The 5th Regiment of Infantry remained on the upper Potomac and in the Shenandoah Valley of Virginia during the winter of 1862-63, and was assigned to General Milroy's Division, who were besieged at Winchester, Virginia, June 13 and 15, 1863, by the entire Confederate army of Northern Virginia. In the battles incident to the siege and the forcing of its way through the enemy's lines, the 5th Regiment, under the command of Maj. Salome Marsh, suffered terribly in killed, wounded and prisoners.

The regiment rejoined the army of the Potomac in 1864, and participated in the siege of Petersburg, June to September, 1864, and was with that part of the Army of the Potomac known as 3d Brigade, 2d Division, 18th Army Corps, and the 2d Brigade, 3d Division, 24th Army Corps, that occupied Richmond, Va. (the Confederate capital), April 3, 1865.

The 5th Regiment rendered gallant service with the 2d and 8th Army Corps and the Army of the James.

A large number of its original members re-enlisted as veteran volunteers. The large number marked as deserters may be accounted for by the fact that late in 1864, and early in 1865, about one hundred "substitutes" were assigned to the regiment, who deserted as soon as they received their substitute pay.

The 5th Regiment of Infantry travelled the following distances during the Civil War viz., By boat, nine hundred and twenty-three miles; by rail, six hundred and seventy, three miles; on foot, five hundred and sixty-seven miles; or a total of two thousand one hundred and sixty-three miles.

The casualties in the 5th Regiment of Infantry were as follows: Killed, one commissioned officer and sixty-three enlisted men, or a total of sixty-four; died of disease, etc., six commissioned officers and ninety-one enlisted men; total ninety-seven, or an aggregate death list of one hundred and sixty-one.

The battles and engagements in which the 5th Regiment of Infantry participated were as follows, viz., Antietam, September 17, 1862; Charlestown, Va., October 16–17, 1862; Winchester, Va., June 13–15, 1863; Siege of Petersburg, Va., June to September, 1864; Battle of the Crater, Va., July 30, 1864; Siege of Richmond, Va., October, 1864, to April, 1865; Second Battle of Fair Oaks, Va., October 27, 1864; occupation of Richmond, Va., April 3, 1865.

The 5th Regiment of Infantry was mustered out of the military service of the United States at Fredericksburg, Va., September 1, 1865, and transported thence to Baltimore, Md., where the regiment disbanded.