M.R.O. 14—13,000—27-9-24.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 2184 Press ~~Mis.~~

Lei-Le2

Dated 2-12-~~19~~1863

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 2nd December 1863.

No. 41. Read the following Proceedings of the Madras Government in the Public Works Department:—

Communicating a letter from Mr. F. Doderet, Mathematical Instrument Maker, reporting on the inferiority of Theodolites lately supplied to the Survey Department by the Home Government. (Here enter 14th November 1863, No. 3,308.)

No. 42. ORDER THEREON, 2nd December 1863, No. 2,184.

1. Communicated to the Superintendent of Revenue Survey, with reference to the Order of Government, 12th October 1863, No. 1,868.

2. The Superintendent will be requested to state when and from what Department the inferior kind of Theodolites in question were supplied, and to quote any correspondence that may have been passed on the subject. He will also state how many such he has on hand, and furnish any other details he may deem necessary in view to a reference being made to the Home Government.

(True Extract.)

(Signed) J. D. SIM,

Secretary to Government.

To the Superintendent of Revenue Survey.
„ Department Public Works.

Exd. S. T. Augustin.

Proceedings of the Madras Government, Public Works Department,
14th November 1863.

No. 291. Read the following letter from MR. F. DODERET, Mathematical Instrument Maker, Department Public Works, to Colonel C. A. ORR, R. E., Secretary to Government, Department Public Works, dated Madras, 3rd November 1863 :—

SIR,

No. 1,092-94-98. In obedience to the instructions conveyed in your Memorandum No. 338, dated 22nd October 1863, I beg respectfully to submit the following report on the three Theodolites, by Henry Barrow & Co., London, received from the Superintendent Revenue Survey :—

1. After a careful and minute examination of the instruments, the following defects are apparent, rendering them consequently unfit for the service for which they are intended.

2. The telescopes of all three instruments are useless, as the object glasses are oxyded, which gives them the appearance of ground glass.

3. The axes of the telescopes do not fit, as the Ys are too wide, and consequently the telescopes, after being clamped, soon become loose. In fact, in instrument No. 1,092, the telescopes cannot be clamped steady.

4. The Ys and the Y carriers are two thin in metal, and will soon grind themselves larger.

5. The axes of lower limb in all three instruments are too thin, and the cone too long. The latter instruments have a double cone, or a cone much thicker and shorter, as the stability of the instrument rests a great deal on the axis.

6. The clamping of the lower levelling screws are of the commonest description, as the screws will by repeated clamping, get quite a different thread, and as they are more frequently used in the middle of the stem, the upper and lower parts will remain the same, while the middle of the screws are worn out, in fact the thread will have worn itself quite away in the middle.

7. The dividing in all three instruments is not quite correct, and by reading only one vernier, there occurs an error of between 30 to 40 seconds, but if all the verniers are read the correction can be applied ; but this takes too much time, while the Surveyor would do double the amount of work if he had a properly divided instrument.

8. In bringing the above to your notice, I respectfully solicit that you will, in the event of your deciding that the Government should be moved to address the Home authorities on the subject, not accept my statement as sufficient, but that you will be pleased to call upon the Officers of the Department Public Works to whom similar Theodolites have been supplied, to report on them. You will then be in a position to form an opinion, based upon the reports of Officers to whose experience and better judgment you could defer in a matter of some importance.

No. 292. ORDER THEREON, 14th November 1863, No. 3,308.

1. The above report will be communicated to the Revenue Department, with reference to the orders in that Department No. 1,868, dated 12th October 1863.

2. It will be observed that the Theodolites, which were tested, are reported to be coarsely graduated and flimsely made, so much so, as to be unfit for work requiring accuracy and rapidity of execution. They are also reported to be liable to more rapid deterioration by wear and tear than well made instruments.

(True Extract.)

Colonel, R. E.,
Secretary to Government.

To the Revenue Department.

Exd. S. T. Augustin.

Pro 12 Octr Lr/Supt Ill Ry 149

Copy in a Letter to Engr dd 22nd Decr 1863 p 130

Perusal 1863 Nov 4 Ins: of Govt for Decr p 282

Proceedings of the Inspection Generl of the Public Works. Depart.

Dated 14th November Received 17th " 1863.

No 3108.

From the Asst Supt Rly Survey dd 8 December 63 No 3911 Encl. &c.

Communicating a letter from Messrs Troughton & Simms Makers of Mathematical Instruments & Walker of Aberdeen on the inferiority of Theodolites lately supplied to the Survey Depot by the Home Govt.

No 2184 & 2185

No 2184 Communicated to the Superintendent of Rly Survey with reference to the Govr's of 12th October 1863, No 2184.

The Superintendent will be requested to state whether the inferior kind of Theodolites in question were supplied, and to quote any correspondence that may have been passed on the subject. He will also state how many such he has on hand, and furnish any other details he may deem necessary in view to a reference being made to the Home Govt.

Fort St George 2nd Decr 1863

No 2184 Communicated to the Supt of Rly Survey Copy &c &c &c