

# BRIDGE BUILDING

By Sgt. JOHN SCOTT  
YANK Staff Artist

These drawings were made during a month with the Combat Engineers, in the apple orchards of Holland while the cold and rain settled down and the mud got deeper. The outfit had fought its way through Europe, sometimes in advance of the Infantry, since the early days in Normandy, and now they looked forward to that biggest bridging job of all—the crossing of the Rhine.

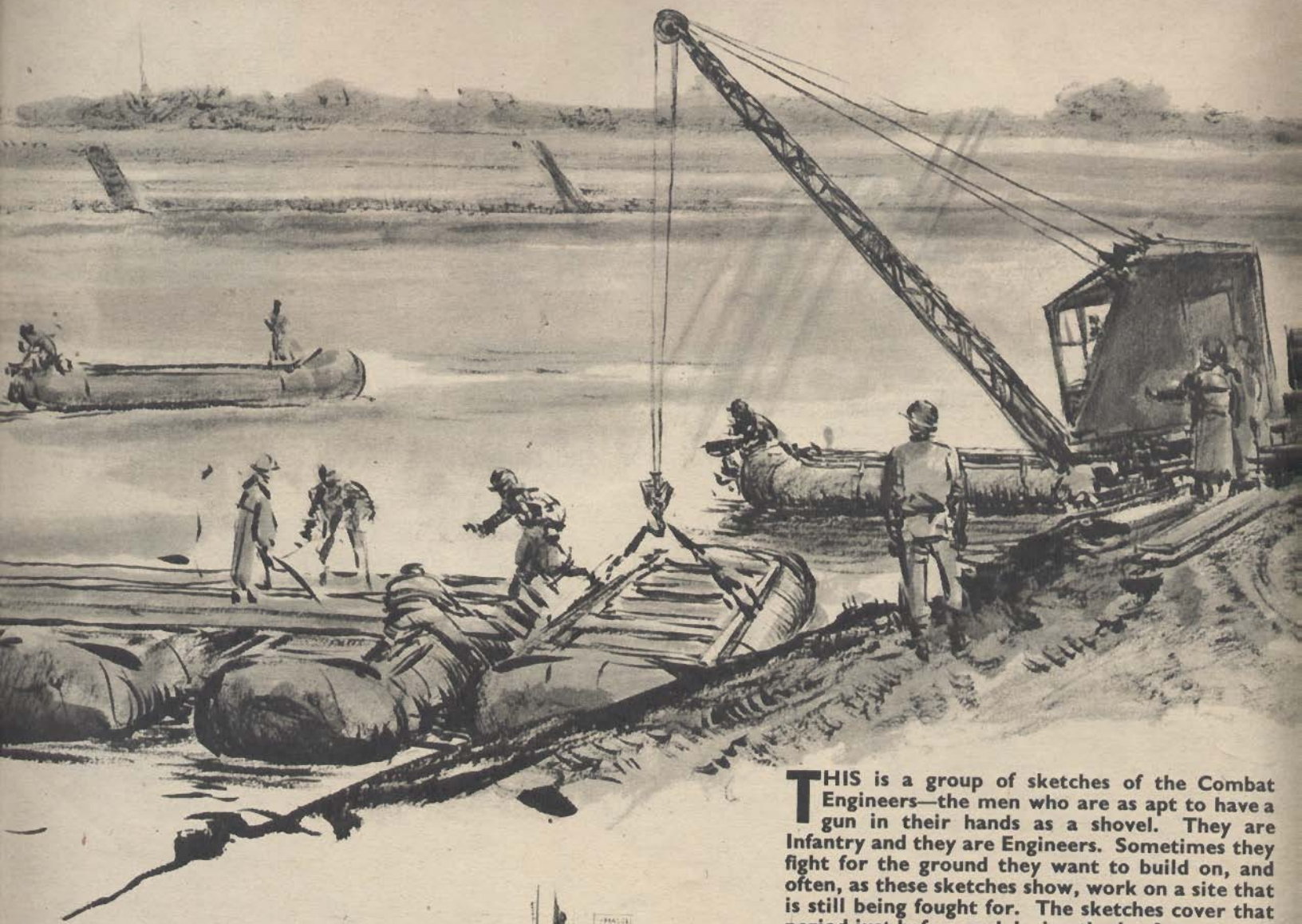


Here, above, in a German farmhouse near the front, is the forward CP of a Combat Engineer group. By candlelight the details of building the bridges and roads that the Infantry and tanks ask for are worked out.

Below. The launching nose of a Bailey bridge being pushed across a gap as the .50 calibre anti-aircraft gunners get ready for business. This is the river Maas, past the Dutch town of Maastricht. Most of this old bridge, which was built in the 13th Century and modernized a few years ago, was blown up by the Germans as they left. Under some of the modern reinforced concrete could be seen the ancient stone and mortar of the bridge, which was already several hundred years old at the time the Spaniards captured the town.



Sgt. John Scott  
Maastricht, Holland



...a section of a Combat Engineer group  
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 ...and raining.



Infantry at Marienburg crossing  
 a Bailey bridge under fire.

**T**HIS is a group of sketches of the Combat Engineers—the men who are as apt to have a gun in their hands as a shovel. They are Infantry and they are Engineers. Sometimes they fight for the ground they want to build on, and often, as these sketches show, work on a site that is still being fought for. The sketches cover that period just before and during the 1st Army attack on the Siegfried Line north of Aachen, in October, and depict only one aspect of the Combat Engineers' work—bridge-building.

The Engineers are young and tough and good technicians. The Army could not move without them. They may work all night in the rain and cold, never knowing when the next flock of 88s is coming in, or when a machinegun or "burp" gun will open up from the surrounding woods.

These bridge-building Engineers took their losses, but in the morning the tanks were going across. The roads and the bridge sites had been zeroed in by the Germans and no one who was around Aachen ever had any illusions about a shortage of German artillery or ammunition.

Above, a section of a Combat Engineer group pulling out a floating Treadway bridge from a temporary crossing of the Albert Canal. A more permanent bridge has been constructed nearby, and this material is moved to another spot where it will be needed. It is cold and raining.

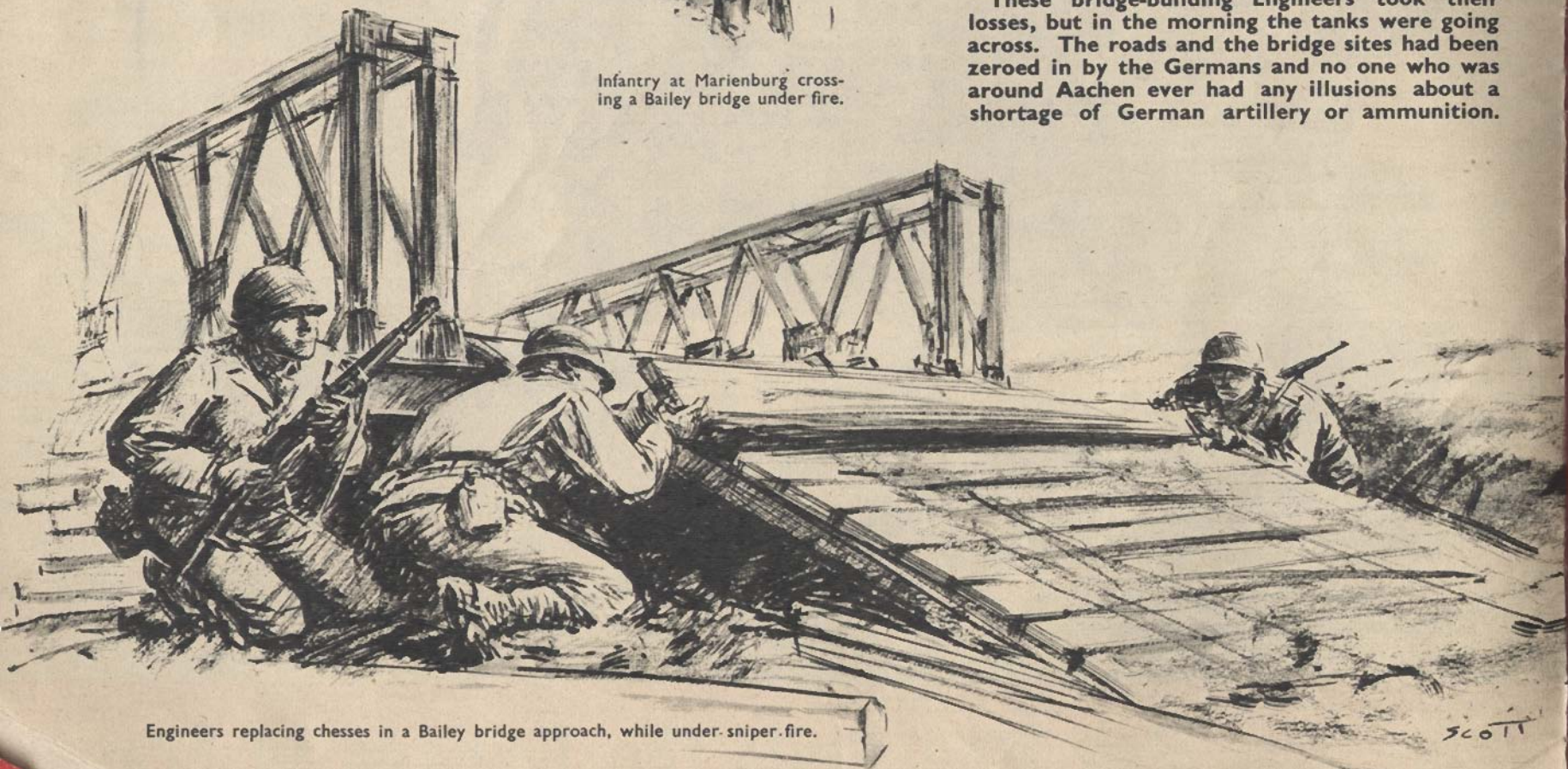


Infantry at Marienburg crossing a Bailey bridge under fire.

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Engineers replacing chasses in a Bailey bridge approach, while under sniper fire.

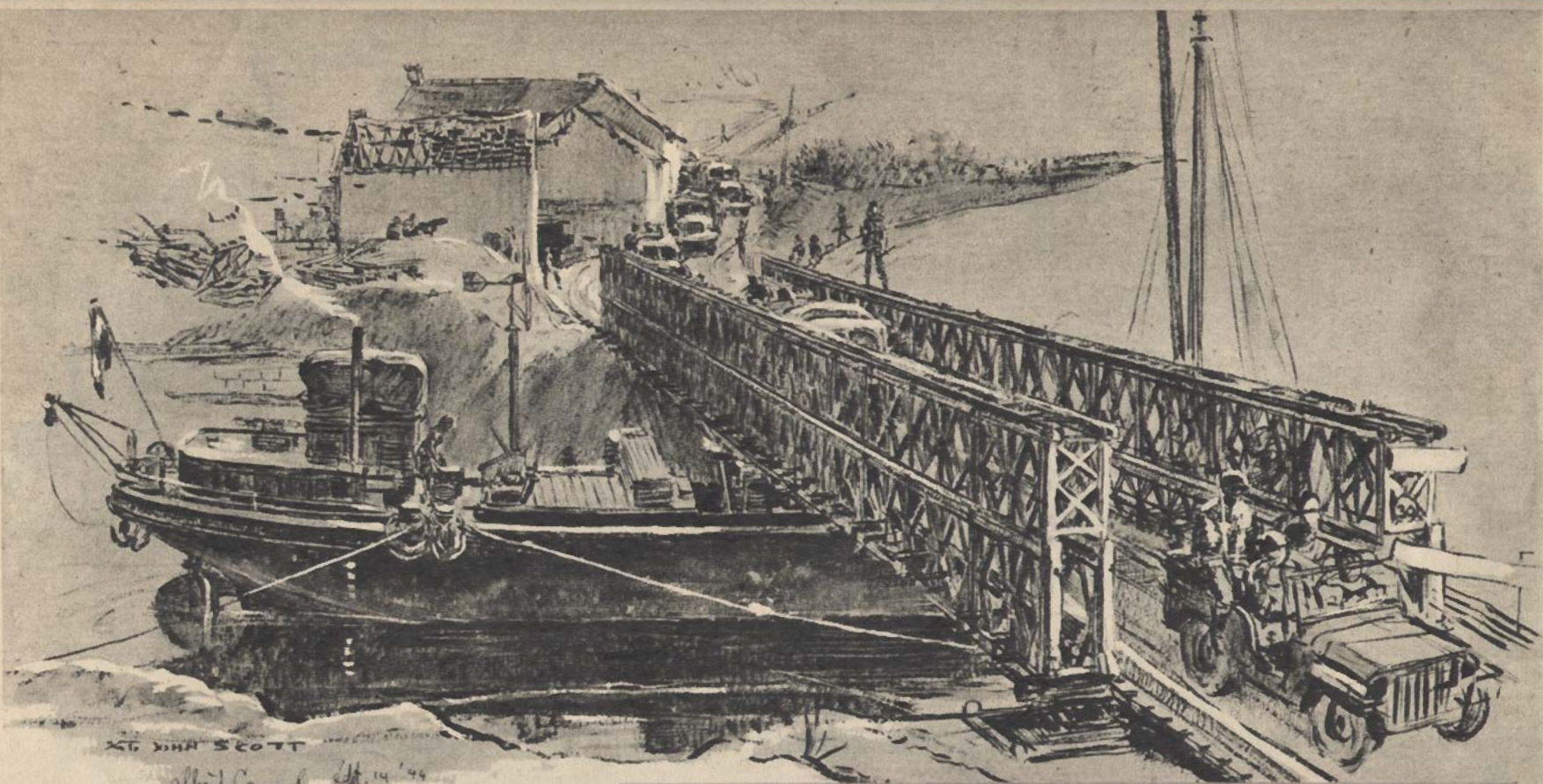
SCOTT



SGT. JOHN SCOTT

ALBERT CANAL BELGIUM

SEPT. 13 1944



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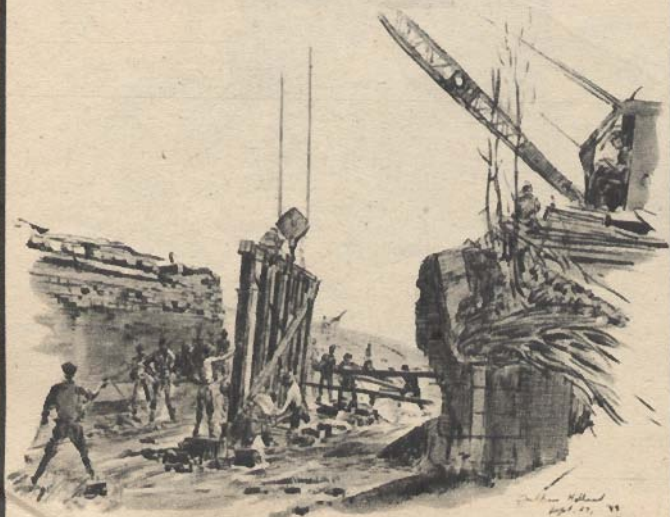
Albert Canal 4th. 14 '44

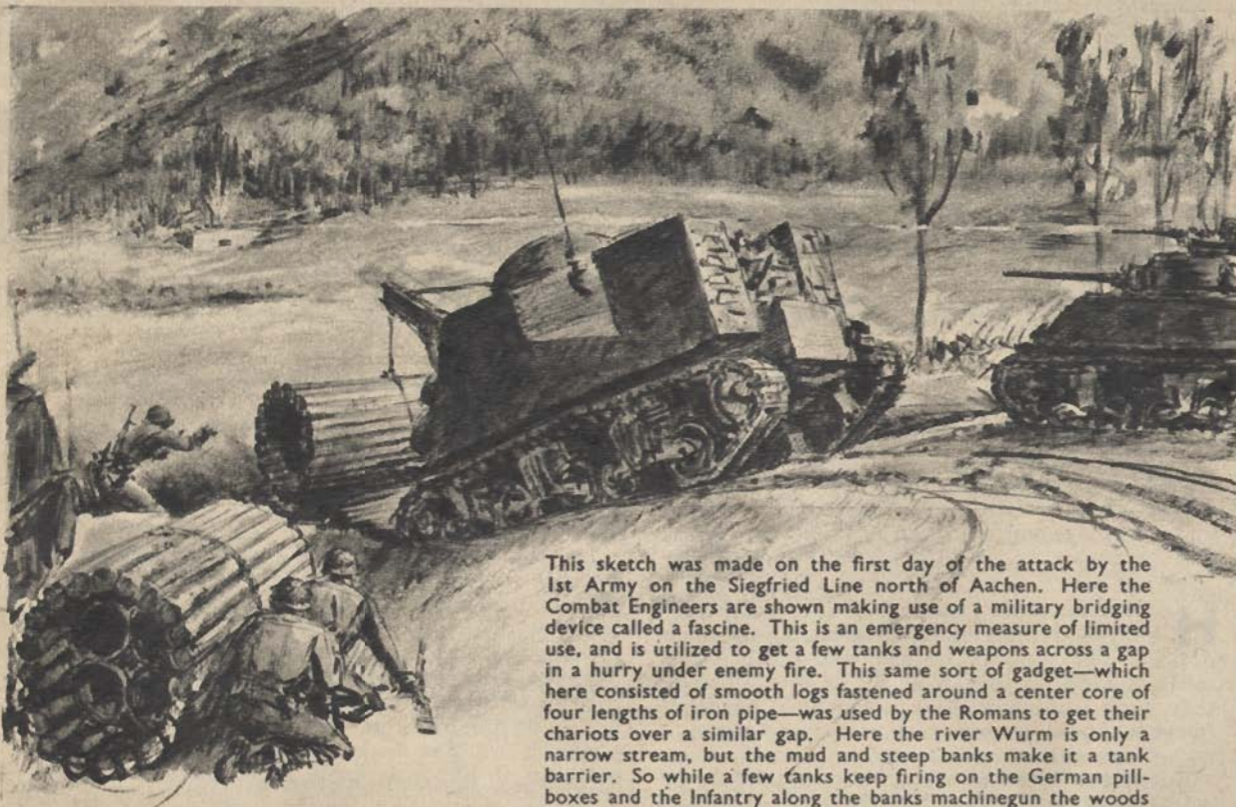
Above, a Bailey bridge, at Canne, on the Albert Canal, near the German border. This bridge is supported in the center by a Dutch barge moored in midstream. The bargemen heard of our building a bridge here and brought this barge to help support the heavy traffic of tanks, guns and Engineer equipment. Piling in the center rests on the barge. The bargeman and his family continue to live aboard and the wife is washing clothes on deck, and once more the Dutch flag flies from the stern. This is a typical Dutch barge and kept as neat and clean as any yacht on Long Island Sound. The Combat Engineers built this bridge and had to fight for the bridge site. They came down the hills in the background and drove the Germans from the foxholes and houses on the bank—there were still German riflemen dug in on the bank in the foreground when the bridge was started. Near the houses is one of the machineguns guarding the bridge.

**T**HE Engineers, like the other branches, have the greatest respect and admiration for the doughboys, and the Infantry in turn seems to have a pretty good impression of the Engineers. Once, at a place where the Engineers had a Treadway across the Wurm river, they were watching the Infantry and saying: "They are the guys! That ol' Infantry has the rough deal. Sure wouldn't want to be in that." An Infantry lieutenant stopped and talked a moment with the Engineer officer and, after taking a look at the shell-scarred ground and shrapnel-lacerated trees, moved on, saying: "Boy, you have the rough deal. Sure wouldn't want to be in the Engineers."



Engineers, above, working in a swiftly flowing stream preparing the seating for a bridge trestle. This is near Gulpin in Holland. Below, the trestle bent being lowered into place after the bed of the stream has been made ready for it.





This sketch was made on the first day of the attack by the 1st Army on the Siegfried Line north of Aachen. Here the Combat Engineers are shown making use of a military bridging device called a fascine. This is an emergency measure of limited use, and is utilized to get a few tanks and weapons across a gap in a hurry under enemy fire. This same sort of gadget—which here consisted of smooth logs fastened around a center core of four lengths of iron pipe—was used by the Romans to get their chariots over a similar gap. Here the river Wurm is only a narrow stream, but the mud and steep banks make it a tank barrier. So while a few tanks keep firing on the German pill-boxes and the Infantry along the banks machinegun the woods the Engineers lower the fascine into place.



Above, with the Germans driven back and the bridge no longer under fire, a timber trestle bridge is built and the steel Treadway moved up to where it is needed in the fighting. Below, decking going on a timber bridge.

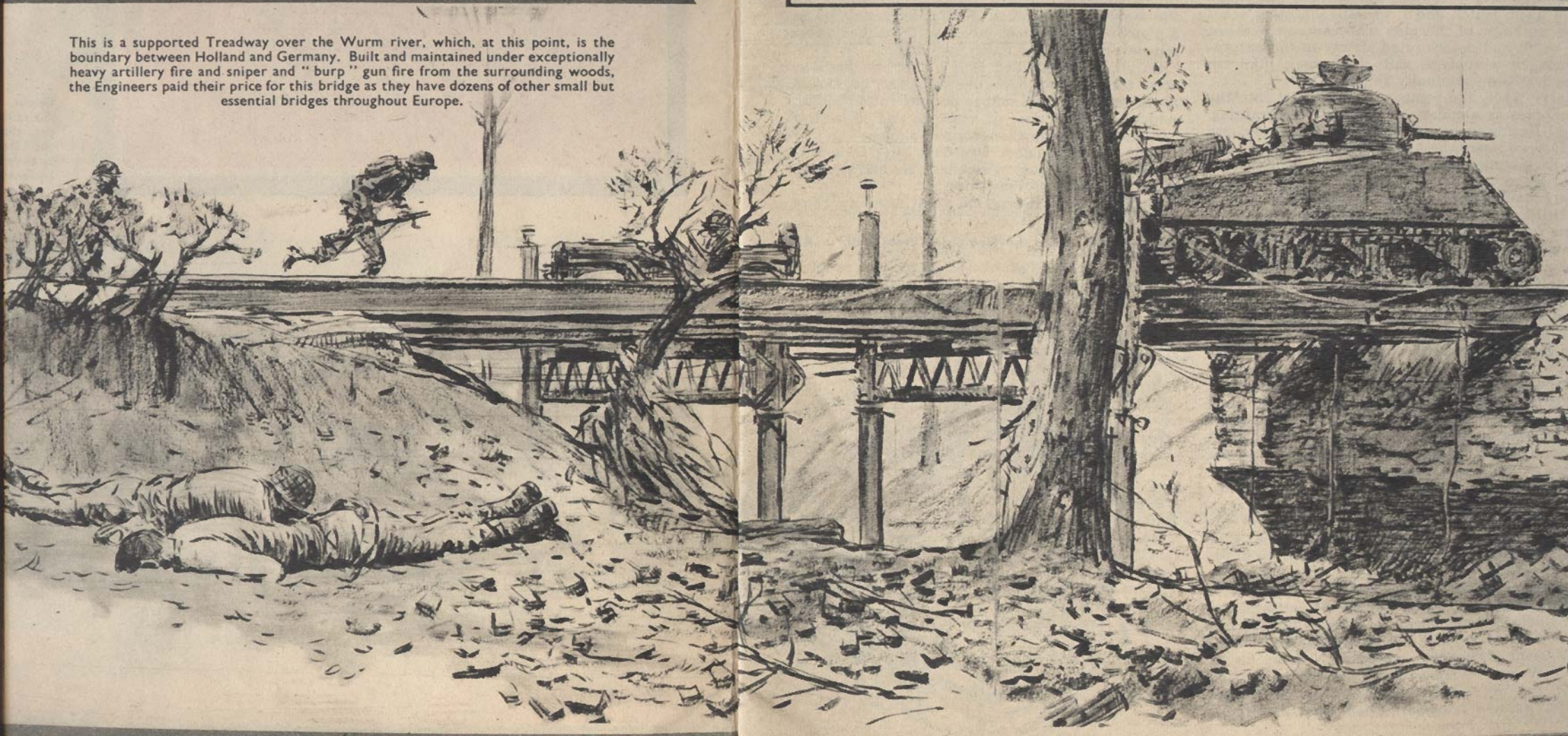


Left, a Bailey bridge across the Wurm river near Marienburg. This bridge was built under fire and maintained under direct small arms and artillery fire for days. The day before, one of the bridge officers was pinned down in the cabbage patch outside the window by machinegun fire. He lay hugging the earth for half an hour while the bullets just cut the top off the cabbages and covered him with cole slaw.

Right, by means of a Treadway beside the Bailey bridge two-way traffic was maintained here, near Marienburg. The bridges are hidden from enemy observation by smoke shells.



This is a supported Treadway over the Wurm river, which, at this point, is the boundary between Holland and Germany. Built and maintained under exceptionally heavy artillery fire and sniper and "burp" gun fire from the surrounding woods, the Engineers paid their price for this bridge as they have dozens of other small but essential bridges throughout Europe.





Rimborg and Marienberg, Germany  
(Germany Campaign)  
03 October to 05 October 1944

During the period from 031200A to 051400A October 1944, this battalion constructed three Treadway bridges and one Bailey bridge while supporting the attack of the 30th Infantry Division against the Siegfried Line. On 3 October 1944, a 50 foot Double-single Bailey bridge was constructed over the Wurm River at (K-846598) under heavy small arms, artillery and mortar fire. A 40 foot Trestle Treadway bridge was also constructed in the vicinity of (K-846596) as soon as the Bailey bridge had been completed. A 60 foot Trestle Treadway bridge was also constructed at (K-842588) (Rimberg) under heavy small arms, artillery and mortar fire. On the 5th of October 1944, a second Trestle Treadway bridge was constructed at (K-842588) under the same types of fire.

While few casualties were suffered compared to the amount of fire that was being placed on these sites, the men who were evacuated were mostly key personnel, consisting of (1) officer, several sergeants and corporals and this will naturally have an affect on the future operations of this Battalion.

LESSONS LEARNED:

It is highly impracticable to start construction of a semi-permanent military bridge while small arms, mortar, and artillery fire is being placed upon the site. Key personnel are always lost as a result of this and they cannot be replaced. And because of such fire, the construction time for a bridge is lengthened to such a great extent that the final completion of the bridge is accomplished no sooner than it would have if we had waited until the infantry had secured the bridgehead.