

company with Prof. Maillefert, at others operating separately, as occasion required.

When Burnside was called to the command of the Army of the Potomac he no longer required their assistance, and gave them high praise in the following certificate:

HEADQUARTERS ARMY OF THE POTOMAC, Nov. 1, 1862.

I most cheerfully certify and acknowledge the good and valuable services rendered my department by Prof. B. Maillefert and Capt. L. Hayden, engineers of the New York Submarine Engineering Company, by their very efficient plan of submarine can blasts.

The great dispatch with which they removed all manner of sunken obstructions from the channels of the Neuse and Pamlico Rivers; Core, Croatan, and Currituck Sounds; the Albemarle and Chesapeake Canal, etc., etc., making ample and speedy channels for the passage of our gunboats and transports, elicited my warmest commendation, and greatly facilitated my operations in that department. I therefore warmly recommend them for their skill and practical application of knowledge to other departments or individuals requiring similar services.

A. E. BURNSIDE,

Major General, Commanding Army Potomac.

In March, 1863, Mr. Hayden made a trip of observation to Nassau, Bahama Islands, returning with reports of the magnitude of the movements of the English blockade runners. Later, he prepared a large quantity of clock-work torpedoes, which were forwarded to Rear-Admiral Dahlgren in Charleston Harbor. In May, 1864, dispatches were received from the Secretary of the Navy, asking Messrs. Hayden and Maillefert to report with all possible speed to Rear-Admiral Lee, of the North Atlantic blockading squadron at Hampton Roads, Va. Here, in addition to work similar to that done under Burnside, they equipped tug-boats and ironclads with boom torpedoes,* and placed torpedoes and sunken vessels in the channel of the James River opposite Farrer's Island, Mr. Hayden having the general supervision of the torpedo post, fully prepared to resist the Confederate fleet in case

* Nearly twenty years afterwards Mr. Hayden, while visiting dock yards in England, found torpedo boats with boom torpedoes, arranged after the pattern of those gotten up on the James River by himself and Prof. Maillefert, although greatly improved.