Boston Dec^r. 18. 1845.

W. A. Pellman Esq

Dear Sir,

Since writing you a short time since (Nov 17.) in regard to lathing & plastering the iron Light Houses, it has occurred to me that a space of a few inches for air between the iron & the plastering, & thus securing them against being so much affected by changes either of cold or heat in the external atmosphere, as the air would be a non-conductor, another method has occurred to us for securing the same object. This is to line the whole inside with a course of bricks laid up in mortar. These might be directly against the iron, as the brick would of themselves form a very good non-conducting body. The flanges of the iron, projecting inward about four inches all round, at the various points where the sections of the Tower are united would afford very convenient lodgements for the brick to lie upon, as they would also serve for securing the furring & lathing. The bricks would perhaps be preferable on some accounts. They would make a finish entirely fire proof, and by their weight would add somewhat

to the security of the Structure against Storms and time, and would be quite as durable in all respects. And being circular in form it would be very strong. Indeed it would be impossible for the bricks to fall inwards, and when white-washed, they would present almost the same appearance as plastering. It may be added, that if thought necessary, they could be laid up so as to leave a space for air all round — though this would somewhat contract the inside dimensions of the Tower.

The expense of these methods, either of which is entirely practicable, would be just about the same; and for a Tower of the size of that on Long Island in Boston Harbor, or of that building for Juniper Island, would be about One hundred dollars.

Very respectfully Your obt Servt

Cyrus Alger & Co.

P.S.

If it is contemplated to erect any more Sea Walls the coming season, it would be an accommodation to have the contracts closed as early as convenient, as it necessarily requires considerable time to get all the parts completed.