

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Case of 10/7/55

G.O. No.	7326	Press
		Min.
Dated	12/7/55	18/5/55

Not to be folded or roughly handled

12/7/55

Fort Saint George, Public Works Consultation of 13th July 1858.

No. 75. Read the following letter from Messrs. A. C. BRICE, and Co.; to W. H. BAYLEY, Esq., Acting Secretary to Government, Fort St. George, dated Bombay, 16th June 1858.

SIR,

We have the honor to bring to your notice the condition and prospects of the Port of Tuddy near Comptah and the circumstances under which we have invested a large sum of money there and in the neighbouring District of Dharwar.

Four years ago our Mr. Brice, believing that if a Port suitable for European ships could be found near the Cotton Districts, large quantities of Cotton and other produce might be exported direct to Europe, visited the whole of the Coast south of Goa and found the Port of Tuddy about seven miles north of Coomptah; the Port was surveyed by Lieutenant Taylor and a chart drawn out indicating as much and indeed rather more water on the bar than at Cochin the chief Port on the Malabar Coast. Temporary beacons were placed on the hills, buoys were *promised* and every encouragement, as far as interest on the part of the local authorities was concerned, was given Mr. Brice to persevere in bringing the Port forward; he accordingly ordered out Screws from England and which have been erected at Tuddy, and he has constructed a long sea-wall and pier at his own expense. The sea-wall being required to secure the neighbouring low lying lands against though not improbable encroachment of the sea.

Besides making these expensive investments, Mr. Brice has, during the last four years, done every thing in his power to improve the cultivation and cleaning of Cotton, has erected Cattle power Machinery at Gudduk and Bunkarpoor; has purchased or erected godowns at Hooblu, Dharwar and sundry other places, has incurred considerable outlay for carts, bullocks, &c. and has in fact expended in all nearly two lacs of Rupees:—this outlay would doubtless have been profitable had it not been for the neglect of the roads caused probably by the straitened condition of the Indian Treasuries in consequence of the Mutinies.

For the last two seasons the roads have been gradually becoming worse and worse and this season have been next to impassable; we have therefore been enabled to bring down very little produce and that only at considerably enhanced cost: had the roads been maintained in good order, the large quantities of cotton and other produce now stored above Ghaut might have been brought down in April and May and have reached England in September or October; as it is they will not reach the Coast before December nor England before the following April, at a period when the cotton market is usually depressed by the heavy supplies received about that time, from the United States.

In order to prevent this unsatisfactory state of things becoming permanent and with the view also of obtaining a return for this large amount of capital now sunk, we beg to urge on the Government the paramount necessity of something definite being decided upon with regard to the roads.

Although it is not improbable that a Railway from the middle of the Cotton and Seed Districts to the Coast would be a very profitable undertaking, it is to be expected that in consequence of the late disturbances in Dharwar, capitalists may hesitate to embark in an undertaking of so expensive a character, we have therefore to draw your attention to some comparatively recent experiments with *Boydell's Traction Engine*, which appear to indicate it as admirably suited to a country like that in question. These experiments were made by directions of the Honorable East India Company and we enclose a copy of the report for your information.

With the roads lightly metalled and a sufficient number of engines there seems every reason to believe that goods might be conveyed a distance of 150 miles in two days, and at an expense considerably less than the present direct and indirect cost of conveyance by carts. The present actual cost is not less than Rupees 30 per ton and to this has really to be added the indirect loss by damage, pilfering, loss of interest and markets and the heavy outlay of capital. The time occupied in traversing a distance of 150 miles, commonly averages thirty days, or about 5 miles per day.

We would suggest that this transport might be undertaken by a small Commercial Company provided that Government would be willing to grant to it a concession of the line of road when the Company may be prepared with engines to take it up:—the Company should be

Fort Saint George, Public Works Consultation of 13th July 1858.

bound to take up portions of the road not less than three stations or say thirty-six miles at a time; and be bound to carry produce and other goods at rates similar to the present cart rates. They should be bound also to keep the road in order at their own expense. On the other hand the exclusive use of the road for all purposes other than the traffic of foot passengers should be granted by the Government to the Company.

The road we would propose to try the experiment upon is that from Tuddry through Arbyle, and Yellapoor to Hooblee, leaving the other road by Sircy, and the Devimaney Ghaut to Coomptah for the use of those Native produce dealers who should prefer the present mode of travelling.

We believe that the Government are fully impressed with the great necessity of improving the communications, and it is therefore unnecessary for us to point out the vast saving in men and money that would result in India, were such a system as we propose, to be generally in force.

We have little hesitation in saying that if the conveyance of produce to the Coast could be really depended upon, Europeans would, as elsewhere, for instance in Ceylon, Wynaud and other places, settle in the country as planters and tend greatly to the improvement of the country; while on this subject it may perhaps not be out of place to say a few words upon the cultivation of cotton and the comparative failure of the experimental culture. This failure we believe to have been mainly attributable to the seed having been planted at the *Native* seed time, viz. August instead of at the *natural* time adopted in the United States viz. *April*. We may mention that our Mr. Brooke tried the following experiments at Cochin. He sowed the Egyptian Sea island seed every week from April to August with the following results.

Sown previous to 1st May.—All came up at same time, viz. about 6th May, was 8 inches high by 6th June, grew during the following 6 months of Monsoon to the height of *twelve feet* and bore pods of long stapled cotton till the following March.

Sown about 1st June.—Came up in two or three days, grew quickly but weakly, attained a height of about 6 feet, but could not stand the hot dry weather of December.

Sown about 1st July.—Came up quickly—but did not attain a height of more than 4 or 5 feet.

Sown after 1st August.—Did not attain a height of more than two feet six inches, was weak and miserable and would not live without watering.

These experiments lead to the belief that early sowing is imperatively necessary, although strange to say it does not appear to have been ever tried except in one solitary instance by Dr. Wight at Coimbatore, and which from exceptional circumstances turned out a failure.

It is perfectly certain that India can produce a very superior class of cotton and that private enterprise would engage in the cultivation if the means of transport were at hand; at present it does not answer to purchase very fine cotton as the damage on the way down is so great as to neutralise in a great measure its superior quality.

We have now to draw your attention to the Port of Tuddry which we fear has suffered neglect in consequence of the great attention that has recently been bestowed upon the prospective Port of Sedashegur, it is perfectly clear that the proposed works and break-waters there will be costly in the extreme, will occupy a very long period in construction, and even when completed it is quite questionable, (looking at the failure of other artificial harbours) whether the harbour can be kept free of mud and silt; we cannot therefore help thinking that in totally neglecting Tuddry the Government are sacrificing the substance for the shadow. The Port of Tuddry is amply sufficient for the commercial requirements of the neighbouring Districts, is a harbour, perfectly safe, the water as smooth as a pond, and there is natural Quay room and deep water for twenty vessels to lie alongside at one time. The Port requires nothing but a couple of buoys and beacons which however we venture to again urge should be laid down without delay. The buoys should be *Warping Buoys* and laid down in the middle of the fair way one on each side the Bar, and should by their direction indicate the proper course of a Ship. The temporary beacons have fallen into decay and are not distinguishable; the two vessels, therefore, that we loaded this season, the "Alice Thompson" and the "Palestine" had to enter and leave the Port without any assistance whatever.

Fort Saint George, Public Works Consultation of 13th July 1858.

We are sending a copy of this letter to the Secretary to Government, Bombay, as the greater part of the roads is in that Presidency, and trusting to receive an early and favorable reply.

Extract from "Times" of 26th April 1858.

Military College,
Addiscombe, 11th February.

To SIR J. C. MELVILL, K. C. B.,
&c., &c., &c.,

SIR,

I have the honor to inform you that agreeably to instructions conveyed in your letter of the 23rd of October 1857, I have in company with Sir Proby Cautley, attended one meeting of the Ordnance Select Committee and one full trial of Boydell's Traction Engine, Sir Proby Cautley having already made known to you very fully his opinion of this engine, has begged me to report on this occasion my individual sentiments. I shall however, send this letter through his hands, that he may add any observation that may occur. The engine experimented with on Thursday, the 4th Instant is one which, when working under a steam pressure of 120 lb. per inch, is calculated at 37 horse power. Having been constructed for agricultural purposes and in the most economical manner it drives only one wheel (the off wheel.) At the Royal Arsenal it took in tow four Guns, two mounted on ordinary, two on devil carriages, the whole load being estimated at about 43 tons. This load it drew at the rate of about three miles per hour on level ground and at about 2 1/4 miles up a steep hill part of which was inclined 1 in 13. Its power of draught was very great but owing to its driving only one wheel it was unmanageable with a load, as it could scarcely be turned to the right hand. The experiment as regards this individual Engine, for general purposes of draught must be pronounced a failure but the powers and capabilities as exhibited on Thursday and on previous trials, reports of which I have seen with the Select Committee, inspire me with the greatest confidence in its final success, when the machinery shall be perfected to work both wheels together or either wheel singly. An Engine so constructed and equipped with a train of carts of a peculiar though simple form would be able to traverse any country where an ordinary bullock cart could travel, and being able to move continuously at the rate of 3 1/2 to 4 miles per hour, would perform journeys of little less than 100 miles in 24 hours. An establishment of such engines and carts would enable Government to dispense with half the ordinary Military force in India, seeing that Troops could then be concentrated in one-fifth the time required by even forced marches. Such self-acting Railways though immeasurably inferior in speed to fixed Railways, will be more generally useful for Military purposes, as they will travel in any direction, and will be safe from the designs of enemies. Prompted by these views I urged the patentee to perfect one engine with a train. He pleaded want of funds having expended large sums in the invention as directed to agricultural purposes. He has however addressed to me a letter, extract from which I annex, proposing to complete for the Honorable East India Company a smaller Engine, with a train of carriages to carry 120 men at the cost of £680. I feel no hesitation in recommending the Directors to accept the offer, with the proviso that the engine and train shall be found to travel with ease and safety in ordinary roads and lanes, &c. &c.

(Signed) FREDERICK ABBOTT, Colonel.

No. 76. ORDER THEREON, No. 1336; dated 12th July 1858.
Referred to the Officiating Chief Engineer for report on the several points alluded to in the letter above recorded.

(Signed) T. PYCROFT,
Chief Secretary.

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extract from 'Times' of 23 April 1858

Military College
Addiscombe 21 July

Sir. I have the honor to inform you
that, agreeably to instructions conveyed in your letter of
the 23rd of October 1857, I have in company with Sir George
Cauntley, attended one meeting of the Ordnance Select
Committee and one full trial of Roydell's Tractive Engine
Sir George Cauntley having, already, made known to you
very fully his opinion of this engine, has begged me
to report on this occasion my individual sentiments.
I shall, however, send this letter through his hands
that he may add any observation that may occur - The
engine experimented with on Thursday, the 4th Inst. is
which, when working under a steam pressure of 12
pounds, is calculated at 37 horse power - Having
constructed for agricultural purposes and in the most
economical manner it drives only one wheel (the off
wheel) - At the Royal Arsenal it took in tow four loads
two mounted on ordnance, two on devil carriages, the
whole load being estimated at about 43 Tons - This
load it drew at the rate of about 12 miles per hour on
level ground and at about 2 1/4 miles up a steep
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and on previous trials - reports of which I have on the select committee, inspired me with the greatest confidence in its final success, when the machinery shall be perfected to work both wheels together or either wheel singly - An engine so constructed and equipped, and a train of carts of a peculiar though simple form would be able to traverse any country where an ordinary bullock cart could travel, and being able to move continuously at the rate of $3\frac{1}{2}$ to 4 miles per hour, would perform journeys of little less than 100 miles in 24 hours. An establishment of such engines & carts would enable Government to dispense with half the ordinary military forces in India seeing that troops could then be moved in one fifth the time required by even forced marches. Such self-acting railways though immensely inferior in speed to paid railways, will be more generally useful for military purposes, as they will travel in any direction, and will be safe from the designs of enemies. - Prompted by these views I urged the Government to perfect one engine with a train - But shaded want of funds having expended large sums in the invention as directed to agricultural purposes - He has however addressed to me a letter, extracted from which I annex, proposing to complete for the R. & D. a smaller engine, with a train of carriages to carry 20 men at the cost of £180 - I feel no hesitation in recommending the Directors, to accept the offer, with the promise that the engine & train shall be found to travel with ease & safety in ordinary road & lanes &c. &c. I am, Sir, your obedient servant Frederick Abbott Colonel

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To the Secretary to Government
Fort St. George.

Bombay 16 June 1858

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Sir We have the honor to bring to your notice the
condition & prospects of the port of Tuddy near Comptab
and the circumstances under which we have invested
a large sum of money there in the neighboring district
of Dhawar.

Four years ago our Mr Price, believing that if
a port suitable for European ships could be found
near the cotton districts, large quantities of cotton &
other produce might be exported direct to Europe,
visited the whole of the coast south of Goa and
found the port of Tuddy about seven miles south
of Comptab; the port was surveyed by Lieut. Taylor
and a chart drawn out indicating as much and
indeed rather more water in the bar than at Cochin
the chief port on the Malabar Coast. — Temporary
beacons were placed on the hills, buoys were pro-
vided and every encouragement, as far as entered
on the part of the local authorities was concerned,
was given Mr Price to persevere in bringing the
port forward; he accordingly ordered out shrou
from England and which had been erected at
Tuddy, and he has constructed a long seawall
and pier at his own expense — The sea being
required to secure the neighboring lands
against the not improbable incursions

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For the last two seasons the roads have been gradually becoming worse and worse and this season have been next to impassable; we have therefore been enabled to bring down very little produce and that only at considerably enhanced cost: had the roads been maintained in good order, the large quantities of Cotton & other produce now stored above Chauth might have been brought down in April & May and have reached England in September or October as it is they will not reach the Coast before Decr. nor England before the following April, at a period when the cotton market is usually depressed by the heavy supplies received about that time from the United States. In order to prevent this unsatisfactory state of things ~~from~~ becoming permanent and

to 7.

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capital now sunk, we beg to urge on the Government
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being decided upon with regard to the roads.

Although it is not improbable that a
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to the Coast would be a very profitable undertaking,
it is to be expected that in consequence of the late
disturbances in Sharwar, capitalists may hesitate
to embark in an undertaking of so expensive a
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to some comparatively recent experiments with
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With the roads lightly metalled and
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and indirect cost of conveyance by carts - The
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loss by damage, pilfering, loss of interest & market
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in traversing a distance of 150 miles, com

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5/15

thirty days, or about 5 miles of day.
We would suggest that this transport might be undertaken by a small commercial company provided that Government would be willing to grant to it a concession of the line of road when the company may be prepared with engines to take it up: - The company should be bound to take up portions of the Road not ~~exceeding~~ less than three Stations or say thirty six miles at a time; and be bound to carry produce and other goods at rates similar to the present cart rates - They shall be bound also to keep the road in order at their own expense - On the other hand the exclusive use of the road for all purposes other than the traffic of foot passengers should be granted by the Government to the company.

The road we would propose to try the experiment upon is that from Luddry through Arboyle, and Yellapoor to Aroolee, - leaving the other road by Siriy, &c. the Dominance Grant to Comptrol for the use of those Native produce dealers who should prefer the present mode of travelling.

We believe that the Government are fully impressed with the great necessity of improving the communications, and it is therefore unnecessary for us to point out the vast saving in money that would result in India, were such as we proposed, to be generally enforced.

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We have little hesitation in saying, that if the
consequences of produce to the Coast could be really
depended upon, Europeans would, as elsewhere,
for instance in Ceylon, Myna and other places, settle
in the country as planters and tend greatly to
the improvement of the country; while on this subject
it may perhaps not be out of place to say a few
words upon the cultivation of cotton & the compara-
tive failure of the experimental culture. - This failure
we believe to have been mainly attributable to the seeds
having been planted at the Native best time viz
August instead of at the natural time adopted
in the United States viz April - We may mention
that our Mr Brooke tried the following experiment
at Cochin - He sowed the Egyptian Sea Island seed
every week from April to Aug with the following results -
Some specimens to all came up at same time viz about 6
May - May, was 8 inches high by 6 June
grew during the following 6 months of
Monsoon to the height of twelve feet
and bore pods of long stapled Cotton till
the following March

Some specimens of all sown &
came up in two or three days, grew quickly
but weakly, attained a height of eight
feet but could not stand the severe
dry weather of December
Some about 1 July - Came up quickly - but a
height of more than 4 feet

Lower after 1 Aug. - Did not attain a height of more than
two feet six inches, was weak & unsteady
and would not live without watering.
These experiments lead to the belief that early
sowing is imperatively necessary, although strange
to say it does not appear to have been even tried
except in one solitary instance by Dr. Wright at
Coimbatore, and which from exceptional circumstances
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a very superior class of cotton and that private
enterprise would engage in the cultivation of the
means of transport were at hand; at present it does
not answer to purchase very fine cotton as the damage
on the way down is so great, great as to neutralise in
a great measure its superior quality.

We have now to draw your attention to the
port of Trudery which we fear has suffered neglect
in consequence of the great attention that has recently
been bestowed upon the prospective port of Adenbegar.
- it is perfectly clear that the proposed works
and breakwaters there will be costly in the extreme,
will occupy a very long period in construction, and
even when completed it is quite questionable whether
at the failure of other artificial harbours, with the
harbour can be kept free of mud and
cannot therefore help, thinking that

neglecting, Iuddy the Government are sacrificing
the substance for the shadow - The fort of Iuddy
is amply sufficient for the commercial requirements
of the neighbouring districts, is a harbour, perfectly
safe, the water as smooth as a pond, and there is
natural buoy room and deep water for twenty
vessels to lie alongside at one time - The fort requires
nothing but a couple of buoys and beacons which
have we venture to again urge should be laid
down without delay - The buoys should be laid
down and laid down in the middle of the fair
way on each side the Bar, and should by their
direction indicate the proper course of a ship - The
temporary beacons have fallen into decay and are
not distinguishable, the two vessels, therefore, that
we loaded this season, the "Abie Thompson" &
the "Jabotins" had to enter & leave the fort without
any assistance whatever -

21
We are sending a copy of this letter to
the Secretary to Government Bombay, as the greater
part of the roads is in that Presidency, and trusting
to receive an early & favorable reply.

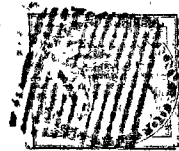
We have the honor to be

Yours most obediently

Adm. Henry Brooke
care of Messrs. Campbell Mitchell & Co.
Bombay

Abel. Brins

POSTAGE
PAID



To the Secretary to Government

Fort St. George

Recd June 22nd 1858

W.S.



Copy in L. 1. 6
12th Oct. 1858. N. 28

7-1336
Offg. Chief Engineer
Referred to the Offg. Chief Engineer
for report in the several points alluded
to in the letter above recorded
From Chief Eng^r
9/12 May 1859

Copy to the Secy of the
24 Jan 1859

Pub. Works 1858 Sept^r
to Com 13th July
N^o 1540

From
A. C. Brice & Co
Bombay.

Dated 16th June 1858
Received 3rd July
From the Offg. Chief Eng^r D/10 Sept^r
1858 C. No. 179 in bond 12th Oct^r

Bring to notice the
improvements effected by them
along the Port of Tudecha at an
outlay of about 2 lacs of Rupees
and state that owing to the neg-
lected state of the roads and not
only the large outlay required to
procure unprofitable but that
they have been unable to bring
down any large quantities of other
and other produce to the Coast.
Suggest means whereby this
evil might be obviated.
Place a few feet the proprietors
of their wharves up a 8 or 10
degrees of inclination above the level
of the sea is now given to it.
From the Secy to the Govt of Bombay
420 Dec^r 58 Pub. C. No. 2011 in Com. 25 Jan 1859 31
From the Secy 2nd July 59 C. No. 1336 in Com. 31

With an enclosure

N^o 1336. 12th July 1858. L