

(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. | 3. 4 81 | Press        |
| B.P. No. |         | Mis. —       |
| Dated    | 18 - 12 | 18 76<br>195 |

Not to be folded or roughly handled

12

---

*Proceedings of the Madras Government, Public Works Department,  
18th December 1876. No. 3,481.*

---

Read the following papers :—

No. 405. From H. G. TURNER, Esq., c.s., Acting Postmaster-General, Madras, to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Madras, 20th October 1876, No. 6,651/2,490.

I HAVE the honor to submit copy of a letter, No. 225, dated 12th September 1876, from the District Engineer of Malabar, and the estimate for Rupees 700 therein referred to, for dismantling and renewing the roof of the Post-office at Vythery, also copy of a letter, No. 4,358, dated 11th October 1876; from the Director-General of the Post-office of India, according sanction to the measure, and request that you will be so good as to move the Government to pass orders for the allotment of the necessary funds from the grant for Minor Works of the Postal Department in this Circle for 1877-78, so that the work may be executed as early as possible after the 1st April next.

COPY of a communication from the District Engineer, Malabar, to the Postmaster-General, Madras, No. 225, dated 12th September 1876.

I HAVE the honor to forward, for your approval and submission to Government, an estimate\* for dismantling roof of Post-office at Vythery and reducing the rise to one-fourth of the span,

\* Rupees 700.

and to state that the roof having been originally constructed for pan-tiling over reepers, the slope is found to be too steep for the kind of roof since adopted, which is of tiles over continuous iron, the former not having been found impervious to wet during the heavy Wynaad monsoon; the slope of this description of roof may be reduced to very slight rise, the mode of putting on the iron making it quite impossible that there should be any leakage provided the quality of the iron is good, and there are no flaws; at a steeper pitch than one-fourth I find the tiles slip, and this has happened extensively in the case of the Vythery Post-office.

COPY of a communication from the Director-General of the Post Office of India, to the Postmaster-General, Madras, No. 4,358, dated 11th October 1876.

IN returning the estimate received with your letter, No. 225, dated 26th September 1876, I beg to sanction the sum of Rupees 700 for dismantling and renewing the roof of the Vythery Post-office, the charge being debitable to the Minor Works grant for 1877-78.

No. 405-A. From Lieutenant-Colonel R. B. KENNEDY, District Engineer, Malabar, to Major-General G. W. WALKER, R.E., Chief Engineer, Public Works Department, dated Calicut, 2nd December 1876, No. 174.

REFERENCE Memorandum No. 1,242-T, 4th November 1876.

With reference to above I have the honor to forward an estimate\* for the work in accordance with the instructions therein contained, but I would ask consideration for following remarks.

\* Amounting to Rupees 582.

2. The great object of using continuous iron at all has been to counteract the leakage which even tiles of the best description permit when subjected to such heavy and continuous rain as that of Wynaad, and the manner in which I have

*Proceedings of the Madras Government, Public Works Department,  
18th December 1876. No. 3,481.*

applied it has been such that no nail-holes of any description were left exposed for wet to percolate through, the iron being nailed only along its upper edge, and that part overlapped by the lower edge of the sheet above; this not only renders it impossible for water to leak through, but also permits expansion and contraction without enlargement of the nail-holes; it also admits of a roof being made with a very slight slope; in fact, it might be made almost flat; the object of the tiles is not to keep out the rain, but simply to cover the iron, and so intercept the heat of the sun which would otherwise make the building intolerably hot; and tiles in this case may be used of very inferior quality without deteriorating from the weather-proof quality of the roof. To screw battens over the iron is, in my opinion, entirely destroying the object for which the iron is used, and making a demand on the tiles which they will not answer; my experience of continuous iron roofing is that no matter what stopping is used, the nail-holes will sooner or later get enlarged unless full play is allowed. Whitelead hardens, and the battens act as catches for dirt and rain water which must then find exit through the screw holes. With corrugated iron the case is different, as the screws are in the ridge, and water escapes through the furrows. The difference of estimate is so small that I trust my plan will be passed in preference to the other; in the one case no new material will be necessary except a few tiles, and in the other there will be battens and screws as well as tiles. I must also add that on my late visit to Wynaad I found the work, which was asked for emergently by the Postal authorities, was commenced in accordance with original estimate, and if that is now set aside there will be some additional cost in restoring the part that was removed. Meanwhile, I have ordered work to be stopped till final orders are passed.

No. 406. ORDER THEREON, 18th December 1876, No. 3,481.

**CIVIL WORKS, No. 27-A.**

(a) Heads of Service.—Imperial.  
Fund.—Ordinary.  
Class.—Original Works.  
Main-head.—Other Services.  
Sub-head.—Civil Buildings.  
Section.—Postal.

Name of Work.—Renewing roof of Post-office at Vythery.  
Amount.—Rupees 700.  
To be carried out by the Public Works Department.

THE estimate of Rupees 700 for dismantling the roof of the Post-office at Vythery reducing the rise to one-fourth of the span and re-tiling it is sanctioned.

2. The requisite funds will be provided from the grant for Minor Works of the Postal Department for 1877-78.

3. This sanction has been registered as Imperial No. 107 W. of 1876-77.

(True Extract.)

Major-General, R.E.,

Secretary to Government.

To the District Engineer, Malabar.  
" Examiner of Public Works Accounts.  
" Postmaster-General.  
" Financial Department.

Exd. S. T. Austin,

Spare Copies

(a) Heads of Service—

Fund.

Class.

Main-head.

Sub-head.

Section.

Name of Work.

Amount.

To be carried out by the

Department.

*Print in the margin of G. O. No. 3481 of 18/12/76—*

P.W.D.

7DEC78

N8 8876

*Journal 11/11/78*

Specification to accompany Estimate  
for dismantling roof of Post Office at  
Vythery and reducing the rise to  $\frac{1}{4}$  of the  
Span, Old wood and Continuous iron  
to be used throughout. 90

Amount of Estimate Rs 400-00

The present slope of roof being so steep as  
to cause the tiles, which are laid on  
galvanized iron, to slip down; it is pro-  
posed to reduce the rise to one-fourth  
of the Span

The whole roof to be dismantled  
and put up again with the same  
Old materials, except the rafters under  
the iron of which there will be  $\frac{2}{3}$  new

After the completion of the work  
all rubbish &c to be removed and  
the ground left clean

Calicut  
20<sup>th</sup> Aug. 1876.

Signed H. Bailey Capt.  
Ex. Engr. Calicut  
Range

Calicut  
12<sup>th</sup> Sept 76.

Signed R. B. Kennedy Esq. Col.  
Dist. Engineer Malabar

(True Copy)

Calicut  
2<sup>nd</sup> Decr 76.  
Signed R. B. Kennedy Esq. Col.  
Dist. Engineer Malabar

Executive Engineer

Estimated

Estimate of the probable cost of dismantling roof of Post Office at Duthery and reducing the rise to  $\frac{1}{2}$  of the span, Old work to be removed from to be used throughout

Valued at the Building Office in 1894-95 Rs 53-

| Qty Work | Measurements |           | Particulars | Rate             | Amount of each                                               |       | Remarks |
|----------|--------------|-----------|-------------|------------------|--------------------------------------------------------------|-------|---------|
|          | L            | B D.      |             |                  | Article                                                      | work  |         |
| 1        | 2            | 78 14 1/2 | 2262        | Sq ft. or 22 1/2 | Square of dismantling roof - at 4                            | 2 1/2 | 90      |
|          |              |           | 2262        | Sq. or 22 1/2    | Sq. of putting up roof with 3                                |       |         |
|          |              |           |             |                  | new rafters, Old continuous down & single                    |       |         |
|          |              |           |             |                  | pan tiles & reducing rise to $\frac{1}{2}$ of span - at 33   | 82    | 428     |
|          |              |           |             |                  | Scaffolding                                                  | 20    |         |
|          |              |           |             |                  | Total Super.                                                 | 8628  |         |
|          |              |           |             |                  | Product value of 198 sq ft of wood work at $\frac{1}{2}$ the |       |         |
|          |              |           |             |                  | rate of scantlings when new - at 1                           | 66    | 196 156 |
|          |              |           |             |                  | Net Total Super.                                             | 66586 |         |
|          |              |           |             |                  | Superintendent at 5% Cont.                                   | 3476  |         |
|          |              |           |             |                  | Amount of Estimate Super.                                    | 700   |         |

South Mysore Railway  
Dismantling roof of Post Office at Duthery

Colonel Range Office  
Goodaloor - 20 August 1896

Malabar District Engineer's Office  
Colonel 10th September 1896

Malabar District Engineer's Office  
Colonel 2nd December 1896

Signed H. Bailey Captain  
Executive Engineer, Colonel Range

Signed R. B. Kennedy Dist. Coll.  
Distt. Engineer, Malabar

(True Copy)

W. W. Murray Lt Colonel  
Distt. Engineer, Malabar

P.W.D.  
7 DEC 76  
NR 8876

Estimate for Discontinuing  
of 300 lbs of 1/2" x 1/2" x 1/2"  
reducing the size to 1/4"  
thickness. Old wood &  
continuous iron  
rod through

1876  
in a letter shown the  
Engineer's estimate to the  
Ch. Eng'r J. W. Macdonald  
on 14 Dec 2nd Dec 1876

General

Estimate for

at Vothory. South Wynard. Repairing the roof of the Post Office

| Quantities | Particulars                                                                                                         | Rate        | Amount        |
|------------|---------------------------------------------------------------------------------------------------------------------|-------------|---------------|
| 22 31/50   | Agro of removing tiles                                                                                              | @ 2         | 45 3/10       |
| 22 31/50   | or Screwing battens 1 1/2" x 1" and 1 1/2" x 1" over con-<br>tinuous iron with 2" screws & replacing tiles @ 22 3/8 | or 508 1/52 |               |
|            | Total                                                                                                               |             | £5. 55 4 3/10 |
|            | Superintendence @ 5 percent                                                                                         |             | 27 1/3        |
|            | Amount of Estimate                                                                                                  |             | £582          |

Cashier Range Office  
Cashier 1st December 1876

W. W. Murray & Co

Asst. Eng'r in charge of W. Bailey

Captain

Executive Engineer

July 25th 1876

for repairing  
the roof of the  
Post Office at  
Sydney.

Abstract of work

Dated 1st  
December  
1876.

P.W.D.  
701076  
8876

Malabar District

Imperial Civil Buildings  
Estimate of the probable cost of repairing the Post Office at Sydney - South  
Meynard.

| Slugs                                           | Number | Measurements | Particulars                                                                                                                                                     | Rate   | Am't   | Artic work. | By whom         |
|-------------------------------------------------|--------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|-------------|-----------------|
| Repairing Roof of Post Office at Sydney - South | 2      | 78 1/2       | 2262 sq. ft or 22 50/100 sq of removing tiles @ 2                                                                                                               | per sq | 453 10 |             | By whom         |
|                                                 | 2      | 78 1/2       | 2262 sq. ft or 22 50/100 sq of screwing battens 1 1/2 x 1 1/2 @ 18" apart over the continuous iron with 2" screws and replace old tiles with one half new ones. | per sq | 581 52 | 554 3       | Chief Engineer. |
|                                                 |        |              | Superintendence @ 5                                                                                                                                             | per    | 27 13  |             | Chief Engineer. |
|                                                 |        |              | Amount of Estimate                                                                                                                                              |        | 582    |             | Chief Engineer. |

Calicut Range Office  
Calicut 1st December 1876  
Malabar District Engineer's Office  
Calicut 2nd December 1876

W. W. Newman  
S. C. Eng. Malabar

W. Barclay  
Captain  
Executive Engineer

Specification to accompany  
Estimate for repairing the roof of  
the Post Office at Ooty - South  
Mysnad. 152

Amount of Estimate Rs. 582-0-0

The slope of the roof being so steep  
as to cause the tiles, which are laid  
on a smooth continuous iron surface,  
to slip down, it is proposed to  
remove the whole of the tiles and  
that longitudinal wooden battens  
 $1\frac{1}{2} \times 1\frac{1}{2}$ " should be screwed to the  
rafters at a distance of  $1\frac{1}{2}$  feet  
apart over the continuous iron  
and the building to be retiled.  
The battens at the points of screwing  
to be well smeared underneath  
with white lead paint and the  
screws dipped into the paint  
before being screwed down.

M. Bailey Captain  
Executive Engineer.

Calicut  
1<sup>st</sup> December 1876

M. W. Vennet & Co

Molebar D. W. Eng. Office  
Calicut 2<sup>nd</sup> December 1876

D. Eng. Moolahad

P.W.D.  
7 DEC 76  
NR 8876

Calicut Range  
Malabar District

Dated 1st  
December  
1876

Estimate and plan  
for the roof of the  
Post Office at  
Calicut.

Amount Rs. 582

Malabar District Eng'g Office  
Calicut, 2nd December 1876.  
No. 174  
From The District Engineer, Malabar,

To The Chief Engineer D.O. Madras.

Sir, Reference Memo No. 1242, I- 14th Nov. 1876.

amounting to  
Rs. 582

With reference to above, I have the honor to forward an Estimate for the work in accordance with the instructions therein contained, but I would ask consideration for following remarks.

2. The great object of using Continuous Iron at all has been to counteract the leakage which even Tiles of the best description permit when subjected to such heavy & Continuous rain as that of Wynad, & the manner in which I have applied it has been such, that no nail holes of any description were left exposed for wet to percolate through, the Iron being nailed only along its upper edge, & that part overlapped by the lower edge of the sheet above; this not only renders it impossible

impossible for water to leak through,  
but also permits expansion & contrac-  
tion without enlargement of the  
nail holes; - it also admits of a  
roof being made with a very slight  
slope; in fact, it might be made  
almost flat: the object of the  
Tiles is not to keep out the rain,  
but simply to cover the Iron, & so  
intercept the heat of the sun  
which would otherwise make the  
building intolerably hot, and  
Tiles, in this case, may be used  
of very inferior quality without  
deteriorating from the weather  
proof quality of the roof. To screw  
Battens over the Iron is in my opi-  
-nion entirely destroying the ob-  
-ject for which the Iron is used,  
and making a demand on the Tiles  
which they will not answer, my  
experience of Continuous Iron  
roofing is, that no matter what  
stopping is used, the nail holes  
will sooner or later get enlarged  
unless full play is allowed. -  
White lead hardens, & the battens  
act

act as Catches from dirt, & rain  
water, which must then find  
exit through the screw holes - The  
Corrugated Iron the case is differ-  
-ent, as the screws are in the ridge,  
& water escapes through the furrows.  
The difference of estimate is so  
small that I trust my plan will  
be passed in preference to the  
other; in the one case no new  
material will be necessary except  
a few Tiles, & in the other there  
will be Battens, & screws, as well  
as Tiles - I must also add that  
on my late visit to Wynad  
I found the work, which was  
asked for emergently by the  
Postal Authorities, was commen-  
-ced in accordance with origi-  
-nal estimate, & if that is now  
set aside, there will be some  
additional cost in restoring the  
part that was removed - Mean-  
-while I have ordered work to be stop-  
-ped till final orders are passed.

I have the honor to be,  
Sir,  
Your Most Obedt Servant  
W. B. Kennedy  
District Engineer Malabar

20-2-63-1641.  
 22-6-63-1635  
 7-5-64-1323.  
 11-5-65-1282  
 22-8-65-2438.  
 20-10-65-3135  
 8-12-65-3731.  
 9-4-66-1076.  
 1-5-68-1356.  
 24-12-69-4008.  
 26-1-70-324.  
 8-4-70-990.  
 24-11-70-2830  
 16-9-71-2355.  
 5-10-71-2525  
 17-1-72-148.  
 12-10-72-2405.

Estimate for house  
 for Rs 582 house  
 joining the Post  
 Office at Gythury

No. 174  
 Dated 12. Dec. 1876.  
 Recd

P.W.D.  
 7 DEC 76  
 NR. 8570

From  
 the District Engineer  
 to the Chief Engineer  
 S.P. H.  
 Madras

x  
 Rs 700-

No. 225 dated 12<sup>th</sup> September 1876

I have the honor to forward  
 your approval and submission to Government  
 an Estimate for dismantling roof of Post office  
 at Gythury and reducing the rise to  $\frac{1}{4}$  of the span,  
 and to state that the roof having been originally  
 constructed for Pantling over reapers, the slope is  
 found to be too steep for the kind of roof  
 since adopted, which is of tiles over continuous  
 iron, the former not having been found  
 impervious to wet during the heavy Mysore  
 Monsoon; the slope of this description of roof  
 may be reduced to very slight rise, the mode  
 of putting on the iron making it quite impossible  
 that there should be any leakage, provided  
 the quality of the iron is good, and there are  
 no flaws, at a steeper pitch than  $\frac{1}{4}$  I  
 find the tiles slip, and this has hap-  
 -pened extensively in the case of the Gythury Post office.

Copy

Copy of a communication from the Director  
General of the Post office of India, to the  
Postmaster General, Madras, No. 4358 dated  
11th October 1876.

7812

In returning the Estimate  
received with your letter No. 756 dated 26th Sep-  
ember 1876. I beg to sanction the sum of  
Rs. 700 (seven hundred Rupees) for dismantling  
and renewing the roof of the Vyttery Post office,  
the charge being debitable to the Minor  
Works grant for 1877-78.

(True Copies)

W. J. Turner

Ag Postmaster General

MEMORANDUM.

Letter Number 225

dated the 12 Sept 1876.

from the District Engineer of Madras  
W. H. Pashford Esq. Madras.

It appears to the Chief Engineer  
that the estimate submitted for  
the work of the roof of the Vyttery  
Post office should be renewed  
it is not renewed. He has  
shown a sketch sufficient to  
show that the timber are decayed and  
require to be replaced by wooden  
battens. The batten is to be  
laid at a distance of  
18" apart outside the  
floor. The battens are  
to be secured to the  
building with 2" x 4"  
battens with effectively  
prevent all tendency to  
the slipping of the tiles.  
The batten at the joints  
of the roof should be  
secured with whole  
lead paint and the  
seams of the tiles  
before the  
work is done.

The Chief Engineer  
will be satisfied with  
the estimate submitted  
to the office.

My order  
2.11.70.

No. 6657  
FROM 2490

POSTMASTER GENERAL'S OFFICE,

Madras: 20 October 1876

*A. G. James Esquire Esq.*  
Postmaster General,  
MADRAS.

To  
THE SECRETARY TO GOVERNMENT,  
*Public Works* Department,  
FORT SAINT GEORGE.

SIR,

I have the honor to submit copy of a letter No. 225 dated 12<sup>th</sup> September 1876 from the District Engineer of Malabar and the Estimate for Rs 700-<sup>00</sup> thereon referred to for dismantling and renewing the roof of the Post office at Vythery. also copy of a letter No. 4358 dated 11<sup>th</sup> October 1876 from the Director General of the Post office of India, according sanction to the measure, and request that you will be so good as to move the Government to pass orders for the allotment of the necessary funds from the grant for Minor Works of the Postal Department in this Circle for 1877-78.

So that the work may be executed as early  
as possible after the 1st April next—

I have the honor to be  
Sir—

Your most obedient servant

W. J. Turner

Adj Postmaster-General

R

W. J. Turner

Civil works

Public Works Department.

No 3481

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

18 Decr 76

Read the following:—

From

The Post Master General  
Madras

District Engineer

Madras

(N.E. No 6651 of 20 Decr 76)

(N.E. No 174 of 2 Decr 76)

The estimate of Rs 100 for dismantling the roof of the Post office at Vyttery reducing the same to one fourth of the original and soliding it is sanctioned.

The requisite funds will be provided from the grant for minor works of the Postal Department for 1877-78.

This

7812

187 - 7

From

The Postmaster General,

MADRAS.

To

The

Secretary

to Government,

Public Works Department,

FORT ST. GEORGE.

No. 103.—P. M. G. O. P.—21-0-76.—250.

No 6657

2490

Dated

20 Decr 76

1876

Received

187

SUBJECT.

\*1088

Estimate submitted by the  
Postmaster General for the  
dismantling the roof of the  
Vyttery P.O. and replacing  
it with a new one. The  
estimate shows that the  
cost of the work is Rs 100.  
The Government have  
sanctioned the estimate for  
the sum of Rs 100.

No 405

Cir 16-12-76. R 18-12-76

Adm. Encl.

1872/1876

Govt. of 1876 Madras.

PUBLIC WORKS.

To The D. B. Malabar

Dated

Issued

Recd.

Encl.

G. O. 1876, No. 2481

Nos. 405/6

Post Office at T. T. T. T.  
Malabar Dist.

Estimate of Rs 700 for  
altering the roof of the  
sanctuary

Est. in Rs.

N 405/6

1876-12-12-76

Encl. Dept  
Recd 4-1-77