

(1) Number of pages 5

(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 2557	Press
385-86	Mis.
Dated 27-10-1870.	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
27th October 1870.*

Read the following letters —

No. 385. From the Acting Superintending Engineer, 5th Division, to the Secretary to Government, Public Works Department, dated Camp at Tripatore, 1st September 1870, No. 108.

As requested in the accompanying letter No 124, dated 29th August 1870, from Captain J. W. Hindle, Staff Corps, Executive Engineer, Salem Range, I have the honour to forward herewith a plan and specification of a system invented by him for night signals at sea.

1 Plan
1 Specification
1 letter of Captain Hindle.

2. As Captain Hindle's invention appears, with much simplicity of detail, to make available for night use the Code now in force for day signals, I have no hesitation in forwarding the project for the favourable consideration of Government, and for submission to His Grace the Duke of Argyle, Her Majesty's Secretary of State for India, for such notice as he may be pleased to take of the same.

Night Signals for Merchant Vessels, adapted to Marryat's Code of Day Signals

The advantages of this system consist in its being adapted to Marryat's Code of day signals by flags, coloured lights, white, red, and green, being used instead of flags. No new Code will be required, and it will be understood, as Marryat's Code is, by all nations.

2. The lights have been arranged to form numbers up to 10, so that any question in Marryat's Code of Day Signals can be asked at night when flags are undistinguishable.

3. The lights are ranged in boxes, five in each box, and, for signalling in numbers, are placed one below the other.

4. For signalling the points of the compass for which the ship is steering they are ranged in line, so that one can never be mistaken for the other.

5. The present system of showing the ship's course, with a green light on the starboard bow, and a red light on the port bow is, as is apparent from the frequent collisions, liable to confusion. With the system now proposed no mistake could occur, especially if the ship carried the course signals fore and aft and at each side, the ship would then tell as clearly as if she were speaking the actual point she was steering to, and the rule of the road would be made much easier, for it would be at once obvious to the meeting vessels which course they ought to take to avoid collision.

6. It has been suggested that the lights could be seen from no great distance, but I do not consider that this is any great defect. They could be seen quite far enough off where questions only are to be asked, and for steering purposes it would be quite immaterial whether they could be read at a distance or not, as the great benefit would arise in cases of close proximity only.

7. As to the position they should be placed in, for signalling by numbers, I leave that to Nautical men to decide, with the remark that if sails were in the way they might be lowered during the time it was required to signal.

8. The machinery of the lantern is very simple. a cylinder containing the bull's eyes of red, white, green, and a black, revolves on a pivot around the light. This cylinder is moved by a small endless chain passing over the cog wheel A in Plan No I. The wheel A was first designed as a V pulley, but as the cord passing round it was liable to slip, and, moreover, as it was difficult to ascertain which colour had been set, it was altered to a cog over which a light endless chain, fitting on to the cogs, passes. This chain is coloured the same colour as the quarter of a circle that it turns. Thus, when the officer of the watch wishes to alter the colour, he pulls the chain to the end of the colour required. This renders the matter so simple, that the commonest seaman could handle the

*Proceedings of the Madras Government, Public Works Department,
27th October 1870.*

lantern in safety There is a slot in the small wheel outside A, which is in circumference equal to exactly a quarter of the cylinder, and when the revolution of A is completed, a small spring slips into the slot and keeps the cylinder fast

9 The wheel A turns a mytre cog wheel B, which fits into, and is exactly one-quarter the size in circumference of, wheel C, on which the cylinder is fixed

(Signed) J W HINDLE, Captain,
Executive Engineer, Salem

No. 385A. From the Acting Superintending Engineer, 5th Division, to the Secretary to Government, Public Works Department, dated Cuddalore, 7th October 1870, No 135

In compliance with the instructions contained in your Memorandum, No. 65, dated 3rd September 1870, having called upon Captain Hindle for a copy of the letter from the Secretary of State for India, expressing a desire to receive the plan of the system invented by Captain Hindle for night signals at sea, I have the honour to forward the undermentioned documents submitted by that Officer:—

- 1 Letter of Captain Hindle, with two enclosures
- 1 G O, Public Department
- 1 Docket from Salem Collector.

1 Original letter from Captain Hindle to the Secretary of State for India, with two enclosures.

1 Proceedings of the Madras Government, dated 21st January 1870, No. 82, Public Department.

1 Docket No 33, of the 25th January 1870, from the Collector of Salem.

2. It does not appear that the Secretary of State has ever expressed a desire to receive the plan in question, but he has merely intimated that he declines to receive any communications from individuals in India, unless submitted through the local Government. ..

No. 386. ORDER THEREON, 27th October 1870, No. 2,557.

CIVIL WORKS, No. 39.

ORDERED that the Home Government be addressed on the subject of these papers.

(True Extract.)

Colonel, R E,

Secretary to Government.

To the Acting Superintending Engineer of the 5th Division

Exd S T. Augustin.

N^o 108.

Supr. Engrs' Office 5th Division
Camp Repatore. 1st September 1870

3d

From,

The Acting Superintending Engineer
5th Division,

To,
The Secretary to Government
D. O. W.

Sir,

As requested in the accompanying letter N^o 124 dated 29th August 1870 from Captain J W Hindle, Staff Corps, Executive Engineer, Salem Range, I have the honor to forward herewith a Plan and Specification of a system invented by him for night-signals at sea.

2. As Captain Hindle's invention appears, with much simplicity of detail, to make available for night use the Code now in force for day-signals, I have no hesitation in forwarding the project for the favorable consideration of Government and for

Enclosures 3.
1. Plan.
1. Specification
1. Letter of Capt
Hindle.

for submission to His Grace the
Duke of Argyll, Her Majesty's
Secretary of State for India, for such
notice as he may be pleased to
take of the same.

I have the honor to be
Sir,
Your most obedt. Servant
Richd. Roberts - Capt. R.E.
Ag. Superintg. Engineer

Recd to Genl 27th Nov
30/11/870

16385

Capt. R.E.

Per 1870 Sept.
From No 3453
The Asst. Supg. Engineer
5th Division

To The Secretary to
Government 1870

Dated 1st { Sept. 1870
Per 22. } 1870

No 105
Quebec 1870

Forwarding a plan
& specification of a
system invented by
Captain McIndoe
Executive Engineer,
Salmon Range, for
night-signals at
sea.

No 2657-27 Oct 70

Night Signals for Merchant vessels
adapted to Marryats Code of day signals.

The advantages of this system consist

in its being adapted to Marryats Code of day signals by Flags, Colored lights, white, red, and green, being used instead of Flags - No new Code will be required & it will be understood, as Marryats Code is, by all Nations.

2 The lights have been arranged to form numbers up to 10, so that any question in Marryats Code of day signals can be asked at night when Flags are undistinguishable -

3 The lights are ranged in Boxes, five in each Box, & for signalling in numbers are placed one below the other -

4 For signalling the points of the Compass for which the ship is steering, they are ranged in line, so that one can never be mistaken for the other.

5 The present system of showing the ships course, with a green light on the starboard bow and a red light on the port bow is, as is apparent, from

from the frequent collisions liable to confusion;
With the system now proposed, no mistake
could occur especially if the ship carried the
Course signals fore and aft & at each side, the
ship would then tell as clearly as if she were
speaking the actual point she was steering to,
& the rule of the road would be made much
easier for it would be as obvious to the
meeting vessels which Course they ought to take
to avoid collision—

6. It has been suggested that the lights
could be seen from no great distance, but I
do not consider that this is any great defect;
they could be seen quite far enough off where
questions only are to be asked, and for steering
purposes it would be quite immaterial whether
they could be read at a distance or not, as
the great benefit would arise in cases of close
proximity only—

7. As to the position they should be placed
in for signalling by numbers, I leave that to the
Nautical men to decide with the remark that if
sails were on the way they might be lowered
during

4
during the time it was required to signal ad
8. The Machinery of the lantern is very
simple a Cylinder containing the Bulls eyes of
Red, White, Green & black revolves on a
pivot around the lights, this Cylinder is moved
by a small endless chain passing over ^{the} Cog
wheel A in plan No 1 the wheel A was first
designed as a V pulley, but as the Cord pas-
sing round it was liable to slip, & moreover
as it was difficult to ascertain which Colour
had been set, it was altered to a Cog wheel over
which a light endless chain, getting on to the
Cogs, passes, this chain is Coloured the same
Colour as the quarter of a Circle that it turns.
Thus when the Officer of the Watch wishes to
alter the Colour he pulls the chain to the end
of the Colour required—this renders the matter
so simple that the commonest sea man could
handle the lantern in safety—There is a slot
in the small wheel outside A which is in cir-
-cumference equal to exactly a quarter of the
Cylinder, & when the revolution of A is complete
a small spring ^{slips} into the slot & keeps the
Cylinder

Cylinder fast -

9. The wheels A turns a hyper Cog wheel B. which fits into and is exactly one quarter the size in circumference of wheel C on which the Cylinder is fixed -

To accompany my letter to Secretary M. H. Smith to look P.W.D. No. 108 dated 1st September 1870

J. H. P. R. E. Capt. P. E.

Mr. Supp. Engineer 5th Div.

MP 343/10

Received 29th Sept 1870

Revenue Depart

1870.

From,

110

The

Collector of Salem.

To

Capt. J. W. Hindle
Salem

Dated 25th

Received

January 1870

MP 400/10 No. 33

ENCLOSURE

four

Your

No.

dated

Copy of the Proceedings of the Madras Government of the 21st Instant 1882 together with its enclosure is herewith sent for the information of Captain Hindle.

P. H. Forster

Copy 1/10

Collector

12-124 Salem 130
29th Aug 1870.

To The Superintendent
Engineer's Office
Salem

Sir, I have the honor to forward herewith plan & specification of a system of light duty as per that I have submitted for submission to you as directed by the fact the Duke of Argyll to whom I was supposed to send them direct.

I may remark, that, previous to his departure Colonel Ford wrote me privately saying that he had examined the project carefully & found no fault with it. I merely add this remark as an extenuating circumstance should they consider that I have wasted time in investigating a crude idea.

I have the honor to be
Sir

Yours obediently

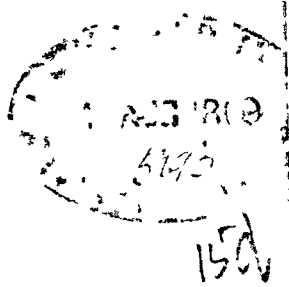
M. W. Hindle

Salem

Enclosure 3.

1 Plan. and

2 Reports



My dear Captain Knittle
I am incompetent to
judge of the merit of
your invention, but I enclose
a note from Galymple.
I do not know very well
how the subject here can
help you except by sending
the invention home where

Light Division 8 PM.
Valley District

Frank

Executive Engineer
Valley Range

to the

Superintending Engineer
S. Dr. - 8 P.M.

Reb'd 29th Aug 70.

Reb'd 30th August.

10. 1874.

Balance 3.

Enclosing find:

subscribing to "Commence"

as per advertisement

from the system of

light signal system

AP 3453/70

might be referred to
competent authority. Your
plan would be either
to submit it to a patent here
or to offer it direct at home
to the Govt, please
address me officially
at the Trinity House between
admiralty but in truth
Yours truly
as above you

5th June
by.

W. H. H. fully in the matter

Madras June 1st



My Dear Ellis 17d

Brother and I

have examined & considered

Captain Huddle's Scheme

for signalling by night

with lanterns and we

are of opinion that it

is an exceedingly clever

invention but one more

22/10/1864
Dated for signalling
from the ship than from
on board ship. The
plans are herewith
returned.

Yours very sincerely
W. D. S. Dalrymple

The Honble
Robert F. Elliot C.B.

General

Salem, Madras Presidency,
East India.

191

My Lord Duke,

I have the honor to forward for your
Grace inspection plans & specification of a scheme
that I have invented for signaling by night at sea.
Your Grace will perceive from the enclosed private
letter from the Secretary to the Madras Government
that it would have been of very little use my
submitting my invention to the Madras Government
as, however feasible they might have thought it, they
would have been powerless to order its
adoption. I have therefore ventured to take the
great liberty of presenting it to your Grace direct.
Were I to send it to the Admiralty or to the Admiralty
House I should in all probability never
be looked at; I feel convinced that if your Grace
likes anything in the scheme likely to be of use,
you will at once take measures for bringing it forward.
I beg your Grace will understand that I am not
actuated with any desire to obtain remuneration
from Government. For your Grace will at once
see that should the invention be adopted, I could
patent it & from that patent obtain ample
remuneration. It would be altogether useless
to patent the invention, before it was known whether
it would be adopted, as there is entirely dependence
upon such adoption.
I first commenced to work out the scheme some
three years ago when in England on Foulis at
that time a great many collisions at night, as
was reported, seldom occurred to me that
by substituting coloured lanterns for flags
the code of signals could be worked as

He

re

Mr. 4.50.1/40

well at night as in the day time. I have
added the signals for the points of the compass
invented a lantern in which the different lights
could be shown without being constantly
taken down. It seemed so simple that I
felt sure that it must have been tried &
given up. For some time I put the matter
by. Since my return to this Country I have
shown it to several scientific men who
strongly urged me to bring it forward.
I should inform your Grace that when
in England I submitted my scheme
to the inspection of two Captains in
Her Majesty's Service, who examined me
very closely upon it, & gave their opinion
that it ^{was} one that would be excessively
useful to Merchant vessels attached
up to the Royal Navy.
Again apologizing for the great liberty I have
taken

I have the honor to receive
 Your Grace's most pleasant letter
 of the 11th inst. and to be assured

His Grace

254

Wm. L. Egan
14, Duane Street
New York City

His absence
for signaling by night
at sea *

July
James M. B.

147186

J. I. MINCHIN,
Acting Chief Secretary.

The enclosed Memorial of Capt.
J. H. Hinkle to be returned to him
in accordance with the
above order.

Charles Parker
Collector

Salerno

25.1.70

Exd. J. Wright.

No 135

Superint. Engineer's Office, 5th Divⁿ,
Cuddalore, 7th October 1870.

From,

The Acting Superintending Engineer,
5th Division.

To,

The Secretary to Government,
P. W. Department,
Madras.

Sir,

In compliance with the
enclosures - 3.
1. Letter of Capt. Hindle instructions contained in your Memo:
with 2 enclosures. : raidum No 65 dated 3rd September 1870,
1. G. O. Public Dept. having called upon Captain Hindle for
1. Docket from a copy of the letter from the Secretary
Salem collector. of State for India, expressing a desire
to receive the plan of the system invented
by Captain Hindle for Night Signals
at sea, I have the honor to forward the
undermentioned documents submitted
by that officer:-
1. Original letter from Captain Hindle

Q. No 135 dated 27/11/70
Received 30/11/1870

Govt. of 18703

PUBLIC.

To

Date 1 Jan 1871, 21st

Recd.

F.

G O. 21st Jan 1871, No 82

JANUARY.
Nos. 85-86.

1871

Report of the ...
in this ...
next ...
been sent through the Local Government

1871

to the Secretary of State for India with
2 enclosures.

1. Proceedings of the Madras Government
of 21st January, 1870, No 82. Public Departt.
2. Doc Ret No 33 of the 25th January 1870
from the Collector of Salem.

2. It does not appear that the
Secretary of State has ever expressed
a desire to receive the plan in question,
but he has merely intimated that he
declines to receive any communications
from individuals in India, unless sub-
mitted through the Local Government.

I have the honor to be

Sir,

Your most Obedient Servant

Rich^d J. Roberts Capt^y R.E.
Actg. Superint^y Engineer, S^t Paul's

Pub. Dept
No 2557

Proceedings of the Madras Government
Under date the 27th October 1878
Recd the following

From the actg Sup'g Ins^r?
of the 5th Div. (H.C. No 108 of 1st Sept/70)
From — Do — Do — (" — No 135 of 7th Octr/70)

Ordered that the Name
Government be addressed
out the subject of these papers.

N

$$\begin{array}{r} 22 \\ \hline 12 \end{array}$$

To
The Supy. Engrs of the
S. S. S.

Dec/2 31/10/70

Dr. Wm. S. D. Sept 27 11. hours
MS 30 of 1870

St. Albans, 1870
The Librarian of the
Library of the
University of Cambridge

5th Division.

The Drawing is - Form 2
 P. M. De la R. 18.

dated 7th
Feb. 1870

Sen 47 135

Feb 25 67 - 25 per cent
Redd-Ingalls et al.

Forwards please:

• would be suited for a ²^d kindle
relation is the place of the dog.

been visited by him for eight

signals at sea, with our welcome;
 & that the good old R. A. heard

that the Secretary of State

had ever expected a slave
to receive this slave.

1463851d
6/23/2008 2:13 PM

Dr. W. & R. W. L. dated 14th Nov
Nov 30 of 1870.

7000

[Faint, illegible handwriting]

[Faint, illegible handwriting]

[Faint, illegible handwriting]

Oct 17th 1870

Dr. W. & R. W. L. dated 14th Nov
Nov 30 of 1870

Further Pro of 613 of 2nd 3rd 4th

Dr. W. Dr. to Capt. dated 14. Nov. 1870.
No. 30 of 1870.

Oct 4001. 5453

Govt. of 1870: 31. Dec. 1870.

PUBLIC WORKS.

To The Chief Superintending Engineer
S. E. (D. W. R. M. S.)

Date

Recd.

27 Oct. 1870. A. 2557

Nos. 1888 & 1889

Light Signals at Sea. Papering orders
(The letters from the Papering of
the 5th Dec. forwarding plan &
papers connected with a mode
of signalling by night at sea
issued by Capt. Huddle.