Boston August 11. 1847.

Sir,

By your request through Mr Wellman, I have been to Eastern Point, Gloucester, & thoroughly examined that light house. The whole fabric is in a leaky condition, particularly at the top. The deck is broken in many places, the stones under it loose, Lantern leaks badly whenever it rains the lantern floor is covered with water & down to the bottom of the stairs.

My opinion is, that neither the lantern, deck or tower can ever be made tight. It will be recollected that the tower was originally built for a monument & no doubt the stone laid up dry, that is, without mortar.

The dwelling house is in good order. I have annexed a specification of a light house which I should recommend to be built, & one I think that will stand near a century; being hard brick laid in cement & plastered outside, it never can leak. The inside course being laid up leaving a space between that & the outside wall for the air to circulate must always be dry, for no dampness can ever come through.

Tower.

To be of hard brick, laid solid in the best Rosendale cement. Form round. Foundation on the same rock on which the present light house now stands. Height 30 feet from the surface of the rock to the under part of the deck. Diameter at the base 17 feet, top 9 feet

walls 2 feet 8 inches thick at the base. A space of four inches left open, then an inside wall carried up four inches thick. These two walls regularly graduated to 20 inches at the top & are to unite at 25 feet from the base of the tower. At the top of the Tower to be turned an arch on which is to be laid a soap stone deck 11 feet diameter. 4 inches thick. The outside course to run in two inches under the sashes. Through the arch to be an entrance to the lantern 24 + 16. Scuttle door an iron frame covered with copper to shut into rabbets To be two windows 12 lights 8 + 10 each. A door 6 feet by 3. Stone door post & cap 10 inches square. Sill 20 inches wide. Lintel over the door, window caps & sills, mica slate, to run through the thickness of the wall. Window sashes iron, glazed with strong glass. Door an iron frame, covered with sheet iron 1/8 inch thick with strong hinges, lock & latch. Floor of the tower paved with hard brick. Circular hammered stone stairs from the floor to within 6 feet of the entrance of the scuttle in the arch. Stairs 9 inches rise. 13 inches tread. One end to form a continued newel. The other end to go 4 inches into the inner wall Newel 8 inches. Stairs to lap 2 inches. At the top of the stairs to be a platform of Mica slate 3 inches thick forming a quarter circle resting on the upper stair & to go four inches into the wall. On the newel of the upper stair to be an iron standard 3 feet high, on which is to be secured one end of an iron rail,

the other end to go into the wall. The outside of the tower to be plastered with Rosendale cement & whitewashed. The porch now over the light house door to be put up over the door of the new tower. The walk to the light house door 25 feet by 5 new planked.

Lantern.

Wrought iron of an octagon form, sufficient height & diameter to contain in each octagon 6 lights, 16 + 24 & one copper pane 16 by 12. Post 1½ inch square to run down 4 feet into the wall. Dome formed by 16 iron rafters concentrating in an iron hoop 5 inches wide & 10 inches diameter there secured with nuts & screws. Covered with copper 32 oz, to the superficial foot, which is to come down, turn over the hoop of the lantern & rivet on the top of the sash which is to be 3 inches wide. On the top of the dome to be an iron framed traversing Ventilator & Vane, covered with copper. Ventilator 15 inches diameter, 24 inches high. Vane 30 inches long, 12 inches wide. In one of the octagons to be an iron framed door, 4 feet by 2 ~~feet~~ covered with copper to shut tight into rabbets 3/4 ths inch deep, with two strong turn buttons & handle. Rabbets of the sashes 3/4 ths inch deep. Bearing of the glass 1/4 th inch. Lantern glared with French plate glass made in Paris. No one plate to be less than 3/16 ths inch thick, well bedded in ~~putty~~ secured in with 12 lead pins in each plate. The lower tier 12 + 16 to be filled in with copper studs to secure it to. In 4 of the octagons to be a ventilator in the copper panes, made so as to regulate the current of air and keep out the wet. Around the lantern to be an iron railing. Post 1 1/8 th inch square, the foot to go 2 inches into the deck, 2 inches from the outer

edge of the deck, to run up 5 feet, then turn, and secured to the lantern post with nuts & screws. 2 railings 3/4 7/16 inch square. All the iron and copper to be painted two coats. White inside. Black outside.

The light house above described may be built for $2200. and leave a fair compensation for the Contractor, but I have not a doubt that you will have offers from responsible men for less than $2000. The new light house will require to be lighted with eleven lamps, & 14 inch Reflectors. To have it complete with all our improvements will cost $5500 & the old materials of the lantern & lighting apparatus.

Respectfully,
Your Obt. Ser't
Winslow Lewis

Marcus Morton Esq.
Collector,
Boston,

Boston Aug. 11/42 - Winslow Lewis'
Specifications &c
for Eastern Point
Light -
(Mr. Morton's file.)