

Govt. of Madras.

PUBLIC WORKS.

Dated

Recd.

Encl.

G.O. 29th April 1890 No. 578d

S. I. Ry

Letter from the S. I. Ry
of Ry regarding failure
of some some of the
new 50 lb. steel rails
recently used on the
Cand to the Cank Ry
for Ry.

80/✓

8/5

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Railway.

Read again the following paper :—

G.O., dated 27th January 1890, No. 148 R., Public Works.

Read the following paper :—

From the Consulting Engineer for Railways, dated 20th January 1890, No. 48.

From the Agent, South Indian Railway, to the Consulting Engineer for Railways, dated Trichinopoly, 17th January 1890, No. 85.

The Chief Engineer has reported to me as follows :—

“Referring to the breakages which have occurred among a certain brand of the new 50-lb. steel bull-headed rails, they all occurred among a batch of rails which was supplied by the firm of Messrs. Crawshaw Brothers, from whom about 43½ miles of track were received and laid into the line approximately as follows :—

	MILES.
Negapatam branch and from Tanjore northwards	31
Madras to St. Thomas' Mount	11
Kolatūr, North and Madurāntakam	1½
Near Panruti	¼
Total	43½

The breakages have been 11 in number out of about 19,000 rails laid between August 1886 and July 1889. I am desirous of instructions as to whether I am to continue the course now and hitherto followed, of closely watching the rails from the batch referred to or whether you wish the rails to be removed from the line and used in sidings as soon and as far as possible.

“Looking to the very small percentage of breakages, 11 in three years out of 19,000 rails, I am of opinion the continuance of the close watch on them is all the safeguard that can reasonably be demanded.”

2. I consider the course proposed to be followed by the Chief Engineer is sufficient, and I shall feel obliged by your informing me if it has your approval.

Submitted to Government.

2. I am myself disposed to concur with the Chief Engineer.

3. It would however be well, I think, to refer the question raised for the views of the Director-General of Railways.

4. Similar failures have, I believe, occurred on most lines in India since the introduction of that rail.

Order—dated 27th January 1890, No. 148 R., Public Works.

Ordered to be forwarded for the favor of an expression of the views of the Director-General of Railways.

(Here enter No. 149 R., dated 27th January 1890.)

(True Extract.)

(Signed)

C. J. SMITH, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Railway Branch.

Endorsement—dated 27th January 1890, No. 149 R., Public Works.

Forwarded.

(By order.)

(Signed) C. J. SMITH, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Railway Branch.

Read also the following paper :—

From Colonel L. CONWAY-GORDON, R.E., Director-General of Railways, to the Joint Secretary to the Government of Madras, Public Works Department (Railway Branch), dated Simla, 1st March 1890, No. 292 S.

I have the honor to acknowledge the receipt of your No. 149 R., dated 27th January 1890, forwarding copy of a letter, No. 85, of 17th January 1890, from the Agent, South Indian Railway, reporting the failure of 11 out of a batch of 19,000 new 50-lb. steel bull-headed rails supplied by the firm of Messrs. Crawshaw Brothers, and enquiring whether it is necessary that the rails should be removed from the line and used in sidings.

2. In reply, I have to request that you will favor this office with a tracing showing, full size with dimensions, the section of the rails which have failed.

No. 1388 C.

Referred to the Consulting Engineer for Railways for compliance with reference to para. 2 of this letter.

(Signed) C. J. SMITH, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
14th March 1890. Railway Branch.

Read again the following paper :—

G.O., dated 31st March 1890, No. 439 R., Public Works.

Read the following paper :—

From the Consulting Engineer for Railways, dated 24th March 1890, No. 213.

From the Agent, South Indian Railway, to the Consulting Engineer for Railways, dated Trichinopoly, 22nd March 1890, No. 430.

In reply to your letter, No. 332, dated 17th March 1890, I beg to send, herewith, a tracing giving the required information.

Submitted to Government with reference to Public Works endorsement No. 1388 C., dated 14th March 1890 (herewith returned).

Order—dated 31st March 1890, No. 439 R., Public Works.

Ordered to be forwarded to the Director-General of Railways with reference to his No. 292 S., dated 1st March 1890.

(Here enter No. 440 R., dated 31st March 1890.)

(True Extract.)

(Signed) SIDNEY SMITH, Major, R.E.,
Under-Secy. to Govt., P.W.D.,
Railway Branch.

Endorsement—dated 31st March 1890, No. 440 R., Public Works.

Forwarded.

(By order.)

(Signed) SIDNEY SMITH, Major, R.E.,
Under-Secy. to Govt., P.W.D.,
Railway Branch.

Read also the following paper :—

From Colonel L. CONWAY-GORDON, R.E., Director-General of Railways, to the Joint Secretary to the Government of Madras, Public Works Department (Railway Branch), dated Simla, 14th April 1890, No. 411 S.

With reference to your No. 149 R., dated 27th January 1890, reporting the failure on the South Indian Railway of 11 out of a batch of 19,000 new 50-lb. steel (bull-headed) rails supplied by the firm of Messrs. Crawshaw Brothers, and enquiring whether the rails should be removed from the line and used in sidings.

2. In reply, I have to state that, considering the small number of failures, it would appear unnecessary to remove from the main line all the rails belonging to that particular batch, but I would at the same time suggest that the rails may be carefully watched and that any which appear faulty may be promptly removed.

3. Referring to the tracing received under cover of your No. 440 R. of the 31st March 1890, I have to observe that the 50-lb. rails in use on the South Indian Railway are of an entirely different pattern from the 50-lb. flat-footed section in use on State Railways.

4. The rails of the State Railway pattern have, however, proved satisfactory, in as much as there have been but few failures which have been confined to rails made by one manufacturer only. Moreover, on the Rajputana-Malwa Railway, where these rails are most largely used, there has as yet not been a single failure.

ORDER—dated 29th April 1890, No. 578 R., Public Works.

Communicated to the Consulting Engineer for Railways with reference to his endorsements Nos. 48 and 213, dated 20th January and 24th March 1890.

(True Extract.)

Major, R.E.,
Under-Secy. to Govt., P.W.D.,
Railway Branch.

To the Consulting Engineer for Railways.

Exd. A. Aubert.
Spare Copies

RAILWAY.
Govt. of {1890} Madras.
PUBLIC WORKS.

Dated April, 29th.

Recd.

Encl.

G.O., 29th Apr. 1890, No. 578 R.

APRIL.

South Indian Railway

Letter from the Director-General of Railways regarding failure of some of the 50-lb. steel rails used on the —, communicated to the Consulting Engineer for Railways.

No. 85

South Indian Railway,

AGENT'S OFFICE,

TRICHINOPOLY, 17th January 1890.

From

The Agent,

SOUTH INDIAN RAILWAY.

To

The CONSULTING ENGINEER FOR RAILWAYS,

MADRAS.

Sir,

The Chief Engineer has reported to me as follows:—

" Referring to the breakages, which have
" occurred among a certain brand of the
" new 50 lbs. Bull headed rails, they
" all occurred among a batch of rails
" which ^{was} supplied by the firm of Messrs
" Crawshaw Brothers from whom about
" 4 3/4 Miles of track were received and
" laid into the line approximately as
" follows:—

" Megapattam Branch & for Trimpur }	Miles
Northwards }	31
" Madras to Saint Thomas Mount	"
" Kalapur North & Madamantakam	1/2
" Near Panruti	3/4

Total 4 3/4

" The breakages have been " in number out
" of about 19000 rails laid between August 1888
" and July 1889. I am desirous of instructions
" as

REGISTERED

Form No. 1.

PUBLIC WORKS DEPARTMENT.

OFFICE OF CONSULTING ENGINEER FOR RAILWAYS,

Madras, 20th January 1890.

Letter from the Agent, South Indian
Railway No. 85, dated 17th January 1890.

No. 48

SUBMITTED _____ to _____ Government.

I am myself disposed
to concur with the Chief Engineer.

It would however be well
I think to refer the question
raised for the views of the
Director General of Railways.

Similar failures have
I believe occurred on most lines
in India since the introduction
of that rail.

C. Smiths Call: R. E.
Chief Eng: for Ryd.

"as to whether I am to continue the course
"now and hitherto followed of closely
"watching the rails from the batch referred
"to or whether you wish the rails to be
"removed from the line and used in sidings
"as soon and as far as possible."

Looking to the very small per
centage of breakages ³ in years out
of 19000 rails I am of opinion the
continuance of the close watch on them
is all the safe guard that can
reasonably be demanded."

I consider the course proposed to be followed by the Chief Engineer is sufficient and I shall feel obliged by your informing me if it has your approval.

Your most obed^t servant
Williamst Belth.
Agent.

From
THE AGENT,
South Indian Railway,
Trichinopoly.

To
THE CONSULTING ENGINEER FOR
RAILWAYS,
Madras.

Dated 19th Jan 1890
Received 19th Jan 1890
No. 85-
Enclosure

Let the 50th
that must be
also

25 January

At the house the report about the
building, the 22nd July 1892

I am myself at home
to be sure with the 22nd July
the report about the building
I think it is the question
raised for the house of the
house of the 22nd July
I think it is the question
raised for the house of the
house of the 22nd July

26

January 20

Building, the 22nd July
the 22nd July 1892
Building, the 22nd July
the 22nd July 1892
Building, the 22nd July
the 22nd July 1892

Building, the 22nd July

27

B. No. 148 R of 27-January/90.

Form No. 3.

23/jan Ordered to be

forwarded for the review of
the Director General of Rail-
ways.

J.E. No 149 R of 27-January 1890.

Forwarded.

Cd
22.1.90
R

Is it a matter for his orders or
for the explanation of his views?
I doubt about the orders

23/jan

D 28/1.

29/2/91

From PWC No 529
THE CONSULTING ENGINEER
FOR RAILWAYS,
MADRAS,

No. 48

Dated 20

Received 21

January 1890.

No. of ENCLOSURES.

Subject.

Submitting letter from
the Agent, South Indian
Railway, regarding the
breakages of 50 lbs steel
Bull headed rails.

B

No. 148-49 R of 27-January/90.

29/2/91

FROM

THE DIRECTOR GENERAL OF RAILWAYS,

To

The Joint Secretary to the Government of Madras,
(Railway Branch) Public Works Department.

Similar the 1st March 1890

Sir,

I have the honour to acknowledge
the receipt of your No: 149 R dated 27th January
1890, forwarding copy of a letter No: 85 of 17th
January 1890, from the Agent, South Indian
Railway, reporting the failure of 11 out of a
batch of 19000 new 50 lbs steel Bull headed
Rails supplied by the firm of Messrs
Crawshaw Brothers, and enquiring whether
it is necessary that the Rails should be
removed from the line and used in sidings.

2. In reply, I have to request that
you will favour this office with a tracing
showing full size with the section of the
Rails

Rails which have failed..



I have the honour to be,
Sir,

Your most obedient servant,

E. H. Stone
for Director General

Documents Accompanying
- ml -

No. 1388.C d/14 March 90
12 min

Referred to the
Consulting Engineer for
Railways for compliance
with reference to paragraph
2 of this letter.

C. Smith Colonel R. E.
Jt Secy to Govt. P. & D.
Railway Branch.

14/3/90
No 332
17-3-90

11-3-90 R 13-3-90.

No 430

South Indian Railway,

AGENT'S OFFICE,

TRICHINOPOLY, 22nd March 1890

From

The AGENT,

SOUTH INDIAN RAILWAY,

To

The CONSULTING ENGINEER FOR RAILWAYS,

MADRAS.

Sir,

In reply to your letter No. 332 dated
17th March, 1890. I beg to send herewith a
tracing giving the required information.

I am,

Sir,

Your most obedt Servant
Walter D. Hooper
brn Agent

1 Encl.

La

Madras, 24th March 1890.

Letter from the Agent, South Indian
Railway, N^o. 430 dated 22nd March 1890,
with enclosure

No. 213.

Government.

SUBMITTED. _____ to _____ Government
with reference to Public Works
Endorsement N^o. 1300C dated
14th March 1890. (herewith
returned)

A. B. P. Chetty Esq. Secy.

Sd/-: Secy. Engr: J. B. G.

P.W. Encl.
3066/90

From

The Agent,

South Indian Railway,

Trichinopoly.

To

The Consulting Engineer for

Railways,

Madras.

Dated 22nd March
Received 24.3.90

No. 430

ENCLOSURE

1890

Am. h. S. E. S. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

P. W. C. No. 3066.
From
THE CONSULTING ENGINEER
FOR RAILWAYS,
MADRAS,

No. 213.
Dated 24 } March 1890.
Received 257 }

No. of ENCLOSURES. 3 (+1 plan)

Subject.

Submitting correspondence
regarding the breakages
of 50 lb steel bull headed
rails on the South Indian
Railway.

B. 439 R 27 31 March 90
P. 440 R 27 31 March 90

Form No. 3.
B. 439 R 27 31 March 90
Ordered the forwarded
to the Director General
of Railways with reference
to his No. 292 S, dated 1st
March 1890.
S.E. B. 440 R 27 31 March 90.
Forwarded.

25/3/90
for R.

No. 148-9 R 27-1-90.

No. 411 S.

FROM
THE DIRECTOR GENERAL OF RAILWAYS,

The Joint Secretary to the
Government of Madras.
Public Works Department.
Railway Branch.
Simla, the 14th April 1890.

25/4/90
papers

Sir,
With reference to your No.
1149 R dated 27th January 1890, reporting
the failure on the South Indian
Railway of 11 out of a batch of 17,000
new 50 lb Steel (Bull headed) Rails supplied
by the firm of Messrs. Crawshaw Brothers
and enquiring whether the Rails should
be removed from the line and
used in sidings.

2. In reply, I have to state
that considering the small number of
failures

failures it would appear unnecessary to remove from the main line all the rails belonging to that particular batch, but I would at the same time suggest that the rails may be carefully watched and that any which appear faulty may be promptly removed.

3. Referring to the tracing received under cover of your No 440R of the 31st March 1890, I have to observe that the 50 lb Rails in use on the South Indian Railway are of an entirely different pattern from the 50 lb flat footed Section in use on State Railways.

The Rails of the State Railway pattern have however proved satisfactory, in as much as there have been but few failures which have been confined to rails made by one manufacturer only. Moreover on the Rajputana Malwa

Malwa Railway where these Rails are most largely used there has as yet not been a single failure. I have the honour to be,

Sir,
Your Most obedient Servant,

Lowry-Ford

Director General

Documents accompanying
Nil

Fr. Bns 439-440 R of 31-3-90
Muns 1388 C of 14-3-90
Fr. Bns 148, 149 R of 27.1.90

MC No 3823

Q 21.4.90

P. 548 R.

PUBLIC WORKS DEPARTMENT,
RAILWAY BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 27th April /90
^{again}
Read the following

Progs. of the Madras } M. No 148-49 R of 27 Jan'y 90
Govt. P. W. Depto: —

— G^o — — — — — G^o — — — — — 439-40 R of 31 March 90

Read also the following:

Letter from the Dir. } M. No 411 S of 14 April 1890
Director General of Railways

^{recd 27 Apr}
Communicated to

the Consulting Engineer for Rail-
ways with reference to his
endorsements Nos 418 and 213
dated 20 January and 24th
March 1890.

2/13/5

Recd
23.4.90

To The Consulting Engineer

W
for R

Number 115. 2. 11. 90

A
No. 548 R 8 27 April 190

For
2
a
x
1