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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1005-16	Press
172-74	Mis.
Dated 11/4/1877	

Not to be folded or roughly handled

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*Proceedings of the Madras Government, Public Works Department,
11th April 1870.*

No. 172. Read the following letter from the Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 26th February 1870, No 84 —

I HAVE the honour to solicit the consideration of the Government to the very great difficulties and disadvantages under which the Railways in this Presidency are placed by reason of the non-existence, or rather the non-discovery, of coal-fields in Southern India. These difficulties and disadvantages have hitherto been in some measure obviated by the use of firewood, which has within the last few years been largely employed for locomotive purposes. It is, however, most improbable that the ever-increasing wants of the Railways in this Presidency can long be supplied from this source. The available tracts of natural forest are few in number, those in the immediate neighbourhood of the lines of railway are already denuded, while the difficulties in the way of artificial production on a large scale, whether by the agency of the State or of private individuals, seem to be insurmountable.

2. In most other parts of India the Railways labour under no such disadvantages. From the coal-fields in Central and Northern India plentiful supplies of fuel are obtained. The extent to which these sources of supply were worked three years ago is detailed by Dr. Oldham in his report* on the "coal resources and production of India," and the general positions of the coal-fields are shown in the map which accompanied it.

3. In that report Dr. Oldham states that all that part of India which lies to the south of the 20th parallel of latitude is without any known coal, or any probability of its existence; but this statement has not been borne out to the letter by the recent discoveries of extensive coal-fields near Chanda. In a Minute,†

dated the 4th December 1869, by the Chief Commissioner of the Central Provinces, it is stated that "rocks belonging to the Indian coal-bearing series have been found, "if not continuously, at intervals over some hundreds of square miles of country "above and below Chanda. These rocks extend into, and coal has been found in both

‡ Dated 11th January 1870, (vide Supplement to Gazette of India, 12th February 1870, page 138) "Berar and the Nizam's territory across "the Wardah opposite the Chanda coal- "field." In a later report‡ upon the explorations now in progress in the Chanda District, Dr. Oldham states that "coal "has been found in the borings at places where its existence was entirely unknown "and unsuspected."

4. These facts may, I think, be accepted in evidence of the difficulty which presents itself, even to the most eminent practical geologists, when any attempt is made to form general conclusions regarding the mineral resources of so vast a tract of country. And it seems to me that the non-existence of coal in Southern India may not unreasonably be doubted on other grounds.

5. Within the last few weeks a seam of good coal, thirteen feet in thickness, has been discovered at Madnapore, at a depth of 121 feet below the surface. The account of the discovery as given in the *Englishman* newspaper makes it appear that the seam of coal underlies a thick superficial deposit of laterite, and

*Proceedings of the Madras Government, Public Works Department,
11th April 1870.*

that all the lower rocks which crop up in the neighbourhood from beneath the laterite are of a crystalline formation, much older than the coal bearing deposits. So far as I know, a discovery of coal under such circumstances is without precedent, but similar discoveries may not unreasonably be looked for elsewhere under similar geological conditions

6 In this Presidency, as the Government are aware, there are vast tracts of country in which the geological formation of the surface agrees with the above description, and I can see no reason why the discovery of coal should be a more improbable event here than at Midnapore. It would be almost impossible to over-rate the value of the boon which would be conferred upon the State and the people by the discovery in Southern India of coal-fields such as have been worked for years in the North, and I have the honour to suggest that the Government of India be moved to offer a reward of say £20,000 to any person who may satisfactorily prove the existence in India of a bed of workable coal within certain geographical limits, say to the south of the 17th parallel of latitude. The coal to be of a specified quality, and the seam to be of such dimensions as it may be thought advisable to name

7 The offer of a reward on some such scale will undoubtedly have the effect of stimulating inquiry into the geological structure of Southern India. If the reward be not claimed, the accumulation of fresh information regarding the mineral resources of this part of the Continent will probably be the sole result of the offer. If the reward be claimed, and honestly earned, the result will probably be such as will re-pay the State a thousandfold, even were the sum offered larger than that named above.

No 173

ORDER THEREON, 11th April 1870, No. 1,005.

RAILWAY, No 20

ORDERED that this letter be forwarded to the Government of India :—
(Here enter No. 1,006, dated 11th April 1870)
(True Extract)

Colonel, R. E.,
Secretary to Government.

To the Consulting Engineer for Railways.

Exd A S Rodgers

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PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 11th April 1870.

No 174.

No 1,006

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

RAILWAY, No. 21.

SIR,—I am directed by the Right Honourable the Governor in Council to forward the accompanying letter from

the Consulting Engineer for Railways, in which that officer brings under consideration the great disadvantages under which the Railways in this Presidency labour, compared with those in other parts of India, as regards their supply of fuel

2. Major Shaw Stewart draws attention to the recent alleged discovery of a seam of good coal at Midnapore, where the geological formation of the country was supposed to render the existence of the mineral improbable, and, expressing doubts as to the correctness of the conclusions which have been formed as to the non-existence of coal in Southern India, he suggests the offer of a pecuniary reward for its discovery.

3. His Excellency the Governor in Council, although unable to share in the hopeful anticipations of the Consulting Engineer, is of opinion that measures should be adopted for a more complete geological inspection of this Presidency than has yet been made, and he would recommend for favourable consideration the proposal of the Consulting Engineer that an offer should be held out of a reward for the discovery of coal, the amount of which, His Excellency thinks, might be fixed at £5,000

I have the honour to be,

Sir,

Your most obedient servant,

Colonel, R. E.,
Secretary to Government.

Exd. A. S. Rodgers.

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CONSULTING ENGINEER'S OFFICE,

Railway Department,

No. 84-

From

Major J. H. Mc Leaw Stewart M.C.
Consulting Engineer for Railways,

To

Lieutenant L. A. Orr M.C.
Secretary to Government,

Public Works Department,

Fort Saint George.

Sir,

I have the honour to
solicit the consideration of the
Government to the very great
difficulties and disadvantages
under which the railways in the
Presidency are placed by reason
of the non-existence, or rather
the non-discovery, of coal-fields
in Southern India. These diffi-
culties and disadvantages have
hitherto been in some measure
obviated

situated by the use of firewood,
 which has within the last few
 years been largely employed
 for locomotive purposes. It
 is however most improbable that
 the ever-increasing wants of the
 railways in this Presidency can
 long be supplied from these
 sources. The available tracts of
 natural forest are few in the
 number; those in the immediate
 neighbourhood of the lines of
 railways are already denuded;
 while the difficulties in the way
 of artificial production on a large
 scale, whether by the agency of
 the State or of private individuals,
 seem

seem to be insuperable.

2 In most other parts
 of India the railways labour under
 no such disadvantages. From the
 coal-fields in Central and Northern
 India plentiful supplies of fuel
 are obtained. The extent to which
 these sources of supply were
 worked three years ago is detailed
 by Doctor Oldham in his report
 on the "Coal resources and production
 of India", and the general positions
 of the coal-fields are shown in
 the map which accompanied it.

* Dated 11th March 1867.
 Vide Supplement
 to Gazette of India
 21st August 1867
 page 713.

3 In that report Doctor
 Oldham states that all that
 part of India which lies to the
 South of the 20th parallel of
 latitude

latitude is without any known
 coal, or any probability of its
 existence; but this statement
 has not been borne out to the
 letter by the recent discoveries
 of extensive coal-fields near
 Lehanda. In a Memoir dated
 the 11th December 1869, by the
 Chief Commissioners of the Central
 Provinces, it is stated that
 "rocks belonging to the Indian
 coal-bearing series have been
 found, if not continuously, at
 intervals over some hundreds
 of square miles of country above
 and below Lehanda. These rocks
 extend into, and coal has been
 found in both Berar and the
 Nizami

*Vide supplement
 to Gazette of India
 15th January 1870
 page 30.*

*Dated 11th Jan'y 1870
 Vide Supplement
 to Gazette of India
 12th February 1870.
 page 138.*

Nizami territory across the Wardah
 "opposite the Lehanda coal-field."
 In a later report upon the explora-
 tions now in progress in the
 Lehanda district, Doctor Oldham
 states that "coal has been found
 in the borings at places where
 its existence was entirely un-
 known and unsuspected."

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 think be accepted in evidence
 of the difficulty which presents
 itself, even to the most eminent
 practical geologists, when any
 attempt is made to form general
 conclusions regarding the mineral
 resources of so vast a tract of
 country

country. And it seems to me that the non-existence of coal in Southern India may not unreasonably be doubted on other grounds.

5 Within the last few weeks a seam of good coal, 13 feet in thickness, has been discovered at Moidnapore, at a depth of 121 feet below the surface. The account of the discovery as given in the "Englishman" newspapers, makes it appear that the seam of coal underlies a thick superficial deposit of laterite, and that all the lower rocks which crop up in the neighbourhood

neighbourhood from beneath laterite are of a crystalline formation, much older than the coal-bearing deposits. As far as I know, a discovery of coal under such circumstances is without precedent; but similar discoveries may not unreasonably be looked for elsewhere, under similar geological conditions.

6 In the Presidency, as the Government are aware, there are vast tracts of country in which the geological formation of the surface agrees with the above description; and I can see no reason why the discovery of

of coal should be a more im-
probable event here than at
Maidnapore. It would be
almost impossible to overrate
the value of the boon which
would be conferred upon the
State and the people by the
discovery in Southern India of
coal-fields such as have been
worked for years in the North;
and I have the honour to suggest
that the Government of India
be moved to offer a reward of
say £20,000 to any person who
may satisfactorily prove the
existence in India of a bed of
workable coal within certain
geographical limits, say to
the

the South of the 17th parallel
of latitude. The coal to be
of a specified quality, and the
seam to be of such dimensions
as it may be thought advisable
to name.

7 The offer of a reward
on some such scale will undoubt-
edly have the effect of sti-
mulating inquiry into the
geological structure of Southern
India. If the reward be not
claimed, the accumulation of
fresh information regarding the
mineral resources of this part
of the continent will probably
be

Leaves to make
the very great diffi-
culty & dis-advan-
tages which the Rail-
ways in this free country

are placed by reason
of the non-existence, or non-
discovery of coal fields
in Southern England,

*The Secretary to Government,
Public Works Department,
Fort Saint George*

**The Consulting Engineer
for Railways,**

RAILWAY DEPARTMENT.

Read the following

مختار

I am directed by the
Right Honble the Governor
in Council to forward the
accompanying letter from
the Chief Engineer for Railways,
in which that Officer brings
under consideration the great
disadvantages under which
the Railways in this Presidency
labor, compared with those

rw

6.
I in other parts of India, as regards
their supply of fuel.

Major Shaw Stewart draws
attention to the recent dis-
covery of a seam of good
coal at Mednapore, where the
geological formation of the
country was supposed to render
the existence of the mineral
improbable, and
expressing doubts as to the cor-
rectness of the conclusions which
have been formed as to the
non-existence of coal in
Southern India, he suggests
the offer of a pecuniary reward
for its discovery.

His Excellency the
Governor in Council, although
unable to share in the hopeful
anticipations of the Eng. Engineer,

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complete geological inspection
of this Presidency than has
yet been made, and he
would recommend for favor-
able consideration the proposal
of the Eng. Engineer that an
offer should be held out of
a reward ^{for the discovery of coal} ~~for the discovery of coal~~, His Excellency
thinks might be fixed at
£ 5,000.

Recd 12/6/70 with Cfy
of Gov 1005 of 1870.

WLB

2-6-1870 1570 CA. 233

is kept in this office

199

Circulated for
orders -

W.B.

Coll. R.E.

at St. George.
1th March 1870

Secretary to Government Ord.

I wish Mr. Shaw Stewart had sent this
para. alluded to for the 'Inquest'
and that he had stated whether the
report had been confirmed.

I think, however, that you might forward
a copy of the letter to the Supreme Govt
and suggest that measures should be taken
for a more complete geological inspection
of the Presidency including the offer of
a pecuniary reward in case of

successful discovery £5000 - would probably
be enough

N.

AP

LOS

What was the cause
of the Appleton
discovery?

LOS

220

2

8

Cue 802.
Govt. of Madras.

PUBLIC WORKS.

To The Consulting Engineer
for Railways
To The Secretary of State
for India.

Date

From

11 April 1870 10054/m

Nos. 172-4738 174

Fuel (By) Paper orders on the
letter from the Consulting Engineer relative
to the disadvantages under which
the Ryots in the Madras Presy are
compared with those in other parts
of India, as regards their supply
of fuel.

Fuel (By) Letter from the Consulting
Engineer relative to the disadvantages under
which the Ryots in the Madras Presy
are compared with those in other
parts of India, as regards their supply
of fuel, forwarded to the Secy of State