RAM ISLAND LIGHTHOUSE.

Work Being Rushed on Much Needed Structure.

The United States engineers and the Lighthouse board are performing a notably good example of tower construction at Ram island ledge, Portland Harbor where all records for lighthouse building are being broken.

The work when it was started early in the spring was favored with the most perfect weather, and phenomenal progress was made. Then there came a bad spell of weather, but this was followed by another long period of calm seas, and one could see the structure mount higher each day.

It is now assuming definite shape, and climbing skyward at an astonishing rate of speed, considering the nature of the work, and extremely rough and dangerous spot where it is located.

At the present time the tower stands out a beautiful white, which when the water dashes over it as it does in nearly all of the high winds, assumes a darker hue. Without doubt when the storms of one or two winters have dashed themselves against it, it will take on the darker color permanently, and finally like Minot's ledge light, off the Massachusetts coast, which is its duplicate, it will become a dirty color, and at low tide green sea mosses and seaweed will be seen clinging to its base, as it does now to the rock on which it stands.

The structure will be ninety-one feet above mean low water and of the second class. The material for the stone work is Vinal Haven granite. There will be twenty stones to the course and twenty blocks to the course. The base stones weigh four tons each, and the upper course blocks will vary from three to two and one-half tons each. The lower course blocks are keyed to the ledge by steel bolts two and one-quarter inches in diameter, four bolts to each block. The bolts are sunk three feet into the ledge and project eight feet into the granite blocks. Each lower course block is bolted with a wrought iron band to the next block, and the whole of the base ring is a mass of granite blocks, bolts and straps. The average weight of each course, from the lowermost to the middle of the structure, is 100 tons, including stone, bolts, bonds and cement. The tower at the base measures twenty-eight feet in diameter. At the top, measuring from the balcony desk, the specifications call for the diameter of twenty-four feet. The cistern will be lined with concrete, and will be twenty-two feet deep and three feet and six inches in diameter. There will be four storage and living rooms, all of the same size, viz., fourteen feet in diameter and six feet high. The character of the light has not been settled by the Lighthouse board. But it has been determined that the fog signals connected therewith will be actuated by a gas engine and of the compressed air trumpet type. Fifty-four years have elapsed since the Lighthouse board and the commercial bodies of Portland suggested that a lighthouse be built on Ram island ledge. Since that time nine ships have gone ashore on that ledge. Many times, as in the case of Captain Boland, of the Allan liner Bohemian, a shipmaster, confused by the Two Lights and by Portland Head light, in certain kinds of weather, has managed to steer clear of Ram island ledge only to go ashore on adjacent ledges. With Ram island ledge lighthouse in good condition, Portland harbor will be amply supplied with night marks for the mariners.