

Marine (1899) Department.

G.O., No. 870 Marine

DATED 18-9-1899.

*22/9/1899*

[Despatch Abstract.]

Lantern and Machinery - Letter from

Forwarding copies received from the Govt.  
of Burma of a descriptive memorandum  
of the — at present used at the  
Alaguada Reef Light-house, to the P.P.O. &  
the Supdt of works, Light-house &c.

Transmitting to Copies  
of a descriptive memorandum  
of the lantern and machinery  
at present used at the  
Alaguada Reef Light house.

## BACK PAPERS.

| No. | Date. |
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## FURTHER PAPERS.

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Mar: 9 20/28-9-99

## MEMORANDUM.

The present light at Alguada Reef Light-house is a "first" order, "catadioptric" "white" "revolving" light having a revolution of one minute between each flash.

The intensity of the light is 6,000 candle-power. The range of visibility in clear weather where it is now exhibited from is 18 miles. Focal plane of light is 144 feet above high water level. The lighting apparatus is formed of light Tee-iron framing having a cast-iron flanged tube with friction rollers at the top and resting on a geared turn-table (on 12 friction rollers) which is worked by the machine below.

The apparatus has 16 Argand lamps with bottles, wick-holders, wick-lifters, gallery and drip-cup and are ranged as follows:—

Four top tier. | Eight centre tier.  
Four bottom tier.

At the back of each lamp a copper hemispherical reflector thickly coated with silver is placed. All the reflectors are in good condition.

At the front of each lamp a gun-metal frame having one bulls eye and eight concentric lenses of white colour is placed. A few of these are slightly damaged by being chipped and cracked.

All the lamps of the apparatus are provided with wrought-iron carriages for raising or lowering.

Besides the complete apparatus as described above the following spare gear belong to this light:—

Thirty-three spare lamps, complete, in good condition.  
One spare copper hemispherical reflector.  
One spare lens slightly defective.  
Eighteen spare carriages.

The machine which is by T. Slight, Edinburgh, is enclosed in a square cast-iron box, having glass doors at each of the four sides. It is the ordinary kind as used where "revolving" and "fixed" and "flashing" lights are used. It is provided with the following:—

- (1) Hand-working gear in case of accident to automatic gear.
- (2) Lever with clutch gearing for throwing in and out or for working the machine independent of the apparatus, and a ratchet gear for winding up.

The bearings for the shafts are of gun-metal of the Plummer Block pattern.

The working parts, save the winding pinion and brass liner over drum, are slightly worn but, which in no ways interfere with the proper working of the light, are in very good condition. The main shaft is on ball bearings, all the bearings, shafts, and steel pins for the pinions, also the heel and head brasses of the clutch gear shaft have just been renewed and adjusted. The light is 34 years old and still works very nearly to time being one second out either way.

The weights are of lead. The machine is provided with two screw jacks for raising the apparatus when changing the working of the Bottom Friction Rollers, one spare radial wheel and one spare flywheel shaft. Along with light are 9 wrought-iron oil tanks with brass draw-off taps. Three such tanks are capable of holding 80 gallons of cocoanut oil which is the illuminant used while the other six each hold 150 gallons.

The apparatus makes one complete revolution every four minutes. The consumption of oil for a nights work is three gallons.



15 SEP. 1899  
REVENUE DEPT.

Burma.

PUBLIC WORKS DEPARTMENT.

No. 9784/37 C.I.

To

The Secretary to the

Government of Madras.

Dated Rangoon, the 7th September 1899.

SIR,

I am directed to forward for information in case it may be required by your Government 10 copies of a descriptive memorandum of the lantern and machinery at present used at the Alguada Reef Light-house which will shortly be available for transfer on being replaced by a new light which has been indented for from England.

I have the honour to be

Sir,

Your most obedient servant

*Alwinthrop*

Under Secy. to the Govt. of Burma.

D. A.

10 copies of memo  
refd. to.