Work was then stopped owing to the monsoon and exhaustion of materials prepared. The work was, however, inspected by the Executive Engineer on 21st December 1888, and, on looking carefully into the masonry as built, he was not satisfied with the quality of the mortar, and reported accordingly in his inspection notes. On 7th January the Executive Engineer again inspected the site and took specimens of the mortar from the work which he sent, together with brickets made according to specification, to the Superintending Engineer* and asked for instructions.

10. The Superintending Engineer, in his Nos. 611 R.N., dated 18th February 1889, and 638 R.N., dated 27th February 1889, stated that the mortar was certainly not up to specification, but was not bad enough to justify the condemnation of all the work done to date (an opinion fully borne out by circumstances since ascertained), and ordered the work to go on. The contractor was fined for using material not up to specification.

11. The Executive Engineer then (on 7th January 1889) took more specimens both from the concrete and masonry, and having sealed them up, retained them in his possession. On the 15th February the contractor having collected materials had recommenced work and added $1\frac{1}{2}$ feet height of masonry to the superstructure, the door frames were all in. On 20th February the work was stopped pending final orders regarding the quality of the mortar, and, on receipt of these, was again resumed on 15th March, when it went on more or less uninterruptedly till 10th July, when, on a thorough examination by the Executive Engineer (the masonry being completed), cracks were suspected from the appearance of the work, and on excavations being made by him, several cracks were found in the foundations, though none were visible in the basement or superstructure. The cracks below were open cracks, and further investigation showed that they continued right up into the superstructure, but had been skilfully concealed by mortar, brick-coloring and false pointing.

12. The Executive Engineer then wired to me to try and catch me on inspection tour at Madura, and the day following wrote a report of the state of things. I had, however, left for Trichinopoly, and having to meet the Chief Engineer for Irrigation on the Vadarniem canal, I ordered all work to be stopped, and things to be kept as they were (except the cracks were to be marked, measured, &c.) until I could get down to the work.

13. I arrived here on the 13th August, and I found the building cracked more or less all over—*vide* sketch-plan herewith. Meantime Mr. Jopp had, on 19th and 20th July, in the presence of the contractor, taken photos of the various cracks, and ordered nothing to be touched or done on the work, except the necessary operations for marking and measuring the cracks.

14. I enclose copies of the photos numbered to correspond with the numbers on the sketch-plan, and I also have attached to the plan a description of most of the cracks in the main walls, from which you will see they are all still more or less opening out.

15. On my arrival I ordered further excavations to be made, from which I ascertained that the sub-soil was everywhere the same, and tallied with the description given of the trial-pits, the bottom being composed of very hard clayey soil, so hard that it required considerable effort to obtain a large lump for examination.

16. On examining the various cracks I found that all of them had been more or less tampered with, and, in some of the open cracks in the basement and partway in foundation, it was evident that further cracking had taken place, the cracks widening out half an inch or so *after the attempt at hiding or filling in had been made.* I convinced myself of this fact by careful examination.

17. The cracks in the superstructure had also, in some places, opened out since the tampering—and the Executive Engineer said in many instances fresh cracks had appeared since his last inspection—but the opening out in the tampering of the superstructure cracks was what may be called hair's breadth.

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* Major D. McN. Campbell, R.E.

18. I also inspected the foundations of a latrine close by, which was laid $5\frac{1}{2}$ below ground-level, and was only completed up to ground-level about a month ago. A hair's breadth crack was discovered on the upper surface, which, on examination, was found to extend, and open out considerably as it progressed, right through the concrete.

19. From these and other facts, notably the different appearance in the tampering in superstructure and basement, I am convinced that, strange as it may appear, the building cracked all over in foundation and basement before work was resumed in February, and very possibly immediately after construction. These cracks, instead of being reported, were skilfully hidden, and built over, and soon after the walls were completed—if not during actual construction—the cracks opened out therein, and were so skilfully manipulated that it was just a chance that they were discovered before plastering commenced. Photo No. 2 shows this; the smear to the right of the door contains a crack built up with mortar so colored and pointed as to represent good masonry; this smear now has opened out into a fresh crack through the false work, about $\frac{1}{8}$ inch wide, but when the tampering work was removed, a crack of from $\frac{3}{4}$ inch to 1 inch wide was displayed running right up to the top of the masonry, and a large imitation brick made of mortar with colored facing was taken out of the arch at right hand corner of the doorway. Photo No. 15 shows the skilful hiding of a crack, the smear and false pointing can just be detected, especially near the bottom and a little to the left of the centre of the picture.

20. Having investigated the cracks and having vainly tried to elicit from the contractor, who was present, why he or his agents had not reported them and how it was the tampering with them had not been noted and reported, I proceeded to try and ascertain the cause.

21. The work throughout is very fair masonry, and the sealed specimens above mentioned were all well set, and the mortar, though, perhaps, containing more sand than allowed, was quite sound and good. In short, there was no work that could be called bad, and certainly none to cause cracking.

22. The pits made for purposes of investigation were again carefully examined as to soil, and then filled with water for some 2 feet depth, but no sign of percolation appeared, the water was held as if by puddle.

23. I then had a pit dug in the bottom of an old chunam pit to a total depth of about 10 feet below ground-level or $4\frac{1}{2}$ feet below bottom of foundation, and then a partial solution of the mystery appeared, the clay-bed below (6 feet or so from surface) was met by veins or fissures filled with a sandy clay, and, on water being poured into one of these from above, it burst out below into the side of the pit.

24. Then I had several fine specimens of the hard clay put into water, and I discovered that, after a few minutes, it all dissolved away into slush—the same clay that acted like puddle in the pits and which was so very hard to cut with a mamooty.

25. My theory is, therefore, (i) that either some of these veins were imperceptibly opened out at the bottom of the foundation pits and that rain water drained into them through or before the filling in (the building was commenced just before the monsoon broke), and so created movement, or (ii) that water either from the Vaintondian channel close by, or heavy rain through fissures in a drain nearer the work, percolated the sand and got into these fissures through the clay.

26. Be this as it may, I should not have hesitated building on the soil as opened out by me in these excavations at work site, and the theory above given is the only one I can give for the extraordinary cracking up of the work—a cracking which I am convinced took place long before any appreciable weight was brought to bear on the foundations. The continuation of the movement—for the cracks are still opening out—is unaccountable.

27. Of course the work cannot be continued, and I have given orders to have the woodwork of part of the roof, which had been placed *in situ*, and all other removable portions of woodwork, to be taken away by the contractor and stored.

28. Roughly speaking, there has been an expenditure of Rs. 3,920 to date on the masonry, viz., concrete, Rs. 485; brick in mortar, Rs. 3,435; to which may be added cost of demolition, say, Rs. 325, if we remove it. Besides the above, about Rs. 3,700 has been paid for timber wrought but not put up—total Rs. 8,786.

29. The question is, who is to bear the loss?

30. Undoubtedly, up to basement level, the Government should bear the loss, for there was nothing to show any risk would be incurred by building on the soil exposed, no one would have hesitated to build thereon. But above this level, I am of opinion, the contractor is responsible for the value of the masonry, for had he or his agent reported, instead of hiding the cracks in the masonry (to tamper with which either some of the filling in must have been removed, or the cracks themselves have appeared still earlier in the day, *i.e., before* the filling in), the work would have been at once stopped pending examination by the Executive Engineer.

31. On inquiry as searching as I can make, I am nearly certain the overseer was quite as much deceived as the Executive Engineer, and as the overseer is a man of good character and whom I have known since 1881 (when I appointed him Superintendent of Gadilam anicut, South Arcot), I should certainly give the case in his favor.

32. As to the maistries, there have been three in succession—

No. 1—from August 1888 to 12th March 1889;
„ 2— „ March to May;
„ 3— „ May to date;

and all of them must have known of the cracks and their concealment. Nos. 1 and 2 have disappeared from view. No. 1 was dismissed on the discovery of the inferior mortar. No. 2 left on account of sickness (small-pox). No. 3, now on the work, declares his own ignorance of all malpractices. Similarly, neither the contractor nor his two agents* could give any explanation of the cracks, and it was with the greatest difficulty that I got them to admit—in spite of the evidence before them—that the cracks had been tampered with in any way. The disguising of the cracks was most artistically done, and from the time and trouble it must have taken, every one on the work must have known all about it, but not a soul will speak out.

* No. 1 dismissed on account of bad mortar as above reported.
No. 2 was entertained on 19th March and has been (supposed to be) on the work ever since.

33. Of course by the time I arrived the work had dried, and the tampering was very evident as it had not been touched up since 10th July.

Awaiting your orders.

Note by the Chief Engineer, Buildings and Roads Branch.

No blame can be attached to Mr. Jopp or the overseer, P. Subrahmanya Aiyar, for the failure of the Munsif's Court, Paramakudi. The maistries, without doubt, connived at the concealment of the cracks, and they should have reported the matter at once; two of them have disappeared, and the third should be dismissed, unless the Superintending Engineer is satisfied that he did not come on to the work until after all the bad work had been concealed; this point might be left entirely to the local authorities who know more about the man's character.

2. Certainly up to basement level, the loss should be borne by Government, for every precaution was taken in sinking trial-pits, the foundations were of proper section and rested on a layer of concrete 1 foot 6 inches thick, which was laid under proper supervision—above basement level the contractor is apparently responsible, he must have known either directly or through his agents that the foundations had cracked, and his proper course was to stop the work for orders; instead of doing so, he tried to conceal the cracks, and pushed on with the superstructure. The line of action I would suggest is as follows:—

(*a*) Select a new site, and re-commence the work, a revised estimate being prepared.

(*b*) Bring an action against the contractor for the value of work done above basement level, deducting the cost of all woodwork which can be utilised in the new building.

(*c*) If the contractor has given any security, this should be withheld.

3. If, however, it is known that the contractor is a man of straw, and if he has not given any security, the first loss will probably be the least, and the revised estimate should be prepared accordingly.

(Signed) R. R. E. DRAKE-BROCKMAN, Lt.-Col., R.E.,
4th September 1889. Ag. Chief Engineer, P.W.D.

Order—dated 12th September 1889, No. 2529 W., Public Works.

The Government agrees with the Chief Engineer that no fault can be attributed to Mr. Jopp or his subordinates except the maistries who failed to report the cracks in the foundations and walls. But it is doubtful whether an action at law is sustainable against the contractor, unless there is an express stipulation in his contract throwing on him the responsibility for reporting the failure of the work. On this point the Superintending Engineer will report further.

2. The work should be re-commenced on a safer site, and the third maistry dealt with as suggested by the Chief Engineer.

(True Extract.)

Captain, R.E.,
Under-Secy. to Govt., P.W.D.

To the Superintending Engineer, VI Circle,
with eight enclosures.
„ Judicial Department.

Exd. P. L. Pereira.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1889} Madras.

PUBLIC WORKS.

Dated September, 12th.

Recd. *Encl.*

G.O., 12th Sept. 1889, No. 2529 W.

SEPTEMBER.

District Munsif's Court-house at Paramakudi, Madura District

Orders on letter from the Superintending Engineer, VI Circle, reporting the failure of the —.

~~O.A 129/12~~ 7850. 14 ix.

For orders.

W

~~(15) 2529~~ 25/9/89

No blame can be attached to Mr Jopp or the overseer P Soobramanya Aiyar for the failure of the Moonsiff's Court Paramakudi. The maistries without doubt connived at the concealment of the cracks, and they should have reported the matter at once; two of them have disappeared, and the third should be dismissed, unless the S.E. is satisfied that he did not come on to the work until after all the bad work had been concealed; this point might be left entirely to the local authorities who know more about the man's character.

Certainly up to basement level, the loss should be borne by Govt, for every precaution was taken in sinking trial pits, the foundations were of proper section & rested on a layer of concrete 1'6" thick, which was laid under proper supervision — Above basement level the contractor is appa responsible, he must have known either directly or through his agents that the foundations had cracked, and his proper course was to stop the work for orders, instead of doing so he tried to conceal the cracks, and pushed on with the superstructure — The course of action I would suggest is as follows

(a) Select a new site, and re-commence the work, a revised estimate being prepared

(b) Bring an action against the contractor for the value of work done above basement level, deducting the cost of all wood-work which can be utilised in the new building —

(c) If the contractor has given any security, this should be withheld —

If however it is known that the contractor is a man of straw, and if he has not given any security, the first loss will probably be the least, and the revised estimate should be prepared accordingly

30.8.89

26.8

OFFICE OF THE SUPERINTENDING ENGINEER,
6TH CIRCLE,
Camp Paramakudi
14th August 1889.
Despd 21st "

No. 202 R.N

From Lt. Col. A. C. Smith R.E.,
The Superintending Engineer,
6th Circle

To

The Chief Engineer,
P. W. D.

ENCLOSURES.

Sir,

I have the honor to report, with great regret, the complete failure of the building known as the Moonsiff's Court, Paramakudi, under the circumstances detailed hereunder:—

2. — — — Since 1873 there has been correspondence regarding the erection of a Moonsiff's Court at Paramakudi, and after several plans and Estimates had been discussed the final one for Rs: 12,693 on the type design issued with G. O. No. 1098 W of 21st April 1887 was eventually sanctioned in G. O. No. 2958 W, dated 20th September 1888.

3. The site had been selected by Exe. Eng., approved by the Collector and District Judge, and the section for foundations was arrived at after trial pits had been made vide section &c. on plan enclosed.

4. Tenders were called for the work and

and that of one M. S. Alaganatha Pillai was accepted for Rs. *, – and the Contract duly made out and signed on 6th July, 1888. Mr. Jopp (the present Executive Engineer) not being satisfied with the Court fee stamp paper, on which the Contract was drawn out, payed a fee of two rupees, and had the deed endorsed by the Collector thus ensuring the validity of the document.

* 2½ per cent under the estimate rates

5. Work was actually started in August 1888, the excavation trenches being lined out on the ground by the overseer T. Subramania Iyer on 13th August 1888, when the excavation was commenced.

6. The work was again visited by the overseer on 13th September, the foundations were then excavated to full depth for the main walls, and the sub soil being found to be of very hard clay (tallying with the section of trial pits) he gave orders for the laying of the concrete which was commenced in his presence.

7. On 20th September the Executive Engineer came to the spot, and the overseer was in attendance; by this time the concrete was nearly laid, and was completed on that evening as per note in Executive Engineer's Note book now before me. Neither the Exec: Engineer nor the overseer observed anything in the soil to lead them to suppose there was any risk whatever in building on it,

and

and the overseer states that he was informed by the D. P. W. Maistry and the Contractor's agent that the soil was so hard it had to be softened with water at night to assist the excavators.

8. Detailed orders were given regarding the construction of the masonry, and the work was proceeded with.

9. The next visit by the overseer was on 29th October, who then found the work had been carried up to 2½ feet above basement, and the trenches were filled in, detailed measurements were taken for the masonry, excavation and filling in up to ground level, and the work being satisfactory to all appearances, bills were submitted. Work was then stopped owing to the monsoon and exhaustion of materials prepared. The work was, however, inspected by the Executive Engineer on 21st December 1888, and on looking carefully into the masonry as built he was not satisfied with the quality of the mortar, and reported accordingly in his inspection notes. On 7th January the Executive Engineer again inspected the site, and took specimens of the mortar from the work which he sent together with brickets made according to specification to the Superintending Engineer,x and asked for instructions.

x Major D. McD. Campbell R.E.

10. The Superintending Engineer, in his

No.

No 0511. R.N. 18-2-89 No 638 RN 27-2-89 Stated that the mortar was certainly not up to specification; but was not bad enough to justify the condemnation of all the work done to date (an opinion fully borne out by circumstances since ascertained), and ordered the work to go on. The Contractor was fined for using material not up to specification.

11. The Executive Engineer then on 7th January 1889 took more specimens both from the Concrete and Masonry, and having sealed them up retained them in his possession. On the 15th February the Contractor having collected materials had recommenced work and added 1½ feet height of masonry to the Superstructure, the door frames were all in. On 20th February the work was stopped pending final orders regarding the quality of the mortar and, on receipt of these, was again resumed on 15th March, when it went on more or less uninterruptedly till 10th July when on a thorough examination by the Executive Engineer (the masonry being completed) cracks were suspected from the appearance of the work, and on excavations being made by him several cracks were found in the foundations, though none were visible in the basement or superstructure. The cracks below were open cracks, and further investigation showed that they continued right up into the

the Superstructure, but had been skilfully concealed by mortar, brick coloring, and false pointing.

12. The Executive Engineer then wired to me to try and catch me on inspection tour at Madura, and the day following wrote a report of the state of things. I had, however, left for Trichinopoly, and having to meet the Chief Engineer for Irrigation on the Vadavurin Canal, I ordered all work to be stopped, and things to be kept as they were (except the cracks were to be marked, measured &c) until I could get down to the work.

13. I arrived here on the 13th August, and I found the building cracked more or less all over, vide sketch plan herewith. Meantime Mr. Jopp had, on 19th and 20th July in the presence of the Contractor, taken photos of the various cracks, and ordered nothing to be touched or done on the work, except the necessary operations for marking and measuring the cracks.

14. I enclose copies of the photos numbered to correspond with the numbers on the sketch plan, and I also have attached to the plan a description of most of the cracks in the main walls, from which you will see they are all still more or less opening out.

15. On my arrival I ordered further

excavations

excavations to be made, from which I ascertained that the sub soil was every where the same, and tallied with the description given of the trial pits, the bottom being composed of very hard clayey soil, so hard that it required considerable effort to obtain a large lump for examination.

16. On examining the various cracks I found that all of them had been more or less tampered with, and in some of the open cracks in the basement and partway in foundation it was evident that further cracking had taken place, the cracks widening out half an inch or so after the attempt at hiding or filling in had been made. I convinced myself of this fact by careful examination.

17. The cracks in the Superstructure had also in some places opened out since the tampering - and the Executive Engineer said in many instances fresh cracks had appeared since his last inspection - but the opening out in the tampering of the superstructure - cracks was what may be called hairs breadth.

18. I also inspected the foundations of a Latrine close by, which was laid 5 1/2 below ground level, and was only completed up to ground level about a month ago. A hairs

hairs breadth crack was discovered on the upper surface, which, on examination, was found to extend, and open out considerably as it progressed, right through the concrete.

19. From these and other facts, notably the different appearance in the tampering in ~~the~~ Superstructure and basement, I am convinced that, strange as it may appear, the building cracked all over in foundation and basement before work was resumed in February, and very possibly immediately after construction. These cracks instead of being reported were skilfully hidden, and built over and soon after the walls were completed - if not during actual construction the cracks opened out therein, and were so skilfully manipulated that it was just a chance that they were discovered before plastering commenced. Photo No: 2 shows this, the smear to the right of the door contains a crack built up with mortar so colored and pointed as to represent good masonry, this smear now has opened out into a fresh crack through the false work about 1/8" wide, but when the tampering work was removed a crack of from 3/4" to 1" wide was displayed running right up to the top of the masonry, and a large imitation brick, made of mortar with colored facing, was taken out of the

arch

arch at right hand corner of the door way. Photo No: 15 shows the skilful hiding of a crack, the smear and false pointing can just be detected especially near the bottom and a little to the left of the centre of the picture.

20. Having investigated the cracks and having vainly tried to elicit from the Contractor who was present why he or his agents had not reported them and how it was the tampering with them had not been noted and reported, I proceeded to try and ascertain the cause.

21. The work throughout is very fair masonry, and the sealed specimens above mentioned were all well set, and the mortar, though perhaps containing more sand than allowed, was quite sound and good. In short there was no work that could be called bad, and certainly none to cause cracking.

22. The pits made for purposes of investigation were again carefully examined as to soil and then filled with water for some 2 feet depth, but no sign of perco:lation appeared, the water was held as if by puddle.

23. I then had a pit dug in the bottom of an old chunam pit to a total depth of about 10 feet below ground level or 4½ feet below bottom of foundation, and then a partial solution of the mystery appeared, the clay

bed below (6 feet or so from surface) was met by veins or fissures filled with a sandy clay, and on water being poured into one of these from above it burst out below into the side of the pit.

24. Then I had several fine specimens of the hard clay put into water, and I dis:covered that, after a few minutes, it all dissolved away into slush — the same clay that acted like puddle in the pits and which was so very hard to cut with a mamotie.

25. My theory is therefore (i) that: either some of these veins were imperceptibly opened out at the bottom of the foundation pits and that rain water drained into them through or before the filling in (the building was commenced just before the monsoon broke), and so created movement, or (ii) that water either from the Vaintondian channel close by, or heavy rain through fissures in a drain near the work, percolated the sand and got into these fissures through the clay.

26. Be this as it may, I should not have hesitated building on the soil as opened out by me in these excavations at work site, and the theory above given is the only one I can give for the extraordinary cracking up of the work — a cracking which

I

I am convinced took place long before any appreciable weight was brought to bear on the foundations. The continuation of the movement - for the cracks are still opening at - is unaccountable.

27. Of course the work cannot be continued, and I have given orders to have the woodwork of part of the roof, which had been placed in situ, and all other removable portions of woodwork, to be taken away by the Contractor and stored.

28. Roughly speaking there has been an expenditure of Rs: 3920 to date on the masonry viz:-

Concrete Rs: 485
Brick in mortar Rs: 3435 -

to which may be added cost of demolition, say Rs: 325 if we remove it. Besides the above about Rs: 3700 has been paid for timber wrought but not put up - Total Rupees. 8786 -

29. The question is who is to bear the loss.

30. Undoubtedly up to basement level the Government should bear the loss, for there was nothing to show any risk would be incurred by building on the soil exposed, no one would have hesitated to build thereon. But above this level I am of opinion the Contractor is responsible for the value of the masonry, for had he or his agent reported

instead

instead of hiding the cracks in the masonry (to tamper with which either some of the filling in must have been removed or the cracks themselves have appeared still earlier in the day i.e. before the filling in) the work would have been at once stopped pending examination by the Executive Engineer.

31. On enquiry as searching as I can make I am nearly certain the overseer was quite as much deceived as the Executive Engineer, and as the overseer is a man of good character, and whom I have known since 1881 (when I appointed him superintendent of Cuddalore Anicut South Arcot) I should certainly give the case in his favor.

32. As to the maistries there have been three in succession:-

No. 1. from August 1888 to 12th March 1889.
No. 2. ——— March to May.
No. 3. ——— May to date.

and all of them must have known of the cracks and their concealment. Nos: 1 and 2 have disappeared from view. No: 1 was dismissed on the discovery of the inferior mortar. No: 2. left on account of sickness (Small pox). No: 3 now on the work declares his own ignorance of all malpractices. Similarly neither the Contractor nor his *agents could give any explanation of the cracks, and it was with the greatest

difficulty

*: No. 1. dismissed on account of bad mortar as above reported. No. 2. was entertained on 19th March and has been (supposed to be) on the work ever since.

difficulty that I got them to admit - in spite of the evidence before them - that the cracks had been tampered with in any way. The disguising of the cracks was most artistically done, and from the time and trouble it must have taken every one on the work must have known all about it, but not a soul will speak out.

34. Of course by the time I arrived the work had dried, and the tampering was very evident as it had not been touched up since 10th July.

Awaiting your orders.

I have the honor to be
Sir
Your Most Obedt. Servant.

A. Smith Lt Col. R.E.

Superintending Engineer

2529/11

Note by the Chief Engineer Buildings and Roads Branch.

No blame can be attached to Mr Jopp or the Overseer P. Soobramanya Aiyar for the failure of the Moonsiff's Court Paramakudi. The maistries without doubt connived at the concealment of the cracks, and they should have reported the matter at once; two of them have disappeared, and the third should be dismissed unless the Supg: Engineer is satisfied that he did not come on to the work until after all the bad work had been concealed; this point might be left entirely to the local authorities who know more about the man's character.

Certainly up to basement level, the loss should be borne by Govt, for every precaution was taken in sinking trial pits, the foundations were of proper section and rested on a layer of concrete 1'6" thick, which was laid under proper supervision - Above basement level

11

difficulty that I got them to admit - in spite of the evidence before them - that the cracks had been tampered with in any way. The disguising of the cracks was most artistically done, and from the time and trouble it must have taken every one on the work must have known all about it, but not a soul will speak out.

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Your Most Obedt. Servant.

A L Smith Lt Col. RE

Superintending Engineer

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7 P

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Certainly up to basement level, the loss should be borne by Govt, for every precaution was taken in sinking trial pits, the foundations were of proper section and rested on a layer of concrete 1'6" thick, which was laid under proper supervision - Above basement level

11

level the contractor is apparently responsible; he must have known either directly or through his agents that the foundations had cracked, and his proper course was to stop the work for orders; instead of doing so, he tried to conceal the cracks, and pushed on with the superstructure — The line of action I would suggest is as follows;—

(a) Select a new site, and re-commence the work, a revised estimate being prepared.

(b) Bring an action against the contractor for the value of work done above basement level, deducting the cost of all wood-work which can be utilised in the new building

(c) If the contractor has given any security, this should be withheld.

If however it is known that the contractor is a man of straw, and if he has not given any security, the first loss will probably be the least, and the revised estimate should be prepared accordingly.

Rhesse
4.9.89 EW

A
Bengal...

No 25296

B & R
Civil works

2839
12

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

~~Under date~~ the 12th Septr 1889

READ the following

From the Supg: Engineer IV Circle H. E. No: 202 R.W. d/14th Aug: 89

Note by the Chief Engineer Buildings & Roads Branch } —— dated 4th Sep: '89

The Govt: agrees with the Chief Engineer that no fault can be attributed to Mr Jopp or his subordinates except the Maistries who failed to report the cracks in the foundations and walls — But it is doubtful whether an action at law is sustainable against the contractor, unless there is an express stipulation in his contract throwing on him the responsibility for reporting the failure of the work — On this point the Supg: Engineer will report further —

Sent 6 Sep

2 The work should be recommenced on a safer site

14

site, and the third maistry
dealt with as suggested
by the Chief Engineer.

Ames
5.9.89

11.9.89

Civil
12/9/89

13 Misc

To
The S.E. VI Circle
with enclos.
"Judicial dept

D
24/9

R. 12-9-89.

R.S.

O.S. 12778. Thu 5/9.

E. 9/16

2529
13

10

Memo No. 3215 C d/15-7-89
Pr. Aux. 2958 W d/ 20-9-88
" " 101 W d/ 11-1-88
" " 3017 W d/ 10-11-87
" " 1098 W d/ 21-4-87
" " 1166-67 W d/ 1-5-87

PC No. 7880

From (S)

The Coll. A. C. Smith R.E.
Supg. Engr. IInd Circle

To the Chief Engineer,
P.W.D.
Madras.

Dated 14th } August 1889
Despd. 21st }

No. 202 R.N.

Enclo. 8. (+2 [illegible] + 5 spec.)

Moonsiff's Court house building at Paramakudi.

Reporting on the failure of the ——, and requesting orders as to who is to bear the loss, under circumstances explained.

0/25/8

2537/14

P. W. DEPARTMENT.

READ the following:—

From the Supg: Engineer II Circle No: 202 R.N. dated 14th August 1889.

Note by the Chief Engineer Buildings and Roads Branch dated

FOR ORDERS.

Rhodes

4.9.89 W

It seems a most extraordinary case. I agree that no fault can be attributed to Mr Jopp or his subordinates except the maistries who failed to report the cracks in the foundations. But I doubt whether the contractor can be made responsible for not reporting the state of things. Is there any express stipulation in his contract throwing on him this duty? If there is not I don't think he can be held liable, especially as it seems there were P.W.D. maistries there to watch him. All he was bound to do was to execute the work according to the specification and it appears that he substantially did so; because though the mortar was not quite as good as it ought

13

& have been it seems to be admitted by the L.E. that it was ~~too~~ not so bad as to account for the failure of the work. That was due to causes over which the contractor had no control, and I do not think that any court would hold him liable, because after he had built according to specification he or his agents attempted to conceal the failure which had taken place owing to the exceptional nature of the soil which deceived all concerned. To bring an action against him under these circumstances would be to throw good money after bad.

There is nothing to be done but to accept the loss & recommence on a safer site.

HLS
5 Sep.

P.&S. 129/8. HM 4/9.05

2529/15

15

Govt. of (18) Madras.

PUBLIC WORKS.

13/9/89

Dated

Recd. Encl.

G.O. 12 Sep. 1889 No. 2529 W.

Dt. Munsif's Court house

at Paramakudi,

Madura Dt.

Orders on letter from

the S.E., VI Circle, reporting

the failure of the —

7/3

(15)

13/9 13/9

2 statement

(1) பக்கங்களின் எண்ணிக்கை 30
(2) புதுக்கித் திருப்பிய நாள் Sep - 90
(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

(78)

P.W.D துறை

அரசாணை எண். / மு. கோப்புத் தாள் எண். 2529 W அச்சகம் / பலவகை

நாள் : 11—9—1889 198.

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

15. Sheets

ஆவண. கா-1—18,006—15-6-87.

(15)

2529/1

12TH SEPTEMBER 1889, No. 2529 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From Lieut.-Colonel A. C. SMITH, R.E., Superintending Engineer, VI Circle, to the Chief Engineer, Public Works Department, dated Paramakudi, 14th August 1889, No. 202 R.N.

I have the honor to report, with great regret, the complete failure of the building known as the Munsif's Court, Paramakudi, under the circumstances detailed hereunder.

2. Since 1873 there has been correspondence regarding the erection of a Munsif's Court at Paramakudi, and, after several plans and estimates had been discussed, the final one for Rs. 12,693, on the type-design issued with G.O., No. 1098 W., of 21st April 1887, was eventually sanctioned in G.O., No 2958 W., dated 20th September 1888.

3. The site had been selected by Executive Engineer, approved by the Collector and District Judge, and the section for foundations was arrived at after trial-pits had been made—*vide* section, &c., on plan enclosed.

4. Tenders were called for the work, and that of one M. S. Olaganatha Pillai was accepted for Rupees *, and the contract duly made out and signed on 6th July 1888. Mr. Jopp (the present Executive Engineer) not being satisfied with the court-fee stamp paper on which the contract was drawn out, ~~payed~~ paid a fee of two rupees, and had the deed endorsed by the Collector, thus ensuring the validity of the document.

* 2½ per cent. under the estimate rates.

5. Work was actually started in August 1888, the excavation trenches being lined out on the ground by the overseer, P. Subrahmanya Aiyar, on 13th August 1888 when the excavation was commenced.

6. The work was again visited by the overseer on 13th September, the foundations were then excavated to full depth for the main walls, and the sub-soil being found to be of very hard clay (tallying with the section of trial-pits), he gave orders for the laying of the concrete, which was commenced in his presence.

7. On 20th September the Executive Engineer came to the spot, and the overseer was in attendance; by this time the concrete was nearly laid and was completed on that evening as per note in Executive Engineer's note-book now before me. Neither the Executive Engineer nor the overseer observed anything in the soil to lead them to suppose there was any risk whatever in building on it, and the overseer states that he was informed by the Public Works Department maistry and the contractor's agent that the soil was so hard it had to be softened with water at night to assist the excavators.

8. Detailed orders were given regarding the construction of the masonry, and the work was proceeded with.

9. The next visit by the overseer was on 29th October, who then found the work had been carried up to 2½ feet above basement, and the trenches were filled in, detailed measurements were taken for the masonry, excavation and filling in up to ground level, and the work being satisfactory to all appearances, bills were submitted.