

World War II Innovation



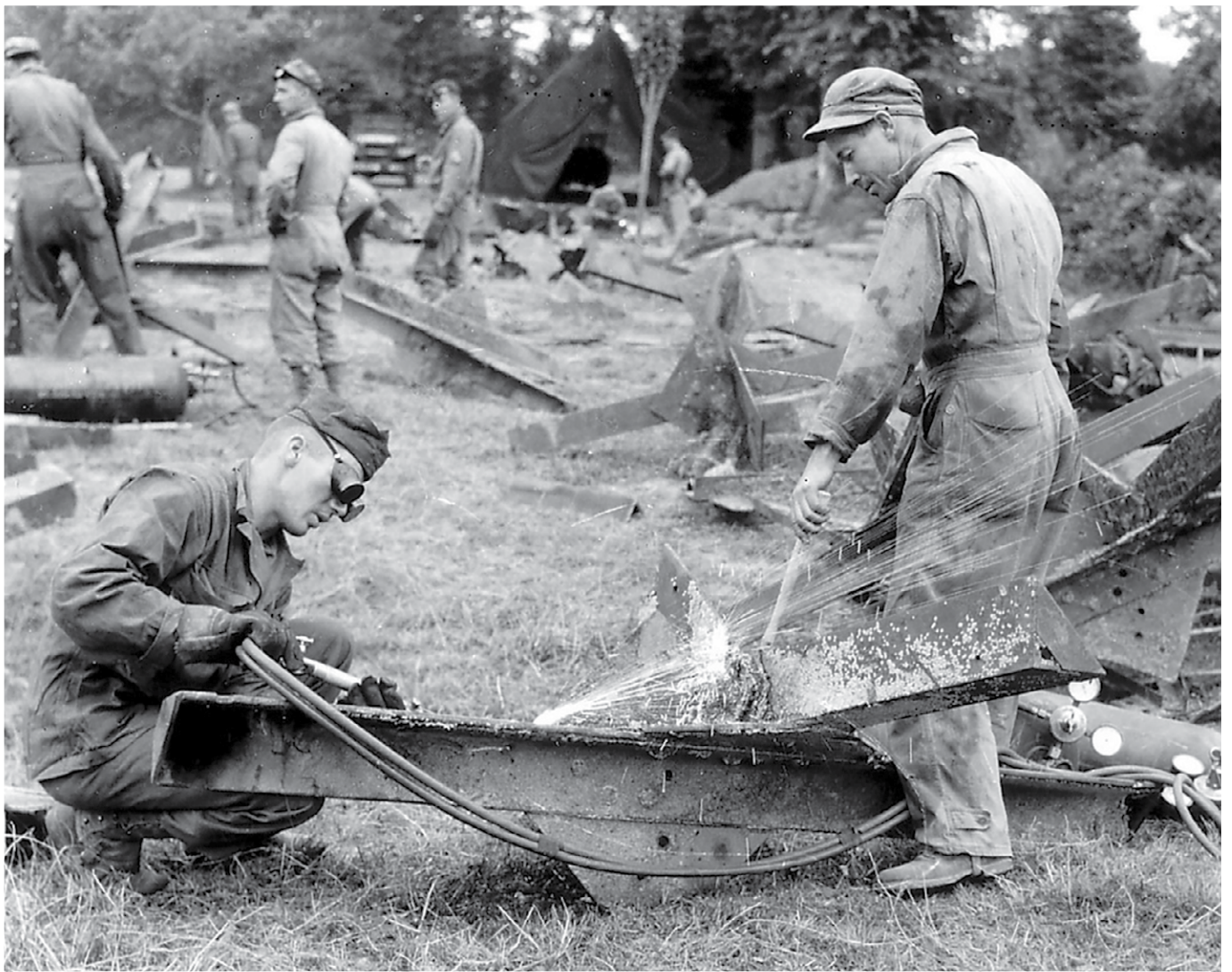
American soldiers and a Sherman tank equipped with hedgerow cutter bust through a hedgerow during the invasion of Normandy, France, circa June 1944. (Photo courtesy of U.S. Army)



Top: Bocage country on the Cotentin Peninsula in lower Normandy, France. (Photo courtesy of Wikipedia)



Right: U.S. soldiers fighting in the hedgerows. (Photo courtesy of U.S. Army)



Army engineers fabricating hedge cutters from the steel beach obstacles left behind by the Germans. (Photo courtesy of World War II Today)

There is arguably no better environment for stimulating innovation than combat. One example is the Culin hedge cutter.

To break out of the beachhead established by the Normandy invasion during World War II, Allied forces needed to push through terrain known as bocage—French farming country with a mix of woodland and pasture. Over hundreds of years, local farmers had divided up the countryside using packed dirt embankments and dense hedges. These hedgerows made formidable obstacles, and teams of German soldiers used them as cover to ambush Allied soldiers and tanks that attempted to scale the embankments.

Demonstrating ingenuity, Sgt. Curtis G. Culin had the idea to modify tanks to break through the obstacles instead of climbing over them. Using steel from the beach obstacles left behind by the Germans, U.S. engineers fabricated hedge cutters and mounted them on the front of U.S. tanks. These modifications enabled the U.S. forces to breach the hedgerows, creating lanes through the obstacles and allowing the Americans to break out of the beachhead and pursue the German Army.