



PRICE:
£1979.00

This is a good-looking, well-made rifle

CLASSIC SINGLE-SHOT

Derek Landers looks at a Pedersoli Trapdoor Springfield rifle

For the most part, soldiers in the American Civil War were armed with single-shot muzzle-loading rifles of the Springfield or Enfield designs. These were manufactured by a number of independent factories as well as the Government arsenals. The relatively small number of cartridge long arms used in the conflict, while playing an insignificant role in the outcome, nevertheless convinced the military leaders that this was the way forward. Such was the state of the USA's economy after the war, that the cost involved with designing and manufacturing new rifles was not top of the agenda. Besides, there were many thousands of serviceable percussion rifles in the armouries and consideration was given to trying to convert these to breech loaders. After trying several systems, they finally chose that of Erskine Allin, Master Armourer at the Springfield Armoury, which was based on the Model 1861 Springfield musket.

The conversion was done by removing the rear end of the barrel and replacing it with a breech block which had a hinged upper portion. This was quickly nicknamed 'the trapdoor'. The lock and hammer were retained with a slight modification to the lock plate to accommodate the trapdoor opening catch. Newly manufactured

plates for later models retained the 'U.S. SPRINGFIELD' marking and the eagle. Around 5000 of these rifles, chambered for .58 rimfire ammunition, were initially produced. The weak link proved to be the copper-cased cartridges, so a new .50-70 centrefire round (still copper-cased) was developed. To accommodate this ammunition, the Model 1863 musket had its .58" calibre barrel bored out to .64" and then fitted with a .50" liner. Some 25,000 examples were made before a .50" calibre barrel was produced for subsequent guns. The first carbines appeared in 1871.

Along with the decision to adopt the Colt SAA revolver, the Army chose to standardise at .45", the calibre of their principal small arms and, being satisfied with the operation of the new trapdoors, the result was the introduction of the .45-70 Government cartridge. For the next 19 years, this was the standard U.S. rifle

cartridge, until it was replaced in 1892 by the .30-40 Krag.

Faults

Although the Allin design was a simple, strong and reliable mechanism, in the early days it was still let down by the copper-cased ammunition. These centrefire cartridges had an inside primer and outwardly resembled a rimfire case. Poor quality control in the fabrication of these thin cases caused many to swell in the breech upon firing. The result was that the head was often torn off by the extractor. The official solution to this situation was as follows: "Prise the ball from another cartridge, pare with a knife so as to be able to insert it in the muzzle, and then ram the ball hard with the ramrod when the breech is closed; this will upset the ball and fill the headless shell. Open the breech block and



(Left) Percussion-era lock plate and hammer. The trapdoor opening spur is just under the hammer nose



(Above) Detail of the vertical graduations on the Creedmoor rear sight
(Left) Hammer on half cock with trapdoor wide open



the ball and shell can be easily pushed out with the ramrod."

This would have been a suitable solution on a target range but would hardly have helped Custer's 7th Cavalry, particularly as they only had one ramrod between ten men. There are reports of several broken knives around the bodies of the soldiers at Little Big Horn, not from 'paring the ball' but from trying to extract the broken cases from the rifles. It is doubtful that better ammunition would have affected the outcome of that particular battle but the soldiers would at least have given a better account of themselves.

Faithful rendition

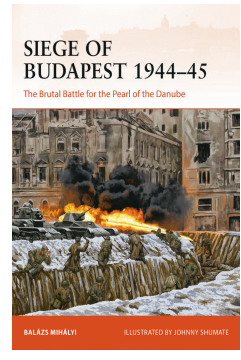
Of the various American single-shot rifle mechanisms from the latter part of the 19th century, the trapdoor is by far my favourite, and Pedersoli has done a great job with its reproduction. A little more complex than most of its contemporaries, it gives you a

bit more to do in the loading and unloading operation, rather than just pulling back a hammer.

This 'long range' model is really no more than the standard infantry rifle fitted with more elaborate sights and the addition of a partially chequered pistol grip extension, all of which are offered as options in the Pedersoli range. The pistol grip, attached by a single screw, does improve the hold but I found the base of the rear tang sight catching my right thumb during firing – maybe I just need to adjust my grip. The fit and finish are up to the usual Pedersoli standard, with a particularly pleasing matte finish on the single-piece walnut stock and good blueing on the metal parts, with the trapdoor and butt plate having some nice, muted case colours.

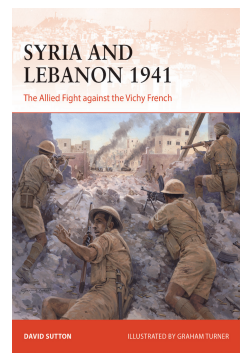
The Creedmoor sight (looks to be Pedersoli's Universal Long Range model) has an excellent range of settings, while the tunnel front (the original blade is removed) comes with a set of ten inserts in

BOOKSHELF



TITLE: Siege of Budapest: 1944-45
AUTHOR: Balazs Mihalyi
PUBLISHER: Osprey Publishing, Oxford
ISBN: 9781472848376
PRICE: £15.99

By 1944, the German army on the Eastern Front was being pushed back by a series of offensives launched by the Russian army. The situation was the very opposite of what it was in 1941-42, with the Germans in Hungary having to be defensive. Earlier, the Germans had been the ones conducting sieges at places such as Leningrad and Sevastopol, now they would become the besieged in Budapest, the capital city of their Hungarian allies. This fascinating work explains how the Russians advanced to the outskirts of the city and manoeuvred to surround and isolate the defenders, which included Hungarian troops, by late December. The narrative describes how the fighting developed as the Germans refused to give up any ground and even launched attacks. This is a chapter of the Eastern Front which is slowly coming to be understood in the west. This book takes the story to its inevitable conclusion and in doing so adds to the understanding.



TITLE: Syria and Lebanon 1941
AUTHOR: David Sutton
PUBLISHER: Osprey Publishing, Oxford
ISBN: 9781472843845
PRICE: £15.99

The campaign in North Africa, in 1941, is usually seen as being between Britain and its Commonwealth troops, including India, against the forces of Italy and Germany. As if the fighting wasn't already harsh enough, Winston Churchill added to the hardships by ordering that the territories of Syria and Lebanon be captured to secure the Suez Canal, which was instrumental to the Allies' supply lines. The region was held by Vichy French, who were pro-German in their beliefs, and defeating them to prevent an Axis attack from there was vital. The Allied attack was launched on 7/8 June 1941 and did not go well, with Vichy forces inflicting heavy losses on British and Indian forces. The author describes how the Allies managed to retrieve the situation in five weeks of fighting, culminating in an Armistice on 14 July. This is a good work which details another chapter in the North African campaign.



a range of profiles. The inserts slot into a groove at the top of the tunnel and are held in place by screwing the knurled ring at the rear. This needs to be nipped up tight, otherwise, it can work loose under recoil and the insert will be thrown out.

The standard rear sight, an elevating ladder arrangement, is left on the rifle and this is graduated from 1 to 4 on the steps of the sideplate and 5 to 12 on the ladder, presumably, they are 100-yard increments. The sliding notch on the ladder can be locked in place via a screw and plate.

The 32" barrel with six-groove rifling and a 1:20 twist is held into the stock by two barrel bands. These are held in place by springs, both of which have a purple hue. The front band has a double sling swivel, with a single swivel on the trigger guard. There is a 2-piece metal ramrod under the barrel.

The rear end of the mechanism is held in place by a screw through the top tang, which locates in the trigger plate. The broad-based trigger guard is, unusually, not integral to the plate but is a separate unit attached with two screws through the plate and into the 'legs' of the guard.

Smooth operator

At around 9 lbs in weight and well over 4ft in length, this is a reasonably heavy but well-balanced rifle. The length of pull suited me fine and the pistol grip helps you put the pad of your trigger finger just where it should be. The large percussion-era hammer has four positions.

TECHNICAL SPECIFICATION
Name: Pedersoli Long Range Trapdoor Rifle
Price: £1979.00 (at time of writing)
Contact: Henry Krank - www.henrykrank.com

The first is the 'at rest' after firing, from where pulling back to the first click engages the safety notch. In this position, the trapdoor cannot be opened. Next comes the half-cock notch then the full cock.

To load the rifle, first, place the hammer in the half-cock position, and using the spring-loaded spur on the right of the trapdoor, push it up and forward to expose the breech. Slide in the cartridge and snap the trapdoor closed. Pull the hammer back to full cock and you are ready to go. The trigger pull is not unduly heavy and it breaks crisply without any creep. Once fired, repeat the above process and as you open the trapdoor it engages with the upper end of the spring-loaded ejector, which shares the trapdoor hinge pin. The empty case leaves the breech smartly and as it travels rearward it hits a small stud in the breech floor and is thrown up and clear. Were it not for this stud, it is possible that the case would come back into the shooter's face. The ejector is reset as you close the trapdoor.

Because of the distance between the hammer face and the cartridge head, the firing pin is a rather long, spring-loaded, 2-piece arrangement which has the advantage that if the tip is damaged, then only the front part needs to be

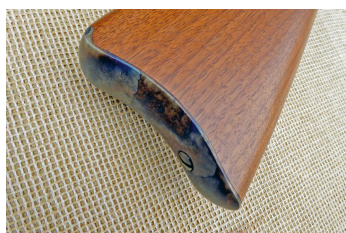
replaced. Due to the positions of the hammer and the cartridge, it makes contact with the primer at a slight angle but worked flawlessly.

Keep it light

On this occasion, I resisted the temptation to use black powder but chose initially a light load (12-grains) of Hodgdon Trail Boss powder. The bullet was a commercial 405-grain lead RNFP from GM Bullets. The target was set out at 100 yards and it took a few shots to get the Creedmoor settings somewhere close to where they should be. I was happy enough when I could put three-shot strings into around 4", so decided to stretch it out a little.

Tweaking the Creedmoor a little and upping the powder charge to 32-grains of IMR 4198, I shifted my attention to a rabbit hole a shade over 300 yards away in the backstop. A couple of dozen shots provided a few direct hits, with the rest close enough for any occupants to stay well below ground.

The trapdoor mechanism is regarded as probably the weakest of the major single-shot actions, so please read the loading instruction booklets carefully, so as not to harm yourself or the gun. **GM**



The butt plate is case coloured



The purple band spring



The rifle is supplied with a set of front sight inserts



Double sling swivels on the front barrel band