M.R.O. 14—18,000—27-9-24.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 3383 — Press Mis.

250 . 251

Dated 14 — 12 — ~~19~~ 1866

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department,
14th December 1866.

No. 250. Read the following letter from Major F. APPLEGATH, 33rd Regiment, Madras Native Infantry, to the Secretary to Government, Revenue Department, Fort Saint George, dated Bangalore, 27th August 1866 :—

1. I have the honor to forward a Memorial, requesting the favor of a further investigation of the subject of Coal on the Kistna, and hope that permission may be given to allow borings to be made in certain localities in the Masulipatam District.

Locality of the Coal.

2. It is below the red shale and red clays on the banks, and near the junction of the Palair and Kistna rivers south of Jugiahpettah village, Masulipatam District.

The extent of indications.

3. About twenty square-miles on the north banks of the Kistna river of fields explored, with a promise of nearly a similar extent on the south bank of the river.

Resemblance to other Indian Coal fields.

4. The rocks on the Kistna have a general resemblance to those of Ramgunj and Adjai coal fields in Bengal, with a particular identity to those of Oomrait, near Chindwarah, in Nagpore, Central Provinces.

Prospect of good Coal.

5. The coal at Chindwarah, Central Provinces, makes good coke, and contains 9,000 cubic feet of gas per ton (analysis by Messrs. Rogers & Co., Bombay,) and as there is a particular identity in the rocks of the Kistna and Chindwarah, we have a prospect of good coal from the Kistna.

Water carriage to the coast.

6. For about six months in the year there is now water carriage available for country boats ladened with cotton and grain, and I consider that the navigation of the Kistna could be still further improved by steam traffic.

Present scarcity of fuel.

7. Firewood and charcoal are every year becoming dearer and more scarce; the price of English coal in Madras is always more than 20 Rupees a ton, and some times exceeds 30, and there is no prospect of English coal becoming cheaper; on the contrary, a gradual increasing price must be anticipated.

The recent discovery of Coal on the Wurdah river near Chanda.

8. Will be the means of opening up a river or canal navigation from the Central Provinces, but probably will not materially lower the price of coal in Madras, which is our great desideratum.

Importance and necessity of borings on the banks of the Palair and Kistna rivers.

9. It would be presumption on my part to say that no out-crop of coal will be discovered on the Kistna, but I believe if there is, it will either be a burnt one, or weathered in such a manner as not to be easily distinguished; the great difficulty is the prevalence of water, so that without pumps or a boring apparatus, it is morally impossible to succeed in winning the coal on the Kistna.

Coal or highly bituminous shale burnt in open heaps on the Kistna.

10. I here most distinctly state that, on the occasion of one of my visits to the locality I have described on the Palair and Kistna rivers, I burnt in several large heaps the coal I had quarried, and that I even carried some and burnt it in the Sherehomedpettah Bungalow compound. I believe that not less than nine or ten tons were quarried and burnt, and that while burning it gave out great light and intense heat, and except that it was much heavier it was not unlike the Torbano Hill mineral.

Suggestions for winning the Coal on the Kistna.

11. I would earnestly recommend that borings should be made, and that a small detachment of Sappers and Miners of one Havildar and twelve Privates should be sent to superintend and carry out the boring operations, as without some skilled labor, delays and damage to the implements would infallibly result; a few blasting tools and a good portable forge should also be supplied.

Experience of former attempts.

12. Having once quarried and burnt the coal on the Kistna, I am not discouraged by my recent failure to reach the coal, and this dear-bought experience will prove invaluable in the next attempt. I am confident that coal exists there, its extent and thickness it is impossible at present to estimate.

Coal and its important uses.

13. I would respectfully urge that in the event of the coal being found on the Kistna of a workable thickness, how urgently coal is now required in Southern India, and for how many useful purposes it would be available. The very recent discovery of a good coal on the Wurdah river, near Chanda, proves that the mineral is to be met with in the Madras Presidency, and I hope that I have been able to convince the Government of the good prospects of a similar result, should an efficient attempt be made on the Kistna, and if it is considered that I can assist in the search, with the sanction of the Military authorities under whom I am serving, I would willingly give up my two months' privilege leave, to which I am now entitled, and if borings are sanctioned, I am perfectly satisfied that every possible assistance will be cordially given by the present Collector of Masulipatam.

No. 251. ORDER THEREON, 14th December 1866, No. 3,383.

Miscellaneous

Ordered to be referred to Mr. Oldham, with the request that he will favor the Government with his views on the subject.

(True Extract.)

(Signed) J. D. SIM,
Secretary to Government.

To the Superintendent of the Geological Survey.

Ed. S. T. Augustin.

C.G. 223/95

Revenue Department

Memorandum

Major Applegath has for years been hunting for coal in the Kistna District and the adjoining territory of the Nizam and continues sanguine that here it is to be found. A precis on the subject prepared on a former occasion is attached to this and with the despatch to the Secretary of State dated 5th September 1860 No 95 will explain the state of matters from 1851 to 1860. In 1860 Captain Applegath repeated his previous applications for permission

permission to search for
coal in the Kistna District
and it was submitted to the Govt. dated 5th Sept. 1860 No 1514.
Secretary of State for his orders
with the remarks that "if the
"opinion of competent judges Desp. of 5th Sept. 1860.
"in England should be at all
"favorable we (the Govt.) are
"strongly of opinion that the
"trial ought to be made in an
"effective and satisfactory
"manner, even at some risk
"of an unsuccessful result."

This Despatch
attracted the attention
of the Govt. of India and
they forwarded to this Letter dated 12th Oct. 1860
Government copies No. 2304
of the papers
regarding

regarding Captain
Applegath's removal
from the Province
of Nagpore where
he was employed
as an Executive Officer
with the remarks that
the Governor General
in Council considers
it objectionable, when
a Geological Survey
of India is being
conducted in a syste-
matic manner
under the able superin-
tendence of a highly
qualified Geologist
specially

"specially deputed to
"this country for this
"purpose, that public
"money should be spent
"in such desultory manner
"this as that proposed
"by Captain Applegath,
"without any communica-
"tion either with Mr
"Oldham or with the
"Officers of the Geological
"Survey who are work-
"ing in the Madras
"Presidency, and who
"may possibly have good
"reasons even assuming that
"Capt. Applegath's personal
fitness

"fitness for the duty
"was unquestionable,
"for recommending
"that expenditure
"should not be incurred
"in the particular in-
"vestigation which he
"has recommended to
"the notice of the Madras
"Government."

The Government
of India also intimated
that under this view of
the case and not being
satisfied "that the ex-
"penditure of public
"money is likely to be
"judiciously controlled
"by an Officer whose
"general inefficiency
"rendered his retention
"in the appointment
"of District Executive
"Officer inadmissable,"
they have deemed
it proper to commu-
nicate

vicinity of the Godavery
was again brought for-
Letter dy 2d Octr/60 N 5516. ward by the late Chief
Engineer Colln Haveley
but with reference to
Mr Foote's report on
the two specimens of
minerals which ac-
companied the Chief
Engineer's letter, this
Government deemed
it unnecessary to con
sider the proposal
to employ a special
officer to search the
affluents of the Upr
Godavery.

The orders of
the Secretary of State
and the Govt of India
above alluded to, seem
to be conclusive against
accepting the proposals
now made by Major
Applegath & the

communicated to the
Secretary of State,
the objections to which
the proposal to em-
ploy Captain Apple-
gath on the duty in
question appear to
be two.

"The Secretary
of State's reply was that Des. dy 30 Nov. 1860
he is not prepared N 5
"to sanction any ex-
"penditure for this
"purpose, simply on
"his (Captain Apple-
"gath's) application.
a copy of this Des-
patch was furnished
to that Officer.

The subject
of employing Captain
Applegath to discover
the coal beds in the
vicinity Order dy 11 Jany 1861 N 80.

Precis

of Papers relating to Capt. Applegath's proposition to search for Coal and Gold in the neighbourhood of the Kistna. Pro: of Govt. dated Sept. 8th & Oct. 21. 1858.

Capt Applegath proposes for the discovery of Coal and gold in connection with his satisfactory result

From Comr., N. Circars, 4th Jany/57, No 2.

The first paper before us in the series in 1857 subject is a letter from Mr Walter Elliot, when Comr of the Northern Circars dated 5th. bears from this that Capt (then Lieut.) Applegath obtained a grant of the 33d M. N. I. for the Contract Comr. to do (apparently) some in 1857, to be dispatch matter for the exploration of the country. He is exploring this region of the country subpatam district, and that in the course of his researches, he came to the conclusion of coal in the neighbourhood of Jaggayapetta. Capt Applegath requested a further grant of 100 Rs to enable him to search, but the Central Committee thought the matter for the consideration of Govt. to be taken up. towards expenses of coal,

only thing that can be done is to send his letter home. The Govt of India will have nothing to say to him. In the opinion of the Geological Survey Officer we may be relieved from the simple fact that to [illegible] they do not themselves prosecute the necessary researches

I do not recommend

L. D.S.

[illegible]

I feel doubtful about sending home Major Applegath's request. The Govt of India may have under consideration different views, and have not thought it desirable to take any direct action on them.

It seems however advisable to communicate to Major Applegath the substance of our proceedings, with the explanation and deliberately conducted by the Govt of India, or employed or employed to search for coal, with the main object of saving money, which Major A. desires to do

13.10.66

I would not send Major A's letter home. How would I employ him in any more search for coal. His best plan would be to send to the Geological Survey for any

and had begun to sink a shaft on the bed of the Pálár, near its junction with the Kistna, and even forwarded specimens which Mr. Elliot thought bore a strong resemblance to anthracite coal, the Commissioner recommended the small grant asked for, provided persons conversant with the subject pronounced the minerals contained to occur in the neighbourhood of coal. The Govt, however, thought no effectual search could be prosecuted at so small an outlay. They were prepared to authorize a larger expenditure, if there existed good grounds for believing that the enquiry would be successful; but the information before them was not sufficient to arrive at a conclusion on that point.

Govt Pro. 15 Feb/57, No 156.

Capt Applegath appears to have returned to England after this, for in the following year, the Worthy Court of Directors communicated a dispatch addressed by him to their Secretary, in which he brought to their notice his discovery of indications of coal and gold in

From England, 8th Oct/52, No 32

the vicinity of Mylavaram, Bezwara, Condapilly and Jaggayapetta in the Masulipatam district. He gave his reasons for believing in the impression with respect to the existence of both minerals in the Masulipatam district, as to coal, the resemblance of the stratification of the Sironcha basin of the Godavery to that of the Coal fields of South Wales, which he had visited after his return to Europe; as to gold, the great similarity of the quartz rocks of Masulipatam with those yielding gold in Australia. The Court sent out this letter simply for such notice as the Govt might think it merited, and the Govt communicated it to the Comr. S. C., and asked him to suggest the course that should be taken.

Govt. Pro. 15 Feb/53, No 171.

From the Comr. 1st April/53. No 35.

Mr. Elliot replied that after (Mr. Ey) his former letter, Capt Applegath had, with private assistance, with aid of tools and coolies supplied by the Civil Engr, sunk several shafts and collected several specimens; that these, with sections and plans of the tracts examined, were sent to Mr. Piddington, Curator of the Dept of Economic Geology in the Museum of the Calcutta

Asiatic Society, and that his reply was decisive, viz: that coal could not be expected in association with the minerals submitted, and that the supposed fossil impressions of shells and plants on which Mr Applegarth chiefly relied, were not organic remains at all. As to gold, Mr Elliot said he had no information that it was to be found in Masulipatam, even in the smallest quantity in which it is known to occur in many parts of Southern India. The tract of country indicated by Mr Applegarth contained the diamond deposits, which the Nizam had specially reserved on ceding the rest of the Condapilly to the British Govt. The alluvial plain between Condapilly and Ondegaum, in which the diamond villages were situated, had been subjected for ages to the most minute & scrutinizing search, and it was not probable that the existence of gold, had there been any, would have eluded the notice of the keen observers who dispersed themselves in search of diamonds. If however gold was found in India,

it was accompanied by a peculiar class of the population which had no other occupation than that of washing the alluvial soil, or the sandy beds of streams in which it occurred, a calling which they pursued from generation to generation. But no such persons were to be met with in the Nizam's dominions. As to the Rajahmundry talooq. As to the lack of gold bars being met in frequents in the Masulipatam district, which Mr Applegarth assigned as one of his reasons for believing in the existence of the metal, Mr Elliot said that bullion in that form was often employed in buying in the Circars, but that he believed it to be of foreign origin, many bars of it he had seen bearing Chinese stamps. The only means by which the existence of the precious metals in quantities sufficient to repay a speculative search, could be ascertained, was, he thought, the employment of a practical and experienced geologist, as the speculations of amateurs commonly led to ultimate loss expense and ended in disappointment.

The Govt agreed with Mr Elliot in this view, & informed the Court accordingly

Pro. of Govt. 9th May 53, No 521.
V. Eng: 25 Oct/53, No 67, para 14.

In January 55, Capt Applegath addressed the Governor's Private Secretary, stating his firm belief in the existence of many valuable minerals in the Masulipatam district, coal not being the least of them, and offered to proceed at once to search for them, provided he were allowed a pump, a naique & three privates & the Sappers, & a Grant of 500 Rs to pay contin. His letter having been transferred to the Govt, they referred to Mr Piddington's unfavourable report, and said that unless Capt Applegath could shew some stronger grounds for retaining his own impressions than those he mentioned, they did not feel warranted in incurring what was likely to be a useless expense.

From Capt Applegath, 13th January 1855.

Govt Pro: 13 March 55, No 296.

Capt Applegath repeated that Govt thought the grounds advanced by him sufficient to warrant an outlay of 500 Rs. So thoroughly convinced was he that Coal did exist near Jaggayapeh, that he was ready to conduct the search at his own expense, if Govt would furnish him with a free

From Capt Applegath, 2d Feb 55.

Govt of Fort 30 Jan 55, No 157.

passage by Steamer to Masulipatam, & a party of a naique & three Sappers with tools from Bézwáda. Govt informed him, in reply, that they appreciated the zeal which had induced him to make his proposition, but that, as they could not see any reasonability of success, they must decline his offer. And in this conclusion the Board Fort agreed.

W. S. 27/7/55

Para 7 of their dispatch, in the Public Dept, 17th Jan 1855, No 3.

Precis.

Capt Applegath's propos-
-als to search for Coal and
Gold in the neighbourhood
of the Kristna.

Memorandum
on Major Apperley's
letter about searching
for coal in the
neighbourhood of the
Khirkee ruins —

W 11 2385

17

W 3383.

Ordered. That
a Send be
addressed to
the Superintendent
of the Geological
Survey of India
for his opinion
on the subject of
the Khirkee
Coal.
11th December 1856

Copy sent to Supt of the Geological Survey

Series 1866 No 1
of Govt for December
No 2837
From Major Genl
Commg Troops Cape of G. Hope
&c &c &c

Dated 27th Augt
Received 28th Sept 1866

From
Lt Col Lamb Deputy Adjt
Genl Troops Cape of G. Hope
&c &c &c

Under the circumstances represented, requests the favor of a further investigation of the subject of Coal on the Kietbuk and for permission to make borings in certain localities in the Kietbuk District

With order

No

14 November
No 24

Respects to Govt
Ly Dunsterville Nov 60

No 253 / 251