M.R.O. 1—77,000—8-5-37.

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public (Misc.) DEPARTMENT.

G.O. No. 1642 Press Mis.
146, 147

Dated 8-11- 1912.

Not to be folded or roughly handled

No. 146. Read the following endorsement of the Revenue Department, dated 31st May 1872 :—

From the Superintendent, Revenue Survey, to the Secretary to Government, Revenue Department, dated Chepauk, 30th May 1872, No. 980-31.

SHORTLY after Colonel Barber took charge of the Survey of the Kurnool District he reported a number of grave errors in the plotting of village maps of the Patticonda Taluq, brought to light on their being finally tested. The most considerable made an aggregate difference in one large village of nearly 500 feet in excess.

2. I ordered the systematic re-examination of the maps of the taluq, and directed that ten or twelve, chosen at random, should at once be sent to the central office to be re-plotted, and that, if necessary, the whole work of the taluq should be re-mapped. This occurred shortly before I went on three months' privilege leave last year.

3. I commended this subject to Colonel Hessey's notice, and, whilst acting Superintendent, he paid Kurnool a visit, and satisfying himself of the actual existence of the discrepancies reported, re-called, as untrustworthy, the records of a number of villages already handed over to the Settlement Department, and instructed Colonel Barber to carry out the re-plotting of the village maps.

4. In November 1871, Colonel Barber's health having failed he was obliged to resign his appointment and take sick leave. He was succeeded in charge of Kurnool by Mr. Cardozo. This officer's attention was of course attracted to the inaccuracies which had been reported, and he discovered that the maps said to contain errors had been plotted with scales of a different maker from those used to test them. Further examination showed that the error was constant and always in excess—the per-centage he put down between 10 and 15.

5. On this account, among others, I found it necessary to pay Kurnool a visit, and going thoroughly into the matter, I discovered the difference per cent. of the scales to be 11 and the mean per-centage of error in the villages as yet examined to be almost exactly the same, *i. e.*, between 11 and 12. The difference in area between a map first plotted with one scale and then with the other is 1·5 per cent.

6. Although the subject is not perhaps of sufficient importance of itself to warrant its being made the subject of a special report (the supposed untrustworthiness of the Survey Records has nevertheless checked progress, and caused a considerable unnecessary outlay), I have the honour to bring to notice the absolute necessity of the scales furnished to the Survey Department being as accurate as they can be made. I send one of each of the scales referred to, and would suggest that the Superintendent, Mathematical Instrument Manufactory, should be asked to decide which scale is correct, and that his report should be forwarded to the department at home which supplies this Government with instruments, with a view to scales being carefully tested before they are furnished to departments in this country.

REFERRED to the Public Works Department, in view to the necessary orders being issued to Mr. Doderet.

(Signed) W. HUDLESTON,
Secretary to Government.

REFERRED to the General Superintendent of Public Works Stores for early report.

FORT ST. GEORGE,
4th June 1872.

(Signed) G. W. WALKER, Colonel, R.E.,
Officiating Secretary to Government.

No. 146. From the General Superintendent of Public Works Workshops and Stores, to the Secretary to Government, Public Works Department, dated Chepauk, 14th June 1872, No. 524.

1 Letter from Superintendent, Revenue Survey, returned.
1 Packet two scales, do.
1 Letter from Mr. F. Doderet.

WITH reference to endorsement dated 4th June 1872, on letter from the Superintendent, Revenue Survey, I have the honour to forward report from Mr. Doderet, Mathematical Instrument Maker, stating that after a most careful comparison he is positive that the Ivory scale is correctly divided, and, being so, supposes that it is correct to the standard.

Mr. Doderet had the opportunity afforded him of comparing the scales sent for examination with those in stock in the Public Works Stores from different makers, and, in the absence of a standard scale, I am of opinion that the above examination would enable him to arrive at a correct conclusion.

The letter from the Superintendent, Revenue Survey, and two scales received therewith, are returned.

From the Mathematical Instrument Maker, to the General Superintendent, Public Works Workshops and Stores, dated Chepauk, 13th June 1872.

I HAVE the honour to return the two plotting scales together with the letter of the Superintendent, Revenue Survey, and beg to say that, in the absence of any standard scale, I could only compare the two scales as to the correctness of their divisions themselves; and after a most careful comparison I can positively state that the Ivory scale is correctly divided, whereas the Box-wood differs in the mean (in excess) from 0 to 20 of 0-11, and in some instances as much as 0-56 between 40 and 40.

The Ivory scale being correctly divided, leads me to suppose that it is correct to the standard. I am not surprised at this for the following reasons :—

Wood being a soft material, divisions will consequently be rough, and cannot be so correctly divided as a harder and finer grained substance. Wood scales being of a commoner description than any other, the manufacturers would not bestow such care as on a better kind of scale. Dividing machines have of late years been greatly improved. Further, that the wood scale having no doubt been made some years ago and never having been examined, whereas now the Inspector of Scientific Instruments, Colonel Strange, who goes to the workshops of the makers and sees that nothing but first-class work is delivered to the India Store Department, therefore I do not believe that scales lately supplied can be incorrect.

Proceedings of the Madras Government, Public Works Department,
8th July 1872.

I would most respectfully propose that no more wood scales, except Ivory edged, should be indented for especially for Revenue Survey purposes, and it would be desirable that a set of standard scales should be in store for reference.

No. 147. ORDER THEREON, 8th July 1872, No. 1,642.

ACCOUNT, No. 5.

ORDERED that the Home Government be addressed on the subject.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

Bd. S. T. Austin.

Public Works Workshops
Chepauk 14th June 1872.

No 524

From
The General Superintendent
Public Works Workshops and Stores

To
The Secretary to Government
Public Works Department
Fort Saint George.

Sir,

With reference to Endorsement dated 4th June 1872 on letter from the Superintendent Revenue Survey, I have the honor to forward report from Mr. Doderet, Mathematical Instrument Maker, stating that after a most careful comparison he is positive that the Every Scale is correctly divided, and being so supposes that it is correct to the Standard.

Mr. Doderet had the opportunity afforded him of comparing the Scales sent for Examination with those in Stock in the Public Works Stores from different Makers, and in the absence of a Standard Scale, I am of opinion that the above Examination will enable him to arrive at a correct conclusion.

The letter from the Superintendent Revenue Survey and two Scales received therewith are returned.

I have the honor to be
Sir
Your Most Obedient Servant
[illegible]
Lieut Col & Superintending Works

P. W. Dept.

No 1642

Copy Memorandum of Assessment.
Undertaken 8th July 1872
Value the following:-

Subassessment from Harbour Master (H.E.I. Railway Co)
from the Port Officer Mr Shaw (H.E.I. Ry Co) of 12 Shares
Merchandize -

Acknowledged Mr Shaw
Name from the assessment
in Mr Thurgood's

Value Received

Bombay 19/7/72

P. W. Dept.
Ext. Bo. Gen. Exp. Cy
No 2967.
Chief Superintendent
P.W. Department
For Secretary Board
Public Works Dept
& Ry Dept
Bombay

Dated 11th June 1872.
Rec'd 15th June 1872.
Acknowledged 24th July
Enclosures.
No 1642 - 8th July 1872
Forwarded for favour
of Mr. J. Dodet A. Statis-
tical Assistant
Bratter, regarding the
Scales adopted for the
Superintendent Revenue
Survey for Examination

No 1446

Ans 11th - 8th July 72

P. W. Dept. No 1446 dy 15th July
Ans 14th 1872

6 Encls dy 15th July 72

No. 2743 & 2967

Govt. of Madras.

PUBLIC WORKS.

To

Dated.

Read. Encl

G. O., 8th July 1874, No. 1612

Nos. 146 - 147

Rules. Ordered that the
the Rank he assigned
the subject of the de-
ective Rules issued to
the Rev. Survey Dept.