BASKETRY

Then and Now

DRYAD AND THE MERL ARTILLERY SHELL BASKET

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During the First World War, artillery shell baskets were woven in the hundreds of thousands. This research examines two designs of shell baskets made by Dryad Cane Works of Leicester, one of the many manufacturers of shell baskets, and looks in particular at the shell basket in the collection of The Museum of English Rural Life (MERL 90/43).

Artillery shell baskets were used in the First World War to assist with the transportation of artillery shells to gun emplacements, either by limber or hanging from the saddle of a horse or mule. It is not clear when the first shell baskets were made, but the 18-pounder field gun – which used shrapnel ammunition – was in use from 1905[1], so it is possible that shell baskets may have been used before 1914.

The shell basket was designed to closely fit the form of an artillery shell and cartridge, and was woven around a mould to match the dimensions of its passenger.

Image: Operation Georgette. Gun crew of a Royal Field Artillery 18-pounder battery prepare to open fire near Meteren during the fighting for Hazebrouck, 13 April 1918. © IWM (Q8712).

Image above: Artillery shell basket, MERL 90/43. © The Museum of English Rural Life, University of Reading.

Both ends are open and the basket narrows along its length, with the shell and cartridge being inserted at the wide end. Each basket was woven individually, either on an industrial scale, such as at Dryad Cane Works, or as part of a small cottage industry.

I have examined several designs of artillery shell baskets in museum collections for this research, focussing on British and Allied baskets. All the designs encountered have used cane as the main material. Some feature sections of woven willow; specific designs use wooden splints. The cane is various, most likely centre cane (referred to as 'pulp cane') and Palembang (both whole and split), both known to be used by Dryad at the time. The designs examined all have a leather cuff at the wide end – although others have leather collars or straps and buckles.

Dryad Cane Works was established in 1907 by Harry Peach. With the design skills of Benjamin Fletcher, Headmaster of the Leicester School of Art, and the influence of the writings of William Lethaby (English Arts and Crafts Movement), Peach founded the business with the aim of producing high quality design-led cane furniture. Fletcher was inspired by good Austrian and German willow and cane furniture designs and worked with Charles Crampton, a local basketmaker, on some experimental pieces. This led to Peach seeing that the production of good quality furniture would be a worthwhile business investment.

Initially the cane furniture produced in the Dryad workshops was made by just four men, but by 1914 Dryad was employing nearly 200 workers. Peach provided employment for local craft workers, rewarding a high standard of work (without the incentive of piece work) with good working conditions. In 1912, Peach also went into a partnership with William Pick to form Dryad Metal Works.[2]

The work of both firms was interrupted by the outbreak of the First World War in August 1914. Dryad began making shell baskets almost immediately. The Dryad Works Committee Minute Book for the period 1911–22 notes that by the end of August 1914 there was already a shortage of cane in stock.[3]

> *We had sufficient cane for 4 months on half time if shell Baskets were made it would run out in about 3-4 weeks when we should have to close down.* (22 Aug. 1914)

By October 1914, Woolwich had ordered one thousand shell baskets and the notes suggest that the first ton of cane had arrived from northern France. Peach, who was in France at the time, then purchased more cane at a cost of nearly £200.

During the remainder of 1914, the following entries relating to orders and the making of shell baskets can be found.

> *Offered to do 1000 18 pdr Shell B for Vickers & got order for 20 000* (27 Oct. 1914)
>
> *Shell baskets started on finally. Fixed up order with Metro. Car. & Wagon Co. for 43,000 Baskets leathered to be completed before June 30 1915.* (27 Oct.–5 Nov. 1914)
>
> *Armstrong's took offer of 10 000 Pulp Cane Shell Baskets @ 4/= delivery before June 1st* (26 Nov. 1914)
>
> *Armstrong's took offer of 10 000 baskets in Pulp Cane @ 4/6 delivery before end of June at 400 per week.* (17 Dec. 1914)

These notes suggest that by the end of 1914 the making of shell baskets had become one of the major demands of the firm, and a considerable source of income. Throughout the war, Dryad Cane Works also made balloon baskets and other items useful to the military effort, while Dryad Metal Works produced aircraft screws and shell heads.[4]

The Dryad Cane Furniture website shows examples of two designs of shell basket. The original showroom catalogues contain photographs of the 'old pattern' and the 'new pattern'. The catalogues give no dimensions or details of the shells themselves. However the minutes from 11 December 1914 indicate that there were some minor alterations to the design and that precision was of great importance.[5]

> *Shell baskets altered to 22 1/2" when dry, not 22 5/8" as before. (11 Dec. 1914)*

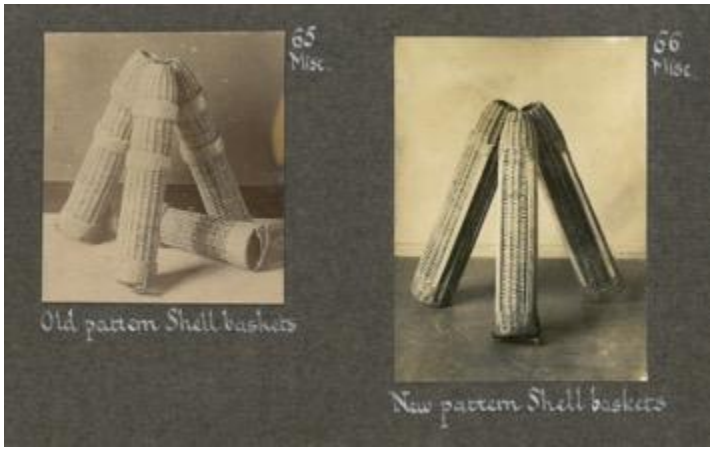

Image: Old and new pattern shell baskets, Dryad Cane Furniture catalogue L31A. © dryadcanefurniture.com.

The Museum of English Rural Life (The MERL) holds a shell basket in its collection attributed to Dryad (MERL 90/43). Believed to have originally entered the collection in 1976 and subsequently double-accessioned in the 1990s, it was donated by a school child who had found two of them in a field in Wokingham. It was initially identified as an umbrella holder for a pony and trap. Images from the Dryad catalogues show how this misidentification could have occurred.

Image: Umbrella baskets, Dryad Cane Furniture catalogue L18. © dryadcanefurniture.com.

It wasn't until 1991 that the true identity of the basket was discovered. According to notes in the object record[6]:

> *This basket was unidentified until a similar one was noticed among the baskets at the Dryad collection in Leicester. A type of basket made to protect military shells during the First World War. Made at Dryads*.

Making a comparison between the MERL shell basket and one held in the Dryad Collection at the Leicester City Museum Service, there is a clear difference in size. The Leicester basket appears to match the 'new pattern' shell baskets shown in the Dryad catalogue photographs. The MERL basket is certainly very similar to the 'new pattern', but the upper narrowing section, above the wooden splints, is noticeably longer than the design shown. One possible explanation for this difference is that the MERL basket was intended to take a longer shell and cartridge.

Image: Top: Artillery shell basket, MERL 90/43. © The Museum of English Rural Life, University of Reading. Bottom: Shell basket made by Dryad Cane Works, from the Dryad Collection, Leicester City Museum Service. © Leicester City Museum Service.

The MERL shell basket has the following dimensions: length, 76cm; diameter of wide end, 12cm (outside measurement), 10cm (inside measurement); and diameter of narrow end, 6cm (outside measurement), 5.5cm (inside measurement). All this provides useful information as to the nature of the shell it would have contained.

The Dryad Works Committee Minute Book makes reference to several types of shells. However it is necessary to view the evidence with care as both the Cane Works and Metal Works made objects for the war effort, and the notes could be misinterpreted. Specific references to shell baskets include[7]:

> *Offered to do 1000 18 pdr Shell B for Vickers & got order for 20 000.* (27 Oct. 1914)
>
> *250 Howitzers Baskets ordered by the War Office.* (30 Jan.–Feb. 1915)
>
> *2^{d} extra on Skein Shrapnel Baskets.* (30 Sep. 1918)

The 18-pounder was the most commonly used British gun, with over 3000 in use in France alone at the end of the First World War.[8] Photographs from the Imperial War Museum show two ways in which shell baskets were used in the transportation of 18-pounder shells.

Image: Gunners of the Royal Field Artillery loading 18-pounder shells into limbers. Acheux, July 1916. © IWM (Q735).

As shown above, the baskets were designed to fit the box compartment of a limber, sometimes travelling behind a gun carriage. First unpacked from wooden crates (seen in the background), the shells were stacked on the ground next to the limber. The shell baskets are arranged in the limber and were loaded with shells, fuse-tip first. The wide end of the basket facing the open back of the limber enabled easy removal of the shells when required. Close inspection of the photograph reveals the addition of small metal clips on the shells, with tape straps attached to the cartridge, and shows the leathered rims of the shell baskets, complete with buckled leather straps.

As shown on the next page, shell baskets were also attached to the saddles of horses or mules, and the design seems to match that of the Dryad 'old pattern' shell basket. It is possible that this type of transportation was considered necessary if the shells had to be conveyed across difficult terrain, inaccessible to a limber.

An 18-pounder shell and cartridge (i.e. an 18-pounder quick-firing shell) was 53cm in length from the tip of the fuse to the base of the cartridge. The cartridge base had a

Image: British troops with pack horses bringing 18-pounder ammunition up to guns over muddy ground, near Aveluy Wood, September 1916. © IWM (Q1468).

diameter of 10.2cm, and the upper end a diameter of 8.5cm.[9] It is at this point that the MERL shell basket becomes problematic. While the design appears to match the Dryad 'new pattern' shell basket, a comparison of the photographic evidence in the Dryad catalogues and the MERL basket clearly shows a discrepancy in the dimensions. While the cartridge base of an 18-pounder shell and the MERL basket match in terms of diameter, they do not correspond in terms of length – with the 18-pounder quick-firing shell being 21cm shorter than the MERL basket.

One possible suggestion for the additional length of the MERL shell basket could be that it was designed for a longer projectile, such as those used in anti-aircraft (AA) guns. These contained more propellant, requiring a longer cartridge with a greater capacity. While it has not been possible to find evidence to verify this theory, there are a number of references that suggest this could be plausible.

With the increasing risk of Zeppelin bombing raids on Britain, it was deemed necessary to introduce AA defence to protect London and other places of military importance. At the start of the war, the Admiralty took responsibility for the development of AA provisions in defence of London, and the War Office defended other key sites. In 1916 AA divisions were also deployed in France. The Admiralty developed a 3-inch high-angle gun which, alongside searchlights, was placed on the rooftops of central London and the ordnance factories to the east. They also took on the defence of naval sites.[10]

A film from British Pathé, entitled 'Royal Horse Artillery In Training' and featuring a Zeppelin drill by the AA Section, shows the practice of preparing a lorry-mounted AA gun for action. In this film, the limber – a compartment behind the cab of the lorry – is stocked with shells. The shells are removed from the limber and man-handled for loading. The type of gun and shell is unclear.

In 1915, experiments were carried out to find a better AA gun, resulting in the adoption of the Mark III QF (quick-firing) 13-pounder mounted on a lorry chassis. Another version was an 18-pounder gun modified to accept 13-pounder shells, which became a standard British AA gun (13-pounder, 9cwt) on the Western Front.[11]

While these developments were for mobile AA guns on the Western Front, it could be feasible that they were also used on the Home Front. There are references to both 18- and 13-pounder guns, but only 13-pounder shells. This might therefore suggest that the MERL basket may have been designed for a 13-pounder anti-aircraft shell and cartridge. This requires further research into the dimensions of the shells and the basket.

Image: Royal Artillery gunner asleep under a lorry-mounted anti-aircraft 13-pounder gun at Hinges, 18 May 1918. © IWM (Q6635).

According to the object record, the narrower end of the MERL basket has burn marks on it. There is some loss to the narrow end of the basket, where the border has come undone and the cane is broken and split. This may suggest that the basket was not a sample but instead has seen active service – although the damage it sustained may have occurred at a later date. Although the wide end is leathered, it does not include the strap and buckle seen on the Dryad basket at Leicester. There are some open holes in the leatherwork, but they do not suggest that a leather strap is missing.

Given that the area around Wokingham, where the MERL shell basket was found, is near to the site of a number of First World War air bases – at Farnborough, Woking and Feltham – and given that Wokingham is situated north-east of Southampton and Portsmouth and to the west of London, could it perhaps have been a suitable site for the positioning of anti-aircraft home defences, thus explaining the size and location of the MERL basket?

Collections

- The Museum of English Rural Life, University of Reading: Has one artillery shell basket made by Dryad Cane Works, MERL 90/43
- Imperial War Museum, Duxford: Has seven 13- and 18-pounder artillery shell baskets, British and German. These baskets are not on display
- Leicester City Museum Service: Has one artillery shell basket made by Dryad Cane Works
- Firepower! Royal Artillery Museum: Has one German artillery shell basket, MISC 31/195. The museum has now closed and the basket is in storage
- Scottish Fisheries Museum, Anstruther: Has four artillery shell baskets, mistakenly identified as eel traps

References

[1] Adkin, M. (2013). *The Western Front Companion.* 1st ed. London: Aurum Press Ltd., p.228.
[2] Kirkham, P. (1986). *Harry Peach: Dryad and the DIA*. London: The Design Council, pp.2–5, 7, 18–19, 25.
[3] Dryad Works Committee Minute Book. (1911–1922). [Manuscript] Dryad Archives. Alan Beavon.
[4] Kirkham, P. (1986). *Harry Peach: Dryad and the DIA*. 1st ed. London: The Design Council, p.7.
[5] Dryad Works Committee Minute Book. (1911–1922). [Manuscript] Dryad Archives. Alan Beavon.
[6] Shell basket. The Museum of English Rural Life, University of Reading. 90/43. Reading.
[7] Dryad Works Committee Minute Book. (1911–1922). [Manuscript] Dryad Archives. Alan Beavon.
[8] Adkin, M. (2013). *The Western Front Companion.* London: Aurum Press Ltd., p.230.
[9] Firepower! Royal Artillery Museum. (2016). London.
[10] Adkin, M. (2013). *The Western Front Companion.* London: Aurum Press Ltd., p.234.
[11] Adkin, M. (2013). *The Western Front Companion.* London: Aurum Press Ltd., p.234.