Boston, Nov 17th 1845.

Wm A. Wellman. Esq.

Dear Sir,

We intended to have replied promptly to the suggestion in regard to Cast Iron Light Houses, proving too hot in a warm climate. After giving the subject our best consideration, we cannot but think that the apprehension of trouble on this score will prove to be unfounded. We have always had more fear that there would be trouble in high latitudes from the cold; for though perfectly air tight, yet from the fact that iron is so perfect a conductor of heat, it would require more fuel to keep it warm in cold weather than if it were made of some material equally tight, which is a non-conductor; & so on

the same principle, if the heat is outside, as in a warm climate, it will more readily penetrate through the iron, being a conductor. But we incline very strongly to the opinion that very slight, if any, trouble, will be experienced in either case. If, however, we are mistaken in this, the remedy is both plain & cheap, & would only require that the tower be lathed & plastered on the inside, so as to leave a space of a few inches for air between the iron and the plastering. We should thus secure a non-conductor, & insure warmth in the winter, & coolness in the summer, by one and the same operation, & that a very simple & cheap one. Besides this, it is to be considered, that from the form of a tower it is exceedingly well adapted to ventilation; so that we feel perfectly

sure that the objection against it on for a warm climate, is not one of serious moment, the inside plastering would be just as good as a double skin. — In regard to their transportation to distant places, we are inclined to think it will not cost more than that of other materials, the circumstance that the whole structure would be completely fitted together & set up before starting, & thus require but little time for its erection on the final spot, would go we think to a reduction of cost.

Very truly Yours.

Signed — Cyrus Alger & Co.