

The Life of Curtis G. Culin

By Bill Curtis

Curtis was born in Cranford, and lived at 2 J 5 Holly Street. He was the only child of a quite prominent family. His grandparents also lived on Holly at 107. Curtis graduated from Cleveland High with a General Diploma in 1935. He was launched from school into the midst of the Great Depression. Fortunately, his father who worked for Schenley Distillers was able to help Culin get employment. His title was Sales Promotion Assistant at Schenley in NYC. His job was window trimming, computing window decorating costs, and general clerking. (Doesn't sound very exciting, but it was a job when jobs were non-existent.) In 1938 he joined the National Guard. The unit he was in was the famed Essex Troop, a cavalry unit. This was a mounted troop that trained on horseback, held exhibitions of riding, and was considered an elite organization.

With War Clouds gathering, and then Pearl Harbor being attacked, his unit was activated in January of 1941. By now the horses had given way to less glamorous conveyances, Tanks. The unit was now known as 102nd Cavalry Recon. Squadron (mechanized). If you notice they held on to the glamorous Calvary designation.

I don't know much of what transpired between the beginning of 1941 and June of 1944, but I assume it was training, both in the U.S. and then in England. I know that while in England he met a girl he thought highly of (V-Mail home). He writes again from France 10 days after the invasion, very short letters but very nicely written.

Now it happens, our tanks are having a great difficulty trying to penetrate the hedgerows in the French countryside. We are losing tanks and sustaining heavy losses of men because of the hedgerows. Curtis comes up with the idea to weld teeth, or tusks, to the front of the tanks to get through the hedgerows, and it works. His idea catapults an ordinary Sergeant into prominence. He is photographed, decorated, interviewed and recorded by Armed Forces Radio. He is now a star, but not for long. On November 2nd he and another Cranford boy, William Bateman are walking at night and Curtis steps on an anti-personnel mine. His left leg is shattered and as he falls, he detonates another, which severely wounds his right thigh. Bateman uses his belt as a tourniquet to stop the bleeding, but he too falls victim to a mine as he goes for aid Bateman loses his left leg. Both soldiers are evacuated to Belgium where they stay for some time. Curtis' wound requires more extensive treatment so he is sent to England, then to various hospitals in the US. He is discharged in September of 1945.

His invention is well known in the Tank Corps, a building was named in his honor at the armor school in Fort Knox. Eisenhower and Bradley both mention Curtis in their books. We have a Culin Drive here in Cranford, and a bronze tablet on the lawn of the municipal building, and many photos and medals of his at the Historic Society.

Curtis G. Culin Revisited

By Bill Curtis

Cranford's Curtis Culin was a 29-year-old Sergeant tank commander in the 102th Cavalry Reconnaissance Squadron. He had landed in France shortly after D-Day and was part of the vast invasion force that was stymied by the "Bocage" country. "Bocage" refers to the Normandy agricultural fields that had been farmed for centuries and had perimeters of stone, earth, and tangles of scrub with ditches on both sides. These "Hedgerows" were natural fortifications for the German defenders. The Germans were wreaking havoc with our tanks, using heavy machine guns and "Panzerfaust" anti-tank weapons. Casualties among our tank crews were so heavy the army high command held up the advance while trying to come up with a plan to allow tanks to penetrate the hedgerows safely.

The basic problem was that as a tank tried to breach this obstruction, it had to crawl up the hedgerow exposing its light underside and couldn't bring its guns to bear on the enemy. Heavy machinegun fire and the shoulder fired "Panzerfaust" easily penetrated the tank armor before the tank crew could train their cannon and machineguns toward the German defenders.

One early solution to the problem of breaching the hedgerows was tried by adding two "Tusks" to the front of a tank then ramming the tusks into the hedgerow, backing off, and then having engineers race forward, placing explosives in the holes and detonating them. This seemed plausible but the amounts of explosives necessary and the engineers being on foot and totally exposed to enemy fire doomed the idea.

July 25 was the date the advance was scheduled to begin regardless of tank or infantry casualties. The Army had to move.

On or about the 21st, Curtis Culin offered his idea of welding teeth to the front of a tank that would make the tank push through the obstacle rather than ride up over it. His idea was tried and it worked. The news of the success was sent to the high command who immediately ordered an all out effort to equip as many tanks as possible with the teeth, called the "Rhino" device.



Bad weather set in and grounded the necessary air-support needed for the push through Normandy. Taking advantage of the delay, the ordnance crews worked night and day cutting steel and welding.

They were able to equip enough tanks with “Rhinos” so that when the major push began, only one tank was lost.

Curtis was awarded The Legion of Merit in the field for the idea that saved countless American lives. Unfortunately, in November in Germany’s Huertgen Forest, Curtis stepped on an anti-personnel mine that blew off his left leg and in falling, fell on another that severely wounded his right thigh. He survived his wounds.

Married in 1945, he died in New York in 1963.

Curtis Culin is remembered locally by a street named Culin Drive and a plaque and tree on our Municipal Building’s lawn. He and his idea are recounted in both General Eisenhower’s and Bradley’s books. A maintenance facility in Fort Knox is named after him. After the war, Eisenhower had met with Curtis and sent his parents a telegram of condolence on his death. The “History Channel” made a video featuring his “Rhino” device, and innumerable students of WW II are familiar with Curtis Culin’s “Rhino.”

All this from a Cranford boy who never entered college, worked for Schenley Distillers in New York City as a window trimmer, and according to his Army Separation’s Main Occupation classifications, was a “Sales Promotion Assistant.” But the timely idea of Cranford’s Curtis Culin was a major innovation that is still being used in tank warfare today.