
25. Other accidents	...	...	...	...	...	...	...	...	...	25	...	...	...	...	...	...	...	...	...	25	...	1	1	...	...	...	...	...	1	24
TOTAL ALL CLASSES	...	11	11	...	...	...	...	...	...		...	1	1	...	...	...	...	...	...		...	34	34	...	(b)1	3	2	3	3	

(a) Including the Jetalsar-Rájkot and the Rajkot-Jamnagar railways.

(b) Not a passenger.

ABSTRACT No. 3.—ACCIDENTS to TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS AND OTHERS, and of RAILWAY SERVANTS KILLED or INJURED in each class of accident—*contd.*

SPECIAL GAUGES.

	JORHAT (2′ 0″).									DARJEELING-HIMALAYAN (2′ 0″).									TEZPUR-BALIPARA (2′ 6″).									THE GAEKWAR'S DABHOI (2′ 6″).									
	Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
3. Collisions between goods trains or parts of goods trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
4. Collisions between light engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
5. Passenger trains or parts of passenger trains leaving the rails	1	...	1	...	...	...	...	...	...	5	...	5	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
7. Trains or engines travelling in the wrong direction through points	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
8. Trains running into stations or sidings at too high a speed	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
9. Trains running over cattle on the line	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
10. Ditto over obstructions on the line	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
11. Trains running through gates at level-crossings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
12(a). Ditto of tubes, etc., of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12(a)
13. The failure of machinery, springs, etc., of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13
14. Ditto of tyres	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
15. Ditto of wheels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
16. Ditto of axles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
18. Ditto of couplings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
20. Broken rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20
21. The flooding of portions of permanent-way	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21
22. Slips in cuttings or embankments	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
23. Fire in trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23
24. Fire at stations, or involving injury to bridges or viaducts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
25. Other accidents	...	1	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
TOTAL ALL CLASSES	1	2	3	...	...	...	...	...	...	5	5	10	...	...	...	...	...	...	...	4	4	...	...	...	...	...	...	...	3	3	...	...	...	...	...	

ABSTRACT No. 3.—ACCIDENTS to TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS AND OTHERS, and of RAILWAY SERVANTS KILLED or INJURED in each class of accident—*concld.*

SPECIAL GAUGES—*concld.*

	RAJPIPLA (2′ 6″).									COOCH BEHAR (2′ 6″).									MORVI (2′ 6″).									
	Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		Number.			Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number of headings.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
2. Ditto ditto and goods or mineral trains, engines and vehicles standing foul of the line	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
3. Ditto goods trains or parts of goods trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
4. Ditto light engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
5. Passenger trains or parts of passenger trains leaving the rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	5
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	6
7. Trains or engines travelling in the wrong direction through points	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
8. Trains running into stations or sidings at too high a speed	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
9. Ditto over cattle on the line	...	1	1	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	10	10	...	...	...	...	...	...	9
10. Ditto over obstructions on the line	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	10
11. Ditto through gates at level-crossings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
12(a). Ditto of tubes, etc., of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12(a)
13. The failure of machinery, springs, etc., of engines	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13
14. Ditto of tyres	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
15. Ditto of wheels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
16. Ditto of axles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
18. Ditto of couplings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
20. Broken rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20
21. The flooding of portions of permanent-way	...	...	...	...	...	...	...	...	...	1	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21
22. Slips in cuttings or embankments	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
23. Fire in trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23
24. Fire at stations, or involving injury to bridges or viaducts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
25. Other accidents	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
TOTAL ALL CLASSES	...	1	1	...	...	...	...	...	...	1	7	8	...	...	...	...	...	...	...	18	18	...	...	...	...	...	...	

ABSTRACT

No. 4.

ACCIDENTS to TRAINS, ROLLING STOCK, PERMANENT-WAY, etc., reported during the SIX MONTHS ending with the 30th June 1898, as having occurred on the several RAILWAYS open for TRAFFIC in INDIA, distinguishing the different CLASSES of ACCIDENTS and the number of PASSENGERS AND OTHERS and of RAILWAY SERVANTS KILLED or INJURED in each class of accident.

	STANDARD GAUGE LINES.												METRE GAUGE LINES.											
	Average number of accidents during the three previous corresponding periods of 1895, 1896 and 1897.	Six months ending with the 30th June 1898.											Average number of accidents during the three previous corresponding periods of 1895, 1896 and 1897.	Six months ending with the 30th June 1898.										
		Number.				Number of passengers and others.		Number of servants.		Total all classes.				Number.				Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Collisions between passenger trains or parts of passenger trains	2	1	3	...	1	1	...	...	...	...	...	...	2	1	3	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line	7	5	12	9	6	15	4	13	5	9	9	22	4	4	8	3	2	5	...	...	...	...	...	...
3. Collisions between goods trains or parts of goods trains	5	25	30	7	30	37	...	...	2	8	2	8	2	9	11	11	3	14	...	...	...	...	...	...
4. Collisions between light engines	...	6	6	1	7	8	...	...	...	...	...	...	...	3	3	2	7	9	...	...	...	...	...	...
5. Passenger trains or parts of passenger trains leaving the rails	6	11	17	6	10	16	1	10	...	...	1	10	10	12	22	7	9	16	...	...	...	...	...	...
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	5	62	67	2	73	75	...	...	1	...	1	...	2	49	51	4	33	37	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points	2	42	44	2	52	54	...	7	...	...	...	7	4	26	30	3	16	19	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed	2	6	8	...	3	3	...	...	...	...	...	...	...	5	5	...	9	9	...	...	...	...	...	...
9. Trains running over cattle on the line	1	644	645	1	771	772	(a) 3	(a) ...	...	...	...	...	6	671	677	2	647	649	...	...	...	...	...	...
10. Trains running over obstructions on the line	6	46	52	3	43	46	...	2 (b)	1	...	4	2	7	30	37	4	36	40	(b) 1	...	...	...	...	...
11. Trains running through gates at level-crossings	3	17	20	1	26	27	...	1	...	...	...	1	1	8	9	...	4	4	...	...	...	...	...	...
12. The bursting of boilers of engines	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12(a). The bursting of tubes, etc., of engines	...	68	68	...	130	130	...	...	...	...	1	...	...	33	33	..	38	38	...	...	...	...	...	...
13. The failure of machinery, springs, etc., of engines	...	189	189	...	256	256	...	...	...	...	...	1	...	88	88	3	66	69	...	...	...	...	...	...
14. The failure of tyres	1	2	3	...	3	3	...	...	...	...	...	...	...	5	5	1	8	9	...	...	...	...	...	...
15. Ditto of wheels	...	2	2	...	2	2	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...
16. Ditto of axles	...	6	6	...	8	8	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...
17. Ditto of brake apparatus	...	1	1	...	...	...	...	...	...	...	...	...	3	21	24	5	32	37	...	...	...	...	...	...
18. Ditto of couplings	...	41	41	...	92	92	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	1	1	...	...	...	...	...	...	...	...	...	2	59	61	1	67	68	...	...	...	...	...	...
20. Broken rails	...	20	20	...	18	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way	2	8	10	...	7	7	...	...	...	...	...	...	...	19	19	1	19	20	...	...	...	...	...	...
22. Slips in cuttings or embankments	...	8	8	...	7	7	...	...	...	...	...	...	1	4	5	3	11	14	...	...	...	...	...	...
23. Fire in trains	2	65	67	3	72	75	1	5 (a) 2	...	...	1	5	...	1	2	1	...	1	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts	...	22	22	2	28	30	...	...	...	...	...	...	...	34	34	...	37	37	...	...	...	...	...	...
25. Other accidents	2	86	88	1	187	188	...	...	...	...	2	...	...	15	51	7	12	19	...	(b) 1	...	...	...	...
TOTAL FOR THE SIX MONTHS ENDING WITH THE 30TH JUNE 1898	...	...	...	38	1,832	1,870	(c) 9	(d) 40	9	18	18	58	...	...	...	8	59	67	...	...	...	...	...	...
Average of the three previous corresponding periods of 1895, 1896 and 1897	...	...	...	40	1,385	1,431	(e) 11	(d) 50	4	17	15	67	...	...	...	52	1,142	1,194	(b) 1	(e) 8	...	...	...	...
Mean mileage worked					12,328												8,493							
Number of servants employed					127,417												59,024							
Train-mileage of all descriptions					26,326,635												11,381,834							
Number of passengers carried					48,659,749												27,504,594							
Passenger-mileage					1,997,195,411												981,386,387							
Per mile open—																								
Train-mileage of all descriptions					2,135												1,340							
Number of passengers carried					3,947												3,248							
Passenger-mileage					162,004												115,552							
Proportion of passengers killed					0·123												.....							
Ditto of passengers injured					0·719												.....							
Ditto of passengers killed or injured					0·003												.....							
Proportion of servants killed					0·018												.....							

	SPECIAL GAUGE LINES.												TOTAL ALL GAUGES.											
	Average number of accidents during the three previous corresponding periods of 1895, 1896 and 1897.	Six months ending with the 30th June 1898.											Average number of accidents during the three previous corresponding periods of 1895, 1896 and 1897.	Six months ending with the 30th June 1898.										
		Number.				Number of passengers and others.		Number of servants.		Total all classes.				Number.				Number of passengers and others.		Number of servants.		Total all classes.		
	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, No. IX of 1890.	Other accidents.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Collisions between passenger trains or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	...	...	...	4	2	6	...	1	1	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line	3	2	3	2	...	...	...	...	...	...	...	...	...	11	9	20	12	8	20	4	13	8	11	12	24
3. Collisions between goods trains or parts of goods trains	...	...	...	...	...	...	...	...	...	...	...	...	...	7	34	41	18	33	51	...	...	2	8	2	8
4. Collisions between light engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	9	3	14	17	...	...	...	...	...	...
5. Passenger trains or parts of passenger trains leaving the rails	...	1	...	1	2	1	3	6	5	11	...	...	...	18	24	42	19	24	43	1	10	...	1	1	11
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	...	...	...	...	1	7	8	...	3	3	...	...	...	8	118	126	6	109	115	...	...	1	..	1	...
7. Trains or engines travelling in the wrong direction through points	...	...	...	...	...	...	...	...	1	1	...	...	...	6	68	74	5	69	74	...	7	...	..	...	7
8. Trains running into stations or sidings at too high a speed	...	...	...	...	...	...	...	...	...	...	...	...	...	2	11	13	...	12	12	...	...	...	..	...	...
9. Trains running over cattle on the line	...	...	...	...	...	9	9	...	16	16	...	...	...	7	1,324	1,331	3	1,434	1,437	...	...	...	..	...	...
10. Trains running over obstructions on the line	...	1	1	1	1	2	3	...	6	6	...	...	...	14	78	92	7	85	92	(a) 4	(a) 2 (b)	1	1	5	3
11. Trains running through gates at level-crossings	...	...	...	...	...	...	...	...	...	...	...	...	...	4	25	29	1	30	31	...	1	...	..	...	1
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	..	...	...
12(a). The bursting of tubes, etc., of engines	...	...	...	...	...	1	1	...	...	...	...	...	...	...	102	102	...	168	168	...	...	...	1	...	1
13. The failure of machinery, springs, etc., of engines	...	...	...	...	...	5	5	...	1	1	...	...	...	...	282	282	3	323	326	...	...	...	...	...	...
14. The failure of tyres	...	...	...	...	...	...	...	...	1	1	...	...	...	1	7	8	1	12	13	...	...	...	...	...	...
15. Ditto of wheels	...	...	...	...	...	2	2	...	...	...	...	...	...	...	4	4	1	3	4	...	...	...	...	...	...
16. Ditto of axles	...	...	...	...	1	3	4	...	...	...	...	...	...	4	30	34	5	40	45	...	...	...	...	...	...
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...
18. Ditto of couplings	...	...	...	...	...	...	...	..	..	...	..	...	...	2	100	102	...	1	161	162	...	...	...	...	...
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	...	...	...	...	...	...	...	2	2	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails	...	...	...	...	...	1	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	40	...	1	37	38	...	...	...	...	...
22. Slips in cuttings or embankments	...	...	...	..	...	2	2	1	3	4	..	...	...	3	14	17	4	21	25	...	...	...	...	...	...
23. Fire in trains	...	...	...	...	...	...	...	...	...	...	...	...	...	1	9	10	1	7	8	..	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts	...	...	...	...	...	1	1	...	...	...	...	...	...	2	100	102	3	109	112	1	5 (a)	...	...	1	5
25. Other accidents	...	...	...	1	...	...	...	...	...	...	...	...	...	...	37	37	9	40	49	...	3	...	...	...	3
TOTAL FOR THE SIX MONTHS ENDING WITH THE 30TH JUNE 1898	...	4	...	4	...	...	...	...	2	2	...	...	...	9	130	139	9	248	257	..	...	...	4	...	4
Average of the three previous corresponding periods of 1895, 1896 and 1897	...	...	...	...	...	...	...	7	40	47	...	...	...	...	...	...	112	2,988	3,100	(e) 10	(f) 41	12	26	22	67
	1	4	2	12	...	...	...	5	34	39	...	...	...	1	...	1	...	...	...	103	2,561	2,664	(e) 12	(g) 58	5	22	17	80
Mean mileage worked									312									21,133						
Number of servants employed									1,775									188,216						
Train-mileage of all descriptions									2,83,476									37,991,945						
Number of passengers carried									398,876									76,563,219						
Passenger-mileage									(h)9,267,713									(h)2,987,849,511						
Per mile open—																								
Train-mileage of all descriptions									908									1,797						
Number of passengers carried									1,278									3,623						
Passenger-mileage									(h)31,739									(h)141,517						
Proportion of passengers killed									.....									0·078						
Ditto of passengers injured									.....									0·457						
Ditto of passengers killed or injured									.....									0·002						
Proportion of servants killed									.....									0·012						

(a) Not a passenger.

(b) Out of these, three were not passengers. Out of these, four were not passengers.

(c) Out of these, five were not passengers.

(d) Out of these, six were not passengers.

(e) Out of these, eight were not passengers.

(f) Excluding Tezpur-Balipara railway.

ABSTRACT No. 3. for TRAFFIC in

Appendix A to the abstract returns of accidents on Indian Railways for the six months ending with the 30th June 1898.

To

THE DIRECTOR OF RAILWAY TRAFFIC, (through the Senior Government Inspector of Railways, Lucknow).

Dated Lahore, the 18th May 1898.

I have the honour to report, for the information of the Government of India, the results of a joint committee of enquiry, at which I was present, held at Jhimpir station, North Western railway, on the 25th and 27th April 1898, to enquire into the particulars of an accident which occurred at that station on the 25th idem.

The committee of enquiry was composed of the following officers :—

Mr. V. E. DEBROE, *Executive Engineer* . . . *President.*
„ LEO. BEAN, *District Traffic Superintendent* . . } *Members.*
„ H. H. BUCKLAND, *District Locomotive Superintendent* . }

The following officers were also present :—

Mr. C. H. C. BICKERTON, *Government Inspector.*
„ C. J. KEENE, *Deputy Traffic Superintendent.*
„ E. W. TOMKINS, *Deputy Superintendent, Railway Police.*
HAJI ABDULLA, *Third class Magistrate, Jerruck.*

A list of passengers killed and injured and of damage to rolling stock will be found in Annexures Nos. 1 and 2.

DESCRIPTION OF ACCIDENT.

No. 7 up mail of 24th April 1898, left Kurrachee as usual and arrived at Jhimpir about 1 hour late owing to having been detained at Malir by the quarantine authorities. The mail is timed to cross Nos. 60 down and 63 up at this station and these trains waited to cross her on her arrival. No. 60 down standing on the down platform line and No. 63 up on the up relief siding. The up main line was left clear for the mail to run on, and the distant and home signals were lowered for her to enter the station yard. The entrance facing points, however, in place of being set for the straight were set for the cross-over to the down line on which No. 60 down was standing, and the mail on entering the yard was switched on to the down line and collided with the goods train. The collision was severe and heavy damage to life and limb and rolling stock was the result.

Evidence.

Evidence of Mr. deBroe, Executive Engineer.—1. There are two questions of fact in dispute, namely (1) as to whether the assistant station master and pointsman respectively gave and received the proper orders as per Rule Book for the reception of the mail train, and (2) as to whether the prescribed speed of ten miles per hour over facing points was or was not exceeded by the driver.

2. Touching the first contingency, I am only able to say that immediately after the collision the guard of the mail drew my attention to the lock of the points lying alongside and to the fact that the disc indicator was burning brightly and showed a green light for the up train, thereby indicating that the points were set for the turn-out and not for the straight. The home and distant signals were also lowered and were burning brightly.

3. As regards the second question, I have no hesitation in saying the speed must have been very high. If the driver's statement is to be believed, that he was aware that he was on the wrong line as soon as he reached the points, he had a distance of 388 feet in which to pull up or break his speed, and if he is correct in saying that he both reversed and applied his vacuum, he must have been running at a very high speed, seeing how completely he failed to reduce the force of the collision. But even supposing that the driver lost his head and omitted to apply the brake, the collision with a speed of ten miles an hour would not have made such a mess as it did. A reference to the section will show that the driver had a rising grade of 1 in 337 for over a mile before reaching the points, and he should therefore have had no difficulty in keeping full control over his train.

4. I believe that no first or second class passengers were injured. A reserved second class which came next to my carriage was occupied by a clergyman and his family who assured me they were unhurt. A child belonging to this party was somewhat frightened and I helped them out of the carriage and conducted them to the waiting room where they settled themselves down until the onward up mail started. The clergyman informed me that the child was not hurt. The rest of the 1st and 2nd class passengers remained in their carriages and made no complaint of having sustained injury.

5. I heard no complaint from the syces in charge of the horses at the rear of the train and believe that they escaped without damage.

6. Immediately after the accident I wired to Kotri for the relief train and the next few hours, namely, 2 A. M. to 6-30 A. M., were spent in rescuing the wounded from the wreck and extricating the dead. Platelayer Abdulla, who arrived from Meting by 8 down, rendered excellent service in these endeavours. The night was pitch dark and he crept in under the wreck, axe in hand, at considerable personal risk. A first class European passenger (whose name District Traffic Superintendent will ascertain) also personally worked hard at this job, and with the aid of two soldiers of the

Highland Light Infantry, who worked with a will, saved some of the imprisoned passengers in their distress.

7. The Medical Officer and Police arrived by the relief train from Kotri and at once took charge of the dead and wounded.

Record of evidence in the case of accident to 7 Up mail at Jhimpir on 25th April 1898, taken down on the spot by District Traffic Superintendent, District Locomotive Superintendent and Executive Engineer.

Gopal Das, Assistant Station Master on duty, age 32, service 12 years, as Assistant Station Master Jhimpir, 20 months.—I came on duty at 19 hours on the 24th April 1898. Three trains, 63 up, 60 down and 7 up had to be crossed at my station. When 63 up left Jánabád at 0-43 hours, I gave label No. 2 to Maloo pointsman with the key of west entrance points and ordered him to set the points for the up line on the straight, to receive this train. This was done and 63 up was put into up relief siding. Train No. 60 down arrived after 63 up and was received on the down main line. After having given arrival of 63 up to Jánabád he asked line clear for 7 up which I gave, Maloo then came back to me with the label and the key of the west entrance points and I then ordered him to receive 7 up on the up line and to let out 60 down from the down line on to the up line to Jánabád after arrival of 7 up. I got "on arrival" line clear from Jánabád for 60 down. I then came out on to the centre line on my way to the up platform and exchanged signals with Maloo pointsman. He acknowledged the signal. Disc at points was showing a white back light indicating that the points were set for the up main line. I then ordered my man (Dinoo bhisty) to lower the home signal and afterwards the distant signal. This I saw him do. The next thing I knew was that there had been a collision between 60 down and 7 up. On 7 up leaving Jánabád I myself rang the warning bell.

Re-called.

60 Down arrived at 1-30
63 Up „ at 1-18
7 Up „ at 2-12

The proper crossing for these 3 trains is Jhimpir, but owing to detention to 7 up at Malir on account of plague quarantine, the crossings have been somewhat irregular of late. When I gave Maloo instructions about receiving 7 up, the other pointsman Alla Rukhya was not present. When I gave the pointsmen instructions for receiving 60 down and 63 up, I had no news of the mail. I asked line clear for 60 down from Jánabád and this was refused, *vide* line clear inquiry book.

The signal I exchanged with Maloo at the points was a hand lamp showing *white* which was waved. This did not comply with rule 113 (*e*) 1. I have always been in the habit of exchanging white signal for the second line and not green, as this is in accord with the colour shown by the disc.

Thomas Whighan Teasdale, spare Guard of 7 Up Mail of 24th April 1898.—I was travelling in the second class carriage, third from the engine, by the above train. I was asleep when the collision woke me and I then walked down to the entrance points where I found the guard of No. 63 up and the guard of 7 up. In their company I found the lock of points lying on the sleeper close to the points and the bolt was through the tongue rail, but the cotter was lying on the ground alongside, having no chain fastening. I found no pointsman there at all and the points were set for cross-over road. The home signal was at danger when I saw it after I found the lock. The distant signal I did not observe. When I alighted from the train the time by my watch was 2-15 Madras. The ground disc signal which works with the points was showing green for the cross-over.

Maloo Pointsman, age 30, service 9 or 10 years, 9 years pointsman, 2 years at Jhimpir, in charge of west points.— When 63 up left Jánabád, I received the key of west entrance points and the label for No. 2 line (up line) and was told by the assistant station master that the goods had left Jánabád and was to be received on the 2nd line (up line). Pointsman Rakhie who was on duty at east end points had gone to let in 60 down when I received these orders. After having received my orders I came down to the points. I set and locked the points for the up line. 63 up came in and was backed into the up relief siding, 60 down, which was on the down platform then whistled and I concluded she was starting for Jánabád ; I turned and locked the points for the down line to let 60 down out. As the train did not come on I walked up towards the engine to find out what was going to be done. When I was near the engine I looked back and saw the mail was close to the distant signal. I then ran to the west entrance points to unlock and set them for the up line. I only had time to unlock the points but not time to turn them over when the mail was on the points. Immediately after the collision I was confused and alarmed, but I saw the guards pick up the lock. They did not ask me any question and I gave them no information. When I saw the mail was about to take the wrong line I shewed a red light and did all I could to get the driver to stop.

I only received orders to take 63 up on the up line and nothing was said about 60 down or 7 up mail.

The custom at this station, when two trains cross, is as follows, while I have been here. As soon as I have let one train in I reverse the points and let the other one out. No further orders being given unless a third train is expected. On this occasion I was not told that the mail was coming and as the down train whistled I concluded she had got line clear and was going out. Since the mail has been detained for medical examination at Malir, there has always been an uncertainty as to whether she would cross these other trains here or not, but on this occasion I was left in the dark and had to draw my own conclusions.

I did not hear the bell rung when 7 up left Jánabád. No bells are rung at this station for goods trains departures. When 60 down whistled no signals were exchanged between the assistant station master and myself. When the driver of 60 down whistled I waved him a green light to show him that my points were set correctly for him to go out.

Re-called.—I had no idea why 63 up was backed into the relief siding. This was done by the station master without consulting me.

After I admitted 63 up I remained at the points and did not return to the station before arrival of 7 up. I did not observe that the distant signal wire was being pulled off when I was at the points, although the wire passes close by.

James Whent, Driver of 7 Up Mail of 24th April 1898, age 56, service 21¼ years Driver.—When I approached Jhimpir, the distant, home and disc signals were all in my favour ; and the points set for the up line. One goods train was standing on the up relief siding and one on the down main line. On approaching the entrance points my train was sufficiently under control to pull up at the platform by using the vacuum brake. I shut off steam at the distant semaphore. As I came within 10 or 12 feet of the points I saw a man deliberately turn over the lever, and I then reversed and put on the brake, but the goods train was so close to the points that I had no chance of bringing up my train, and I collided with 60 down. I think the man was squatting near the points and jumped up when he saw me coming. I whistled on nearing the distant signal. As I passed the facing my speed was about 10 miles an hour.

Khamissa, Fireman, on 7 Up Mail of 24th April 1898, age 32 years, 6 years' service, 3 years first Fireman.—On approaching Jhimpir the distant, home and disc signals were all in our favour. When we were close to the points the pointsman turned over the lever suddenly and let us into the wrong line. I cannot say who the man at the points was. I saw no red light at the points.

Tara Chand, Station Master, age 34, service 18 years, Station Master 8 years, this station 4 years.— I was not on duty on the night of 24th April 1898, but was called when the accident occurred. I inquired what labels had been given to pointsman Maloo. The assistant station master informed me he had label No. 2 (west entrance points). The pointsman had this label and handed it over to me. I asked him how the accident had happened and he replied it was his luck. He did

not tell me that he was unaware that 7 up was coming or that he had received no orders from the assistant station master.

Ram Chandra, Guard of 60 Down, age 22 years, service 6 years, 3 years Guard.—When 60 down arrived at Jhimpir, 7 up had not left Jánabád. I heard the warning bell for 7 up rung, it was rung by one of the menials, I believe. The assistant station master did not ring the bell as he was in the office at the time. When 7 up left Jánabád the assistant station master left the office, but what he did I cannot say. I did not hear him give the pointsman any orders whatever. After the accident I went to the scene of collision but did not see the pointsman. I heard the other guards say that they could not find the pointsman.

Statement of Allah Rakhie, Pointsman, age 50, service 4 or 5 years in this station.— I was on duty on the night of 24th April. When 63 up and 60 down left Maloo and I were told by the assistant station master that these trains had left. I received the label for No. 1 line, and Maloo the label for No. 2 line. We then went to our respective points, 63 came in first and was backed on to the up relief siding. 60 down came in and was put on to station line. The assistant station master gave me no orders as to the departure of any train. Nor did I hear him give Maloo any such orders. The assistant station master in giving me orders for the reception of 60 down told me that after her arrival to keep my points set to allow 63 up to go ahead and back into up relief siding. Maloo was present at the time and must have heard these orders.

Driver Yusuff of 60 Down of 24th April 1898, age 54, service 39 years, 25 years Driver.—After taking water at Jhimpir I was told to move my train ahead so as to clear away for passengers at the back from one platform to the other. This I did ; and then the warning bell for 7 up was rung. I did not see any one wave a green light from the west entrance points to the station. Before 7 up came in, I three times noticed that the disc was showing a white light. When the mail was close to the distant signal the disc was showing a white back light. The home signal was down. I saw no one come near my engine, after the mail left Jánabád. I cannot say whether there was a man at the west entrance points.

I got no green signal from the points when I whistled to move ahead after taking water.

Re-called.—The speed of the mail when the collision occurred was 10 to 15 miles an hour. I saw no hand signals whatever in the hands of Maloo pointsman before the mail came in, but only the disc signal ; and none were displayed at the points where a red one should have been.

Din Mohammed, bhishty, age 20 years, service 5 or 6 years.—The warning bell for 7 up mail on 24th April 1898 was rung by assistant station master himself, not by me. I did not hear the assistant station master give the two pointsmen any orders as to reception of the two goods trains and the mail train. I was not ordered to lower any signals and did not do so. The *Bunqy* assists in lowering signals, etc. I do not know who lowered the signals on this occasion nor even if they were lowered at all.

Abdulla Tharo, Permanent-Way Inspector, Meting, age 35, service 20 years —When I arrived at the scene of accident by 8 down mail I examined the points and permanent-way and found them to be in good order. No damage was done to the road. I asked the pointsman, Maloo, how it was he had put up 7 mail on to the the wrong road and he informed me that he was dosing and threw over the lever inadvertantly when he saw the mail coming, when half asleep.

Sunta, Sweeper of Jhimpir, age 30 years, service 1 year.—When the warning bell for 7 up was rung I got up and came to the station and went to the office and closed an envelope at the request of the signaller. He then told me to take the line clear book to the up platform, which I did, the signaller accompanying me. The assistant station master remained in the office. The collision occurred while I was on the up platform and assistant station master was in the office or on the down platform. I cannot say which. I never ring the bells for the night mails.

Juggannath, Signaller at Jhimpir, age 20, service 1 year.—I was on duty on 24th, 25th April 1898, when 7 up mail came to grief. I received departure from Jánabád of 7 up and told the assistant station master to tell some one to ring the bell. He was then in the office. I do not know who rang the bell, but assistant station master went out of the office after departure of 7 up had been received. When the train came in I was on the up platform to hand over covers, etc., to the guard. I think the sweeper was also on the up platform. When 7 up came in, the assistant station master was in the yard on the centre line.

Statement of Francis Orridge, Guard, age 30 years, service 4 years.—I was guard of 7 up. On approaching Jhimpir I heard the driver whistle and I loo ed out for the signal and observed that both distant and home were lowered. We left Jánabád at 1-54 and arrived outside the distant signal Jhimpir (when the driver whistled) at 2-10. The vacuum brake was then applied by the driver to slow down the train. Just as I was preparing to leave the train and do my work at Jhimpir the collision occurred and I was thrown down. I did not apply my brake. After the collision I went to the points and found them put for the down platform line. But I found no pointsman there. I could not say at the time whether the points were locked or not. I then walked up to the engine to ascertain what had happened. When I examined the points the disc signal was showing green towards the station. We left Malir at 23-47 or 50 minutes late. We arrived at Jánabád at 1-52 or 1 hour and 4 minutes late. I saw Jhimpir distant signal at 2-10 and had we got to the platform I reckon we should have been 1 hour and 6 minutes late. No. 7 up is timed to cross 63 up and 60 down at Jhimpir. I have been running on 7 up for some time and have known 60 down to cross me at Jánabád when mail has been running late. When the collision occurred I should say the train speed must have been about 10 miles an hour. I met the driver soon after the accident and drew his attention to the position of the disc signal. I returned to the point and met guard Teasdale and also the guard of 63 up train. We found the lock was lying on a sleeper alongside the rail on the down side, the key was lying alongside the lock. The locking bolt was through the tongue rail, but the cotter was not in the bolt. The cotter was lying alongside, the lock was on the lever side and the cotter was on the disc signal side. I am sure there was no cotter in either of the bolts. I spoke to driver Whent soon after the collision and he informed me that the points were set for the straight as indicated by the disc signal, and that on approaching close to them he saw a man suddenly turn the lever over and put him into the down line. The vacuum brake was applied three times by the driver Once outside the disc signal, a second time inside the same, and a third time violently as I thought, but this may have been the collision itself ; I am not sure.

The statement of C. Zazarte age 34 years, service 8 years, 4 years as Guard of 63 Up.—My train arrived at Jhimpir at 1-18, and was received in the up line : after the engine had taken water the train was backed into the up relief siding. I then came to the office. I was then told by the assistant station master that I could not go on as the mail had left Jungshahi. About three minutes later I heard the bell ring for the mail departure from Jánabád. I don't know who rang the bell. I then heard the noise of the collision. I ran out and met the assistant station master running into the office. I observed that the home signal was lowered, I did not notice the disc signal at the points. When I went down to the points, guard Orridge pointed out to me that the disc was showing green. The lock and key were lying on the sleeper on the lever side of the points.

Finding.

The committee after considering the evidence are of opinion that the responsibility for this accident rests, primarily, with Gopal Dass, assistant station master, who disregarded Rule No. 113 (*e*) 1, inasmuch as he did not give Maloo, Pointsman, definite orders that 7 up mail was

to be received prior to the departure of 60 down goods, and that he also disregarded Rule No. 118 (*e*) 1, inasmuch as he did not satisfy himself, by exchanging the proper signals with the pointsman, that the points were properly set and locked for the up line before he caused the home and distant signals to be lowered in favour of the up train.

Secondly, we find that Maloo, pointsman, was to blame for not realising when 63 up was shunted into the relief siding that this must have been done to admit 7 up, and that he neglected to make himself acquainted with the order in which the assistant station master intended to receive the trains.

Thirdly, we find that the driver disobeyed the rule, printed as a foot-note on every page of the time-table, to the effect that trains entering station yards shall not pass over facing points at a higher speed than 10 miles per hour, the result of the collision proving beyond doubt that the speed must have been greatly in excess of this, and that the driver had not sufficient control over his train on approaching the facing points.

The committee do not believe the statement of the driver that the pointsman threw over the points lever just as the train approached.

The extent of the damage done to the rolling stock would lead the committee to the conclusion that the driver did not have time either to reverse or apply the vacuum brake after he found himself on the wrong road.

CONCLUSION.

I concur in the "finding" of the committee. The assistant station master having given the instructions necessary for the admission of the two goods trains, seems to have omitted to issue instructions for the admission of the mail, as, if the points marked A. in the plan had been left in the position they were in when No. 63 goods arrived, no accident would have occurred.

* * * * * * *

The statement of driver Whent, as to speed, cannot, I think, be accepted. The rule of 10 miles speed over facing points is, I am afraid, more than frequently broken. There is also difficulty in accepting his statement that he noticed the point indicator light as far away as the distant signal.

As orders for the prosecution of the assistant station master, pointsman Maloo, and driver Whent have issued, no further action is required.

It may perhaps be noted that it is more than probable that had the accident occurred *on the straight* greater damage would have resulted. As it was, being on a curve, a great part of the shock acted at an angle only on most of the carriages.

The Railway administration appears to have rendered all possible assistance to the injured.

LAHORE :
18th May 1898.

CHAS. H. C. BICKERTON,
Government Inspector.

Documents Accompanying.

(1) Annexures Nos. 1 and 2.
(2) * Three tracings.

Remarks by Senior Government Inspector.

I concur in the "finding" of the committee.

* * * * * * *

I also concur with the Government Inspector's remarks regarding the breach of the Rule 131, regulating speed of trains over facing points to 10 miles per hour.

LUCKNOW :
Dated 20th May 1898.

H. H. GAHAN,
Senior Government Inspector.

* Only one tracing has been re-produced.

ANNEXURE NO. 1 IN APPENDIX A TO THE ABSTRACT RETURNS OF ACCIDENTS ON INDIAN RAILWAYS FOR THE SIX MONTHS ENDING WITH THE 30TH JUNE 1898.

Names of passengers killed and injured in accident, handed over by Deputy Superintendent, Railway Police.

KILLED.

1. Allahdad Khan, son of Ubbas Khan, Pathan of Parwal, police station Parwal, Dhera Ismail Khan, 3rd class passenger, ticket No. 391 from Jungshahi to Laki, age 40 years.
2. Gujhardhar Dass, disciple of Rang Dass, Bairagi Fakir of Agra, 3rd class passenger, ticket No. 9207 from Kurrachee to Kotri Bunder, age 20 years.
3. Badri Dass, disciple of Udho Dass, Bairagi Fakir of Ajhodhya, District Fyzabad, North-Western Provinces, 3rd class passenger, ticket No. 9197 from Kurrachee City to Kotri Bunder, age 30 years.
4. Vaishmi Dass, disciple of Bhawan Dass, Bairagi Fakir of Agra, 3rd class passenger ticket No. 9211 from Kurrachee City to Kotri Bunder, 30 years of age.

SERIOUSLY INJURED.

1. Abdulla Khan, son of Sher Mohammad Khan, Pathan of Ghazni, Kabul, 3rd class passenger, No. from Kurrachee, age 25 years.
2. Shankar, disciple of Bhagwant Parshad, Bairagi Fakir of Bhilsam, tehsil Harraril, District Isargarh near Bundelkhand, age 25 years.
3. Ram Dyal, son of Adhar, disciple of Adhar, Bairagi Fakir of Karor, tehsil Raj Naggar of District Chatteripur.

SLIGHTLY HURT.

1. Dharm Dass, disciple of Bairag Das, Bairagi Fakir of Jassabad, Tehsil Dhammo, District Dhammo, Bhopal, age 16 years.
2. Sita Ram Dass, disciple of Jai Gopal Dass, Bairagi Fakir of Ajhodya, Fyzabad, North-Western Provinces, age 25 years.
3. Mohammed Faruq, 2nd guard No. 7 up mail, son of Sheikh Hosain of Kotri.
4. Mehr Din, Railway Police Constable, No. 546, travelling constable posted at Kotri.
5. Karim Bakhsh, son of Ibrahim, Kallasi on Engine No. 629 of No. 60 down goods, head-quarters Kotri.
6. Kishen Chand, son of Devi Dass, Ice seller on the up mail.

TOTAL DETAILS.

Killed	4	passengers.
Seriously injured	3	„
Slightly „	3	„
	2	Railway employés.
	1	„ Constable.
	13	

ANNEXURE No. 2 IN APPENDIX A TO THE ABSTRACT RETURNS OF ACCIDENTS ON INDIAN RAILWAYS FOR THE SIX MONTHS ENDING WITH THE 30TH JUNE 1898.

List of damages caused to stock through collision of No. 7 up mail with 60 down goods at Jhimpir on 25th April 1898.

No. and description of engines and vehicles.	Particulars of damages.
3868 Brake van.	2 Racker bars and 2 bar partition rails broken and body shifted, 4 axle boxes broken.
36 Reserved carriage.	4 axle boxes, 1 end framing bar, 2 door pillars and 2 window guaze wire frames broken and body shifted, 1 Verandah door bent.
490 II Class.	3 Axle boxes, 1 axle grand connecting rod broken and 1 bent, 1 bracket, 1 brake block hanger bracket and 2 truss bars broken, 1 pull rod bent, 1 end framing bar, 4 end mouldings, 3 side sunshade boards, 2 end sunshade boards and 4 brackets broken, 1 axle guard bent, 9 bolts and 3 foot boards broken, 4 hangers bent and 1 broken, 1 bathroom side panel and 1 side and 2 cross rails broken and body shifted, gratings, 2 bottom boards, 1 drawbar face plate, 1 dummy carrier and 1 universal hose coupling broken.
1197 Composite 3rd and int. Class.	Underframe very badly broken and bent, 2 axle guards and boxes broken and body smashed.
1556 3rd Class Bogie.	3 Compartments entirely smashed, 1 head stock broken, 1 end framing bar and 1 longitudinal bar bent, 1 side chain and 2 buffer sockets broken, 2 buffer plungers centre pins bent, 1 brake screw rod broken, 1 sole bar broken and 1 bent, 1 foot board split.
5058 B. C. G. W.	1 Head stock broken and 1 bent, 2 sole bars bent, 1 end panel, 3 end angle irons broken and 1 bent, 2 corner angle irons and 1 bottom sheet broken, 2 channel irons and 1 longitudinal bar bent, 1 buffer socket broken plunger centre pin bent, 1 bogie safety chain, 2 axle boxes and 2 stay rods broken.
26506 C. G. W.	1 Screw coupling shackle broken.
Engine 605 H. B.	Engine buffer beam smashed. Bogie cross stay bent, tender buffer packing broken, 2 engine buffers broken, cow-catcher with stays broken, left front framing very slightly bent, angle iron of buffer beam broken, a few bolts also broken.
Engine 629 K. R.	2 Engine buffers broken, smoke box front plate ripped, cow catcher smashed and stays bent. Front draw bar hook bent, 1 tender buffer broken, right and left outside tender frames bent, 1 intermediate buffer bracket broken, 1 tender coupling shackle broken, 1 tender tail lamp smashed.

G. I. C. P. O.—No. 189 P. W. D.—2-11-98—616—J. P. M.

Appendix B to the abstract returns of accidents on Indian Railways for the six months ending with the 30th June 1898.

FROM

THE GOVERNMENT INSPECTOR OF RAILWAYS,
Lahore,

To

THE DIRECTOR OF RAILWAY TRAFFIC,
Simla.

(Through the SENIOR GOVERNMENT INSPECTOR, LUCKNOW.)

Dated Lahore, 25th June 1898.

I have the honour to report, for information of the Government of India, the results of a Joint Committee of Enquiry, at which I was present, held at Multan on the 15th and 16th June 1898, to enquire into the particulars of an accident which occurred at Gílawála station, North Western Railway, on the 14th idem.

2. The Committee of Enquiry was composed of the following officers :

MR. F. G. ROYAL-DAWSON, *Executive Engineer, President.*

MR. R. C. WILLIAMS, *District Traffic Superintendent* } *Members.*
MR. T. GREGSON, *Offg. District Locomotive Superintendent* }
MR. C. H. C. BICKERTON, *Government Inspector, Present.*

DESCRIPTION OF ACCIDENT.

On the 14th June 1898, No. 58 down goods train had been received on the main line at Gílawála station, and shortly afterwards No. 117 up goods train arrived and was received on the main line loop. After No. 58 down goods train had left for Lodhrán station, the shunting of certain empty wagons, which it was desired to cut off from No. 117 up, commenced. In order to effect this, the front portion of the train was uncoupled and run forward on to the points of the main line over the cross-over, three empty vehicles were then detached to be hand-shunted from the remainder of the train into the dead end siding leading off from the loop siding. Two of these wagons had been taken into the dead end, and the 3rd (a bogie) was being shunted by four of the station staff, when No. 54 down goods train, disregarding signals, ran into the portion of No. 117 up which was at the points, pushing it back on to the vehicle which was being hand-shunted. Two of the men with the vehicle were killed, and rolling stock and permanent-way seriously damaged.

A sketch of the scene of accident, and a list of damages done, are attached.

EVIDENCE.

J. P. Moore, Driver, age 32, service 13 years, total 8 years as driver, Engine No. 552 H.—I was trainman of 117 up goods on morning of 14th. There were two engines, one in steam attached. The load up to Gílawála was about 40. We arrived at Gílawála at about 3-36, and were received on the loop line, so as to cross 58 down goods which was standing on the station line. On arrival, both engines of 117 up fuelled and watered. When fuelling was finished, the guard informed me that we had to do a shunt to detach three or four trucks from front portion of train which (trucks) had to be hand-shunted to dead siding. To enable this to be done, the coupled engines, with one truck attached, had to move ahead to clear the crossing for the dead siding. This was done, and my engine stood on the facing points of the main line. This was about 17 minutes after our arrival at the station. The 58 down goods had not yet departed, but did so almost immediately afterwards. I had been standing on the facing points about four or five minutes when I sighted a down train coming into Gílawála. She had just passed the distant signal and began whistling. This gave me to understand that the driver was not prepared to stop at the points. So I sounded my alarm whistle and shouted out to the men at the back to ascertain if there was any possibility of averting what appeared to be an inevitable collision. They replied by showing danger signals. Hand-shunting was in operation at the time. So I put my engine in position to back at once, keeping whistle open all the time. But when I found I could not back against the danger signals in rear, and that the incoming train was still advancing, I saw there was nothing to be done but jump off the engine, instructing my firemen to do the same, which they did.

Immediately after I jumped, the engines collided with sufficient force to have knocked me off my engine if I had been on it. My engine brakes were not on, so there was very little resistance to the shock. After the engines had come to a standstill, I called the attention of the station master and the guard of my train to the fact that two of my lights, the head and left buffer, were then burning.

I did not see the distant signal before the accident, as my attention was not directed to it, but there was a green disc signal at the points where I stood. The home signal was at danger. There was no pointsman at the points. I went to the points after the accident and found them locked. After this, the assistant station master came rushing out and directed my attention to the distant signal, which was at danger, by the green back light. I could not see the arm. There was no moon, the air was thick and there was no wind. There had been a sandstorm on the road in the earlier part of the night when we were between Chanigot and Ahmadpur. The air was not too thick to see the distant signal back light from the facing points after looking particularly for it.

Having crossed a train on my arrival, I did not expect another so soon, as I was not warned. On looking round to see what damage had been done, I came across two corpses, one being under the left trailing tender wheel of the attached engine and the other clear of the loop line on the further side at about one engine length from the dead siding, or three engine lengths from the other corpse.

When the Traffic Inspector arrived by 8 down train or four hours afterwards, I directed his attention to the fact that the facing points, when from that time to the were locked. I first heard a very short interval.

Bahadur Khan, age 35, service 11 years, station man and Driver, Engine 610 H. B.—I was driver of attached engine of 117 up goods on morning of 14th. Driver Moore of the leading engine and I, on arriving at Gflawála, first took fuel and water and then began shunting. The two engines took one truck and stood at the facing points of main line. The leading engine was on the points: I was behind. I was looking towards the shunting operations when driver Moore sounded the alarm whistle. I immediately opened my whistle. Our whistles were left open at danger for about one or two minutes before the collision occurred.

I heard the whistle of the incoming train in the distance before driver Moore responded with his danger whistle. The danger whistle was sounded immediately after the incoming train whistle was heard. I and my fireman remained on our engine when the collision occurred. I was knocked against the vacuum brake handle, but sustained no visible injury. The fireman was standing over the hand-brake of the tender and commenced screwing down the brake when the danger whistle sounded. The reversing lever was in its central position. I had placed it so when we first arrived at the points. The speed of the incoming train, at time of collision, was about 10 or 12 miles an hour.

At the time we commenced shunting, I noticed that the home signal was at danger. I did not notice the distant signal. The fireman applied the hand-brake by my orders, when I sounded the danger signal so as to protect the shunting operations in rear.

Ahmad Ali, son of Ladha, Fireman, Engine No. 610 H. B., age 26, service 3 years as Fireman.—I was fireman of the attached (second) engine of 117 up goods at Gflawála on morning of 14th June. We had started shunting and my engine, attached to the leading engine, was standing just behind the facing points of main line to allow of hand-shunting operations to go on behind us, when I heard the leading engine whistle sound an alarm. My driver immediately sounded a danger whistle, and at the same time ordered me to screw down the hand-brake to protect the shunting operations at the back. I screwed this brake tightly down before the collision occurred. There was plenty of time to screw the brake down tight, because about two minutes must have elapsed from the time the danger whistle first sounded till the time of the collision.

Khuda Bux, son of Gandi, Driver, Engine 509 H., age 30, service as Fireman 11 or 12 years; service as Driver since 8th May 1898.—As a fireman I have often done shunting in yards. I passed the shunter's examination a year ago, and driver's examination 3 months ago. I was driver of 54 down goods on morning of 14th June. 54 down left Multan at about 1-29. At Shujabad I received a caution line clear to the next station Gflawála, and understood that my train was following another. The time of departure written on the "line clear" from Shujabad was 3-21. I went at the ordinary speed of 18 or 20 miles per hour and kept a look-out for the train which I understood to be in front of me. On approaching Gflawála distant signal, I saw that it was at danger. I was about three telegraph posts away when I whistled for the signal to be lowered, and shut off steam at the same time, and began to put on the brake. Soon after I whistled, the light of the distant signal changed from red to green. I can swear that I saw the light change from red to green. On seeing this I immediately went on. I saw a green disc signal at the facing points. I also saw the head lights of an engine, but I did not see whether they were on the loop or main line or where they were. I did not notice whether the home signal was down or not; I was looking at the green disc signal.

(On being questioned.) I did not look at the home signal when I passed the distant signal, because it seemed to me there were trees in the way.

I was about two telegraph posts away from the facing points when I became aware that there was an engin[illegible] them. I did not hear it whistling, because the engine whistle drowned all other sounds. I [illegible] steam and put on the brake. I

The reason I did not look [illegible] place. passing the distant signal was, that [illegible] home signal after red lights of the engine on the line sight of the absorbed all my attention, so that I could think of nothing else.

I wish to point out that when I first saw the red lights of the engine in the yard, I thought it was on the main line, so that I could proceed on to the loop. I saw some white hand lights being moved about—at least one light in the neighbourhood of the shunting engine on my right hand side, and thought this was a signal for me to proceed. I drew the attention of both my firemen to this white light, and told them to take off the brake.

Khuda Bux also stated on 16th June 1898:—It is customary for drivers to gain five or six minutes of time in proceeding to a watering and fuelling station. I was thinking of this and also of the fact that I had left Shujabad late when I was approaching Gflawála. When I tried to stop the train by reversing the engine, the lever did not catch, but went forward again. There was not time to pull the lever back again before the collision. But I had already opened steam after reversing, so the steam was on at the time of the collision.

Daulat Khan, son of Babu Khan, Fireman, 509 H., age 35, service 16 years.—I was 1st fireman of 54 down goods, leaving Multan on morning of 14th Khuda Bux was my driver.

When we got to within two telegraph posts of the distant signal of Gflawála, the signal showed a half red and half green light, so the driver shut off steam, whistled and told me to put on the brake. When we got to the signal, the driver said the signal was "down," so I was to take off the brake, which I did, and the train went on by its own impetus, as the steam was not turned on again. The home signal was not visible then. I saw the green disc signal at the facing points and the red lights of an engine on the line near them when I was about one telegraph post away. We immediately opened both whistles, put down the brake, reversed, then removed the brake and opened steam again, but with a load of 32 vehicles behind us, these precautions were of no avail to avert the collision. The only lights I saw in Gflawála station yard were the green disc signal of the facing points and the red lights of the shunting engine.

Nihala, son of Sadda, age 20, service 5 years 8 or 9 months as Fireman, 2nd Fireman of Engine 509 H.—Evidence practically identical with that of driver Khuda Bux.

Pala, son of Devani, Pointsman of No. 3 facing points on main line, Gflawála, age 24, service as pointsman 5 or 6 months.—On the night of the 14th, I set the facing points to admit 58 down on to the station line, locked the points, then lowered the distant signal to admit the train. When the train arrived, I released the signal which flew up to danger. The signal works correctly and does not stick. I saw the arm fly back to danger when I released the signal. About 20 minutes after arrival of 58 down 117 up arrived. After departure of 58 down, I was ordered to detach one wagon and two trucks for shunting purposes. After unhooking the two engines and truck from the rest of the train, I ran to the facing points and set them for the loop. I put the cotter in and applied the padlock, but did not lock it, because I knew there was another down train coming in presently, when I would have to alter the points again.

I think 25 minutes elapsed from the time I began shunting to the time that the collision occurred. As soon as I set the points for shunting, I held a red light towards Shujabad, because I knew there was a train due from that direction. The night was dark, but there was no storm at the time. I was standing on the lever side of the points, holding the red light. I did not lower the distant signal again for the second incoming train, because I had no orders to do so. The home signal was not lowered. I heard no whistle from 54 down up to the time of the collision. I asked the gateman of the level-crossing what light he was showing to the incoming train when it first came in sight; he replied that he was showing the red light. The lights of 117 were all burning brightly.

Ganga Ram, son of Sirdar Chand, age 34, service 19 years, Assistant Station Master and Station Master 8 to 10 years on this line; Assistant Station Master at Gflawála.—I gave "line clear" to down goods 58 at Shujabad at 1-52. She left Shujabad at 2-30 and arrived Gflawála at 3-30, and was admitted on station line. As 58 down had to cross 117 up at Gflawála, which had left Lodhran at 2-54, the latter had to be admitted on the loop line and arrived at 3·34 by guard's watch and 3·44 by station clock. Shujabad asked for line clear, caution, for following 58 down: message received at 2-49 (station time), reply line clear signalled back at 2-54, and message of departure of 54 down from Shujabad leaving at 3-21, was received at Gflawála at 3-35 (station time). 54 down arrived Gflawála at 3-51 guard's booking, 58 down left at 4-0 according to station time. As soon as 117 arrived I informed, guard that four vehicles had to be shunted, but that 54 down already departed from Shujabad at 3-21, so "if you could possibly and safely finish the shunting in time, you might do so, otherwise wait until after arrival of 54 down." Guard said he had ample time on hand and would not take long. I again warned him that 54 down had already left Shujabad, 54 down due at Gflawála according to running time at 4-6. I gave orders to the menial staff to assist the guard in shunting. I then remained in the Telegraph office, and the key of the home signal was in my possession. There was no other man in the Telegraph office. Pala, pointsman, was at No. 3 points receiving 58 down. He did not return to the station for further orders. I told Buxsha, sweeper, to tell him that 54 down was following and was to be admitted on the station line. I gave this order as soon as 54 down had left Shujabad. I told Buxsha to take all available men to assist in shunting. I do not know when the shunting operation commenced. When I heard the danger whistles, I rushed out and heard a collision. I looked towards the distant signal and saw it at danger. It showed a green back light. This was before the collision.

C. Starr, Guard of 117 Up Goods on morning of 14th, age 22, service as Guard since December last, formerly Ticket Collector.—My tr[illegible] rived at Gflawála at 3-34 by my watch. I did no[illegible] whether there was any difference between m[illegible] the station time. The station master on duty did not bring to my notice any discrepancy in the time. Directly after my arrival the station master said he wanted four wagons. I told him that I had no wagons in front, but there were some trucks. Then he said, anything would do. He then told me to superintend the shunting, at the same time that a train had just left Shujabad station for Gflawála. There was another train, No. 58 down, standing on the station line at the time. The station master, after giving me the above instructions, remained in his office. I commenced shunting operations by cutting off three trucks and a bogie truck from the front part of the train. The two coupled engines and one truck went as far as the main line facing points so as to clear the dead siding points. Then two trucks were detached and hand-shunted into the dead siding by four of the station staff. These men then returned for the bogie truck and proceeded to hand-shunt it into the dead siding. I was between the dead siding and the cross-over. When I heard my driver whistling, I ran towards the main line side and saw the incoming train. I had not previously heard this train whistling. It was a dark night. I could only see the engine lights and could not tell whether it was actually moving or not. It was within the distant signal, I think. Immediately I saw it, I held up my danger signal to it. About a minute or two afterwards, the incoming train collided with the engine standing at the facing points. I saw nothing more of the shunting operations after I came across to the main line. When I began shunting, I saw that both the home and distant signals were at danger. I could distinctly see the green back light of the distant signal.

After the accident, I looked about to see whether any men had been injured, and found one man under the engine.

It is not my custom to inform the driver concerning expected trains. I did not warn the driver in this instance that 54 down was expected.

When 117 up arrived at Gflawála, the station master told me that 54 down had left Shujabad under caution message and was due at Gflawála at 4-6. The station master made this calculation, and I understood that his timing was the same as mine. I commenced shunting about 3-42; this gave me 24 minutes to shunt; but we are supposed to stop shunting 10 minutes before a train is due. This still left 14 minutes, which I considered sufficient for all the shunting that there was to do.

G. Walker, Guard of 54 Down on 14th, age 33, service as Guard 10½ years.—I was guard of 54 down leaving Shujabad for Gflawála on a caution message at 3-21 by my watch. I was in a bow window brake, so that I could see ahead. I did not notice the time when we reached the distant signal at Gflawála, but I looked at my watch when the collision occurred. It was 3-51. The distant signal was at danger when we passed it. We were going rather fast. After passing the distant signal I looked towards the home signal and saw that at danger also. When I saw that the driver was going rather fast in the face of the danger signal, I put my brake on. I saw one or two red lights on the line ahead, but I could not define them. It was a hand-brake I put on. There was no vacuum brake. The load of the train was 27-32 vehicles, all loaded. When the collision occurred, I was thrown against the end of the brake van, and my hand lamp was knocked out of my hand, but I was not actually injured. After collision I walked up to the scene and saw that assistance was being given to extricate the bodies of the men who were killed.

I think the driver tried to reduce speed after passing distant signal, but he did not actually begin whistling until a portion of the train had passed the distant signal.

Ram Rattan, son of Hari Ram, Hindu water carrier, age 17, service under a year.—I was shunting at Gflawála on the morning of the 14th. The truck I was shunting before the accident occurred was being pushed by four men, including myself.

I was on the extreme right, my left hand neighbour was Buxsha, sweeper. On the left hand side of the truck were Umra [bhisti] and Natu [chaukidar]. They being on the off side could not see the engines on the cross-over, but we being on the inner side could, and when we saw the collision we shouted to our companions and ran out of the way ourselves. But they apparently did not realize what our shouting meant. An hour after the accident we returned to the scene and found the two bodies laid out under the tank house. The only time I heard the engines whistling was immediately before the collision.

Buxsha, Sweeper, son of Phatta: age 28, service 7 years in Gflawála.—I was assisting in the shunting at Gflawála on the morning of the 14th. We had hand-shunted two wagons, and were hand-shunting the third, a bogie, when the accident happened. I and Ram

Rattan were pushing on the right hand side, and the two men who were killed were on the left hand side. I was knocked outside by the collision of the engine on the truck which I was shunting. As soon as I recovered, I ran to the platform and met the assistant station master, who asked me what had happened. I told him the engines had collided. He then told me to call the station master, who was asleep in his quarters. The station master and I then went to the scene of the accident. The station master called out the names of his staff and he also called out the drivers of the different engines, and all went to look for the missing men. We found one corpse (Umra's body) under the rear engine, and the other corpse (Natu) on the off side of the loop siding.

Jawala Pershad, son of Gopee Ram, age 29, service as Sub-Inspector 12 years.—I was asleep at my quarters at Gílawála on the morning of the 14th, when my mate came and woke me up and informed me there had been a collision in the yard. I hurried out and found a down train fouling the facing points of the main line. When the mail train arrived, its engine pulled off the carriages which fouled the main line, and after these carriages had been hand-shunted to the far end of the yard and put on to the loop, the mail train passed through. I then found that the facing points were a little bent. The bolt and cotter were in, but I did not see the padlock. The principal damage to permanent-way was at the points of dead siding; they had been split by the engines after the collision, having been set for the dead siding. The station master told me to put my gangmen on to help in picking out the bodies. One body was just about opposite the crossing of the dead siding, outside the line, the other was under the engine 610, which was on the points of the dead siding. I could not get this body out until I got a jack from the station master, as it was under one of the wheels of the tender. My gangmen then conveyed the bodies to the tank-house. The life was extinct when I saw the bodies.

Report of Permanent-Way Inspector, Multan, on accident of 14th June in Gílawála station yard, between points Nos. 2 and 3 (i.e.) *collision of 54 down goods with No. 117 up goods.*

I was informed of the above accident verbally by the carriage examiner at 5-25, and received official intimation by wire at 6 hours.

On receipt of the first intimation I advised my Executive Engineer and Sub-Divisional Officer of the same, and left with them for the scene of the accident in the relief train, arriving Gílawála at 8-15.

From enquiries made and marks found in the road I discovered that engine of No. 54 down goods first struck engine of 117 up goods 12 feet from the down facing points No. 3 and pushed it 374 feet into the loop siding, derailing bogie of engine of No. 54 down goods, as well as derailing and completely wrecking one low-sided truck No. 9767 and bogie truck No. 11939. Engine No. 509-H. of 54 down goods and No. 552-H. of 117 up goods were interlocked and badly damaged, as well as coupled engine No. 610-H. B.

Truck No. 9767 had mounted the tender of coupled engine No. 610-H. B. of 117 up goods, and the frame and sides of bogie truck No. 11939 were lying skew to the loop siding.

The two latter trucks were, at the time, being hand-shunted (detached from 117 up goods) into the dead end siding for which the engines had cut off to make room.

The down distant signal is 1,841 feet from points No. 3, and has a clear straight view of 5 miles on the down side (*i.e.*) mile 576-2 to 581-2, and 13 miles on the up side from mile 563 to 576. All the signals at this station have a clear view both up and down, and are clearly visible both by day and night.

I attach a plan of the yard at Gílawála, showing scene of accident.

The switch connection of points Nos. 2 and 3 and the road between was shaken and strained, as well as a rail length of sleepers broken, and two rails, 30 feet 75lbs., bent.

It is customary to speak of a bogie truck as equivalent to two vehicles. This probably gave the Platelayer the idea that two trucks were actully being shunted.

Finding.

From a study of the evidence, the actual facts appear to be as follows:—

On the morning of the 14th, the assistant station master of Gílawála gave "line clear" to 58 down at Shujabad at 1-52. At 2-30 the train left Shujabad and arrived at Gílawála at 3-30 and was received on the station siding. In the meantime 117 which had left Lodhrán at 2-54 was on her way to Gílawála and was received on the loop line at Gílawála at 3-34. At 2-49 No. 54 down at Shujabad asked for line clear to follow 58 down. A "following" caution message was consequently given at 2-54, and 54 down left Shujabad at 3-21. As 54 down was running under a "following" caution message, it was not supposed to run faster than the speed given by the time table (*vide* foot-note to Rule 17, clause O, of the General Rules). The distance between Shujabad and Gílawála is 14½ miles, and the time allowed is 45 minutes. Hence 54 down was not expected in Gílawála until 4-6. No. 117 up was a double engine train, the two engines being coupled in front. Both engines required fuel and water at Gílawála. The assistant station master also told the guard that he wanted four wagons detached and hand-shunted into the dead siding. After the engines had fuelled and watered, the shunting operations commenced. The time allowed for fuelling and watering is 7 minutes for each engine, and there is no reason to suppose that less time was taken on this occasion. Hence the shunting could not have begun before 3-34+14 minutes, that is 3-48. Shunting operations are supposed to cease 10 minutes before an incoming train is due (*vide* Rule 187-*a*.) Hence, as 54 down was expected at 4-6, the time limit of shunting would have been 3-56. Having watered and fuelled, the two engines with a truck attached, advanced as far as the facing points of the station line so as to clear the dead siding points for hand-shunting. Two trucks were then successively hand-shunted into the dead siding, and the shunters, four men, were pushing the last truck, a bogie, towards the dead siding, when No. 54 down arrived, and running against all signals, collided with the engines of 117 up (which were standing on the facing points) with such force that it carried them before it to a distance of 374 feet back on to the loop, splitting the points of the dead siding, overturning and crushing the bogie truck, which was being hand-shunted at the time, and killing two of the shunters on the spot, the other two narrowly escaping by letting go and darting to one side just before the shock. Every precaution seems to have been taken by the drivers and guard of 117 up to avert the collision, but the drivers were prevented from backing, because of the shunting operations in their rear. The leading driver reversed his engine, but did not dare open steam, the driver of the rear engine also screwed down his brake hard so as to protect the shunters from the impending collision. This circumstance perhaps tended to increase the shock of the collision, but it must also have tended to retard the speed of the incoming train after impact, so as to give time

to two of the shunters to escape. Otherwise, all four might have been killed. The collision occurred at 3-51, although 54 down was not due in the station until 4-6, and shunting was permissible up to 3-56.

It is thus evident that the driver had gained considerable time in the run from Shujabad to Gílawála.

The evidence is all against the driver's statement that the distant signal was "down." We therefore agree that he broke Rule 101 by not stopping dead on reaching it, even if under clause (*a*) of the same rule he had intended to draw cautiously inside the signal to protect the rear of the train. There was plenty of room for this, as the distance from the distant signal to facing points is 1,841 feet.

We also consider that in making up time between Shujabad and Gílawála he did not act in accordance with the letter of the foot-note to Rule 17, clause O, but we did not consider this a serious fault, as although he was running on a "following" caution message, he did not actually leave Shujabad for Gílawála until nearly half an hour after permission had been given.

We are also of opinion that the driver did not exercise ordinary caution in entering the station, and that he even lost control over his train. He is unable to say whether the home signal was up or down; and when he saw the engine lights on the line in front of him, he does not seem to have taken any particular action until he was close up to them. It appears from his own evidence that he pulled the reversing lever back, then opened steam without waiting to see that the lever had caught. The lever, as it happened, did not catch, but went "forward" again of its own accord, so that at the time of the collision his lever was forward and the steam on at the same time, thereby aggravating the shock.

We have inspected the "line clear" books of Gílawála and Shujabad, and find that the assistant station master's statement of a discrepancy of 10 minutes between his clock and the guards' watches is a pure fabrication, invented apparently with the intention of conveying the idea that he thought there was much more time for shunting than there actually was when he gave instructions to the guard of 117 up. It was also apparently invented to explain the fact that 58 down was booked as having left the station at 4-0, the real time being 3-50, for all the evidence goes to show that this train had only just left Gílawála a minute or two before 54 down arrived.

We consider that this alleged discrepancy of time is purely a side issue, the assistant station master apparently being not quite easy in his mind as to the time available for shunting.

But we cannot find that the traffic staff were to blame for having any shunting operations on at 3-51 (the time of the collision) seeing that by the rules above quoted they were entitled to the use of the yard for shunting purposes up to 3-56, *i.e.*, 10 minutes before 54 down was due. If we take driver Moore's evidence, 117 up arrived at Gílawála at 3-36, and 17 minutes later he was on the facing points of the station line, four or five minutes later the collision occurred.

This would make the time of the collision 3-57 or 3-58, which was still eight or nine minutes before 54 down was due. But driver Moore's time calculations do not profess to be anything more than mere estimates. They merely serve as a check on the time bookings of the guards.

The District Locomotive Superintendent wishes to call attention to the fact that the driver of 117 up was not informed by the guard that any down train was expected from Shujabad, and thinks that he (the driver) ought to have been warned before the shunting operations began.

Conclusion.

I concur in the finding of the committee.

The evidence shews that the signals were visible and in order and against No. 54 down goods, and that, although the road is straight and open, the driver ran through signals.

I agree with the District Locomotive Superintendent that guard Starr shewed a want of discretion in not warning his driver of an incoming train, which he himself had been informed was shortly due.

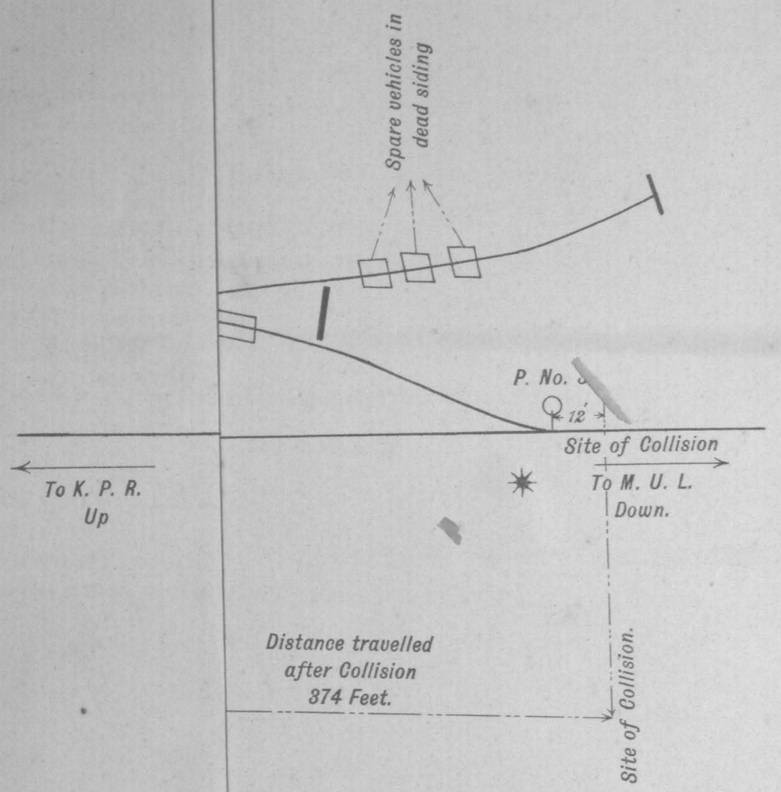
As the railway authorities have decided to prosecute the driver of No. 54 down train, no further action is necessary.

C. H. C. BICKERTON,
Government Inspector.

Remarks by Senior Government Inspector.

I concur in the finding of the Committee of Enquiry and in the remarks made by the Government Inspector, Lahore.

H. H. GAHAN,
Senior Government Inspector.



(Sd.) J. B. RABBITT.

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Litho., S. I. O., Calcutta.