

- (1) பக்கங்களின் எண்ணிக்கை 14
 (2) புதுக்கித் திருப்பிய நாள் 11.9.01
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் 600

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

102

P. W. 5. துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	<u>2445</u>	அச்சகம் பலவகை
நாள் :	<u>12-9-1891</u>	198

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

7. Sheets

2445
1

12TH SEPTEMBER 1891, No. 2445 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following paper :—

From E. DUCANE SMITHE, Esq., Officiating Under-Secretary to the Government of India, Public Works Department (Civil Works—Miscellaneous), to the Secretary to the Government of the Punjab, Public Works Department, dated Simla, 22nd August 1891, No. 309 M.

I am directed to acknowledge the receipt of your letters Nos. 343 C., dated the 26th June 1891, and 4478, dated the 6th August 1891, and in reply to paragraph 4 of the former to say that the scales should be classified as mathematical instruments and included among the instruments referred to in the note to paragraph 63 of chapter X, volume I of the 5th edition of the Public Works Department Code, *i.e.*, to be obtained on indent under the special sanction of the Chief Engineer. A moderate supply of scales and rules for issue on indent will be obtained by the Mathematical Instrument Department and by the Roorkee Workshops.

No. 310 M.

Copy, with copy of the letters referred to, is forwarded to the Revenue and Agricultural Department for information and with a request that the Mathematical Instrument Department may be instructed to indent for a moderate supply of the scales which are manufactured by Mr. W. F. Stanley, 4 and 5, Great Turnstile, Holborn, London, England, the agents in India being Messrs. John Fleming and Company, Bombay.

(By Order.)

(Signed) E. DUCANE SMITHE,
Officiating Under-Secretary.

No. 311 M.

Copy, with copy of the letters referred to, is forwarded to the Government of the North-Western Provinces and Oudh for information and communication to the Superintendent of the Thomason Civil Engineering College, Roorkee.

(By Order.)

(Signed) E. DUCANE SMITHE,
Officiating Under-Secretary.

No. 312 M.

Copy, with copy of the letters referred to, is forwarded to the Local Govern-

The Governments of Madras, Bombay and Bengal.
The Chief Commissioners of the Central Provinces, Burma, Assam and Coorg.
The Residents at Hyderabad and in Mysore.
The Agents to the Governor-General in Central India, Rajputana and Baluchistan.
The Director-General of Railways.
The Director-General of Telegraphs.
The Consulting Engineers to the Government of India for Railways, Calcutta, Central Division and Lucknow.

ments and Adminis-
trations marginally
noted for information
and guidance, and to
the Director-General
of Military Works for
information.

(By Order.)

(Signed)

E. DUCANE SMITHE,
Officiating Under-Secretary.

ENCLOSURES.

From the Secretary to the Government of the Punjab, Public Works Department, to the Secretary to the Government of India, Public Works Department, dated 26th June 1891, No. 343 C.

I have the honour to forward, for information, one set of Rai Bahadar Gunga Ram's calculating scales, and one pamphlet containing rules thereon.

2. The pocket slide rules having been carefully and separately compared by three officers in the Province, and found correct, are now accepted in the Punjab Public Works Department for purposes of calculation in connection with projects.

3. These rules are so accurate and useful that they can with safety be recommended, and if the Government of India should approve of their general adoption in the Public Works Department, a supply can be obtained in ordinary course through the Secretary of State.

4. A doubt exists as to whether these slide rules should be classed as "Ordinary books of reference" to be purchased (Public Works Department Code, volume I, chapter 6, paragraph 7) by officers themselves, or as "Mathematical instruments" (Public Works Department Code, volume I, chapter 10, paragraphs 61-67), supplied on indent at the expense of the State, and a decision on this point is solicited, *viz.*, whether the slide rule, a mechanical contrivance to solve certain formulæ, should be classed as "an ordinary book of reference," or like a planimeter (a mechanical contrivance to solve the integral equation of a curve) it should be classed with "Mathematical instruments."

From the Secretary to the Government of the Punjab, Public Works Department, to the Secretary to the Government of India, Public Works Department, dated 6th August 1891, No. 4478.

With reference to your letter No. 257 M., dated 22nd July 1891, inquiring through what agency a supply of boxes containing Rai Bahadar Gunga Ram's calculating scales, with rules complete, may be obtained, I am directed to say that the following are the agents:—

In India—

Messrs. John Fleming and Company, Bombay.

In England—

Mr. W. F. Stanley,

4 and 5, Great Turnstile,
Holborn, London.

2. Mr. Stanley is also the manufacturer of these scales.

ORDER—dated 12th September 1891, No. 2445 W., Public Works.

Communicated to officers of the Public Works Department.

2. The Superintendent of Stationery will be instructed, in the Financial Department, to obtain a supply of these scales and rules for issue to the Public Works Department on indent.

(True Extract.)

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

To Superintending Engineers.

To the Consulting Architect to Government.

„ Superintendent of Works, Periyár Project.

„ Chief Engineer for Irrigation.

„ Consulting Engineer for Railways.

„ Examiner, Public Works Accounts.

Exd. A. J. Peters.

Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.
PUBLIC WORKS.

Dated September, 12th.

Recd.

Encl.

G.O., 12th Sept. 1891, No. 2445 W.

SEPTEMBER.

Calculating Scales

Docket from the Government of India forwarding correspondence relating to Rai Bahadar Gunga Ram's — and rules, communicated to the officers of the department, and the Superintendent of Stationery asked to obtain a supply of the scales and rules.

Calculating Scales of
Scales. Hms of
Scales for 18th. 2445
—

The enclosed would
represent that the
Scales should be sent —

The scales rules in
question are very useful
and proper and are
of great value of time and
work of mistakes in
calculations.

Some engineers (the
enclosed among them)
prefer to use scales
but for the majority the
scales rule is a great help
and it is desirable that
there should be some
of them in the
Department of day to

S. S. 9

2445
4

P. W. DEPARTMENT.

Read the following:—

From the *Govt of India* No 312 M d/22. VIII. 91

FOR ORDERS.

The undersigned
would suggest that
the draft should stand.

The slide rules
in question are very
useful and ^{when} properly
used save a great
deal of time and
risk of mistakes in
calculations.

Some engineers
(the undersigned
among them) prefer
direct calculation,
but for the majority,
the slide rule is a

As it seems these slide rules
are already known to W. I have
no further objection to the draft.

Wes
gdp

Done
S

great help, and it
is desirable that
those who wish to
use it should have the
opportunity of doing

so.

L
W

FOR ORDERS.

24452

Obs 5.17
Hm 8.17

No. 309 M.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
CIVIL WORKS.
Miscellaneous.

To

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

Simla, the 22nd August 1891.

SIR,

I am directed to acknowledge the receipt of your letters Nos. 343 C., dated the 26th June 1891 and 4478, dated the 6th August 1891, and in reply to paragraph 4 of the former to say that the scales should be classified as mathematical instruments and included among the instruments referred to in the Note to paragraph 63 of Chapter X, Vol. I of the 5th edition of the Public Works Department Code, i.e., to be obtained on indent under the special sanction of the Chief Engineer. A moderate supply of scales and rules for issue on indent will be obtained by the Mathematical Instrument Department and by the Roorkee Workshops.

I have the honour to be,

SIR,

Your most obedient Servant,

E. DUCANE SMITHE,
Officiating Under Secretary.

Documents accompanying.

Nil.

No. 310 M.

Copy, with copy of the letters referred to, is forwarded to the Revenue and Agricultural Department for information and with a request that the Mathematical Instrument Department may be instructed to indent for a moderate supply of the scales which are manufactured by Mr. W. F. Stanley, 4 and 5, Great Turnstile, Holborn, London, England, the Agents in India being Messrs. John Fleming and Company, Bombay.

By order,

E. DUCANE SMITHE,
Officiating Under Secretary.

No. 311 M.

Copy, with copy of the letters referred to, is forwarded to the Government of the North-Western Provinces and Oudh for information and communication to the Superintendent of the Thomason Civil Engineering College, Roorkee.

By order,

E. DUCANE SMITHE,
Officiating Under Secretary.

No. 312 M.

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The Chief Commissioners of the Central Provinces, Burma, Assam, and Coorg.
The Residents at Hyderabad and in Mysore.
The Agents to the Governor General in Central India, Rajputana, and Baluchistan.
The Director General of Railways.
The Director General of Telegraphs.
The Consulting Engineers to the Government of India for Railways, Calcutta, Central Division, and Lucknow.

ments and Adminis-
trations, marginally
noted for information
and guidance, and to

the Director General of Military Works for information.

By order,

E. D. Smithe
Officiating Under Secretary.

*To. The Secy to the Govt of Madras.
P.W. Department.*

2445/6
Enclosures to P. W. D. Nos. 310—12 M. of 1891. } S P

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To—The Secretary to the Government of India, Public Works Department.

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To—The Secretary to the Government of India, Public Works Department.

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In England—

Mr. W. F. Stanley,

4 and 5, Great Turnstile,

Holborn, London.

2. Mr. Stanley is also the manufacturer of these scales.

*draft
have
under separate
of 9-14-91*
As they printed, or known to be in
any way superior to those rules & rules
in use.
We are understood to buy them, and
are not told how to clean them if we
do.
Wm. "Revised" in fine.

No: 2445 W. of W. Genl
12th Sept. 1891. Supt. Dept.

Communicated to
officers of the
Public Works Depart-
ment.

The Superintendent of
Stationery will be
instructed in the Financial
Dept. to obtain a sup-
ply of these scales and
rules for issue to the
P. W. Dept. on indent.

S.

5 8/11

S. Eugros ✓
C. A. to Gool ✓
Supt of Works, P. Projects
C. E for Design
C. E for Rys
Esar. P. W. A. Lito

Int. Dept. 15/9/91

15/10/91

W. 91

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7*

*Recd. 4. 11. 91
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*Ken
x 1 copy for
Coburn*

Ch. H. H. H. H. H.

4677

1890

Public Works Department.

No. 24458

Dated 12 Sep

Despatched

Received

SUBJECT.

Calculating Scales

Docket from the party
Mr. K. K. Pandey cor-
respondence relating
to Rai Bahadur Jungu
Rani's — and rules,
came to the officers of
the Dept., & the Dept.
Stationery asked to obtain
a supply of the scales &
rules

⑨

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12/9