

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1232	Press Mis.
692-693	
Dated 29-4-	18-64

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
29th April 1864.*

No. 692. Read the following Endorsement of the Consulting Engineer for Railways, dated Madras, 6th April 1864, No. 189 :—

Read the following letter from R. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, to Lieutenant-Colonel P. P. L. O'CONNELL, R. E., Consulting Engineer for Railways, dated Madras, 5th April 1864, No. 290.

Sir,

1. I have the honor to submit an account of expenditure incurred in the erection of a bridge at the 395th mile of our South-West Line, and shall feel obliged by your taking the necessary steps to recover the amount, viz., Rupees 35,269-0-5 (thirty-five thousand two hundred and sixty-nine, and Pice five) from the Department of Public Works.

2. The Chief Engineer, when forwarding this account to me, with its accompaniments, offered the following observations :—

"I believe that the Government is prepared for this claim, but it may be advisable to state here the grounds on which it is made.

3. "Some time prior to the construction of the Madras Railway, a channel or canal was cut by the Department of Public Works from the coast to the Venjally lake. It was subsequently abandoned and a bund was thrown across it about half a mile above the point at which it is crossed by the line. The channel was spanned by a 20 feet arch for the purpose of carrying the Railway. On the 23th June, owing to heavy rains, the Kuddluhoondy rose to 16 feet above its ordinary level at this bund and breached it, the waters escaping by the unfinished canal, carrying away the Railway arch and flooding the country for some miles on either side.

4. "It is self-evident that the breach in the Railway was caused by the inadequacy of the bund to perform the work for which it was constructed. The Officers of the Department of Public Works alleged, in the first instance, that the inundation and subsequent destruction of the Railway bridge, were due in a great measure to the impediment offered to the discharge of the Kuddluhoondy by the Railway bridge and embankment 12 miles further down the stream; but Mr. Pinson, in his report of the 4th September 1863, clearly disproves this allegation, and the Government* has expressed its concurrence in his views.

5. "You are aware that it has been stated by some of the Officers of the Madras Railway, that the bund had not been maintained in an efficient state up to the time of its failure. I thought it advisable to institute some enquiries on this point, and annex copies of the evidence that has been collected.

6. "The following extract from a private letter, dated 12th November 1863, written by Mr. Lovell, formerly Resident Engineer at Beypore, to Mr. Anderson, shows that the attention of Captain Bean of the Department Public Works was directed to the inefficient state of the bund some years ago, and that he was warned of the danger to which the Railway works were exposed :—

"After the aforesaid canal bridge was well on to completion, there was a heavy flood over the country, and observing a great extent of land under water, I rode up to east of line and found an extensive dam across the canal cutting, and the flood-water within one, two or three feet of the top. I forget which, and at the same time that the dam required some repairs. I remember I wrote at once on the subject to Captain Bean at Calicut, pointing out this, and informing him that if this dam was not kept in proper repair, the consequence would be that some day the Railway bridge would be swept away." I regret that the letter referred to is not forthcoming. It may perhaps be discovered in the Engineer's Office at Calicut, if a search be made.

7. "These documents appear to me clearly to prove neglect on the part of the Department Public Works, and therefore liability for the damage done. You will observe that Nadoothodi Moosacooty, one of the witnesses whose deposition has been taken, has made a claim on Government for damage caused by the inundation, and that the validity of his claim has been recognized. The same principle, I think, must obtain in the case of damage sustained by the Railway."

Washed

*Proceedings of the Madras Government, Public Works Department,
29th April 1864.*

1. Forwarded for the orders of Government.
2. In an Order of the 18th December last No. 3,748, in the Public Works Department, Government were of opinion that the over-topping of the Venjally lake bund was not owing to the bank of the tank having been maintained in a very inefficient state of repair."
3. In my letter of the 18th January last, No. 27, I brought to the notice of Government that the Agent proposed calling on them to reimburse the expenses incurred in re-building the bridge at the 395th mile.
4. As the present letter and its accompaniments will have to be considered in the Department Public Works, I refrain from remarking on them.
5. Should the Madras Railway Company's claim be admitted, Government must be prepared for similar claims being made by the Great Southern of India Railway Company, in the event of the Padoogays being washed away, the artificial banks of the Cauvery failing from unforeseen causes, and the works on the Railway being damaged.

(Signed) P. P. L. O'CONNELL, Lieut.-Colonel, R. E.,
Consulting Engineer for Railways.

Transferred to the Public Works Department for consideration and disposal.
Fort Saint George,
9th April 1864.

(Signed) A. J. ARBUTHNOT,
Chief Secretary to Government.

No. 693.

ORDER THEREON, 29th April 1864, No. 1,232.

1. These papers relate to a claim preferred by the Officers of the Madras South-West Railway for the reimbursement to the Company of the cost of constructing a wrought iron bridge of three bays, of 70 feet span each, in lieu of a small one arched masonry bridge of 20 feet, which carried the rail over the bed of the abandoned Pooraparamba channel, and was destroyed on the night of the 28th June last by the bursting of the embankment of the Venjally lake. The claim is based on the alleged neglect of the Government to maintain the embankment in an efficient state of repair, and in support of their views on this point, the Railway officials present a purely supposititious section of what the embankment "might" have been, and what it "would be," in their opinion, under certain eventualities, and they adduce the testimony of four Native inhabitants of the neighbourhood, who do not hesitate to declare that nothing had been done to the embankment for two years previous to its failure.
2. The first intimation the Government had of the breaching of the embankment and the destruction of the Railway bridge was conveyed in a report from the Superintending Engineer, under date the 29th July 1863, in paragraph 6 of which he described the accident, and stated that, in Captain Bean's opinion, it had possibly been caused by the impediment to the exit of the waters of the Kuddulhoondy or Mulleapooram river occasioned by the construction of the Kuddulhoondy Railway bridge embankment.
3. This report having found its way into the local papers, the passage attributing the giving way of the Venjally lake embankment to the effect of the Kuddulhoondy Railway bridge embankment attracted the attention of the Railway officials, and on the 9th September 1863, the Agent and Manager submitted, through the Consulting Engineer, a copy of a letter from Mr. Assistant Engineer Pinson, in which that gentleman clearly showed, from the result of personal inspection of the height at various points to which the Kuddulhoondy had risen above the ordinary level of its waters, that the cause of the reflux of that river into the Venjally lake and consequent breaching of its embankment was not any obstruction offered by the Railway works, but simply the inadequacy of the sectional area of the river's channel to carry off an extraordinary flood like that which had occurred. In submitting this letter, Mr. Elwin remarked that he had reason to believe that the embankment had not been maintained in a very efficient state of repair, and that, if this fact could be clearly established, he thought the Department of Public Works should be held responsible for the amount of the damage.

*Proceedings of the Madras Government, Public Works Department,
29th April 1864.*

4. Mr. Pinson's letter, with the Agent's remarks, having been communicated to the Superintending Engineer for any observations that he might wish to offer, Colonel Walker in a letter, dated 27th November 1863, No. 245, disputed the conclusion at which Mr. Pinson had arrived, and with reference to the allegation that the over-topping and breaching of the Venjally lake embankment were attributable to its defective condition, he gave a distinct denial.
5. In its Proceedings under date the 18th December 1863, No. 3,748, the Government after the fullest consideration of the subject, recorded its opinion to the effect that the bursting of the Venjally lake was not occasioned by its embankment being in an inefficient state of repair, but by the reflux of the pent up waters of the Kuddulhoondy into the lake, and that this reflux was not caused by any artificial obstruction created by the Railway, but by the natural incapacity of the channel of that stream to carry off an extreme flood.
6. The Government is still of this opinion. It sees nothing in the papers now laid before it that can be accepted as proof to establish the fact of the Venjally lake embankment having been maintained in a very inefficient state of repair. If the statements that nothing had been done to it for two years be worth anything, they may be taken to show that nothing had been required. The Government has the assurance of the Superintending Engineer that the assertion of the over-topping of the embankment being attributable to its defective condition is gratuitous, and without conclusive evidence, the Government is not prepared to admit the charge of negligence on the part of the Public Works Department. On the other hand, it is not clear that the Railway Company, as required by Clause 4 of its Contract, had taken effectual measures to protect its works "from injury or destruction by inundations, tempests or other causes whatsoever." The site of the bridge at the 395th mile across the Pooraparamba canal, and only a few yards below the embankment of an artificial lake, seems such as eminently required the most thorough protective arrangements being provided, and the Government believes that if the original bridge had, with proper foresight, been designed to allow the same outlet as the one now substituted for it, it is not likely that the Railway would have sustained any damage by the bursting of the lake, for the width to which the canal was extended by the discharge from the breach was only 60 yards, or 180 feet, while the clear water-way of the new bridge is 210 feet.
7. The failure of the embankment to withstand the effect of the unprecedentedly heavy flood, which was diverted into the lake on the 28th of last June by natural causes, over which no control was possible, appears to have been utterly unavoidable, and the Government declines to entertain the Railway Company's claim for damages in any shape whatsoever.
8. The receipted Bill which accompanied the papers under consideration will be returned to the Agent and Manager.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 7th Division.

„ Financial Railway Department.

„ Consulting Engineer for Railways, with receipted Bill.

Exd. S. T. Augustin.

Washed

No 189.

Forwarded for the orders of Government.

2. In an Order of the 18th December last, No 3745, in the Public Works Department, Government were of opinion that the over topping of the Venzally lake tunnel was not owing "to the bank of the tank having been maintained in a very inefficient state of repair."

3. In my letter of the 18th January last, No 27, I brought to the notice of Government that the Agent proposed calling on them to reimburse the expenses incurred in rebuilding the bridge at the 395th mile.

4. As the present letter and its accompaniments will have to be considered in the Department Public Works, I refrain from remarking on them.

5. Should the Madras Railway Company's Claim be admitted, Government must be prepared for similar claims being made by the G. & S. Railway Company, in the event of the Passogay being washed

washed away; the artificial banks of
the Cañon failing from unforeseen
causes, and the works on the Rail-
road being damaged.

Machas 3
6 April 1864 3

Wm. S. G. R. C.

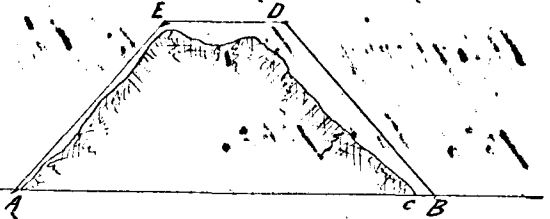
Ans. Lugo for Ry

To
The Chief Secy to Govt
Fort S. George

Excerpt of a letter from the Quakers to Mr. Pison dated February 16th 1864.

I have been to the Break this morning to ascertain the state of the Bund at the time of the flood. The inhabitants state that for two years previous to the break nothing had been done to the Bund; that the water had little by little washed away the earth from the foot of it so that the slope which originally might be represented by

D. B. latterly would be shown as at D. C.



The sides they say were steep, there was no sign of leakage anywhere. They cannot state whether the bund gave way before the water ran over it. Since the flood occurred at night. In ordinary seasons the top of the bund was considerably above the level of the water, but last year the water rose much higher than the level of the tops of the bund. I enclose Prager's account given about four months after the occurrence; what I have given above is information derived directly from people living in the neighborhood and corresponds with information contained in Prager's account.

(True Extract)
Signed W. L. Smart
Chief Engineer

Chas.

Copy received to England
27 3 65 May 1864 No 34.

407 1864 2 Apr

Copy of 400 ft. for 1864

21 11 64 333

From the Comptroller

1864

Detest 7th 1864
Pencil 11 1864

6 3 1864

24 12 32 - 29 2 1864

Transferring some
money to my bank for
regulating the movement
of the 35 269 - 2.5 being the cost
of constructing a bridge at the
395th mile of the route from
here.

W. L.

21 1864 1864 - 01.21.65

2. 1864
April 1864 - 03.27.64

The Pond originally at the top of the bank at 395' high, had not been attended to, or repaired for two seasons.

The Kallagies and People say that the water rose to a considerable height above the top level of the Pond, which was the chief cause of the bank giving way. The last Monsoon that caused the break is as stated by the people of the place the most severe one that has been experienced within the last 15 years.

I understand it was the duty of the Adigaying to see to the Pond that it was secured
13 Nov: 1863:
Signed D. P. Pagan

[True Copy]
Signed W. G. Smart
Chief Engineer

Deposition taken from Nadoothodi Moosacootty

I Nadoothodi Moosacootty, have been residing near the Sattankhal Canal now about 30 years. There had not been a Canal here before it was made by the Government. In consequence of an overflow of water in this Canal some boundaries of the Puccambas belonging to the neighbours had washed away. The Government then blocked up the Canal by means of putting a band across it. In the same year the band was made the water rose up very high and washed away part of the band. The Government then cleared it with lattice ballast and leveling up the slopes. Although it was then cleared the slopes used occasionally to wear away. For two or three years since the Pond was built the

the Government servants used to visit it annually and repair it if required any. Since the two years last the Government servants neither visited nor repaired the Pond. Wherever it was washed away the band had in some places fallen down on account of the fall of rain and cattle climbing over. In consequence of the break of this Pond I have sustained a loss of 5 coconut trees, 1 Jack tree and a portion of land belonging to my compound. This the Government servants have inspected and made up an account of. As the band was broken at night I did not happen to see it at the same time, but I saw it only on the next morning. I saw it on the evening before it was broken I found that the water was standing about two feet to the top of the Pond. This is what I know about the matter.

Cooraparamba
Signed Moosacootty mark.
27 February 1864

[True Copy]
Signed W. G. Smart
Chief Engineer

Deposition taken from Vettoonyang Ayed Ally

I Vettoonyang Ayed Ally have been residing near Cooraparamba since my infancy. There was not a Canal at this place before and that which we now see has been made by Government and subsequently built a band across it. The aforesaid band had been repaired by the Government when it used to wear away, but since the two years last the Adigaying or any Government servant have neither visited or repaired it. This band was

first built with sand and subsequently with
lateral ballast and its slopes steepened after it had
occasionally washed away. It is now more than forty
years since the bond was built. This is all I
know about it.

Cootaparamba
27 February 1864
/ Signed Dyed Ally

/ True Copy /
/ Signed W. G. Smart
Chief Engineer

Deposition taken from Potthooyya

I Potthooyya, have been residing
about 1 1/2 miles distance from the Cootaparamba
Canal, since my infancy. On some occasions when
I was walking by the side of the Canal I have
seen the bond built across the Canal, by the
Government. It was first built with sand, and
had been occasionally repaired by Government when it
was partly washed away. Since the two years last
the Government servants have neither visited nor
repaired it. A few days before the bond was broken
I saw that it was in some places washed away
and required repair.

Cootaparamba
27 February 1864
/ Signed Potthooyya

/ True Copy /
/ Signed W. G. Smart
Chief Engineer

Deposition taken from Sheshachan Pooial
Rajen Coatty.

I Sheshachan Pooial Rajen Coatty,
has been residing near the Cootaparamba Railway
Bridge now about 10 years. There had not a Canal
at this place before. The Canal which is here
at present was made by the Government and
subsequently a bond was built across it and blocked
up the Canal. This bond as it washed away
little by little, the Government used to repair it.
but since two years last the Government servants
have neither visited nor repaired it.

Cootaparamba
27 February 1864
/ Signed Rajen Coatty

/ True Copy /
/ Signed W. G. Smart
Chief Engineer

/ True Extract and Copy /
W. G. Smart
Agent and Manager

P.S.

Copy in duplicate
of 30 May 1864, at 34

2/1333/1/1

no 290

Madras Railway
Madras 5th April 1864

From

A. B. Elumbar, Esq.,
Agent and Manager of the M. R. Co.

To

Lieut. Col. A. D. O'Connell, Esq.,
Cons. Engineers for Railways.

Sir,

1. I have the honor to submit an account of expenditure incurred in the erection of a bridge, at the 395th mile, of our South West Line, and shall feel obliged by your taking the necessary steps, to recover the amount, vizt Rs 35,269.0.5 (thirty five thousand two hundred and sixty nine and five paise) from the Department of Public Works.

2. The Chief Engineer, when forwarding this account to me, with its accompaniments, offered the following observations.

"I believe that the Government is prepared for this claim, but it may be advisable to state here the grounds on which it is made."

3. Some time prior to the construction of the Madras Railway, a Channel or Canal was cut by the Department of Public Works from the Coast to the Venjally lake. It was subsequently abandoned and a bund was thrown across it about half a mile above the point at which it is crossed by the line. The Channel was spanned by a 20 feet Arch for the purpose of carrying the railway. On the 28th June, owing to heavy rains, the

2. 1872 Adm. 1864-012148
Kuddalhoondy rose 16 feet above its ordinary level at this bund and breached it, the waters escaping by the unfinished Canal, carrying away the Railway arch and flooding the Country for some miles on either side.

"4 It is self-evident that the breach in the railway was caused by the inadequacy of the bund to perform the work for which it was constructed. The Officers of the Department of Public Works alleged in the first instance that the inundation and subsequent destruction of the Railway bridge, were due in a great measure to the impediment offered to the discharge of the Kuddalhoondy by the Railway bridge and embankment 12 miles further down the stream; but Mr Pinson, in his report of the 4th September 1863, clearly disproves this allegation and the Government has expressed its concurrence in his views.

"5. You are aware that it has been stated by some of the Officers of the Madras Railway, that the bund had not been maintained in an efficient state up to the time of its failure. I thought it advisable to institute some enquiries on this point, and annex Copies of the evidence that has been collected.

"6. The following extract from a private letter dated 12th November 1863, written by Mr Lovell, formerly Resident Engineer at Beypore to Mr Anderson, shows that the attention of Captain Dean of the D. P. W. was directed to the inefficient state of the bund some years ago, and that he

was warned of the dangers to which the Railway works were exposed.

"After the aforesaid Canal Bridge was well on to completion, there was a heavy flood over the country and observing a great extent of land under water, I rode up to east of line and found an extensive dam across the Canal cutting, and the flood water within one, two or three feet of the top. I forget which, and at the same time that the dam required some repairs. I remember I wrote at once on the subject to Captain Dean at Calicut, pointing out this, and informing him that if this dam was not kept in proper repair, the consequences would be that some day the Railway Bridge would be swept away. I regret that the letter referred to is not forthcoming. It may perhaps be discovered in the Engineer's Office at Calicut, if a search be made.

"7. These documents appear to me clearly to prove neglect on the part of the D. P. W. and therefore liability for the damage done. You will observe that Nadothotti Alloosacooty, one of the witnesses, whose deposition has been taken, has made a claim on Government for damage caused by the inundation, and that the validity of his claim has been recognized. The same principle, I think, must obtain in the case of damage sustained by the Railway."

I have the honor to be,
Sir,
Your most Obedient Servant,

Wm.
J. J. Chin
Agent and Manager.

feet, which

1232 Public Works Dept

Proceedings of the Native Government
Under date the 29th April 1864
Read the following En-
closurement from the Chief
Secretary to Government

Transferring Enclosure-
ment of the Consulting Engineer
for Railways requesting the per-
mission of Rs. 35,269 - - -
being the cost of constructing a
bridge at the 395th mile of the
South West Line.

N. S. 9th April 1864

These papers relate
to a claim preferred by
the Officers of the Native
South West Railway for
the performance to the
Company of the cost
of constructing a wrought-
iron bridge of three bays,
of 70 feet span each, in
lieu of a small one-arched
masonry bridge of 20
feet, which would

I am in full with the
opinion expressed in
the draft. such a flood
as causes a reflex of
water into a tank by
which the Pond is overflowed
is an event that can
hardly be provided for
while the Railway people
do not seem to have made
any provision against a
casualty by no means
unprobable in the building
of a Tank Pond

MD

JP

Transferred to the Public
Works Department for consid-
eration and disposal.

For St. George
9th April 1864

W. J. Cunningham
Chief Secretary
to Government.

South West Railway - Dept
of Railways.

From

The Chief Engineer

To

The Consulting Engineer

29th April 1864

Enclosed for the

Chief Secretary

to Government

for the consideration

of the cost of construct-

ing a bridge at the

395th mile of the

South West Line, the

amount of Rs. 35,269 - - -
being the cost of construct-

2. 1864-1865-1866-1867-1868-1869-1870-1871-1872-1873-1874-1875-1876-1877-1878-1879-1880-1881-1882-1883-1884-1885-1886-1887-1888-1889-1890-1891-1892-1893-1894-1895-1896-1897-1898-1899-1900-1901-1902-1903-1904-1905-1906-1907-1908-1909-1910-1911-1912-1913-1914-1915-1916-1917-1918-1919-1920-1921-1922-1923-1924-1925-1926-1927-1928-1929-1930-1931-1932-1933-1934-1935-1936-1937-1938-1939-1940-1941-1942-1943-1944-1945-1946-1947-1948-1949-1950-1951-1952-1953-1954-1955-1956-1957-1958-1959-1960-1961-1962-1963-1964-1965-1966-1967-1968-1969-1970-1971-1972-1973-1974-1975-1976-1977-1978-1979-1980-1981-1982-1983-1984-1985-1986-1987-1988-1989-1990-1991-1992-1993-1994-1995-1996-1997-1998-1999-2000-2001-2002-2003-2004-2005-2006-2007-2008-2009-2010-2011-2012-2013-2014-2015-2016-2017-2018-2019-2020-2021-2022-2023-2024-2025-2026-2027-2028-2029-2030-2031-2032-2033-2034-2035-2036-2037-2038-2039-2040-2041-2042-2043-2044-2045-2046-2047-2048-2049-2050-2051-2052-2053-2054-2055-2056-2057-2058-2059-2060-2061-2062-2063-2064-2065-2066-2067-2068-2069-2070-2071-2072-2073-2074-2075-2076-2077-2078-2079-2080-2081-2082-2083-2084-2085-2086-2087-2088-2089-2090-2091-2092-2093-2094-2095-2096-2097-2098-2099-2100-2101-2102-2103-2104-2105-2106-2107-2108-2109-2110-2111-2112-2113-2114-2115-2116-2117-2118-2119-2120-2121-2122-2123-2124-2125-2126-2127-2128-2129-2130-2131-2132-2133-2134-2135-2136-2137-2138-2139-2140-2141-2142-2143-2144-2145-2146-2147-2148-2149-2150-2151-2152-2153-2154-2155-2156-2157-2158-2159-2160-2161-2162-2163-2164-2165-2166-2167-2168-2169-2170-2171-2172-2173-2174-2175-2176-2177-2178-2179-2180-2181-2182-2183-2184-2185-2186-2187-2188-2189-2190-2191-2192-2193-2194-2195-2196-2197-2198-2199-2200-2201-2202-2203-2204-2205-2206-2207-2208-2209-2210-2211-2212-2213-2214-2215-2216-2217-2218-2219-2220-2221-2222-2223-2224-2225-2226-2227-2228-2229-2230-2231-2232-2233-2234-2235-2236-2237-2238-2239-2240-2241-2242-2243-2244-2245-2246-2247-2248-2249-2250-2251-2252-2253-2254-2255-2256-2257-2258-2259-2260-2261-2262-2263-2264-2265-2266-2267-2268-2269-2270-2271-2272-2273-2274-2275-2276-2277-2278-2279-2280-2281-2282-2283-2284-2285-2286-2287-2288-2289-2290-2291-2292-2293-2294-2295-2296-2297-2298-2299-2300-2301-2302-2303-2304-2305-2306-2307-2308-2309-2310-2311-2312-2313-2314-2315-2316-2317-2318-2319-2320-2321-2322-2323-2324-2325-2326-2327-2328-2329-2330-2331-2332-2333-2334-2335-2336-2337-2338-2339-2340-2341-2342-2343-2344-2345-2346-2347-2348-2349-2350-2351-2352-2353-2354-2355-2356-2357-2358-2359-2360-2361-2362-2363-2364-2365-2366-2367-2368-2369-2370-2371-2372-2373-2374-2375-2376-2377-2378-2379-2380-2381-2382-2383-2384-2385-2386-2387-2388-2389-2390-2391-2392-2393-2394-2395-2396-2397-2398-2399-2400-2401-2402-2403-2404-2405-2406-2407-2408-2409-2410-2411-2412-2413-2414-2415-2416-2417-2418-2419-2420-2421-2422-2423-2424-2425-2426-2427-2428-2429-2430-2431-2432-2433-2434-2435-2436-2437-2438-2439-2440-2441-2442-2443-2444-2445-2446-2447-2448-2449-2450-2451-2452-2453-2454-2455-2456-2457-2458-2459-2460-2461-2462-2463-2464-2465-2466-2467-2468-2469-2470-2471-2472-2473-2474-2475-2476-2477-2478-2479-2480-2481-2482-2483-2484-2485-2486-2487-2488-2489-2490-2491-2492-2493-2494-2495-2496-2497-2498-2499-2500-2501-2502-2503-2504-2505-2506-2507-2508-2509-2510-2511-2512-2513-2514-2515-2516-2517-2518-2519-2520-2521-2522-2523-2524-2525-2526-2527-2528-2529-2530-2531-2532-2533-2534-2535-2536-2537-2538-2539-2540-2541-2542-2543-2544-2545-2546-2547-2548-2549-2550-2551-2552-2553-2554-2555-2556-2557-2558-2559-2560-2561-2562-2563-2564-2565-2566-2567-2568-2569-2570-2571-2572-2573-2574-2575-2576-2577-2578-2579-2580-2581-2582-2583-2584-2585-2586-2587-2588-2589-2590-2591-2592-2593-2594-2595-2596-2597-2598-2599-2600-2601-2602-2603-2604-2605-2606-2607-2608-2609-2610-2611-2612-2613-2614-2615-2616-2617-2618-2619-2620-2621-2622-2623-2624-2625-2626-2627-2628-2629-2630-2631-2632-2633-2634-2635-2636-2637-2638-2639-2640-2641-2642-2643-2644-2645-2646-2647-2648-2649-2650-2651-2652-2653-2654-2655-2656-2657-2658-2659-2660-2661-2662-2663-2664-2665-2666-2667-2668-2669-2670-2671-2672-2673-2674-2675-2676-2677-2678-2679-2680-2681-2682-2683-2684-2685-2686-2687-2688-2689-2690-2691-2692-2693-2694-2695-2696-2697-2698-2699-2700-2701-2702-2703-2704-2705-2706-2707-2708-2709-2710-2711-2712-2713-2714-2715-2716-2717-2718-2719-2720-2721-2722-2723-2724-2725-2726-2727-2728-2729-2730-2731-2732-2733-2734-2735-2736-2737-2738-2739-2740-2741-2742-2743-2744-2745-2746-2747-2748-2749-2750-2751-2752-2753-2754-2755-2756-2757-2758-2759-2760-2761-2762-2763-2764-2765-2766-2767-2768-2769-2770-2771-2772-2773-2774-2775-2776-2777-2778-2779-2780-2781-2782-2783-2784-2785-2786-2787-2788-2789-2790-2791-2792-2793-2794-2795-2796-2797-2798-2799-2800-2801-2802-2803-2804-2805-2806-2807-2808-2809-2810-2811-2812-2813-2814-2815-2816-2817-2818-2819-2820-2821-2822-2823-2824-2825-2826-2827-2828-2829-2830-2831-2832-2833-2834-2835-2836-2837-2838-2839-2840-2841-2842-2843-2844-2845-2846-2847-2848-2849-2850-2851-2852-2853-2854-2855-2856-2857-2858-2859-2860-2861-2862-2863-2864-2865-2866-2867-2868-2869-2870-2871-2872-2873-2874-2875-2876-2877-2878-2879-2880-2881-2882-2883-2884-2885-2886-2887-2888-2889-2890-2891-2892-2893-2894-2895-2896-2897-2898-2899-2900-2901-2902-2903-2904-2905-2906-2907-2908-2909-2910-2911-2912-2913-2914-2915-2916-2917-2918-2919-2920-2921-2922-2923-2924-2925-2926-2927-2928-2929-2930-2931-2932-2933-2934-2935-2936-2937-2938-2939-2940-2941-2942-2943-2944-2945-2946-2947-2948-2949-2950-2951-2952-2953-2954-2955-2956-2957-2958-2959-2960-2961-2962-2963-2964-2965-2966-2967-2968-2969-2970-2971-2972-2973-2974-2975-2976-2977-2978-2979-2980-2981-2982-2983-2984-2985-2986-2987-2988-2989-2990-2991-2992-2993-2994-2995-2996-2997-2998-2999-3000-3001-3002-3003-3004-3005-3006-3007-3008-3009-3010-3011-3012-3013-3014-3015-3016-3017-3018-3019-3020-3021-3022-3023-3024-3025-3026-3027-3028-3029-3030-3031-3032-3033-3034-3035-3036-3037-3038-3039-3040-3041-3042-3043-3044-3045-3046-3047-3048-3049-3050-3051-3052-3053-3054-3055-3056-3057-3058-3059-3060-3061-3062-3063-3064-3065-3066-3067-3068-3069-3070-3071-3072-3073-3074-3075-3076-3077-3078-3079-3080-3081-3082-3083-3084-3085-3086-3087-3088-3089-3090-3091-3092-3093-3094-3095-3096-3097-3098-3099-3100-3101-3102-3103-3104-3105-3106-3107-3108-3109-3110-3111-3112-3113-3114-3115-3116-3117-3118-3119-3120-3121-3122-3123-3124-3125-3126-3127-3128-3129-3130-3131-3132-3133-3134-3135-3136-3137-3138-3139-3140-3141-3142-3143-3144-3145-3146-3147-3148-3149-3150-3151-3152-3153-3154-3155-3156-3157-3158-3159-3160-3161-3162-3163-3164-3165-3166-3167-3168-3169-3170-3171-3172-3173-3174-3175-3176-3177-3178-3179-3180-3181-3182-3183-3184-3185-3186-3187-3188-3189-3190-3191-3192-3193-3194-3195-3196-3197-3198-3199-3200-3201-3202-3203-3204-3205-3206-3207-3208-3209-3210-3211-3212-3213-3214-3215-3216-3217-3218-3219-3220-3221-3222-3223-3224-3225-3226-3227-3228-3229-3230-3231-3232-3233-3234-3235-3236-3237-3238-3239-3240-3241-3242-3243-3244-3245-3246-3247-3248-3249-3250-3251-3252-3253-3254-3255-3256-3257-3258-3259-3260-3261-3262-3263-3264-3265-3266-3267-3268-3269-3270-3271-3272-3273-3274-3275-3276-3277-3278-3279-3280-3281-3282-3283-3284-3285-3286-3287-3288-3289-3290-3291-3292-3293-3294-3295-3296-3297-3298-3299-3300-3301-3302-3303-3304-3305-3306-3307-3308-3309-3310-3311-3312-3313-3314-3315-3316-3317-3318-3319-3320-3321-3322-3323-3324-3325-3326-3327-3328-3329-3330-3331-3332-3333-3334-3335-3336-3337-3338-3339-3340-3341-3342-3343-3344-3345-3346-3347-3348-3349-3350-3351-3352-3353-3354-3355-3356-3357-3358-3359-3360-3361-3362-3363-3364-3365-3366-3367-3368-3369-3370-3371-3372-3373-3374-3375-3376-3377-3378-3379-3380-3381-3382-3383-3384-3385-3386-3387-3388-3389-3390-3391-3392-3393-3394-3395-3396-3397-3398-3399-3400-3401-3402-3403-3404-3405-3406-3407-3408-3409-3410-3411-3412-3413-3414-3415-3416-3417-3418-3419-3420-3421-3422-3423-3424-3425-3426-3427-3428-3429-3430-3431-3432-3433-3434-3435-3436-3437-3438-3439-3440-3441-3442-3443-3444-3445-3446-3447-3448-3449-3450-3451-3452-3453-3454-3455-3456-3457-3458-3459-3460-3461-3462-3463-3464-3465-3466-3467-3468-3469-3470-3471-3472-3473-3474-3475-3476-3477-3478-3479-3480-3481-3482-3483-3484-3485-3486-3487-3488-3489-3490-3491-3492-3493-3494-3495-3496-3497-3498-3499-3500-3501-3502-3503-3504-3505-3506-3507-3508-3509-3510-3511-3512-3513-3514-3515-3516-3517-3518-3519-3520-3521-3522-3523-3524-3525-3526-3527-3528-3529-3530-3531-3532-3533-3534-3535-3536-3537-3538-3539-3540-3541-3542-3543-3544-3545-3546-3547-3548-3549-3550-3551-3552-3553-3554-3555-3556-3557-3558-3559-3560-3561-3562-3563-3564-3565-3566-3567-3568-3569-3570-3571-3572-3573-3574-3575-3576-3577-3578-3579-3580-3581-3582-3583-3584-3585-3586-3587-3588-3589-3590-3591-3592-3593-3594-3595-3596-3597-3598-3599-3600-3601-3602-3603-3604-3605-3606-3607-3608-3609-3610-3611-3612-3613-3614-3615-3616-3617-3618-3619-3620-3621-3622-3623-3624-3625-3626-3627-3628-3629-3630-3631-3632-3633-3634-3635-3636-3637-3638-3639-3640-3641-3642-3643-3644-3645-3646-3647-3648-3649-3650-3651-3652-3653-3654-3655-3656-3657-3658-3659-3660-3661-3662-3663-3664-3665-3666-3667-3668-3669-3670-3671-3672-3673-3674-3675-3676-3677-3678-3679-3680-3681-3682-3683-3684-3685-3686-3687-3688-3689-3690-3691-3692-3693-3694-3695-3696-3697-3698-3699-3700-3701-3702-3703-3704-3705-3706-3707-3708-3709-3710-3711-3712-3713-3714-3715-3716-3717-3718-3719-3720-3721-3722-3723-3724-3725-3726-3727-3728-3729-3730-3731-3732-3733-3734-3735-3736-3737-3738-3739-3740-3741-3742-3743-3744-3745-3746-3747-3748-3749-3750-3751-3752-3753-3754-3755-3756-3757-3758-3759-3760-3761-3762-3763-3764-3765-3766-3767-3768-3769-3770-3771-3772-3773-3774-3775-3776-3777-3778-3779-3780-3781-3782-3783-3784-3785-3786-3787-3788-3789-3790-3791-3792-3793-3794-3795-3796-3797-3798-3799-3800-3801-3802-3803-3804-3805-3806-3807-3808-3809-3810-3811-3812-3813-3814-3815-3816-3817-3818-3819-3820-3821-3822-3823-3824-3825-3826-3827-3828-3829-3830-3831-3832-3833-3834-3835-3836-3837-3838-3839-3840-3841-3842-3843-3844-3845-3846-3847-3848-3849-3850-3851-3852-3853-3854-3855-3856-3857-3858-3859-3860-3861-3862-3863-3864-3865-3866-3867-3868-3869-3870-3871-3872-3873-3874-3875-3876-3877-3878-3879-3880-3881-3882-3883-3884-3885-3886-3887-3888-3889-3890-3891-3892-3893-3894-3895-3896-3897-3898-3899-3900-3901-3902-3903-3904-3905-3906-3907-3908-3909-3910-3911-3912-3913-3914-3915-3916-3917-3918-3919-3920-3921-3922-3923-3924-3925-3926-3927-3928-3929-3930-3931-3932-3933-3934-3935-3936-3937-3938-3939-3940-3941-3942-3943-3944-3945-3946-3947-3948-3949-3950-3951-3952-3953-3954-3955-3956-3957-3958-3959-3960-3961-3962-3963-3964-3965-3966-3967-3968-3969-3970-3971-3972-3973-3974-3975-3976-3977-3978-3979-3980-3981-3982-3983-3984-3985-3986-3987-3988-3989-3990-3991-3992-3993-3994-3995-3996-3997-3998-3999-4000-4001-4002-4003-4004-4005-4006-4007-4008-4009-4010-4011-4012-4013-4014-4015-4016-4017-4018-4019-4020-4021-4022-4023-4024-4025-4026-4027-4028-4029-4030-4031-4032-4033-4034-4035-4036-4037-4038-4039-4040-4041-4042-4043-4044-4045-4046-4047-4048-4049-4050-4051-4052-4053-4054-4055-4056-4057-4058-4059-4060-4061-4062-4063-4064-4065-4066-4067-4068-4069-4070-4071-4072-4073-4074-4075-40

e. 1877-1894-02.214

Railway Officials present

~~for a full and~~
~~formal investigation~~

2. The first information the troops had of the breaching of the embankment, and the destruction

1863 July 1864 - 1010 - 01115

of the Railway bridge
was conveyed in a
report from the Super-
-intending Engineer
under date the 29th
July 1863, in para 6
of which he described
the accident, and stated
that, in Captain Beem's
opinion, it had possibly
been caused by the
impediment to the exit
of the waters of the
Huddulhoondy or
Mullapooram River
occasioned by the construction of
the Huddulhoondy
Railway bridge em-
bankment.

This

3 This report having
found its way into the
local papers, the pro-
-page attributing the
giving way of the Ten-
-jally Lake embank-
ment to the effect of the
Huddulhoondy Railway
Bridge embankment
attracted the attention
of the Railway Official,
and on the 9th September
1863, the Agent and
Manager submitted thro
the Consulting Engineer,
a copy of a letter from
Mr. Assistant Engineer
Pinson, in which that
Gentleman clearly showed
from the result of per-
-sonal inspection of

of the height at various points to which the Kudohoondy had risen above the ordinary level of its waters, that the cause of the reflux of that river into the Venjally Lake and consequent breaching of its embankment was not any obstruction offered by the Railway works, but simply the inadequacy of the sectioned area of the River's channel to carry off an extraordinary flood like that which had occurred. In

In submitting this letter, Mr. Elwin remarked that he had reason to believe that the embankment had not been maintained in a very efficient state of repair, and that, if this fact could be clearly established, he thought the Department of Public Works should be held responsible for the amount of the damage.

Mr. Dawson's letter, with the Agents' remarks, having been communicated

Superintending Engineer

for any observations

that he might wish

to offer, Colonel

Walker in a letter

dated 2nd November

1863. No 245, disputed

the conclusion at

which Mr. Tinson

had arrived, and with

reference to the allegation

that the overtopping

and breaching of the

Venzally Lake embank-

ment were attributable

to its defective condi-

tion, he gave a distinct

denial.

5

In its Proceed-

ings under date the

18th December 1863,

No 3748, the J. & W. for

the fullest consideration

of the subject, recorded

its opinion to the effect

that the breaching of the

Venzally Lake was

not occasioned by its

embankment being in

an inefficient state

of repair, but by the

reflux of the pent up

waters of the individual

channels into the Lake,

and that this reflux

was not caused by

any artificial obstruction

created by the (Railway)

but by the natural
inefficiency of the
channel of that stream
to carry off an extreme
flood.

6. The Government
is still of this opinion.
It sees nothing in the
papers now laid before
it that can be accepted
as proof to establish
the fact of the Vengally
Lake Embankment
having been maintained
in a very inefficient
state of repair. If the
statements that nothing
had been done to it
for

29th
for two years he will
say anything, they may
be taken to show
that nothing had been
required. The Govern-
ment has the assen-
sance of the Super-
intending Engineer
that the assertion of
the overflowing of
the embankment
being attributable to
its defective condition
is gratuitous, and
without conclusive
evidence, the Govt.
is not prepared to
admit the charge
of negligence on the

part of the P.W.D.

On the other hand, it
is not clear that the
Railway Company, as
required by clause 4
of its Contract, had
taken effectual measures
to protect its works

"from injury or destruction

"by inundations, tem-

"pests, or other causes

"whatsoever". The site

of the Bridge at the

375th Mile across the

Pooraparamba Canal,

and only a few yards

below the embankment

of an artificial Lake,

seems such as eminently

required the most
thorough protective ar-
rangements being provided,
and the Government
believes that if the
original Bridge had,
with proper foresight,
been designed to allow
the same outlet as the
one now substituted
for it, it is not likely
that the Railway
would have sustained
any damage by the
bursting of the Lake,
for the width to
which the Canal was
extended by the dis-
charge from the
beach

was only 60 yards,
or 180 feet, while
the clear water way
of the new bridge
is 210 feet.

7 The failure of
the embankment to
withstand the effect
of the unprecedentedly
heavy flood, which
was diverted into the
Lake on the 28th of
last June by natural
courses over which no
control was possible,
appears to have
been utterly unavoidable,

~~Robertson~~
~~Robertson~~

and the Government
declines to entertain
the Railway Com-
pany's claim for
damages in any
shape whatsoever.

8 The perished
Bill which accom-
panied the papers
under consideration
will be returned to the
Agent and Manager.

Atch

To The Superintending Engineer
of the First Railway Dept
in the Com. Engrs for
Railways with receipt bill 5 Decr 2nd May.

Copy in a Letter to England
of 30th May 1864 No 34.

W 1864 Dept
Pres. of Govt for Aff.

79/232

Pres. of the Alport
D/29 April/64

Claim preferred
by the Officers of the Madras
South-West Railway
for the reimbursement
of the Company of the
Cost of Constructing a
wrought Iron Bridge
at the 375th Mile of the
Line ordered to be
accepted.

No 692. 692