

(1) Number of pages 10

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No.	2132	Press Mis.
Dated	24-7-	1865.

Not to be folded or roughly handled

*Let
2-12-62*

*Proceedings of the Madras Government, Public Works Department,
24th July 1865.*

No. 608. Read the following letter from Captain R. F. OAKES, R. E., Acting
Superintending Engineer, 6th Division, to Colonel C. A. ORR, R. E.,
Secretary to Government, Public Works Department, dated Tanjore,
12th July 1865, No. 520 :—

SIR,

1. I have the honor to inform you that a large portion of the south branch of
the lower anicut, which has just been re-built, was destroyed on the 5th instant.

2. On the receipt of information of the destruction of the anicut I proceeded
to the spot, with a view of ascertaining, if possible, the cause of its destruction, and
I have been engaged during the last two days in examining a number of persons
relative to the matter.

3. It would appear that on the morning of the 4th instant the water stood 3'
below the crown of the north branch of
the anicut, and that it continued at that
level till about 4 P. M., when the water
began to rise very rapidly, and at 6 P. M. there was 1½' of water flowing over the
anicut; by 6 A. M., on the following morning, the water had risen to 4' 6" above the
dam and stood within 1½" of a portion of the top of the earthen embankment across
the south branch of the river.

4. The water on the apron of the north branch of the anicut was 10' 6"
deep, and the backwater on the apron of the south branch was about 3½' deep, the
two southern sluices were open and the water stood on the up-stream side of the
anicut* about 3' in depth when the earth
embankment was cut 50 yards from its
southern extremity. As soon as the
water began to flow through a passage two yards broad, a second cut was made 100
yards from the south end, the cuts soon began to widen and deepen; in 25 minutes
the water below the embankment had risen to the level of the crown of the anicut,
and appeared to Lieutenant Livesay and Mr. Overseer Doheny from the front
embankment, a distance of nearly 700 yards, to be flowing over the north section,
or the new portion, while the crown of the rest of the anicut was dry; this however
is contradicted by witnesses† on the spot;
the gaps in the embankment now measured
together from 50 to 75 yards in breadth, and
Lieutenant Livesay hastened down to the anicut only to learn that the new portion of
the dam had rolled over *en masse* when 2' of water was flowing over it, this occurred
35 minutes‡ after the first cut was made.
By the fall in the surface of the water it was
clear that two gaps had been formed in the
anicut, one near the sluice was about 30' broad, and the other near the centre of the
new portion about 100' broad, the dam between these gaps soon gave way and of
the 225' 4" of dam lately built only some 25' or 30', and that adjacent to the north
abutment, now stands.

* South branch.
† Natives.
‡ Time was noted.

5. The river is still in flood, and the difference of level between the water
above and below the anicut since my
arrival has been so small that it is not
possible to judge whether only the upper
step of the anicut has given way, as is
generally believed, or whether the whole
has been destroyed. There is no broken
or troubled water below the breach, and I am inclined to think that only the
superstructure has given way owing to its not having been sufficiently dry, though
the lower step of the dam was completed at least a month and the upper step 18 days
before its destruction, and that the apron and foundations will be found undisturbed.

6. It had been my intention to have allowed the front embankment, across the
south branch, to stand during the first fresh, which usually rises about 2½' or 3' above

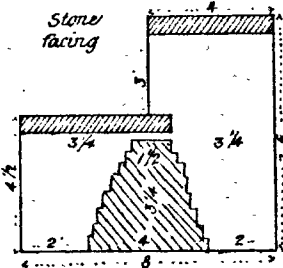
4 P. M. when the water began to rise
very

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24th July 1865.*

the anicut a fortnight or more after the water first comes down the river. The rise this season has been unprecedentedly rapid, and there is no doubt the front embankment could not have been saved, for on the evening of the 5th the depth of water over the north and south branches of the anicut, was 3' 10" and 4' 3" respectively, and it rose on the 8th to 4' 9" and 5', and has gradually fallen since (11th) to 3' 6" and 3' 9".

7. The front embankment was cut at the southern extremity, and the two south sluices in the dam were left open in order to divert the stream as far as possible from the north section of the anicut, which had been re-built, and against which the deep stream sets.

8. With regard to the workmanship and material the native bricklayers all admit that it was of the very best description, and that they have never seen such good work done before. It would appear, however, that when the dam had been brought to the basement level, bricks began to fail and the shaded portion was built first, as per margin, of bricks of a somewhat inferior quality, and the unshaded portion was bonded on most carefully, about one week later with the very best bricks. No uneven settlement appeared to take place, but I have thought it necessary to mention the matter as the minutest details are of importance in determining the actual cause of such an accident as that which has occurred.



9. From an examination of the southern portion of the south branch I find that though the sluice arch, which is adjacent to the injured portion of the anicut, appears to be sound, two cracks over the haunches of the adjacent arch have increased considerably, being about 1/2" broad in the parapet and extending through the face-wall to the arch, but the arch itself seems sound.

10. The accident is to be very much deplored, but I do not think the Executive Officer or Agent are in any way to blame, they could not under the circumstances have acted otherwise than they did. It may perhaps be said that one cut in the embankment should have been made instead of two, and probably had I been present I should have waited to see the result of the first cut before opening a second gap, but in making the two cuts Lieutenant Livesay only carried out my orders.

No. 609. ORDER THEREON, 24th July 1865, No. 2,132.

CIVIL WORKS, No. 82.

Ordered to lie over, till the receipt of a further report which the Superintending Engineer will submit as soon as the state of the river will permit him to examine the anicut and ascertain the extent of the damage it has sustained.

(True Extract.)

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

To the Superintending Engineer, 6th Division.

Ed. S. T. Augustin.

No 520 | Sups: Engrs Office 6th Div
Tanjore 12th July 1865

From,
Captain R. F. Oakes R.E.
As: Sups: Engineer 6th Div

To,
Colonel C. A. Orr R.E.
Secretary to Government
Public Works Department

Sir,
I have the honor to inform you that a large portion of the South Branch of the Lower Anicut, which has just been rebuilt, was destroyed on the 5th Instant.

2 On the receipt of information of the destruction of the Anicut I proceeded to the spot with a view of ascertaining, if possible, the cause of its destruction and I have been engaged during the last two days in examining a number of persons relative to the matter.

3 It would appear that on the morning of the 4th Instant the Water stood 3' below the crown of the North branch of the Anicut and that it continued at that level till about 4 P. M. when the water began to rise very

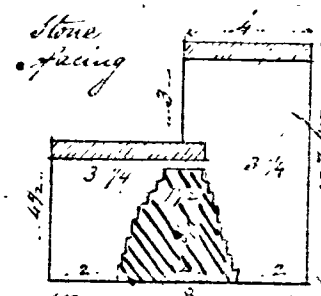
whether the whole has been destroyed. There is no broken or troubled water below the breach and I am inclined to think that only the superstructure has given way owing to its not having been sufficiently dry, tho' the lower step of the Dam was completed at least a month and the upper step 18 days, before its destruction, and that the apron and foundations will be found undisturbed.

6 It had been my intention to have allowed the front embankment across the South branch to stand during the first fresh which usually rises about $2\frac{1}{2}$ or 3' above the annient a fortnight or more after the water first comes down the River. The rise this season has been unprecedentedly rapid and there is no doubt the front embankment could not have been saved for on the evening of the 5th the depth of water over the North and South Branches of the Annient was 3' 10" and 4' 3" respectively and it rose on the 8th to 4' 9" and 5' and has gradually fallen since 11th to 3' 6" and 3' 9".

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only carried out my orders. 913

I have the honor to be
Sir

Your most obedient servant

A. T. Pakenham R.E.

Ag. Supt. Engineer, 6th Dr.

Handwritten signature

Chief Clerk

57172
C. G. Brown

212

2006/5/15/65

Die Schöpfung

Received of Mr. J. H. [illegible]
Dec 13th 1885

10/10/10

210 July 1855
K. Knapp

~~Declaration of~~

Dr. J. H. H. H. H.

of the Great Barrier

has not been

1871-1872

What came in the house

They came in and
with an Order

2:17 July 1868 Dr. 175 Dr. en. 184

10.10.08.009

Directed to the over the
 the receipt of a sum for repair, which the
 Engineer Building Engineer will submit
 as soon as the state of the River will
 permit him to examine the accident
 and ascertain the extent of the damage
 it has sustained.

2132

Franklin George?
24th July 1865



70 We subtract $6\frac{1}{2}$ from

Dear Mr. May -