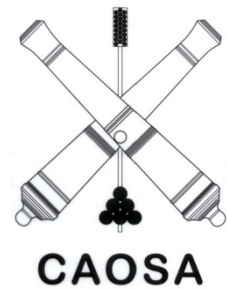


CANNON ASSOCIATION OF SOUTH AFRICA

Cannon Association of South Africa c/o
Chavonnes Battery Museum, Nedbank Building,
Clock Tower Precinct,
V&A Waterfront, Cape Town, 8000



SAPS Registration number: 28/1/3/8/2/1 23704

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An informative service to the muzzle loading cannon enthusiast

CAOSA AND THE FUTURE

This rather annoying episode of COVID19 has certainly upset the apple cart and forced us all to regard life rather differently. Just as individuals battle with the “new normal” so do most organisations including CAOSA. I asked several senior members what information I could pass on to all CAOSA members and they all agreed that nothing could be done until the situation settles down and the new rules for gatherings are established.

In the old days it was called “Wait and see”.

PEACEFUL FIRING OF CANNON

We all associate cannon with mayhem, death and destruction and much is written on that theme, but there are also peaceful firings.

Salutes - We are all aware of the 21 gun salute fired to honour heads of state or at the state funerals of military personnel. There is a hierarchy of salutes for senior persons or officers with the maximum of 21 shots.

Line throwing - Since 1808 mortars and small cannon were used in the maritime situation as rescue equipment to fire a projectile which towed a sturdy line known as a “messenger” to people in distress. The messenger would then be used to pull a heavier rope with which a rescue could be effected. A special half projectile used in mortars were known as Manby’s shot and had either a leather or steel wire leader to which the messenger was fastened.

Navigation - In the days of sail and the absence of radar sailing in thick fog was a risky business, particularly when in consort with other ships. It was customary to fire the occasional small cannon or beat a drum to alert other ships to your position.

Celebration - It was customary to celebrate royal events, such as births, marriages and birthdays with the firing of a few cannon to mark the occasion. Today we announce the launch of new businesses, fetes, bazaars etc with cannon firing.

Rogue's Gun - Old naval tradition dictated that whenever a court martial was to take place a single blank cannon shot would be fired to advise all in the fleet that justice was being served. This was known as the rogue's gun.

THE HOWITZER

The earliest ordnance consisted of only cannon and mortars. The cannon was capable only of direct fire with solid shot approximately along the line of sight to the target, whereas the mortar could lob explosive shell over obstacles and into enemy positions.

On land the smaller cannon, 12 pounder and less, were mounted on big wheeled field carriages which, in consort with its ammunition limber, were fairly manoeuvrable and were regarded as field artillery. The mortar on the other hand was a weapon of position, occasionally transportable but never manoeuvrable, mortars were designed to defend an establishment or to lay an enemy position to siege and were permanently set to fire from a mortar bed at a fixed elevation. Regardless of many senior officers' wishes, mortars were too cumbersome and restricted to play any part in a rapidly changing battle situation.

In the early 1700's several countries were experimenting with modifications to mortars and carriages in order to develop the weapon and make it available to field commanders. It would appear that the German effort was the most successful because it was a chap by the name of "Haubitze" who solved the problem.

Haubitze changed the mortar design by making the bore slightly longer, fitting trunnions just forward of the balance point instead of at the back as was usual for mortars and thus making it possible to mount on a modified field carriage and enable changes in elevation. In this manner did the mortar give birth to the howitzer, a far more manoeuvrable field piece with its own ammunition limber. In a very early step towards standardisation the howitzer calibres remained the same as for the mortars and they fired the same ammunition.

GUNPOWDER COMPONENTS

When we need chemicals today we nip off to "Chemicals-R-us", fork out some money and go home with the desired chemicals, easy as pie. It was not so in the early days of gunpowder, the Chinese had invented the stuff using some fairly obscure components, with charcoal being the easiest to obtain.

Sulphur was slightly more difficult to obtain: all you had to do was climb to the top of your nearest volcano, search around the inner brim for yellowish deposits which you could chip off and carry home. For this reason sulphur was originally known as "brimstone".

The third component, saltpetre, was the most difficult to harvest. Originally traces of saltpetre were found in old stables and barns where animal droppings had dried out and the salts, which had been leached out, had covered walls and floors. Official inspectors and collectors working for the government functioned as "dung beetles" in accumulating these deposits for re-processing and refinement into useable saltpetre, but this could not provide enough for the growing demand.

Leaching beds were established in all farming communities with wooden or stone bases and used animal bedding, urine and droppings were piled onto the bases such that the slow leaching process could take place. The liquid thus obtained was placed in large evaporation trays and the impure saltpetre could be collected in the form of white sediment which then went for refinement into pure saltpetre. Chemicals-R-us had a very slow start.

THE VERY CONFUSED MID 1800'S

Lionel Crook sent me a bundle of papers a long time ago, some I read at the time, some I looked through during research and some just stayed on the pile. Among these there were six A4 sheets of photocopied tables and figures which required careful trimming and assembly into one very large sheet which turned out to be a list of service ordnance and ammunition printed by the Royal Artillery Institution at Woolwich on 1 June 1870.

I very much doubt that there is any other single document which shows the confusion with which the Board of Ordnance had to deal during this time of transition. It is no wonder that they had to print it on such a large piece of paper.

In the mid 1800's there was a tremendous amount of experimentation and development going on. The bronze and cast iron guns were being replaced with steel and wire-wound guns. The advent of ironclad ships rendered the smooth bore firing round shot obsolete overnight and the smooth bore was being replaced with various types of rifling, the muzzle loader (ML) was giving way to the breech loading (BL) designs and the type and style of ammunition was trying to keep pace with this progress.

When several breeches failed and the gunners lost faith in this new development the Board of Ordnance stopped all orders for breech loaders and returned to muzzle loading for a period. This made the entire stock of BL ammunition temporarily redundant.

The outdated system of classifying gun calibre by shot or shell weight only added to the confusion and the same gun could be listed as a 6,3 inch RML or a 68 pdr RML. The 7 and 9 pdr RMLs could both be listed as 3 inch RMLs. Some guns had polygrooved rifling, some had the Woolwich rifling and some had the French rifling and others had the newer shunt rifling. Some guns had minor differences in weight or length when they were designated for land service (LS) or sea service (SS).

There are guns listed as being bored-up to a larger calibre than they were originally designed for, 24 pdrs bored to 32 pdr, 12 pdrs bored out to 18 and 24 pdr calibre. Some guns were meant only for casemate deployment and others for coastal batteries. Thrown into the melee were Pallister and new shrapnel shells, case shot, carcass and incendiary shells, fuzes listed as common, wood, Boxer, metal, Pettman etc. The combinations of all of the above create a mind boggling matrix of possibilities – and we try to make sense of it all!

UBIQUE

Gerry de Vries