The Horse Goes to War

by Robert Butler. This article appeared in the original programme for War Horse. (2007)

One of the most widely-reproduced illustrations to have come out of the First World War shows a man kneeling in the middle of a road, cradling the head of a wounded horse. Behind him, smoke billows from a shelled house, and a compatriot (further up the road) urges him to move on quickly. The soldier's cheek is pressed against the horse's. The caption reads: 'Goodbye Old Man'. It's melodramatic, of course; but the harsh fact is that more than eight million horses died during the First World War.

Most people had expected the war to be a short-term affair (over by Christmas, in fact). The classic theory of war, outlined by Clausewitz, was to seize the initiative. What followed would be short and decisive. The qualities needed in these kinds of engagements – surprise, speed, precision and ruthlessness – were best exemplified by the cavalry. The Calvary Manual was unequivocal on the matter. Nothing could replace 'the speed of the horse, the magnetism of the charge, and the terror of cold steel.'

The cavalry placed great value on training and experience because horses don't like blood, or noise, or gunshots (they don't like anything unexpected really) and in a cavalry charge, a horse that panics can be more dangerous than the enemy. In the 19th century, the level of training reached impressive heights. Officers in the Prussian cavalry could charge 2000 yards without breaking line. Off-duty, a Prussian officer's idea of fun was to ride his horse between the turning sails of a windmill.

As for experience, English cavalry officers were renowned for riding fast over uncertain ground. This was largely thanks to the amount of time they had spent hunting foxes. 'In the business of war', wrote Captain Nolan, who died in the Charge of the Light Brigade, 'Our cavalry ought to be able to do whatever is done in the sport of hunting.' In his book Cavalry – Its History and Tactics (1853), Captain Nolan writes that the first principle of horsemanship is to think of the horse first. A bad rider tries to guide and manage his horse so that he can 'keep his seat'. A good rider 'keeps his seat' in order to guide and manage his horse. This advice echoes the words of the Greek soldier and writer, Xenophon, two thousand years earlier. In his own treatise, On Horsemanship, Xenophon urged the cavalry to treat their horses gently. 'Those who force horses forward with blows, inspire them with still more terror.'

On the Western Front, the cavalry was stopped in its tracks by two 'terrors' that had been around for decades. The first was patented by an American farmer, Joseph Glidden, in 1874. He had discovered that if you placed barbs at intervals along a wire and used a second wire to hold these barbs in place, you could prevent cattle from roaming around the countryside. The discovery of 'bobbed' wire, or barbed wire, made Glidden one of the richest men in America, and transformed the American West.

The second 'terror' came from another American, who had previously distinguished himself by inventing the mousetrap. Sir Hiram Maxim later became British and was knighted. His breakthrough was based on Newton's Third Law of Physics, the law of reciprocal actions. It states that 'whenever a particle A exerts a force on another particle B, B simultaneously exerts a force on A with the same magnitude in the opposite direction.' Maxim used the backward momentum, or recoil, that comes from firing a shot, to load the next bullet. This transformed the weapon's rate of fire. In 1881 Sir Hiram invented the automatic machine gun.

Hundreds of thousands of cattle in America may have known about barbed wire, but at the beginning of the First World War, the British army was still using single strands of wire. Machine guns had been used in the Russo-Japanese war (1904-5), causing one future British general to report that the only thing the cavalry could do in the face of machine guns was cook rice for the infantry. (His superiors thought he had lost his mind.) Between 1904 and 1914, when war broke out, the number of machine guns the British army ordered each year from the arms manufacturer Vickers remained the same: ten. As one historian observed, the British army in the 19th century was 'a social institution prepared for any emergency except that of war.'

Barbed wire and machine guns overturned the traditional concepts of warfare (quick and decisive actions) and introduced (on an unheard-of scale) the war of attrition. The area under hostile fire, or 'swept zone', became known as No Man's Land. The trenches were rapidly constructed out of duckboards, sandbags and corrugated iron and this trench system became so fixed that you could buy maps of the Western Front from London stationers.

The most famous battle of the war, the Battle of the Somme, was remarkable (not least) for its total lack of surprise. One survivor from the Somme remembered as his strongest recollection 'all those grand-looking cavalrymen, ready mounted to follow the breakthrough. What a hope!' Two and a half months after the Somme, a new weapon emerged. It was mobile, it could deflect machine gun bullets and it could crush barbed wire. The horse had been replaced by the tank.