



CANNON RESEARCH PROJECTS

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A free service to the muzzle loading enthusiast

GUNS NEARLY LOST FOREVER

I was recently requested to identify two guns in Durbanville that someone had just bought from a scrapyard. He had bought them both for less than one would expect, and he is now mounting them on his property.

I recorded them as numbers 788, an 18 pdr Blomefield gun cast by the Carron Company and 789, a beautiful little 4 pdr Finbanker cast at Finspång in Sweden.

Had this chap not ventured into the scrapyard and taken an interest in what he saw, these guns would have been melted down for next year's Japanese cars. This scenario has been repeated over and over for many years.

THERE MUST BE A SCRAPYARD SOMEWHERE NEAR YOU !!!

THE 13 INCH MORTAR

A lady in Plumstead recently donated a 13 inch mortar shell to our Recovery Programme for display at a suitable public site. The lugs through which the lifting rings had been fitted were broken off and the restoration of this shell required some research into the original dimensions.

One interesting observation is that there are only two of these shells in South Africa as far as we know, one at the Natalia Labia Museum in Muizenberg, and this one which was unearthed in Muizenberg many years ago. These shells are of the Gribeauval design of 1765 as used by the French and the Dutch. The English had common shells of a very different design, and they had begun to make use of Shrapnel shells by the time they occupied the Cape in 1806.

The presence of these two shells, both unearthed at different sites in Muizenberg, is an indicator that a 13 inch mortar was used in this area at some time. There was a mortar available to the Dutch forces in Muizenberg in 1795, but there is no evidence that it was fired at all and the calibre of this mortar is not reported in any documentation known to the writer.

The restoration of the shell is in progress and a suitable home will be found for it.

MAKING AN ASS OF ARTILLERY

In 1871 there were several experiments conducted on the proof ranges at the Royal Arsenal at Woolwich, one of which involved the trial of a small calibre mountain gun which was meant to be fired from the back of a mule.

Many dignitaries and officers, most with little faith but great interest in the experiment, gathered to witness the trial. Since no mule was available, a donkey was pressed into service for the trial. The animal was docile while the contraption was strapped to its back, the gun mounted and loaded and the donkey "aimed" down range.

A piece of slow match was used to prime the gun, and once lit, the spectators retired to a respectful distance to observe the recoil effect on the donkey. Realising that he was now free from the restraints of his handler, and possibly aware of something spluttering and sparking on his back, the donkey began to caper about in a most random and alarming manner.

The situation resembled a gigantic Russian Roulette table with the donkey bucking and spinning about with a loaded gun about to fire "to whom it may concern". Showing their immediate understanding of the situation, dignitaries, grasping their ladies dressed in their finest, dived for cover and sought safety behind even the smallest object.

A loud report announced the discharge of the gun and the first observers to peer out from their places of hiding saw the donkey roll over, leap to his feet and gallop off down the range. A rapid survey established that nobody had been hurt, physically at least.

In which direction, and at what elevation the shot had gone nobody knew. They decided to wait for the complaint which must most surely come from one direction or the other.

They are still waiting !

HOW MANY OLD BRONZE GUNS VANISHED

Bronze guns, having a bore softer than their iron ammunition, had a tendency to wear out with constant use. The high cost of copper and tin dictated that obsolete, cracked and worn guns could not be retired gracefully and that they had to go back into the smelter to make new guns.

The melting down of fine pieces of ordnance was not limited to those damaged beyond repair, the guns captured from the enemy were also destined for the foundry. When Viscount Ligonier took Cherbourg in 1758 he brought to England 21 brass cannon and two mortars as battle trophies, most of which were later melted down. The melting down of the enemy's guns, particularly when calibres were incompatible, occurred time and again.

On 30 October 1841 a fire gutted the Grand Storehouse at the Tower of London, destroying or badly damaging many trophy guns from great battles. Some guns, although damaged, were preserved, others went to the foundry. The increased demand for bronze guns during the Crimean War brought about a re-assessment of the number of trophy and obsolete guns held in store. The assessment favoured the hungry furnaces at the foundries.

SILENCING A CARRIAGE ?

Most of us have heard the expression "to silence the guns", but few have heard the expression "to silence the carriage".

When it was tactically expedient to move a gun or guns into position quietly, normally during the dark hours, the rumbling, clanking and grinding noises made by a moving carriage had to be silenced as much as possible. This was achieved by lashing canvas, hessian bags, strips of blanket or any such material around the iron tyres on the wheels.

The loading equipment, sponging bucket and any other loose items that could rattle were carried in the hands of the gunners. The ammunition cart compartments were stuffed with rags or horse fodder to prevent the shot from thumping around in their housings and both carriage and ammunition cart were pulled slowly by men and not horses.

One occasion where this silencing of a carriage was used in South Africa was during the Siege of Mafeking when the 7 pdr RMLs were moved to new positions at night.

COPPOOLSE & FINLAYSON

These purveyors of fine wine have purchased the wine farm **Bon Esperance** upon which stands a large building in the form of a castle complete with ramparts and bastions. Dutch born Rob Coppoolse has a great affinity for the history of wine making at the Cape and in the preservation of VOC era heritage. When Rob saw an old VOC iron cannon lying at a scrap yard, he could not resist rescuing it from certain destruction.

His colleagues became concerned when he purchased a VOC bronze chamber for a swivel gun from another scrap yard and some cannon balls from yet another. In avoidance of the threatened straight jacket and sedatives, Rob explained that the "castle" outlet for Sentinel Wines, situated near Stellenbosch on the road to Paarl, needed a theme that matched the building. He said that old wine presses, vats, ancient tractors and well dressed scarecrows were old hat and the theme for the "castle" was going to be old cannons, their equipment, ammunition and accoutrements.

Coppoolse & Finlayson are mounting their cannon, including bronze guns, on solid wooden carriages and are preparing a professional display for their collection of ammunition, equipment and artefacts. The items will be on display, correctly labelled and will be available to the public for study. They are on the look-out for more appropriate items for the collection.

I wonder if one of their wines will be named grape shot?

THE NATURE AND EFFECTIVENESS OF CANISTER SHOT

Between its final design in C.1770 and the advent of rifled pieces in C.1870 case shot did not evolve to any degree of note. Case shot was essentially a tin cylinder with a wooden base and a metal lid upon which was a wire handle to facilitate handling and loading. The diameter of the case was the same as the diameter of a solid shot for the gun. The case was filled with small cast iron shot to a maximum weight equal to a solid shot for the gun. There were two or three sizes of shot for each calibre of gun, with more of the smaller shot offering the same weight as less of the larger shot. The size of the shot varied also in proportion to the calibre of the gun. The most common canister shot contained between 38 and 42 shot in the canister.

The smaller the shot in the canister, the more of them there were, but the lighter the individual shot and the shorter was the effective range at which each individual shot was able to inflict a disabling injury. This was the deciding factor in the final design of canister shot. The assembled shot was painted red and marked on the side with the weight and the calibre of gun for which it was intended.

Trials were conducted where canister of 40 balls was fired at large blank surfaces at varying ranges to determine the spread of shot. It was noted that the shot spread very rapidly when a full service charge of powder was used, but that the expanding cone of shot was smaller when a $\frac{3}{4}$ charge was used. Efforts were made to determine mathematically from the trial results, at which range the ammunition would most likely cause casualties, and thus be most effective.

When one considers that a line of approaching cavalry is only 8 ft high and that infantry is only 5 ft high, and that they are so spaced that 75% of the horizontal target is the spaces between them, then it becomes apparent that the probability of a hit is low. This is exacerbated by the fact that the cone of fire is also dispersed vertically, with a large proportion of shot passing over the enemy and an equal proportion striking the ground in front of them.

If the cone of fire is only 30 ft wide (which is doubtful) at 300 yards, contains 40 shot, and 35% are high, 35% are low, then only 30%, or 12 balls, are in line for the target. This horizontal target consists of several men and horses of which 75% or more is the spaces between them, leaving a probability of about 3 balls causing a casualty of some type. Even considering that some of the shot which are low will ricochet and find the target, does not make canister a very effective weapon at anything but the most desperate of short ranges.

Knowing that there would probably not be time to reload for a second shot, the gunners would fire solid shot at an advancing enemy until the Gun Captain decided that only one last desperate shot was possible, then they would load the gun with double canister shot and wait until the last second to fire. If this failed they turned to muskets and sabres to defend the guns.

For field artillery the canister was made up into a single item of ammunition by means of attaching the powder charge to the wooden base of the canister. The whole was then strapped with cord to maintain its shape for rapid loading.

EAST LONDON GUNS SAVED

The two historic guns, one ML and one BL, which stood outside the East London City Hall vanished. This was noticed and reported to me by Zane Palmer in Port Elizabeth. "Moose" van Rensburg, curator of the Fort Beaufort Museum was sitting in his local pub when someone explained that he had bought the two EL guns. Moose reported this fact to me complete with the new owner's name and telephone number. I duly passed this info on to Zane.

Zane made enquiries at the EL City Hall but nobody of any standing appeared to know anything about the disposal of the two guns. Zane found the address of the new owner and took a few photographs of the two guns, now severely damaged and piled upside-down on top of each other. I sent copies of the photographs to General van den Berg of the Gunners Association who, in turn published the pictures in his GUNS Newsletter. Then all hell broke loose!

Leaving out all the painful details of visits by large men in brown coats, nasty telephone calls and embarrassing articles in newspapers, the result is that the guns have been recovered and will be presented to the Border Volunteer Rifles (old Kaffrarian Rifles), the storeman who sold the guns and pocketed the money has been fired and the guns have been saved.

JAMES II OF SCOTLAND

James II was killed in an artillery accident during the siege of Roxburgh Castle in 1460. The report on the incident reads :-

"While this prince, more curious nor became the Majestie of any Kinge, did stand near-hand where the Artylliare was discharged. His thigh-bone was dung in two by a piece of a mis-framed gunne, that brake in the shuting, by the which he was stricken to the ground and died hastilie".

POWDER MONKEY AND BRASS MONKEY

During the 18th century it was common practise to carry young boys aboard ships. These lads, sometimes as young as 12 years of age, worked as cabin cleaners, stewards, cook's assistants and sometimes assistants to the Shipwright, Sailmaker or other tradesmen on board. During action these boys served to supply the guns with bags of gunpowder.

When a ship was "cleared for action", a term still used today, it was necessary to remove some of the staircases and ladders between decks in order to allow certain guns 'tween decks to recoil fully. The collection of leather cartridge cases, containing the charge, from the magazines in the lowest part of the ship and delivering the correct charge for the calibre of gun required strength, agility and nerve. There were swivel guns situated in the fighting tops, half way up the mast, which had to be supplied with powder.

These youngsters, who climbed and ran to and fro in their bare feet between clouds of smoke, recoiling guns, battle damage and shouting men, were known as powder monkeys.

If the lad who controlled the powder was the Powder Monkey, it naturally followed that the triangular or square rack in which the shot was stacked, which was made of brass in the early years, was known as the Brass Monkey. These racks took many forms and were made of brass, iron or wood. Some consisted to two long planks fixed on edge and spaced according to the calibre of ammunition in use. These planks had "V"s cut into their upper edges which allowed a line of shot to be stored safely, even in a rough sea. Regardless of the design or material from which they were made, they were known as Brass Monkeys.

STONE SHOT

Dr Dan Sleight sent me a clipping from the *Nederlandse Post* of 5 February 2003 which is in Dutch. My translation from Dutch to Xhosa, Xhosa to Zulu and then Zulu to English reads as follows:-

A few centuries ago obsolete stone cannon shot were used to cobble a lane. The cobbled lane was, during recent archaeological work, discovered behind the community centre in Den Bosch, Netherlands. In the early 17th century stone shot were replaced with shot of iron, and in stead of throwing the stone shot away, some road builder must have decided to use them as paving for the lane.

Road builders of that calibre are scarce today ?

QUESTION ABOUT RESEARCH REFERENCES

I have been asked more than once why I do not include the bibliography and references for statements that I make. I understand the academic credibility and protocol that surrounds the inclusion of myriads of little numbers¹ and reams of foot notes to back up a statement. The problem is that I refer to possibly ten publications and four articles for each subject, and a three page newsletter does not have much space for these niceties. Most of the readers are purely enthusiasts and do not, as far as I can guess, require the references. Should anybody require the references for an article, please ask and I shall provide.

1 - Yes, like that !

Regards,

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