No. 2481 W. dt/ Octr 22nd 1885.

B

Sanctioned.

Sanctioned

A.H.

Oct. 19. 1885

From

Dck 9041

The Superintending Engineer,

V Circle,

To

The Chief Engineer

P.W.D.

Dated 14th } October 1885.

Recd. 16 }

Enclosures.

No. 2481 W dt/ Octr 22nd 1885.

No. 3005

Bungalow at Attantangal—

Requests sanction to eject the occupants of the — at an estimated cost of Rs 54.

With order

Note. The cost first named was about Rs 20/- but it is now reported to be 54/- under the altered conditions. This to cost at a value to be named

S. E V Circle ✓

Ex P.W.D. ✓

Rev Deptt ✓ Receipt 23.10.85

Rs 9/10

29/10/85

No. 3105

SUPERINTENDING ENGINEER'S OFFICE,

V CIRCLE, MADRAS,

Bangalore Camp, 14th October 1885.

From

THE SUPERINTENDING ENGINEER,

V CIRCLE,

To

THE Chief Engineer

P.W. Deptt.

SIR,

With reference to G.O. No. 1778 dated 30th July 1885; I have the honor to report that the Government Vakeel in the District Munsiff's Court at Poonamallee who will have to conduct the proceedings for the ejectment of the occupants of the Bungalow at Attavantagle wishes to proceed on the Cancellation of the building, instead of as originally proposed, on the amount of rent due from the occupants

Enclosures.

10TH SEPTEMBER 1885, No. 1011, REVENUE.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following letter from P. BOSWORTH-SMITH, Esq., Government Mineralogist, to the Acting Director of Revenue Settlement and Agriculture, dated Coimbatore, 20th August 1885, No. 47 :—

I have the honor to submit, for the information of Government, a report of my mineralogical work in Coimbatore.

2. *Wednesday the 12th August.*—I went to visit the limestone bed at Madukarai, about nine miles from Coimbatore, on the Pálghat road.

3. The limestone which is rather soft is of various colors—pink, grey, whitish, and, in some places, of a light brown color, and crops out on a small ridge crossing the road and near to the railway. The stone has been quarried to some slight extent on both the western (road) side and the eastern side of the ridge.

4. The English church of Coimbatore is built of the limestone which seems perfectly durable, but as the building has only been erected about fifteen years, it has not had much time to weather. Inside the church the font and the capitals of the pillars show that the limestone takes a fair polish and is extremely handsome.

5. The great facilities for working the stone, the ease with which it may be cut, and its beauty when polished, makes one marvel that it has not received more attention as a building stone for internal decoration and for the manufacture of small ornaments (paper weights, &c). As the railway from Madras to Beypore and Calicut runs within a few hundred yards of the eastern outcrop, lines could, with very little expense, be run right up to the quarry, and the stone, after being split off in blocks for buildings, could be put on trucks; consequently the cost of transit should be very cheap.

6. For outside masonry it would be advisable to reject such blocks as contain much pyrites and green mineral (chlorite?), as these might be liable to decompose and so disintegrate the limestone, but on the other hand such blocks would be the handsomest to polish and would be durable if kept from the open air.

7. I have taken specimens of the various different colored stones that occur, some of which it would be advisable to polish.

8. *Saturday 15th.*—I started for Kángyam reaching Tirupúr in the evening, and from thence on to Kángyam, which I reached on the following morning.

9. During the few hours' stay at Tirupúr I looked round the country close to the village in search of minerals; quartz seems excessively abundant, there being large reefs running across the country from which fragments are strown over every field. The natives collect these fragments and break them up for road metal, for which purpose the quartz answers extremely well, the roads being very hard and compact. The roads are so good that they are not materially affected by the wheels of the country carts which severely test the durability of any road, the native driver always managing to keep the wheels of his cart in particular grooves or lines on the road so that the continual wear on a very small surface makes deep cuts in any but very hard and compact roads.

10. Around Kángyam there is a great quantity of quartz and felspar which has also been used as road metal, but judging from the heaps of broken *kankar* lying on the road sides, I suppose they are going to use the latter as metal.

11. There is abundance of quartz in the neighbourhood, every field being covered with it; so the only reason that they are trying kankar must be that they find it easier to break up; but I doubt if the inferior durability of the limestone will be compensated by the smaller amount of labor necessary to break the mineral.

12. *Monday 17th.*—I visited the aquamarine well at Padiyur (Padoor).

13. The well passes through a vein of *graphic* granite in which there are large masses of quartz and albite (clevelandite). Micax (muscovite) is also very abundant, and garnets occur occasionally as rhombic dodecahedrons but in too fissured a condition to be extracted as perfect crystals.

14. From what I could see of the excavation I should suppose that in digging the well they came across a nest of crystals of aquamarine, and after exhausting the nest, worked up towards the outcrop, abandoning the workings when they were within about 3 yards of the surface.

15. I could find no crystals of aquamarine and was informed by the natives that many Englishmen had visited the place during the last seven or eight years but that they had never been able to find the mineral. That no specimens are to be found in the present state of the well does not at all prove the entire absence of the mineral, or that attempts at reviving the works would be futile. To express an opinion on that subject it would be necessary to follow the granite in the direction of its dip, which is about 20° in a northerly direction, and extract about 20 or 30 tons or even more. A large sample must necessarily be taken, as the beryl is known by old accounts to occur "in nests in cavities in the clevelandite" (albite, Manual of Economic Geology of India by V. Ball, page 520); consequently, as the mineral is not found in continuous veins, the chance either of finding a nest or of finding no crystals at all in a small amount of granite taken out would not give a fair estimate of the amount of the mineral to be found in working on a large scale. If a small sample contained no crystals at all, it would not necessarily follow that the working would not pay, as a nest might be close at hand which would be found on taking a larger sample. On the other hand if a nest of crystals were found in the small sample and an average taken, that average might be very much too high, which would be shown by a larger sample being taken.

16. The working expenses would doubtless be small, the stone would not probably cost more than one rupee per ton to bring to the surface, and the whole expense—breaking, sorting, &c.—would cost about Rs. 2 per ton.

17. Mr. Heath seems to have found a fair quantity of crystals in the well having between June 1819 and June 1820 obtained 2,196 stones weighing 22 lb., and valued at £1,210. This, though interesting in proving that there are crystals in this locality, does not give us any clue as to the value of the well; for the price of beryls must have altered considerably since then, as many more have been found in various localities, some being crystals of gigantic size. A crystal of beryl was found in Brazil approaching the size and form of a calf's head, weighing over 18½ lb. and being transparent and without a flaw; and crystals, though not transparent, have been found weighing over 2,000 lb.

18. There are also large crystals of white mica (muscovite) in the joints of the quartz, and although those at the surface were not large enough for economical purposes and were somewhat decomposed by the action of weathering, their size—some being as big as 5 inches by 3 inches — gave hope of better ones being found if the granite was worked.

19. I have taken specimens of the graphic granite and of the albite (clevelandite).

20. I was unable to stay at Kángyam for a longer period, as I had no conveniences for camping with me, and the public bungalow contains no furniture. When I have procured the above I propose visiting the district again, as there are other wells which might cut into the granite vein and might throw light upon the question of the occurrence of beryl in the district. I have also found a reference to amethyst (quartz colored by manganese) being found near Kángyam and being sent to the lapidaries at Vallam, Tanjore district, to cut (Ball, page 502).

No. 1593.

Submitted to Government.

2. The present Consulting Architect built, it is believed, the church at Coimbatore.

3. Had he approved of the limestones mentioned by the Government Mineralogist they would probably have been used in the construction of the various public buildings which have of late years been put up in Madras.

4. Specimens of these limestones might be sent to the London Exhibition.

5. Mr. Bosworth-Smith's account of the spot where beryl was formerly obtained is interesting, and it would possibly be worth while to make, as he proposes, a further examination of the locality after he has visited the Bellary district.

6. Examinations to the extent recommended would, however, probably cost considerably more than the Government Mineralogist calculates.

MADRAS,
24th August 1885.

(Signed) J. F. PRICE,
Ag. Dir. of Rev. Settlement and Agriculture.

To the Secretary to Government, Revenue Department.

ORDER—dated 10th September 1885, No. 1011, Revenue.

Miscellaneous.

1. Limestone bed at Madukarai.
2. The aquamarine well at Padiyur near Kángyam.

The Government have perused with interest Mr. Bosworth-Smith's report of his inspection of the localities marginally noted in the district of Coimbatore.

2. Mr. R. F. Chisholm, F.R.I., B.A., who designed the English church at Coimbatore, and who, it is believed, recommended the use of the Madukarai limestone in its construction, will be requested to state his opinion in regard to the value of the stone as a building material.

3. Adverting to paragraphs 13—19 of the report having reference to the excavation at Padiyur whence beryl was formerly taken, the Government are of opinion that the locality should be scientifically tested in view to determining whether the mineral still exists in quantities sufficient to admit of its being remuneratively worked, and on his next visit to the locality Rs. 200 will be placed at the disposal of Mr. Bosworth-Smith in view to his making the experiment.

4. It is thought that Tirupúr and its neighbourhood deserves more attention than the Government Mineralogist was able to give to the locality on his recent visit. Table ornaments and spectacle lenses are manufactured from crystal found in the vicinity, and there is a green stone which is worked up by native artists and which takes a good polish.

(True Extract.)

(Signed) W. WILSON,
Ag. Secretary to Government.

To the Director of Revenue Settlement and Agriculture.
,, the Board of Revenue.
,, the Public Department.
,, R. F. Chisholm, Esq., F.R.I., B.A., Consulting Architect to Government.
,, the Accountant-General.
,, the Editors' Table.

Exd. A. Aubert.

100 Copies.

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Comm^r to the SE IV circle for information

2. Mysolm will submit the report thro' the Ca^l Department.

(Sd) J.S.S
W

SE IV circle
copy Asst to Govt

Govt. of {1885} Madras.

REVENUE.

Issued

Recd. Encl.

G.O., 10th September 1885, No. 1011.

SEPTEMBER.

Government Mineralogist.

Orders passed on report of his inspection of certain localities in the district of Coimbatore.