W. C. No 7782

Govt. of {1881} Madras.

PUBLIC.

To

THE REVENUE DEPARTMENT,
&c., &c., &c.

No 3195 Dr. a/31-12-81.

Recorded.

28-12-81

Dated December 28th.

Issued

Recd. 28 Dec/81 Encl.

G.O., 28th December 1881, No. 1776.

DECEMBER.

Changes in Districts.—Orders issued in regard to the creation of the new Collectorate of Anantapur.

Re S. E 3rd Circle
Ch: Engr. for Info.

Read
31/12/81

Entd. in Receipt Regr.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

28th December 1881, No. 1776.

Changes in Districts.

Read the following paper :—

From the Government of India, dated 13th October 1881, No. 1646.

ORDER THEREON, 28th December 1881, No. 1776.

Under the sanction of the Governor-General in Council, the existing Collectorate of Bellary will, from and after the 5th January 1882, be divided into two by the creation of a new Collectorate, *Anantapur*, with head-quarters at the town of Anantapur. Each Collector will be the "Magistrate of the District" in the district comprised within his Collectorate.

1. Anantapur.	5. Hindupur.
2. Dharmavaram.	6. Gooty.
3. Penukonda.	7. Tadpatri.
4. Madakasira.	

The taluks, marginally noted, will, from the aforesaid date, be separated from Bellary and constitute the new Collectorate of Anantapur. The Sub-Collectorate of Bellary will thereupon cease to exist. The local limits of the jurisdiction of the District Judge of Bellary are not varied, and the Bellary Sessions Division remains as it is now fixed. The District Jail, Bellary, is declared the District Jail of Anantapur.

2. The proposition statements appended to the Proceedings in the Public Department, No. 1212, dated 8th September 1881, as subsequently amended, will be forwarded to the Board of Revenue, and to the Inspector-General of Police, who will issue such orders as may be required relative to the entertainment of the requisite establishments, within the limits of cost therein exhibited. Should any reductions in the sanctioned scale be found practicable, they will be submitted for approval.

Proposals regarding divisional charges in the two districts and other subsidiary arrangements will be submitted, without delay, by the Magistrates and Collectors concerned through the Board of Revenue. From the date of the creation of the new district of Anantapur, the division now in charge of the Head Assistant Magistrate of Bellary shall, under Section 39 Criminal Procedure Code, and until further orders, constitute a division of the former district.

3. The first paragraph of this Resolution of Government will appear as a Notification in the *Fort St. George Gazette*.

(True Extract.)

for Chief Secretary.

To the Revenue Department.
„ all Departments of the Secretariat.
„ the Board of Revenue, with proposition statement.
„ the District Magistrate and Collector of Bellary.
„ the „ „ of Anantapur.
„ the Inspector-General of Police, with proposition statement.
„ the „ of Jails.

Copy to the Honorable the Judges of the High Court.

Exd. T. O'Connor.

In Heu VO Hudleston
In Hon D 7 Carnicha

For orders

Mr Nordmann
Sends copy of his
and Mr Coxe's
-nals comp
reconnaissance
Jun as Bogor to
Junction of the
with the Zil riv
in Kalahundy, a
205 miles from Vizi
and about 160 mi
from Raipur

While Mr Nordm
has himself exa
the direct route
Dumbadoola
Comma has A
over two Labou
routes (1) the
via Longjar

Brandesor previously

Dear Sir
in the following order
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Asuguo to Bofo
2nd - Do - by Long
Jaluni into the
route,
3d - Do - by Line
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Mussa Point to Buna
and Bofor,
as the Summit level
of the first is only 123
ft. above sea level,
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and of the third 18
feet
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?1584

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[illegible] after passing the Summit
[illegible] Creek on the Nevada
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[illegible] however this rule
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[illegible] the question is
[illegible] instructions should
[illegible] conveyed to Mr.
[illegible] Warner?

Circumstances Mr
Vordeman after
reaching Raisaw
should be directed
either himself to go
back over Colonel
Lewis Smiths route
or detach Mr Comac
to that purpose
Government has already
decided that however
compromising the route
west of the Naosarke
Hills may be it is to
be explored and
reported on, and as
Mr Vordeman is doing
the best man in the
work, he might have
instructions to follow
up the original orders
on the subject, leaving
it to himself to decide

[illegible] rule
[illegible] it rule
[illegible] on the
[illegible] Rose.
[illegible] by Colonel

at the time of last writing had my received letter dated 13th Nov., and that he expected to receive orders further till reaching Raipur

Should he be correct in this it is clear that he will not be aware till too late that the Govt. (as wired to Mr Timms) are anxious to have the route explored by Bundesar and Bolor explored by Colonel Lucie Smith via Nandol Kanker &c examined by Mr Cormac, while it is not considered essential to report on the line route to Ootki

The question therefore arises whether if

Ombadoola and Bolor, it will be quite out of the question to folow Colonel Lucie Smiths line

Should the Govmnt be disposed to accept this view I would venture to propose that the present letter be Recorded with the observation that Mr Nordmann on reaching Raipur should make arrangements for reconnoitring the best line west of the Maopurh hills towards Naoranspore &c as originally ordered, but that it will be left open to him to decide whether under all the circumstances it will be necessary to detach Mr Cormac for the examination of the line to Bundesar previously traversed and reported on by Colonel Lucie Smith

Approved RH 24/2/87

Draft wrong in paragraph 2 of underlined portion, line 3 e.g. should read alternative route to Raipur

RH

Bundesor previously traversed, and reported on by Colonel Lucie Smith.

R.S.

1895-99

27-1-31 Bill

27.12.94

this G.O. 3193 W. of 28th Dec 1881

Rec'd 28/12/94

R. T. Hordmann Esq S (Civ: Engr for Ry for perusal)

No 9/1

For Comparison back also Colonel Lucie Smiths route to Bundesor

For myself I should not consider it worth while to order the investigation of this latter route as 1st we have Colonel Lucie Smiths strong report that there is no difficulty whatever to overcome, and 2nd as the direction of which line the future railway is to take does not depend on the features of the country in this portion so much as on those to the South

If in fact as the evidence produced the S of I give this preference to the line viâ Bingenbil

No 3193 W

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 28th Decr 1881

Read the following :—

From

K. F. Cardmann Esqr
Executive Engineer on Special duty

(Rpt No $\frac{20}{B}$ of 4 Decr 81)

Report on Reconnaissance from 18th Nov to 4 Decr 81.

Recorded with the observation that Mr Cardmann on reaching Raipur should make arrangements for reconnoitering the best line west of the Naogurh Hills towards Kowarungpore, &c, as originally ordered - But it will be left open to him, in consultation with the proper Officers of the Central Provinces, to decide whether under all the circumstances it will be necessary to detach Mr Cormac for the examination of the line to

Mr Cormac's Report

on his march from Rayagadda viâ Bondeso and Dadpur to Bogor, and from Singapur to Lonjigar

18th Novr to 1st Decr 1881

Dated
Camp Bogor
4th Decr 1881

Enclo: 8 Sheets of Sections

8 annas each per day: judging from the description of the buildings in the town, very few have been employed: as only two tiled houses were seen besides the house of the Rajah, which is of brick in clay, but is incomplete.

The jail is a wattle and daub structure with a thatched roof: the prisoners (about 90) are employed in making roads: a few also make carpets.

A kind of cloth resembling Tassa silk, is manufactured in this part of the country.

It was ascertained that rice is being sold in Bondisor at 50 seers per rupee, and at Singapore only 32 miles distant, at 12 seers per rupee: this fact shews the necessity for improved means of communication between the two places.

The acting dewan of Kalahandy has exceedingly attentive, and gave every assistance in his power; without his help it would have been very difficult to obtain supplies, as the villages passed are small, and do not possess any bazaars.

30th November: Camps Bondisor: Height above mean sea level 653 feet. ✓

Distance from Majigaon 11 miles 3 fur. 1403 yds.

Difference in altitude — 213 feet.

Proceeded through the town of Bondisor, emerging from it at 3/4 mile from starting point:

From limit of town to 2 miles, passed through wet cultivation, and thence through a well cultivated country, to Bijepur, 5 3/4 miles distant from Bondisor.

From this place the country has a most deserted appearance; land previously cultivated having

been abandoned.

At 7¼ miles passed through the village of Dadpow consisting of about 200 thatched houses and with a small area under cultivation near the village.

The country is partially cleared of jungle where not cultivated, and heavy jungle is not seen except on the hills.

At 3¼ miles beyond Dadpow crossed a small ghat, through thick jungle, and at 4½ miles crossed a river with Sandy bed, and well defined banks, requiring a waterway of 80' x 15'.

Here is a good camping ground, and good water at Komari: country more or less rocky.

1st December: Camp Komari: Height above mean Sea level 698 feet. S

Distance from Bardiw 13 miles. 4fur. 215yds.
Difference of altitude, + 45 feet.

On leaving Komari passed through patches of cultivated land, surrounded by partially cleared jungle: the appearance of the country here gives the impression that it has been more populous, but has been deserted, there being traces of cultivation all along.

At 2½ miles crossed a stream with stony bed and banks, not well defined requiring a waterway of 50' x 6'

Up to 3¼ miles passed through country covered with long grass; at Sujang (3¼ miles) were patches of cultivated land, partially cleared jungle continued to 5½ miles up to the village

of Ukhekala, round which also is some cultivated land.

At 8½ miles passed the village of Boria on high ground: open country all round and wet cultivation to east.

At 9¼0 miles crossed a river, the Kel Roi, with Sandy bed and well defined banks, requiring a waterway of 250' x 15'.

At 13-2-20 reached Bogor: Height above mean sea level 600 ft. S

Along the last five miles of this journey a tolerably level road was traversed, without any proper covering of gravel or metal, but with side drains and recently planted avenue trees at intervals: this road runs from Bardiw to Sambalpore, and is said to be fairly practicable for carts.

Camp. Bogor.
4th December. 1881.

Jomar
Sub Engr

K.F. Nordmann
Executive Engineer

cultivation near it, and it has the appearance of being almost deserted.

From thence the track continues through low jungle, quite up to Bondicon, where there is an excellent camping ground: good drinking water has to be brought from a distance.

Between the foot of the Musa Ghat and Behera-gana there is a large area of land available for immigrants: the soil is good and fertile.

In the forest one Matti tree was measured and found to be 13 feet in circumference, six feet above the ground: there is Sal, jack, Ggp. Ippa, and mango, in any quantity, and also small bamboo.

Limestone is procurable (no dular knowing) in abundance: iron is found and worked in Bondicon, nearly every person met being armed with an axe of local manufacture.

The climate is said to be unhealthy: but with so much jungle this may be expected: the working season would be from November to July: the country would be difficult to travel in during the remainder of the year on account of the rains.

The chief trade is in rice, gingelly, Bengal gram, and linseed: this is chiefly exported from Junagar: the route to that place diverges to the west about 9 miles south of Bondicon.

Fully 600 Brinjaree pack bullocks were met from Junagar this day, with rice, and Bengal gram: and about 200 (empty) on their way to the same place.

A few bricklayers carpenters and stone cutters live at Bondicon, and are said to receive

Mr. Cormac's Report.

18th November: Camp. Komatipettah: height
703 feet above mean sea level.
Distance from Rayagedda 5 miles 2 fur. 176 yds.

At ⅛ mile crossed a river. (50' x 9') with stony bed. banks not well defined: passed a Khond village (Sandilly) 1/4 miles from Komatipettah: from that village the country is broken by ravines; low jungle prevails. and continues to Kurumpeta, a large village principally of Telegu people

The country here is well cultivated, soil light and sandy: the hills on the west are well wooded. and are about one mile distant.

Camped at Dorabada where there is a large area under wet cultivation.

The track to this point runs about one mile from the hills. and parallel with them.

There is a good camping ground beyond the village. and a well of good drinking water.

The land in the vicinity is fully cultivated and well irrigated. the villages round about as well as this. are peopled with immigrants from the Kurumpam taluq near Purvatipur.

19th November: Camp Dorabada: height 885 feet
above mean sea level.
Distance from Komatipettah 7 miles 0 fur. 120 yds.
Difference in altitude. +182 feet.

Passed along the foot of the hills to the west of the valley. through well cultivated land. (chiefly dry cultivation): the ground having a slight inclination to the east.

About three miles from Dorabada the track crosses several deep ravines and much broken ground, with patches of dry cultivation here and there.

At 7¼ miles from Dorabada the track runs parallel with the Nagavully river; and, crossing a large stream (138" x 8"; banks not well defined, bed stony) at 8½ miles distance, enters upon a fine open valley where there is a good camping ground, and good drinking water, near the village of Shikarpoy: there is a large sugar cane plantation at this place, and the country round about is well cultivated; the rice crop, which covered a large area, has been harvested.

20th Camp. Shikarpoy: height above mean sea level, 1625 feet ✓
Distance from Dorabada 9 miles 0 furs. 53 yds.
Difference of altitude +140 feet.

The track from this village runs nearly parallel with the Nagavally river, up to Singapore: the river valley is about two miles across, and the cross section is almost level.

Fully two thirds of the valley is under cultivation; chiefly dry crops.

Four streams, one, requiring a span of 15 ft. one of 16 ft. and two of 20 feet, were crossed up to 3¾ miles from Shikarpoy: here a large stream requiring a span of 30 feet was met with: the banks of this stream are not well defined, and the bed is stony.

The village of Karrampuram (4 miles) possesses a small pucka temple, the first seen since leaving Rayagedda.

At 4¼ miles distance, a stream requiring a span of 40 feet was crossed: banks not well defined, and bed sandy; and, at 5¼ miles, another stream, requiring a span of 30 feet: bed rocky, banks well defined.

At Singapore, crossed the Nagavully, requiring a bridge of three openings of 40 feet each: bed sandy: banks not well defined.

The produce (which is much in excess of local requirements) of the country generally from Rayagedda to Singapore, is rice, raggi, cholum, ongar cane, horse gram, green gram, gingelly, linseed, and hemp.

The trade chiefly consists of the food grains named previously, and gingelly, castor oil, hemp, linseed, and hides: the track followed by me, is the trade route from Jenagar and Bondoor.

In the forests, the timber chiefly found is Jack, Teak, Matti, Sissa, Mango and Blackwood.

At Singapore, ordinary smiths and carpenters are obtainable: their hire being 4 and 5 as. per day: ordinary cooly hire is 1½ as. per man per day; this is generally paid in kind.

The country is but sparsely populated and there is space for a large number of immigrants; especially north and east of Singapore.

22nd November: Camp. Singapore: height above mean sea level 996 feet. ✓
Distance from Shikarpoy 7 miles 2 furs. 25 yds.
Difference of altitude — 29 feet.

Passed through the town of Singapore by the foot of the Rajah: a space enclosed by a mud wall about 12 feet high and 3 feet thick, with a

thatched coping: the buildings inside being of mud, and thatched.

Beyond the town the country is open, and under dry cultivation: over a large area the stumps of sal trees are still standing.

The track runs along the watershed of the San and Bodo rivers, until the San is crossed near Palkomma: the banks of the stream, which flows at the bottom of a deep ravine, are not well defined: the bed is sandy: span required 70' x 10'.

At 4-3-190. back to Bondi -ga diverges.

At 5½ miles distant from camp, another stream, flowing at the bottom of a ravine, is crossed: the bed is rocky, and banks not well defined: between these two streams lies the village of Pal-komma, round which there is a large area of dry cultivation.

- Here see Section from Palkomma to Longigar.

After crossing the stream, the track enters dense jungle, and crosses several smaller streams entering a clearing of about 6 acres near Tirnai, where there is a good camping ground and good water: the jungle is very thick, and it was with difficulty that the elephants passed through it.

23rd November: Camp Tirnai: height above mean sea level 1584 feet. N

Distance from Singapore 10 miles 5 fm. 115 yds.
Difference of altitude +588 feet.

On leaving camp entered dense jungle which continued for 3/8 miles, when the village of Ban-bandong was reached: the country from this place is well cultivated, and under sugar cane and rice quite up to Longigar, where a halt was made.

Just before entering Longigar the Bongodara was crossed: banks are well defined, and the bed stony: requiring a span of 40' x 12'.

The forest abounds with Sal, Gigi, Kattu, Jack, Mango, Ippa, and Blackwood trees: the soil is rich loam, except at the small spots where it is rocky.

The track is evidently not much used: and, probably, only the produce of the South of the Longigar valley is conveyed by this route.

The country from Singapore to Longigar is very thinly populated, and there is ample room for a large number of immigrants.

The crops produced are chiefly rice, raggi, gram, and sugar cane.

There is a good camping ground and good water obtainable.

26th November: Camp Palkomma: Height above mean sea level 1116 feet. N

Distance from Singapore 4 miles 3 fm. 190 yds.
Difference of altitude 120 feet.

Skirted the side of a hill through jungle for 5/8 mile, passing south of the village of Cholapore, which is surrounded by wet cultivation: and at 1¼ miles passed through low jungle, with a small patch of dry cultivation on the south.

At 1⅝ miles crossed low ground under paddy cultivation, and entered the village of Rumdragudo: here met bullocks coming from Jumagar.

At 2⅜ miles joined the regular track of the Bullock carts from Singapore: this track lies on the watershed of the Bodo and the San rivers, and has a very gradual ascent.

At 2½ miles distance croped the San river. (banks well defined, bed sandy, and requiring a water-way of 60' × 10') paped up the valley (about half a mile broad, and with an almost level cross section) of a small stream up to a low saddle: skirted the side of a hill, croped a second saddle and entered upon a wide open valley, (well cultivated) in which stands the village of Bijepur.

The ascent to this is very gradual, and might be made practicable for carts at a small cost.

The track continues along the valley, (ascent very gradual) which is broad and open, and nearly level across, up to spot marked Nisampur on the map, where the camp was pitched.

Up to this, the country from Bijepur is well cultivated, both wet and dry: the dry being chiefly, camps oil seeds.

The soil is a sandy reddish clay: camping ground good, and good water procurable.

The hills on each side of the valley are well wooded, and several topes of large mango trees were paped.

27th November: Camp Nisampur: Height above mean sea level 1593 feet. ✓

Distance from Kalkonma 9 miles 4 furlongs.
Difference of altitude +477 feet.

Left camp, proceeding up the valley of the Kundra stream, which is croped several times by the track, (but which may be avoided) through dense jungle, (which had to be cut to permit the passage of the elephants) to the head of the Musa Ghat, which is 1880 feet above mean sea level. ✓ 1936

With the exception of the last furlong, the ascent is so gradual, that the track may be made practicable for wheeled traffic for a small outlay, and no difficulty will be experienced in the last furlong.

From the ghaut head, on the Bondisin side, the gradient is very steep for 1½ miles, to the foot, whence it runs with a gradual descent for 4 miles, through dense jungle, to the camping ground.

Good water is procurable, and the camping ground is good.

Owing to the heavy jungle, it was not possible to see much, but from what was observed of the hills, the difficulties attending the opening out of a good ghat road, with a gradient of 1 in 22 will be very slight, as, apparently, little more than earthwork will be necessary.

28th November: Camp Majigaon: Height above mean sea level 866 feet ✓

Distance from Nisampur 7 miles 1 fur. 18 yds.
Difference of altitude — 727 feet.

Left camp along the valley of the Patna river which was croped about 5 miles distant; and proceeded nearly parallel with the course of the Sinli river which was croped near Beherampura about 9¼ miles from last camp: all this distance was traversed through dense jungle, paping only two small patches of cultivation.

The village of Beherampura stands in an open piece of ground, but there is very little

alteration near it, and it has the appearance of being almost deserted.

From thence the track continues through low jungle, quite up to Bondicoor where there is an excellent camping ground: good drinking water has to be brought from a distance.

Between the foot of the Musa ghat and Behera-guna, there is a large area of land available for immigrants: the soil is good and fertile.

Near the foot one Mahwa tree was measured and found to be 13 feet in circumference, six feet above the ground: there is Sal, jack, goji, Appa and mango, in any quantity, and also small bamboo.

Limestone is procurable (nodular kunkur) in abundance: iron is found and worked in Bondicoor, nearly every person met being armed with an axe of local manufacture.

The climate is said to be unhealthy: but with so much jungle this may be expected: the working season would be from November to July: the country would be difficult to travel in during the remainder of the year on account of the rains.

The chief trade is in rice, gingelly, Bengal gram, and linseed: this is chiefly exported from Junagar: the route to that place diverges to the west about 9 miles south of Bondicoor.

Fully 600 Brinjarris pack bullocks were met from Junagar this day, with rice, and Bengal gram, and about 200 (empty) on their way to the same place.

A few bricklayers carpenters and stone cutters live at Bondicoor, and are said to receive

Vizagapatam-Raipur Railway

Extract from
Executive Engineer's
Notes of Reconnaissance

26th Nov. to 4th Dec. 81

Ouchadola to Bogor

G.O. No. 1934 of 25/12/81

Dated
Camp Bogor
4th Dec. 1881

K.T.N.

Quartz about here; my camp stands on a bed of gneiss and quartz. A hill near this consists of the same minerals. There is also some porphyritic granite, with feldspar in large crystals, thickly scattered over the surface in white blotches, often rectangular in shape. The Quartz is full of shining specks, white and yellow: leaflets that can be detached with a penknife — probably Mica and pyrites — as well as glistening grains of some metal, and little nodules of peroxyde of iron imbedded in the quartz. I will forward — from Kaipur — a few samples, both pulverized and solid, for chemical analysis and assay, if it be considered worth while to have this done

Despatched a Messenger, one of the men from Bondevor, to the Zamindar at Karial, to see about arrangements for supplies, coolies &c. en route to that place; as nothing seems to have been arranged so far by the Karial people, and without their authority nothing is to be had.

AP 31

2nd December. Bogor.

Thermo. 6 a.m. 49°7.

Occupied with Office duties, as yesterday

3d. December. Bogor.

Thermo. 6 a.m. 49°7.

Went out to examine the Tél River and to find a suitable crossing. The bed is treacherous and will in some places not support the weight of horse and man.

No tappal received in Camp for more than a fortnight.

Camp Bogor
4th. December 1881

K.F. Nordmann
Executive Engineer
on Special Duty

SP 30

the place. — Jungle again.

Limpora. Some open ground and a few fields; some sugar cane; then light jungle. A small nullah 11'x4'. — A Tank with rice fields under it; then Bogor.

12 m. 4 f. 53 yds.

1st. December. Bogor.

Therm. 6 a.m. 47°7.

Mr. Cormac arrived from Boudesor; all well in his camp, except 1 Lascar and 1 Mahout who have fever. Mr. Cormac's Report and Notes of reconnaissance taken during his march, as well as a section of the country gone over by him, accompany this. — We are busy with accounts, reports, maps, observation of instruments, calculations of altitudes &c. and with general camp duties. The Weather is fine, the nights are cold. Fever begins to prevail in the Camp: the Dresser, the Hospital Servant, the Writer, one police Constable, three Lascars and several Servants are laid up with it.

There is much white and reddish

the right bank of the Stream, near Kokornal, and cross a mile to the East of Kandel.

Korlakuta; a dozen huts in a jungle clearing, with a few fields. Then jungle. — Much kunkur lime stone is here lying about the surface.

pp. 13. Kandel; a dozen huts in a large clearing in the jungle. A few rice fields, and some dry crops.

The River to be crossed a mile East of Kandel is 245' wide and 16' deep in flood, when the low banks which are about 8' high are covered to a further depth of 8', for some distance. The bed is sandy; no rock visible. Five 50-feet arches, crown 20' above deep bed, will be required.

A few fields cultivated; then jungle again. — Soil: light clay with sand. —

Dunnerunnora; a few huts in a small cleared space, surrounded by jungle. A crude "still", for the manufacture of alcoholic liquor from the flowers of the Ippa tree, was at work here. — There are very few fields about

clay, nearly black.—

Village of Borgáon. Open country around. Extensive wet and dry cultivation; the former under a tank. There are no sluices in the bund of the tank; the water is lifted up by picotas into wooden troughs laid across the bund, and so let into the field below the tank.—Here I saw wild geese and duck, some cranes, plover, white gulls, and the first trace of snipe since Parvatipur. Cattle are numerous about here.—Rice is packed for carriage in bags (about a cubic yard in capacity) made of straw ropes worked together in a manner similar to rattan basket work.

Village of Séturpalli. Some cotton was being cleaned here by the ordinary hand machine (churka).—A tope of young mango trees, about 5 years old, is being attended to.—Extensive rice fields.—Dry crops: gram, cotton, raggi, jingelly, castor oil, mustard, chillies, beans, gourds, pumpkins, tobacco.

Trees: Bhér, Ippa, Tamarind, Mango, Jack, fig.—Soil, lighter than before: more sand in it.

Village of Bólarpúr, with a tank. Then jungle again, with a few patches of wet and dry cultivation; some rock. From here tracks lead to Bánpúr (N.E.) and Dádpúr (S.W.).—

4th mile; a small stream, requiring a bridge 18' span x 9' high. Sandy bed, good banks.—Jungle again.—

Dousilát: half a dozen huts in the jungle, with a few fields.—Then dense jungle, on light soil; the sand on the track shining with small particles of quartz and felspar, and dust of mica and pyrites.

Torla. Five huts in a small clearing, surrounded by jungle.

6 m. 7 f.: Crossed the Dhéron Stream, 65' wide between the banks which are 7' high and occasionally flooded to a further depth of 7', for some distance. Total width 162', depth 14'. The Railway would keep on

name, used about here, for Boudesor).—
10 m. 6 f. 67 yds. Attrugor. This village has been of some importance in former times, but is now insignificant. There is a large Tank. The village is situated in a rectangular enclosure of earthen rampart, (an old Fort) about one third of a mile square, with a moat round it — that can be filled from the tank. In the moat some paddy is cultivated; and red and white lotus flowers grow extensively. A fine mango tope for camping, South West of the old fort, just under its ramparts and near the moat. Near this tope will be the most suitable site for the future Railway Station.

Trees: tamarind, wild fig, ficus religiosa, mango, yégu, ippa, sál, matti, the wild silk cotton tree, and other jungle trees; also several kinds of acacia, among them the tree (I forget the name) of which the bark is used in the South for the manufacture of arrac. I have met no Sandal wood as yet in the jungles.

30th November. Attrugor to Bogor.

Distance 12 m. 4 f. 53 yds.
Height of Bogor above M.S.L. ~~600~~ 627'-7"
Fall from Attrugor to Bogor 45' 7 3/5
Distance of Bogor from Vizagapatam:
205 m. 3 f. 128 yds; from Raipúr about 160 miles.

The Police Inspector and the Kotwál from Kimedi, who had accompanied the party so far and been very useful, the one in arranging for supplies and coolies, and the other in acting as guide, returned from here. A Sowar, mounted and armed, and a Minor official, sent by the officiating Dewán of Boudesor to assist the Camp, joined this morning. —

Thermo: 6 a.m. 58°7.

Crossed the Sandul River, 19' deep and 170' wide in flood. Three 50 feet spans required. Rock for foundations of piers and abutments: gneiss mixed with quartz and conglomerate. Kunkur lime stone near the spot.

Enter light jungle, with fields of dry cultivation here and there. Soil, heavy

Village of Póremalla. Heavy soil. —
Enter jungle again. —
4 m. 1 f.; an Irrigation Tank, newly constructed, or repaired, by the people of Bankel, a village a mile further North.
5th mile. Bankel, a largish Village. Wet and dry cultivation; paddy and sugar cane; horse gram, raggi, mustard, gingelly. — Low hill ridges, East and west, 2 to 3 miles apart.
Olisirka. The people's Swamies or wor-
-shipping places here consist of a stump or block of wood, let perpendicularly into the ground, with its top rudely carved. — Scrub jungle; much stunted date; long coarse grass; dark clayey soil.
6 m. 2 f. Túlagáon. Wet and dry cul-
-tivation. — The Villagers here possess more cattle than I have so far seen, since Rayagadda. The Village pig is not wanting, nor the pariah dog. I have seen no donkeys for some time; nor dhobies. — There is a good deal of open ground around this Village; then

scrub jungle again. — The Villagers here understand Hindustani, besides Oriya. —
Half a mile further, a pond or tank. Irrigation is carried on under it, as well as round its margin on three sides. Country comparatively open. — Good ground for a large camp: good grass; plenty firewood; water from the Sandul River close by; ample straw and grain; other supplies procurable. — The large Village of Nórola to the right; heavy, dark soil; no stone or rock.
Sorjigura. Wet and dry cultivation; numerous cattle. There are carts here with solid wooden wheels, 4' diameter, made of three segments; wooden axles. —
8 miles. Nearing the Village of Maudel, a Tank; gardens of sugar cane; rice fields; a few young trees planted, fenced in and taken care of. The Village is of a good size, and there is much culti-
-vation all round. Soil nearly black. Country open. From here leads a track to Bhavánipatnam (which is the popular

timber, especially matti; but little undergrowth.

10 m. 3 f. Streamw; waterway 20'x6'; high banks; gravel bed. — The hill range on the left rises up to nearly 3000 feet, and is well wooded. — Small nullah 10'x5'. — Abundance of Kunkur lime stone about.

11 m. 50 yds. Streamw, 25'x6; stony bed, good banks; no rock visible. — All jungle, no cultivation.

11 m. 5 f. 176 yds. Soriqura. A few huts in a small clearing in the midst of a dense jungle. — A kind of wild Ginger grows here; the people use it medicinally, to heal sores.

November 29. Soriqura to Assurgor.

Distance 10 m. 6 f. 67 yds. Height of Assurgor above M. S. L. 645. — Descent from Soriqura to Assurgor 211'. — Distance of Assurgor from Vizagapatam 192 m. 7 f. 75 yds. —

Heavy dew in the morning. Thermo. at 6 am. 57°F.

An armed man, sent from Lonjigar to my camp for assistance, and carrying sword and hunting knife, led the way. — The track runs alongside of the Sandut Streamw, through a dense forest of good timber trees, old and young. Matti abundant; some yégi, sál and blackwood. An ample stock of timber for railway sleepers &c. — Soil, Virgin. —

1 m. 6 f. 117 yds. Crossed an affluent of the Sandut Streamw, 160' wide, and 16' deep in flood. Bed, shingle and sand; ~~banks high and low alternately~~, the lower side flooded in the rains. — All virgin jungle and forest here, without a patch of clearing or cultivation, for more than a mile. Here I heard the first jungle cock in these parts. —

Village of Sadamarra, with a large pond or tank. — Country flat. Soil, light clay with sand. — In the third mile the jungle becomes lighter. — Some paddy fields and dry cultivation. —

Trees: Appa, Matti, fig, tamarind, mango, stunted date, gooseberry and other jungle trees.

Traffic. 90 bullocks from Bimha to Parvatipur, with paddy. — The ground is irregular, broken and undulating; but there is no obstacle to road or rail-way.

3 furl: further a small stream, needing a 6' culvert. — Some paddy fields. — Hill ridges to the right and left of the track, 3 to 4 miles apart; the hills rising upwards of 2000' above this, well wooded; fit for coffee, tea and cinchona.

7 m. 176 yds*. Village of Boreguda. — Some dry cultivation in the midst of jungle.

Traffic. Pack bullocks from Parvatipur going northwards to bring grain. — The Fall from the Summit Level to this* is 220' in 3 m. 3 f., or about 1 in 80. But this gradient can be eased by keeping on higher ground and throwing the foot of the descent a mile further out; whereby a gradient of 1 in 100, for a distance of 4½ miles, may be obtained. This represents all there is, on this side, in the shape of a Ghaut. — It is only the present

track that descends somewhat rapidly (as the section will show) from the summit; but there is ample room, by taking the line on higher ground along the hill side, for an easier descent. The ground is, on the whole, Easy; and there will not be much hill side cutting required.

8 m. 1 f. The country now becomes flat again. The village of Dengen on the right, Kargati on the left; near the latter a large Pond or Tank, with wet fields under it. — Some dry cultivation surrounded by jungle. — Ground irregular and undulating, and cut up by gullies. — Soil, red clay.

* 9 m. 2 f. 21 yds. Boundary between the Bissemkuttak (Jeypore) and Kalahundy States, marked by heaps of Stones where the line crosses the track. — Dense jungle of trees and shrubs. Mattie wood plentiful. — Stony soil. — Sigriguppa, the first village in Kalahundy territory. — Mud-and-thatch Bungalow, without windows. — From here four tracks branch off, viz: to Lonjigar, Boudesor*, Assurgor and Ombadola. — Forest of large trees; some good

* via Santpur and Dadpur

to repair my broken tent poles, but there was no carpenter in the place. Weavers there are, but no tailors or chuck-ers: anything required in this line by the well-to-do people of Oubadola has to be procured from Parvatipur.

November 27. Oubadola. Sunday. Dew at night and in the morning. Thermo. at 6 a.m. 55°7. Fine day. Despatched one camp 10 miles ahead to Soriguru. En route to Bogor.

From Oubadola to Bogor.

November 28. Oubadola to Soriguru 11 miles 5 furl 176 yards. Descent from Oubadola to Soriguru 269 ~~240~~ feet. Distance of Soriguru from Vizagapatam 182 m. 1 f. Height of Soriguru above M.S.L. 856'. Thermo. 6 a.m. 60°. —

Through paddy fields and jungle. At the 5th furlong a stream 35' wide, 7' deep in flood; good banks, gravel bed. Planted topes alternating with jungle and dry crops. — Village of Kum-drabal. Small stream 10'x4'. Jungle. — Bijapuram: Jungle and dry cultivation.

Ithapur: jungle and dry cultivation. — The road, if so it may be called, is here a broad and well beaten bullock track, leading through jungle.

At 3 miles 5 furl. 153 yards from Oubadola the Summit Level is reached by a steady and gentle ascent, without a Ghaut or anything approaching a Ghaut. This summit level is 1233 (1296) feet above M.S.L. and 87 (100) feet above Oubadola: a rise of 1 in 225 from the latter place.

From this summit begins the descent Northwards. — A small stream requiring a 6' culvert. — Gneiss rock, with quartz and felspar. — Jungle.

4 m. 2 f. Village of Baupur. Dry and wet cultivation. Undulating ground. — 4 m. 5 f. 197 yds a stream, 30' wide, 10' deep in flood. Banks high. Rock formation on one bank. — Broken ground; stony soil. — A furlong further another small stream 9'x3'. Much rock about here. — Soil: clay, with some kunkur. — Jungle. — The easy decline continues. — 5 m. 3 f. 26 yds. Village of Perramarram.

Extract from

Notes of Reconnaissance.

Ombadola to Bogor.

26th Novr. to 3d. December 1881.

November 26th. Ombadola

Went out and examined the lay of the Country with reference to the proposed Railway.

Traffic. 30 pack Bullocks from Maringi and Kurpám, without loads, going to the Naridapúr Taluq of Jeypore, via Kalahoondy, to bring down Grain &c.

190 pack bullocks coming from Kalahoondy going to Parvatipur, with Rice, Gingelly and Mustard seeds, Bengal Gram and paddy.

Cooly Labour. This is at present very cheap, there being so little demand for it, except for agricultural operations when the Labourers are paid in Kind; Coolies can be had at 1/2 as per day. If there were a heavy and steady demand for Labour, as on a line of Road or railway, the daily rate would doubtless be higher.

Artizans. These are very scarce at Ombadola. I could get a jungle blacksmith

C E No. 3055 - 16 - 12 - 81

P. W. C. No. 7509.

No. 20
B

Dated Camp Bogor
4th December 1881
Rect. 20 Dec. 81

From The Secr. to Govt.
on Special Duty
Vizagapatam.

To The Chief Engineer
& Secretary to Government
P.W.D.
Madras

Cyclostyled: 3 10

Subject
Report on Reconnaissance
from 18th November
to 4th December 1881
Entd. in Receipt Regr.

is a good bridge site for the Tel Nadi near Bogon, with rock visible in the bed on the Northern bank, and Extending most probably across the River not very deep below the sandy bed. This bed is rather treacherous; in trying to cross this morning my horse sank with me up to the girths into the quicksand. The Water is sufficiently low to permit fording. In heavy monsoons the banks are flooded on both sides; hence considerable embankments will be required in order to have the Bridge, as it ought to be, at least 30 feet above the deep bed.

8. The last letters and papers, I have received, are dated the 13th November. I despatch this post to Birsenkuttak by the Tát Rajah's Elephant which returns from here, according to agreement; thence the packet is to be forwarded by the beat constable to Rayagadda. I scarcely expect to receive any further tappal until I reach Areng. I write to Rayagadda and Vizagapatam to re-direct to Raipur. I request that all letters may, till further notice

Despatcher
To note

notice, be addressed to "Raipur, C.P.
to await arrival."

9. Fever begins to prevail in the
Camp.

10. We leave this to-morrow for
Karial, Kumma &c.

I have the honour to be
Sir
Your most Obedient Servant

K.F. Nordmann
Executive Engineer
on Special Duty

P. W. C. No 7509.

No. 20
B

Dated Camp Bogor
4th December 1881
Rect. 20 Dec. 81

From The Secr. Engineer
& Special Duty
Vizagapatam.

To The Chief Engineer
& Secretary to Government
P.W.D.
Madras

Enclosures: 3 10 Sheets

Subject
Report on Reconnaissance
from 18th November
to 4th December 1881
Entd. in Receipt Regr.

C E No. 3055 - 16 - 12 - 81

the trade and old military routes which lead from Chicacole to Rampatee, one via Bateli, Mukuli, Dádpur, Junágarh, Kanker, Wairágarh and Umber (No 44 in the Quarter Master General's Route Book); and the other via Junágarh, Karial, Arang &c. (No 45 in the same book).

6. The short cuts, marginally indicated, which might be obtained by using the Musa Ghaut, would scarcely compensate for the inconvenience and extra cost that would be caused by that Ghaut; the less so since those short cuts would have to cross several formidable rivers, besides passing through some otherwise difficult country.

1. From Bonderoor via Dadpur to Bogor
2. From Bonderoor via Furkel & past Ojarar to Badbeng
3. From the Musa Ghaut via Junágarh, Daspur & Manjher to Karial; or
4. From Manjhér via Borgáon & Polsodar to Kumma; or
5. From Manjhér via Borgáon, Kinapur & Balda to Torbor

7. Bogor is 601 feet above Mean Sea Level; 265 miles from Vizagapatam; and about 160 miles from Raipur, by the route via Kumma, Nara and Areng. There is

No 20
B

Camp Bogor
4th December 1881

From R.J. Nordmann, Esq.
Executive Engineer on Special Duty
To Colonel R.H. Sankey, C.B., R.E.
Chief Engineer and Secretary to Govermt. P.W.D.
Madras

Sir,

I have the honour herewith to forward the Report and "Notes" on the progress of the Reconnaissance from Oubadola to Bogor, and from Rayagadda via Singapur, Bonderoor and Dadpur; in continuation of my letter No 19/0 dated 26th ult.o (from Oubadola) and its enclosures. — The country traversed is described in detail in the Notes.

2. The route from Oubadola northwards has continued to prove an easy one. The only approach to anything like a Ghaut is a declivity which begins on the summit level*, 3 miles and 5 furlongs north of Oubadola. Thence the present track descends by varying but chiefly easy gradients to the 7th mile, with a total fall of 220 feet in 3 miles and

* 87 feet above Oubadola, and 1233ft above M.S.L.

3 fur.

3 furlongs, or about 1 in 80. The descent along the track at first is rather steep, immediately below the Summit; but there is no need for such a rapid descent, as there is room to take the line on higher ground along the hillside and so reduce the gradient which need not exceed 1 in 100, if the northern foot of the descent is thrown out as far as the 8th mile from Orubadola; which is quite practicable. This is all there is like a Ghaut, on this line.

3. Mr. Cormac, coming from Bondesor, joined me here on the 1st instant. I submit, in original, his Report on his March, and an approximate longitudinal section of the country travelled over by him. The altitudes given in his section, though nearly correct, are strictly only approximate, as he had only two detached Aneroids which read differently from mine (and a thermometer), and had not the "Battery" to refer to which came with my Camp. Moreover, the Aneroid readings on the sea coast are wanting to complete the exact calculations. A revised section will have to be prepared when those readings are all received. For this reason I defer, as I have already reported

as reported in my last letter, sending the section of my Route till I have all the sea coast readings. I hope to send the correct sections from Raipur; meanwhile the approximate altitudes, which are very nearly accurate, are indicated in the Notes.

4. It will be seen from Mr. Cormac's Report and section that the Singapur–Bondesor route, which passes over the Muisa Ghaut a mile North of Kundru, ascends to an altitude of nearly 1900 feet, and has a considerable Ghaut to descend on the Northern Slope; while the highest point reached on the Orubadola route does not exceed 1233 feet, with (practically) no Ghaut, or only a faint approach to one. Hence, other considerations on both lines being equal, the Bissemkuttak–Orubadola line must be considered preferable, for a railway, to that via Singapur and Bondesor. Nor is it advisable to take the line from Rayagudda via Singapur and Lonjigar to Orubadola, since there is a Ghaut to cross, upwards of 1500' high, between Singapur and Lonjigar (at Tirmuli).

5. At Dádpur Mr. Cormac crossed

the

the trade and old military routes which lead from Chicacole to Kamptee, one via Bâtéli, Mukuli, Dádpur, Junágarh, Kankér, Wairágarh and Umber (N° 44 in the Quarter Master General's Route Book); and the other via Junágarh, Karial, Arang &c. (N° 45 in the same book).

6. The short cuts, marginally indicated, which might be obtained by using the Músa Ghaut, would scarcely compensate for the inconvenience and extra cost that would be caused by that Ghaut; the less so since those short cuts would have to cross several formidable rivers, besides passing through some otherwise difficult country.

1. From Bonderor via Dadpur to Bogor
2. From Bonderor via Furkel & past Ojarar to Badbeng
3. From the Músa Ghaut via Junágarh, Daspur & Manjher to Karial; or
4. From Manjhér via Borgáon & Polsodar to Kumuna; or
5. From Manjhér via Borgáon, Bimapur & Balda to Torbor

7. Bogor is 601 feet above Mean Sea Level; 205 miles from Vizagapatam; and about 160 miles from Raipur, by the route via Kumuna, Nara and Areng. There is

No 3189/V. 24-12-81.

C&S Ns: 2698- 15-11-81.
3096- 20-12-81

Sd 9/1

No. 3189 W

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 24 Dec/87

Read the following:—

From Genl: Supdt. P.W. Workshops } No. 1441 W dy 16th Dec/87.

From Consg. Archt. to Govt No. 753 dy 22nd Dec/87.

The papers will be forwarded to the Consulting Architect to Govt. who is authorized to have the machine made up at the P.W. Workshops and charged to the estimate of the Post and Telegraph offices under "Contingencies" shewn he considers the machine necessary.

R.S.

23/12/87

Consg: Architect to Govt. with papers ref Genl Supdt letter 1+2 Enclos.

Genl: Supdt to P.W. Store

ROADS AND BUILDINGS.

P. W. C. No. 753-7-A.

From

The Consulting Architect
to Government,

To

The Chief Engineer, P. W. Department,
Buildings and Roads Branch.

No. 753

Dated 22 December 1881

Received 22

No. OF ENCLOSURES. 3

Machine for crushing stone.

Entd in Receipt Regr.

ROADS AND BUILDINGS.

No. 753

CONSULTING ARCHITECT'S OFFICE,
Chepauk, 22 Decr 1881.

From

THE CONSULTING ARCHITECT TO GOVERNMENT,

To

THE CHIEF ENGINEER, PUBLIC WORKS DEPARTMENT,
BUILDINGS AND ROADS BRANCH.

SIR,

I have the honor to return the drawing and Estimate received with your Memo No 3096 dated the 20th December 1881

The crushing machine seems to me good and simple and I can suggest no improvements with the view of cheapening it.

I have the honor to be
sir
your most obedt servant.

H Chisholm.
Consulty Architect to Govt

Enclosures.

1 plan
1 Estimate
1 Letter.

his requirements, and

ROADS AND BUILDINGS.

P. W. C. No 753-7-A.

From

The Consulting Architect
to Government,

To

The Chief Engineer, P. W. Department,
Buildings and Roads Branch.

No. 753

Dated 22 December 1881

Received 27 [illegible]

No. of Enclosures. 3

Machines for crushing stone.

Entd in Receipt Regr.

Lr 2698 a/15-11-81. P.W.D

Memorandum

From the Consg. Architect to Govt Lr 623 a/ 9th Novr/81.

The Consg. Architect to Govt is requested to submit in Communication with the General Supdt P.W. Stores a sketch and estimate for constructing a suitable machine for applying the crushing test to stone.

(By order)

Sgd/ Ross Thompson.

Lt Col. R.E.

Ag. Dy. Ch. Engr.

P.W.D

To The Consg. Architect to Govt.

Dy C.S.

Despatched 16

ROADS AND BUILDINGS.

P. W. C. No 6556

From

The Consulting Architect to Government,

To

The Chief Engineer, P. W. Department, Buildings and Roads Branch.

No. 623

Dated 9th November 1881

Received 10th

C.E. No 2698 a/15-11-81

No. of Enclosures.

Requests specimens of Sholin-ghur granite to be sent to Secretary of State for experiment.

Entd in Receipt Regr.

ROADS AND BUILDINGS.

No. 623

CONSULTING ARCHITECT'S OFFICE,
Chepauk, 9th Novr 185 .

From

THE CONSULTING ARCHITECT TO GOVERNMENT,

To

THE CHIEF ENGINEER, PUBLIC WORKS DEPARTMENT,
BUILDINGS AND ROADS BRANCH.

SIR,

I have the honor to inform you that I have applied severally to the Principal of the Civil Engineering College, The Superintendt Government Workshops, The Superintendent Harbor works, and the Superintendent Perambore Workshops, to have the accompanying Specimens of Stone crushed with the view of ascertaining its suitability to support continued heavy pressure and that not one of these Officers possess the appliances necessary.

As several parts of the New Post & Telegraph office are bearing the maximum safe load ($\frac{1}{20}$th crushing power) I should feel much obliged if you would forward these specimens to the Secretary of State and have them crushed by an expert.

I have the honor to be
sir
your most obedt servant

R Chisholm.

Enclosures.
one box containing 10 pieces of Sholin-ghur stone.

+ In a closed Box in the office

Trincomalee, Royapooram.

No 3. View taken from Abercrombies Battery.

No 4. —Do— of the South Arm.

" 5 — do — do —

" 6 — do of the North Arm.

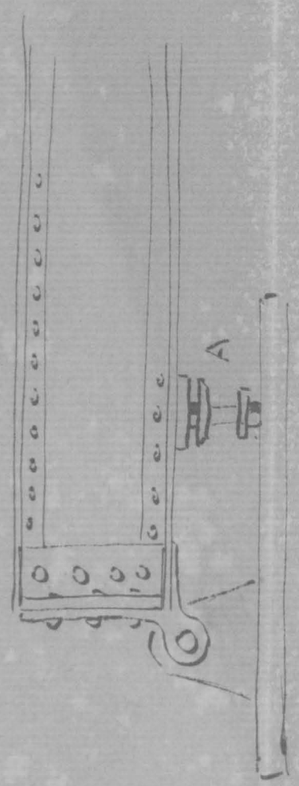
R.P.

Plan 3183 Dr. 23-12-81.

22/12/81

Despatched
6 Photographs
27/12/81

Engine & Steel a pair of 13000 lbs.



Pair pins & steel
Gun Carriage

P. W. Dept.

No. 3183 dated 23rd Dec. 81

To,

The Secy. to the Govt. of India,

P.W. Dept.

Sir,

Referring to your letter No. 410 M dated 13th December 1881, I am directed to forward herewith a copy of each of the following Photographs of the Madras Harbour as it appeared after the storm of the 12th November last.

No. 1. View taken from the Lighthouse.

" 2. Do. from the Railway

the storm of the 12th November last.

P. W. C. No. 7468

Rec'd. 19 Dec.

I have the honor to be,
Sir,
Your most obed. servant,

Wm. G. Cumming — Major R.E.

Offg. Asst. Secy. to the Govt. of India.

Des: Brs. 16th & 17th Dec. 1881.

Dstd. in Receipt Register.

No. 410 Me.

All communications should be addressed to the Secretary.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

Civil Works,
Miscellaneous.

To, The Secy to the Govt of Madras,
Public Works Department.

Fort William, 13th December 1881.

Sir,

Referring to the Despatches addressed by the Madras Government to the Secretary of State, Nos 71 W/2855, and 74 W/2928, dated 15th and 23rd November, 1881, respectively, I am directed to request that, with the permission of His Excellency the Governor, the Government of India may be furnished with copies of any photographs which may be available of the Madras Harbour as it appeared after

4E 3182 Br. 23-12-81.

No 9/1

No. 31824

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 23rd December 81

Read the following:—

From the Cong: Architect
to Government ..... P. E No. 739 d/ 20th
December 1881

The Consulting
Architect to Govern-
-ment will submit for
sanction plans and es
timates for alterations
and additions to the
extent shown in his
rough plans -

R.S. (signed) Ross Thompson
Secd RE
Ag. Under Secy to Govt PWD

To
The Cong: Architect
to Govt with
Plans.

Send
23/12/81

P. W. D. No. 7528

ROADS AND BUILDINGS.

From
The Consulting Architect
to Government,

To
The Chief Engineer, P. W. Department,
Buildings and Roads Branch.

No. 739

Dated 20th December 1881

Received 21

No. OF ENCLOSURES. 2 Plans

Amir Mahal Zenana -
Additions required by H. H.
The Prince of Arcot

Sanctioned
23/12/81

Sent to Accepted Engr.

ROADS AND BUILDINGS.

No. 739

CONSULTING ARCHITECT'S OFFICE,
Chepauk, 20 Dec^r 1871.

From

THE CONSULTING ARCHITECT TO GOVERNMENT,

To

THE CHIEF ENGINEER, PUBLIC WORKS DEPARTMENT,
BUILDINGS AND ROADS BRANCH.

SIR,

Enclosures.

I have the honor to forward herewith a rough Sketch plan of the alterations which the Prince of Arcot desires should be made in the Zenana buildings of the amir mahal.

You will observe that they are very extensive and will probably cost from 65.000 to 70.000 Rupees.

I may mention that the zenana originally designed by me covered an area twice as large as the one constructed but the Government were most particular in restricting the area of this building and I was ordered to reduce it to the least possible dimensions.

I have the honor to be
sir
Your most obed^t servant
W Chisholm
Consg Architect to Govern^t

In Mr W. Hudson

Fr orders

In accordance with the request of the H. L. I in company with Mr Chisholm and Major Baynes inspected the premises now occupied by the Prince of Wales also minutely observed as were the house and grounds & the buildings & the Zenana to allow of an opinion being formed as to his precise requirements

The plan originally framed was considered to be on too extensive a scale, and the Prince agreed to several

reductions

Mr. Chisholm has embodied all the additions finally decided on in the annexed Cargo plan where these are shown in the yellowish tint

He Estimates the total Cost approximately at from Rs 65,000 to Rs 70,000 and as it could not reasonably take up his time to ask him to go into details before knowing the limit to which the Govemnt is prepared to go in meeting the Prince's wishes I submit the matter in its present form

For orders on this point

Pttt

21-12-81

The Hon'ble Sanderson

No 3179 W dt 22 Dec 87

Sanctioned.

17.12.87

17.12.87

Presidency P. W. Workshops.

P. W. C. No. 7448

From

THE GENERAL SUPERINTENDENT,
P. W. WORKSHOPS,
MADRAS,

To

THE Dy Chief Engineer
D W Rs
Madras

No. 2421 W

Dated 15
Despd. 16 } December 1881.
Received 17

ENCLOSURES.

Subject.

Enquiries if an Engine & Boiler of the W Workshops sent to messrs McDowell & Co Madras since March 1879 - may be disposed of to them for Rs 750- as offered by them

B. No. 3179 W dt 22 Dec 87

Enclosed in Receipt Regr. with order.

Gen Supt S. W. W.
Ex S. W. O.

Copy 19.12

PRESIDENCY PUBLIC WORKS WORKSHOPS,
Madras, 15th December 1881.

No 2421 W.

From

THE GENERAL SUPERINTENDENT,
PUBLIC WORKS WORKSHOPS,

To

THE *Deputy Chief Engineer P.W.D.*
Chepauk.

SIR,

Enclosures.

I have the honor to report that 1st March 1879 Messrs M.Dowell & Co hired from the Workshops an Engine and Boiler, and up to date they have paid Rupees 2,087-10-0 as hire for the same. They now wish to purchase the Engine and Boiler, the book price of which is 2,000 Rupees, and I beg to enquire whether I may accept their offer of 750 Rupees for the Engine and Boiler, which are not required by the Workshops.

I have the honor to be
Sir
Your Most Obedient Servant

M.C.Baddeley Lt.R.E
Genl Supte P.W. Workshops

P.P. 15/12

Pr. Chg 7571

Govt. of {188 } Madras.

Judicial

To *P.W. Dept.*

Dated 21 } *Dec* 188*1*, *No.* 2615
Recd. 22 }

Nos.

B. No 3178 Way 22 Dec 81

Communicated
to Lt Col Ross-Thomp.
Son R.E.

C&O Rs: 3017- 14-12-81

Do 1/1

Dstd in Receipt Regr.
To Lt Col Ross Thompson R.E.
Copy
23/12/81

Judicial Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

READ the following

Memorandum from the Chief Engineer Public Works Department dated 14th December 1881 No 3017

Order thereon 21st December 1881 No 2615

Communicated to the Collector of Madras and the other members of the Committee appointed by G.O. dated 2nd December 1881 No 2475

(True extract)

J Burkey
Actg: Under Secretary

To

The Chief Engineer Public Works Department

Ad

Ref. 4
8,000-1-4-04.

DEPARTMENT.

Paper taken out of the Records from the charge of the Referencer.

Press / Miscellaneous / Routine No. 2475 dated 22-12-81 190 .

Date taken out.	For what purpose.			Initials of clerk taking the paper or of attender.	Date returned.	Initials of attender.
	Department.	C. No.	Year.			
27-9-06 Ceylon Papers					9/4/06	

Date taken out.	For what purpose.			Initials of clerk taking the paper or of attender.	Date returned.	Initials of attender.
	Department.	C. No.	Year.			

1.10.04 √

B № 3177 Way 22 Dec 87

Communicated to
the Supdg Surv 4 Circle
& The Sar P.W.D.

Ag

21-12-87

Gobt. of {188 } Madras.

Ptn to No 7503

To _____

Dated
Recd. 20 } Dec 188/, No.

Nos.

B № 3177 Way 22 Dec 87

Directing Accts Asst
to place Rs 800 at the
disposal of PW dept
for petty construction
& repairs

Gp 2380 W - 18-9-79
28)57 W - 17-11-81.

S.S. 4 Circle (Parel to Dadar) Sarpowar
Dejad
23/12/87

Entd. in Receipt Register
W Thorden

Financial Department.

P. W. C. No 7513

Read 6 Dec. 81

PROCEEDINGS of the MADRAS GOVERNMENT.

READ the following

Proceedings of the Public Works Department dated 17th November 1881 No 2875 W.

From the Archdeacon of Madras dated 5th December 1881 No 345.

From the Accountant General, Madras, dated 6th December 1881 No 4780.

Order thereon 19th December 1881 No 2460

The Accountant General will place the sum of Rs 800 at the disposal of the Public Works Department for the purpose stated, debiting the amount to the lump grant for petty construction and repairs, as the Government learn from the Venerable the Archdeacon that the greater part of the allotment for Nilgiri Churches - works of petty construction and repairs - has been already appropriated.

2. The attention of the Public Works Department will be drawn to G.O. No 1378 dated 8th September 1879.

(True Extract)

[illegible]

Asst. Secretary.

+ Sub Dept

In this case, the Church Committee Pres. with whom attached Lo. to the estimate, implied that the Sum of Rs 800 was still available.

The Public Works Dy Department.

Entd. in Receipt Regr.

All communications should be addressed to the Secretary.

No. 444. a. g.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.

General.

To The Secretary to Government.
Public Works Department.
Madras.

Dated Fort William 15th December 1881.

Sir,

In acknowledging the receipt of your letter No. 2602 W. of the 25th October 1881 submitting the first revised estimate 1881/82 and budget estimate 1882/83 of Rs XXVII of 84. "Other Pubic Works", I am directed to enquire if the Madras Government is prepared to relinquish the sum of Rs 4000 - the difference between the modified x grant to date and the revised figure* shewn in your estimate for Imperial ordinary - Other services

x Rs 3.27.712. ✓
* Rs 3.23.587. ✓
4125

I have the honor to be,
Sir
Your most Obedient Servant.

Allen Fraser Major General R.E.
Secretary to Government of India.

RM
15/12/81

2. In my letter No 2726 W of 3rd November 1881, to which no reply was received, information on this point was asked for -

CW/ FB 21.12.81

Dd 4/12/81

B No 3175 W a/22.12.81

B L. C No 2602 W 25th Oct 81.
B " " 2726 W 3-11-81.

1

Do 9/1

CH 29/12

No 3175 b

P. W. Dis. 7563

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 22nd Dec 1881.

Read the following :—

From the Govt of India (Ry) No 441 A.B. dt 15 Dec 1881.

Ordered that the following reply be sent.

Forwd P. W. Accts with copy of letter to the Govt of India

(Ry) No 3176 dt 22nd Dec 1881.)

Read 24/12/81

To The Secretary to the Government of India P. W. Dept.

Sir,

In reply to your letter No 441 A.G. dated 15th Decr 1881, I am directed to state that this Government is prepared to relinquish the sum of Rs 4,125 under Civil Buildings Telegraph on account as follows.

Establishment Charges on Rs 15,000 withdrawn by the Govt of India in this letter No 77A-MC — Rs 3,750

Do Do accounts with Do No 2515 dt 15 Oct 81 — 375

Tools and Plant on Do Do — —

Rs 4,125

Rec'd 22 Dec '81.

Go 2988 W. 22-12-81.

B No 3174 Wks 22nd Dec 81

Do 1/1

Dated in Receipt

No. 1 Total

[Exr. Wks. Form No. 141.]

Dates of Receipts of Divisional Accounts in the Examiner's Office.

Divisions.	Days post from Madras.	Accounts for October/81 Received After Due date	Accounts for Nov 1887. Received Before	Divisions.	Days post from Madras.	Accounts for October 1887 Received After Due date	Accounts for Novem 1887 Received Before
		Nov 81	December 1887.			Nov/81	December 1881.
~~Arcotpore~~	~~0~~			Madras Harbor Works ...	1	21	. .
Architect	1	23	. 20	Madura	2	.	. 15
~~Bangalore~~	~~1~~						
~~Bellary~~	~~1~~			Negapatam	2	21	. .
Buckingham Canal	1	-	. .	Nellore	2	.	. .
~~Calicut~~	~~1~~			~~North~~ North Arcot ...	~~1~~	.	- 20
~~Canara~~	~~1~~			~~Ongole~~	~~1~~		
Chingleput	1	.	. 20	~~Ootacamund~~	~~1~~		
~~Chittoor~~	~~1~~			~~Pondicherry~~	~~1~~		
Coimbatore	1	.	- 19	Presidency	1	-	- 19
~~Cuddalore~~	~~1~~			Do. Stores	1	29	. .
Cuddapah	1	.	. .	Do. Workshop ...	1	-	- 15
~~Dindigul~~	~~1~~			~~Rajahmundry~~ Singaram	5	30	. .
Dowlaishwaram Workshops ...	5	28	. .	Salem	1	25	- -
~~Guntoor~~	~~0~~			~~Sattur~~ South Arcot ...	3	-	- .
Gódávari, Eastern Delta ...	5	28	. 20	Tanjore	1	23	- -
Do. Western do. ...	5	24	. .	~~Tindivanam~~	~~1~~		
~~Guntoor~~	~~1~~			Tinnevelly	3	-	- 20
Kistna, Eastern Delta ...	4	28	- -	Trichinopoly	1	-	- 20
Do. Western do. ...	4	23	- -	~~Vellore~~	~~1~~		
~~Kurnool~~	~~0~~			~~Vizagapatam~~	~~0~~		
~~Madhanapalle~~	~~0~~			~~Wynaad~~ West Coast. ...	4	28	/ -

MADRAS,
December 1881.

To

The Secretary to Government, P. W. D.

D. P. Condon
Examiner, P. W. Accounts,
Madras.

Abstract for November 1881.

No. received by due date ...	10
,, due	16
No. of Divisions ...	26

21/12

B No 3173 W dt 22nd Nov 81.
Communicated to
Superintending Engineers.
Cy
20.12.81

P. W. C. No 9479

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
MILITARY WORKS.

To

Circular No. 31 Public Works.
Dated December 3, 1881.
Received 19 Dec 81

60. Se.

9

S&I
Mil Dept
23/12/81

20/1

B No 3173 W dt 22nd Dec 81

Rule regarding storage of gunpowder.

No. 457, P. W. D. Press—5-12-81—700.

Entd in Receipt Register
W Worder

Circular No. 31 Public Works.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

MILITARY WORKS.

Fort William, December 3, 1881.

Governments of Madras, Bombay, Bengal, North Western Provinces and Oudh, and Punjab, in the Public Works Department.
The Chief Commissioners, Central Provinces, British Burma, Assam and Coorg.
The Resident at Hyderabad.
The Agents to the Governor General for Central India, Rajputana, and Beluchistan.
The Accountant General, Public Works Department.
The Inspector General of Military Works.

Copy of the following is forwarded to the Local Governments and Administrations noted in the margin for information and guidance.

By Order,

W. G. CUMMING, Major, R. E.,
Offg. Asstt. Secy. to the Govt. of India.

No. 1083 D, dated 4th November 1881.

From—Colonel W. M. Lees, Offg. Secy. to the Govt. of India, Military Dept.,
To—The Secretary to the Defence Committee.

Ordnance Department.
Stores.

In reply to the letter from the President, Defence Committee, No. 123, dated 8th October 1881, I am desired to state that the Government of India approve of the proposed rule in regard to the storage of gunpowder, and sanction its adoption in the three Presidencies, *i. e.*, "that, as a general rule, to economise space, powder barrels should be stowed in magazines in stacks limited to five barrels in depth, each tier containing three rows of barrels. The passage between the stacks never to be less than 3 feet in clear width, but in new structures passages of not less than 3 feet 6 inches in width should be arranged for. In very damp climates the barrels should be placed on stacks in single tiers."

2. The rule will be published in Army Circulars, and embodied in the Ordnance Code.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

MILITARY WORKS.

To

Circular No. 31 Public Works.

Dated December 3, 1881.

Received

B No. 3173 Wks 22nd Dec 81

Comm^r to Govt

Sec/ RT

Govt

Mil Dept

Rule regarding storage of gunpowder.

No. 457, P. W. D. Press—5-12-81—700.

Circular No. 31 Public Works.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

MILITARY WORKS.

Fort William, December 3, 1881.

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The Chief Commissioners, Central Provinces, British Burma, Assam and Coorg.
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C A W

Mr Chisholm is to be asked to complete his plans & estimate & sanction to the extent indicated in his rough plans

21/12

CAW

Plan draft
letter with
photos
and number
2

AHH

CAW

Leave all
mounted with
left hand margin
I will subsequently
write some remarks
in pencil to be
printed on the
letter

19/12/50

C No

2d- use
See one copy
of each photo
as mounted

19-12-11

W The accompanying Roll contains a copy of each.

R.S. 19-12

W C. No: 7468

The Statement on the other side shows the different views of the work - and the number of copies of each view used in office - Kindly say what the Govt. of India should be supplied with.

R.S.

19-12.

Photos of the Harbour - taken after the Storm of the 12th Nov/81

Copies

+2. Views - taken from the Light-house.
3 - do ——— do — Railway Terminus.
3 - do ——— do — Abercrombies' Battery.
3 — do — No 9 - of the South Arm.
3 — do — " 10 ——— do ———
1 — do — " 11 — North Arm.

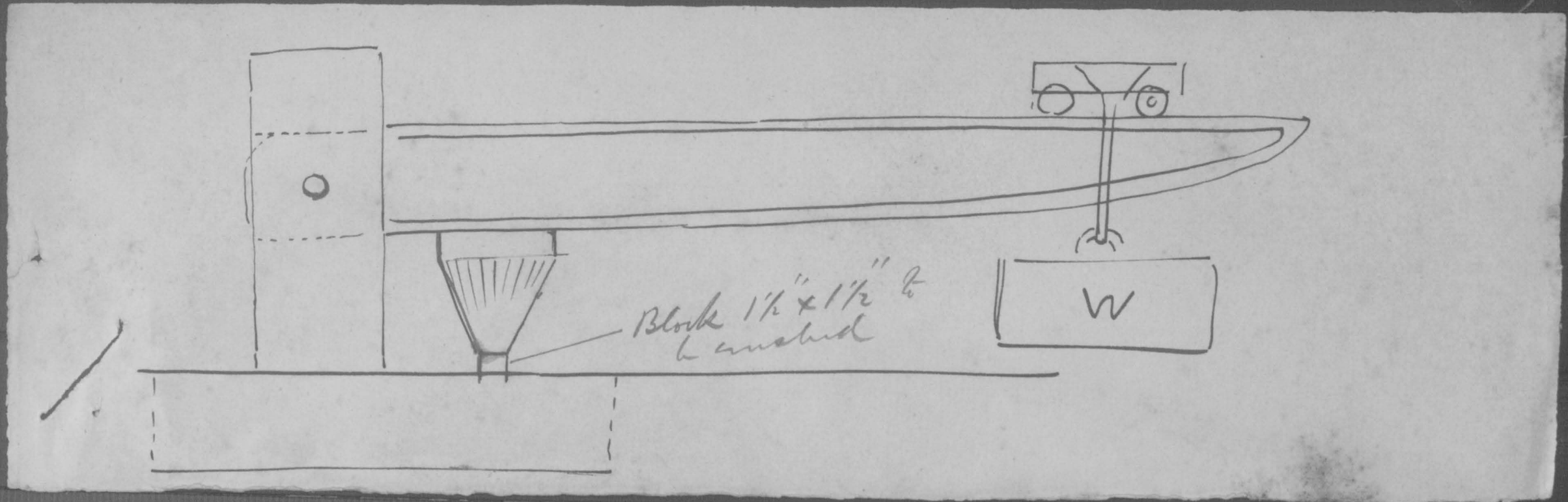
18/12/81

+ There were mounted for Members of Govt. but were subsequently ordered to be kept over by W. R.S.

C.A.W

Request - C.A. in
Communication with
G.S. P.W.W. to Submit
a Sketch and Estimate
for Constructing a Suitable Machine
for applying the Crushing
test to Stone.

14/11/81


Block 1½" × 1½" ⌀
bushed
W

P. W. 188/ DEPARTMENT.

No. 7496

From

The General Supdt
P. W. workshops
Madras.

No. 2441 W
Dated 16. Decr 87.
Recd. 19 —

Entd. in Receipt Regr.

SUBJECT.

Forwards a plan & estimate for Rs 717 for a Machine to test the strength of stone under compression with his remarks thereon.

Disposal.

Cr No. 3096 of 20-12-87

Forwarded with reference to Memo: No. 2698 of 15th November 87 to the Consg: architect to Government for report whether the proposed machine would meet his requirements, & if

any cheaper but
equally efficacious
apparatus.

(By order)

Sgd/ R.T.

Ag. Dy. Ch.-

To

The Consg. architect
to Govt in original
to be returned.
Encloz 2
Secs in / return to
Mr Louis.
26/12/81

Ch. No 2698 a/ 15-11-81.

C. No: 7496.

D.W.

It has recently been decided to restrict the operations of the Workshops.

R.S.
17-12.

C.W.

This has been Estimated for by Ws desire. Please send on to Mr Chisholm and enquire whether this would meet his requirements - and whether he could suggest - and if Chapman and Equality & Efficacious apparatus.

19.12.81

Bd 3184 }
Bd 3185 } w
orginal

file retd to

law

reg urdnr geld

Forschers Memorial

24-12-71

GENERAL RECORD DEPARTMENT.

Paper taken out of the Records from charge of the Record-keeper.

Department Pub Works

E. M. C, or G. O., No. 3199-3200 W

~~Desp. from or to England, No.~~

Volume General No. Dab

Date 31-12-81

To whom given for Secretary

hence from Mr. D Parsons

For Current No. Memo 28-2-96 ~~189~~ Department

When taken out 11-2-96

Initials. HH