Revenue (1898) Department.

PRESS SERIES.

G.O., No. 181–182.

Dated 25th March

[Despatch Abstract.]

Kurnool Iron ores

Stating that the Govt. will not press for the immediate investigation of the ——, nor for the early inspection of the mica mines in Nellore; and requesting the Director, Geological Survey of India, to be good enough to state whether the survey of the South Canara dist. has been completed by Mr. Holland and, if so, to furnish this Govt. with a copy of that officer's report on the subject.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
C.R.O 3097/98 G.O. 1875 A & 2844 98							

0
15 4,000 19-7-97.

Revenue (1897) Department.

CURRENT No. 10085

From

The Offg Director
Geological Survey of India
Calcutta.

Order

No. 1205.

Dated 16 Nov.

Received 22 "

Registered 23 "

Enclosures

Spare copies.

SUBJECT.

Informing the Govt of Madras that the programme of employment of Messrs Middlemiss and Holland for the coming season has been already arranged & sanctioned and that it would be inconvenient now to change them &c.

K.9

BACK PAPERS.

G.O.	No.	Department.	Date

FURTHER PAPERS.

G.O.	No.	Department.	Date.

SECL GVT MADRAS
2 NOV 97
REV. DEPT.

No. 1205.

FROM

R. D. OLDHAM, ESQ.,
OFFG. DIRECTOR, GEOLOGICAL SURVEY OF INDIA,

To

The Secretary to the Government of Madras,
Revenue Department.

Dated Calcutta, November 16th 1897.

SIR,

In reply to your letter No 847, dated the 6th October 1897, I have the honour to inform you that the programme of employment of Messrs: Middlemiss and Holland for the coming season has been already arranged and sanctioned, it would be inconvenient now to change them. Apart from this consideration, I would offer the following remarks with regard to the desires expressed in your letter under reply.

2. With regard to the investigation of the Kurnool iron ores I am still of the opinion that it would be advisable to defer this till the experiment of smelting the 300 tons of Salem iron ore, which you have in view, has been tried. I have seen no estimate in which the Madras iron ores were shown to be workable at a profit which did not show some serious omission. It must be remembered that there is probably no industry where competition is so keen and profits cut so close

as in iron manufacture, and experience has proved that it can only be profitably carried on on a large scale and in places where the natural advantages of cheap fuel, ore, and transport, and proximity to a large market are combined. In these circumstances it is on the face of it improbable that a profitable industry could be established in Madras, but the matter can only be settled by actual trial.

3. On the other hand Mr. Middlemiss expects to be able to complete the survey of the Coimbatore district during the next working season, and it would be more profitable that the examination of the iron ores be postponed till the completion of the work in hand. At the same time I would point out that it would be of little service for Mr. Middlemiss to be despatched on this investigation unless your Government is prepared to provide or procure for him, assistance in making excavations which would enable samples to be obtained of sufficient size and sufficiently unaffected by weathering to enable a true estimate of the quality and quantity of ore to be made. This assistance might be of the same nature and on the same scale as was rendered in the investigation of the corundum deposits at Palacod in Salem, without an assurance that this will be done I do not feel myself able to submit your proposal to the Government of India with a recommendation that it be adopted.

4. With regard to your second proposal my position is totally different. I observe that your Board of revenue have no misgivings as to the existence of mica in quantity, and in this I am in perfect agreement with them. Nor does it appear that they desire the extension of the mica bearing rocks to be surveyed; this too is I consider undesirable as in the absence of better maps than are at present available it would be impossible to make a survey which would be of real service to the mica miners who are probably quite capable of finding the mica bearing rock for themselves.

5. Either of these services would lie within the province of the Geological Survey, but it is different with the demand actually made on me, that Mr. Holland be deputed to advise the miners as to how to improve their methods of mining. I am prepared to accept your statement that the methods at present in vogue are crude and wasteful, though it is my experience that methods which appear to be imperfect to the outsider have often some real reason when they are fully investigated. I also believe that Mr. Holland, or any other member of the survey, if deputed to the task and given funds and time, could devise improvements in the methods of working the mica; but I am still more strongly convinced that in such a matter he would not be accepted as an authority by the men actually engaged in the industry. It does not even appear that

any request has been made for assistance or advice, and we may take it as certain that the suggestions made by him would be rejected, if not resented, on the score of his want of experience. For this reason I cannot support the proposal that any member of the Geological Survey should be deputed for the special purpose referred to by you.

6. I have to add that in the orders of the Government of India communicated to this Department there is no mention of Dr. Holland being deputed to the Madras Presidency till the end of 1898, and that in accordance with the scheme drawn up by me last year, he will be employed during the coming working season on the survey of the Province of Coorg.

I have the honour to be

Sir,

Your most obedient Servant,

R.D. Oldham

Offg. Director, Geological Survey of India.

Read again Go. 846-7
6.10.97
C No 10085 of 97

C/1 Ry
2/1 R & the Govt

For orders

Letter No 564 D 26.6.93. A

In 1893, the Govt of India was asked to move the Secretary of State to sanction the appointment of a skilled petrologist on a salary of Rs 800–1000, for five years, to carry out a systematic mineralogical survey of the whole Presidency. It was stated that if the Govt of India should object to pay a moiety of the cost from the Imperial Revenues, this Govt was prepared to bear the whole cost. The Govt of India however, declined to recommend the appointment of a special officer for this Presidency, but asked the Director, Geological Survey of India, to depute one of his subordinates for a series of two seasons. Mr Middlemiss who accordingly came to this Presidency in November 1893 was engaged in the geological survey

* in order to make widely known these mineral products likely to prove of economic value

* Go. 355 D 25-9-93. H

A separate establt, they said, would involve the absence of sufficient control. Jy

To conduct a practical investigation. Jy

G.O. No 987 D 16.11.93 B.

C. 09/98
2.4.98
R. 2.5.98
R. 16.4.98

of Salem & Coimbatore till April 1896 when the Govt of India enquired if the preliminary investigation conducted by him justified the deputation of a Mining specialist to carry out a thorough practical enquiry. The Govt answered the query in the affirmative and also informed the Govt of India that the Mining Specialist, Mr Anderson who was proposed to be deputed to Madras for a limited period should primarily confine his attention to the practical investigation of the Corundum areas of Salem and Coimbatore and of the Chromite and other deposits of the Chalk Hills, which had been surveyed by Mr Middlemiss, and that he should also, if possible inspect and report on the mica mining industry in the Vellore District.

Mr.

He was to work also the corundum deposits when desired.

letter No 982 dt 22-3 dt 18.4.96 printed in page 19 of G.O. No. 3072 dt 1.8.96 C

& letter No 3073 dt 1.8.96 D.

G.O. 4140 dt 19.10.96 N & the Telegram therein. also letter from the G dt 23.10.96 No 3997 dt 2-11. in page M of G.O. 4803 dt 25.11.96.

To work under Mr Middlemiss for one season & then to Coorg & S. Canara

G.O. 3638 dt 11.9.96 G

B.P in G.O No 1568 dt 22.3.97 H

Report flagged J in G.O. No 2160 dt 23.4.97

Mr. Anderson, the Mining specialist, however having subsequently resigned his appointment, the Govt of India, after consulting this Govt approved of the proposal of the Director Geological Survey, to allow Mr. Middlemiss to continue to work in this Presidency till the year 1900, and to depute Mr. Holland also for two years. The work of the practical investigation of the Corundum deposits which was intended for the Mining Specialist was therefore entrusted to Mr Middlemiss himself with the Director's approval and the local Govt allotted Rs 2000 out the Provincial funds for expenditure in connection with blasting &c. Mr. Middlemiss accordingly was engaged in trial excavations at Palacod in the Salem from the 1st November 1896 to the 15th March 1897 and the result was that the cost of extracting

extracting one Cwt. of Corundum was found to be Rs 15-4-, while the market price of the best quality was only Rs 4-. Mr. Middlemiss not being a Mining Specialist, was not aware of the cheapest and best methods of extracting the mineral. He said that if the extraction of Corundum was attempted on a large scale, the adoption of machinery as a substitute for hand-work would be a desideratum, and he concluded his report saying that samples of the Corundum and matrix would be sent to firms in England for testing and valuation and that if the reports be favourable, he would make further trial excavations at other places. The officiating Director of Geological Survey, Mr Oldham, however, recommended to this Govt the Continuance

× continuance of the practical investigation by Mr Middlemiss and added that he would send a subordinate to assist Mr Middlemiss in Supervising the operations. The Govt, however, could not adopt the Director's recommendation. While reserving the expression of a final opinion pending the valuation at home of the Samples extracted by Mr Middlemiss the Govt arrived at the conclusion that the results of his experiments did not justify the Continuance of his practical investigation; and in intimating this fact to the Director, certain other Matters were brought to his notice, to which it was thought that immediate attention of Messrs Middlemiss & Holland might be more profitably directed.

The

first thing was about the Kurnool iron ores. In September 1896, the Board of Revenue observed that there were other iron fields in this Presidency, besides Salem, which required investigation and referring specially to Kurnool, where very large quantity of charcoal could be had from the Vallamalai reserved forests, the Board recommended that Mr. Middlemiss might be asked to collect specimens of the best Kurnool ores to be sent home to the Imperial Institute for analysis similar to those made of Salem ores.

S. B.P. no 1441 2.11.96 in Go 4846 30.11.96

Salem has been fully worked. No doubt that when the iron can be worked at still more as regards the Commodum &c

The Govt thereupon requested Mr Middlemiss to pay a visit to Kurnool, collect specimens of ores found there & send them home for analysis (Go 4846 d 30.11.96) S

Mr. Middlemiss first said

letter in Go. 5338 24.12.96 T

page 3 flag U/in the volume put up.

said that he would go to Kurnool in February 1897, but in the meantime, the Director, in para 8 of his annual report for 1896, referred to the subject as follows:

"An application has "been made by the Govt of "Madras for the examina- "tion of the iron ores of Kur- "nool, but in view of the "report of Mr Jeremiah's "Head addressed to Her "Majesty's Secretary of "State for India dated "2nd May 1896, which shows "that there is no possibility "of locally manufactured "charcoal iron competing "with the imported product "all special investigation "of the iron ores in Madras "would appear to be a waste "of time. In the case of "the iron ores of Kanja "malai, near Salem, it has "been decided to send two "to

"trial on a large scale,
"and until the results of
"this are known, any special
"examination of iron ores,
"apart from what can
"be done in the course of
"regular Survey, to be
"deprecated." Having
regard to the opinion thus
expressed by the Director,
Mr Middlemiss addressed a
letter to this Govt in March
1896 in which he said that
he had no opportunity of
going to Kurnool during the
past season, & that such
a proceeding would have
been unadvisable, as the
Director was against such a
course. The Govt of India
however, having in their
review of the Director's
report, remarked that
"the statement in the
"report that all special
"investigation of these
"ores would be a waste
"of time is premature,

It is thus that Mr Jeremiah Heads his memorandum at all conclusions, but I agree that we had await the result of the trial before doing more with regard to iron ores

Dy Sec.
A.G.M.

× flag V in G.O. No 1747
1.4.97

para 3 in page 2 of
Resolution
Proceedings in G.O. No 1380
11.3.97 W.

"as the subject is still un-
"der enquiry" the Board
of Revenue drew Mr Midd-
lemiss's attention to this fact
and also urged the importance
of the speedy investigation
of the Kurnool iron ores, in
connection with the determina-
tion of the question of working
the practicability of working
it with Barakar Coke. The
Board was of opinion that
if the Kurnool haematite
ores were found to be
satisfactory both as regards
quantity and quality, it would be possible
to find a suitable site
at Bezwada, which would
be an important conver-
gent railway site, with
short canal communica-
tion to the port of Masuli-
patam.

Mr. Middlemiss thereupon
agreed with the Board of Rev-
enue and said that he would
bring forward the

B.P. No 1428 of 14.4.97. Y
in G.O. No 2387 of 12.5.97.

Paras 9 & 15 of B.P. in
G.O. No 221 of 30.3.97. Z

B.P. in G.O. No 2578
20.5.97
Class A

Kurnool by the 15th June '97.
The Director however, to whom, he applied for permission, did not let him go but on the other hand blamed him for having entered into correspondence with this Govt & expressed his opinion on a matter which involved a change in the sanctioned and proposed programme of the Dept.

The Hon'ble Mr Sturrock then proposed in a do. that the Govt of India should be addressed, and he added that if the question of the feasibility of working Indian ore with Barakar Coke was to be determined, it was important that ores supposed to be valuable and lying near the Coal field than Salem should be thoroughly examined.

The Director's attention

letter in BP no 1836 19.5.97 B,
in Gov. no 846 dy 6.10.97

Do. cno 104. flagged C,
in Gov. no 846
6.10.97

this point in letter no 847 dy 6.10.97 and he was requested to depute Mr Middlemiss as early as possible to investigate the iron ores of the Kurnool District and also to aid in getting out some of the ore, if necessary.

In the Current read above, the Director has declined to Comply with this request.

He says that it would be inconvenient to change the programme of employment which has already been settled; and that in his opinion, it would be advisable to defer the investigation of the Kurnool ore till the experiment of smelting the 300 tons of Salem ore has been tried. He however adds further on, that as Mr Middlemiss expects to Complete the

the

Coimbatore District during the next working season. (15th June to the 15th Sept. 1898). it would be more profitable that the examination of the iron ores be postponed till then, and that he would then be able to recommend to the Govt of India, the deputation of Mr Middlemiss to Kurnool, provided he is assured that Assistance of the same scale as was given in the Course of the trial excavations at Palacod in the Salem District, would be rendered to him while in Kurnool. As already stated, it has been arranged that Mr Middlemiss should work in this Presidency till the year 1900. & if he finishes the Geol survey of Coimbatore by September next, there will be still two years of this time available for other

Whether it is a mere proprietary or not is a matter of opinion. I should think a mere opinion contrary would carry weight with the Govt.

DJ

This must be considered carefully.

DJ 7.9.98

He will finish the out-door work there, but the in-door work must be finished much before then and if the season

other work. ~~Should the~~ practical investigations the Corundum deposits which was conducted from 18th November 96 to the 15th March 1897 has ceased, but Mr Middlemiss is now evidently continuing, purely by this Geological survey which is perhaps his legitimate work in the Deptt. It is for consideration whether the proposal reluctantly made by the Director to depute Mr Middlemiss to Kurnool after the completion of the survey of Coimbatore District may be accepted & the Director told that the necessary assistance will be given to Mr Middlemiss, or whether the Govt of India should be addressed at once in view to Mr Middlemiss being sent to Kurnool during the next field season (15th June to 15th September).

The

The Second matter was the inspection of the mica mining industry in Nellore. When the Board of Revenue was asked to sketch out a detailed programme of work for the mining specialist Mr. Anderson, who was expected in 1896. the Board of Revenue observed among other things that it would be well if Mr Anderson could arrange to inspect and report on the mica mining industry in the Nellore District & also remarked as follows:— "The "industry is one of daily "increasing importance, "as the demands for mica "for electrical purposes are "great and growing, and "Mr. Anderson might be "able to give suggestions "both as to the Conduct of "mining operations and "also as to places in which "they might be Conducted "with advantage. Suggestions from

para 4 of B. Pro 31 Feb 24.6.96
in page 5 (flag H) of Go
No 3072 dt 1.8.96.

"from him would be valuable
"which would tend to the
"more economical working
"of the mica mines, having
"special regard to reducing
"the waste in the process of
"extraction and dressing
"Any process by which mica
"waste could be rendered
"useful for electrical or other
"poses should be brought
"to notice." The Govt
also approved of the Board's
view and included the
work of inspection of the
mica mines in the program
work to be done by Mr.
Anderson. The latter however
having resigned his appoint
ment under the Govt of India
the Board asked Mr Middle
Miss in whose term of deputation
to this Presidency was extended
till 1900, to report what
Arrangements he had made
to inspect the mica mining
industry. Mr. Middle-
Miss, however said that

Go
No

G.O No 3072
1.8.96 H,

para 2 of B.P. No 1798
10.3.97 J,
in Go. 2816 dt 3.6.97.

The proposed for Mr Anderson did not necessarily devolve on him & that the sanction of the Director was necessary to his leaving the District of Salem or Coimbatore wherein he was primarily engaged. These facts having been brought to the notice of Govt., the Director, Geological Survey of India, was told that the inspection and advice of an expert would greatly correct and improve the crude and wasteful methods in which mining operations for mica are at present conducted in that District, and that as Mr. Holland appeared to be particularly well qualified for the work by reason of his previous acquaintance with the district and his practical knowledge of mica, its uses, and the general requirements of the market, the

para 2 of letter in B.P.Nr 3151 dt 5-5-97 flag O, in Ry. O. No 2816 dt 3-6-97.

para 4 of letter No 847 R. 6-10-97

Director was informed that opportunely should, if possible, be taken to utilize Mr Holland's services during the cold season of 1897-98.

The Director however says that he cannot support the proposal to depute an officer of the Geological Survey dept for the purpose & he gives his reasons as follows:—

"I observe that the "Board of Revenue have no "misgivings as to the existence "of mica in quantity, and "in this I am in perfect agree- "ment with them. Nor "does it appear that they "desire the extension of the "mica-bearing rocks to be "surveyed; this too is I con- "siders undesirable as in "the absence of better maps "than are at present avail- "able it would be impossible "to make a survey which "would be of real servi-

to

"to the mica miners, who
"are probably quite capable
"of finding the mica bear-
"ing rock for themselves.
"Each of these services
"would be within the pro-
"vince of the Geological
"Survey, but it is different
"with the demand actually
"made on me, that Mr
"Holland be deputed to
"advise the miners as to
"how to improve the methods
"of mining. I am prepared
"to accept your state-
"ment that the methods
"at present in vogue are
"crude and wasteful, though
"it is my experience that
"methods which appear to
"be imperfect to the out-
"sider have often some
"real reason when they
"are fully investigated.
"I also believe that Mr
"Holland or any other
"member of the Survey
"if deputed to the task
and

Mr. Holland had special qualifications which Mr. Middlemiss has not. He is a geologist, and a mining expert.
Jy

"aid given funds, could
"devise improvements in
"the methods of working the
"mica, but I am still
"more strongly convinced
"that in such a matter he
"would not be accepted
"as an authority by the
"men actually engaged
"in the industry. It does
"not even appear that any
"request has been made
"for advice assistance or
"advice, and we may
"take it as certain that the
"suggestions made by him
"would be rejected, if pre-
"sented, on the score of
"want of experience."

The Director also adds that Mr Holland has not been deputed to this Presidency till the end of 1898 and that he would be engaged in the Survey of Coorg during the next working season (probably June to September).

It appears that the Dir[illegible] has

He is right here. Mr. Holland was not with Mr. Middlemiss during the working season of 97/98 & has proceed to the Survey of Coorg & Canara, but after that became of the proposed survey of Canara?
Jy

misunderstood ~~of~~ the object of Mr Holland's mission in Nellore. ~~All that Mr Holland~~ is expected to do is to inspect the Mica Mines in the District & to submit a report to Govt embodying the results of his inspection & the suggestions he would make to improve the ~~existing~~ method now adopted &c. The Govt will give wide publicity to the Report & it cannot be that the people now engaged in the mining operations would ~~summarily~~ take no heed of the instructions given or suggestions made because Mr Holland has no experience, as the Director says.

It is therefore a matter for Consideration whether the Govt of India should not be addressed on the subject & asked to depute a specialist in Mica if possible.

Lastly,

B in Go. No 987
16.11.93.

Report in pages 3-4 of Go
No 3072 d 31.8.96. Q.

Lastly, the general question of mineralogical investigation in this Presidency seems to deserve consideration.

It will be seen that Mr. Middlemiss who came to the Presidency in November 1893 is still engaged in the geological survey of Coimbatore & Salem & that he would be kept on in Coimbatore till the end of the next working season. There are several other Districts to be surveyed, besides Cuddapah & North Arcot which were specially mentioned in para 4 of Dr King's letter No 48 of 10.10.93. Moreover, several Mineral occurrences (besides Corundum) which have been surveyed by Mr Middlemiss require practical investigation before their economic value can be known. Mr Middlemiss will have perhaps some two years after finishing Coimbatore, but it is extremely

extremely doubtful if all the work that remains to be done by him during that period. It is therefore submitted that the Director may be asked to give a programme of the work which is proposed for which is proposed to be done by Mr Middlemiss before he leaves this Presidency, so that, such representations may be made in time to include in the programme such of the investigations as this Govt may wish to be taken up during that period.

It is also submitted that Mr Middlemiss may be asked to state if the reports of the English firms on the valuation & testing of the samples sent have been received.

Mk 12/2/98. Secy

Please see note appended below

WRy 20/2/98

Impossible Jy for A.97

No doubt he will report as soon Jy A.M.

23

The current is the reply of the Director of the Geological Survey of India to our letter No. 847 dated 6-10-97 (Fl. R.)

A precis of the previous history of the subject is given in G.O.No. 846 d/ 6-10-97 page 12. (Flagged Q.)

It will be seen that the original idea put forward by this Govt in its letter No. 564 dated 26th June 1893 flagged A was that a special officer should make a systematic mineralogical survey of the whole Presidency with a view to the discovery and allocation of those mineral deposits which would be likely to prove of economic value. It was thought at the time that such a survey could be completed in five years, three months being given to each District.

The Govt of India negatived the proposal to employ a specialist independent of the Geological Survey Department. They recognised however the importance of

7 ag B

a practical enquiry conducted by a qualified officer of the Geological Survey Dept. Under the advice of Dr. King, the then Director of that Dept., it was decided that the officer deputed to Madras should first take up for investigation the Corundum deposits of Salem.

G.O. 846 & 847 dated 27 Q

The results of Mr. Middlemiss' labours (Mr. Middlemiss was the officer deputed) have been pronounced by Govt to be not very promising. Apparently the corundum examined and surveyed by him cannot be worked at a profit. At all events the results are not sufficiently promising to justify his spending further time over corundum. This Govt therefore suggested to the Director the two most promising fields in the Presidency for Mr. Middlemiss to work upon.

letter 847 dated 27 R

The first is the iron Kurnool iron fields. The iron deposits of Salem have been throughly examined and are well known. Those of Kurnool are not. Should they prove on examination to be as rich and as extensive as those of Salem it is clear that the prospects of establishing

This is a very doubtful point in the calculation of the expense depending as it does on the distance of the iron pits from the railway?

S.H.

+ Yes, they would be brighter; but it is obviously best to await the report of the trial of Salem or Indian coal now being made in England before undertaking the investigations.

J.S.

A.H.

establishing an iron industry in India could be much brighter owing to the greater proximity of the coal fields.

The second is the mica mines of Nellore.

The Director however prefers that Mr. Middlemiss should complete the survey of Salem and Coimbatore before taking up that of the Kurnool iron. The Director does not ~~suppose~~ profess that Mr. Middlemiss' further labours in Salem or Coimbatore will add anything to the practical value (which is apparently nil) of the investigations he has already made. The only object of continuing the examination of the corundum and other minor minerals in this locality is purely scientific. No doubt ~~it~~ this object is very desirable in the interests of science but Mr. Middlemiss was sent here to make practical enquiries and as already stated by this Government it is a waste of time for him to continue investigating fields which as far as we can see will never prove of any economic value.

Not purely. A thorough & not great survey of this country will reveal many sources of economic interest

J. A.H.

Next as to Nellore the Director I submit misunderstands this Govt. Govt did not want Mr. Holland to instruct the mica miners. It wanted from him a report on the present state of the industry pointing out defects in the present methods of working, suggestions for improvement etc. The publication of such a report prepared by Mr. Holland, a scientific expert, with a practical mind, would probably attract capital and enterprise to mica mining to the great advantage of a District at present dependent upon agriculture on a poor soil and ever liable to famine.

I submit there can be no doubt of the importance of pushing practical investigations of the mineral resources of this Presidency and widely publishing the results. Mr. Middlemiss's report on corundum printed on pages 4 to 7 of G.O. 846 dated 6-10-97 is a poor result for three years' labour (1894, 1895 and 1896). This is due no doubt to the fact that the practical object of his investigations has been all along subordinate to the further-

We agree that minors might appeal to act on Mr Holland's suggestions. They would be as much bound to do so if they were embodied in a report sent, as if they were made verbally to the miners.
JG

Yes, probably: but commercial instinct is a far stronger means of discovering a paying enterprise than we think that there is a large number of European Speculators & miners on the scent.
E.A.

? a great deal of Scientific work may be put into a few pages. S.K.

I don't think it is a "poor result". It is as good a result as we could expect from any geological exp-

But practical geology must be based on scientific geology. The latter must come first in any scheme of scientific Survey
JG

I don't think we have any one fault to find with India, & the Govt would allow this decision on facts we have been already brought to notice.
JG
9.9.97

ing of purely scientific Geology.

I submit the Govt of India should be addressed on the subject. If scientific geology in Madras is worth the deputation of an officer of the Geological survey a separate officer may be deputed for the purpose but Mr. Middlemiss (if we cannot have the more efficient officer, Mr. Holland) should it is submitted be set free for pursuing practical investigations of those mineral products likely to prove of economic value. It would be better however if a geologist who had some practical knowledge of mining could be ~~engaged~~ employed on the work. A list in order of importance of the minerals likely to prove of economic value & localities where they are said to occur might be prepared by the Board of Revenue in consultation with Mr. Middlemiss. Dr. King's letter Tour No. 4-1 dated 10th October 1893 printed in G.O. 987 Revenue dated 16th November 1893 (fl.B) mentions several such minerals and localities.

(initd) MRM 20 Sept

H.G./ We may feel assured that as fast as scientific geology maps out the mineral construction of the country, the practical exploiter will have his eagle eye upon anything indicative of anything that is likely to pay. It is he who brings out the practical miner to examine the deposits & see whether they are workable. European enterprise is keenly on the look out & if Govt. will supply it with accurate scientific information it is all that is wanted. It is for Govt. to take up the districts methodically & thoroughly & publish the result as fast as possible

As the Director says the plans for the coming year are already settled, we need not trouble Govt. further at present

S.R. 5/4/98

H.G.

A.H.

I think it would be as well to do so. But what has become of the proposed trawler Canara? We must have [illegible] 3/5.

Plans approved 15/5

Revenue Department.

Read again G.O.846,d/6th Oct:'97 (P).

" letter 847,d/6th Oct:'97 (P).

" G.O. 1007,d/3-12-97. (P).

Letter No 10085 d 3.12.97 (P)

" C.No:10085 of '97.(Letter from the Director,Geological Survey of India,d/ 16th Nov:'97,No:1205.)

Order Press No: 187 d/ 25th March 1898

In the circumstances stated in the letter from the Director,Geological Survey of India,read above,the Govt: resolves not to press for the immediate investigation of the Kurnool iron ores nor for the early inspection of the mica-mining industry in Nellore.

2. As advised by the Director in para 2 of his letter,the Govt: will await the results of the experiments to be made in England with the Salem iron ore and Bengal coal,before taking further action towards the exploitation of the Kurnool iron ores.

3. If it should

Government will consider the question of providing him with adequate professional assistance.

4. The Director will be requested to ~~let the~~ Govt: know if the survey of the South Canara Dt: which was included in the programme of work allotted to Mr: Holland in para 1 (b) of the Govt: of India's letter No: 3997/72-11,d/23rd Nov: 1896 has been completed, and if so to furnish Govt: with a copy of this Officer's report on the subject.

5. With reference to para 14 of his report on the trial excavations ~~on the~~ at Palacod printed in G.O.No:846,d/6th Oct: 1897,Mr: Middlemiss will be requested to state if any information has been received on the testing and valuation of the corundum sent to England.

6. The following letter will be despatched to the Director,Geological Survey of India.

Rec. 4803 25.11.96 M

page 7

(Initialled) NEM 23.2.98.

Letter No: 1802/25-3-98

To The Director,Geological Survey of India.

Sir,

With reference to para 3 of my letter No:1008 d/3rd Dec:'97 wherein a further communication on the subject of future geological investigations in this Presidency was promised,I am directed to state that after a careful consideration of the circumstances set forth in your letter d/16th Nov: 1897 No:1205,H.E. the Governor in council has resolved not to press for the immediate investigation of the Kurnool iron ores nor for the early inspection of the mica-mines in the Nellore Dt.

2. In deference to the views expressed by you in para 2 of the same letter, H.E. the Governor in Council has decided to await the results of the experiment to be made in England with Salem ore and Bengal coal, before taking any further action in the direction of exploitation of the Kurnool deposits.

Ho -

-lled next season, H.E. in Council

l consider the question of providing

with ~~his~~ professional assistance as

ggested in para 3 of your letter.

th reference to para 1 (b) of the Govt: letter of the

India's ~~letter~~ d/23rd Oct: 1896 No:

97 -11 in which it was stated that Mr:

lland was to undertake the Survey of

Canara and Coorg, I am to enquire

hether the survey of the former dis-

rict has been completed by Mr: Holland

nd if so, to request that a copy of his re-

ort may be furnished to this Govt:

Initialled NEM. 23/2/98.

Letter drafted 15.4.98.

S/B 25/2/98.

20/2

Go 4803 25.11.96 M.

Photo taken
No. 182

Government {1898} of Madras.

REVENUE.

Recd.	1898.	*Enclosures*
Regd.		*Spare copies*

G.O., No. 181, 25th March 1898.

MARCH.

Kurnool Iron ores

Stating that the Government will not press for the immediate investigation of the —, nor for the early inspection of the mica mines in Nellore; and requesting the Director, Geological Survey of India, to be good enough to state whether the survey of the South Canara district has been completed by Mr. Holland and, if so, to furnish this Government with a copy of that officer's report on the subject.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—again G.O., No. 846, Revenue, dated 6th October 1897.

Abstract.—Passing orders on the question of the continuance of the investigation of the corundum areas of Salem and Coimbatore, the investigation of Kurnool ores and the inspection of mica mines in Nellore.

Read—letter to the Director, Geological Survey of India, No. 847, dated 6th October 1897.

Abstract.—Requesting that Mr. Middlemiss may be deputed, at as early a date as possible, to investigate the iron ores of the Kurnool district, and stating that the services of Mr. Holland should, if possible, be utilized during the ensuing cold season in the inspection of the mica mines in the Nellore district.

Read—again G.O., No. 1007, Revenue, dated 3rd December 1897.

Abstract.—Passing orders on the subject of the despatch to Messrs. Bolchow, Vaughan & Co., of a sample of Salem iron ore and Indian coal for the purpose of determining by experimental manufacture the value and cost of production of pig-iron made from Indian ore with Indian coke.

Read—letter to the Director, Geological Survey of India, No. 1008, dated 3rd December 1897.

Abstract.—Requesting that Mr. Middlemiss may be deputed to assist the Collector of Salem in selecting two tons of iron ore to be sent to England for experimental purposes.

Read—also the following letter from R. D. OLDHAM, Esq., Officiating Director, Geological Survey of India, to the Secretary to the Government of Madras, Revenue Department, dated Calcutta, 16th November 1897, No. 1205 :—

In reply to your letter, No. 847, dated the 6th October 1897, I have the honour to inform you that, as the programme of employment of Messrs. Middlemiss and Holland for the coming season has been already arranged and sanctioned, it would be inconvenient now to change them. Apart from this consideration, I would offer the following remarks with regard to the desires expressed in your letter under reply.

2. With regard to the investigation of the Kurnool iron ores, I am still of the opinion that it would be advisable to defer this till the experiment of smelting the 300 tons of Salem iron ore, which you have in view, has been tried. I have seen no estimate in which the Madras iron ores were shown to be workable at a profit which did not show some serious omission. It must be remembered that there is probably no industry where competition is so keen and profits cut so close as in iron manufacture, and experience has proved that it can only be profitably carried on on a large scale and in places where the natural advantages of cheap fuel, ore, and transport, and proximity to a large market are combined. In these circumstances, it is on the face of it improbable that a profitable industry could be established in Madras, but the matter can only be settled by actual trial.

3. On the other hand, Mr. Middlemiss expects to be able to complete the Survey of the Coimbatore district during the next working season, and it would be more profitable that the examination of the iron ores be postponed till the completion of the

work in hand. At the same time I would point out that it would be of little service for Mr. Middlemiss to be despatched on this investigation unless your Government is prepared to provide, or procure for him, assistance in making excavations which would enable samples to be obtained of sufficient size and sufficiently unaffected by weathering to enable a true estimate of the quality and quantity of ore to be made. This assistance might be of the same nature and on the same scale as was rendered in the investigation of the corundum deposits at Palacod in Salem, without an assurance that this will be done, I do not feel myself able to submit your proposal to the Government of India with a recommendation that it be adopted.

4. With regard to your second proposal, my position is totally different. I observe that your Board of Revenue have no misgivings as to the existence of mica in quantity, and in this I am in perfect agreement with them. Nor does it appear that they desire the extension of the mica-bearing rocks to be surveyed; this too is, I consider, undesirable as, in the absence of better maps than are at present available, it would be impossible to make a survey which would be of real service to the mica miners, who are probably quite capable of finding the mica-bearing rock for themselves.

5. Either of these services would be within the province of the Geological Survey, but it is different with the request actually made on me, that Mr. Holland be deputed to advise the miners as to how to improve their methods of mining. I am prepared to accept your statement that the methods at present in vogue are crude and wasteful, though it is my experience that methods which appear to be imperfect to the outsider have often some real reason when they are fully investigated. I also believe that Mr. Holland, or any other member of the survey, if deputed to the task and given funds and time, could devise improvements in the methods of working the mica; but I am still more strongly convinced that in such a matter he would not be accepted as an authority by the men actually engaged in the industry. It does not even appear that any request has been made for assistance or advice, and we may take it as certain that the suggestions made by him would be rejected, if not resented, on the score of his want of experience. For this reason I cannot support the proposal that any member of the Geological Survey should be deputed for the special purpose referred to by you.

6. I have to add that in the orders of the Government of India communicated to this department there is no mention of Mr. Holland being deputed to the Madras Presidency till the end of 1898, and that in accordance with the scheme drawn up by me last year, he will be employed during the coming working season on the survey of the province of Coorg.

Order—No. 181, Revenue, dated 25th March 1898.

Miscellaneous.

In the circumstances stated in the letter from the Director, Geological Survey of India, read above, the Government resolves not to press for the immediate investigation of the Kurnool iron ores, nor for the early inspection of the mica mines in Nellore.

2. As advised by the Director in paragraph 2 of his letter, the Government will await the results of the experiments to be made in England with the Salem iron ore and Bengal coal, before taking further action towards the exploitation of the Kurnool iron ores.

3. If it should be decided to depute Mr. Middlemiss to Kurnool next season, the Government will consider the question of providing him with adequate professional assistance.

4. The Director will be requested to be good enough to inform this Government if the survey of the South Canara district, which was included in the programme of work allotted to Mr. Holland in paragraph 1 (*b*) of the Government of India's letter, No. 3997—72-11, dated 23rd November 1896, has been completed, and, if so, to furnish Government with a copy of this officer's report on the subject.

5. [illegible] paragraph 14 of his report on the trial excavations at Palacod [illegible], No. 846, dated 6th October 1897, Mr. Middlemiss will be requested [illegible] if any information has been received on the testing and valuation of the corundum sent to England.

6. The following letter will be despatched to the Director, Geological Survey of India.

(True Extract.)

(Signed) G. S. FORBES,
Ag. Secretary to Government.

To the Board of Revenue (Revenue Settlement, Land Records and Agriculture).
" " (Land Revenue).
" C. S. Middlemiss, Esq.

Exd. Shaik Karim.

60 Copies.

1898.

DIRECTOR, GEOLOGICAL SURVEY OF INDIA.

From *The Government of Fort St. George.*

Recd. } 1898. *Enclosures*
Regd. } *Spare copies*

Letter No. 182, 25th March 1898.

MARCH.

Informing the Director, Geological Survey of India, that this Government has resolved not to press for the immediate investigation of the Kurnool iron ores, nor for the early inspection of the mica mines in the Nellore district; and requesting the Director to be good enough to state whether the Survey of the South Canara district has been completed by Mr. Holland and, if so, to furnish this Government with a copy of that officer's report on the subject.

REVENUE DEPARTMENT.

From

The Hon'ble Mr. G. S. FORBES, I.C.S.,
Ag. Secretary to the Government of Madras,

To

The DIRECTOR, GEOLOGICAL SURVEY OF INDIA,

Dated Fort St. George, 25th March 1898.

Sir,

Miscellaneous.

With reference to paragraph 3 of my letter, No. 1008, dated 3rd December 1897, wherein a further communication on the subject of future geological investigations in this Presidency was promised, I am directed to state that, after a careful consideration of the circumstances set forth in your letter, dated 16th November 1897, No. 1205, His Excellency the Governor in Council has resolved not to press for the immediate investigation of the Kurnool iron ores, nor for the early inspection of the mica mines in the Nellore district.

2. In deference to the views expressed by you in paragraph 2 of the same letter, His Excellency the Governor in Council has decided to await the results of the experiment to be made in England with Salem ore and Bengal coal, before taking any further action in the direction of the exploitation of the Kurnool iron ores. If it is decided to depute Mr. Middlemiss to Kurnool next season, His Excellency in Council will consider the question of providing him with professional assistance as suggested in paragraph 3 of your letter.

3. With reference to paragraph 1 (*b*) of the letter of the Government of India, dated 23rd October 1896, No. 3997—72-11, in which it was stated that Mr. Holland was to undertake the survey of South Canara and Coorg, I am to enquire whether the survey of the former district has been completed by Mr. Holland and, if so, to request that a copy of his report may be furnished to this Government.

I have the honour to be,
Sir,
Your most obedient servant,

(Signed) G. S. FORBES,
Ag. Secretary to Government.

Exd. Shaik Karim.

20 Copies.

[illegible] No.

[illegible] No.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

N.B. —

A = Print in full.
P = Not to be printed.
T = Print abstract only.
Q = Print heading only.