

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

7th September 1881, No. 2,220 W.

Buildings and Roads,
Civil Works.

Read the following paper:—

No. 81. Despatch from the Most Honorable the Secretary of State for India.
Public Works,
No. 22.

INDIA OFFICE, LONDON,
28th July 1881.

I HAVE received a Public Works letter from your Government, No. 33, dated 11th June last, detailing the steps which you have taken in connection with coal-boring operations on the Bhadrachalam field; on the left bank of the Godavari river, and requesting the supply of two pumps from this country for the continuance of these operations.

2. The action taken by your Government in this matter commenced antecedent to the receipt of my Public Works letter to the Government of India, No. 141, dated 30th December 1880, (copy of which was transmitted to your Government under cover of letter from the Public Works Secretary of this Office, dated 30th December 1880,) in which the importance of procuring a cheaper supply of fuel for the Railways of your Presidency was dwelt on, and the exploration of the districts of Southern India, with the view of ascertaining whether there were reasonable grounds for expecting the existence of coal there, was suggested, in accordance with the proposal of the South Indian Railway Board.

3. I gather, from the letter of your Government under reply, that you are desirous of obtaining professional assistance, but that you have been unable to obtain the services of a competent Mining Engineer. You report, however, the progress which has been made in the coal-boring operations on the Bhadrachalam field. Before any further expense is incurred, however, in these operations, I should wish to be informed, on good authority, whether it has been clearly ascertained that that site offers conditions sufficiently hopeful to justify the prosecution of the work.

4. Under the circumstances, it would certainly be most desirable that the course recommended in my despatch to the Government of India above referred to, should be followed, and obviously you should lose no time in placing yourself in communication with that Government on the subject.

His Excellency the Honorable
The Governor in Council, Fort St. George.

I have, &c.,
(Signed) HARTINGTON.

No. 81-A. Telegram from H. B. MEDLICOTT, Esq., Calcutta, to the Secretary to the Government of Madras, Public Works Department, Ootacamund, dated 23rd August 1881.

FOOTE instructed as desired, but advise await my letter.

No. 81-B. From H. B. MEDLICOTT, Esq., Superintendent, Geological Survey of India, to the Secretary to the Government of Madras, Public Works Department, dated Calcutta, 23rd August 1881, No. 277.

I HAVE the honor to acknowledge receipt of your telegram of yesterday's date, requesting that I should instruct Mr. Foote, who is at present at Yercaud for the monsoon recess, to apply to your office for orders with reference to a proposed examination of the Badrachalam Coal Field. I have this morning telegraphed to Mr. Foote: "Report yourself for orders to Madras D. P. Works," telegraphing to you that I had done so, but begging that you would await the receipt of my letter.

2. I would very much deprecate such extreme precipitancy when a little counsel with those who are presumably best able to advise in the matter might save much trouble and expense. It is quite certain that Mr. Foote (or any officer) could add nothing to our knowledge by a visit to that ground. Just at present the best data of observation would be under water, but all that can be seen was examined and described ten years ago by Mr. W. T. Blanford, than whom no more competent judge could be found. He had had extensive experience of the Indian coal-measure rocks; Mr. Foote has had none, though he could of course form an independent opinion. Mr. Blanford's examination included a pretty extensive exploration by trial borings made under his direction by Messrs Vanstavern and Heppel; there are, in fact, few areas of equal extent so well known as the small patch of coal measures on the British side of the Godavari, to which it is assumed your telegram refers. Mr. Blanford's opinion of it is thus expressed: "The portion of this field on the north (left) bank of the river has been thoroughly explored by boring and some coal has been found, but the quality is altogether inferior, and the quantity small, the seams being thin and much mixed with shale." He estimates the probable net output for the whole area at about 15,000 tons. To set up a mining establishment for such a total result would be scarcely a profitable transaction. It is of course possible that Mr. Blanford's estimate may be more or less than the actual: but the margin of error is very small, for it is finally determined that there is only a mere fringing area of the coal measures on that side of the river. Thus there is absolutely nothing more to be learned of that ground by an examination of the surface features, and the boring operations already effected are deemed sufficient to prove what the measures are worth. Any further exploration can only be in the way of additional borings or of actual pit-sinking, either of which operations Mr. Foote is not competent to undertake; it is the work of an Engineer, not of a Geologist, and the positions for either would be sufficiently indicated by the borings already put down. But it is distinctly to be inferred that either undertaking would be a waste of effort.

3. The only good plea for making a show of work there would be in the hope of stimulating enterprise on the Nizam's side of the river. There is no doubt that the best prospects of coal for Madras lie in that neighbourhood, and that those prospects would be very promising if that territory were accessible to European enterprise. Subsequent to the trials made on the British side of the river, trial borings were put down by the Nizam's officers on their side, and some good seams are reported to have been found.

4. In this connexion I have to regret that the report and map on the Godavari Coal Fields has not yet been published. I did not receive it from Mr. King so soon as I had a right to expect it; there has not been an hour's delay in this office, and the maps have been ready for some time, but the printing has been rather protracted. I hope, however, that it will now be issued in a very few days.

5. I would finally express a hope that Mr. Foote may not be diverted from his regular work to undertake duties for which he is not properly qualified, and which cannot therefore be efficiently conducted by him.

No. 82. ORDER THEREON, 7th September 1881, No. 2,220 W.

UNDER the circumstances represented by the Superintendent, Geological Survey of India, the Honorable the Governor in Council is not at present disposed to proceed with the contemplated examination of the Bhadrachalam Coal Field, and resolves, therefore, to relinquish the services of Mr. Bruce Foote, which had been applied for.

2. The matter may however be reconsidered on receipt of the Report and map of the Godavari Coal Fields, referred to in paragraph 4 of Mr. Medlicott's letter, when a decision will also be come to as to the nature of the operations to be carried out during the next cold season.

3. The prospects on the right bank of the river in the Nizam's territory appear to be far more promising, and it seems desirable that enterprise in that direction should be stimulated. The correspondence, including the despatch from the Secretary of State, No. 22, dated 28th July, will accordingly be forwarded to the Government of India for such further action as may be necessary.

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintendent, Geological Survey of India.
" Superintendent of Works, Godavari.
" Consulting Engineer for Railways.
" Revenue Department.

Exd. S. T. Austin.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of (1881) Madras.
PUBLIC WORKS.

To
THE SUPERINTENDENT,
GEOLOGICAL SURVEY OF INDIA,
&c., &c., &c.

Dated September, 7th.

Issued

Recd.

Encl.

G. O., 7th September 1881, No. 2,220 W.

SEPTEMBER.

Nos. 81-82.

Bhadrachalam Coal Fields.—Suspends
action and relinquishes the services of Mr.
Foote in connection with the contemplated
examination of the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

7th September 1881, No. 2,220-A W.

Buildings and Roads.
Civil Works.

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3. I gather, from the letter of your Government under reply, that you are desirous of obtaining professional assistance, but that you have been unable to obtain the services of a competent Mining Engineer. You report, however, the progress which has been made in the coal-boring operations on the Bhadrachalam field. Before any further expense is incurred, however, in these operations, I should wish to be informed, on good authority, whether it has been clearly ascertained that that site offers conditions sufficiently hopeful to justify the prosecution of the work.

4. Under the circumstances, it would certainly be most desirable that the course recommended in my despatch to the Government of India above referred to, should be followed, and obviously you should lose no time in placing yourself in communication with that Government on the subject.

I have, &c.,
(Signed) **HARTINGTON.**

His Excellency the Honorable
The Governor in Council, Fort St. George.

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(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintendent, Geological Survey of India.
" Superintendent of Works, Godavari.
" Consulting Engineer for Railways.
" Revenue Department.

No. 83. (DOCKET No. 2,220-A W., dated 7th September 1881.)
COPY of the above forwarded to the Government of India.

Major R.E.,
Under Secy. to Govt., P.W.D.

Ed. S. T. Austin.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1881) Madras.
PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated September, 7th.

Issued

Encl.

Recd.

G. O., 7th September 1881, No. 2,220-A W.

SEPTEMBER.
Nos. 81-83.

BHADRACHALAM COAL FIELDS.

India Office,
London, 28th July 1881.

Public Works,

No. 22.

To His Excellency The Honourable The Governor in
Council, Fort St. George.

SIR,

Para. 1. I have received a Public Works Letter from your Government, No. 33, dated 11th June last, detailing the steps which you have taken in connection with coal boring operations on the Bhadrachalam field, on the left bank of the Godavari river, and requesting the supply of two pumps from this country for the continuance of these operations.

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5013. I. 1724.

my Despatch to the Government of India al
referred to, should be followed, and obviously
should lose no time in placing yourself in com
munication with that Government on the subject.

I have the honour to be, ant,

Sir,

Your most obedient humble Serv

Attorney

bove
you
mu-

N. 6. 542 R. 28th Feb/81
" 1191 R. 11th May/81
" 1192 R. 11 — do —
" 1416 R. 6th June/81
Despatch No 33 of 11 June/81.

No 2

P. W. C. to 5098

Public Works

20th July 1881

The
Letter to Fort St George

No 22.

Henry R. P. R.

10-2-88 GUMMAGATOO

Recd 18 Augt. 81

No. 277.

FROM

THE SUPERINTENDENT,
Geological Survey of India,

TO

The Secretary to the Government of Madras,
Public Works Department.

Dated Calcutta, August 23rd 1881.

SIR,

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water, but all that can be seen was examined and described ten years ago by Mr. W. J. Blanford, than whom no more competent judge could be found. He had had extensive experience of the Indian coal-measure rocks; Mr. Fote has had none, though he could of course form an independent opinion. Mr. Blanford's examination included a pretty extensive exploration by trial borings made under his direction by Messrs Vanstaen and Heppel; there are, in fact, few areas of equal extent so well known as the small patch of coal-measures on the British side of the Godavari, to which it is assumed your telegram refers. Mr. Blanford's opinion of it is thus expressed: "The portion of this field on the north (left) bank of the river has been thoroughly explored by boring and some coal has been found, but the quality is altogether inferior, and the quantity small, the seams being thin and much mixed with shale." He estimates the probable net output for the whole area at about 15,000 tons. To set up a mining establishment for such a total result would be scarcely a profitable transaction. It is of course possible that Mr. Blanford's estimate may be more or less than the actual: but the margin of error is very small, for it is finally determined that there is only a mere fringing area of the coal-measures on that side of the river. Thus, there is absolutely nothing more to be learned of that ground by an examination of the

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...that ...
...but the printing has been ...
hope, however, that it will now be issued in a very
few days.

P. H. C. Foster

5. - I would finally express a hope
that Mr. Foster may not be diverted from his regular
work to undertake duties for which he is not pro-
perly qualified, and which cannot therefore be
efficiently conducted by him.

I have the honor to be
Sir,

Your most obed^t. serv^t

H. G. Medlicott
Superintendent, Geological Survey

I approve the
suggestion that we
should suspend action
on King's Mt.
Foster's invoices.

I am in receipt of Mr.
Blanford's report, &
can I consider the
rather. But I am
disposed rather to try
& stimulate to action
on the Higams side.
It is of far more importance

Cir 31/8
O.S. 30/8

31/8/87

The ...
2000W

With reference to the
Accounting letter
from the Sup^t of ...
No 277 of 23 instant
discrepancy in the diversion
of Mr. Foster's services
from his legitimate work
I confess I am unable
to urge any argument
Mr. Medlicott
underestimates I think
the probable amount
of coal (15,000 tons)
as the yield of the field
Mr. W. J. Blanford's
Calculation if any
memory serves me
having been made
before several of the
bore holes, & notably
No 16 in which we
are now working,
was sunk -
This however is not

hope, but
few days
5.-
that I
work to
-fully q
efficient

my material as
even with all allowances
the field is an extremely
small one - If the
whole quantity to
be excavated & brought
to the surface were
150,000 or 200,000 tons
it would not make
much difference if
the stuff is as feared
so full of ash as to
be useless with venturers,
and if it can be as
now almost certain
to be obtained at
such heavy outlay
as to raise the price
at the pits' mouth
to a price which will
render competition
with coal obtained
elsewhere impossible.

The Government has
done all it can and has
failed to obtain the
specimen of a mineral

Esquimaux, ^{has} ~~and~~ faute
de mieux I turned
to a Geologist, Mr.
Forte.

Mr. Medlicott says
is that an Esquimaux
with a Geologist's opinion
is what is wanted, and
again that Mr. Forte
has his own professional
work to attend to -
perhaps but time is
not the time of year
for a constant specimen
being found for

Although I was
myself the first to
suggest the employment
of Mr. Forte I must
admit the force of one
and all of these
considerations - Mr. Forte's
employment was in
fact a derniere resort
and as this has now
definitely failed
I must leave it to
Government to decide

hope
few
5.-
that
work
-part
effici

whether it would
not be best to
abandon all imme-
-diate action, and
simply communicating
Mr. Medlicott's letter to
the S of S (i.e. after the
receipt of the report
spoken of in para 4
of his letter) and ask
his decision as to whether
the works should be
provided with in
the Cold Season of
1882

Order Solicited

Att

29.8.81

Recorded

Att

28/8/81

Cir 24/8

C.L.S. 22/8 1879-9

hope
few
5-
that
work
-part
effic

W. Dept.

Telegram from the Superin-
tendent, Geological Survey
Calcutta dated 23rd Aug. /81.

Circulated
for information.

It is proposed
to await Mr. Medhurst's
promised letter
before any further
action is taken.

Meanwhile the
papers on the
subject are being
collected.

W. Sankar Choudhury
Secy to Govt. W. Dept.

R.S.

For order

In the annexed dispatch
the S of S desires to be informed
on good authority whether
it has been clearly ascertained
what the site of the conditions
is sufficiently helpful to justify
the prosecution of the work
and that no time should
be lost in addressing the
S of S

20 20 20
20 24 3 W

The Government has on
shown by the annexed S.O.
in vain addressed both
the S of S and C P Admin
-istration. It would only be
waste of time to do so
again unless there are
some new facts to bring
forward —

If Mr. Foote of the Geologic
Survey Dept. could be
deputed at once while
the river is high enough
to allow of his going up
to the coal field site

by Steamers (2nd class
Cotton") he might infer
Such information is
already on record & accordingly
he can obtain (personally)
from the Supt. of Works
(Mr. Walsh) he enabled
to come to a decision
which might be accepted as
a final

If approved I will
ascertain by telegraph
to Mr. Medlicott whether
Mr. Foster's services could
be spared in the duty
which if he goes up by
Steamer to Coimbatore
need not take him
more than a fortnight
or three weeks at most

Att

20/8/81

All operations have
been suspended and
will remain so till
further orders

No. 2220 W

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 7th Sept 1881
Read the following:—

Despatch from the } (H.C. No. 22 of 28th July 1881)
Secretary of State }

Telegram from Mr. Medlicott } (" " 28th Aug 1881)

Letter from the Supt. } (" " 27th " 28th ")
Geological Survey of India }

Under the circum-
stances represented by
the Superintendent
Geological Survey of
India, the Honorable
the Governor in Council
is not at present
disposed to proceed
with the contemplated
examination of the
Bhadra-chellum Coal
Field. and resolves

R.S.

therefore to relinquish
the services of Mr.
Bruce Foote, which
had been applied for

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however be reconsidered
on receipt of the
Report and map of the
Godavari Coal Fields
referred to in para 4
of Mr. Macleod's letter,
when a decision will
also be made as to the
nature of the operations
to be carried out during
the next cold season.

3. The prospects on
the right bank of the
river in the Nizami
territory appear to be

(Note
Mr. Foote has been
telegraphed to accordingly).

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it seems desirable that
enterprise in that
direction should be
stimulated. The
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the Despatch from
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No. 22, dated 28th July,
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Government of India
for such further
action as may be
necessary.

N.E. No. 2220 A & 27th July 1881

Copy of the above
forwarded to the Govt.
of India.

Supt. Geological
Survey of India
Supt. of Works Godavari
Congress for Rys.
Rev. Dep. Secy

Desd
14 9-87

2/7/81

The Hon. the Secy



me

all 30/3. Cr 2/3. Re 5/9

7
7

8 7

5071 - 0

Gt. of 1881 Madras.
PUBLIC WORKS.

To

Dated

Issued

Recd.

Encl.

G. O., 7 Re lts 1881, No. 2220 A

Nos. 8/683

Bhadrachellum Coal
Fields suspends action
and relinquishes the
services of Mr Foote in
connection with the contro-
verted examination of
the —

Bhadrachellum Coal
Fields.

Encl. in Receipt
Regt.