

(1) Number of pages 18
66. (2) Date of repair 5/87
(3) Initials of the Referencer lary

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

FINANCIAL DEPARTMENT

G.O. No.	1825	Press.
~~B.P. No.~~		Mis.
Dated	28. -9-1881	~~197~~ .

10/11

Not to be folded or roughly handled

9

A. N. N.

1825
1

GOVERNMENT OF MADRAS.

FINANCIAL DEPARTMENT.

28th September 1881, No. 1825.

Stationery.

Read the following paper :—

From Surgeon-Major G. BIDIE, M.B., Superintendent, Government Central Museum, to the Chief Secretary to Government, dated Madras, 15th September 1881, No. 606 [Current No. 2523].

With reference to paragraph 3 of G.O., No. 733, of 26th April 1881, I have the honor to submit the report of the Chemical Examiner on the preparation of red ink from redwood.

ENCLOSURE No. 1.

From Surgeon T. K. ROGERS, M.B., F.R.C.S., Chemical Examiner, Madras, to the Superintendent, Government Central Museum, dated Madras, 3rd September 1881, No. 299.

In reply to your letter, No. 339, dated 8th June 1881, with enclosures herewith returned, I have the honor to submit the following report.

2. After many experiments it appeared that the best attainable results were obtained by the following formulæ, though considerable advantage was gained by the mere substitution of borax for Bicarbonate of soda; it being, of course, understood that substances which could be obtained cheaply and carried about in the dry state are alone available :—

Rx—				
Redwood	..	..	..	6 oz.
Borax	..	..	..	1½ oz.
Boracic acid	..	..	..	300 grains.
Gum	..	..	..	½ oz.
Water	..	..	..	1½ pints.

Heat the water to boiling, then add the borax, stirring rapidly. When the borax is dissolved add the redwood. Boil gently for fifteen minutes.

Then add the boracic acid, and as soon as this is dissolved, which with stirring takes only about one minute to effect, remove from the fire. Finally strain, and add gum as formerly directed.

3. The value of the addition of the boracic acid will be readily appreciated if a broad mark be made with the ink on a piece of white paper before and after the addition of the boracic acid.

If eight ounces of redwood be used instead of six, gum need not be added, and the ink seems to keep rather better, but has not quite so bright a color at first.

4. The ink will only keep from seven to ten days in an open pot, and in a closed bottle probably only for about a month. Writing made with ink recently prepared is of a bright Turkey red color, and though it becomes less bright in the course of two or three days on any paper, except the common blue official paper, which seems to be particularly unsuitable for this ink, it appears to undergo, so far as I have observed, little, if any, subsequent change in the course of a fortnight when freely exposed to the air in this Laboratory.

5. If you can come here any day on your way down to office, I shall be happy to show samples of the ink and specimens of writing of various dates. But I am afraid that even if experience should show that the writing made with redwood ink will remain permanently of

a color readily distinguishable from old writing with common black ink, which seems to be doubtful, the trouble required to make the ink, and the fact that it cannot apparently be kept for any great length of time, will make the ink too costly and troublesome for ordinary use, although it has the great advantage of being irremovable without injury to the paper.

ORDER THEREON, 28th September 1881, No. 1825.

Recorded. The Government regret to learn that the ink made from redwood is not suitable for general adoption.

(True Extract.)

R. DAVIDSON,
Chief Secretary.

To the Superintendent of Stationery.
„ Superintendent, Government Central Museum.

Exd. T. O'Connor.

1825
2

Govt. of (1881) Madras.
FINANCIAL.

To
THE SUPERINTENDENT OF
STATIONERY.
&c. &c. &c.

Dated September, 28th.

Issued

Recd.

G.O., 28th September 1881, No. 1825.

SEPTEMBER.

Stationery.—Letter from the Superintendent,
Government Central Museum, submitting report of
the Chemical Examiner on the preparation of red
ink from redwood, recorded with remarks.

No 606

From

CURRENT No. 2523
16
Government Central Museum
Madras 15th September 1881.

1825/7
Surgeon-Major George Bidie M. B.,
Superintendent Government Central
Museum.

To

The Chief Secretary to Government
Revenue Department
Patacamund.

Sir,

With reference to para 3 of G.O. No 733 of
26th April 1881, I have the honour to submit the
report of the Chemical Examiner on the preparation of
Red-ink from redwood.

I have the honour to be,

Sir,

Your most Obedient Servant,

George Bidie M. B. Surgeon-Major

Superintendent Govt Central
Museum.

11-10-1881
BY G.O. No.

1825
8/28

Ind.
Revenue (1881) Department
(Hatching)
From

The Superintendent
Government Central
Museum.
7 SEP 81

No. 106
Encls. 1

Dated 15th Sept 81

No. 16

2523

No.

Subject

Submitting the report of the
Chemical Examiner on the preparation
of Red ink from red woods.

Order 28 Sept 1881, No. 1325

Recorded. The Govt.
regret to learn that
the ink made from red
is not suitable for
adoption.

To the Supt. of the
Museum.

No. 299

1881/3
288

Madras

3rd September 1881

From

The Chemical Examiner

Madras.

To

The Superintendent

Govt. Museum

Madras

Sir

In reply to your
letter No. 339 dated 8th
June 1881, with enclosures
herewith returned, I have
the honour to submit

the following report.

2. After many experiments it appeared that the best attainable results, were obtained by the following formula; though considerable advantage was gained by the mere substitution of Borax for Bicarbonate of Soda. It being of course understood, that substances which could be obtained cheaply, and carried about in the dry state are alone available.

Rx

Redwood	6 ^{oz}
Borax	1 ¹ / ₂ ^{oz}
Boracic Acid	300 grains
Gum	1 ¹ / ₂ ^{oz}
Water	1 ¹ / ₂ pints

Heat the water to boiling, then add the Borax stirring rapidly. When the Borax is dissolved add the Red Wood. Boil gently for 15 minutes. Then add the Boracic Acid, and as soon as this is dissolved, which with stirring takes ~~but~~ only about one minute to effect; remove from the fire. Finally strain, and add gum as formerly directed.

4. The value of the addition of the Boracic Acid, will be readily appreciated, if a broad mark be made with the ink on a piece of white paper, before and after the addition of the Boracic Acid. If eight ounces of Red Wood be used instead of six; gum need not be added, and the ink seems to keep rather better, but has not quite so bright a colour at first.

31

5 The Ink will only keep from 7 to 10 days in an open pot, and in a closed bottle probably only for about a month. Writing made with ink recently prepared is of a bright Turkey red colour, and though it becomes less bright in the course of two or three days; on any paper except the common blue official paper, which seems to be particularly unsuitable for this ink, it appears to undergo so far as I have observed, little if any subsequent change, in the course of a fortnight when freely exposed to the air in this Laboratory.

6 If you can come here any day on your way down to Office, I shall be happy to show samples of the ink, and specimens of ~~the~~ writing of various dates. But I am afraid that even if experience should show, that the writing made with

h 80 7

Red Wood Ink, will remain $\frac{80}{100}$ permanently of a colour readily distinguishable from old writing with common Black Ink, which seems to be doubtful: the trouble required to make the ink, and the fact that it cannot apparently be kept for any great length of time, will make the ink too costly and troublesome for ordinary use. Although it has the great advantage of being unremovable without injury to the paper.

I have the honour to be

Sir

Your most Obedient Servant

R Rogers. M.B. & P.C.S.
Chemical Examiner

1825
x

the whole of the ...
from the ...
black ...
light ...
to make the ...
it cannot ...
any ...
the ...
for ...
the ...
... the ...

paper

... the ...
...
...
...
...

1825
9

Dec 30/9

1881

016 491

0164

Recd 5th Q^{tr} 1881

