

Public (1899) Department.

ORDINARY M.S.

G.O., No. 244-45

Dated 7-7-99

INDEXED.

[Despatch Abstract.]

Forwarding to the Sd/-
a copy of a report by the Chemical
Examiner, Madras, as to the methods
of analysis pursued by him for the
detection of the presence of "Bhang"
"fange" drugs when they are made up
for consumption with other vegetable
substances & when their physical
characters are disguised by being
mixed into a fine ~~paste~~

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

CURRENT No.

From
 on your general Certificate, A. H. P.
 on your general Certificate with the
 of 1st & 2nd in order

No.

Dated 11/03/2017

Received

Registered

Enclosures 7

Spare copies

SUBJECT.

Forwarding letter in
original form the chemical
res. Mar. 20. 1871. upon the
method of detection of the presence
of alkali. See "Gould's" Aug. 1871.
Original and copy of same. See
1871.

BACK PAPERS.

G.O.	No.	Department.	Date
	729	Indus	1-7-98
	626	"	5-8-98

G.O.—500—15-7-98.

278
5
No. 6

CHEMICAL EXAMINER'S OFFICE,
Madras, 1897.

29 JUN. 1899 From
WITH GOVT. ADDRESS

THE CHEMICAL EXAMINER,
Madras,

To

THE

FURTHER PAPERS.

G.O.	No.	Department.	Date	Closures.

Reference:

For the purpose of the letter
No. 1011/1 dated 1-7-98
in which a copy of the
a copy of the report on the
Ceylon, and the methods of
for the purpose of the
and "General" and
called "General" and
character of the
to a local
State
get the

of the plant. The recognition of its presence in any substance, but for examination generally depends upon the physical characters of the plant and its physiological action. But in cases where the physical characters are disguised as in the case under reference, the only way of detecting the presence of the plant is by extracting the greenish brown resinous mass, the chief active principle of the plant and finding out its physiological action.

2). With the amended process, a portion of the substance containing the plant e.g. Sweetwood, Sassafras, Mastic, etc., is digested for a day or two with alcohol acidified with a few drops of acetic acid (65° Et. Rectified spirit being generally used in this laboratory). The alcoholic solution which not only contains the active principle of the plant, but also other substances such as fat, and the principles of other plants and other substances soluble in alcohol, is filtered through a filter.

dish by gently evaporating it on a water bath to the consistency of Syrup; and to this concentrated Syrupy mass, a small quantity of water is added (half to one ounce) and the whole is stirred with a glass rod and allowed to cool. On addition of water generally precipitates the resin of gaulth. along with other resins if any, dissolves any alkalioid that may be present and separates the oily substance which floats on the surface of the watery solution.

The resinous precipitate if allowed to settle for a time, generally sticks to the bottom of the evaporating dish and may easily be collected by decanting the supernatant watery solution, and gently washing it with a little distilled water.

The oily substance is easily removed by filtering the decanted watery solution when the oily mass remains on the filter paper, and the clear or slightly turbid filtrate is removed.

for the extraction of the rest
other active principles that
in it.

3) The resin is
usually of a greenish brown
is freely soluble in alcohol.
a dark greenish solution
reprecipitated from this
as a greenish or greenish
precipitate on addition of
sufficient quantity of water.
Resinous matters found in
derived from non-poisonous
substances that might have
in the "lagum" are liable
mistaken for the resin of 1
they can be distinguished
later by the colour of their
solution which is light
green while that of the 1
is dark greenish brown.
precipitates obtained from
solution of these resins by
of water is of yellowish or
white colour and is
soluble in a solution of
while the one which is

the alcoholic solution of the gum resin is, as already mentioned, generally of a greenish or greenish brown color and is insoluble in a solution of caustic Potash. A part of the resin collected as above is dissolved in alcohol and the solution is compared, as regards the above-mentioned physical peculiarities, with an alcoholic solution of fresh gamboge leaves kept in the laboratory for the purpose; but these physical tests are not at all conclusive, though they may be of some help in affording suspicious evidence of the presence of the gamboge resin.

4). The most reliable test as far as it is known at present consists in finding out the physiological action of the greenish brown resin on an animal. The remaining portion of the resin is therefore mixed with some rice or milk and administered to a small dog and the narcotic effects produced observed. If well

Known narcotic effects are produced
in the dog by its administration, the
presence of gajah is indisputably proven.

5). The watery solution, as already
mentioned, generally contains the alkaloid
and other active principles of the
vegetable substance and is used
for the extraction of the alkaloid according
to Stas or any other method. The chief
alkaloid invariably desired for the case
of gajah preparations, is the alkaloid
of *Shatura* (which is usually
powdered and mixed with them to
increase the intoxicating effects. It
presence of this alkaloid may or may not
be a doubt as to whether the narcotic
effects produced in the dog may not
be due to it as the symptoms of
Shatura intoxication closely resemble
those of intoxication from gajah, but
the fact that it was the resin that
produced the intoxicating symptoms
and not the *Shatura* alkaloid
which generally remains behind
in the watery solution, so that there is
no difficulty in clearing the matter.

6). In cases where the available quantity of the substance for analysis is too small to extract sufficient quantity of the resin for administering to a dog or for properly gauging its empirical character, it is reported that no reliable evidence of the presence of gaulth is obtained.

7). As the detection of the presence of small quantities of gaulth is attended with some amount of difficulty and uncertainty, I have the honor to request that a copy of the collected reports of all the Chemical Examiners may be obtained from the Government of India and sent to this office for information.

I have the honor to be,
Sir,
your most obedient servant

W. J. S. M. Esq.
Chemical Examiner

From

SURGEON-~~MAJOR~~-GENERAL J. J. HARRINGTON, JR., U.S.A.

SURGEON-GENERAL, WASH. D.C.

GOVERNMENT OF MALACAS,

To

THE HON'BLE THE CHIEF SECRETARY TO GOVERNMENT

Public DEPARTMENT.

SIR,

With reference to G.O. No. 616, Public, dated the 5th June 1899, I have the honor to forward herewith in original letter No. 652 dated the 28th June 1899, from the Chemical Examiner, Madras, reports upon the method of detection of the presence of "Chang" and "Panja" drugs when they are made up for consumption with other vegetable substances and when their physical characters are disguised by being mixed into a fine powder.

2. The request contained in paragraph 7 of the Chemical Examiner's letter may be complied with.

Have the honor to be,

Ch.

Yours most obedient servant,

C. F. Smith,
Agent General

Surgeon General

895 From the Surgeon General No. 7/107 dated 7-1-1901

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..... 182

4/8 Order no. 74 ~~2~~ 97th 7-97.

Maryland

$\frac{C_u}{5.754}$

Letter W. 745
To the Secretary of the House of Representatives

10th Sept to the end of Oct.

With reference to Mr.
Nathan's letter no 917, undated
dated 25th May 1899. I am
directed to forward a copy
of a report by the Chemical
Examiner, Montreal, no 652
dated 24th June 1898, to the
Lt. Nathan.

Nathaniel letter no 917, unrecd
dated 25th May 1899. I am
directed to forward a copy
of a report by the Chemical
Examiner, Montreal, no 652
dated 28th June 1898.

of a report by the Chemical
Examiner, Montreal, No. 652
dated 24th June 1885.

Examine Notes, pg 652
dated 28th June 1995

dated 28th June 1995.

14. *man. Th.*

pursued by him for the
 detection of the presence of
 "bhang" & "ganja" drugs when
 they are made up for consump-
 tion with other vegetable sub-
 stances, & whose physical
 characters are disguised by
 being mixed into a fine paste.
 2. I am to invite attention
 to the report made in para-
 7 of the Ch. Insp's letter, that
 a copy of the collected reports
 of all the Ch. Insps on this
 subject may be furnished
 to his office.

C₄
 5.7.99. *M*
 5.7.99. 99. *15/7/99*

✓
 Note for Insp. - Ch. Insp. Ch. Insp.
 Lett. to Insp. on a/c of 19/7/99

Faircopy of the letter
 sent by C₄ - is attached
 and have the me-
 mories + despts for-
 ward. The 8th + 11th
 are being given to
 + dated.

M

Please note in the
 original if the enclosure
 was dispatched
 with the letter to
 India.

Yes. + I have *10/7/99*
 it now marked
10/7