

MAKING AN ARTILLERY SHELL BASKET

BASKETRY

Then and Now

MARY CRABB

After researching two designs of First World War artillery shell baskets made by Dryad Cane Works of Leicester, one of the many manufacturers of shell baskets, Mary Crabb set out to make a replica of the one in the collection of The Museum of English Rural Life (MERL 90/43).

Image above: Weaving the replica shell basket. © Mary Crabb.

During the First World War, basketwork cases were used to transport artillery shells to the front in limbers, attached to gun carriages or hung on the saddles of packhorses and mules. They were woven on an industrial scale by firms such as Dryad Cane Works in Leicester, Matthew Mills at East Leake and basketmakers in the Castle Donington area, with orders from the War Office for thousands at a time. The design of the shell basket varied according to the type of shell and cartridge it was to accommodate, but formed a tightly fitting sleeve around the shell.

My interest in First World War basketry came from researching my grandmother's boyfriend Cecil, who was killed in 1916. I was looking for an object that might have been part of the action in France during the war. The artillery shell basket in the collection at The Museum of English Rural Life (The MERL) was the first one I had seen.

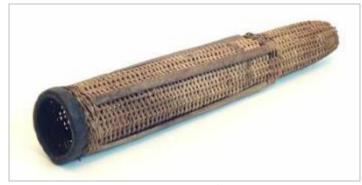


Image: Artillery shell basket, MERL 90/43. © The Museum of English Rural Life, University of Reading.

I set out to record details of its construction, and then source materials and weave a replica. This proved to be more difficult than I had anticipated, stretching my knowledge of materials and techniques, and testing my skills as a basketmaker. I began basketmaking in 2000, working mainly with willow. My more recent work has involved the adaptation of techniques to work with fine, flexible materials such as copper and aluminium wire.

My initial response to the basket at The MERL was that it was much larger and longer than I had anticipated. It consists of a tapering tube, open at both ends, with a leather cuff around the wide end. Made in a shiny cane, with bands of willow and four straight wooden splints, it did not appear at first glance to be a complicated object to recreate. I examined the basket closely and took measurements of the length, diameter, and width of the bands of weaving. I wrote down details of the weaves applied to different sections and made approximations of the sizes of material used in my sketchbook.

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Image: Sketchbook image of shell basket, MERL 90/43. © Mary Crabb.

Before I could start making the replica, I needed to carry out some research into the materials, and the construction methods and techniques used.

Materials

Cane: My knowledge and previous experience of cane was limited to centre cane, also known as 'pulp cane'. The MERL basket did not appear to use this, as the surface of the woven cane is shiny rather than dull. Whole cane was used for the stakes, and split cane for the body of the basket.

Dorothy Wright gives the following description:

Calamus – cane or rattan – is the generic name for many varieties of cane palm growing in the jungle and virgin forest of tropical countries.¹

She highlights the following types of cane used in industry: Tohiti, Malacca, Kubu (Kooboo), Palembang, Sarawak and Segah, also Whangee. She identifies Kooboo and Palembang as the varieties most suited to industrial basketmaking.

Writing in 1912, Thomas Okey describes the size of imported whole cane of the period, with lengths ranging from 12–16 feet and diameters of 4.5–8mm. He discusses the sorting of materials into classes of quality:

Short-Nature, the best and kindest; Mackerell-back, a medium quality; and Squeaky, the hardest and heaviest²

The MERL basket is attributed to Dryad Cane Works. The war-time entries for the Dryad Works Committee Minute Book mention two varieties of cane – pulp and Palembang.³ This led me to believe that the MERL basket may have been made with Palembang as, unlike pulp cane, it retains its outer shiny surface and has not been stripped.

Willow: At the wide end of the basket, just above the leather cuff, is a band of woven willow which, on first observation, looked to be worked with a wale weave. Given the diameter of the basket and the joins part-way up, I made a guess that the willow rods used for the weaving may have been three or four feet in length. The basket is discoloured and aged so it is difficult to identify the colour of the willow. I assume that, as there is no evidence of bark and the object was utilitarian, it was probably buff willow.

Wood: I have not been able to identify the wood used to make the splints. The splints do have some tool marks on them.

Leather: The cuff is made of a single piece of leather with a hand-stitched seam. The leather is folded over the wide end of the basket, and held together through the basket with stitching. It is unclear whether the leather was originally brown or black in colour.

Supply of cane

Supply of cane during the First World War must have been difficult. The Dryad Works Committee Minute Book makes reference to the import of cane: 'Malaunay 1st Ton through' (10–17 October 1914), Malaunay being a town in northern France.⁴

Cane was imported into Britain by a number of firms. Imports were organised by the Board of Trade which registered firms to distribute the cane, including Jacobs, Young and Westbury of Haywards Heath and Fred Aldous Ltd. of Manchester. The latter was founded in 1886 by Fred Aldous as a willow and cane merchant. During the First World War Fred continued the business with Frank Aldous, who was appointed by the Board to take charge of UK rattan imports in London for the duration of the war.⁵



Image: A handcart loaded with what appears to be bolts of willow, 1886. Fred Aldous Ltd. still sells supplies for basketry more than more than 130 years later. © Fred Aldous Ltd.⁶

Processing of cane

The MERL basket uses whole cane split down the middle. Cane furniture was exceedingly popular in the earlytwentieth century and was made by many companies across the country, including Dryad and Harrisons of Grantham. It is likely that split cane was used for furniture, so I wanted to find out where the splitting took place.

A description by Thomas Okey in 1912 suggests that the process was not mechanised at this date:

Split Cane.- Whole cane split down the middle and shaved by the shop knife is also used for purposes

other than staking, such as siding, bottoming, covering etc.⁷

By 1928, Charles Crampton, a basketmaker at Dryad, describes the mechanised processing of pulp cane being carried out in Germany, America, France, Holland and Italy.⁸ He also mentions a small amount of processing taking place in England. I have found evidence of small cane splitting ventures in such places as Wimbledon during the First World War.

I chose to make the replica with Kooboo cane. My lack of knowledge and experience of working with cane meant that I would need to experiment to identify the size of cane required, so I decided to split the cane by hand.

The form of the shell basket

Once I had decided what material to use, I then had to work out how to weave the basket. There is little photographic evidence of anyone making shell baskets. The Dryad Cane Furniture catalogues contain photographs of two designs of shell basket: the 'old pattern' and the 'new pattern'.⁹ The MERL shell basket is similar to the 'new pattern', albeit about 20cm longer. Castle Donington Museum has two shell basket formers (moulds on which the baskets are made), and a photograph of basketmakers with a large pile of shell baskets. These baskets appear to match the Dryad 'old pattern', of which I saw examples at the Imperial War Museum (IWM). The IWM baskets were made in centre cane, with bands of waling covered with leather.



Image: Shell basket workers, Castle Donington. A stack of completed shell baskets can be seen in the background. Courtesy of Castle Donington Museum.

The Castle Donington photograph shows a bundle of material in the foreground, the curved form of which confirms the baskets were made in cane. There are also several formers visible.



Image: Close-up of shell basket workers, Castle Donington. Courtesy of Castle Donington Museum.

A closer look shows baskets at different stages of completion:

- 1. The beginning of a basket. Note the stakes (uprights) inserted through the disc at the base of the former.
- 2. A part-woven basket on its former.
- 3. An almost-finished basket on its former. Note the ribbed bands of weaving.
- 4. A leathered basket. The basket has been removed from the former, and the raised weaving covered with leather bands.

Staking up and weaving the first band of willow

The first step in making the replica was to select and sort the lengths of cane for the sixteen stakes. I had purchased long lengths of cane in two diameters, 6–8mm and 4mm. The diameter of the cane varies along its length, so during the sorting I selected the sections of cane which matched the diameter I required. For the stakes, I used the 6–8mm cane, looking to ensure an even diameter along each stake and to make sure all the stakes were the same diameter. I cut the stakes longer than the finished basket, as they would be woven into the border at either end.

Having soaked and mellowed the stakes, I then inserted them into the sixteen holes drilled evenly around the disc at the base of the former. Having studied the MERL basket and the Castle Donington photograph, I decided to start weaving from the first band of willow above the leather cuff, leaving the ends of the stakes protruding through the disc so that they could be woven into a 'trac' border after the body of the basket was finished.

The first band of willow weaving appeared to be a 'wale' weave, with the shaped ends of the four wooden splints encased in the weave. However, when I tried this I realised something was wrong. There followed a series of experiments, drawings and diagrams to identify the weave used to hold the splints.



Image: The first band of willow weaving, MERL 90/43. © The Museum of English Rural Life, University of Reading.

The diagram below shows my final interpretation, although I am still questioning whether the weave was done in the opposite direction with the basket upsidedown.

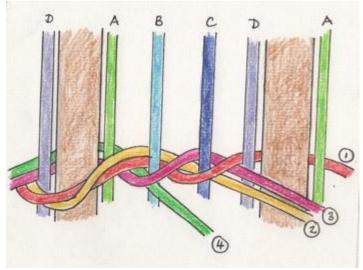


Image: Decoding the first band of willow weaving on the MERL shell basket, one of the six stages I interpreted to hold the wooden splints in place. © Mary Crabb.

It is difficult to decide whether three-, four- or even fivefoot willow was used for this band of weaving. There appear to be some joins on the three rounds of the weave, but not all of the rods have been replaced. The willow may have been joined to ensure a consistency of diameter, or the rods may have been damaged. For my first attempt I chose to use three-foot, and later four-foot buff willow.

Weaving with cane

The next step was to prepare the cane to be used for weaving the body of the basket. I cut the finer 4–6mm

cane into suitable lengths for weaving with. I did consider working in long lengths but the MERL basket features neat joins at regular intervals, which suggest that the cane was cut into manageable lengths. The body of the MERL basket is woven in split cane with a semi-circular cross section. In my initial experiments with various tools I found it very difficult to split the cane to produce material of a consistent size – something mechanised processing would easily do.

The body is woven using a 'chased rand', where two lengths of cane chase each other around the former, with opposing patterns producing an alternating surface of canes in front and behind the stakes.

The practice of weaving with split cane proved extremely difficult, as the cane was inflexible and strong-willed. Having not used Kooboo cane before, I had to learn by trial and error. There were several possible reasons for the difficulty I experienced: the quality of the cane available today is likely to be different from the cane imported in the First World War, when it was required in bulk for a thriving industry; my estimation of the thickness of the split material may have been wrong, and further splitting and shaving may have been needed; and the cane may not have been adequately soaked and mellowed before weaving.



Image: The randed cane, MERL 90/43. Note the joining of material in the centre. © The Museum of English Rural Life, University of Reading.

These difficulties manifested themselves in two key areas. Firstly, the lengths were troublesome to join without an interruption to the flow of the weave. In the MERL basket (see above) the join is neat and considered. The new length is 'slyped' and inserted to the right of a stake, with a backward right angle turn in front of the next stake, capturing the old weaver in its path and continuing the line of the weave.



Image: A poor join on a trial basket, possibly caused by the quality, thickness or lack of soaking of the cane. Note how the new weaver rises above the line of the weave. © Mary Crabb.

Secondly, it was difficult to maintain a tight fit against the former. The stakes are close together, so each length of cane must be woven with a fluid movement in front and behind each stake. I found that further shaving of the backs of the semi-circular cane made the lengths more flexible, making it much easier to weave tightly against the former.



Image: Trial basket no. 2. Further shaving and a longer soaking time made the cane easier to handle and gave a much tighter weave against the former. © Mary Crabb.

Borders

The MERL basket has a border at either end, but only the border at the narrow end is visible. Of the sixteen stakes, four appear to have been paired with others to enable the basket to taper and the size of the opening to decrease. It is worth noting that in the final tapered section, the split cane has been substituted by fine whole cane, the last few rows incorporating the paired stakes. This part of the basket has probably sustained the most damage, with little of the original border remaining. However one stake can be seen with a cut end and a sharp bend to the right. This might suggest it was finished with a simple trac border, perhaps using only twelve stakes for the finishing.

There is potentially another border, possibly a wider trac,

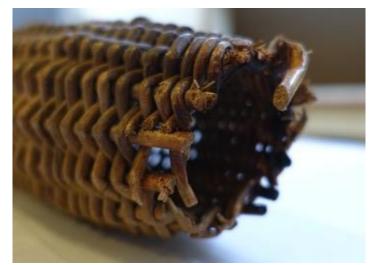


Image: Narrow end of the MERL shell basket, 90/43. © The Museum of English Rural Life, University of Reading.

at the wide end, but it is hidden beneath the thick band of leather forming the cuff. It is likely that this border was the last part to be woven, once the basket had been removed from the former, and would have been worked with the basket upside-down.

Final thoughts

The weaving of the replica shell basket has been a valuable opportunity to work with an unfamiliar material. The difficulties I have encountered have informed the process and provided me with a bank of new knowledge to enhance and guide future making. The researching of past makers, their working processes and acquisition of materials has been an integral part of learning to recreate what is essentially an extinct object in terms of the skills and knowledge required for making. I have admired the skill of the designer and maker of the MERL basket, producing an object that is functional while showing integrity in its attention to detail. Considering the pressure to make an object in such a situation, without a compromise in quality, shows a dedication and pride in the craft.

Glossary of Basketmakers' Terms¹⁰

- **Rand:** a single rod worked in front of one stake and behind the next.
- Slype: a slanting or flat cut.
- Stakes: rods driven in with the bottom sticks to form the foundation of the sides of a stake-and-strand basket.
- Trac: a simple border worked with one stake, or a stake and its liner, at a time.
- Wale: three or more rods worked in sequence in front of two, three or more stakes and behind one. Or in front of two or three and behind two, using four or five rods.

References

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