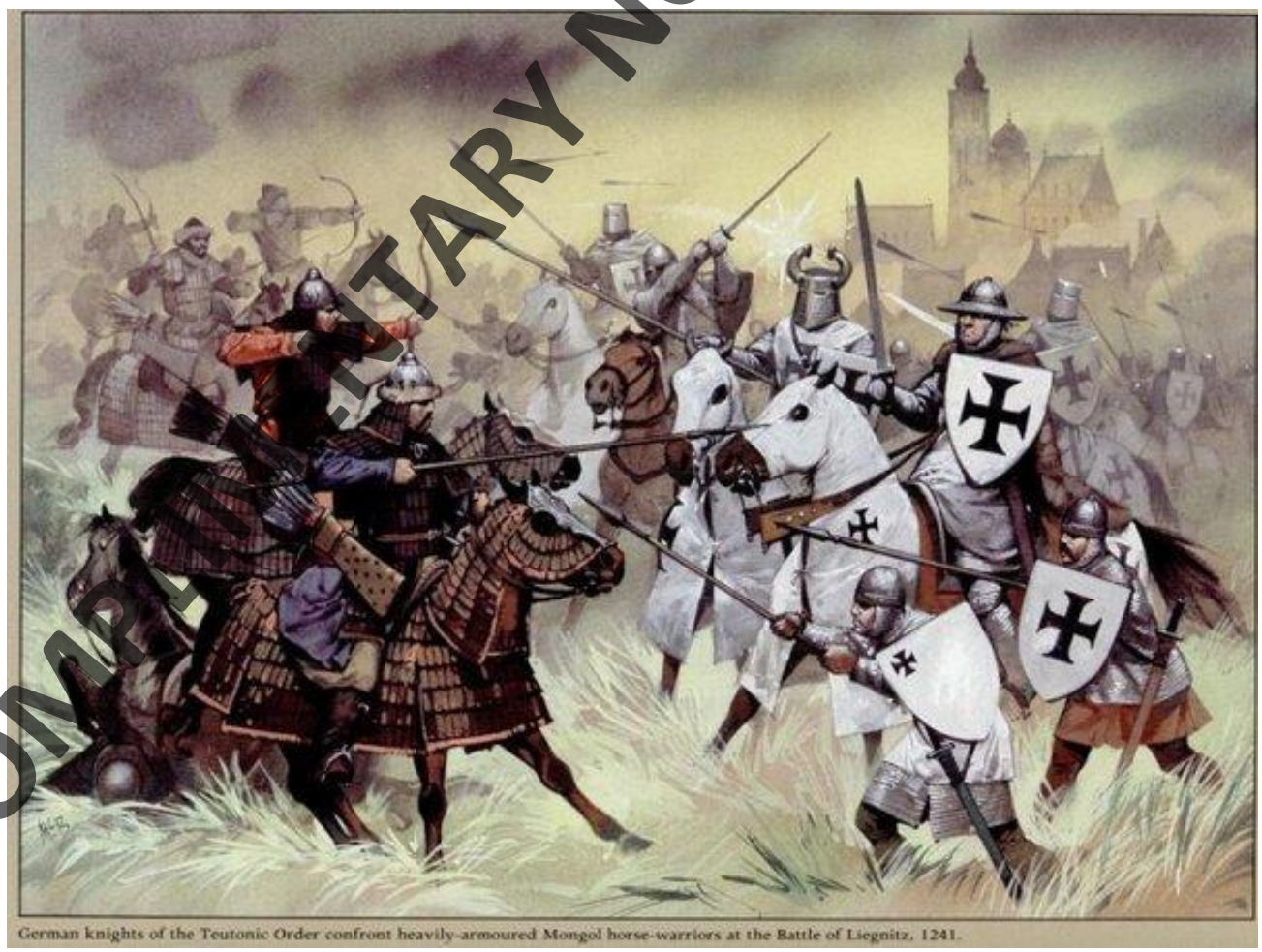
BARRELS & BLADES

Captain Francis Grenfell leading the 9th Lancers at Audregnies, 1914

February 2026



German knights of the Teutonic Order confront heavily-armoured Mongol horse-warriors at the Battle of Liegnitz, 1241.

SA Members our next meeting is on the 3rd Friday of the Month at the Lutheran Church Hall 57-59 Botting Street (Corner of Osborne St) Albert Park SA. The hall can be entered from Botting Street. For those members who will be displaying items there is also car parking for approximately 13 vehicles in the rear carpark off Osborne street), for members and visitors who are not putting on a display there is plenty of street parking.

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The Association Email Address is:
heritage.arms.society@gmail.com
Webpage: https://heritagearmssa.com/

Membership Applications

Nominee: William Mitchell
Interests: Firearms, swords, knifes & Militaria
Location: South Australia

Nominee: Tom Lianos
Interests: Our New Firearms Collector's Licence Training Officer
Location: South Australia

Nominee: Tony Hebron
Interests: History
Location: Western Australia

Any member having objection to membership being granted to the above applicants should give reasons in writing, in confidence and without prejudice, to the Secretary, c/- 32 Teakle Street, Exeter, within 21 days of this meeting. South Australian applicants that do not have a current firearm or firearms collectors' licence will require a fit and proper person check from SAPOL.

SA Member Displays

JANUARY

Europe

Artillery

Buttons & Badges

Conversions/Restorations/Fakes

PLUS, Anything over 80 years old.

THE DEVELOPMENT OF GERMAN BINOCULARS 1930 to 1980

Zeiss Jena 8X24 Deltuis commercial binoculars very high quality non coated lenses brass fittings product of the 1930s These were purchased by the British Government. Marked No3Mk11 broad arrow D. Range finder graduation (Strick latte) in right eye piece.

Voightlander & Sohn AG Braunschweig 8X24. Made 1943 with cold weather symbol. Manufacturers code ddx. Military range graduation right lens. Non coated lenses in original Bakelite case.

Zeiss factory at Jena fell into the hands of the Russians at the conclusion of WW2 and a new Zeiss factory was established in West Germany for the production of optics. The old Jenna factory in the East continued to manufacture optics but innovation remained mainly at the 1945 level with one exception the coating or blooming of lenses that were pioneered very late in the war by the Germans.

An example of Zeiss West Germany production in the 1970s 8X42 B. Armoured body fully coated bloomed lenses and greatly improved mechanism and clarity, attention to finish and optical brilliance, further advances illuminated reticules auto focus and lots more.

Royal Artillery full dress busby 1902 -1914, Victorian Royal Artillery officer's sabretache and Royal Artillery Belt.

Royal Artillery field service side cap and Royal Artillery Cross Belt pouch.

Artillery Officers sword c1822 maker Wilkinson

Argentine Artillery 1909 short sword

WW1 German luger p08 8-inch Artillery holster and WW1 German field cap

Military telescope in a leather covered body with caps.

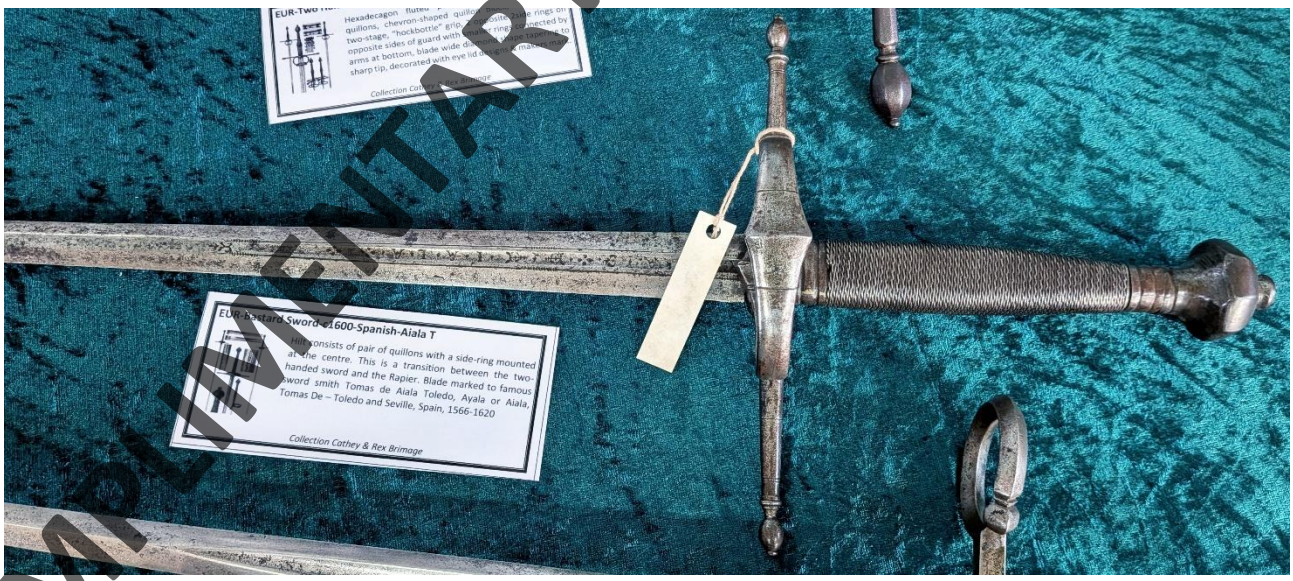
Europe

EUR-Armour Helmet-Cabasset-c1575

One piece bowl rising to a small stalk. Central crease. Narrow brim extending to a point front and back. Brim with inward turned roll at the edge. Rough from the hammer surface with old black finish. Retains all lining rivets and rosettes which still secure a cloth lining band. This appears to be in nearly original condition. Many of these are described as having come through Fenton and Sons, but there is no provenance on this piece.

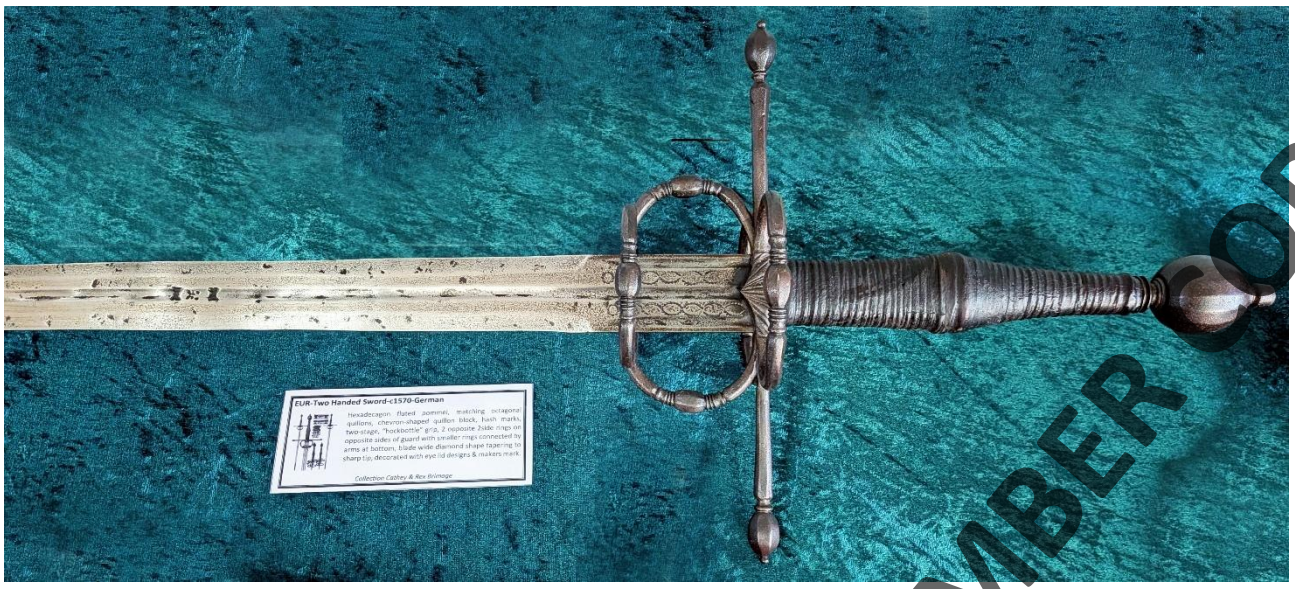
EUR-Crab Claw Cavalry-c1590-Italian Brescian

Description: Constructed with a slightly tapering massive wide flat double-edged blade with a single thin short fuller running about a third of the length down the centre of the blade, a makers mark on both sides of the fuller, a pair of drooping quillons with scrolling terminals, an additional pair of basal lugs en suite, three outer ring-guards of diminishing size towards the base, the upper two with a scalloped plate between, faceted ovoid pommel, and the grip bound with plaited wire between 'Turk's heads.



EUR-Bastard Sword-c1566-Spanish-Aiala T

Hilt consists of pair of quillons with a side-ring mounted at the centre. This is a transition between the two-handed sword and the Rapier. Blade marked to famous sword smith Tomas de Aiala Toledo, Ayala or Aiala, Tomas De – Toledo and Seville, Spain, 1566-1620. Whilst blades by Aiala where heavily copied the period of the hilt and pommel are appropriate for the time when Aiala was producing blades in Spain.



EUR-Two Handed Sword-c1570-German

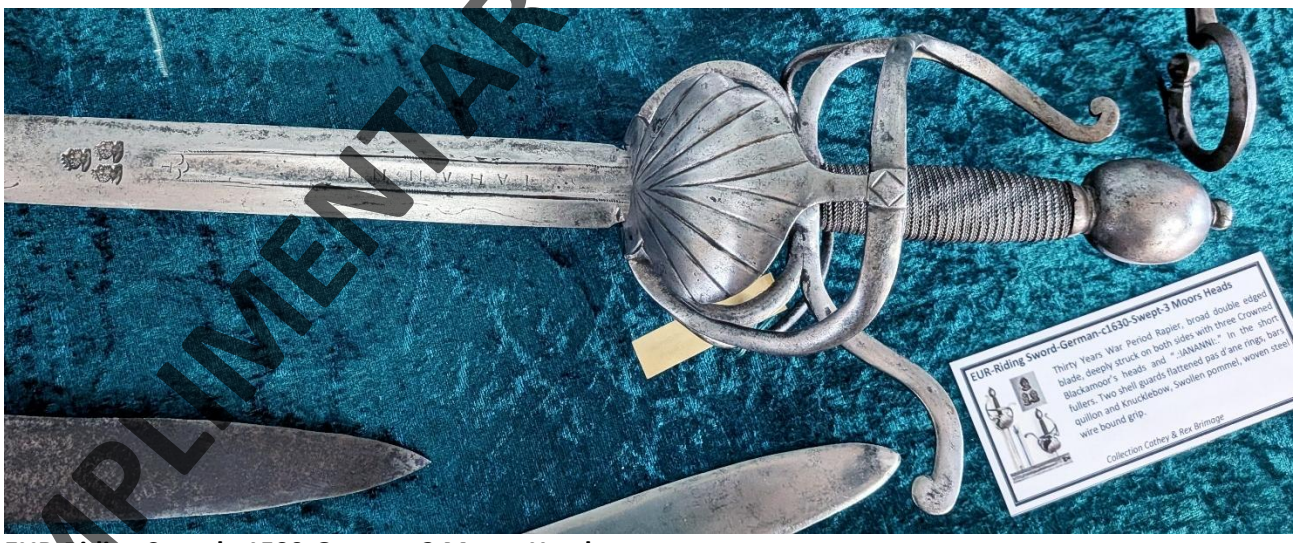
Original black from the hammer finish, now a slight russet colour on a Norman style 43 hilt, hexadecagon fluted pommel with peen on the apex, matching horizontal octagonal quillons expanding at the tips, chevron-shaped quillon block with hash marks originating at the tip of the chevron, a transverse separation on the grip under the pommel creating a comfortable two-stage, "hockbottle" grip, two opposite defensive side rings on opposite sides of the guard with smaller defensive rings connected by arms at the bottom, the blade is wide and of stiff diamond shape tapering to a sharp tip, a rectangular ricasso with three fullers and decorated with eye lid designs facing each other, a makers mark on one side at the beginning of the fuller in the form of a double circle with chevrons extending outwardly, original leather and wood grip, blade retaining a fuller running down about half the centre length of the blade with a deep mark formed of two broad saltires (St. Andrew's cross) and a talismanic symbol at the centre

EUR-Estoc-c1570-German-Diamond Blade-Stantler

ESTOC German Circa 1570, steel hilt with guard formed of two side loops. Robust diamond section 42" (106.5cm) blade. Blade thickens below fuller a third of the way down from grip. Wire bound grip with Turk's heads top and bottom. Blade carries a single mark inlaid with another metal possibly copper. This mark is possibly that of Wolfgang Stantler of Passau and Munich Circa 1500.

EUR-Riding Sword-c1560-German-3 Kings Heads

RIDING SWORD - German, Loop-Guard Hilt/Swept –Hilt. Blade 31ins (78.7cm) Leather covered wooden Grip, Broad double-edged blade with Marks: 3 kings heads, running wolf, Orb & Sceptre, & letters SCLI.FEO GLORIA both sides of blade circa 1600. The King's heads are the mark of Johanes Wundes of Solingen Germany (1560-1620). The imperial orb and cross are generally considered to be decorative devices although they may have had some talisman significance. The running wolf is the passau mark generally found on words supplied to mercenaries of the Arch-Duke Leopold V.



EUR-Riding Sword-c1590-German-3 Moors Heads

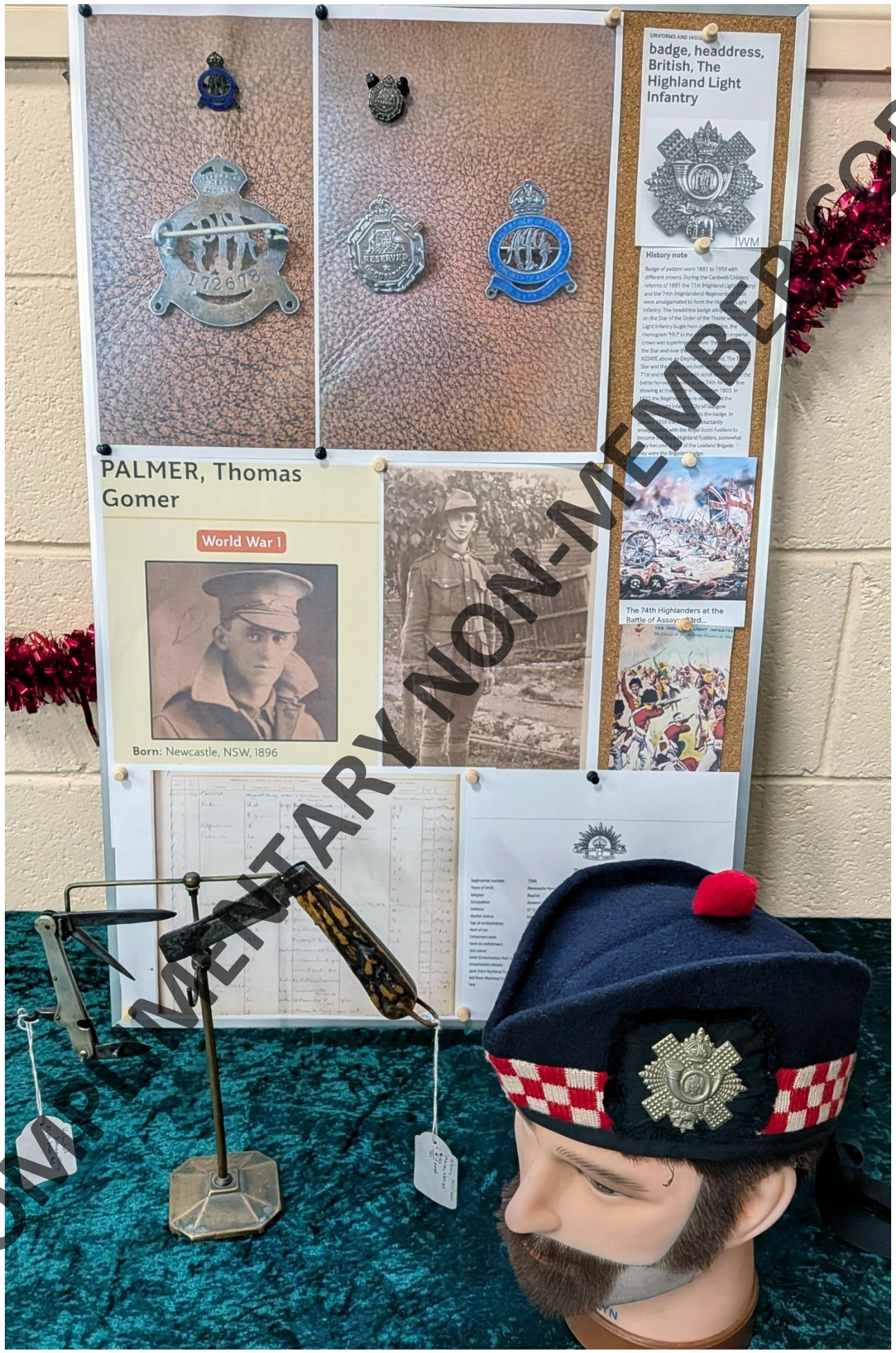
Thirty Years War Period Rapier, broad double-edged blade, deeply struck on both sides with three Crowned Blackamoor's heads and ".:IANANNI:." In the short fullers. Two shell guards flattened pas d'ane rings, bars quillon and Knucklebow, Swollen pommel, woven steel wire bound grip.

EUR-Armour Gauntlets-articulated Black & White-c1580

A pair of German black and white fingered gauntlets, circa 1580. Articulated metacarpus of five lanes with raised cabled knuckle protection. Articulated finger defences and hinged thumb plates. Pointed cuffs set with turned under and roped edge. Length 35 cm 14” long each.

Under restoration, an 1885 pattern cavalry sword, purchased rusty and badly damaged leather hilt. Restored to a reasonable display condition.

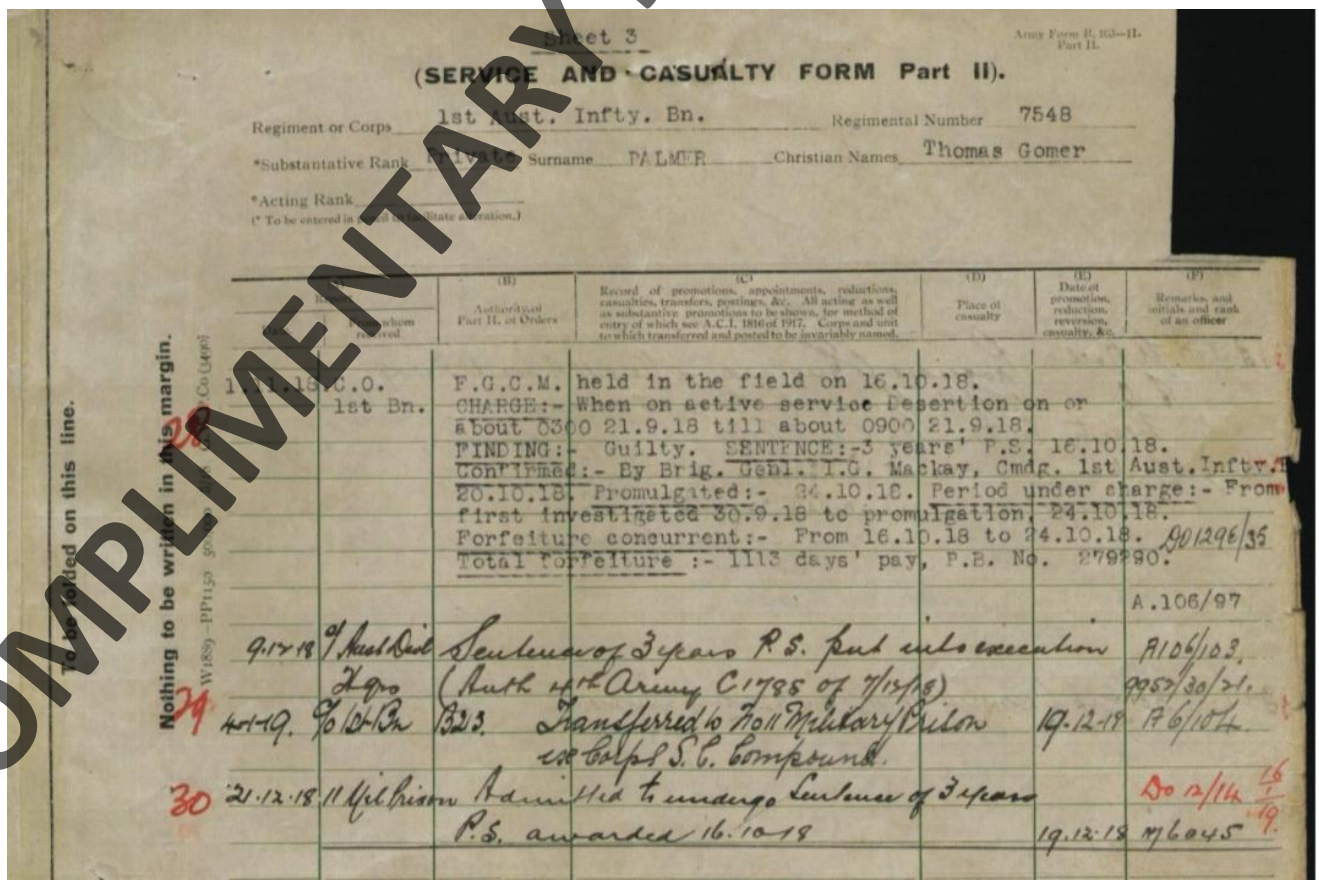
Royal Artillery Trench Art dated 1916



A WW1 sterling silver & blue enamel, nearest female relatives badge no. 172678, a search of the digitised badge registers in the National Archives of Australia reveals that this badge was issued to the mother of Private Thomas Gomer Palmer, a 21-year-old smelter of 37 Queen Street, Newcastle, New South Wales. With an enlistment date of 20th April 1917, Thomas found himself embarking for Europe aboard H.M.A.T. Marathon on 10 May 1917. Thomas had a regimental no. 7548, this gives a stark indication of the number of individuals who had served with the 1st battalion, up until then. He was with the 25th reinforcements to 1st battalion.

Suffering a gunshot wound to the left leg 16th April 1918, he was only away from the battalion for a few weeks before rejoining his unit, a bout of sickness saw him hospitalised from 23rd July 1918 until 11th August 1918, suffering from scabies. Further entries on his service record indicate that Thomas was held in custody and charged with 'desertion', date of the charge being 21st September 1918 ,from 0300 until about 0900 of the same day. However, the date of the charges and his detention is listed as 16th October 1918, at this time the initials ''F.G.C.M", Field General Court Marshal appear. Findings "Guilty", Sentence "3 years Penal Servitude", sentence later confirmed 20th October 1918. Further penalty, Total Forfeiture 1113 days' pay.

I was totally amazed when I read this, a 21-year-old married volunteer, he has been wounded in action and given a stunningly heavy sentence for a period supposedly spanning 6 hours ! I have read dozens of service records and seen all manner of soldiers transgressions, some of weeks of absence without leave or conduct unbecoming military etc. etc. No penalties, even approaching this one had been dealt out. What had Thomas done, so near to the end of the war to warrant such treatment? Thanks goes to Paul Skrebels for offering a clue to this question. The members of the 1st battalion had been part way through a relief, when they were unexpectedly ordered forward to go on the offensive, less than half of this severely depleted battalion complied with the order. Rather than charge them with mutiny, Monash opted to have them charged with desertion, this lesser charge did not carry a death penalty. A number of 'soldiers strikes' occurred in the AIF during World War I. At this time in 1918, many battalions that would have constituted a strength of one thousand officers and men, were reduced to a few hundred. Mutinies in the 1st Australian Imperial Force (AIF) | Australian War Memorial https://share.google/4d0JyGwbrCf5dQHkL


Sheet 3

(SERVICE AND CASUALTY FORM Part II).

Regiment or Corps 1st Aust. Infty. Bn. Regimental Number 7548

*Substantative Rank Private Surname PALMER Christian Names Thomas Gomer

*Acting Rank

(* To be entered in red ink to indicate alteration.)

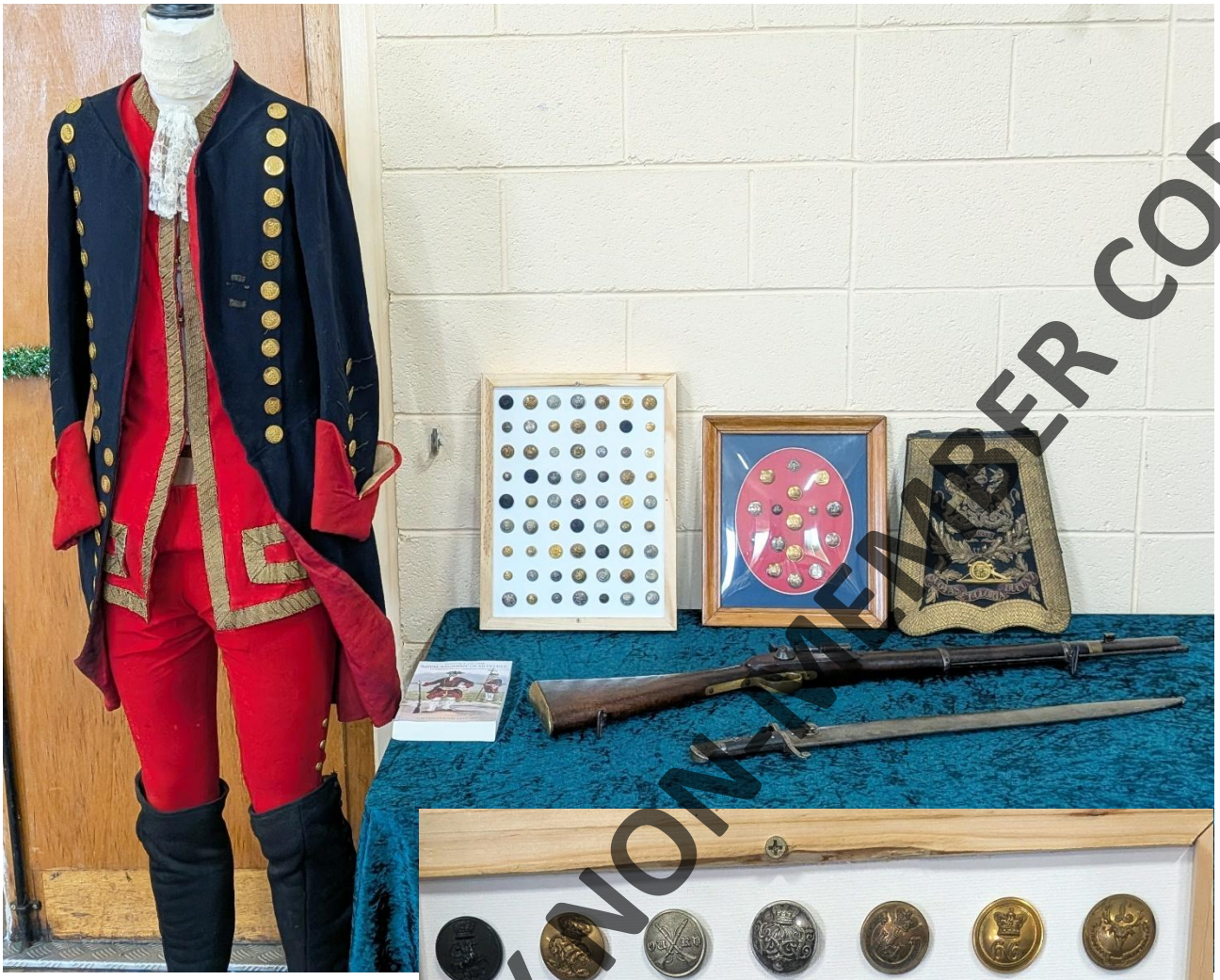
To be folded on this line. Nothing to be written in this margin.

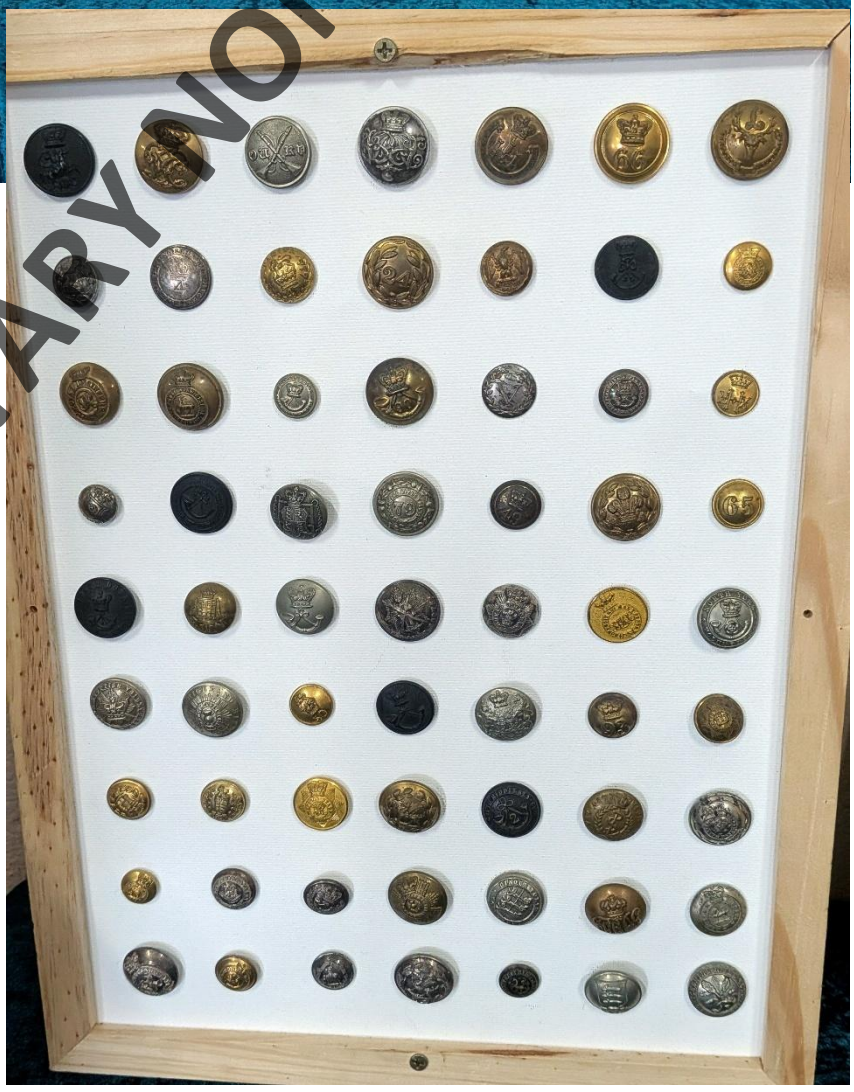
			(B) Authority for Part II. of Orders	(C) Record of promotions, appointments, reductions, casualties, transfers, postings, &c. All acting as well as substantive promotions to be shown, for method of entry of which see A.C.I. 1816 of 1917. Corps and unit to which transferred and posted to be invariably named.	(D) Place of casualty	(E) Date of promotion, reduction, reversion, casualty, &c.	(F) Remarks, and initials and rank of an officer
		1st Bn.		F.G.C.M. held in the field on 16.10.18. CHARGE:- When on active service Desertion on or about 0300 21.9.18 till about 0900 21.9.18. FINDING:- Guilty. SENTENCE:-3 years' P.S. 16.10.18. Confirmed:- By Brig. Genl. I.G. Mackay, Cmdg. 1st Aust. Infty. Bde. 20.10.18. Promulgated:- 24.10.18. Period under charge:- From first investigated 30.9.18 to promulgation 24.10.18. Forfeiture concurrent:- From 16.10.18 to 24.10.18. Total forfeiture :- 1113 days' pay, P.B. No. 279280.			901296/35 A.106/97
9.12.18	C/Aust Div Base			Sentence of 3 years P.S. put into execution (Auth 4th Army C1785 of 7/12/18)			A106/103, 9957/30/21.
29 Jan 19.	To 1st Bn		B23.	Transferred to No 11 Military Prison ex Corps S.C. Compound.		19.12.18	A6/104.
30	21.12.18	11 Mil Prison		Admitted to undergo Sentence of 3 years P.S. awarded 16.10.18		19.12.18	Do 12/14 16/1/19. M/6045

A WW2 'Reserved Occupation' badge, I am very interested to know how many of these were actually issued, the example I displayed has a number A32463. Internet research suggests that only three thousands of these were actually issued and that they are 'rare', I am sceptical , it seems many more thousands would have been required in essential wartime industry.

Another recent acquisition displayed, a British Army, Highland Light Infantry Glengarry. The cap bears the Highland Light Infantry badge with the battle honour 'Assaye'.

Two recent blade ware acquisitions a Royal Navy pattern folding 'rope knife', 1870-1910. Maker marked 'Thomas Turner & Co. Encore, Best Steel, & a 4 blade sportsman's 'champagne' style knife, featuring main blade, corkscrew, marlinspike and tin opener. Maker marked to 'Wade, Wingfield & Rowbotham' Sheffield. These were a typical private purchase item late nineteenth & early twentieth century.



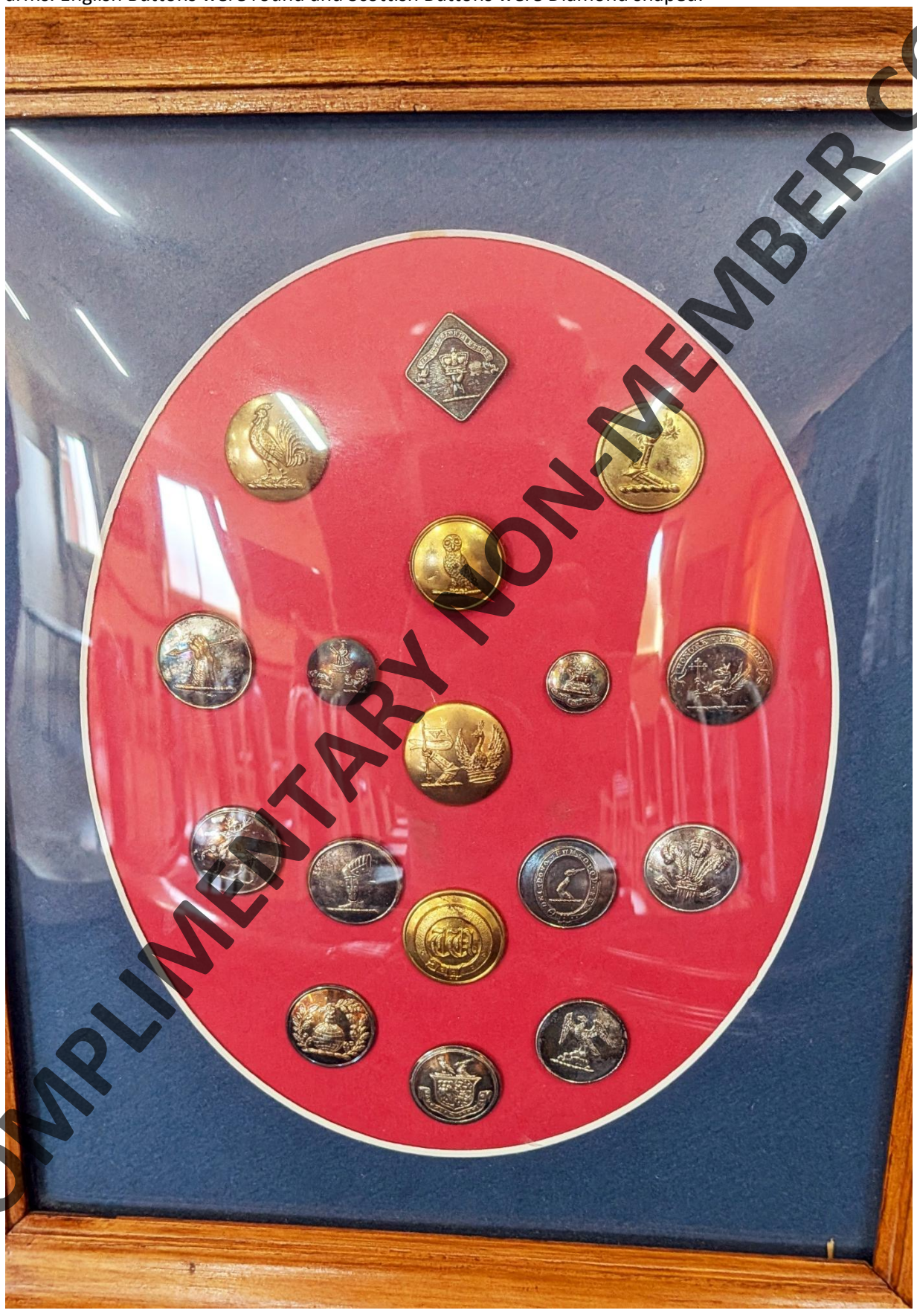


English Regimental and Volunteer buttons:

Assortment of 63 British Regimental and Volunteer Militia Buttons, dating from 1790s to Early 20th century. Since the inception of the British military, Buttons have been used as a way to distinguish different regiments from each other. Originally simply having different numbers, as years went by, the designs of these buttons grew more and more elaborate, often with more prestigious regiments like the Grenadier Guards having the most elaborate of all.

Livery Buttons:

Assortment of 17 English and Scottish livery Buttons. Houses of Lords and other families of wealth would often employ many household staff such as footmen, coach drivers, and other kinds of servants and dress them in uniforms called Livery, with the buttons of these uniforms often featuring a family crest or coat of arms. English Buttons were round and Scottish Buttons were Diamond shaped.



Royal Regiment of artillery Uniform:

Uniform belonging to an Officer of the Royal Regiment of Artillery circa 1745 – 1760s. The Royal Regiment of Artillery gained their distinctive Blue coloured uniforms when King George II decreed that the regiment should be dressed in Blue so as to assist in disguising the stains from Gunpowder. George II, having been raised in Hanover, witnessed the Hanoverian military experiment with different coloured uniforms for their artillery and eventually settled on dark blue, both as a way to distinguish artillery troops from the rest of the Infantry and also to alleviate the need for constant cleaning of gunpowder stains. This cut and style of uniform is of the same style that would have been worn during both the Jacobite Rising in 1745 and the Seven years' War. The uniform set is comprised of an outer coat, adorned in Gold coloured artillery buttons and Blue wool with red facings, an inner red vest with gold trim that was of the same design across all regiments of the British military at the time, a pair of red breeches that extended just below the knees, a pair of long serge wool gaiters, and a pair of brass buckled leather shoes.

Snider-Enfield Artillery Carbine:
Introduced in 1866, The Snider-Enfield rifle was a conversion of the previous pattern 53 Enfield rifle into a new breech-loading, cartridge rifle, based on Jacob Snider's action design. The rifle saw service in the British army until it was superseded by the Martini-Henry rifle in 1880 but saw extended service around the empire until the turn of the century. Many varieties were manufactured, including shortened carbine versions for the cavalry, and artillery, such as the one shown here.

Restorations & Fakes – HAS Member Athy Kalatzis

Restorations:
Throughout history swords were a valuable commodity and particularly prior to the industrial revolution blades were hand crafted and not only expensive but took time to make. However, they were always a working tool and subject to damage, breakage etc. It is inevitable that wherever practical these swords were restored or repaired to extend their life as much as possible.

I'd like to present a few examples of sword restoration or modification from Europe and also Japan giving some insight to how it was done and if known, why.

European Conversions

British -60th Rifle Regiment Sword 1827

The sword appears to be a high quality 1827 pattern with the strung bugle motif surrounded by a laurel wreath. This is the symbol of the 60th (Royal American) Regiment. The hilt retains most of its original nickel coating although rust has come through in many parts.

The no 30588 Wilkinson blade is a much later fitting, probably to replace a broken or badly worn original. The blade is in exceptional condition with minor rust blemishes. It is extensively engraved including the Royal Cypher of a Tudor Crown over an unusual Cypher of Victoria possibly VRI indicating an Indian Army owner? On the back of the blade is an engraving indicating the percussion point. (A frequent indication by Wilkinson).

The reason for the replacement of the blade is unknown, it could be extensive wear, a break in an earlier blade or even the owner wishing to upgrade the blade whilst retaining the original sword appearance.

Replacing blades on this and similar pattern British swords is reasonably straightforward. The tang would extend through the grip and protrude slightly above the pommel. To fasten the blade to the hilt this was

either fastened with a threaded nut or the end of the tang was simply peened over. This particular blade uses the later technique which replicates what was most likely used when it was made. The advantage of this technique is it facilitated easy replacement of blade or even hilt should that be damaged.

Swedish Infantry Cutlas Conversion 1685

Double edged blade of lenticular section, shortened for Naval use in 1832, struck with three marks and a proof mark, the letter P. It has a rudimentary blackened iron hilt, spherical pommel, grip of plaited brass binding covered in black leather between Turk's heads. The iron hilt is typical of a naval cutlas, very plain and utilitarian. There are remnants of the black paint/bitumen it was covered with.

The scabbard is black leather with brass fittings and a long frog hook. By its excellent condition it was probably made when the sword was shortened in 1832.

The rationale for the conversion of this rapier to a cutlas was for a different more tactical reason. The Swedish Komissvärja M1685 was used by the infantry soldiers from 1685 to 1788. As a result of the changing infantry tactics of European armies and the use of shorter hangers, from 1735 the infantry started to shorten the blades to 73 cm from the original 90 cm. This became the model M1735. The navy inherited a great number of them. They also shortened them from 90 cm blade length to 73 cm and took away the thumb ring. This became the naval cut sword "Huggvärja M1832". Total length: 91 cm Blade length: 74 cm Width: 3,1 cm

Central control of Swedish sword making has quite a history and the journey of this blade design, its use and evolution make interesting reading:

- The Swedish Carolean army drilled in sword practice.
- The Värja m/1685 (rapier model 1685) was a standard sidearm for both pikemen and musketeers. 340 000 were made from 1686 to 1737.

The swords were forged out of high-quality steel, and each blade was tested by the tip being put between the upper end of a door and a door post and a man suspending his entire weight on the hilt - the blade was supposed to bend, but not crack or deform, and spring back into shape after being released. The blade was then sharpened and a feather released from head height. The blade had to be sharp enough to cut the feather in two mid-air to be approved.

The Carolean infantry was drilled to march double-quick at the enemy. The battalion consisted of 600 men, 150 men wide and 4 men deep, with each rank consisting of 50 pikemen in the centre and 50 musketeers on either flank. The musketeers were to release a volley at 70 and 20 paces - with no reloading. The first two ranks fired at 70 paces and the second two passed them and marched to 20 paces and fired. After that, the battalion would charge with pike and bayonet (not all troops had bayonets as the Great Nordic War started in 1700 and would draw their rapiers instead). As long as formation could be kept, the troops were to use bayonets and pikes, but if the enemy started to run and formation broke down, the pikemen were to lay down their pikes and the musketeers to hand their muskets on their shoulders and draw swords.

The troops were drilled to thrust their rapiers towards the upper body of the enemy soldiers - if they were armed (with a cuirass, for example) they were to aim for the eyes. Fencing was not drilled - troops were supposed to deliver 3-4 rapid thrusts on an enemy, take him and advance on the next man, not engage in fencing. If an enemy stood with a bayonet mounted on his musket, the Carolean was supposed to use his

own bayonet (and bayonet fencing was drilled to some extent) or his pike, with which had much longer range than the musket-mounted bayonet of his enemy.

At Helsingborg 1710, the Swedish pikemen "tumbled over" several Danish infantry formations that tried to stand with bayonet and musket, causing the Danes to re-introduce the pike with their troops in order to be able to stand against such charges in the future.

What probably happened is that the front ranks of the Danish formation either got killed, wounded or came in disorder trying to avoid the pikes and the rear ranks, taking a few steps back at the carnage met the pikemen with swords out and started routing. To the Danish commander, it might have looked like his infantry, which stood without retreating, facing the initial charge (which is a feat of high morale and discipline), was simply destroyed by the Swedish charge, which looked like it did not even slow down as it destroyed the Danish formation.

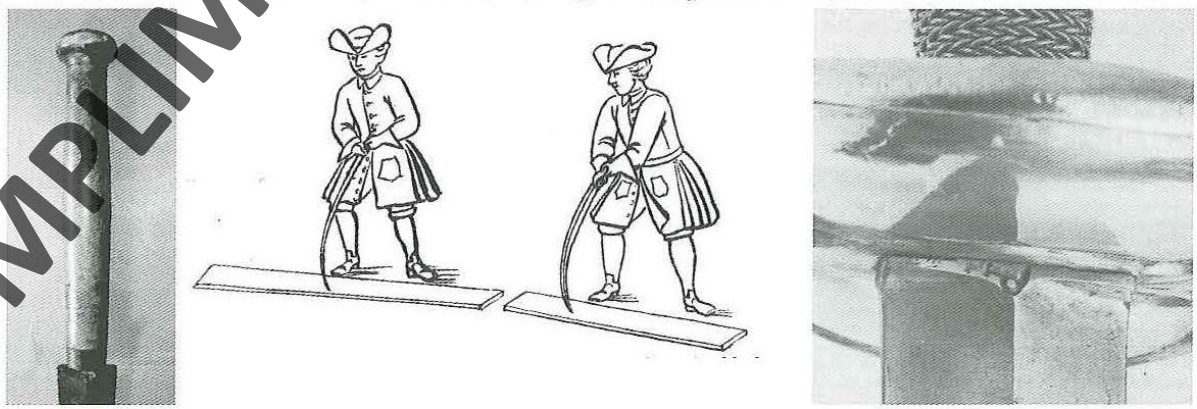
THE SWEDISH P-MARK - KINMAN-S-European Makers of Edged Weapons their Marks-Kinman Pp 161

King Gustaf Vasa (1523-1560) ordered control of the blade factories. For example, the king ordered his sheriff in a letter in 1555 to control the elasticity of the blades by bending them and observing the ability to reassume their straight shape afterwards before accepting the blades for the Crown.

In 1675 the first official rules for blade testing were established by King Carl XL The blades were subjected to very tough tests. They were forcefully struck with their flat side against a plank. If they did not break, they were bent into a "snake" way by pressing the edge against a piece of wood and they were supposed to reassume their straight shape to pass. If they withstood these tests they were approved and a "P" mark was hammered in at the blade base at a spot that was not hardened. The P mark was established by the king on l5 July 1682. Probably the procedure and the marking had been used for some time then. In 1704 the testing rules were somewhat mitigated. The striking test was left out, and the snake bending was replaced by simple bending both ways.

In 2009 an unmounted P-marked sword blade model of 1701 with a long wooden handle with a wide end on the 23 cm tang was sold at an auction in Stockholm. The scabbard and its original leather cover were still there. The blade is interesting in two ways: it is one of the 24 unmounted blades, which were sent together with the 200 mounted drabant swords to Danzig in November 1703, where they were picked up by the drabant corporal Nils Hielm. It is also the only preserved blade to my knowledge with a handle that would make the blade tests possible. Mollerheim (Manuscript 1722 in the archive of the Army museum, Stockholm) shows in a drawing how the bending test was performed. Both hands (with gloves) grasped the wooden handle around the tang. The tang end pointed at the stomach of the examiner, and it is easy to understand why the handle is broad at the end. The blade point is fixed in a plank.

Literature: Fleetwood 1926, Kinman, S., Edged Weapons 2014, Seitz, H. in AMM 1957.



The 23 cm long wooden handle on the tang of a blade model 1701, the bending test (in a drawing from 1722) and the approbation P-mark struck into the non-hardened base of a blade model 1701.

Japanese Conversions:

Japanese Early Shinto Wakizashi 1625

This example of a Japanese blade will be used to illustrate some of the reasons and methods used for restoring Japanese swords. Japanese swords are all based on a single design principle whereby the hilt is fastened to the blade by the use of a bamboo peg that penetrates the hilt through a hole in the blade thus holding the blade and hilt firmly together. The picture below shows the dismantled blade with the handle (Tsuka) at the top above the bamboo peg (Mekugi) and the blade end with two holes from a shortening exercise plus the components of the guard: Habaki; blade collar, Sepa; spacer, Tsuba; guard and second Sepa.

This facilitated not only easy remounting of blades and hilts, but when the blade was not going to be used it could be sheathed in a plain wooden scabbard (Sura Saya) to protect the blade from contamination. This arrangement was used extensively as part of the protocol of maintaining blades in pristine condition throughout their life.

The routine maintenance would be dismantling of the blade as above and thorough cleaning followed by oiling to protect the blade against corrosion. This would be done usually by the family and supporters of the samurai who the blade belonged to. During its life if a blade or any element is damaged it could be easily replaced as an individual part, handle, blade, guard etc.

If there was severe damage to the blade (possibly to this blade), the blade could be re-purposed. In this case the two Mekugi holes in the tang (Nakago) indicate this blade was shortened from probably a katana blade to its current size.

The other requirement is that blades were routinely polished as they became dull or otherwise worn through use. This blade was sent for polishing (which today costs roughly $300 per inch of blade face), however the polisher after doing a "window" considered it wasn't viable for a blade of this relatively young age.

However, the window clearly shows how the polishers art can enhance the blade. The section between the two bands across the blade are where the blade was polished. The section nearer the camera is very dull and doesn't show the Hamon (temper pattern) near the cutting edge. The unpolished side also shows some pitting from corrosion which was removed in the polished section. Polishing blades would probably be carried out a few times during the blades life, and it served a number of purposes as shown here: Firstly, it restored the blade to as built condition, it removed corrosion or similar nicks and damage to the blade and finally it restored the razor-sharp edge to the blade. It is sad that this blade wasn't worthy of a full restoration, but it is an excellent example of what such a restoration could do.

Japanese Iwato Ichimonji Katana 1325

Rare Important Daimyo family Katana remounted for Naval Military use, mounted in excellent Naval, Rear Admiral, Kyu Gunto Koshirae with Sakai family Mon. Owned by Navy Rear–Admiral Sakai Tadatoshi.

Sword worn with court dress of Imperial Navy appointee.

This sword is used as an example of a relatively modern re-purposing of an old family sword to suit a new role for the owner. When the sword was made in 1325 it would have been dressed in traditional Koshirae of the time and probably looked something like the one below.

However, when Emperor Meiji took over the running of Japan in 1868 from the Tokogawa shogunate he instilled a large number of reforms, many of which were aimed at having Japan adopt many of the western ideas and principles from which it was isolated by the Shogunate. As part of this he had a preference for western style military dress and patterns. A key one from the military perspective was to adopt western patterns for swords and similar accoutrements.

Rear Admiral Sakai Tadatoshi had this heirloom Ichimonji sword shortened when he had a meeting with Emperor Meiji on the occasion of being appointed Residential Naval Officer of the Japanese legation to Russia in 1901 in order to wear it with a court dress. Like many personnel he wanted to retain his centuries old family sword, so he had it re-purposed by modifying the blade to mount in the western style naval Koshirae shown above. This would have involved shortening the tang and adding new Mekugi holes to match the western style naval hilt.

In keeping with tradition even such "modern" fitted Japanese swords have their wooden scabbard (Sura Saya) to protect the blade. In this case the sword smith added a monogram to record the modification to the blade on the timber scabbard. This reads:
出羽庄内藩酒井左衛門尉家傳来海軍少将従四位勲三等功四級酒井忠利拝刀
明治三十四年駐露西亞公使館駐在武官ニ補サレ明治大帝拝謁之際家傳ノ一文字ヲ磨上**大禮服着用剣ニ改ル者也 石山識「花押」**

Dewa Shōnai–han Sakai Saemon no Jō–ke denrai Kaigun Shōshō Ju–Shi'i Kun–Santō Kō–Shikyū Sakai Tadatoshi haitō. Meiji sanjūyonen chū Roshia kōshikan chūzai–bukan ni hosaru Meiji Taitei hai'etsu no sai kaden no Ichimonji o suriagaru Taireifuku chakuyō ken ni aratameru mono nari Ishiyama shirusu + kaō

This blade was an heirloom of the Sakai Saemon no Jō family, which ruled the Shōnai fief in Dewa province. It was then worn by its descendant, Navy Rear–Admiral Sakai Tadatoshi (1857–1943), holder of the Fourth Court Rank Second Grade, the Order for Distinguished Service Third Grade, and the Order of Merit Fourth Rank. Tadatoshi had this heirloom Ichimonji sword shortened when he had a meeting with Emperor Meiji on the occasion of being appointed Residential Naval Officer of the Japanese legation to Russia in 1901 in order to wear it with a court dress.

Written by Ishiyama monogram.

Miniature Firearms

Miniature Auto Pistol – HAS Member Les McKessar

The pistol featured here was designed by Franz Pfannel, a watchmaker by trade. He was born in Stein, Austria, and was trained by his father who was also a watchmaker. In 1897 Pfannel began producing 2mm pinfire "berloque" pistols and rifles – tiny guns that were produced more or less as a novelty. The word "berloque" translates as "jewel". These early pieces were tip-up barrel single shot weapons and were a big success from the start. The business grew to the point where he had fifty workers, making mini guns but also mechanical items.

In 1910 Pfannel patented this semi-automatic design. He formed a partnership with a friend, George Grabner, to manufacture these guns, and production began in 1914. They were not quite as successful as the simpler and cheaper single shot berloques, and it is believed that less than 1000 were made. Production came to a halt in early 1915 due to the disruption of the First World War, and they never came back into production. A nearly identical model, just a little larger was produced in 3mm centrefire, but also never re-appeared.

The gun shown here was the first of Pfannels semi-automatic pistols and was the smallest semi-automatic pistol ever produced in quantity.

Statistics: - 7 shot magazine, calibre 2.7 mm centrefire rimless cartridge, barrel length 1 3/8" inches long with a weight of just two ounces. The serial number is "8", and it is marked KOLIBRI.

<u>References</u>

The Handgun by Boothroyd 1988 Pp489-490
The Tiniest Guns by Urso 2nd edition Pp26 No A40
Miniature Arms by Lindsay Pp99

Winchester Cannon – HAS Member Les McKessar

The miniature cannon shown here was designated the model 1898 by Winchester and was produced from 1898-1958. The carriage and wheels were of cast iron, with the barrel of cast steel. They were all bored for 10-gauge shells and were intended for signal and ceremonial use. However, they will chamber a loaded cartridge. Minor documented changes were made over the years.

This cannon was made between 1907-08 and has all iron wheels. After 1930 the wheels were made of iron with rubber tyres.

To use, a lever attached to the breechblock is swung up sideways, then backward to open the breech. This cocks the action and allows a cartridge to be inserted into the chamber. The breechblock is now returned to the locked position. Firing is achieved by pulling a piece of cord attached to the lever, preferably several metres from the cannon.

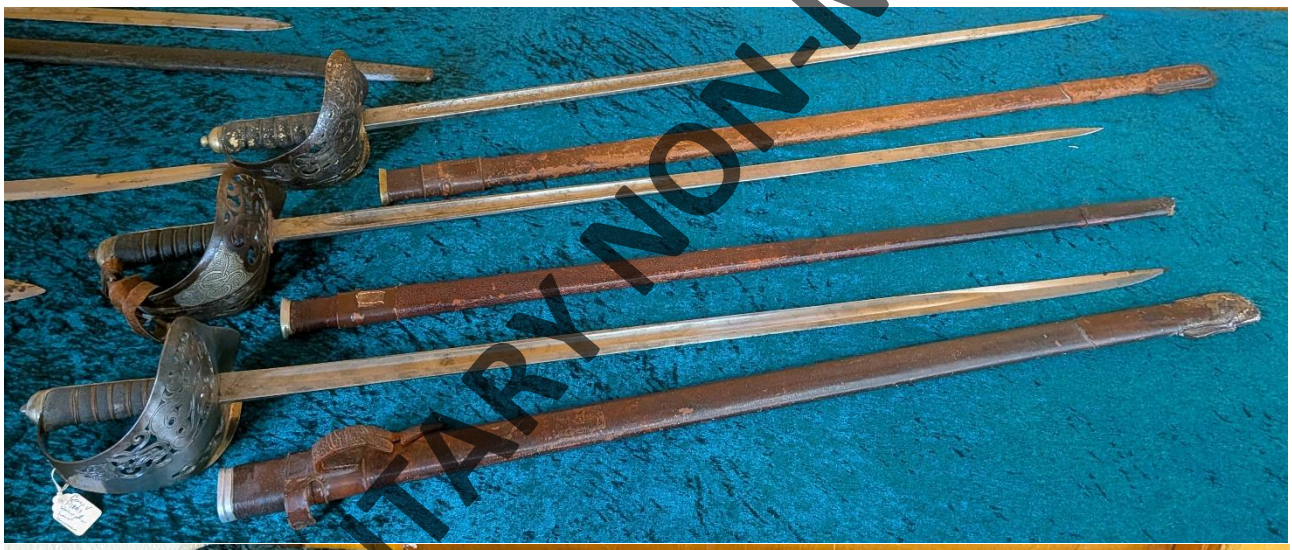
The serial number 328 is marked to the under barrel and barrel mount. The frame is marked “W.R.A. Cº. TRADE MARK REGISTERED IN U.S.A.”. The barrel is stamped “NOT FOR BALL”, also “MANUFACTURED BY THE WINCHESTER REPEATING ARMS Cº. NEW HAVEN. CONN. U.S.A. PAT. AUG. 20. 1901. 10GA.””. The original blue finish is almost gone, but the cannon remains in good condition.

A total of 18,400 cannon were made by Winchester, and production was restarted in 1976 by the Bellmore – Johnson Tool Company of Connecticut under license from Winchester.

Statistics:- The barrel is 11¾” long, smooth-bored to 10-gauge centrefire. The overall length is 17”, with a weight of 14lb.

References:-
“The Winchester Book”, Madis 1985. Page 512
“Guns of the World”, Bonanza Books 1977. Page 149
“Flayderman’s”, Norm Flayderman, 9th edition. Page 323

Fakes: Indian tourist sword
Badges: WW1 Scottish Black Watch hat badge, a WW1 Cameron Highlanders hat badge, WW2 Women's Land Army pin
Artillery: British 1879 saw back sword bayonet, Russian saw back Artillery tessik
Conversions: British infantry officers swords: A regular 1897 pattern British infantry officers sword, converted 1895 pattern infantry officers sword, An 1897 pattern infantry officers sword with a Wilkinsons cut and thrust style blade.



A Uniform of the 2/4th Australian Armoured Regiment, c.1943 – HAS Member Paul Skrebels

This display is based around a service dress tunic named to a member of the 2/4th Australian Armoured Regiment from the Second World War.

The Beret

Prior to the outbreak of WW2, Australian mechanised units followed the British Royal Tank Corps practice of wearing black berets, and these continued to be issued to the AIF Divisional Cavalry regiments throughout the war. With the formation of the 1st Australian Armoured Division in 1941 and subsequent expansion of the Armoured Corps, however, the lobbying of one of its founding officers, Maj Gen R.N.L. Hopkins, resulted in a distinctive and more practical khaki beret being issued to members of the Corps. This was worn with the small collar-size rising sun badge and was supposed to have a left-facing unit colour patch on that side, although photos show that the patch often wasn't worn on campaign.

The beret on display either never had or no longer carries a patch, and being rather well-worn, any manufacturing marks have faded or are washed out. The particular type of lining suggests an example of British manufacture, although khaki berets were made in Australia as well. In March 1945 the Armoured Corps was ordered to adopt a black beret with the large hat-size rising sun badge, but again photographic evidence implies that this regulation only came into effect at the war's end.

The Tunic

Fig.1 (left): The label inside the tunic.

The service dress tunic is the first WW2 pattern derived from late First War types with external bellows pockets. Its label (Fig.1) shows an unidentified Victorian manufacturer's code V444, a date of 1942, and an inked-in owner's service number and name: SX23316 R.W. Michael (of whom more later). The tunic bears the usual bronze rising sun collar badges and 'Australia' shoulder titles, the latter issued only to members of the 2nd AIF. As was the practice at the time in the Australian Army, corporal's rank stripes are stitched to the right sleeve only, while an opposing pair of unit colour patches of the 2/4th Armoured Regiment are worn on each upper sleeve (Fig.2). This was the first pattern patch authorised for the 2/4th in February 1943, in the hexagonal shape of the 3rd Armoured Division. The yellow base colour denotes the 2nd Armoured Brigade, while the black top colour indicates the brigade's senior-numbered regiment, the 2/4th. The grey superimposed tank shape was common to all armoured units, and of course the grey background was worn by all members of the 2nd AIF.

Fig.2 (left): The first pattern colour patch of 2/4th Armd Regt, as worn on the tunic. Made in opposite-facing pairs, this is the version for the left sleeve and the beret.

Even after these higher formations were broken up and disbanded, the 2/4th retained this patch for most of its career, taking it on campaign in New Guinea and Bougainville. In early 1945 a new patch was authorised reflecting the 2/4th's establishment within the re-formed 4th Armoured Brigade, in

that brigade's rhomboid tank shape and the traditional double-blue colours of the 4th Light Horse Regiment (a unit to which the 2/4th Armd had no other connections but its number). Once more, photos suggest that this new patch wasn't taken up until near the conclusion of the war.

The Equipment

The Light Combat Order on display is made up of standard Pattern 37 webbing waistbelt, pair of braces and brace attachments. Attached to the belt is a padded webbing compass pocket, and a feature unique to armoured units, the so-called 'Pistol Case for Royal Armoured Corps (RAC) Personnel'. This consists of a pistol case or holster suspended from a wide supporting strap which forms a loop for hanging from the belt, and a horizontal strap for securing the holster to the right thigh. Down the front edge of the case is a tube for holding a clearing rod, and along its front face a series of six loops for spare rounds of .38" ammunition. In Australian service the usual sidearm carried was the Smith & Wesson .38/200 Victory model revolver, often with a lanyard of the regulation type shown on the mannequin, tied to the butt to prevent loss.

Figs 3 and 4 (above): Front and rear views of the Pistol Case for RAC Personnel. This is a Canadian-made example as worn by Australian armoured crews. Note the thigh strap and the rounded top of the holster.

The British came to regard the rig as too clumsy for use in armoured fighting vehicles, so in December 1942 ordered all cases in RAC possession cut down and modified into more conventional pistol holsters (see Fig.5). Not so in Australia, Canada and elsewhere, where the long straps were retained at least for parade use if not on campaign. The display example was made in Canada in 1943 by Z.L.&T. Ltd and is a reminder of Australia's heavy reliance on Canadian sources for its webbing equipment. In September 1945 the 2/4th Armd Regt was even noted as turning out for a formal victory parade wearing the new black berets, freshly issued jungle green uniforms, and the long pistol holsters secured to the thigh.

The 2/4th Australian Armoured Regiment

The 2/4th Armd Regt was a relative latecomer to the Australian Armoured Corps order of battle, being established in November 1942 from various units deemed redundant by the army authorities. Thus, A Squadron was formed from D Sqn, 2/11th Armd Car Regt; B Sqn from the 2/2nd Armd Bde Reconnaissance Sqn, and C Sqn from the 2/1st Armd Bde Recce Sqn. Over the coming months drafts from other disbanded units were received by the regiment, chiefly from 7th Motor Regt (ex 7th Light Horse), 3rd Army Tank Bn, and 6th Armd Bde, made up of South Australian units to which, as will be seen, the tunic's owner, R.W. Michael, originally belonged. Also raised and attached to the regiment were a Signal Troop, an Electrical and Mechanical Engineers Workshop, and an Ordnance Field Park, each given the designation 2/4th. They became

an integral part of the regiment, such that it came to be regarded as a self-contained Armoured Regimental Group.

Fig.5 (left): A British-made Pistol Case for RAC Personnel in green webbing. This scarce example survives in its original configuration because it was used and brought back to Australia by Capt John Devonshire, 2/3rd Machine Gun Bn. Note the square-topped holster flap that differentiates the British model from the Canadian pattern. Beside it is a postwar model showing the shortened version, following the order to modify the original suspension. The thigh strap was therefore no longer required.

After training at Murgon, Queensland, on US M3 Grant and Stuart tanks, the 2/4th Armd Regt reached a level of proficiency which saved it from the disbandment which the rest of 2nd Armd Bde underwent. Instead in early 1944 it was sent to Southport, placed under command of 4th Armd Bde, and converted to British Matilda tanks with a view to potential service overseas. At last, in August 1944, it was shipped to New Guinea minus its own pristine tanks, taking over instead the rather battle-worn ex-1st Armoured Regt Matildas. The 2/4th would eventually see front-line service – becoming one of only four Australian Armoured Corps units to do so – but not as a whole regiment. In November C Sqn was sent to the Aitape-Wewak area of northern New Guinea to support the 6th Division's efforts to dislodge the Japanese. It particularly distinguished itself at the capture of Wewak in May 1945 and remained in the region until after the Japanese surrender in August.

Meanwhile, B Sqn travelled to Bougainville in December 1944 and spent the next few months hacking a camp out of the jungle and training with the infantry of 3rd Division. The squadron would see action aplenty during the last months of the war, beginning most notably at Slater's Knoll in March 1945. In May HQ Sqn and A Sqn arrived to share the load, and the fighting would continue unabated until August. Throughout its involvement in the Pacific, all elements of the 2/4th proved the value of employing armoured vehicles in areas where many thought they would be a liability. The infantry certainly appreciated the ability and willingness of tank crews to blast the enemy out of their strongholds with the Matildas' 2-pounder and 3-inch tank guns, or to break up fanatical counterattacks with their concentrated machine-gun fire.

Total casualties suffered by the regiment amounted to 13 killed in action or died of wounds, 12 dying from other causes, and 31 wounded in action. This may not seem a great sacrifice, but the relatively small numbers belie the efforts put in by the regiment to keep its tanks in operational condition and up front where they were most needed. Its involvement did not end there, either. For several months after VP Day a detachment of B Sqn served in Rabaul, supervising the re-deployment of captured Japanese tanks in one of those bizarre and frequent examples in the Pacific theatre where former enemies found themselves serving alongside each other. These duties were wound up in May 1946, and in September the last member of the 2/4th Armd Regt was discharged.

SX23316 R.W. Michael

The story of Reginald William Michael may not involve active service with the 2/4th Armd Regt, but it does illustrate the complexities of its founding and composition. A farmer born in Snowtown, South Australia on 26 May 1917, Reg Michael originally attested for the 9th/23rd Light Horse Regt with service number S7265 on 13 August 1940. In January 1942 he transferred to the 3rd Reconnaissance Company (also termed a Squadron in other sources) and was called up for full-time duty. On 10 June 1942 Michael transferred to the 2nd AIF and received the service number SX23316. On 13 June he entrained for Victoria and in July the whole 3rd Recce became an AIF unit. In January 1943 he attended a wheeled vehicle instructor's course and qualified, receiving fair to good assessments overall. Among other comments, it was noted that his 'Voice needs practice to develop tone control. More aggressiveness required.'

Fig.6 (left): R.W. Michael's identity photos from his original 1940 attestation form, when he joined the 9th/23rd Light Horse Regiment in Clare, South Australia. It shows his militia enlistment number, S7265. It also reveals that he wears generic rising sun collar badges on his service dress tunic rather than Light Horse regimental patterns.

On 3 April 1943 he transferred to the 2/4th Armd Regt and entrained for Queensland – one of apparently quite a number of South Australians from 6th Armd Bde to do so, and most of whom appear to have been concentrated in HQ and B Sqns. However, in July he transferred yet again to the Australian Armoured Corps Training Regt at Puckapunyal, Victoria. The reason for this isn't specified, but there followed a series of periods of Leave Without Pay and a downgrade of his Medical Category from A1 to B. The next several months saw him posted variously to the Leave and Transit Depot and General Details Depot, until his eventual discharge on 30 March 1944.

A combination of health issues and his profession as a farmer were the probable causes of his premature discharge from the army. By 1944 the government was seeking to return as many service personnel as feasible back onto the land and into industry, and Michael's medical status may have provided an excuse in his case to do just that. Despite his short stay in the 2/4th Armd Regt, and the declaration that his Posting on Discharge was the already defunct '3rd Motor Regiment' (an earlier designation of the 3rd Recce), it was the 2/4th's first pattern colour patches that ended up on the sleeves of his tunic.

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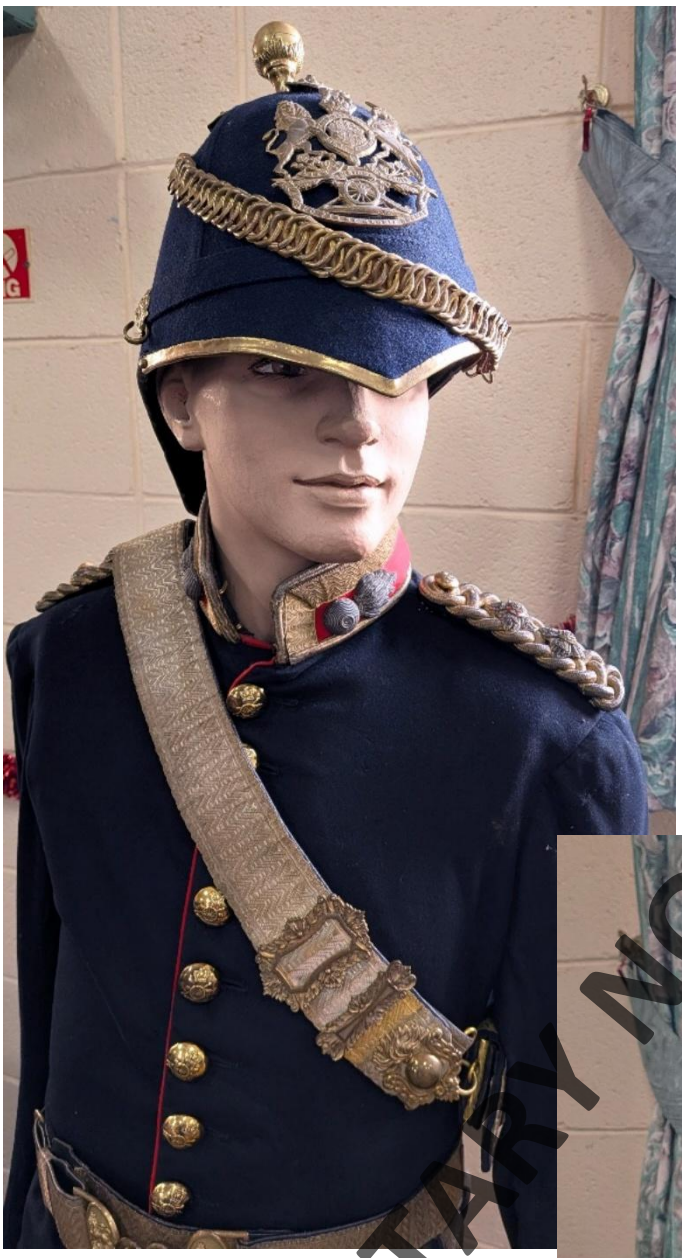
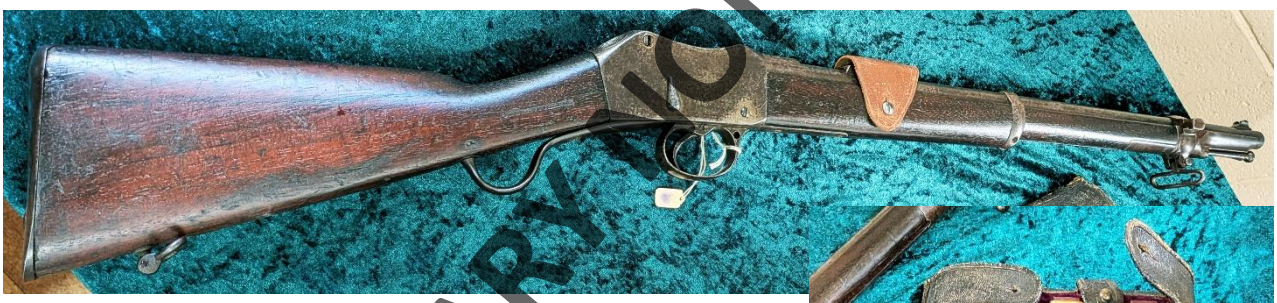


Pre Federation Artillery officer's navy-blue service dress with gold bullion embellishments. Buttons are brass with Queen Victoria crown above an artillery piece. Two-star pips on the epaulettes denote the rank of Captain (after federation the rank of Second Lieutenant was introduced, therefore One pip denoted Second Lieutenant, 2 pips became Lieutenant and 3 pips were then Captain). The accoutrements were a gold bullion waist belt with 3 suspenders attached to a sabretache and 2 others attached to a metal scabbard in which is an 1821 pattern Artillery sword with the blade etched with the words 'VOLUNTEER SA ARTILLERY' (South Australia). A bullion shoulder belt with bullion embossed expense pouch sits over the left shoulder draping down to the right side. Navy blue trousers with broad red stripes down the outside of each leg and black lace up boots. Completing the uniform is a blue cloth pith helmet with general service artillery helmet plate to the front.

A Pre Federation Artillery other ranks navy blue service dress with yellow rope embellishments. It has white metal buttons with Queen Victoria's crown above an artillery piece. One chevron on the upper right arm denotes the rank of Lance Bombadier. Trousers are navy blue with broad red stripes down the outside of each leg and black leather boots. A blue cloth pith helmet bears a star burst helmet plate with Queen Victoria's crown at the top, a round broad leather garter in which is embossed 'SOUTH AUSTRALIA MILITIA ARTILLERY' which surrounds a field cannon in its centre.

A white leather waist belt has a white metal buckle featuring an artillery piece and the letters 'S A V' (South Australian Volunteers). A white metal frog on the left side of the belt supports a black leather scabbard with steel fittings in which is an 1879 Artillery saw back bayonet with a small arrow and initials 'S A' (South Australia) on the upper metal tang between the leather hand grips.

The accompanying firearm is a Martini Henry artillery carbine in .450" calibre; the arm is marked to the Victorian Government.



An other ranks navy blue artillery pill box round cap with red piping and black leather chin strap.

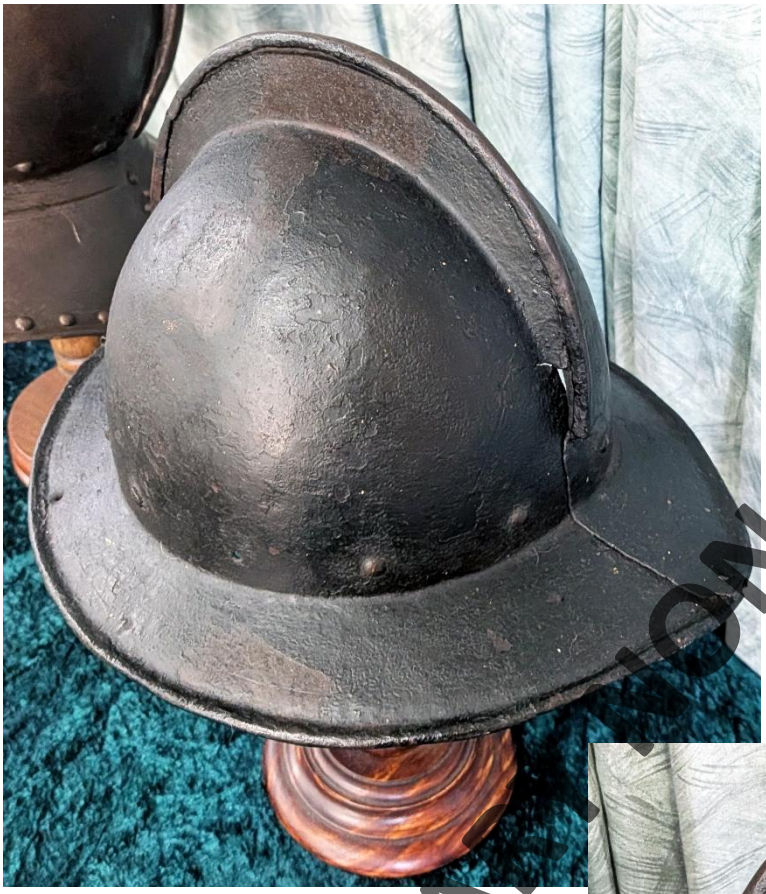
A black leather cover for the sabretache with another sabretache inside is shown to illustrate how the sabretache is protected from the elements when worn in the field.

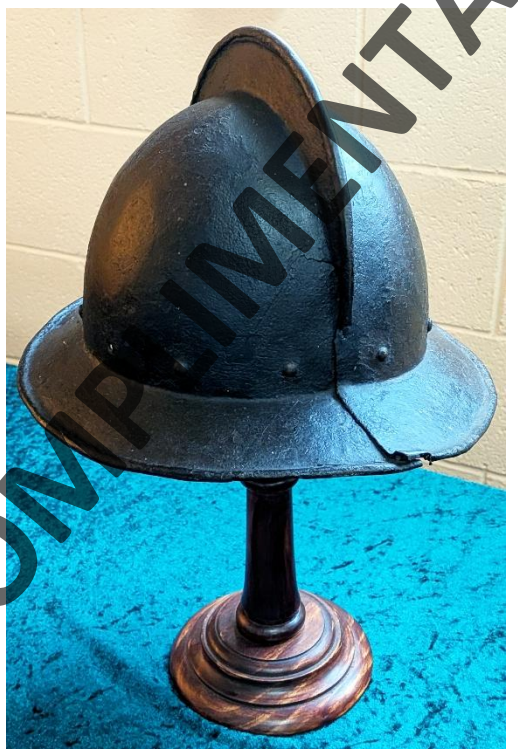
English , German or Flemish Close helmet

The Close Helmet was a knightly headpiece of the 16th Century. It enclosed the head completely yet provided a nearly ideal combination of protection, vision and ventilation . It is the double bevor type made from four pieces of steel circa 1540- 1650 . Movable parts including visor are held in place by bolt pivots and pivoted hooks. Lifting peg for visor is missing .This example has a single gorget plate remaining at the rear but missing the front plate possibly removed after some sort of damage and not replaced.

English Civil war period Pikeman / Artillery Pot helmet.
Blackened steel two-piece construction with rolled edge brim and central comb. 12 bolts (one missing) would have held the liner in place. (Liner missing).

The design was ideal for infantry who had to engage enemy cavalry . The wide brim gave shoulder and face protection from mounted sword blows. The comb helped to deflect a strike away from the skull and could be used as a weapon if otherwise disarmed.





On display are some items relating to the pre-federation South Australian Artillery.

A helmet plate worn by all South Australian Artillery and Machine Gun units (other than Permanent Forces) during the period 1896 to 1903.

A South Australian issue *Bayonet, Sword, Martini Henry Carbine, converted*, or what is left of it! This example, with half a blade, could be indicative of the fate of many of South Australia's bayonets. To quote from an advert in The Register of 21 August 1920 "Wednesday next, 25th August at Keswick Barracks, Sale of Obsolete Stores, &c. J. A. Sando & Son are instructed by the Defence Department to sell - About 600 Obsolete Rifle, Haversacks, Large Lot SCRAP METAL. STEEL, Brass, and Iron (broken bayonets, rifle parts, &c.)". While the more converted bayonets were on the SA Military inventory than new made *Bayonets, sword, Martini Henry carbine, Artillery* (Pattern 1879 in collector speak) they are less common now and many that do show up have the bottom half of the blade missing, such as this example. The various Annual Returns of Military and Naval Resources of Colonies & Protectorates, for South Australia / 4th Military District, list a maximum of 203 *Bayonet, Sword, MH carbine, converted* as opposed to a maximum of 86 *Bayonet, Sword, M.H. carbine* (i.e. new made) on hand. These returns do not include other users such as Sheriff's Department (prisons). We can make an educated guess from this that many of the converted bayonets had their blades broken and were disposed of as scrap. This could well apply to other SA bayonets that have disappeared from history.

CAPTAIN JAMES WOOLDRIDGE RN 1809 HIS GOLD MEDAL FROM KING GEORGE III & PATRIOTIC FUND £100 SWORD - HAS Member Peter Biscoe AM KC

During the Napoleonic Wars, on the night of 11 April 1809, Captain James Wooldridge RN, commanding the frigate HMS *Mediator*, led British fireships in the attack on a powerful French fleet defeated, disabled and partially destroyed in the Battle of Basque Roads (also called Aix Roads), a sheltered bay at the mouth of the Charente River on the Biscay coast of France. For his gallantry, he was immediately promoted to the rank of post-captain, King George III awarded him a gold medal and chain valued at £105 struck expressly for him, and the Patriotic Fund at Lloyd's presented him with a gold sword of £100 value. Due to the very severe injuries, he suffered in the attack, the following year he became disabled from serving his country further and was awarded a special annual pension of £200. He never fully recovered from his injuries and died suddenly in 1814 aged just forty-two.

Mediator (second from left)

The Battle of Basque Roads was the last of Britain's major naval victories during the French wars[1]. The French fleet, comprising eleven sail of the line and four frigates, was anchored in an apparently impregnable position under the batteries of Isle d'Aix. After the fireships attack began, Wooldridge discovered that the French had laid an enormous boom of cables almost one metre in diameter across the approach channel in front of their anchorage. The heavy frigate *Mediator* was the only fireship capable of breaking it, the others being light transports converted to fireships. Utilising the *Mediator's* great weight and the strength of the wind and tide, Wooldridge caused her to break the boom thus opening a passage to the sides of the French fleet, and the few surviving fireships followed. Launching rockets as they closed with the anchored fleet, they were at once fired at by the entire fleet as well as the shore batteries. When in the act of grappling with the French Admiral's ship, the *Mediator* then having been several minutes on fire, her skeleton crew of five were blown up and forced overboard by an unexpected explosion of rockets. One was killed and the others slightly burnt except for Wooldridge who was dreadfully scorched. The survivors rowed back two miles against a strong tide and rough sea to a British frigate waiting to receive them. The terrible onslaught of the blazing fireships caused the panic-stricken French to cut their ships' cables to escape. In the chaos, their ships collided, nearly all were driven helplessly aground, several considerably damaged, and many of their seamen were lost overboard.

Next day, the British commander in chief, Admiral Lord Gambier, controversially failed to attack promptly with the main fleet before the flood tide enabled most of the French ships to be warped off into deep water and escape to the relative safety of the mudflats at the mouth of the Charente. In the afternoon and night, British attacked and destroyed four French sail of the line and took hundreds of prisoners. Later, the French destroyed one of their frigates which was too badly damaged to be saved.

WOOLDRIDGE'S GOLD MEDAL AND CHAIN AWARDED BY KING GEORGE III[2]

On 25 May 1809, the First Lord of the Admiralty, the Earl of Mulgrave, wrote to Wooldridge informing him that:

> *the King had been pleased to direct that you should receive a gold chain and medal according to the provision of the ancient fighting instructions regarding fireships.*

This was the last of the special medals rewarding victorious captains of fireships[3]. The medal was designed to be worn from the neck by the chain.

It was not until after waiting nearly three years without hearing anything further, that Wooldridge ventured to make inquiries of the Admiralty by letter of 15 February 1812. The Secretary of the Admiralty replied on 18 February 1812 that the Lords Commissioners of the Admiralty had commanded him to acquaint Wooldridge 'that every effort had been made, but without effect to have the medal executed, but that my Lords hope shortly to be able to have it accomplished'.

Nine months later, an Admiralty minute of 24 November 1812 recorded that the Secretary was required to:

> *Acquaint Capt. James Wooldridge that the Gold Medal and Chain for his services in the Mediator are ready for delivery, and that, if convenient to him to attend he may receive them at the Board; if not, that they shall be transmitted to him.*

In reply, on 27 November 1812 an evidently unwell Wooldridge wrote to the Admiralty from his home in Penzance, Cornwall:

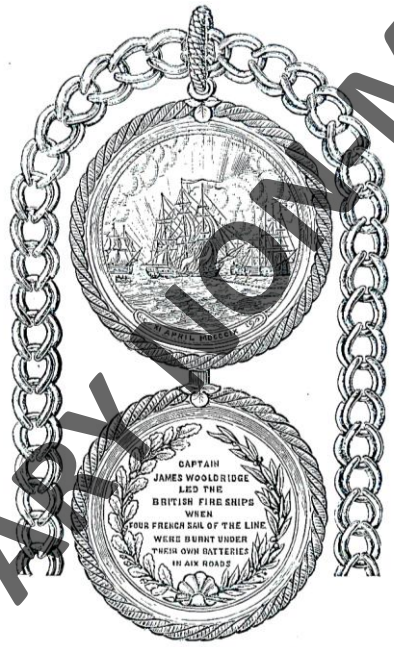
> *I have been honoured by yours of the 24th inst., acquainting me that the Gold Medal and Chain ordered for me is now ready for delivery. I feel much indebted to their Lordships for their indulgence in considering my convenience, and as my state of health continues such as at present to prevent my undertaking so long a journey, I have requested my brother, Capt. W. Wooldridge, who is present in town, to wait on you and receive it for me.*

No doubt that is what his brother Captain William Wooldridge RN did. At last, after a delay of more than three years, Wooldridge received the gold medal and chain.

An Admiralty account dated 20 April 1813 records that the medal was made at a cost to the Admiralty of £105. The dies are at the Admiralty in the box in which they were originally supplied.

It is not known how long the medal and chain remained in the Wooldridge family. For many years they formed part of the collection of Captain John Hamilton, which at his decease was purchased by James Sanders, by whom they were resold at Sotheby's in May 1882 for £95, and by 1891 they belonged to Captain Murray of Polmaise[4]. It is likely that Murray purchased them at Sotheby's auction on 17 April 1886 when the auction catalogue of Sanders' extensive collection of coins and medals lists the Wooldridge medal and chain as Lot 384. On 10 May 1926, after Murray's death, his extensive collection of war medals and decorations was sold via Sotheby's auction. In the auction catalogue, Lot 35 was Wooldridge's medal and chain, and Plate 1 included a black and white drawing of the obverse of the medal hanging from the chain. The whereabouts of the medal and chain thereafter is not known to the author.

The following fine black and white print of both sides of Wooldridge's medal and the chain was published in 1891[5]:



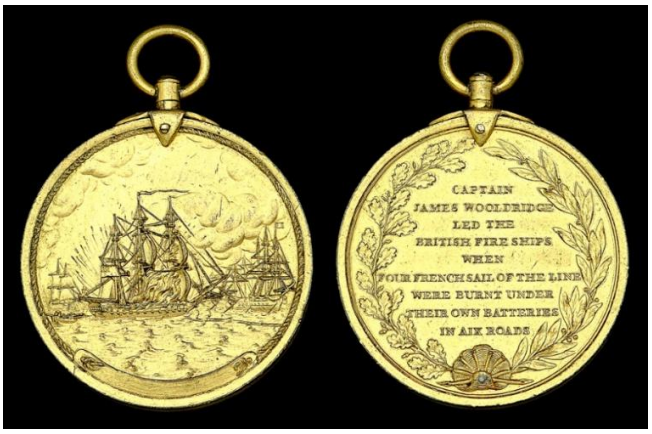
GOLD MEDAL TO CAPTAIN WOOLDRIDGE, R.N.,
FOR SERVICES IN AIX ROADS,
1809.

(From the original. Murray collection.)

Wooldridge's medal, 40 mm in diameter, is within a rope border and attached to the chain. It portrays on the obverse the *Mediator* in flames, rockets firing, breaking the boom and bearing down on French ships; astern is a small boat with the four survivors of *Mediator's* skeleton crew of five rowing away; at the rear left is a second fireship not yet ignited; clouds above. Below, chased on a scroll, is the raised inscribed date "XI April MDCCCIX". On the reverse, within a wreath of oak and laurel leaves held together at the base by a scallop shell, is the raised inscription: 'Captain James Wooldridge led the British fire ships when four French sail of the line were burnt under their own batteries in Aix Roads'.

Commemorative silver-gilt versions without the chain are held at the Royal Museums Greenwich and the Victoria & Albert Museum, and commemorative gilded metal plated bronze versions without the chain were sold at auction in England on several occasions in the first quarter of the 21st century. They differ somewhat in design from the original; including that they do not have a rope perimeter although they have a thinner

rope circle offset on the obverse and, curiously, the latter version is undated. An image of the latter version appears below:



WOOLDRIDGE'S £100 SWORD AWARDED BY THE PATRIOTIC FUND

Two weeks after the Battle of Basque Roads, on 25 April 1809, the handwritten minutes of the committee of the Patriotic Fund at Lloyd's recorded[6]:

> *Read the London Gazette extraordinary of the 21st of April containing copy of the letter from Admiral Lord Gambier to the Hon. HH Cole relating the capture and destruction of four line of battle ships of the enemy in Aix Roads on the coast of France on the 12th of April last and transmitting a list of the killed and wounded on the occasion.*
>
> *Resolved that the officers & men of HMS Mediator, being the leading fire ship in the attack, be particularly distinguished in the sums to be presented to the officers and men wounded in this gallant enterprise.*

The minutes listed cash awards to men on various ships who were wounded in the battle. Although Wooldridge had been seriously wounded, he was not included in the list, presumably because he was earmarked to be later awarded the far higher honour of a £100 presentation sword. Under the names of the *Mediator's* other three, slightly wounded survivors were the words: 'These blown out of the Mediator after she was set on fire'.

Two months later, on 20 June 1809, the committee of the Patriotic Fund resolved to present Wooldridge with a £100 presentation sword. The handwritten minutes recorded:

> *Read a letter from Captn James Wooldridge of HMS Mediator, employed as the leading Fire Ship in the late attack of destruction of the French fleet in Basque Roads as recorded in the London Gazette extraordinary of the 21st of April, enclosing copy of a letter from Lord Mulgrave, expressive of His Majesty's approbation of his gallant & highly meritorious conduct, and stating that it would be gratifying to his feelings to be noticed by the Committee for managing the Patriotic Fund.*
>
> *Resolved – That a Sword of the value of £100 be presented to Captn James Wooldridge.*

Like all presentation swords, Patriotic Fund presentation swords were intended to be worn with uniform on ceremonial occasions.

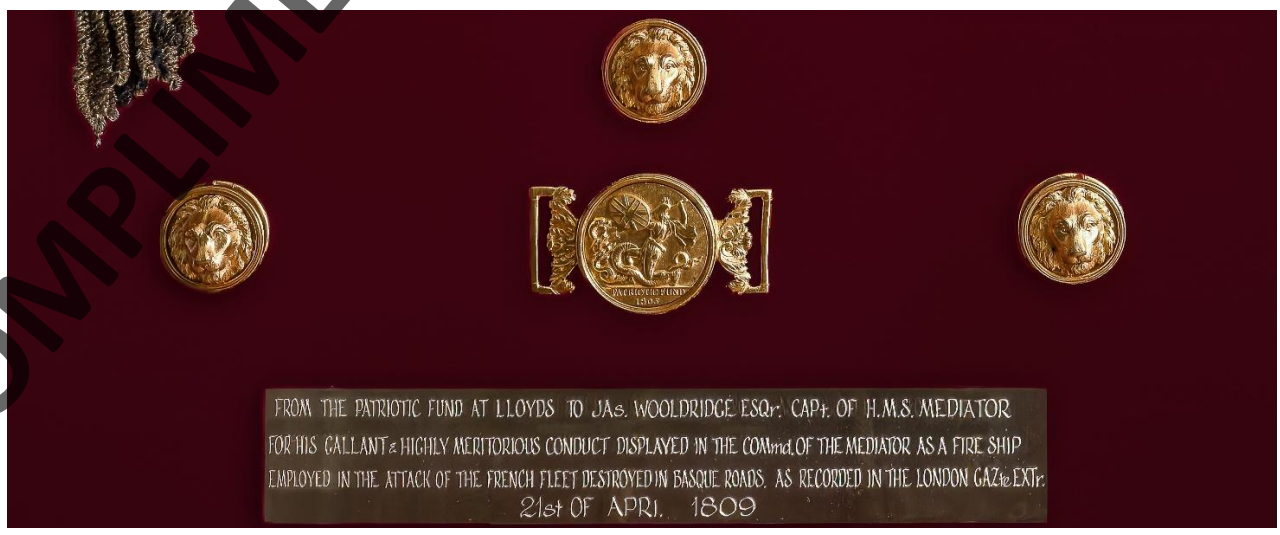
The last swords presented by the Patriotic Fund before it decided on 26 August 1809 to cease awarding them were Wooldridge's sword and his lieutenant, Clement's, £50 sword awarded on 15 August 1809 (at Clement's request, instead of the cash awarded to him on 25 April).

After Wooldridge's death, his Patriotic Fund £100 sword passed into the ownership of the Biscoe family as a result of the marriage in 1835 of his daughter Caroline to Rev. William Biscoe of Queen's College, Cambridge. It passed down the Biscoe line and is now in the ownership of a Biscoe descendant in Australia.

Today, Wooldridge's sword is in excellent condition and complete with gilt scabbard, gilt belt mounts and sword knot (the belt is missing, perished).

The gilt inscription in raised capitals in the blued panel on the obverse of the blade (replicated in the modern gilt bronze plaque at the bottom of the photo) is as follows:

> *FROM THE PATRIOTIC FUND AT LLOYDS TO JAS. WOOLDRIDGE ESQr. CAPT. of HMS MEDIATORFOR HIS GALLANT & HIGHLY MERITORIOUS CONDUCT DISPLAYED IN THE COMmd. OF THE MEDIATOR AS A FIRE SHIP EMPLOYED IN THE ATTACK OF THE FRENCH FLEET DESTROYED IN BASQUE ROADS, AS RECORDED IN THE LONDON GAZte EXTr. 21st OF APRl. 1809.*



Hilt. Wooldridge's sword features a stirrup *hilt* of gilt bronze (ormolu) with a shaped ivory grip. The ivory grip is diamond knurled over most of its surface, cut with three turned bands near the top, and secured at its base by a gilt bronze ferrule cast in relief with a wreath of laurel. Overlaying the top and back of the grip and fitting into a shaped recess is a gilt pommel and back piece modelled as the head, mane and front paws of the golden furred Nemean lion slayed by Hercules (symbol of victory and the proudest of Hercules' trophies). This piece is screwed into the grip on both sides, at the side of the top jaw of the lion's mouth. Concealed under the lion's head and only visible if the hilt is dissembled, three parallel marks "III" are etched on the ivory: perhaps they were a craftsman's identifier. Extending from the mouth of the lion is a ring through which loops the head and upper body of a serpent (symbol of wisdom), forming a link with the straight knuckle guard. The rest of the serpent's body is entwined around the knuckle guard and the lower quillon (arm) of the cross guard. The knuckle guard at right angles is formed as Hercules' club (symbol of Herculean efforts). The straight quillons of the cross guard, which supports the knuckle guard, are fashioned as Roman fasces (symbol of national unity and power), being rods and an axe bundled together, divided by a stepped rectangular block decorated with a cannon inscribed with the royal cypher 'GR' of King George III, cannon balls, anchor, trident, Roman fasces, flags and naval trophies. Below the block, on each side, is a V-shaped languet decorated with acanthus leaf.

There is a *sword knot* of blue and gold twisted cord with a large tassel having gold bullions and a band of silver sequins.

Blade. The curved, single-edged steel *blade* is highly ornamented along its entire length in gilt against a blued background, and etched with acanthus, oak and acorn garlands, roses, thistles and shamrocks. The reverse of the blade has cherubs holding wreaths above seated Britannia holding a trident and shield, the crowned arms of King George III including a unicorn on the side and a lion recumbent below and a shield inscribed 'Honi soit qui mal y pense' ('Shame on anyone who thinks evil of it') above a scroll inscribed with the historical Royal motto 'Dieu et mon droit' ('God and my right'), and the allegorical figure of Hope. The obverse of the blade has King George III's royal cypher 'GR' intertwined in foliate surmounted by a crown with an eight-pointed cross, and a blued panel engraved in gilt capital letters as set out above.

Scabbard. The elaborately ornamented *scabbard*, identical on both sides, is wood encased in a gilt-bronze frame. The following description of the decorations reads downwards from mouth to chape. On the edge of the mouth is engraved the name and address of Richard Teed, Dress Sword-maker to the Patriotic Fund, under whose direction all Patriotic Fund swords were made: 'R. Teed, Sword Cutler, Lancaster Court, Strand'. At the top of the scabbard is an anchor in foliage. Below is a ribbon scroll inscribed with the name of Wooldridge's fireship 'MEDIATOR 1809' surmounted by the stern of a warship flying the ensign, flanked with flags and anchors. There are three decorated oval medallions in relief, alternating with two pierced openings covered with navy blue velvet and filled with gilt ornamentation in low relief. The first oval medallion has Britannia seated to the left on a rocky headland overlooking two ships at sea, a trident in her left hand, her right arm supported on the Union Shield, with the British Lion on guard behind. Supporting this medallion is a globe with latitude and longitude indicated, surmounting an anchor and trident crossed and flags. The second oval medallion shows Hercules accomplishing his Second Labour, the slaying of the Lernaean Hydra (monstrous, multi-headed serpent), surrounded by flags, canon, weapons and an anchor. The third oval medallion shows Hercules accomplishing his First Labour, strangling the Nemean lion, surrounded by a similar group of decorations as surround the second oval medallion. The shorter of the two pierced openings, with navy blue velvet background, is filled with a naval crown, helmet, cannon in relief on a lion skin, anchor and buoy, flag, rudder and laurel sprays. The longer of the two pierced openings, with navy blue velvet

background, is filled by an emblematic group comprising the mast of a ship entwined by a serpent, crossed flags, winged dragon astride a warrior's helmet and corslet, chain shot, anchors, sails, Roman fasces and laurel sprays. Around the trail of the chape is graduated beading, perhaps representing cannon balls. On the rear edge above the first and second oval medallions are two loops for attachment of the belt slings in the form of coiled serpents; heads pointed towards the top of the scabbard.

Belt. The gilt *fittings* of the sword *belt* comprise: a circular buckle formed of two pieces each with a rectangular loop with foliate border and the outer decorated with Hercules, a short sword at his waist, fighting a three-headed Hydra with a spear and holding the Union Shield, above the inscription 'Patriotic Fund 1803'; three mounts in cast relief featuring a lion's head within a reeded circular medallion for the hangers; and, for the two belt slings, twin buckles of naval motifs and spring-clips to attach to the scabbard suspension mounts. The blue leather belt itself, elaborately embroidered with gold oak leaves, is missing, perished.

Presentation case. Like all Patriotic Fund swords, Wooldridge's sword, with scabbard and belt, was presented in a blue baize-lined, polished mahogany *presentation case*, which it no longer has. We know from surviving cases of other Patriotic Fund swords that the outside lid of the case was fitted with a recessed brass handle and a rectangular brass plate, on which was inscribed 'From the Patriotic Fund Lloyds London to James Wooldridge Esqr Capt of HMS Mediator 1809'. Inside the lid was pasted a printed card with an ornamental border. The top border showed Cecrops (half man half serpent) fighting a three headed Hydra with a spear and holding a shield covered by the Union flag. The other three borders were decorated with naval emblems. Entwined around the bottom border was a ribbon with details of the maker: 'R.Teed, Dress Sword Maker to the Patriotic Fund, Lancaster Court, Strand'. The card explained, in a variety of stylish texts, the classical symbolism of the hilt:

> *PATRIOTIC FUND, LLOYDS, 1803. The ornamental design for the Hilts of the Swords Presented from this Fund, in reward of BRITISH VALOUR, imports that NATIONAL UNION (figured by the Roman Fasces) produces HERCULEAN EFFORTS (of which the Club of Hercules is emblematic) WHICH, aided by WISDOM (denoted by the serpent) lead to VICTORY (implied by the Skin of the Nemean Lion – the proudest of that Hero's Trophies). The wreath of laurel denotes that REWARDS Await the Brave who shall Successfully Wield their swords in the Cause of their Country, in Defence of British Security, Independence & Honour.*

THE PATRIOTIC FUND AT LLOYD'S[7]

The Patriotic Fund at Lloyd's was inaugurated on 20 July 1803 at a meeting of merchants, underwriters and bankers in the City of London associated with the maritime trade. The 'at Lloyd's' part of the title was because the meeting was held in Lloyd's Coffee House. The inauguration was in response to recommencement of the war with France in May 1803 after breakdown of the brief Peace of Amiens, raising a fear of imminent French invasion. The gravity of the situation was reflected in a statement in the handwritten minutes that Britain was 'the last barrier against the total subjugation of Europe by the overbearing influence of France'. The Napoleonic Wars, driven by Napoleon's desire to expand French influence in Europe, continued until 1815.

The purpose of the Patriotic Fund, which received huge financial support from all over the British Empire, was expressed as follows in the inaugural minutes:

> *That to animate the efforts of our defenders by sea and land, it is expedient to raise by the patriotism of the community at large, a suitable Fund for their comfort and relief - for the purpose of assuaging the anguish of their wounds, or palliating in some degree the more weighty misfortune of the loss of limbs – of alleviating the distress of the widow and orphan – of smoothing the brow of sorrow for the fall of their dearest relatives, the props of unhappy indigence or helpless age – and of granting pecuniary rewards or honorable badges of distinction for successful exertions of valor or merit.*

The last category came to be called 'honorary rewards'. The 'honorable badges' took the form of superb gilt presentation swords and silver vases and (in one case) a medal.

By August 1809 circumstances had changed. There was no longer a threat of imminent invasion by the French, and the war had moved from a naval campaign towards large scale military operations in the Peninsular War, resulting in high casualties. The consequent demands on the Fund were so great as not to be in contemplation when the Fund was established and, going forward, exceeded what the Fund could answer. Consequently, on 24 August 1809 a general meeting of the subscribers varied the original objects of the fund in order to effect savings by limiting gratuities for wounds to those involving loss of limbs or disability from future service and not, as provided in the original resolution, all wounds, and thus discontinued gratuities to men slightly wounded who suffered only temporary pain - who represented nearly half of present expenditure. The committee's report to the general meeting recommending this saving eloquently argued that a man in the latter category had been:

> *...to some degree compensated for that pain by bearing an honourable scar received in the service of his country and surely he will not repine at no gratuity being voted him from this fund, when he knows that he can only receive it by depriving the widow and orphans of some of his comrades of their means of support.*

In addition, the meeting also decided to discontinue honorary rewards, including swords. The reason is unclear because the minutes recorded that the savings thereby made would be 'but trifling', only 5% of expenditure since 1803.

SWORDS OF THE PATRIOTIC FUND AT LLOYD'S

Patriotic Fund swords are viewed by many collectors as the finest Georgian naval presentation swords ever made. They were of three grades dependent on rank and rising in value according to rank: £30 swords for midshipmen, master's mates and Royal Marine lieutenants; £50 swords for naval lieutenants and Royal Marine captains; and £100 swords for naval captains and commanders. After the Battle of Trafalgar on 21 October 1805, a slight variant of the £100 sword was awarded to many of the surviving captains and commanders, others opting for a silver vase. This was the naval action for which the greatest number of swords were awarded at one time. While most swords were given to naval officers, seventeen were awarded to officers of the Honourable East India Company for a single action against French warships, and a few went to army officers for actions involving expeditionary forces landed by the Royal Navy or for the capture or defence of sea ports around the world[8].

Patriotic Fund swords were based on the light cavalry sabre with a curved blade highly ornamented in blue and gilt. The hilt and scabbard were most ornate. Their design reflected the neoclassical taste of the Regency period and employed imagery drawn from antiquity. All swords had identical ivory and gilt bronze hilts, the different values being distinguished by the degree of elaboration of the scabbard and the amount of blue and gilt decoration on the blades. The technique for decorating the blade involved acid-etched motifs, mercury gilding and fire blueing (a technique that exposed workers to mercury poisoning and would not now be allowed). On £100 and £50 swords the presentation inscription is on the obverse of the blade in gilt letters on a blued panel; and on most £30 swords the inscription is in letters raised slightly in relief against an etched and gilded background. The swords came with a sword knot of gold bullions attached to a blue and gold cord

and a blue sword belt embroidered with gold oak leaves and furnished with gilt fittings. If awarded to an army or Royal Marines officer, then the sword knot was red.

The Patriotic Fund committee did not settle on the design of the swords until 28 February 1804, after several officers had chosen the design of Richard Teed, and this was approved at its next meeting on 20 March 1804. The revised inscription on each scabbard was 'Richard Teed, Dress sword maker to the Patriotic Fund, Lancaster Court, Strand'. On £100 swords, the inscription was on the mouth of the scabbard; on most £50 swords on the top rear of the scabbard. Teed won the contract to supply the swords but mostly assembled components he had made by others.

The most recent scholarly analysis, in 2021, concluded that 201 Patriotic Fund swords were awarded up to discontinuance of honorary rewards in August 1809, of which 152 were accepted as swords and made (75%), the other awardees electing to take the alternative of vases or cash[9]: In addition, it was concluded that after the discontinuance ten swords were made by Teed where men had been awarded cash for their injuries but requested and obtained the committee's approval to have a sword instead, and that three 'unofficial' swords were made where there is no record of them having been approved, two made by Teed and one by Brun.

There is a website dedicated to tracing the location of Lloyd's Patriotic Fund swords[10] .

In Australia, in addition to Wooldridge's £100 sword in the ownership of a descendant, four Patriotic Fund swords are held in museums:

a) HMAS Creswell Museum, Jervis Bay, in the Royal Australian Navy Heritage Collection, £100 sword Lieutenant William Dawson commanding HMS *San Fiorenzo* 8 March 1808 capture of French frigate *La Piedmontaise* in the Gulf of Mannar;
b) Maritime Museum of Tasmania, Hobart, £50 sword Lieutenant John Martin Hanchett HMS Antelope 23 March 1804 capture of Dutch vessel *Schrick*;
c) Anzac Memorial Museum, Sydney, £50 sword Captain Maurice Charles O'Connell, 1st West Indian Regiment, 22 February 1805 defence of Dominica against attempted landing by French forces;
d) Jervis Bay Maritime Museum, £30 sword Midshipman William Pitt Bowler HM sloop *Swift* 13 August 1805 capture of Spanish schooner *La Caridad Perfecto* under the batteries of Truxillo.

NOTES

[1] Accounts of the battle by participants are found in Admiral Lord Gambier's despatch to the Admiralty of 14/15 April 1809 published in the London Gazette extraordinary of 21 April 1809, and in the *Minutes of Court Martial of Admiral Lord Gambier from 26 July to 4 August 1809*, taken in shorthand by William Gurney. A summary of Wooldridge's heroism appears in the Order in Council of 18 November 1811 granting him a pension on account of his incapacity resulting from his very severe injuries. Assessments by historians include those by: William James, *Naval History of Great Britain* (London: Richard Bentley, 1837), vol V, pp99 to 130, 394, 397; Edward Brenton, *Naval History of Great Britain* (London: Henry Colburn, 1837), vol II, pp 276 to 286; William Clowes, *The Royal Navy: a History from the Earliest Times to 1900* (London: Chatham publishing), vol 5. pp255 to 270, 450, 552; John Sugden, *Lord Cochrane, Naval Commander, Radical, Inventor (1775-1860): A Study of His Earlier Career 1775 - 1818*, a dissertation for the degree of PHD, Department of History, University of Sheffield, pp 114-146 (1981); and Cordingly, *Cochrane the Dauntless* (London: Bloomsbury, 2007), chapters eleven and twelve.

[2] The documents referred to in the text relating to the medal are set out in John Mayo, *Medals and Decorations of the British Army and Navy* (Westminster: Archibald Constable, 1897), vol 1, pp184 -188.

[3] Mayo, vol 1, p lxii; Admiral the Marquess of Milford Haven, 'Medallic Illustrations of Naval History', *British Numismatic Journal,* vol 13, (1917), p169.

[4] Mayo p188 recorded in 1897 that they were in the ownership of Murray. They were recorded in 1891 as being in Murray's collection by George Tancred, *Historical Record of Honorary Distinctions Conferred on the British Navy, Army and Auxiliary Forces from the Earliest Period* (London: Spink, 1891) p74.

[5] In Tancred pp74-75.

[6] The handwritten minutes of the Patriotic Fund at Lloyd's are held at the Guildhall Library, London, together with the typed minutes for the first six years which sometimes significantly differ. They survived a fire in 1838 which destroyed many other Fund documents and singed the edges of some pages of the handwritten minutes.

[7] Mark Barton, *The Patriotic Fund at Lloyd's, a Covenant between the City and the Armed Forces*, Ph.D thesis King's College, London, 6 June 2021, Annexure A where the awards made by the Patriotic fund are listed chronologically, http://kclpure.kcl.ac.uk/portal/en/studentTheses/the-patriotic-fund-at-lloyds-a-covenant-between-the-city-and-the-; John McGrath & Mark Barton, *British Naval Swords and Swordsmanship* (Barnsley: Seaforth Publishing, 2013), pp77 to 81 and Appendix A; May & Annis, *Swords for Sea Service* (London: HM Stationery Office,1970), pp58 to 64 and 69 to 72 where the recipients of Patriotic Fund swords are listed alphabetically; *Lloyd's Patriotic Fund tracing website* dedicated to tracing the current locations of Patriotic Fund swords. I am indebted to Mark Barton, and also John McGrath, for generously corresponding with me and providing insights into the Patriotic Fund.

[8] John McGrath & Mark Barton (note 1) p 77.

[9] Mark Barton, PhD thesis (note 1), Tables 5 to 8 and Annexure A. This updates different numbers found in the earlier publications cited in note 7.

[10] Note 7.

THE NAVAL GUNS IN THE SOUTH AFRICAN AND TRANSVAAL WAR 1899-1902 – HAS Member Dr John Bird

Introduction

It was soon appreciated that Boer artillery outranged the British artillery. The Royal Navy was asked to provide guns to counter this Boer superiority. The guns of the siege train would provide an answer to the enemy's guns, but they were not due to arrive in South Africa until early 1900. In a remarkable display of ingenuity, guns were provided by the R.N, with makeshift field carriages and mountings, designed by Captain Percy Scott. These long range guns provided an answer to the Boer Artillery.

At the outbreak of war, the most effective guns available to the Royal Field Artillery were 15pdr BL guns. Since the Jameson Raid of 1895, the Boers had acquired 4 x 155mm Creusot guns (Long Toms), 6 x 75mm Creusot guns and 8 x 75mm Krupp QF guns. All of these were more modern than the British guns and their performance was much better than the 15pdr.

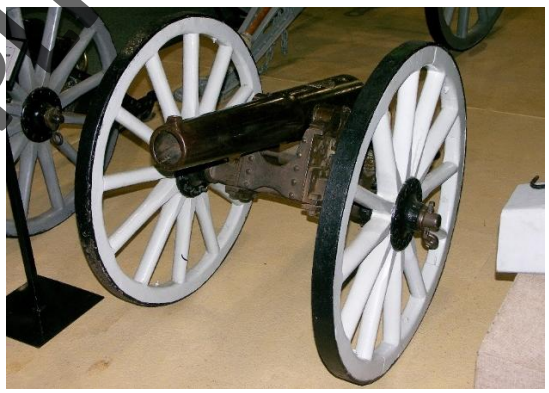
The naval guns landed were:
7pdr RML. 1
12 pdr. 8cwt. Landing party. 7
12 pdr. 12cwt. QF. (Long 12). 35
4.7 Inch QF Platform mounting. 5
4.7-inch QF Carriage mounting. 8
4.7-inch QF Railway mounting. 4
6-inch QF Carriage mounting. 1
6-inch QF Railway mounting. 2

BL Breech Loading.
RML Rifled Muzzle Loading.
QF Quick Firing.

Much of the success credited to the Naval Brigades was largely due to the comprehensive nature of its composition and system which invariably rendered such forces self-supporting. Every appliance or instrument likely to be used was taken on active service, mostly selected to meet expected contingencies.

7pdr RML Mountain Gun

This rifled muzzle-loading (RML) gun was developed specifically for use in rugged terrain and by Royal Navy landing parties. The gun could be taken apart easily and could be manhandled with relative ease. When used by R.N. landing parties it was hooked to a double pole limber and drawn by mules. Ammunition was carried in two leather cases tied to the limber. In mountainous terrain, it could be carried on the back of 3 mules, each carrying either gun barrel, carriage or wheels. Additional mules carried the ammunition.



1 7pdr RML

2 7pdr RML

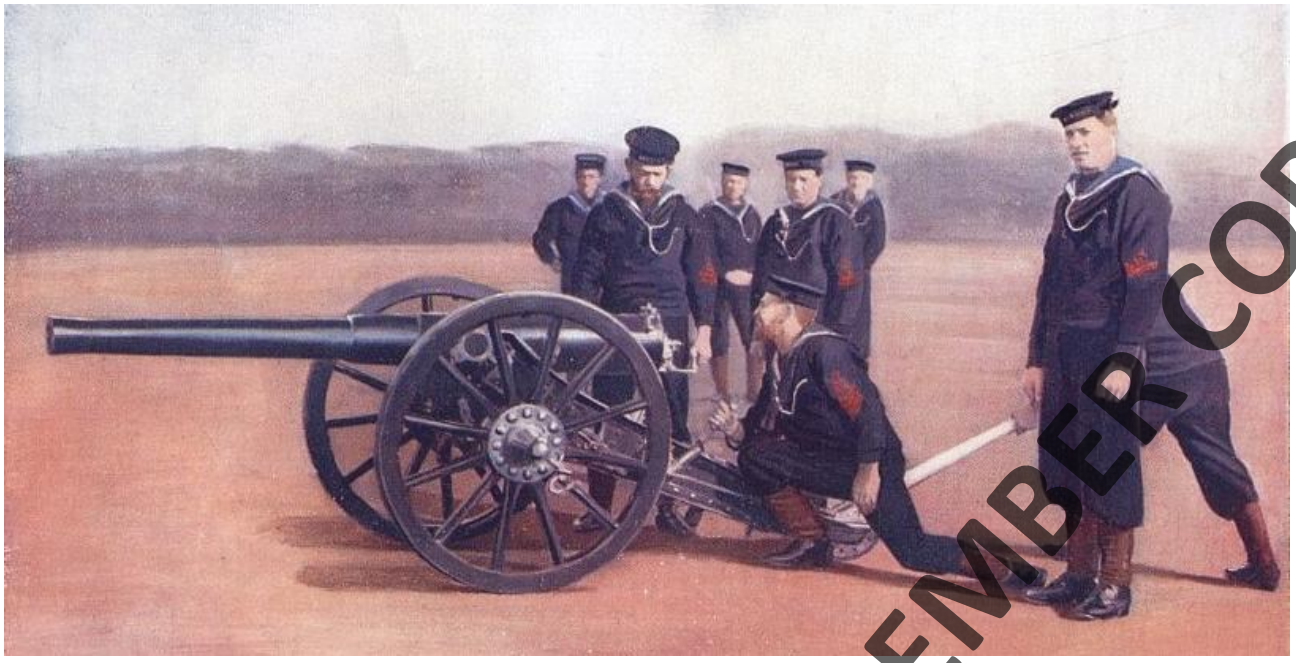
This gun fired a 7lb shell using black powder charges in cloth bags. The gun was manually loaded, requiring a crew of 10 and relied on a screw gun assembly method where the barrel and breech were screwed together before firing. Despite its mobility advantages, it proved disappointing in combat due to its low rate of fire, limited range and outdated muzzle loading mechanism when compared to the newer quick-firing guns.

Only one of these guns was landed by the Royal Navy from H.M.S. Tartar for use in an armoured train in Natal. It was mounted on an open ordinary truck in the front of the train (when advancing) and to the rear (on retiring). It was served by 4 sailors from Tatar. The armoured train from Estcourt was reconnoitring towards Chieveley on Nov.15 1899 when attacked. The naval gun got off 3 rounds before the barrel was struck by a shell, and the trunnions, being smashed, fell off the carriage. Winston Churchill was captured.

Later train with 12pdr

12pdr 8cwt Gun - Landing Party
From the Naval Historical Review, June 1982.
Calibre 3 inch.
Weight of gun 8cwt.
Weight of shell 12.5lb Separate QF.
Charge 13.5 ounces of cordite No.10.
Projectiles Common, Case and Shrapnel.
Muzzle velocity 1585fps.
Range Sighted to 5100 yards.

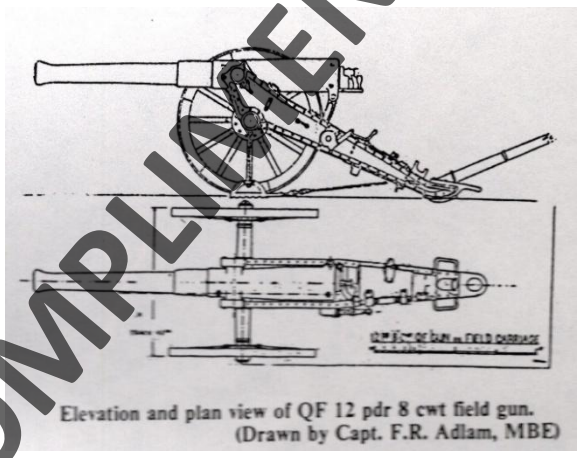
This was the normal artillery piece for naval landing parties and therefore there was no need to design a carriage for it. It had a short range and a light shell and was not that effective. Nevertheless, it played a part in the early stages of the war. It was designed to be boat portable. The gun could be quickly stripped down to a few basic parts, ie. the piece, the trail and the wheels. A limber was provided to carry ammunition, its wheels being interchangeable with the gun. Both pieces of equipment were mounted on steel tyred wooden spoked wheels, 42 inches in diameter. The limber was pulled by two men by means of a pole with a crossbar. These two members of the team were the brakes. Drag ropes were attached to drag washers on the limber wheels, the drag ropes being fitted with hand grips. In the limber there was storage for ammunition and spare parts and spare primers etc. Two boxes were fitted to the frame of the limber, each holding 12 cartridges, 2 case-shot, four common shell and six shrapnel.



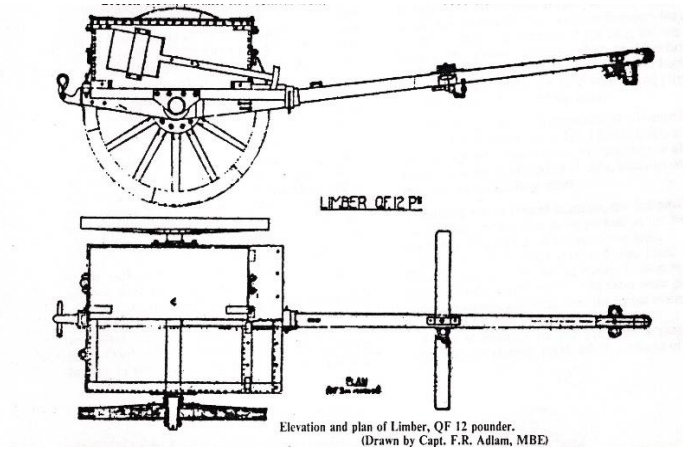
12pdr 8cwt Gun

Defects.

1. No traversing gear was fitted to the carriage, but elevation gear was. To lay the gun was a simple matter of turning a handle, but to traverse the piece No.1 had to bodily move the carriage with a hand spike.
2. It did not extract the spent cartridge case after firing.
3. Loading was fairly slow as the gun was designed for separate loading. A shell was rammed followed by the cartridge case. The primer was not fitted into the case until after the case was firmly seated into the breech. The drill was that after No.3 of the crew had entered the shell and No.4 had entered the cartridge, No.2 closed the breech, then opened it sufficiently to fit the percussion tube, and then closed the breech for a second time. As the tube protruded out of the adapter in the base of the case, the breechblock carried a recess to go over the tube. After firing, the breech was opened and the breech worker hooked a hand extractor under the tube adapter and physically hauled the case out of the breach.
4. The gun lacked recoil gear and was fitted with trunnions on the barrel. To help reduce recoil when firing, metal drag shoes were placed under the wheels and these were connected to the rear of the trail by steel wire cables.



12pdr 8cwt Gun



12pdr 8cwt Limber

Moving the gun about was accomplished by 17 men, two on the pole and 15 on the drag ropes. The gun had a shorter barrel and was relatively low power compared to the 12pdr 12cwt. although it fired the same shell.

12pdr 12cwt QF, (Long 12)

Long 12pdr in action

This naval gun, introduced in 1894, was solely designed and built for use at sea or in forts against armour and so to get the necessary muzzle energy, high velocity and penetration, a long gun was required. It had a heavy recoil and was generally considered unsuitable for use as a mobile field gun. It was designed to repel fast moving targets like torpedo boats. However, when the British Army was outgunned by the Boer artillery in South Africa, QF 12pdr 12cwt guns were landed from the warships. They were mounted on improvised field carriages, designed by Captain Percy Scott, R.N., with solid 12 foot long wooden trails and utilising small diameter Cape wagon wheels and axle trees. Drag shoes were fitted to limit recoil, although the gun also had an oil and spring buffer. The 10,000 yard range provided valuable long range fire support for the Army throughout the war. They were known as 'Long 12's' to distinguish them from the BL 12pdr 6 cwt and the QF12pdr. 8cwt which had much shorter barrels and range.

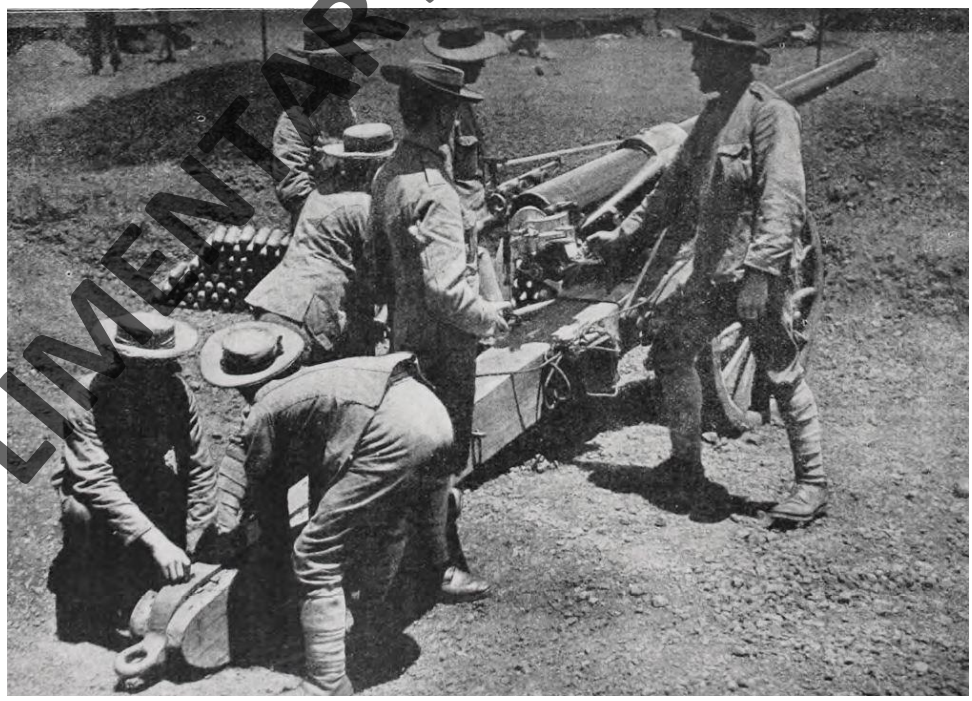
Long 12pdr gun position at Ladysmith

Although the makeshift carriage was sufficient to get the gun onto the field, there were various flaws:

1. Too weak generally in all parts, particularly the wheels and axles, for any long campaign. The wheels and axles were all various types and therefore not interchangeable.

2. The wheels and axles were too narrow and high, which caused guns to overturn on difficult ground. The mountings need to have a broader space between the wheels which needed to be low. The Boer guns were far superior in this aspect.
3. The system of checking the recoil of the field carriage was a bad. A 'recoil spade' held the gun in position on firing. This was a large shovel shaped metal plate located at the rear end of the gun carriage's trails. Before firing, the spade was driven into the ground. When the gun is fired, the force of the recoil pushes a spade deeper into the earth, anchoring the carriage and preventing the gun from rolling backwards. The recoil was absorbed by an oil and spring buffer. Sandbags placed at a certain distance in the rear of each wheel effectively checked the carriage but also ran it out again. Seeing that the guns had only half crews, this system was important in saving the men undue exertion.
4. There were no brakes and wheels had to be lashed until brakes could be devised. Over any rocky or bad country, this simply tore the wheels to pieces and choked the whole mounting up. An ordinary military Scotch cart brake or a brake as fitted to Trek wagons was better.
5. The 12foot pole type wooden trail restricted elevation giving a range of 7000 yards. If the gun was elevated over 7000 yards, the oil cylinder hit the trail. To overcome this, the trail was dug into the ground to provide greater elevation/range. In bad ground this often took some considerable time. To correct the defect the trail was made of two side steel plates with space for the gun and the cylinder between the sides. However, there were seldom any trouble with the guns themselves.
6. All 12pdr's except two in the first instant were sent up without limbers and had to be limbered up to wagons which carried ammunition. For practical purposes in the country tracked over, this arrangement was extremely troublesome and caused endless delays. Eventually strong limbers were built in Maritzburg. They could carry 40 rounds of 12pdr QF ammunition and if necessary, up to 60. The gun crew could place their great coats, leather gear, gun telescopes, ammunition, water bottles, day provisions on top of the limber. Their rifles were slung on the gun muzzles allowing the crew to march light. Oxen to drag the gun separate from the wagons were allocated. A gun was hauled by 8 span (16) oxen assisted by gun crews on the drag ropes. Further ammunition followed in the wagons.
7. Due to the hasty construction and the variation in wheels, axles, trails, drag-shoes and chains, the guns had a variation in performance. Each gun had its own shooting powers.

The gear to get the guns up steep hillsides was carried by the ammunition column.



8'Terrible' 12pdr at Estcourt. Battery pack mounted on right side of trail.

Fitting primers /primer adaptors

Lyddite

Many shells exploded but the lyddite did not detonate. An exploding Lyddite shell has much the same effect as one of black powder, producing a brownish yellow smoke. But should it detonate, there is a tremendous shattering effect, and the smoke is a thick greenish yellow haze. The effect on people in the neighbourhood is tremendous shock and death if too close. Many Lyddite shells did not explode. The 'direct action fuse' should have been screwed into the nose of the shell instead of the 'delayed action fuse' that it had in it for the use against thin plated ships.

Sighting of Gun

The sighting of the gun uses the 'drum and bar system'. This is an artillery fire control mechanism primarily used for direct fire to allow for independent line of sight allowing the gunner to set the elevation on the site itself, rather than relying solely on elevating the entire gun barrel to the correct angle. Telescope sights were on the guns. High powered telescopes on tripods were a tremendous value for observation.

Range Finding

With respect to range finding, the Mekometre (Range Finder) proved useful to us to get ranges roughly up to about 10,000 yards. These were borrowed from the RHA and RA as they were not issued to the Naval Guns. This instrument is small and portable. and may be carried slung like a small Kodak camera on one's back. When a gun is in a fixed position, it was advisable to find the ranges roughly all around to prominent objects with the mekometer. This instrument was used together with the clinometer which lays the elevation of a gun barrel. A spirit level could be placed on the gun trail to tell which way the wheels or carriage of the gun were inclined on uneven ground (so altering the deflection scale). At this point in time Stereoscopic instruments for range finding were being developed and would soon make this system obsolete. A very quick way of finding ranges was by shooting one or two shots to define the range.

Long 12 Gun Pit

Lt. Burne has described a Long 12 gun pit in Natal. The pit was dug about 1' 6" deep and the dirt removed used to form a circular parapet 3' 6'' high. The floor of the pit was levelled with a gradual slope for easy movement of gun in and out. The size was enough for the gun trail to move around in an arc allowing adequate room of more than three feet for the recoil in drag-shoes. Another ditch could be dug all around the inside of the parapet to allow the crew additional cover and the ammunition boxes may be placed in this ditch or in a magazine dug and sandbagged over when plenty of time was available. A couple of drainage holes are required in heavy rains to empty the pit on each side. The parapet should be sandbagged over and can have added protection with sods of grass if available to hide emplacement and to keep dust down. If sods

not available cow dung can be used instead. This dries and all dust under the muzzle of the gun is avoided. Watering the ground in front was effective but rarely practicable on account of the scarcity of water. Unless dust is controlled, it rises in a cloud under the muzzle of the gun at every shot giving away the time of firing and gun's location. Guns could be placed on the reverse slope of a hill out of sight of the target and the fire be directed by telescope.

SPECIFICATIONS
Mass 12cwt.
Length. 10' 3''
Barrel length 10'.
Shell. Separate loading QF. Projectile and Propellant in brass cartridge case loaded into the breech in two separate steps.
Shell weighed 12.5lbs.
Calibre 3 inches.
Propellant 2lb Cordite housed in brass cartridge case 20.2" long.
Cordite- 58 parts Nitro glycerine, 37-parts gun cotton, 5 parts Mineral Jelly.
The Cordite Charges in their brass cylinders and zinc line boxes did admirably well despite the rough treatment the case endured.
Projectile types. Common shell, Lyddite shell (Picric Acid), Shrapnel shell (contains 200 steel balls), Case shot.
Breech Single Motion screw.
Rate of fire. 15 rounds per minute.
Muzzle velocity 2210 feet per second.
Effective firing range. 11,750 yards at 40° elevation.
Firing system Breech loader.
Firing mechanism. The cordite propellant charge was ignited by an electrically activated primer in the base of the cartridge case with power provided by a battery. But in the field, it was found hard to care for and keep the batteries charged. The support of an armourer was required. Misfires often happened with the electrical system. Guns and connections often became thick with mud or dust and required time to clean when one may have no time to spare. The electric primer in the cartridge could be replaced by an adapter which allowed the use of an electric or percussion tube to be inserted to provide ignition. Owing to the rarefied atmosphere the composition of the fuses burnt slower, and the fuses had to be adapted to allow for this.

The Navy, 12pdr 12cwt, also appeared as the guns of the Elswick Battery. Six of these guns were destined for a Japanese battleship under construction in Newcastle upon Tyne. They were converted to field pieces equipped with proper field carriages and were issued to a volunteer battery whose men worked at the engineering works. The guns or service in South Africa.

Elswick 12pdr Gun

When the Navy crews were withdrawn from the field, the guns were handed over to the army.

4.7” Naval Gun – Platform Mounting

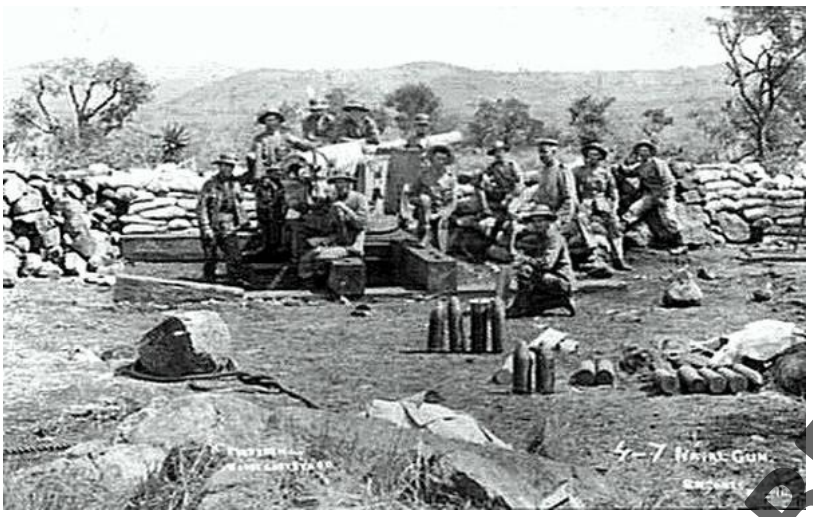
This mounting was designed by Captain Percy Scott and had to answer 3 requirements.

1. The gun must be able to fire in any direction. This was met by arranging timber beams in the shape of a double cross giving equal stability all around.
2. The platform must be sufficiently stable not to require bolting down or concreting in. The answer was beams 3, 7 metres in length and for safety sake, 16 old 12 inch 600 pound shot with chains to anchor down the ends of the timbers.
3. It must be possible to move the gun quickly from one place to another. The answer was to place the platform with nuts on top so that they could be quickly unscrewed.

The 4.7 platform consisted of 4 x 12 inch square heavy timber baulks 14 to 15 feet long, bolted together in the form of a double cross and buried in impacted earth and stone, which proved to give almost equal stability all the way around. It was found that concreting was not necessary. This allowed for quick transfer of the gun. The nuts of the bolts securing baulks and pedestal were left on top so they could be quickly unscrewed. To this platform was secured the base plate, the mounting and the gun cradle, to absorb the recoil which were used in the ordinary 4.7 ship’s mounting. The guns could thus be fired in any direction.

At Ladysmith, each 4.7 was brought into position in pieces needing 6 wagons to transport the barrel, mountings, timber baulks and all the essential gear. The 4.7 gun emplacement consisted of a formidable parapet, 3 to 4 dirt filled sandbags thick to the height of a man's head, faced with four feet of loose earth with a glacis of rocks to burst any shell before it could penetrate the parapet. No Boer shell managed to penetrate these parapets during the siege. A six foot deep trench lined with wood boards along which a man could run with shells and cartridges with their heads below the ground level, connected the gun position to the magazines near each gun. 20 yards away, hollowed in the side of a convenient hillock, was built the Main Magazine for the bulk of the ammunition. Another secure position near the gun was cut out for a ready magazine containing a few shells of each kind for immediate use. A barbed wire entanglement was erected in front of the position.

Naval 4.7” gun position, Ladysmith



4.7" gun position

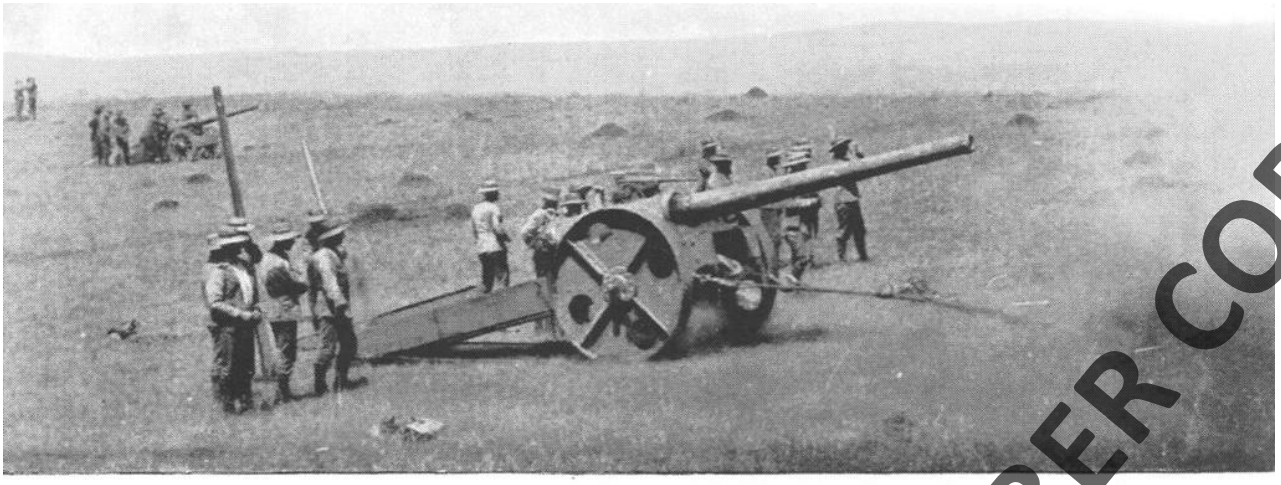
Rate of fire up to 10 rounds a minute. Almost twice that of the carriage mounting.
Weight of shell 45 lbs.
Shell common and shrapnel
Range. Shrapnel 6500 yards. Percussion 10,000 yards.
Weight of gun about 7 tons.

4.7" Naval Gun – Carriage Mounting

The construction of the travelling carriage was very simple. The large timber beams forming the trail were needed to provide stability with their weight and to prevent the gun overturning on recoil. Drag shoes were also used and the carriage was attached by a cable to a strong point in front of the gun to help control recoil. The wheels were circular plate 1.22 metres in diameter. Angle iron around the circumference was fashioned to carry a broad tyre. No limbers were made for any of these guns. Instead, Cape wagons were used to carry the ammunition.

On its mobile carriage, the 4.7 performed well. Weighing more than the Long Tom and with all its weight bearing on only one pair of wheels, it was more difficult to move than its Boer adversary. As many as 32 oxen were required to move the 4.7, while its weight also caused one or two temporary bridges to give way. They were able to keep up with the troops in most cases, and the infantry were always ready to help in difficult situations.

4.7" Gun



One of the 4·7's and a 12-pounder in action at the Battle of Colenso
[Note the drag rope anchored to the ground to prevent recoil]
Lent by 'Navy and Army Illustrated'

4.7" and Long 12pdr at Colenso

Buller requested 4.7's on lighter and more mobile carriages. The wooden carriages were removed and steel used instead of the wood. A single wheel was placed in the end of the trail to facilitate movement. When maximum elevation of 37° was needed, this wheel was removed. Four of these guns were produced on steel carriages and handed over to the Royal Garrison Artillery.

4.7" Gun

16'Terrible' 4.7'' at Colenso

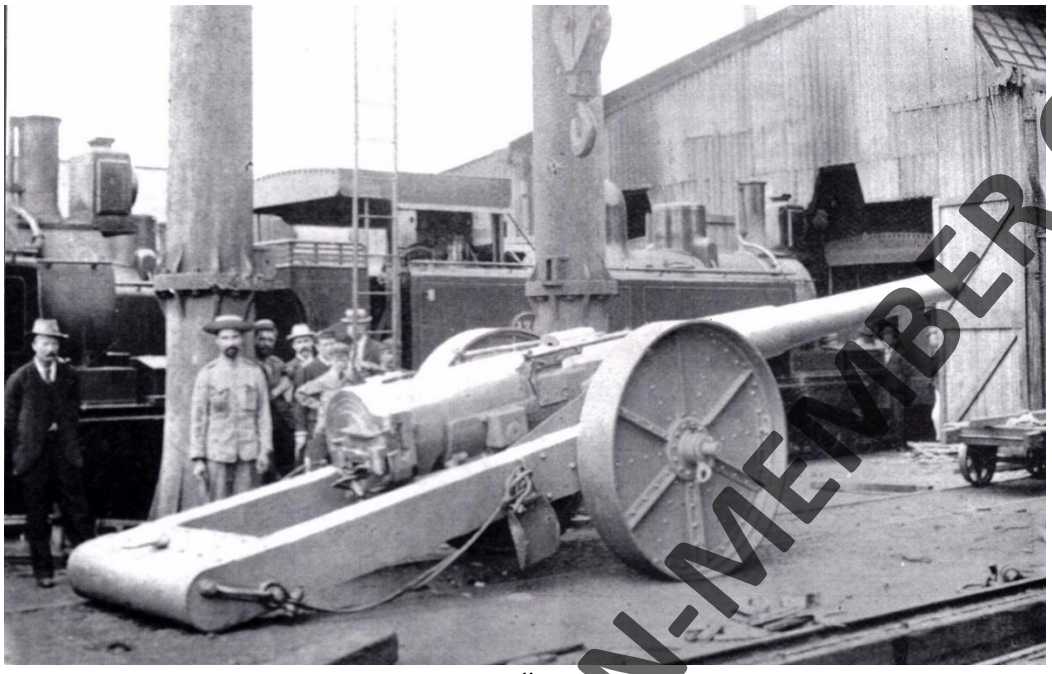
4.7" Naval Gun – Railway Truck Mounting

The railway truck was strengthened with timber. The gun platform mounting was similar to the platform mounting. The cross members were cut short to allow movement through railway tunnels. The whole was secured to the truck by chains. Because of the amount of energy absorbed by the gun's hydraulic cylinders, very little recoil energy was transmitted to the truck. Consequently, the gun was stable enough to be fired at right angles to the railway line. Extra stability had to be given to the gun if it was used off the railway truck. This was done by supplying a movable beam which could be bolted on to the mounting.

4.7'' Railway Gun

6” Naval Gun – Carriage Mounting

Captain Scott designed a carriage for a 6” gun. Unwanted 4.7inch gun wheels were fitted with wider tyres to withstand the greater weight. In Natal, ranges of up to 15,000 yards were reported from this gun, but it proved to be too heavy for its field carriage and was subsequently only used for a railway mounting.

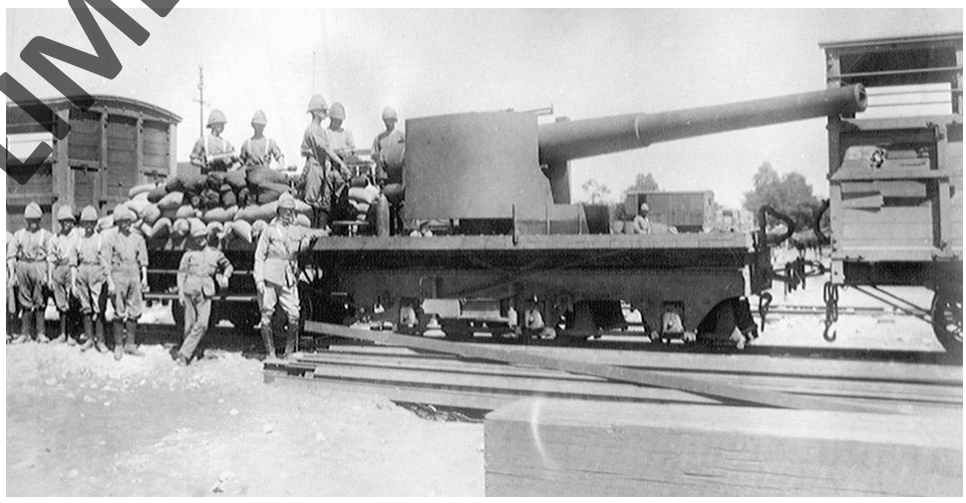


PICTURE 20 6’’ Carriage Gun

Calibre 6 inch.
Weight of gun 7 tons 8cwt.
Weight of gun carriage packed 11.5 tons.
Ammunition Common and Shrapnel.
Weight of shell 100lb
Range. Percussion 1500 yards.
Muzzle Velocity 2154fps

6” Naval Gun – Railway Mounting

2 x 6inch guns were put on railway mountings at the Royal Naval Dockyard in Simons town. These guns fired 100lb shell about 10,800 yards. They could not be fired at an angle of more than 16° from the railway line. The guns were fired at all ranges from 3000 to 12,000 yards. The larger angles of elevation were achieved by firing sidings inclined upwards to the front.



Railway Gun

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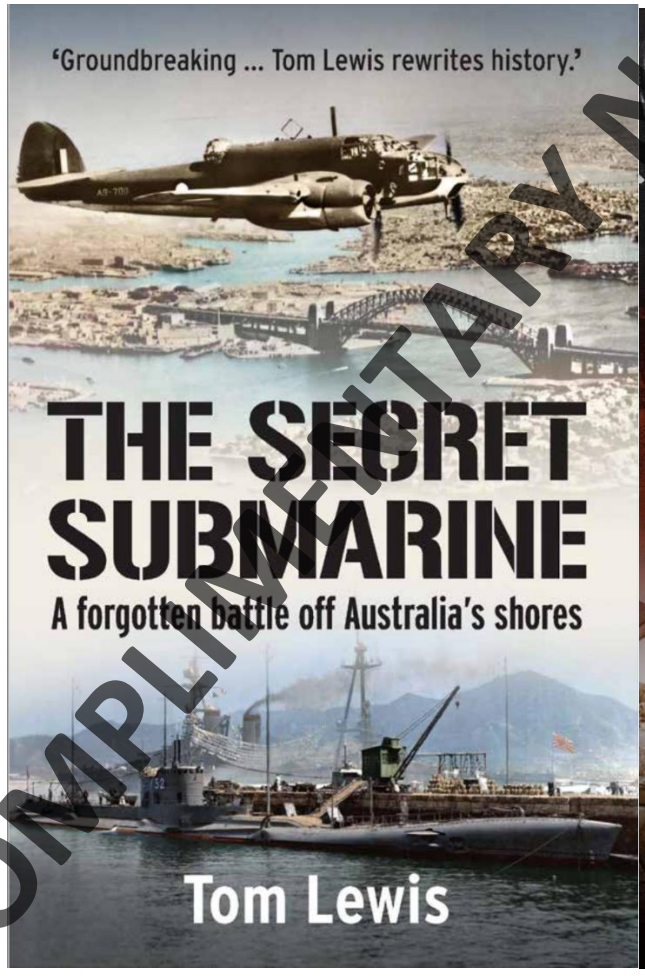

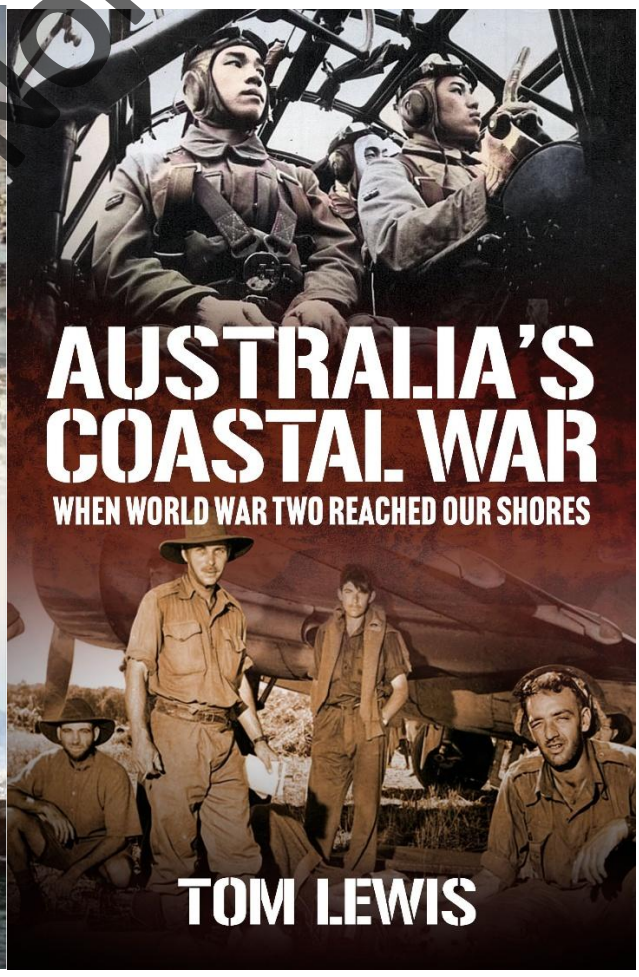

Meetings and Topics

All members are reminded and encouraged to bring along items for display. **If you don't like the topic categories on the night, no problem, pick your own, if it is over 100 years old, we would love to see it.** Note: All ammunition *must* be securely contained to prevent handling.

Calendar of Topics

Note: Display topics may change as required to accommodate special requests.

Month	Where	Who	What	Famous/infamous
Feb	Africa	Cavalry	Axes, Polearms & Clubs	Mutinies & Rebellions
Mar	America	Engineers	Accoutrements	Napoleonic Wars
Apr	Australia	Infantry	Firearms& Loading Equipment	Egypt, Soudan & North West Frontier
May	Asia & the East	Navy	Armour	Crimea
Jun	Colonies	Pirates, Bushrangers & Highwaymen	Edged Weapons	As seen in the Movies
Jul	United Kingdom	Volunteers, Militia & Yeomanry	Headdress	Scottish Wars
Aug	Caucasus & Eurasia	Coast Guard	Medals	Trafalgar
Sept	Imperial Germany	Police	Curiosa	Zulu & Boer Wars
Oct	Mediterranean	Hunting & Sport	Failures, Blunders & Bad Ideas	Peninsula Wars
Nov	Japan	Staff Officers & Staff Corps	Maker Marked, Presentation, Religious or Royal	World Wars
Dec	Scotland	Civilian	Uniforms	Civil Wars,
Jan	Europe	Artillery	Buttons & Badges	Conversions, Restorations & Fakes

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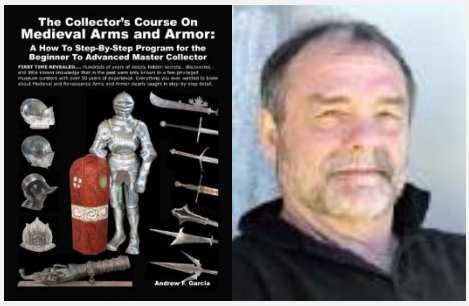

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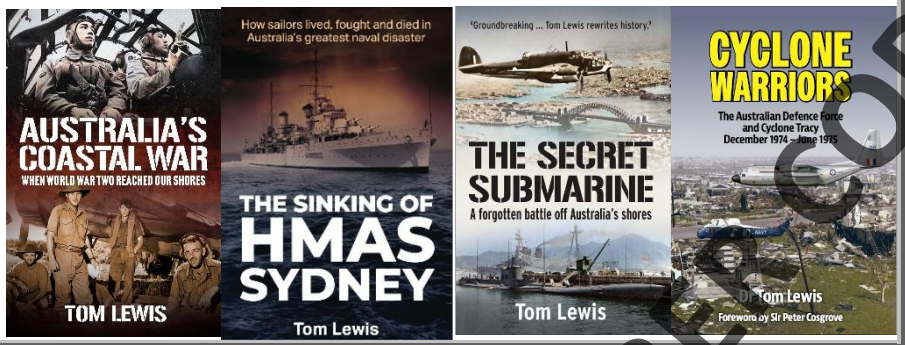

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