DEPARTMENT OF COMMERCE AND LABOR

ALL COMMUNICATIONS SHOULD BE ADDRESSED TO "LIGHT-HOUSE ENGINEER, THIRD DISTRICT."

LIGHT-HOUSE ESTABLISHMENT,

THIRD DISTRICT,

OFFICE OF ENGINEER, 3D DISTRICT,

4118
6659

INCLOSURES.

TOMPKINSVILLE, N. Y., September 17, 1903

SUBJECT: Burlington Breakwater Beacons,
Notice to Mariners.

The Light-House Board,

Washington, D.C.

Sirs:-

I have the honor to acknowledge receipt of Board's letter dated 12 September, 1903, file No.4118.

In some cases it is very difficult to tell exactly when minor changes in lights will be made. In the case referred to - the change in the Burlington Harbor lights - it was a part of the work laid out for the repair party on Lake Champlain. This year the Tender "Nettle" in charge of Supt. Verner was sent to Lake Champlain with orders to do all necessary work to the light-stations on the lake. A list of needed repairs had been made by me personally during a trip made in May. If the work was to be carried on economically, the order of the work and the details had to be left to the Superintendent on the spot. I directed the Superintendent to report to me as soon as he could fix the date at which the changes at Burlington would be completed. As soon as I received word I at once sent the same to the Board. Had the change been one that would have made a difference in the characteristic of the lights, I should have been careful to have allowed a large margin of time, even at a considerable increased cost, but the change was merely an increased intensity.

Referring to the Board's request for information as to how the intensity of the light is increased with a reduction in the order of the light and without a change in characteristic or reduction of the arc of visibility of the light: I would say that this is done by using a lamp giving a greater intensity of light.

The two lights changed were Burlington Breakwater North Extension Pierhead (N.end) and Burlington South Beacon Light. Before the change these were 6th order lights using a Hains flat wick lamp. They are now changed to a lens lantern with new improved round wick lamps.

The estimate of candle power of these two combinations, is for the 6th order lens with Hains lamp:----------90 c.p.

Lens lantern with new improved lamp:----------190 c.p.

The small 6th order lenses are not big enough to allow the use of the new improved lamp.

Respectfully yours,

Wm T Rossell

Major, Corps of Engineers, U.S.A.

Engineer 3rd L.H.District.

J.H.G.