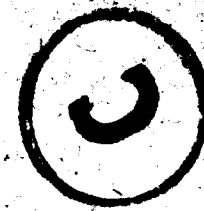
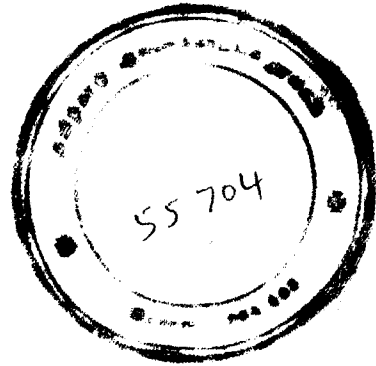


GENERAL REPORT
OF
THE ROAD DEPARTMENT
1853



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 * 12.11.1990 *



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GENERAL REPORT

OF

THE ROAD DEPARTMENT

BY

CAPTAIN C. C. JOHNSTON,

(Engineers,)

SUPERINTENDENT OF ROADS.

Madras :

PRINTED AT THE FORT SAINT GEORGE GAZETTE PRESS.

1853.

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ERRATA.

Page 6, paras 21 and 22, the figures referring to the foot notes should be read from (8) to (14).

- a. 7, line 14th, *for* "20th miles," *read* "28th miles."
- a. 12, para 42, line 1st, *for* "Ment" *read* "Ment."
- a. 13, in the 2d line of the Note to para 41, *for* "recovered" *read* "recovered."
- a. 14, para 47, line 30, *for* "a scale of 4 miles," *read* "8 miles."
- a. " " " line 3d, *for* "204," *read* "411."

4

GENERAL REPORT

OF

The Road Department,

To the 1st May, 1853.

1. The nature of the country chosen for the several Trunk roads has so frequently been remarked upon, in the late Captain Best's reports to Government, that I purpose in speaking of each line in succession, commencing with the western Trunk road No. 1, to detail merely what works were in progress at the time⁽¹⁾ of my assuming charge of the Department, those for which estimates have since been sanctioned, the progress made in the same, noticing the large masonry works only, the extent of traffic, and adding some few particulars regarding the increased establishment, which has been found necessary as the operations of the Department have been extended.

2. "No 1 TRUNK ROAD."

Lieutenant Fortlong of the 1st Regiment Native Infantry, the Officer in charge of No. 1 Trunk road,^(a) was engaged in superintending the annual repairs on an estimate of Rupees 39,178-11-0⁽²⁾ from the Presidency to Vaniembaddy in the 125th mile, and in order to avoid passing through the crowded bazaar street of that town, in the alteration of the line on an estimate of Rupees 6,383-14-0⁽³⁾ from the 125th mile, to join the old road to Bangalore again beyond the Neyoondy river in the 120th mile.

3. Throughout the 125 miles, commencing from the Supreme Court limits, at the Female Asylum in the 4th mile from the Fort, (measured from the Wallajah bridge) the average thickness of metal on the road in the month of March 1852, was 3½ inches, and the greatest thickness in any part of it, and that for a distance of 10 miles only—between the 73d and 83d miles, was 5½ inches, proving, as stated by Captain Best in his General Report to the 1st May 1851, (in which he observes, that in 24½ miles, the crust was 6 inches thick, and more in 7½ miles,) that the quantity of material worn off the road, exceeded the quantity replaced.

4. It was evident, therefore, that the annual allowance which during the last 5 years had been increased from Rupees 15,610-10-0⁽⁴⁾ to Rupees 22,775-12-0⁽⁵⁾ and again to Rupees 39,178-11-0⁽⁶⁾ was still insufficient to

(1) 14th October 1851.

(a) Plan No. 1.

(2) M. C. No. 202, 2d October 1849.

(3) Do. do.

(4) M. C. No. 215, 19th October 1847.

(5) Do. do.

(6) Do. No. 202, 2d October 1849.

keep the surface in repair, in the then rapidly deteriorating state of the road, and I consequently took an early opportunity of submitting to Government, an estimate of Rupees 1,16,543-3-0, being a revision by Lieutenant Forlong, of one which had been prepared by Captain Best, for placing on it a thickness of 6 consolidated inches of metal throughout.

5. This estimate received the sanction of Government on the 1st June 1852,⁽⁷⁾ and the work commenced by Lieutenant Forlong, has since been most actively carried on, under the superintendence of Lieutenant Chauncy of the 39th Regiment Native Infantry, who was appointed to succeed that Officer on his being ordered to join his Regiment on foreign service in Burmah. The expenditure up to the present time has been about Rupees 94,000—those portions of the road which have been completed are now in perfect order, and much attention having been given to the side slopes and drainage, the condition of the road generally is greatly improved.

6. Probably the best criterion of its improvement may be formed, from the trifling extent of damage it sustained during the late very severe monsoon, compared with former years, as mentioned by Captain Best in his General Report of the Department, to the 1st October 1848. The gradual improvement may be dated from the monsoon of 1846, during which no fewer than 11 bridges were destroyed, these having been substantially rebuilt, all the smaller tunnels and culverts carefully strengthened, others added to admit of the passage of water where necessary, and proper attention, as before stated, having been paid to the side slopes and drainage, I feel sanguine, that with the additional metal now being laid on, the present annual allowance of Rupees 39,178-11 will be found sufficient to keep the surface of the road in good order for some years to come.

7. On the 23d October 1852,⁽⁸⁾ an estimate of Rupees 45,009-12-6 was sanctioned for improvements from Vaniembaddy to the Mysore frontier beyond Oosoor in the 193d mile, which provides for bridging and tunnelling the numerous rivers and streams, in all 51, which cross the line in this distance, and an effective establishment for superintendence having been organized, the works are now progressing rapidly. The expenditure up to the present time has been about Rupees 21,000.

The principal bridges to be constructed on this portion of the line are:—

The Neycoondy ^(b) of	4	arches of	8	yards span.
The Kullaur ^(c)	1	„	of 16	do
The Natrapilly ^(d)	3	„	of 10	do
The Burgoor Malapady ^(e)	3	„	of 10	do
The Condacoopum ^(f)	3	„	of 5	do
And Cooroobahully ^(g)	3	„	of 16	do

(7) M. C. No. 181.

(8) M. C. No. 390.

(b to g) Plan No. 1.

8. In addition to the above estimates, two of trifling amounts have been sanctioned, one of Rupees 959-10-0⁽⁹⁾ for improving the road over the Begunahully^(h) tank bund in the 193d mile, and another of Rs. 424-9-0,⁽¹⁰⁾ for strengthening the Coorn⁽ⁱ⁾ river bank in the 5th mile—the former work has been completed under the superintendence of the Collector of Salem, and the latter is to be undertaken by the Civil Engineer of the 4th Division.

9. A sum of Rs. 3,100-0-0 was sanctioned on the 23d August 1852⁽¹¹⁾ for the formation of direct bandy tracks from thirteen of the principal quarries to the main line, between the Presidency and Cauveripauk, which will be of much importance, as at present the road operations are not only frequently stopt during the rains, but the price of stone and gravel is materially increased, by the bandies having to follow long winding tracks to avoid crossing deep channels, or patches of cultivated land. The surveys of these quarry tracks have been completed, and the formation of them commenced.

10. The road now comprises 6 divisions, averaging 31½ miles in extent, each being under the charge of an Assistant Overseer. These divisions are again subdivided into districts of 6 miles, in which, in addition to the head overseer, are employed, according to the amount of work, Pygusta and cart Conicopolies—other Conicopolies are placed in charge of the quarries, and the duties of the department Muistries extend over a certain number of districts, to superintend, under the orders of the Overseers, either the road or masonry works, or both according to their qualifications.

11. As new estimates received sanction, Lieutenant Chauncy's charge became so extensive, comprising, as stated in my report for December 1852—180 miles of Trunk road No. 1—65 miles of No. 10—the number of masonry works to be constructed between Vaniembaddy and the Mysore frontier, the formation of quarry tracks, and the charge of the several quarries, which require frequent inspection, that I was induced to solicit the sanction of Government to my entertaining an intelligent Assistant to travel about with, and relieve him from some portion of his work. For this purpose, Mr. Addis, who had gained considerable experience in road making in the Coimbatore district, and who was otherwise well qualified for the duties, was appointed to the department, and is now employed under the directions of Lieutenant Chauncy.

12. "No. 2 Trunk Road."

Overseer Graham of the Sappers was engaged as now, in superintending the construction of the Feringypett bridge⁽¹⁾ of one 15 yard arch, and the annual repairs⁽²⁾ from Fraserpet, via the Sunpapet^(a) ghaut to Mangalore, a distance of 105 miles, and reports great improvements to have been effected. The

(9) M. C. No. 26, 23d January 1852.

(h) Plan No. 1.

(10) M. C. No. 235, 12th July 1852.

(i) Plan No. 1.

(11) M. C. No. 283.

(1) Rs. 5,620-5-0 M. C. No. 100, 24th September 1849.

(2) Rs. 5,262-8-0 do. No. 130, 12th May 1840.

(a) Plan No. 2.

repairs⁽³⁾ of the branch road from Oopinungady to Pootoor, 7½ miles, have been superintended by the department of the Collector of Canara, and an allowance of Rupees 200⁽⁴⁾ for its annual repair, was sanctioned on the 23d November 1852. The only additional estimate which has been sanctioned on this road, is one of Rupees 1,455-1-0⁽⁵⁾ for a bridge over the Huntiaur^(a) nullah of one 6 yard arch.

13. "No. 3 TRUNK ROAD."

The operations on this line, on an estimate of Rupees 1,150⁽⁶⁾ for maintenance, from the north western frontier of Mysore, via the Munzerabad^(b) ghaut to Buntwall, a distance of 46 miles, as well as the construction of bridges in Canara, between the foot of the ghaut and Oopinungaddy, on an estimate of Rupees 9,827⁽⁷⁾ have been conducted under the orders of the Board of Revenue, in the Department of Public Works.

On the former estimate bills have lately been submitted to Government, amounting to Rupees 1,317-5-0 for the years 1849-50-51 and on the latter, an expenditure to the extent of Rupees 9,753, is proposed to be debited to the Road funds, as explained in my letter No. 207, dated 4th May 1853.

The construction of the bridge⁽⁸⁾ of one arch of 49 feet span, at a new site over the Conchicar Cootle^(c) stream near Buntwall, is to be delayed until the completion of the Feringypett bridge, in which will be tested the value of laterite stones as a building material for arches.

14. The additional estimates which have been sanctioned are :-

Rupees 2506-15-4⁽⁹⁾, for making a new line of road at Buntwall from Mangalore, between the 15th and 18th miles.

Rupees 798-12-6⁽¹⁰⁾ for constructing a bridge of one arch of 8 yards span, across a jungle stream^(d) at Buntwall, and

Rupees 13,589-13-7⁽¹¹⁾ for the construction of bridges in the Canara District, the particulars of which have not been furnished to this Office.

15. "No. 4 TRUNK ROAD."

Lieutenant Francis of the 12th Regiment Native Infantry, who was engaged in the construction⁽¹²⁾ of the road from the Mysore frontier, via the Periambad^(e) ghaut to Cannanore, a distance of 68 miles, was, on the works being nearly completed, removed to the southern Trunk road No. 8, leaving

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| (3) Rs. 2,432-1-6 M. C. No. 127, 29th June 1849. | (8) Rs. 3,750-13-0 M. C. No. 249, 8th November 1845. |
| (4) M. C. No. 372. | (c) Plan No. 3. |
| (5) M. C. No. 182, 1st June 1852. | (9) M. C. No. 44, 4th February 1853. |
| (a) Plan No. 2. | (10) Ditto ditto. |
| (6) M. C. No. 173, 4th September 1850. | (d) Plan No. 3. |
| (b) Plan No. 3. | (11) M. C. No. 90, 29th March 1853. |
| (7) M. C. No. 127, 20th June 1849. | (12) Rs. 1,83,376 M.C. No. 15, 14th January 1848. |
| (e) Plan No. 4. | |

Assistant Overseer Church of the Sappers in charge, to carry on the annual repairs on an estimate of Rupees 3,400, sanctioned in Minutes of Consultation No. 238, dated 2d December 1850.

16. The only additional estimate which has been sanctioned on this line, is one of Rupees 1,298-5-0⁽¹⁾ for rebuilding the Oorette Todu^(a) bridge of three arches of 8 yards span, near the foot of the ghaut, the cause of the failure of the original structure, was explained to Government in my letter No. 576, dated 14th December 1852. The expenditure during the year has been—

Rupees 6,006, and the Assistant Overseer reports very favorably on the state of the ghaut and road generally.

17. "No. 5 TRUNK ROAD."

Lieutenant Chauncy now in charge of the western roads Nos. 1 and 10, was engaged in superintending the repairs⁽²⁾ between Waliaur and Ponany 70 miles, in the annual repairs⁽³⁾ of the same. In the construction⁽⁴⁾ of the road from Coimbatore to Waliaur, 16 miles, in placing additional metal⁽⁵⁾ on the same. In improvements⁽⁶⁾ between Waliaur and Ponany—and in building the Nurgumpillay^(b) bridge⁽⁷⁾ of 5 arches 13 yards span, and Paralakadow^(c) bridge⁽⁸⁾ of 10 arches of 15 yards span, both of which have been completed, the former at a cost of Rupees 6,518-4-0, for the latter—the bill has not yet been received.

18. The rebuilding of the bridge of 26 arches of 47½ feet span over the Cauvery river at Bowany^(d), on an estimate of Rupees 48,769-11-0⁽⁹⁾ has been completed under the orders of the Civil Engineer of the 5th Division, but no bills yet received by this Department, and the repairs⁽¹⁰⁾ between Perindoray and Bowany, 12 miles, have been carried on by the Civil Engineer of the 7th Division.

19. The additional estimates which have been sanctioned are :

Rupees 4,830-14⁽¹¹⁾ for repairs between Coimbatore and Avanashy, 12 miles.

Rupees 5,204-5⁽¹²⁾ for additional metal and masonry works between the same.

Rupees 1,566-3⁽¹³⁾ for repairs from Coimbatore towards Carumthumputty, 4½ miles.

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| (1) M. C. No. 30, 27th January 1853. | (b) Plan No. 5. |
| (a) Plan No. 4. | (7) Rs. 5,003-0-6 M. C. No. 171, 30th August 1849. |
| (2) Rs. 8,218-12 M. C. No. 33, 27th April 1848. | (c) Plan No. 5. |
| (3) { Rs. 2,100-0-0 M. C. No. 90, 20th September 1848. | (8) Rs. 12,900-1-6 M. C. No. 42, 30 January 1851. |
| { Rs. 7,100-0-0 M. C. No. 63, 6th April 1851. | (d) Plan No. 5. |
| (4) { Rs. 21,533-3-2 do No. 171, 30th August 1849. | (9) M. C. No. 112, 19th June 1849. |
| { Rs. 584-7-3 do No. 112, 7th June 1850. | (10) Rs. 126-8-0 M. C. No. 231, 15th July 1851. |
| (5) Rs. 6,300-12-0 do No. 67, 6th April 1850. | (11) M. C. No. 386, 20th Decr. 1851. |
| (6) Rs. 12,322-13-0 do No. 66, 3th April 1850. | (12) do No. 171, 25th May 1852. |
| | (13) do and 197, 18th June " |
| | (13) do No. 214, 1st July 1852. |

Rupees 1,370-12(1) for annual repairs between Coimbatore and Waliaur, 16 miles.

Rupees 13,066-10-4(2) for construction of the road between Paulghat and Menjara, 12½ miles.

Rupees 4,781-10-9 (3) for building a bridge of 3 arches of 10 yards span, over the Wotapollum(a) stream, in lieu of an old timber one which had gone to decay, and

Rupees 2,218-14-9(4) for repairs to the Chinna Nowkurray(b) bridge, and Muddakaray(c) road dam.

20. These works are being conducted by the departments of the Collector of Coimbatore, and Civil Engineer of the 7th Division, and in consequence of a representation made by the latter Officer, regarding the want of some assistance in superintendence from the road department, Overseer Downes of the Sappers was ordered in March last, to proceed to Coimbatore for employment on Trunk road No. 5, in the limits of that district.

21. "No. 6 TRUNK ROAD."

The works in progress on this road from the Presidency to the Bengal frontier(d) were—annual repairs(5) between Itchapoor and the frontier 54 miles—repairs(6) between the same, and the construction(7) of a bridge of 9 arches of 10 yards span, over the Bimilipatam(e) river, which has nearly been completed under the superintendence of Lieutenant Rundall, of the Engineers.

The repairs(8) between Goomidipoondy and Uthoor, 102 miles—annual repairs(6) between the same, and construction(9) of the road between Madaveram and Goomidipoondy, 19 miles—under that of Assistant Supervisor Arnold of the Sappers.

22. The additional estimates sanctioned are :

Rupees 703-4-2(10) for repairs between Senkaram and Aukapilly, 12 miles.

Rupees 1,408-1-3(11) for repairs between Senkaram and Soobarum, 12 miles.

Rupees 3,668-3-9(12) for building a bridge of 3 arches of 10 yards span, at the approach to the Bimilipatam river bridge.

Rupees 3,413-7-7(13) for repairs between Yellamanchelly and Cassimcottah, 12 miles.

(1) M. C. No. 214, 1st July 1852.

(2) M. C. No. 266, 12th August 1852.

(3) do No. 295, 6th September 1853.

(a) Plan No. 5.

(3) M. C. No. 335, 15th October 1852.

(b and c) Plan No. 5.

(d) Plan No. 6.

(e) Ra. 1680, M. C. No. 32, 31st Jany. 1846.

(f) " 790, do No. 106, 20th September 1847.

(g) " 6912-14 M. C. do do.

(7) Ra. 9042-7-6 M. C. No. 108, 18th March 1851.

(e) Plan No. 6.

(8) Ra. 16253, M. C. No. 265, 20th October 1846.

(9) " 5760 do do.

(10) " 60,337-4-11 do No. 173, 20th May 1851.

(11) M. C. No. 351, 2d December 1851.

(12) do No. 157, 13th May 1852.

(13) do No. 59, 7th May 1852.

(14) do No. 233, 15th July 1852.

Rupees 23,171-0-5(1) for repairs from Yellamanchelly to Toonee, 25½ miles.

Rupees 21,135-0(2) for the construction of two bridges, each of 10 arches of 10 yards span, over the Aukapilly(a) and Toonee(b) rivers.

Rupees 3,600(3) salary of an Officer, at Rupees 150 per mensem, for 2 years.

Rupees 3,210(4) for annual repairs from Toonee to Soobarum, 53½ miles.

Rupees 781-0-3(5) for repairs in the Guntoor district.

Rupees 952-14(6) for construction of the road between Yerukenjairy and Madaveram, 3 miles.

Rupees 2,974(7) for annual repairs between Yerukenjairy and Goomidipoondy, 22 miles.

Rupees 59,268-5-9(8) for alterations and improvements between the 47th and 79th miles.

Rupees 6,310-8-8(9) for repairing the damage done in October 1852, from the 5th to the 28th miles, and

Rupees 28,753-7(10) for ditto ditto in November and December 1852, between Tada and Nellore.

In addition to the bridges before named the following are to be constructed(11):—

The Pamla Kalva(c) of 5 arches of 10 yards span.

Manadi Kalva(d) of 5 do of 12 do.

Kalingee Nuddy(e) of 7 do of 10 do and two head sluices, one(f) of one vent of 2 yards span to the Ootoo Calva, a channel from the Kunlaur river, and the other(g) of 6 vents of 1½ yards span in the bund of the Wooljelly tank.

23. The first nine of these estimates were prepared by Lieutenant Rundall, and the works on them will be superintended by that Officer, in communication with this Department, assisted by Lieutenant Magrath of the 21st Regiment Native Infantry, who arrived in the Vizagapatam District on the 23d April last—those on the last five estimates, will be conducted by Ensign Marshall of the 12th Regiment N. I. who joined the Department on the 10th October 1852. Assistant Supervisor Arnold, who has been in charge of the line as far as Nellore for the last five years, was obliged shortly after being relieved, to proceed to the Neilgherry Hills on medical certificate.

24. The inundations of the rivers Corteliaur, Ponair, and Pennaur, and their channels, with the overflowing and bursting of several of the large tanks to the west of the line, again caused a great amount of damage during the last two monsoons. Nor will repairs be of any avail, until the river and tank

(1) M. C. No. 33, 28th January 1853.

(2) do do.

(a and b) Plan No. 6.

(3) do do.

(4) do do.

(5) M. C. No. 220, 23d August 1852.

(6) do No. 204, 22d June 1852.

(7) M. C. No. 340, 23d October 1852.

(8) do No. 133, 21st April 1853.

(9) do do.

(10) do do.

(11) These works are included, the estimate(12) of Ra. 69,268-5-9.

(c to g) Plan No. 6.

embankments are carefully strengthened, and the supply of water to the river channels, properly regulated by head sluices, as represented in my Report for January last.

25. From Yerukanjairy to the Cortelaur river, a distance of 12 miles, the road has been completed, its surface metalled, all the smaller streams crossing it tunnelled, and a bridge of 5 arches each of 8 yards span, built over the surplus channel from the Red Hill(a) tank, a bridge of 9 arches each of 12 yards span, is in course of construction across the Ponnair(b) river, and a small one(c) of 3 arches of 12 yards span, has nearly been completed in the 20th mile. By the end of the year, the metalling, excepting over those portions, where the embankments were breached during the last monsoon, will be completed as far as Goomidipoondy, 22 miles.

26. "No. 7 TRUNK ROAD."

On this road which branches off to Hyderabad from No. 6, a little north of Ongole(d), no estimates for work have yet been submitted.

27. "No. 8 TRUNK ROAD."

Captain Heathorn of the 3d Regiment Native Infantry, who was in charge of the southern Trunk road No. 8(e) from the Presidency to Trichinopoly, was obliged, shortly after my joining the Department, to proceed to Sea on medical certificate. On the 26th April 1852, Lieutenant Tireman of the 4th Regiment Native Infantry, was appointed to succeed him, and on the 29th October 1852, Lieutenant Francis was directed to take charge of the line from Vickravandy to the Oopaur river near Semiavaram, a distance of 95 miles, Lieutenant Tireman's charge extending from Palaveram to Vickravandy, 80½ miles, and thence to the Lower Coleroon Anicut 62½ miles. On Trunk road No. 9, on which latter, beyond the marking out and the preparation of materials for the Wallajah and Vuddavaur bridges, no work had been commenced.

28. On No. 8. The works in progress under Lieutenant Tireman's superintendence were:—

Completing the construction(1) of the road from Chingleput to Vickravandy 53 miles, and from(2) Vickravandy to Oolundoorpett, 80 miles.

The annual repairs(3) between Palaveram and Vickravandy, 80½ miles.

The construction of a causeway(4) across the Oopaur(f) river near Semiavaram, which has been completed at a cost of Rupees 5401-0-7, of a bridge(5)

(a) Plan No. 6.	(3) Rs. 11,698-0-0 M. C. No. 167, 10th
(b) Plan No. 6.	August 1849.
(c) Plan No. 6.	(4) Rs. 5,850-5-6 do No. 23, 22d
(d) Plan No. 7.	January 1851.
(e) Plan No. 8.	(f) Plan No. 8.
(1) Rs. 1,97,875-5-8 M. C. No. 17, 28th	(5) Rs. 4,499-2-0 do No. 137, 17th
January 1847.	August 1852.
(2) Rs. 54,600-8-0 do No. 63, 13th	
March 1849.	

of 5 arches of 10 yards span, over the Chinnaur(e) river, of which the abutments and piers were built before the last monsoon, and the annual repairs(6) and metalling(7) of the road from Vickravandy to Oolundoorpett. These last three works have now been placed under Lieutenant Francis, and the Chinnaur bridge which was nearly completed having unfortunately been destroyed by an unexpected fresh in the month of March, before the centrigs had been removed, has to be rebuilt.

29. The works under Major Lawford, Civil Engineer of the 6th Division were:—

The construction(8) of the road between the Coleroon and Cauvery rivers, 2½ miles, and from(9) the Coleroon river to Semiavaram 5½ miles.

The construction(10) of a bridge of 32 arches of 15 yards span, over the Cauvery(d) river near Trichinopoly.

Of a bridge(11) of 38 arches of 20 yards span, over the Coleroon(e) river near Trichinopoly.

And the annual repairs(12) between Semiavaram and Trichinopoly, 8½ miles.

30. The estimates since sanctioned are:—

Rupees 42,099-5-9,(13) for the reconstruction of 22 arches of the Coleroon bridge.

Rupees 1,937(14) for annual repairs between Semiavaram and Trichinopoly, 8½ miles.

Rupees 378-11(15) for embanking the Oopaur near Semiavaram.

Rupees 47,667-0-6,(16) for the construction of the road between Oolundoorpett and the Vellaur river, 29 miles—and of

Rupees 57,263-10-4,(17) from the Vellaur to Semiavaram, 36 miles.

Rupees 31,709-12(18) for a Causeway across the Paular(f) river near Chingleput, and

Rupees 25,000(19) for repairs between Moosree and the Salem boundary, of these works; the three first have been conducted under the orders of Major Lawford—the two second are in progress under the superintendence of Lieutenant Francis, the sixth, under that of Lieutenant Tireman, and the last

(c) Plan No. 8.	(e) Plan No. 8.
(6) Rs. 4,500.	(12) Rs. 2,404-11-0 M. C. No. 23, 22d
(7) Rs. 32,235-15-0 M. C. No. 236, 21st	January 1851.
January 1851.	(13) M. C. No. 301, 9th December 1851.
(8) Rs. 8,230-13-6.	(14) Do No. 58, 17th February 1852.
(9) Rs. 22,858-12-0 M. C. No. 49, 19th	(15) Do No. 313, 25th September 1852.
February 1849.	(16) Do No. 125, 13th April 1852.
(10) Rs. 28,129-11-4 do No. 139, 22d	(17) Do No. 224, 3d July 1852.
July 1849.	(18) Do No. 172, 25th May 1852.
(d) Plan No. 8.	(f) Plan No. 8.
(11) Rs. 1,10,468-11-0 M. C. No. 10,	(19) M. C. No. 34, 28th January 1853.
26th January 1850.	

is to be carried on under the directions of the Civil Engineer of the 5th division.

31. The rebuilding of the Coleroon bridge has been completed, but the bills not yet furnished to this department. The embankments, and formation of the line generally, from Oolundoorpett to the Oopaur river, are progressing rapidly under Lieutenant Francis, and by the end of the present year, the greater number of the smaller masonry works, with the abutments and piers of the larger bridges will be completed. The principal bridges on this portion of the line are:

The Yeringee,^(g) 8 arches of 10 yards span.

Chepaukum,^(h) 7 do of 10 do.

Oorungoor,⁽ⁱ⁾ 1 do of 7 do.

Vapoor,^(j) 1 do of 8 do.

Chinnaur,^(k) 5 do of 10 do.

Jungle stream,^(l) 1 do of 5 do.

Ditto,^(m) 1 do of 6 do.

Agarum,⁽ⁿ⁾ 1 do of 12 do.

Jungle stream,^(o) 1 do of 5 do.

Ditto,^(p) 1 do of 6 do.

Ootatoor,^(q) 1 do of 12 do. and the Vickravandy^(r) bridge of 5 arches of 8 yards span, particulars regarding the destruction of which during the last monsoon, were submitted to Government in my letter No. 159, dated 21st April 1853, has to be rebuilt.

32. "TRUNK ROAD No. 9,"

Which branches from No. 8 in the 91th mile near Vickravandy,^(a) follows a direction nearly due south, and crossing over the Vellaur and Coleroon rivers at the sites of their annicuts, is continued on to Combacorum, a distance of 75½ miles, where it joins the high road from Trichinopoly, to the coast road from Negapatam to the Presidency.

33. The construction of a bridge⁽¹⁾ of 19 arches of 31 feet span, over the Vellaur annicut^(b) under the superintendence of Captain Heathorn, was completed previous to my joining the department, and Major Lawford is about to submit a plan, which in connection with other improvements to the Coleroon annicut,^(c) will provide for bridging it; of the Vellaur bridge, four of the arches at the north end fell in March last, the portion of the annicut under them having been destroyed during the floods in that month—arrangements are being made for restoring the annicut, and if the work is completed sufficiently early in the season I shall hope to get the piers rebuilt before the monsoon, leaving the arches to be turned next year.

(g to q) Plan No. 8.

(r) do.

(a) Plan No. 9.

(1) Rs. 18,439-4-0 M. C. No. 83, 24th April 1849.

(b) Plan No. 9.

(c) Plan No. 9.

34. The construction⁽²⁾ of the road from the lower Coleroon annicut to Combacorum 13 miles, of two ferry boats⁽³⁾ for crossing the Coleroon river, and of a head sluice to the North Rajah Voikal,⁽⁴⁾ to provide a roadway at a cost of Rupees 4,000⁽⁵⁾ to the department, have also been conducted under the orders of Major Lawford—an annual allowance of Rupees 300-8 was sanctioned in Minutes of Consultation No. 118, dated 27th March 1852, for the maintenance of the ferry boats, for which bills are furnished by the Collector of Tanjore.

35. The marking out⁽⁶⁾ of the line between Vickravandy and the lower Coleroon annicut, a distance of 62½ miles, was completed on my joining the department, and the preparation of materials was in progress, for the construction of a bridge⁽⁷⁾ of one arch of 60 feet span, over the Vuddavaur channel,⁽⁸⁾ and of one⁽⁹⁾ of 5 arches of 10 yards span, over the surplus channel from the Wallajah tank.^(f)

36. The estimates since sanctioned are—

Rupees 3,240,⁽⁶⁾ for repairs between the lower Coleroon annicut and Combacorum, 13 miles.

Rupees 49,150-8 6,⁽⁹⁾ for the construction of the road from the Geddalum river to the lower Coleroon annicut, 43 miles, and of

Rupees 48,094-12-4⁽¹⁰⁾ from Pauprumpett to the Geddalum river, 19½ miles.

The works on the first of these estimates, are in progress under the superintendence of Major Lawford, and on the two latter, of that of Lieutenant Tireman. The abutments of the Vuddavaur bridge, and abutments and piers of the Wallajah bridge, were completed before the last monsoon, and the turning of the arches, with the construction of all the smaller masonry works as well as the embankments throughout will be completed by the end of this season.

37. The principal bridges on the line, of which the abutments and piers only will be built before the monsoon are the

Punby^(g) of 2 arches of 10 yards span.

Aullungaul^(h) 4 do 3 do.

Mullataur⁽ⁱ⁾ 2 do 10 do.

Comaramungalum^(j) 1 do 5 do.

Poolavannoor^(k) 1 do 5 do.

Wallajah 5 do 10 do.

Old Vuddavaur^(l) 2 do 5 do.

The expenditure during the year has been Rs. 27,850-11-11.

(2) Rs. 16,617-0-0 M. C. No. 49, 19th February 1849.

(3) Rs. 1,410-2-2 do No. 69, 2d April 1850.

(4) Plan No. 9.

(5) M. C. No. 1211, 19th December 1850.

(6) Rs. 1,845-0-0 M. C. No. 83, 24th April 1849.

(7) Rs. 4,195-7-0 do No. 157, 17th April 1851.

(8) Plan No. 9.

(9) Rs. 7,217-15-0 do do.

(f) Plan No. 9.

(g) M. C. No. 85, 4th February 1852.

(h) Do. No. 77, 4th March 1852.

(i) Do. No. 149, 24th April 1852.

(j) to l, Plan No. 9.

Brown, Jolliffe, Church, Hopkins and Goodchap, Ordnance Artificer Dimerant, and of Assistant Overseers Wakefield, Shopman, and Ramanjooloo—Assistant Overseers Booth, Beveridge, McCarthy and Lawrence, who have lately joined the department from the Artillery, also promise well.

47. Accompanying this report are—Maps of the several Trunk roads, on a scale of 4 miles to an inch, showing the positions of all the towns, villages, and large bridges, of which mention has been made, one Map on a scale of 20½ miles to an inch, showing the relative positions of the roads; Statements of the estimates sanctioned, advances drawn, Balances of estimates, Bills sanctioned, and ready for sanction, and of the outstanding balances, from the first formation of the department to the 1st May 1853—with a general summary of the same—a prospective statement of expenditure for the year 1853-54, a statement of traffic, and one of the marches I have made from December 1851, to May 1853.

48. It will be observed by comparing the general summary contained in statement No. 14 with that submitted to Government to the 1st May 1852, that the estimates sanctioned during the past official year, amount to Rupees 5,38,980-1-8,(1) the advances drawn to Rupees 4,13,468-1-0,(2) and the bills sanctioned to Rupees 4,54,115-11-8;(3) of the expenditure no exact account can be given until bills for the several works executed are received, but the advances made may be taken as an approximate amount.

49. I have been endeavouring to procure correct returns of traffic on the several Trunk lines, a comparison of which with the periodical reports furnished to my office, on the condition of each mile of road, will in the course of time enable me to judge correctly of the annual amount of outlay required for repairs. This at present I am unable to do, partly on account of the traffic returns hitherto furnished at irregular intervals, being very incomplete, and partly from not having as yet received a sufficient number of reports, from which to form an opinion, as to whether the roads generally, are properly maintained.

50. From January 1852, to May 1853, surveys on a scale of 8 inches to 1 mile extending over a distance of nearly 400 miles have been completed, each mile occupying a separate sheet, according to the arrangement of the late

(1) { Estimates sanctioned to 1st May 1853 Rupees . 23,33,800-4-3	
{ Do. to 1st May 1852 „ . 17,94,820-2-7	
	5,38,980-1-8
(2) { Advances drawn to 1st May 1853 Rupees . 18,26,615-4-5	
{ Do. to 1st May 1852 „ . 14,13,247-3-5	
	4,13,468-1-0
(3) { Bills sanctioned to 1st May 1853 Rupees . 10,29,204-5-1	
{ Do. to 1st May 1852 „ . 5,75,088-9-5	
	4,54,115-11-8

Superintendent, on which are shown an Extract from the field book of the Surveyor, and elevations of the several masonry works, large and small—a very intelligent Maistry, by name Annasawmy, has been employed exclusively on this duty, and the surveys carefully made, have been plotted by him with a great degree of neatness and exactness.

51. The establishment for European superintendence, which on my first joining the department consisted of 1 Superintendent—3 Assistants—1 Assistant Supervisor—and 14 Assistant Overseers, in all 19—has now been increased to 1 Superintendent, 5 Assistants, 1 2d Assistant, 1 Assistant Supervisor, 2 Overseers and 19 Assistant Overseers, in all 29.

C. C. JOHNSTON, Captain,
Superintendent of Roads.

Superintendent of Roads Office :
Camp, Aurumbank,
28th June 1853.

Accounts Particular of the Road Department from May 1846 to April 1853.

Letter of Estimates	Amount of Estimates.	No. and date of Minutes of Consultation, sanctioning Estimate.	Advances.	Balance of Estimates.	Bills sanctioned.	Bills ready or submitted.	Particulars of Expenditure, and outstanding Balances.	Remarks
STATEMENT No. 1.								
TRUNK ROAD No. 1.								
C & E	97,545 0 8	215 19th October 1847	97,200	345 0 8	92,657 0 8			
F & G	36,148 14 ..		36,148 14 ..		36,148 7 5			
D(1)	15,610 10 ..		16,500	0 6 ..	61,160 9 1		959 10 ..	Salem Collector.
D(2)	22,775 12 ..		21,886				424 9 ..	Civil Engineer 4th Division.
D(3)	22,775 12 ..		22,775 12 ..				1,60,878 11 ..	Lieutenant Chauncy.
K	6,383 14 ..	202 2d October 1849	6,383 14 ..		6,270 7 7		4,000	Tasildar Tripatoor.
H(1)	39,178 11 ..		39,178 11 ..	28,420 2 ..	39,178 10 11		3,500	Do. Kistnagherry.
H(2)	39,178 11 ..		47,177 8 ..		39,178 14 5		4,500	Do. Oossoor.
H(3)	39,178 11 ..		59,600	12,248 15 4	59,892 9 7		4,398 3 ..	Madras Bank
H(4)	39,178 11 ..		26,929 11 8					
X	16,768	209 31st October 1850	16,768		16,768		1,78,161 1 ..	Outstanding.
B	959 10 ..	26 23d January 1852	959 10 ..				11,284 0 6	Balance of Estimates.
J	1,16,543 8 ..	181 1st June 1852	1,16,543 3 ..				3,51,254 11 8	Bills sanctioned.
U	424 9 ..	235 12th July 1852	424 9 ..				60	Do. ready.
Q	3,100	280 23d August 1852		3,100				
A	45,009 12 6	338 23d October 1852	21,000	24,009 12 6				
	5,40,759 13 2		5,29,475 12 8	11,284 0 6	3,51,254 11 8	60	5,40,759 13 2	
STATEMENT No. 2.								
TRUNK ROAD Nos. 1 & 5.								
(1)L	3,400	217 26th October 1849					7,907 3 11	Salem Collector.
(5)C	5,600		9,000			198 14 3	893 13 10	Madras Bank.
							8,801 1 9	Outstanding.
							198 14 3	Bills ready.
	9,000		9,000			** 198 14 3	9,000	
C & E	Completion of repairs from Madras to Vanambaddy		121		39,704-2-8	to D(3) Annual Estimates from 1846-47 to 1848-49 inclusive.		
F & G	Preparation and cartage of material		125		28,420-2-0	H(1) to H(4) do. 1849-50 to 1852-53 do.		
D	Annual repairs from Madras to the 12th mile		125		11,284-0-6			
K	Repairs between the 125th and 126th miles		4					
H	Annual repairs from Madras to the 10th mile		125					
X	Carting reserve material							
R	Widening the Dagenbally tank between the 123d mile							
J	Repairs from Madras to the 125th mile		125					
C	Repairing and facing the right bank of the Cooum river in the 5th mile							
Q	Construction of quarry roads							
A	Improvements between the 129th and 130th miles		64					
(1)L	Repairs in the Salem District for 12th mile from the 127th to the 106th mile towards Bangalore		68					
(5)C	Do. do. do. 127th to the 239th mile do. Salem		112					

** In the last Statement Bills to the amount of Rupees 351-11-8 were entered in this column, but on a further adjustment of the accounts it appears that Rupees 153-4-0 were expended in the purchase of timber for No. 10 Road, to which the Bill has been transferred and the money paid into the Madras Bank.

55704
V2H, 88 P.M.
1753

Accounts Particular of the Road Department from May 1846 to April 1853.

Letter of Estimates	Amount of Estimates.	No. and date of Minutes of Consultation, sanctioning Estimates.	Advances.	Balance of Estimates.	Bills sanctioned.	Bills ready or submitted.	Particulars of Expenditure and outstanding Balances.	Remarks.
STATEMENT No. 3. TRUNK Road No. 2.								
A(1)	5,262 8..	132 12th May 1846	3,652 2..	2,105 6 10	29,428 8 2		817 5 1	Canara Collector.
A(2)	5,262 8..		5,044 12 1				3,760 11 9	Balance of Estimates.
A(3)	5,262 8..		5,264 3 4				31,860 5 9	Bills sanctioned.
A(4)	5,262 8..		4,958 7 9				12,186 10 6	Bills ready
A(5)	5,262 8..		5,287 8..					
A(6)	5,262 8..		5,262 8..					
A(7)	5,262 8..	127 29th June 1849	5,262 8..	0 3 11	2,431 13 7		48,575 1 1	Due to Bank.
D	2,432 1 6		2,431 13 7				5 9 1	
B	5,620 3 9	190 24th September 1849. }	5,620 3 9					
C	2,024 9 9		2,024 9 9					
N	1,455 1..	182 1st June 1852		1,455 1..				
R	200	372 23d November 1852 ..		200				
	48,569 8..		44,808 12 3	3,760 11 9	31,860 5 9	12,136 10 6	48,569 8..	

STATEMENT No. 4. TRUNK Road No. 3.*								
A(1)	9,827	127 29th June 1849		9,827			27,872 9 5	Balance of Estimates.
B*	1,150	173 4th September 1850 ..		1,150				
C*	3,305 11 10	44 4th February 1853		3,305 11 10				
A(2)	13,589 13 7	99 29th March 1853		13,589 13 7				
	27,872 9 5			27,872 9 5			27,872 9 5	

STATEMENT No. 5. TRUNK Road No. 4.								
A†	1,83,376	15 14th January 1848	1,83,376		74,895 1 6		964 6 6	Assistant Overseer Church.
B(C)	3,400	238 2d December 1850 ..						Balance of Estimates.
B(2)	3,400						1,74,895 1 6	Bills sanctioned.
B(3)	3,400		17,000				25,914 13 ..	Bills ready.
B(4)	3,400							
B(5)	3,400	30 27th January 1853						
C†	1,398 5..		1,398 5..					
	2,01,774 5..		2,01,774 5..		74,895	25,914 13 ..	2,01,774 5..	

A(1) to A(7) Annual Estimates from 1846-47 to 1852-53 inclusive.

B(1) to B(5) Annual Estimates from 1846-49 to 1852-53 inclusive.

A	Annual repairs from Frazerpet to Mangalore	105
B	Repairs between Oppinungaddy and Pootoor	71
C	Bridge near Fringepett.	
C	Do. over the Chennuadduk river.	
N	Do. over the Hunter nullah.	
R	Annual repairs between Oppinungaddy and Pootoor	71
A(1)	Bridges in Canara between Oppinungaddy and foot of the Munzerabad ghaut.	
B†	Maintenance of Munzerabad ghaut and road to Buntwal	46
C*	Construction of road from Mangalore to Buntwal.	
A(2)	Construction of Bridges in the Canara District.	68
A*	Construction of permanent ghaut and road	68
B	Annual repair do do.	

Accounts Particular of the Road Department from May 1846 to April 1853.

Letter of Estimates	Amount of Estimates.	No. and date of Minutes of Consultation, sanctioning Estimates.	Advances.	Balance of Estimates.	Bills sanctioned.	Bills ready or submitted.	Particulars of Expenditure, and outstanding Balances.	Rema
STATEMENT No. 6.								
TRUNK ROAD No. 5.								
A	8,218 12 ..	86 20th April 1848	7,701 13 3	516 14 9	7,701 13 3			
B(1)	2,100	90 20th September 1848 ..	2,100		4,198 5 1			
B(2)	2,100		2,100					
F	48,759 11 ..	112 13th June 1849	35,900	12,889 11 ..				
D(1)	21,593 13 2	171 30th August 1849	21,593 13 2		21,593 13 2		35,900	Civil Engineer 5th Division
E	5,903 9 6		5,903 9 6				10,436 6 6	Malabar Collector.
K	6,300 12 ..	104 20th March 1850	6,300	0 12 ..	5,607 9 4			
H	12,328 13 ..	66 8th April 1850	7,688 14 11	4,639 14 1			46,336 6 6	Outstanding.
D(2)	584 7 3	112 7th June 1850	584 7 3		584 7 3		60,421 4 5	Balance of Estimates.
J(1)	12,990 1 6	42 30th January 1851	11,000	1,990 1 6			46,785 1 8	Bills sanctioned.
G(1)	7,100	66 8th April 1851	6,981 14 9	118 1 3	7,099 1 7		21,833 0 8	Bills ready.
G(2)	7,100		7,100					
P	126 8 ..	231 15th July 1851		126 8 ..				
V(1)	4,830 14 ..	386 20th December 1851 ..		4,830 14 ..				
G(3)	7,100	37 17th February 1852		7,100				
V(2)	5,204 5 ..	171 25th May 1852		5,204 5 ..				
		197 18th June 1852						
C	1,566 3 ..	214 1st July 1852		1,566 3 ..				
R	1,370 12 ..			1,370 12 ..				
J(2)	13,066 10 4	260 12th August 1852		13,066 10 4				
W	4,781 10 9	295 6th September 1852 ..		4,781 10 9				
M	2,218 14 9	335 15th October 1852		2,218 14 9				
	1,75,375 13 3		1,14,954 8 10	60,421 4 5	46,785 1 8	21,833 0 8	1,75,375 13 3	

A	Repairs between Wallaur and Ponany	70
B	Annual repairs do. do.	70
F	Rebuilding Bowany Bridge.	
D(1 & 2)	Construction of road between Coimbatore and Wallaur	16
E	Nurgumpilly Bridge.	
K	Additional metal for road between Coimbatore and Wallaur	16
H	Improvements between Wallaur and Ponany	70
J(1)	Parlakadow Bridge.	
G	Annual repairs between Wallaur and Ponany	70
P	Repairs between Perindoray and Bowany	12
V(1)	Do. Coimbatore and Avanashy	26
V(2)	Additional metal and Masonry works between Coimbatore and Avanashy.	
C	Repairs from Coimbatore towards Carumthumpetty	41
R	Annual repairs between Coimbatore and Wallaur	16
J(2)	Construction of road between Palghat and Mungara	121
W	Wotapolliam Bridge.	
M	Repairs to Chiana Nowkurray Bridge and Muddakurray road dam.	

B(1) & B(2) Annual Estimates for 1848-49 and 1849-50 inc
G(1) to G(3) Do. from 1850-51 to 1852-53 incl.

Accounts Particular of the Road Department from May 1846 to April 1853.

Letter of Estimates.	Amount of Estimates.	No. and date of Minutes of Consultation, sanctioning Estimates.	Advances.	Balance of Estimates.	Bills sanctioned.	Bills ready or submitted.	Particulars of Expenditure, and outstanding Balances.	Remarks.
STATEMENT No. 8. TRUNK ROAD No. 8.								
A	1,27,575 5 8	17 28th January 1847.....	1,18,590 1 1	9,285 4 7	1,11,548 6 4			
C(1)	8,239 13 6	49 19th February 1849	8,239 13 6		8,239 13 6			
D	22,658 12 ..	63 13th March 1849	22,658 12 ..		22,849 12 7			
B	54,899 6 ..	139 22d July 1849	54,000 ..	899 6 ..	45,548 15 8			
E	28,129 11 4	167 16th August 1849	28,129 11 4		27,665 13 1			
J	13,032 ..		13,000 ..	32 ..				
G(1)	9,540 ..						17,408 11 10	Lieutenant Tireman.
G(2)	10,616 8 ..						1,52,588 .. 9	Civil Engineer 6th Division.
G(3)	11,693 ..	167 16th August 1849	29,225 14 4	2,623 9 8	27,062 2 3		103 2 4	Sessions Judge Chinglipat.
G(4)	11,693 ..						48,898 15 6	Lieutenant Francis.
F(1)	1,10,488 11 ..	19 26th January 1850	11,393 ..				2,000 ..	Chingliput Tasildar.
O(1)	2,494 11 ..	28 22d January 1851	2,494 11 ..				250 ..	7 Carangooly do.
S	5,850 5 ..	137 17th April 1851	5,850 5 ..		2,075 6 10		549 5 4	Thadivaram do.
T	4,499 2 ..		4,499 2 ..		5,851 15 10		4,000 ..	Virachellam do.
V	32,233 15 ..	236 21st July 1851	15,000 ..	17,233 15 ..			4,000 ..	Torarangolam do.
X	4,500 ..						4,000 ..	Vellooanasoar do.
F(2)	42,099 5 9	361 9th December 1851	42,099 5 9				4,000 12 6	Villapooram ..
O(2)	1,937 ..	58 17th February 1852	1,937 ..				2,37,997 1 10	Outstanding.
O(3)	47,667 .. 6	125 13th April 1852	26,000 ..	21,667 .. 6			1,41,194 11 1	Balance of Estimates.
L	31,769 12 ..	172 25th May 1852	10,000 ..	21,769 12 ..			2,45,692 8 1	Bills sanctioned.
K	57,263 10 4	224 3d July 1852	20,586 ..	36,683 10 4			41,337 3 4	Bills ready.
P	378 3 11	313 25th September 1852	378 3 11				6,66,411 8 4	
H	25,000 ..	34 28th January 1853		25,000 ..			152 2 4	Due to Bank.
O(3)	1,500 1 ..	50 10th February 1853		1,500 1 ..				
	6,66,259 6 ..		5,25,064 10 11	1,41,194 11 1	2,45,882 8 1	41,337 3 4	6,66,259 6 ..	

A	Construction of road between Chingliput and Vikravandy	53
C(1)	Do. the Coleroon and Cauvery rivers	21
D	Do. Samiavaram and Coleroon river	51
B	Do. Vikravandy and Ooloonoorpett	30
K	Bridge over the Cauvery river near Trichinopoly	53
J	Preparation and cartage of material for 3 years in advance between Chingliput and Vikravandy	60
G	Annual repairs between Palaveram and Vikravandy	84
F(1)	Bridge over the Coleroon river near Trichinopoly	31
O(1)	Annual repairs between Samiavaram and Trichinopoly for 1851	31
E	Causeway across the Oopaur near Samiavaram	20
T	Bridge over the Chinnar river	36
V	Metalling between Vikravandy and Ooloonoorpett	84
X	Annual repairs for do.	
F(2)	Reconstruction of the Coleroon Bridge	
O(2)	Annual repairs between Samiavaram and Trichinopoly for 1852	
O(3)	Construction of road between Ooloonoorpett and the Vellaur river	
L	Causeway across the Palaur near Chinglipat	
K	Construction of road between the Vellaur river and Samiavaram	
P	Embanking the Oopaur river near Samiavaram	
H	Repairs between Mussoory and Salem boundary	
O(3)	Annual repairs between Samiavaram and Trichinopoly for 1853	

G(1) to G(4) Annual Estimates from 1849-50 to 1852-53 inclusive

* Amount refunded to General Treasury.

15

Accounts Particular of the Road Department from May 1846 to April 1853.

Letter of Estimates	Amount of Estimates.	No. and date of Minutes of Consultation, sanctioning Estimates.	Advances.	Balance of Estimates.	Bills sanctioned.	Bills ready or submitted.	Particulars of Expenditure and outstanding Balances.	Remarks.
STATEMENT No. 11. TRUNK ROAD No. 11.								
A(1)	7,359 5 11	84 24th April 1849.....	7,359 5 11		7,315 2 4			
A(2)	14,592 11	173 20th May 1851.....	14,592 11		14,776 12 1			
R(1)	600	17 16th January 1852.....		600			32,746 4 2	Balance of Estimates.
R(2)	600			600			22,091 14 5	Bills sanctioned.
E	11,881 7 10			11,881 7 10			392 4 6	Bills ready.
B	16,903 1	91 3d February 1852.....						
	*139 13 6	91 17th March 1852.....	392 4 8	16,510 12 4				
F	3,154	382 6th December 1852.....	139 13 6	3,154				
	55,230 7 3		23,484 6 1	32,746 4 2	22,091 14 5	392 4 6	55,230 7 3	
STATEMENT No. 12.								
A*	15,000	269 14th August 1852.....		15,000			15,000	Balance of Estimates.
	15,000			15,000			15,000	
STATEMENT No. 13. MARKING OUT ROADS.								
M	12,410 15 10	53 24th April 1849.....	12,410 15 10		4,444 14 9	4,556 5 3	191 10	Cuddalore Collector.
							1,500	Bellary Collector.
							600	Cauase Collector.
							200	Lieutenant Moberly.
							400	Do. Randall.
							100	Do. H. Emery.
							200	Sholinghur Tassider.
							207 13	Gangai Collector.
							100	Assistant Overseer Damerun.
							3,409 7 9	Outstanding.
							4,444 14 9	Bills sanctioned.
							4,556 5 3	Bills ready.
							0 4 1	Madras Bank.
	12,410 15 10		12,410 15 10		4,444 14 9	4,556 5 3	12,410 15 10	

A* Repairs of the Cuddalore branch..... 7
 B* Improvements between Cuddalore and Bellary..... 7
 C* Construction of road between Bellary and Cuddalore..... 9
 D* Removing the obstacles from Bellary to Cuddalore..... 14

Superintendent of Roads Office - Camp
 Arcot, 28th June 1853.

PROSPECTIVE List of Expenditure on Trunk Roads proposed for the year
1853-54.

Road.	Estimates		Balance on the 1st May 1853.	Proposed Expenditure.
1	H	Annual repairs from 4th to 129th mile...	39,178 11 ..	39,178 11 ..
1	Q	Construction of Quarry Tracks	3,100	3,100
1	A	Improvements between the 129th and 193d miles	24,009 12 6	16,000
2	A	Annual repairs between Frazerpett and Mangalore	5,262 8 ..	5,262 8 ..
2	N	Bridge over the Huntiar nullah	1,455 1 ..	1,455 1 ..
2	R	Annual repairs between Oopinungaddy and Pootoor	200	200
3	C	Construction of road from Mangalore to Buntwall	3,305 11 10	
3	A	Construction of Bridges in the Canara District	13,589 13 7	6,000
4	B	Annual repairs of the Perumbaddy ghaut and road	3,400	3,400
5	H	Improvements between Walliaur and Po- nany	7,688 14 11	7,688 14 11
5	J	Parlakadow Bridge	1,190 1 6	1,190 1 6
5	V(1)	Repairs between Coimbetoor & Avanashy.	4,830 14 ..	4,830 14 ..
5	G	Annual repairs between Walliaur & Ponany	7,100	7,100
5	V(2)	Additional metal and masonry works be- tween Coimbetoor and Avanashy	5,204 5 ..	5,204 5 ..
5	C	Repairs from Coimbetoor towards Carmu- thumpetty	1,566 3 ..	1,566 3 ..
5	R	Annual repairs between Coimbetoor and Walliaur	1,370 12 ..	1,370 12 ..
5	J(2)	Construction of road between Palgaut and Mungara	13,066 10 4	12,000
5	W	Wotapallium Bridge	4,781 10 9	4,781 10 9
5	M	Repairs to Chinna Nowkurray bridge and Muddukurray road dam	2,218 14 9	2,218 14 9
6	D & G	Annual repairs between Itchapoor and the Bengal frontier	2,400	2,400
6	F(2)	Completion of road between Madaveram and Goondipoondy	15,137 14 11	14,000
6	H	Bridge at the approach of the Bimlipatam river bridge	3,688 3 9	3,688 3 9
6	F(3)	Construction of road between Yerkenjairy and Madaveram	952 14 ..	952 14 ..
6	Y	Repairs between Yelloomanchilly and Ca- simcotta	3,413 7 7	3,413 7 7
6	R(2)	Annual repairs between Yerkenjairy and Goondipoondy	2,974	2,974
6	L N & T	Repairs between Yelloomanchilly and Toonee	47,907 0 5	30,000
Carried forward..				1,79,976 9 3

Road.	Estimates		Balance on the 1st May 1853.	Proposed Expenditure.
		Brought forward	1,79,976	9 3
6	R(3)	Annual repairs between Toonce and Soobaram	3,210	3,210
	G	Repairs between Madras and Goomdi-poondy from 5th to 28th mile	6,310 8 8	6,310 8 8
6	&	Masonry works between Tudda & Ulloor.	28,753 7	13,000
	R	Improvements between the 47th and 79th mile	59,268 5 9	20,000
8	B	Construction of road between Vikravandy and Ooloondoorpett	899 6	899 6
8	G(4)	Annual repairs between Palavcrum and Vikravandy	11,693	11,693
8	V	Metalling between Vikravandy and Ooloondoorpett	17,233 15	15,000
8	X	Annual repairs between do	4,500	4,500
8	C(2)	Construction of road between Ooloondoorpett and the Vellaur river	21,667 0 6	12,000
8	L	For a Causeway across the Palaur near Chingleput	21,769 12	9,000
8	K	Construction of road between the Vellaur river and Samiaveram	36,683 10 4	22,000
8	H	Repairs between Moossoory and Salem boundary	25,000	12,000
8	O(3)	Annual repairs between Samiaveram and Trichinopoly	1,500 1	1,500 1
9	X	Maintenance of the two ferry boats at the Lower Coleroon annicut	300 8	300 8
9	G	Construction of road between the Gedalum river and the Lower Coleroon annicut .	22,077 9 6	12,000
9	P	Construction of road between Pauprum-pett and the Gedalum river	16,358 0 3	9,000
10	R	Annual repairs from Arcot to the Mysore frontier via Paunautoor, Chittoor and Palmanair	6,813	6,813
11	R	Annual repairs to the Gooleheroo ghaut and road	600	600
11	E	Improvements between Daumulcheroo and Kulloor including the ghaut	11,881 7 10	1,000
11	B	Construction of road between Baukrappett and Cuddapah	16,510 12 4	9,000
11	F	Removing chief obstacles from Peclair to Coodairy	3,154	3,154
13	A	Preliminary works on the direct road to Cuddapah	15,000	10,000
		Marking out roads		3,000
		Establishment		33,000
		Total Rupees	3,98,957	0 11

Superintendent of Roads Office :
Camp Aurumbauk,
28th June 1853.

C. C. JOHNSTON, Captain,
Superintendent of Roads.

MEMORANDUM to shew the Marches made by the Superintendent of Roads from December 1851 to May 1853.

Year.	Month.	Road.	March.	Miles.
1851	December	6	From Madras to Nellore and back...	215
1852	January	8.9	Do. to Vickravandy and Vellaur annicut...	136
"	February	8.9	Vellaur annicut to Coubaconum, Trichinopoly and Chengieput	247
"	March	8.1	Chengieput to Madras and Tortallum...	140
"	April	1.10	Tortallum to Vaniembaddi, Vellore, Nungly, Arcot and Madras	259
"	May	6.1.10	Madras to Nerrumbank, Arcot and Chittoor...	133
"	June	10.1	Chittoor to Palmanai, Vellore and Cooroobahully...	166
"	July	1	Cooroobahully to Oosor and Madras...	213
"	August	6.1	Madras to Goomidiponde and Pullicondah...	152
"	September	1.8	Pullicondah to Vaniembaddi, Madras and Conairycoppum...	221
"	October	8.9	Conairycoppum to Coubaconum, Velliapoorum and Chinoor...	242
"	November	8.1	Chinoor to Madras and Streepurumatoor...	95
"	December	1	Streepurumatoor to Oosor and Velloor...	270
1853	January	1.6	Vellore to Madras and Nellore...	192
"	February	6.1	Nellore to Uloor, Madras and Arcot...	217
"	March	1.10	Arcot to Nungly and Madras...	214
"	April	8.9	Madras to Vickravandy and Vellaur annicut...	136
Total.....				3,248

Superintendent of Roads Office : Camp }
Aurumbank. 28th June 1853.

C. C. JOHNSTON, Captain,
Superintendent of Roads.

Extract from the Minutes of Consultation, under date the 25th July 1853.

Read the following Report from the Superintendent of Roads.

(Here enter 28th June 1853.)

1. The general report of the Road Department furnished by Captain Johnston, the Superintendent, is in continuation of that of the 1st May 1851 and is brought up to the 1st May of the current year. The Report contains much valuable matter, is full in all material details and being accompanied by Road-Maps and Statements, is rendered clear and intelligible. The particulars of the extent of work on each line which has been undertaken, executed or continues in progress, and the works yet necessary for their further improvement for which Estimates have been prepared and sanction obtained are given in so complete a form as to leave little for notice by Government, not perhaps beyond the remark, that with one exception, the line No. 7 between Ongole and Pondigul on the Hyderabad frontier, where nothing would appear to have been done, the extent of the road operations and the results which have attended them as evinced in the general fair condition of the several communications, are highly satisfactory.

2. The accounts of the Road Department shew that in the 7 years comprised between the 1st May 1846 and the 30th of April 1853, the Estimates prepared by the Superintendent and sanctioned by Government amounted in the aggregate to Rupees 23,33,809, of which

Bills have been sanctioned for work performed..... 10,29,204
Bills for work performed, ready to be submitted.... 1,38,241
Sums outstanding on works in progress.... 6,59,170
Undrawn balance of Estimates, or works not commenced upon..... 5,07,194

Rupees....23,33,809

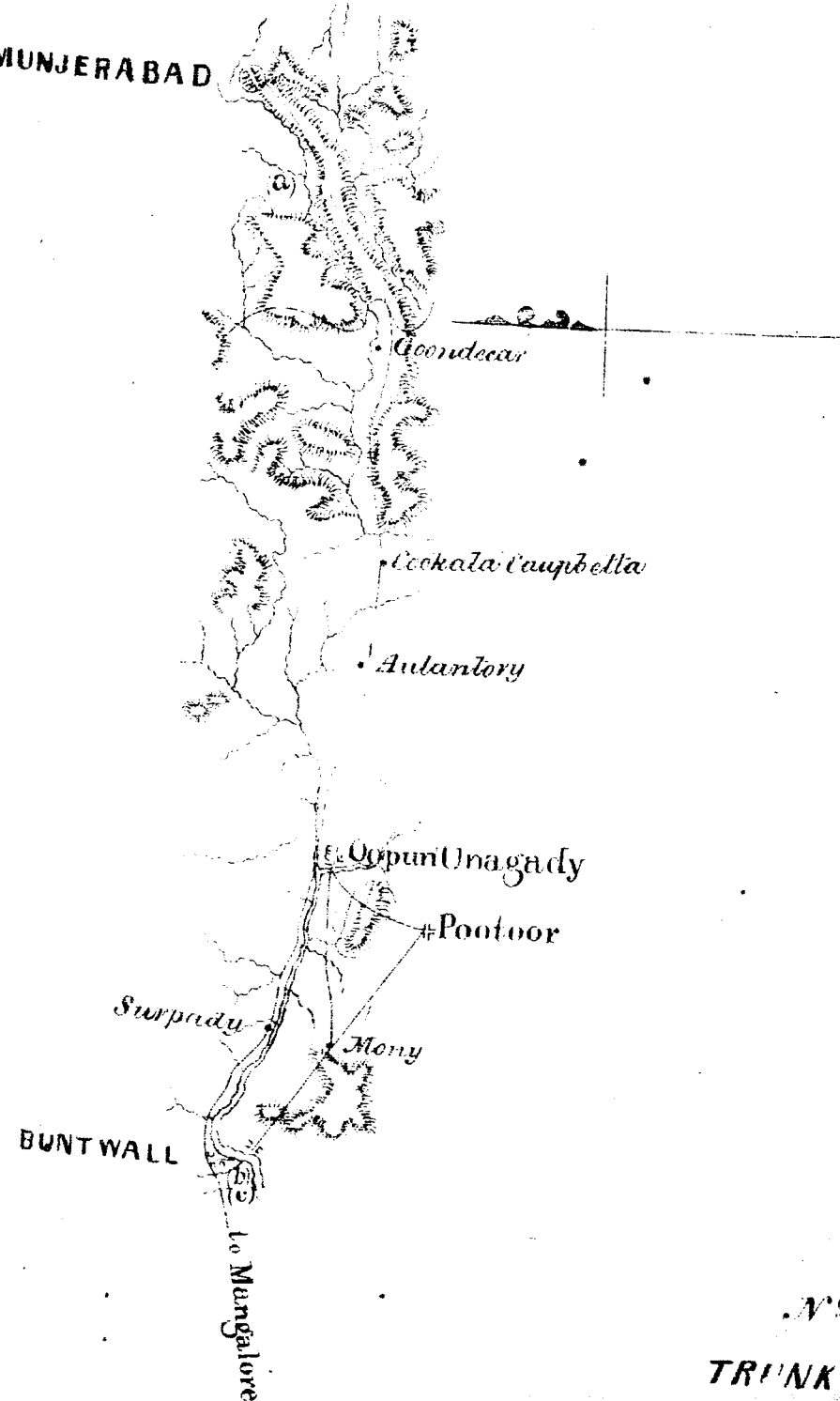
3. The Government notes with satisfaction the ready assistance afforded to Captain Johnston by the local Revenue and Engineer Officers and by his Assistants Lieutenants Tremen, Chauncey, Francis and Marshall, as well as the very favorable report made by the Superintendent of the Overseers and Artificers employed under his order.

(True Extract)

H. C. MONTGOMERY,

Chief Secretary

MUNJERABAD

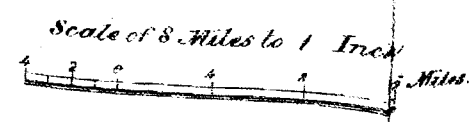


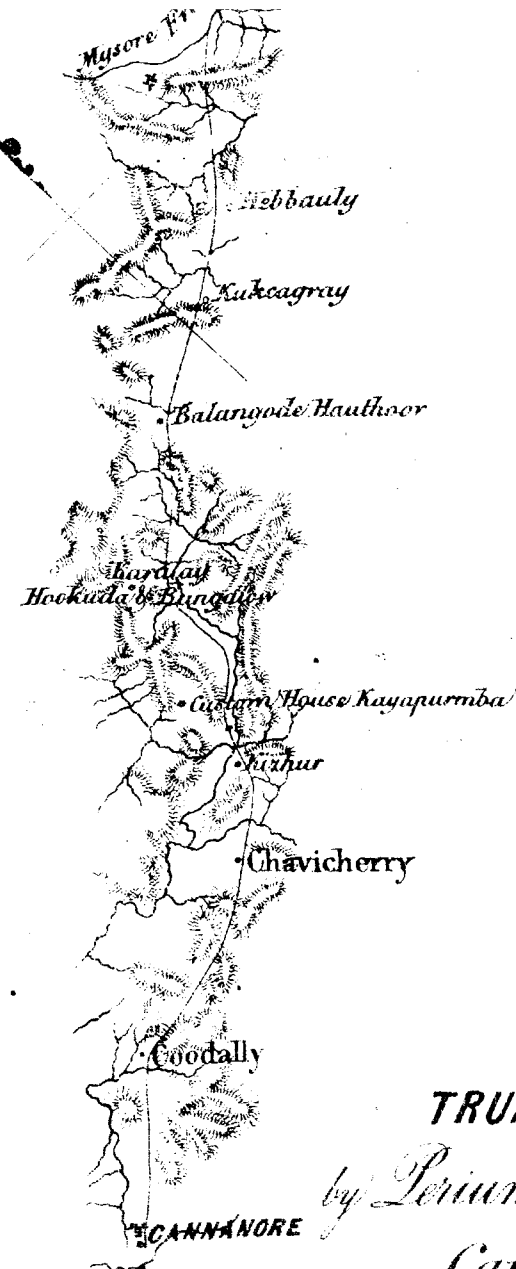
BUNT WALL

to Mangalore

Nº 3

TRUNK ROAD
from Munjerabad to
Buntwall





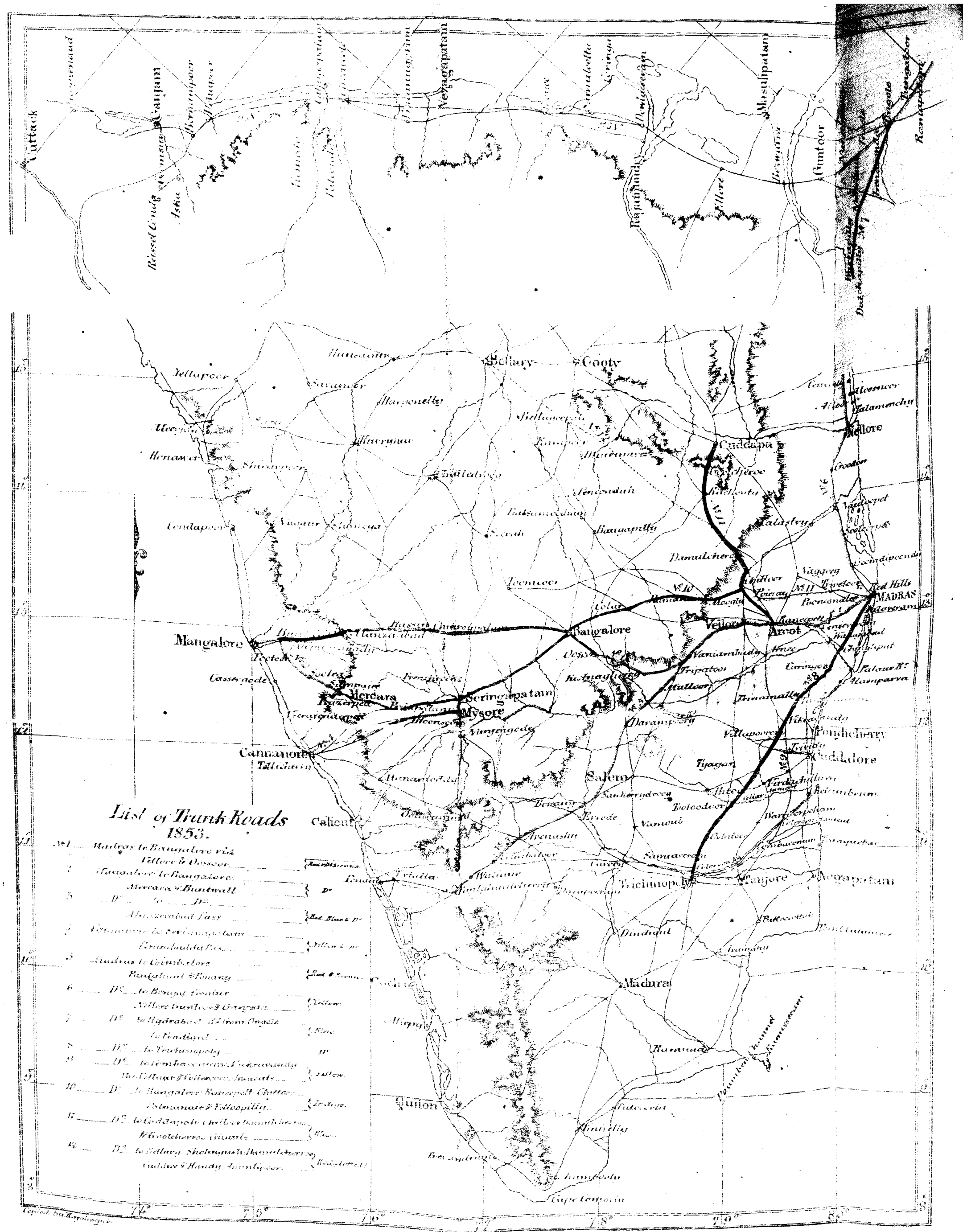
55204

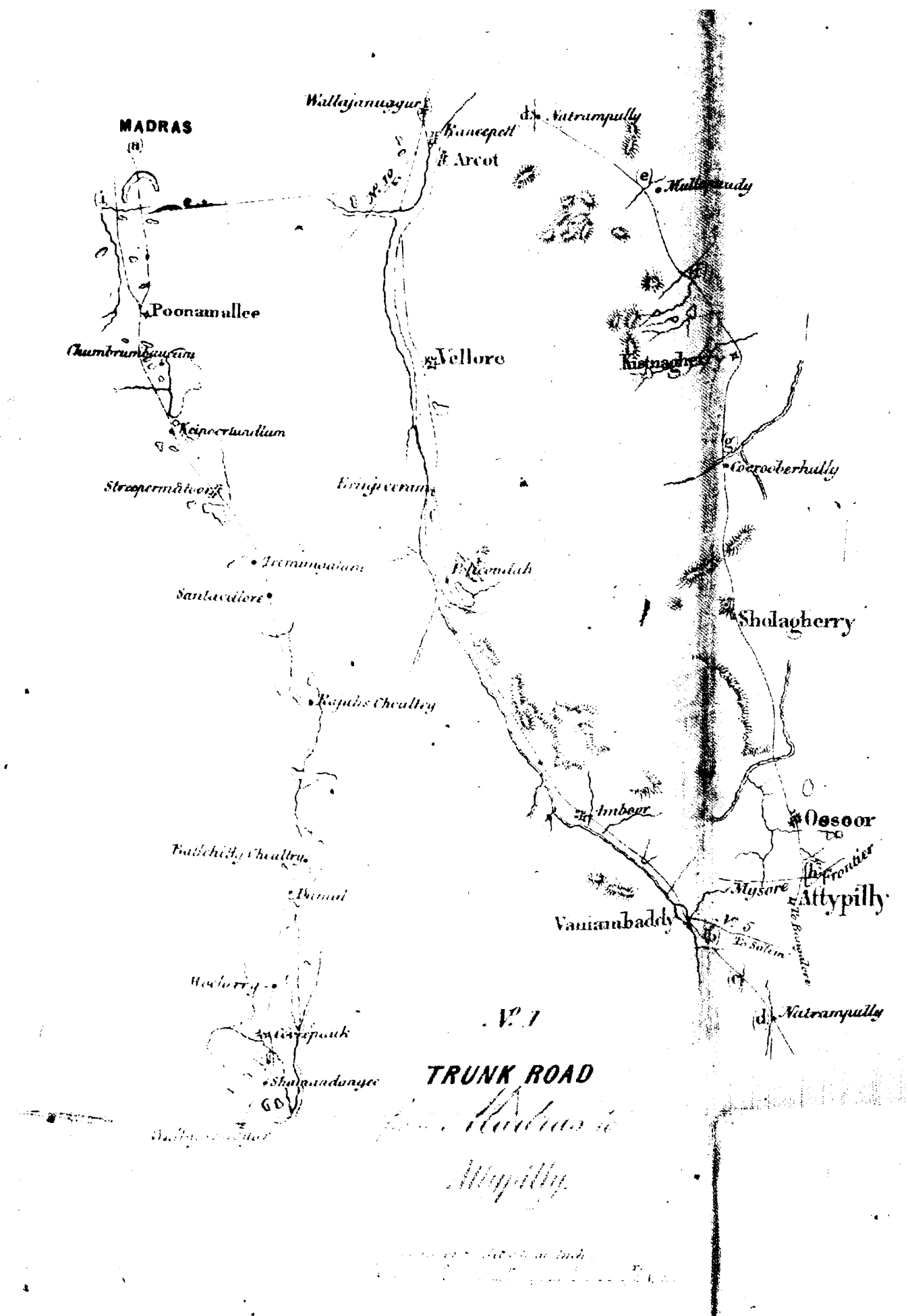
N^o 1

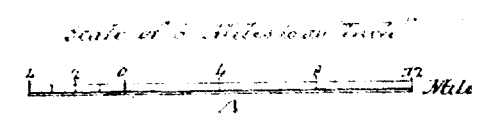
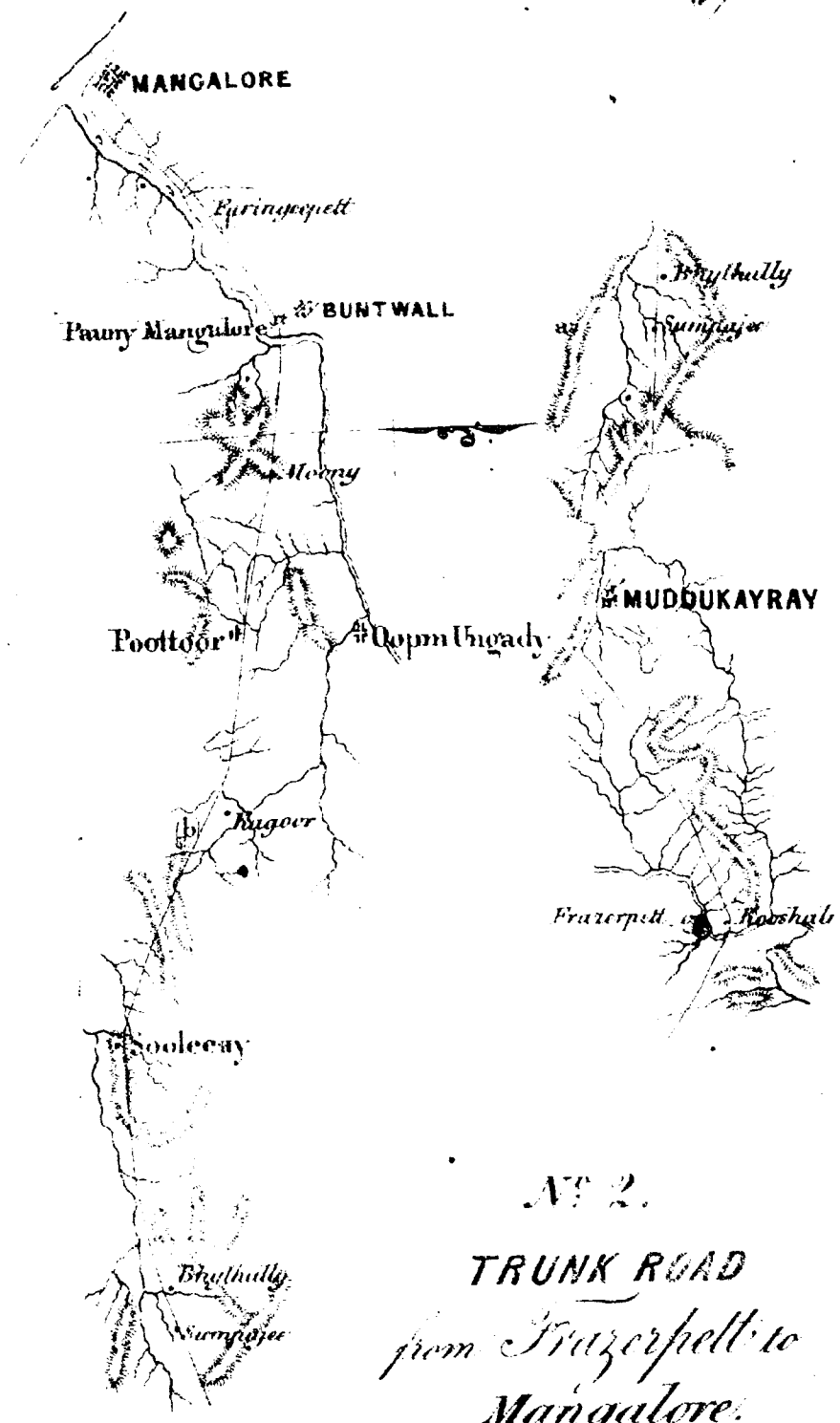
TRUNK ROAD

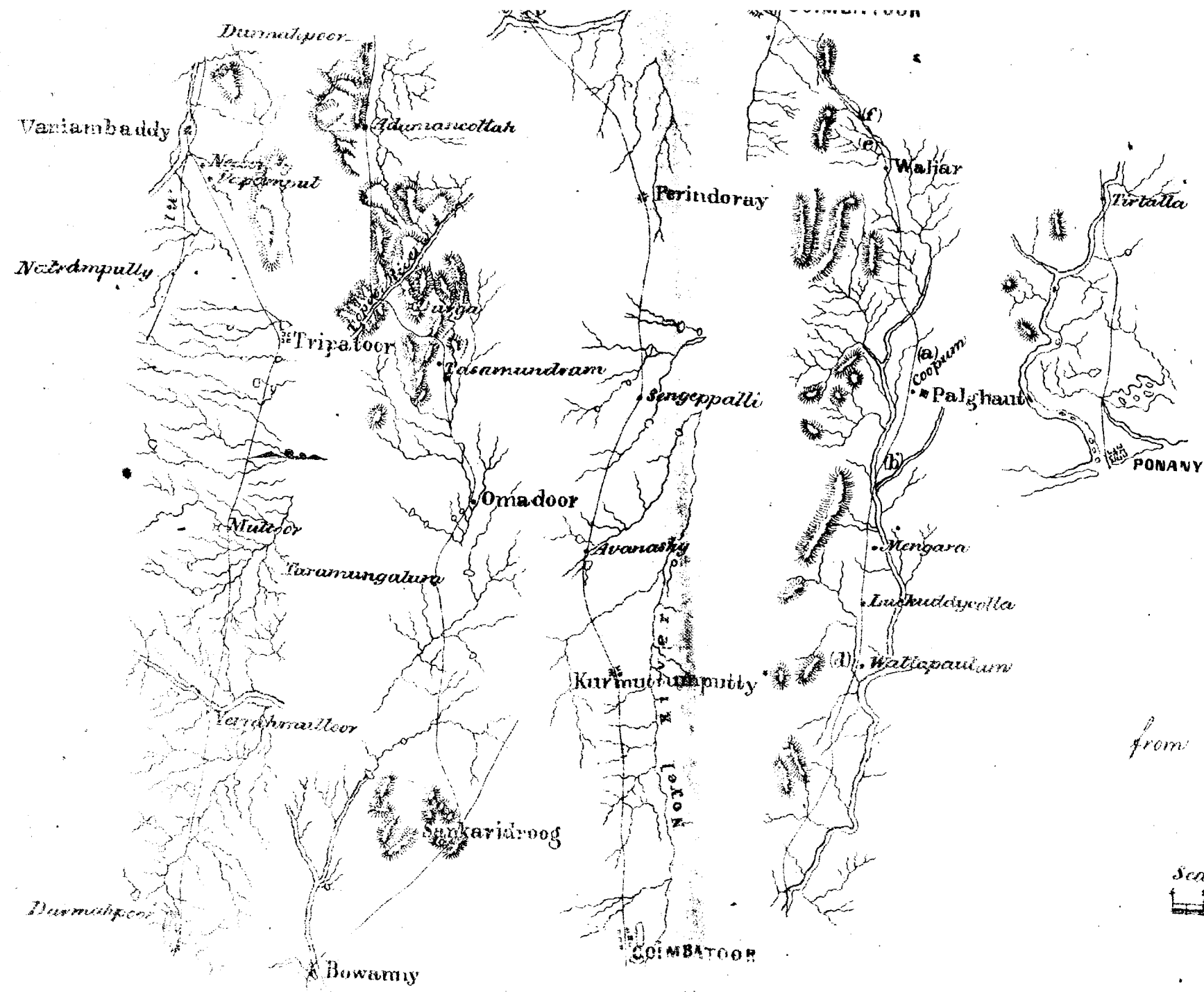
by Perumbaddy Chautu
Cannanore.

Scale of 8 Miles to an Inch
0 1 2 3 4 5 6 7 8 Miles



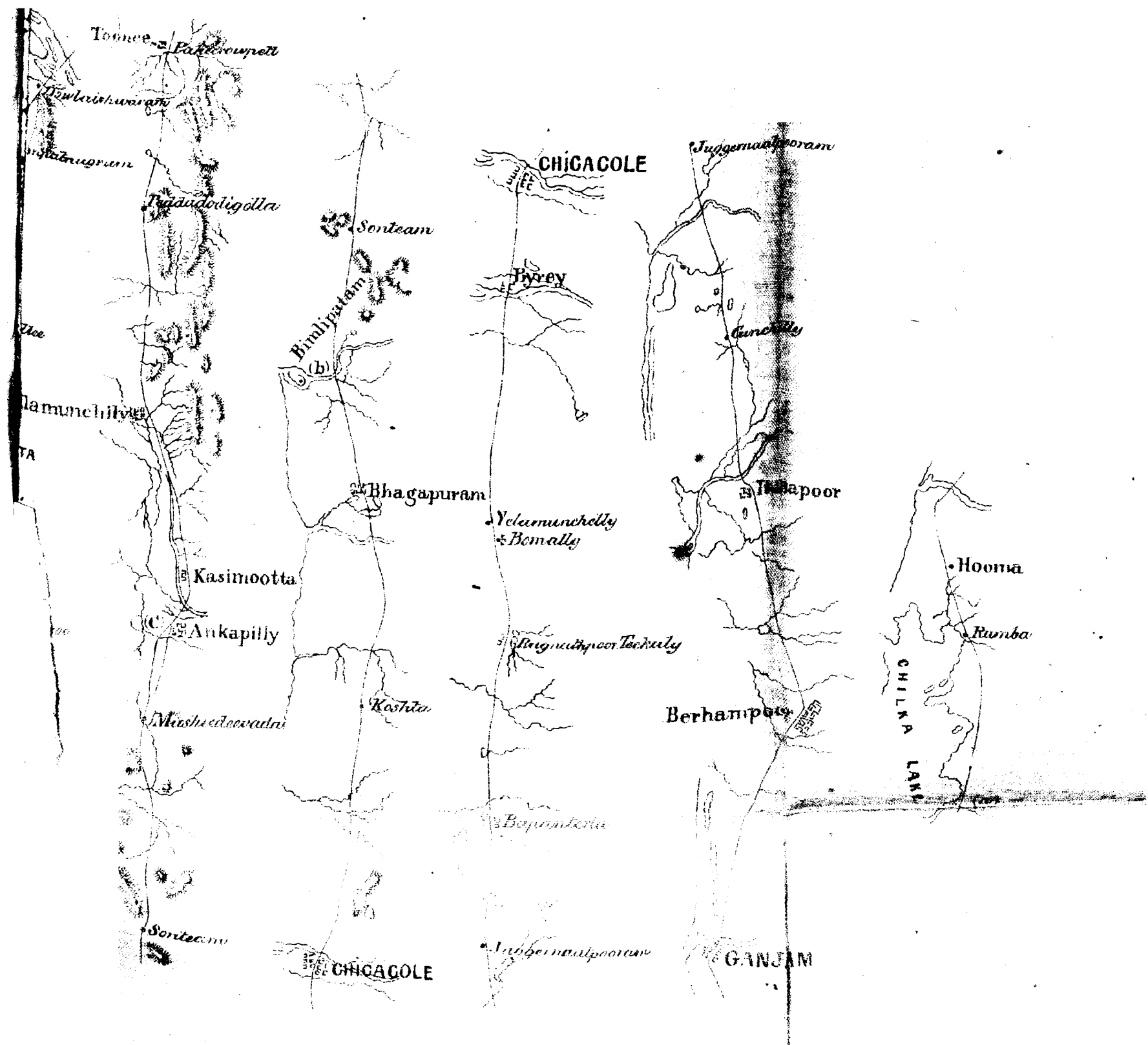


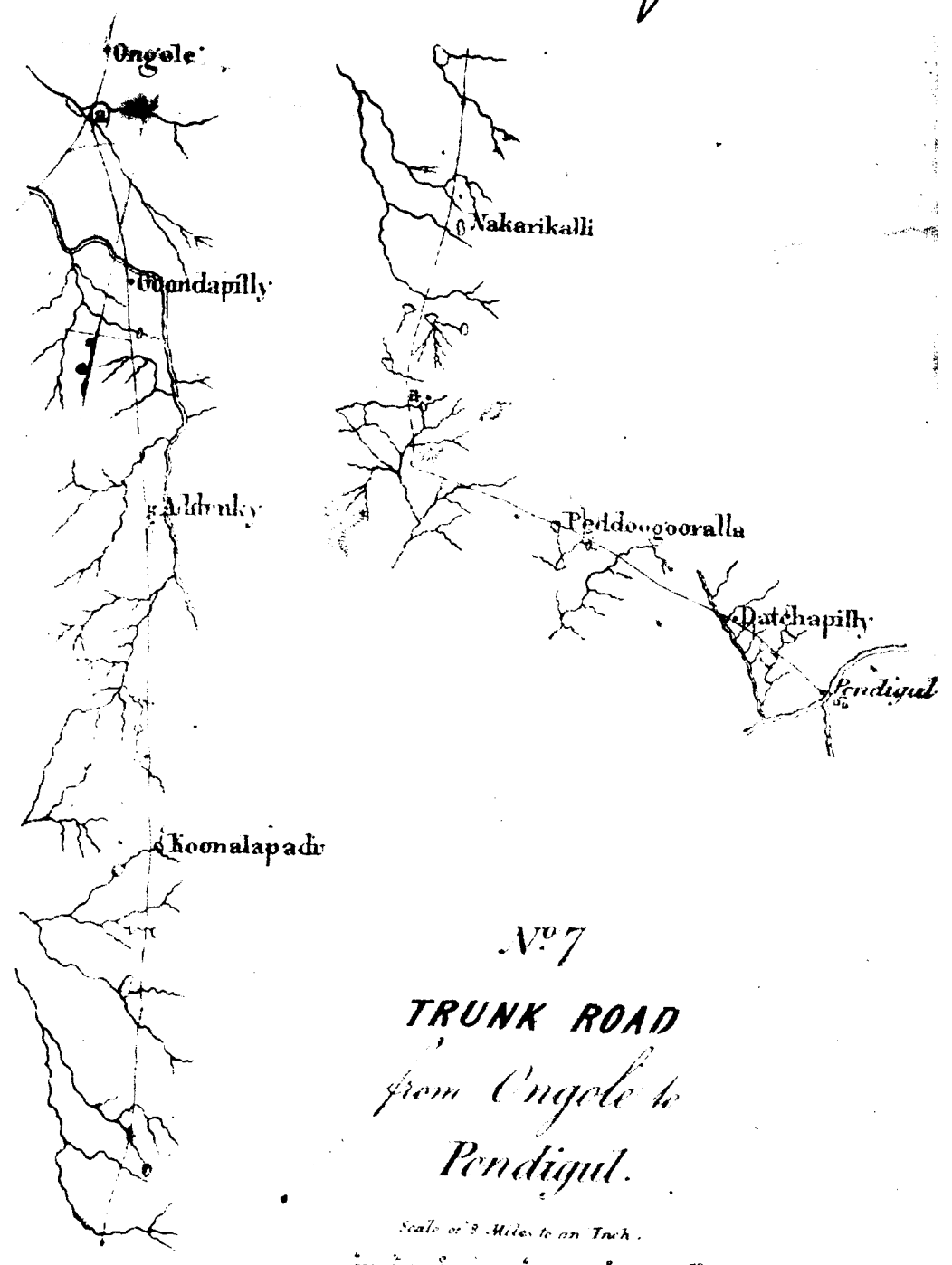




M 5
TRUNK ROAD
 from Vaniambaddy to
 Ponany

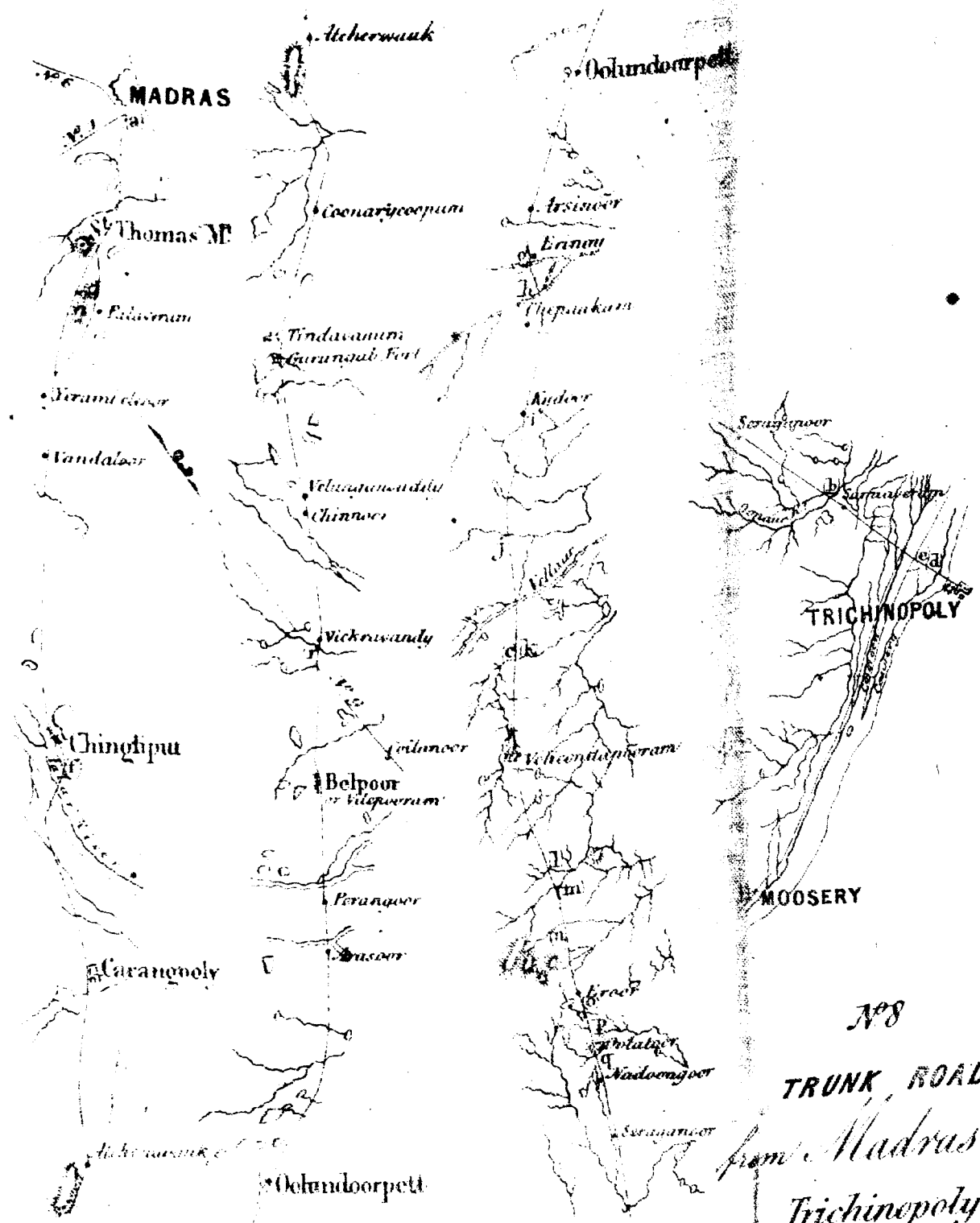
Scale of 4 Miles to 1 Inch
 12 Miles



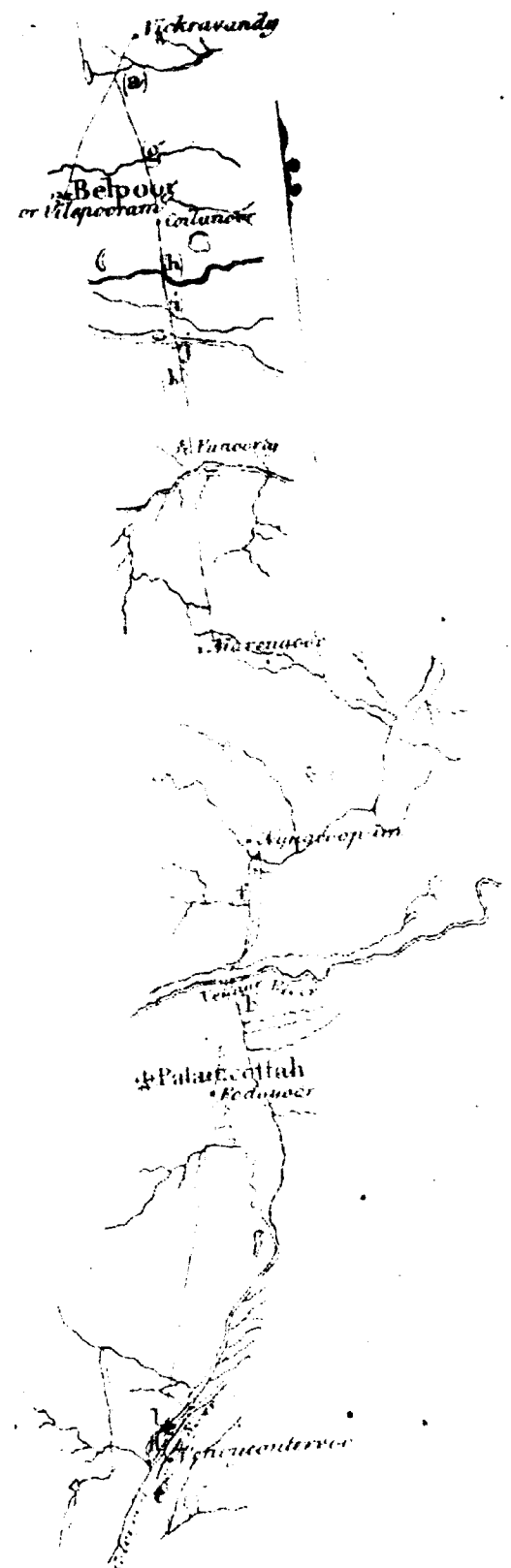


N^o 7
TRUNK ROAD
from Ongole to
Pendigut.

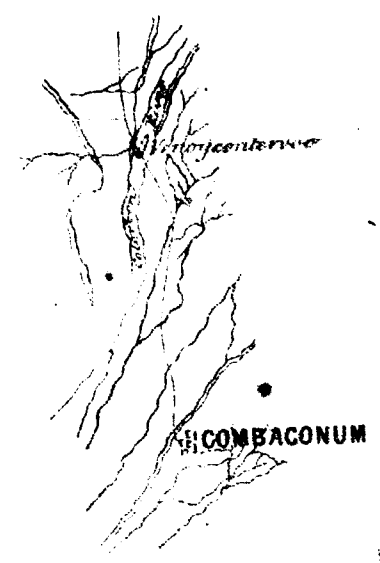
Scale of 2 Miles to an Inch.
0 1 2 3 4 5 6 7 8 9 10 Miles



N^o 8
 TRUNK ROAD
 from Madras
 Trichinopoly.
 Scale of 2 Miles to an Inch



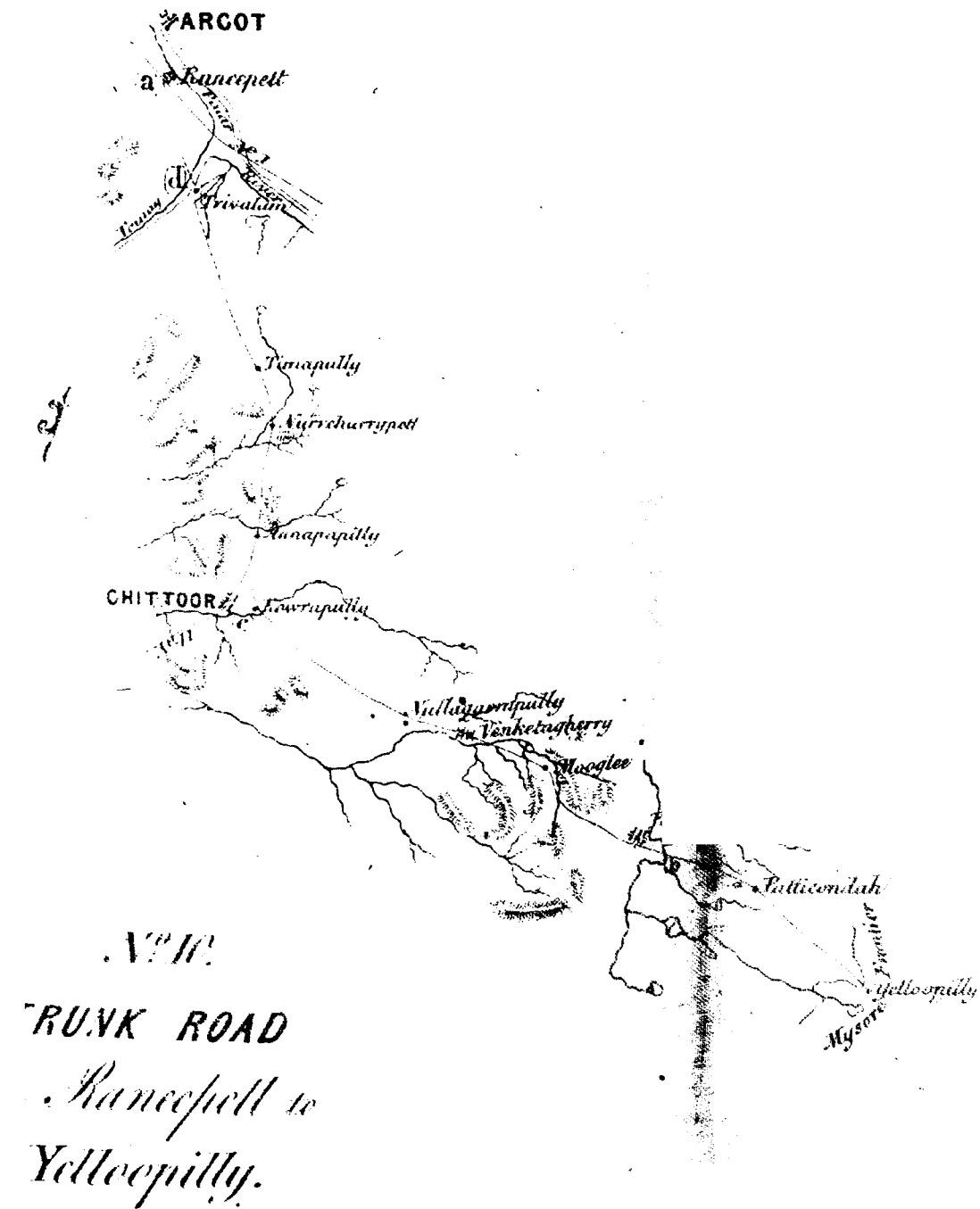
28



Nº 9

TRUNK ROAD
from Vickravandy to
Combaconum.

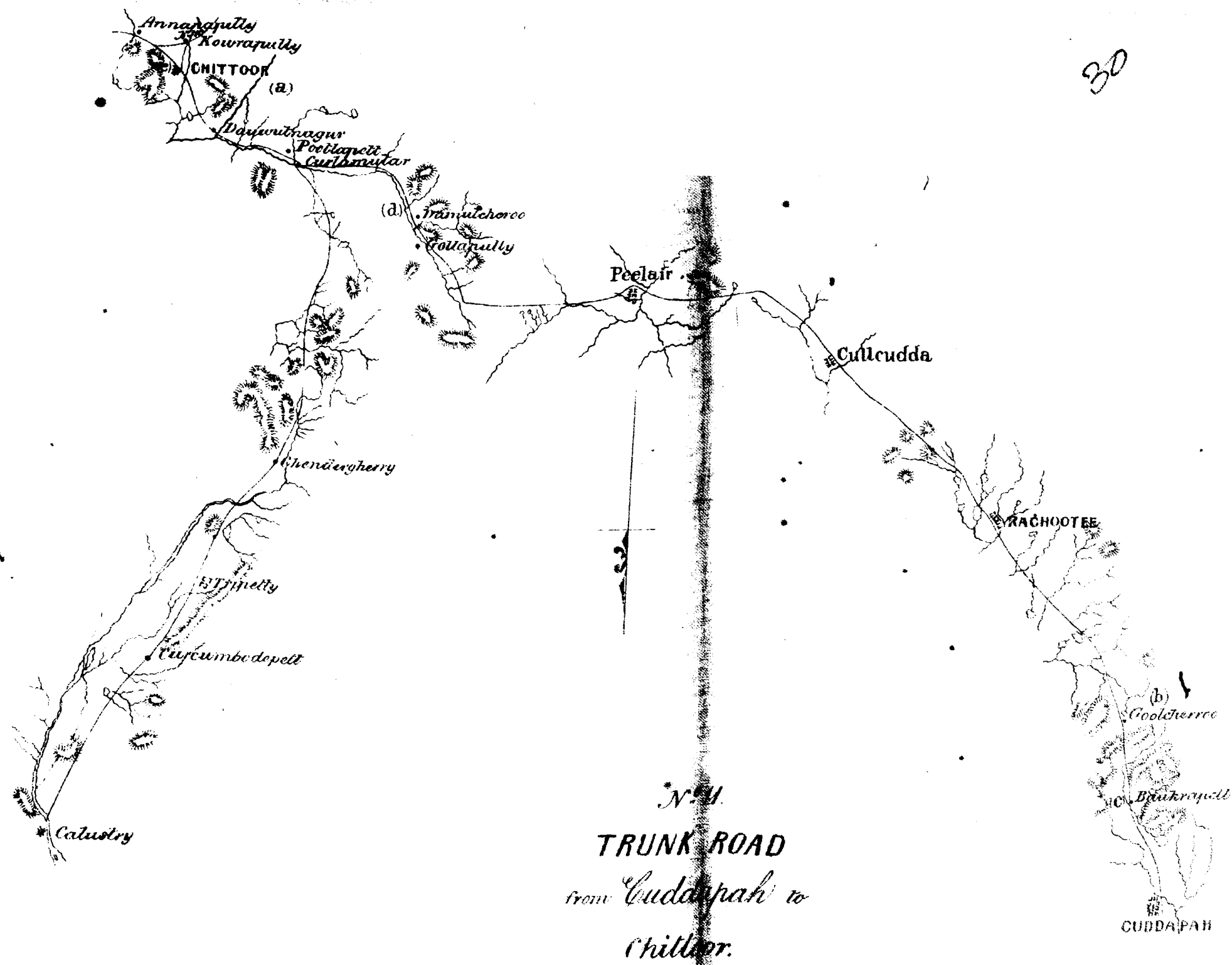
Scale of 8 Miles to an Inch.
0 1 2 3 4 5 6 7 8 miles



N. W. E.
 TRUNK ROAD
 Raneepett to
 Yelloopilly.

Scale of 8 Miles to an Inch.
 0 1 2 Miles

30



N
TRUNK ROAD
from Cuddapah to
Chittoor.
Scale of 8 miles to 1 inch
Miles