Clarence was born in Grafton, NSW, in 1889, the son of William Clarke and Alice Frances Jane Clarke, nee Blake. On his enlistment into D Company, AN&MEF on 11th August 1914 he stated that he was and Indent Agent and gave his mother, at Harrison St, Neutral Bay as his next of kin. He further stated that he had served with the Shanghai Police in 1908/09, also with the CMF for two years prior to that.

Whilst he was in Rabaul he was attached to the Treasury Department and he returned to Sydney and was discharged, term expired, on 4th March 1915 having completed 206 days service.

On 11th March 1915 he joined the AIF and was posted to A Company, 20th Battalion. He was promoted Sergeant on 31st May and sailed with the battalion to the middle East, departing Sydney on 25th June aboard the BERRIMA. With the battalion, he landed on ANZAC Cove on 22nd June 1915 and on 30th November he was hospitalised, suffering a bout of malaria.

Following the withdrawal from Gallipoli he moved to France in March 1916 and on 16th June he was evacuated to UK suffering from arthritis. He rejoined his unit in France on 17th November and on 8th December was promoted CSM (WO11). He was granted a Commission as a 2nd Lt on 1st August 1917 and subsequently promoted Lieutenant on 1st December 1917.

Clarence was seconded to the 3rd Training Battalion in the UK on 1st March 1918 for a 6-month secondment during which, between 4th April and 4th May, he attended a rifle course at the Australian School of Musketry at Tidworth. He rejoined his unit on 4th September and shortly afterwards was awarded the Military Cross for his action as follows: -

"On 3rd October, 1918, when the right flank of the battalion was held up in the attack on the BEAUREVOIR system, North of ST. QUENTIN, Lieut. Clarke on his own initiative worked out on the flank with two machine guns and four men in order to bring cross fire to bear on the enemy's strong post at LAMOTTE FARM. The enemy was pouring on incessant stream of bullets on to our troops, and LIEUT. Clarke, by his prompt action, drew the fire off our men and his cross fire assisted greatly in the taking of the enemy strong post. During the time he was under heavy machine gun fire from the rear and right flank."

Clarence left the UK aboard the KAROA, departing on 28th March 1919 and arriving home on 5th May 1919. His appointment with the AIF was terminated on 9th June.

On 25th August 1920, Clarence married Nancy Cox at St Augustine's, Neutral Bay.

Clarence died in Shannon, Victoria in 1948.