

of an attack. He was now in the midst of the conflict, the firing back and forth between the Union ironclads and the Confederate Howlet batteries being at times directly over him. Later on he was called to clear other obstructions, such as blowing out the rebel barricades in Elizabeth River, consisting of about fifty sunken vessels, and driven piling; and blowing out the masts of a sunken bark which lay forty-five miles out to sea from Cape Henry, endangering navigation.

Their services throughout these years were very exciting and extremely hazardous, from the shot of the enemy, premature explosions, risks of capture and its consequences. Their remuneration was very liberal, as also the courteous treatment extended to them by high officers of both Army and Navy.

Mr. Hayden says he arrived at the zenith of his ambition when he witnessed, on the 14th of May, 1865, the honored veterans of Sherman's army tramp through the streets of Richmond, en route to the national capital, where the representatives of a restored nation awaited to do them honor and bid them God speed to their homes and private life.

The war being over, Mr. Hayden returned to New York, and took an interest in the Morris & Cumming Dredging and Harbor Improvement Company. His experience in ship-building enabled him to create an efficient plant of dredges, barges, and tug-boats with which the company operated all along the coast from Maine to the Rio Grande, and in New York harbor and along the shore front of Jersey City, and in raising sunken rocks from several reefs in New York harbor, and at Hell Gate in connection with General Newton. The company took a contract with the Government of Russia for deepening the channel of the river Neva, and Mr. Hayden went out to superintend the building of a plant, and to arrange for active operations. His experience there gave him great opportunity for observing Russian life and manners, and for learning the favorable social side of the Russian character, as well as the vexatious delays and technicalities of some of their governmental and business operations. His observations extended to the provinces of the far south, where he was directed to survey some of the most important harbors in the Sea of Azoph, and at the naval station of Nicolaef.