



Ordnance Society

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Editorial Pete Fuller. beegpete@btinternet.com

Welcome to the Society Newsletter for April 2007. In England, birds, flowers and trees have already decided it is spring and I am hoping that we shall not have any more nasty weather to prove them wrong.

I must apologise to those of you who have been hoping to see write ups of members day meetings and précis of Board of Management meetings, but these have not been available. I hope to include them again soon.

In this issue we have the usual mixture of articles, comments, queries and letters, including a fine assessment of the Milemete and Loshult guns by Sjef Pijls. For those of you who were interested earlier on in the forthcoming publication of 'War Department Notes' by G C Holden, we have an update on the current situation of preparation by Adrian Roads..

No Gun Data this time I am afraid, Allen Driver would be pleased to receive any appropriate material for this feature. We also have the usual cannon drawing from Rudi Roth. This is a splendid and valuable series and we are most indebted to Rudi for his kindness in allowing us to print the results of many years of excellent and painstaking work.

Please take notes of the changes in addresses and Emails on page 2.

Once more, I would like to ask contributors to please submit articles and pictures as Word documents if you can by Email so that I can download them in pristine form. If you send hard copy, again please send good quality pictures and good quality text. Every time I have to scan hard copy, the quality goes down and the Newsletter suffers in appearance. I know I make this plea several times a year, but it seems to be mostly ignored. To those who do send good copy, my hearty thanks. . To would - be contributors, please do not be put off by the above requests. I would rather have to struggle than not receive copy!

Address information Please note the following:-

Roger Cook (Chairman)

1 rue du Grand Baut, Ivairy, 55270 EPINONVILLE France.

Tel; 00-33-(0)3.29.83.67.97. Email roger.cook801@orange.fr

Change of address, Allan Driver

13 North View, Wilsden, Bradford, West Yorkshire, BD15 ONH.

Tel, 01535 274304, Mob, 07891 766984. Email, allandriver@aol.com

And a new Email address for Charles Trollope, please update your Board of Management notes, for both Roger, Allan and Charles. claybarn@btinternet.com

For those of you who may wish to make contact with The English Heritage Library, please see below,

From: CRYER, Nicola [mailto:Nicola.Cryer@english-heritage.org.uk]

Sent: 02 February 2007 11:44

To: McKenzie Ian A

Subject: Ordnance Society Membership details

Dear Mr McKenzie,

The Library at English Heritage has a corporate membership with the Ordnance Society. This is currently registered with our old Library address in London at 23 Savile Row. I would be grateful if you could amend your records to show the address given below, as the Library has now moved to this location. In addition, could you remove any reference to individual staff names and address items to 'The Librarian'. Many thanks for your assistance in this matter.

Regards,

Nicola Cryer
Assistant Librarian

The Library
English Heritage
National Monuments Record
Kemble Drive
Swindon
SN2 2GZ

01793 414630
nicola.cryer@english-heritage.org.uk

An important note from Rudi Roth

This note gives some important information on one of the books mentioned in John Day's 'Book Notes in the Feb 2007 Newsletter.

Wolfram zu Mondfeld's 'Schiffsgeschutze 1350-1870' has been published in 1988. Mondfeld was widely known in the German speaking areas for his books on ship model building which seem quite satisfactory, His book on Schiffsgeschutze (Naval guns) raised of course many hopes among the model builder fraternity because there is just simply nothing available in German on the subject. Indeed the book is still today widely quoted by the Ignorant as the 'Bible' on Ordnance, also by the Model Cannon shooters in Germany and Switzerland for building their cannons.

In 1990 the German 'Arbeitskreis Historischer Schiffbau E.V.' (Society for historical ship building) published in their Journal No 4 a review of Mondfeld's book. It provided well argued evidence that the drawings were not to scale as he claims, they were inaccurate, included gun types and 'historical facts' which never existed, numerous guns which were definitely not naval guns and other specific guns allocated with a different coat of arms as 'naval guns' under different countries. It is an impressive looking book written with a very minimal knowledge and with so many faults that it is difficult to identify the correct statements or at least the realistic possibilities of a truthful statement.

After this Review and verification of the Reviewer claims, it has been said that the publisher ceased all cooperation with Mondfeld, terminated his contract and the remaining two Volumes were never published. Rumour has it that Mondfeld was even excluded from the Society of Historical Ship Building, it appears that his Schiffsgeschutze book was the straw that broke the camels back.

Rudi Roth

A situation update for everyone previously interested in War Department Notes By Adrian Roads

WAR DEPARTMENT NOTES BY GC HOLDEN ASSISTANT SUPERINTENDENT OF STORES.

First and foremost please accept my apology for not having provided an update sooner. It has been my wish to do so, but I have been waiting for some certainty on both a printing cost and timing prior to making contact.

As has been advertised, the volumes are being published as a memorial tribute to their deceased owner, John Bell. The work being undertaken by his wife and Dr C.H. Roads. Alas, John's wife, Margot, passed away late in 2006, and it was one of Margot's last

wishes that this project be completed. The project is now a memorial to both John and Margot Bell and has the consent of the remaining family members.

The publication of the five handwritten War Department volumes falls primarily into two main tasks, firstly that of transcribing the work and adding commentary, secondly collating and printing the work.

TRANSCRIPTION - progress report.

It was initially envisaged that the volumes could be transcribed at the rate of one volume per annum. However, I have been engaged on a project in the Middle East for twelve months (two months remaining), and being away from family and friends, I have spent all my spare time engrossed in working on the War Dept Notes. Of the estimated 2000 hours transcribing etc, well over half will have been accomplished during this period.

The status of the 5 volumes, with regard to transcription is as follows:

- 1st book - Is fully transcribed and commentated and has been with the printer for nearly 18 months.
- 2nd book - Is fully transcribed and commentated and has been with the printer for 7 months.
- 3rd book - Is transcribed and commentated and is currently under going a proof read before being placed in the print queue. It will be ready for printing by the end of this March.
- 4th book - Is nearly all transcribed and much of the commentary has been drafted, and I envisage having this book ready for the printer by about the end of this April.
- 5th book - This will be commenced upon my return to Australia in April. Due to limited spare time (my wife will only tolerate me spending so many hours per week on transcription and commentary research) this, the largest volume, will take approximately 12 months to complete.

PRINTING - progress report.

As can be guessed from the transcription report, there has been a frustrating lack of progress in this vital area. The process for each book is:

First producing a high resolution scan of each page, this requires highly specialised equipment and is a much more complex task than it sounds.

Secondly combining and collating the scanned original pages with the new transcribed pages and producing a printed copy for proof checking.

Thirdly - printing off copies or providing the final discs for a commercial printer/binder etc to do so.

This does require some time; unfortunately all that has been achieved in this area in the past 18 months is the scanning of one volume, bringing the total of scanned volumes to three. The printer, an integral part of this project has, very recently, informed us that he is not in a position to devote the time and effort required, though it is anticipated that the two final scans required will be done by him.

So although very good progress has been made in the area of transcription, there has been a marked falling behind with the printing schedule that had been agreed to, and this will take some time to resolve.

The transcribing, research and commentary will proceed as per the above projection, and in the meantime we will also be looking for a suitable UK based printer who is able to work closely with us on this project and run off small print runs on demand. This is certainly an area where any recommendations would be helpful.

On a final note, it was felt important to include something of the man who penned these volumes; initially we knew nothing of Holden other than his initials and his job title in the mid 1860s. A search has been conducted to remedy this and, although he proved a very elusive fellow at first, very satisfactory results have been obtained for inclusion in the foreword.

I trust that your patience will hold and apologise for the vexing delay in printing. Final costs remain, of course, unknown until this area is finalised, once some positive progress has been made in this area I will be back in touch.

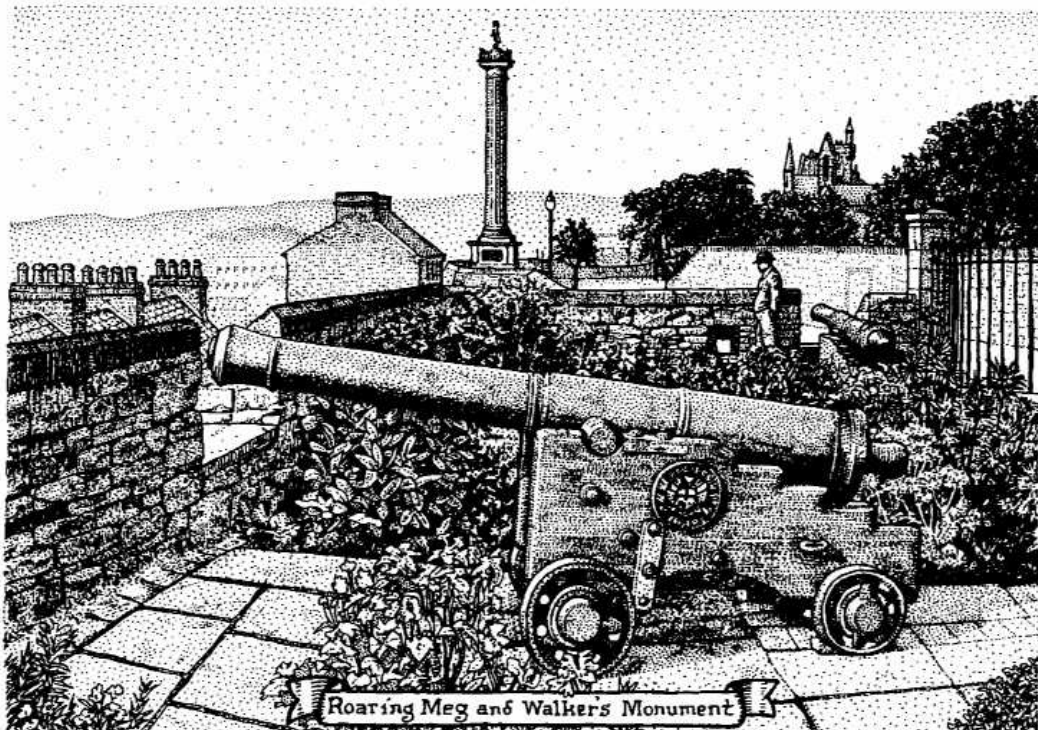
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'Roaring Meg'. A further note by Rob Morgan

As with so many of the historically important, yet frequently neglected, pieces of ordnance which appear in the pages of the newsletter, Londonderry's 'Roaring Meg', the venerable survivor of the 1689 Jacobite siege, has more to tell.

This illustration, and I'm grateful to my colleague D.J. Sallis of Wexford for it, shows the gun in position at the Royal Bastion of the City. The drawing appeared in a 1989 anniversary booklet, written by a team of writers from 'The Honourable Irish Society' and published I'm told as a 'one-off' that year. Walker's Monument, referred to in the caption, was erected in 1826 as a tribute to Rev'd George Walker, one of the City's Governors during the siege. He was later killed at the Battle of the Boyne. The 96' high monument was blown up in 1973 (?) and according to the text, only the stump remains.

Presumably an Ulster based member of the Society will know if the gun is still in situ at the Royal Bastion, and may know something of the other piece shown in the drawing?



An assessment of the Milemete gun and the Loshult gun by a modern military engineer by Sjef Pijls

INTRODUCTION

Since I became a member of the Ordnance Society I have seen several articles about the two earliest guns known so far: the Milemete gun(s?) and the Loshult gun [1,2,3,4]. These articles were written by leading historians but what I miss in them is a sound technical base. By looking at them as a modern military engineer I will try to set some boundary conditions that may be helpful for future research.

The Milemete gun (fig.1) is only a picture and the discussion has been so far about its accuracy. The Loshult gun (fig.2) exists; a replica has been build and has undergone firing trials, yielding a lot of valuable knowledge. But it is important to look at both of them as weapons: what were there advantages and disadvantages compared with the contemporary weapons? How did they perform? How were they used? Why would people spend their money on them?

Before starting about these weapons I will try to establish their place in history; not in time (that has been done before) but in the frame of scientific and technical developments. Next I will discuss some general considerations when assessing a weapon.

This contribution is intended as a starter for a future article about the development of saltpetre and guns in Europe. Although I have formulated the main lines, I still have to do some laboratory checks to be sure.

Fig 1 The Milemete

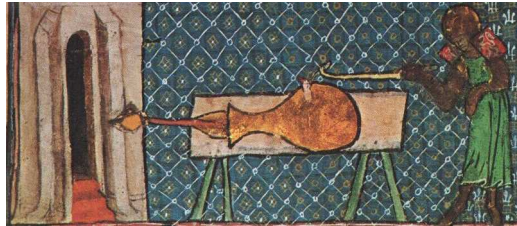


Fig.1: the Milemete gun

Gun..



Fig.2: the Loshult gun

Fig 2 The Loshult Gun

Science

To start with it is good to have the time line of scientific development in mind. Modern science is founded by Galileo Galilei early in the 17th century. A major step forward was by Christian Huygens, who measured the gravity acceleration accurately by a pendulum and who studied the resistance of a moving body in a medium. His protégé Isaac Newton arranged all knowledge so far available, reduced it into a number of laws and published

them in 1700 in his Principia [5]. That was the first time in history when all knowledge gained so far was in a concise form available to everybody worldwide. From 1326, when the Milemete gun was drawn, until 1700 is 371 years, from 1700 to 2007 is 307 years. For chemistry things lasted longer: in 1789 Lavoisier published the first chemical theory [6]. From 1326 to 1789 is 460 years, from 1789 to 2007 is 218 years. So the people in the 14th century had still a long way to go. That doesn't mean they didn't investigate; they made a steady progress. When reading the Feuerwerkbuch [7] one can only be impressed by the knowledge the alchemists possessed already in 1388. But the more knowledge and technology available, the faster the progress and that will go on in future. It is difficult to imagine for 21st century people, but a researcher in the 25th century will probably conclude that progress was slow until the 24th century. The first idea of a programmable computer was around 1840 and it took 150 years before it was becoming a common tool. The first car was built in 1885 and 120 years later we are still driving the same primitive, smelly, oil consuming machines. We ourselves know we had to learn more about electronics and combustion first and we had to invent the transistor, plastics and a few more things first, but our 25th century researcher will not be impressed. We will be surprised when he regards Lavoisier and Einstein as contemporary authors, but that is exactly what we do with the Feuerwerkbuch and La Pirotechnia [8]; there is 150 years of development in between.

Range

When the Principia was published, it was the first time in history when among others mass, velocity and acceleration got a clearly defined meaning. Of course the gunners in the 14th century had an intuitive understanding about these topics, but no unambiguous definition existed and they didn't have a way of measuring it. That is why the author of the Feuerwerkbuch speaks many times about the range of his guns: not because he ever intended to shoot at that range, but it was his only way of assessing the power of his gun.

Names

When studying early ordnance no great meaning should be given to the names. Suppose our 25th century researcher wants to find out what a frigate was in the second half of the 20th century. He finds a book about the Royal Netherlands Navy and compares two ships: the first a Wolf class frigate (fig.3) of 800 tons, equipped with one primitive radar, armed with a few small, hand operated guns, a speed of 15 knots and a crew of 70. The second one is a De Zeven Provinciën class frigate (fig.4): a major surface combatant of 6000 tons, equipped with the most advanced radar and optical systems, armed with a complex air defence systems, a 127 mm gun with an advanced fire control system, a fully automatic close in weapon system, a speed of 30 knots and a crew of 170. The time span between the disappearance of the first and the appearance of the second one is less than twenty years. Further, the last one is called a frigate by the Dutch and the Germans, the English and the French would call her a destroyer and the Americans and the Russians a cruiser. He will be totally confused. But for the contemporary naval officer it is no problem at all. He knows these names are chosen for political reasons only and it hasn't any influence on the way he is doing his job.

The lesson is that names give only a way of comparison when they are used within one country and within a very short time frame. For example, a falcon may somewhere in the early 1400's have been a hunting weapon (to replace the falcon), next it found some military use, then it was modified for its military purpose and the weapon that became a century or more later a standardised design had except the name absolutely nothing in common with the original.

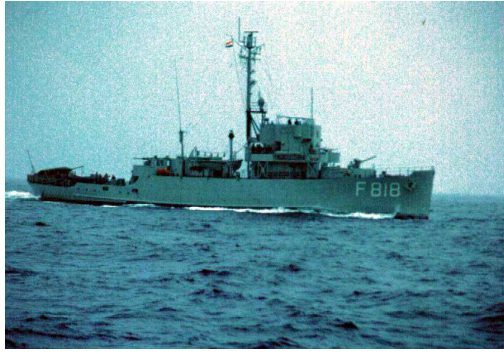


Fig.3: Wolf-class frigate

Fig 3. A Wolf class Frigate



Fig.4: De Zeven Provinciën-class frigate

Fig 4 De Zeven Provincien class frigate.

Gunpowder

Some authors compare the composition of gunpowder during the centuries. However, without knowing what type of saltpetre was used and for what weapon the gunpowder was intended this hardly explains anything. I have good reasons to believe that the saltpetre originally imported from China (or India) was sodium nitrate. Next somebody in Europe discovered how to make calcium nitrate. A subsequent step was the discovery that the addition of wood ashes during the production yielded potassium nitrate and the final step was the development of corning. This will result in four different types of gunpowder and each requires a different type of gun. I still have to do some research on this but in a future article I will give more attention to this subject.

The assessment of the guns

When assessing the value of a weapon (and in the case of the Milemete gun also the likelihood that it is a true representation) the answer should fulfil three basic requirements. The weapon should make sense from a technical point of view. Although we speak about a time long before Newton formulated his laws, they apply nevertheless.

The weapon should make sense from a military point of view. People fight a war to win, not to loose. A new weapon will be used only when it has at least one major advantage over the existing weapons.

The weapon should make sense from an economical point of view. People in the past had the same problem as we have today (at least, I have): you can spend your money only once. Nobody will spend a huge amount of money on a new weapon when the same effect can be achieved with the existing weapons for less money.

The Milemete gun

I will start with the Milemete gun. I have measured the dimensions (the gunner with an estimated length of 1.6 m is taken as a reference) and made a drawing of it (fig.5). Two dimensions are not known: the calibre and the bore length. I have taken the wall thickness at the throat the same as the calibre, so this will be around 47 mm. I have let the chamber start at the place where the thickness all around the breach is equal, something that would make sense for a 14th century gun designer. These two dimensions might have been slightly different, but that will not make a major difference for the output power. I assume that the touch hole is perpendicular to the bore so the charge is ignited from its front end. I don't know if this was common, but I have seen some more pictures where this may be the case [9]. This imposes no technical problem, just an operational one: it is impossible to use different charge weights, but that was probably no requirement for a 14th century gunner.

The gun is made of bronze because the technology to make such a piece of iron, either wrought or cast, was not yet available in those days; the mass is computed as 890 kg. As ammunition I have taken a wooden arrow with the flights in the middle, thus twice the length between the touch hole and the muzzle. The mass will be 1.7 kg. Since the centre of gravity has to be well forward of the flights in order to get a stable flight trajectory I have added an iron tip of 800 g, so the total mass is 2.5 kg.

The first element to consider is the technical capability of this gun. I have computed the pressure the gun can withstand along its length. An elastic limit of 210 MPa as for modern gunmetal is probably too high, because the composition of gunmetal is developed in the 19th century.

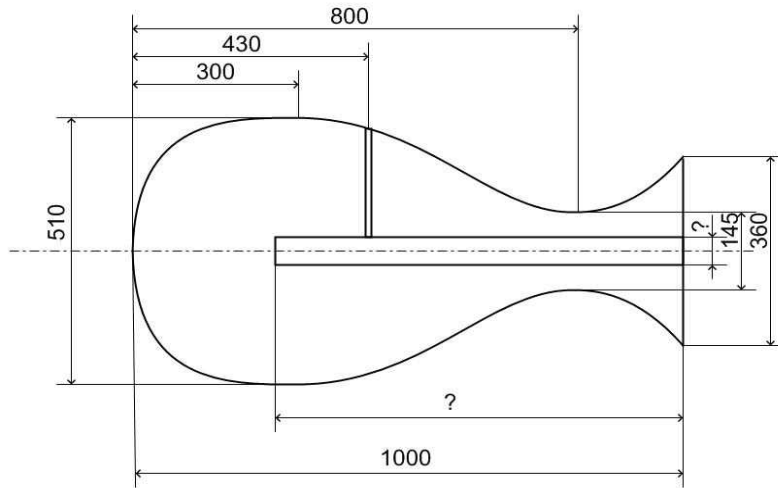


Fig.5: dimensions of the Milemete gun

Fig 5 The milemete gun.

In fig.6 (top line) the maximum pressure along the bore is given, using a bronze with a tensile strength of 250 MPa. Since bronze is a ductile material it will deform during proof shots and after some shots an elastic limit of 120 MPa (middle line) may be achieved. Since a 14th century gunner would certainly have taken a safety margin the strength is computed with a safe limit of 100 MPa (bottom line). Then the next question has to be answered: was the charge confined or not? If the answer is no, the pressure curve will be very steep and the energy of the shot will be around 20 kJ; in that case the critical point will be the breach. However, I think (awaiting further investigation) that in order to achieve reliable burning when using uncorned powder the charge has to be confined and in that case the energy of the shot may have been 50-60 kJ, in which case the throat of the gun is the critical point. In both cases the bronze is not used in an effective way: there is either too much around the throat or around the breach. Nevertheless, it is a powerful weapon. The table supporting the gun looks too fragile. Even if it doesn't collapse under the weight of the gun it will under the recoil force.

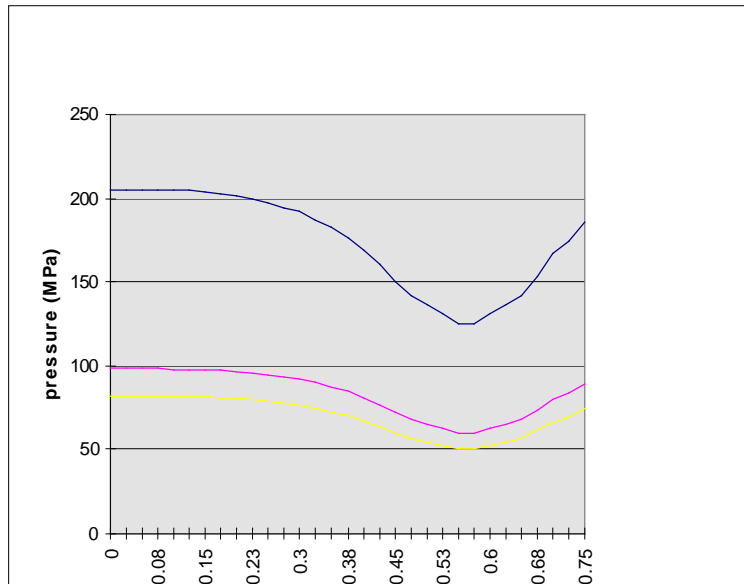


Fig 6 Maximum pressure along the bore for various tensile strength bronzes.

What are the military capabilities of this gun? The first question to answer is against what target it is designed. It is too clumsy to use against moving targets; furthermore, the rate of fire is by far too low. Although an impressive weapon, it is not powerful enough to breach a wall. The muzzle energy of a medium sized trebuchet is about 0.5 MJ [10], at least ten times as much. Counter battery fire to knock out trebuchets and other siege engines? The chance of a direct hit on one of the beams seems small and even when a direct hit is achieved, the trebuchet will be repaired before the gun is loaded again. So I can't think about a suitable target for this gun.

The second question is how it was handled. It doesn't have lifting eyes or hooks or any other way to keep a rope in place. A piece of bronze of 890 kg of this shape is even awkward to handle with modern lifting equipment. It could have been fixed on a wagon and be fired from it, but why is it in the picture placed on a table?

The third question is how it compares to other weapons. Of course it is more powerful than a normal crossbow, but a crossbow of 890 kg would give a muzzle energy of around 25 kJ [11], at least half the power of the gun. But that crossbow would have had a rate of fire at least ten times as high, it could have been disassembled for transport, it would have had better means of pointing, it would have been cheaper and it could have been repaired in the field.

How are the economics of this gun? Bronze was a precious metal. It could be used over and over again. In the Netherlands there exist some examples of church bells transformed into guns when war broke out and after the war a new church bell was cast from the bronze of guns [12]. Bronze was expensive and scarce, labour not. Why should anybody use an amount of bronze, of which thirty smaller guns could have been made, to build one big gun? And why would anybody build such an expensive weapon when the propellant is expensive and the supply not guaranteed?

So this gun may be a sound weapon, but unless somebody can explain against what target it was intended, it doesn't make any sense from a military or an economic point of view.

The Loshult gun

This is a small gun, just some 30 cm in length. In 1999 a replica has been build and tested [1] and, although there were some flaws in the test set up, it has proven to be technically sound. An arrow of 250 g reached 500 m, and from this it may be computed that the muzzle energy must have been around 0.6 kJ. This is probably too high, because modern saltpetre has been used, but even if it is half of it, it compares well with a crossbow or a longbow.

What is the military value of this gun? The muzzle energy is in the same order of magnitude as that of a crossbow, so it is probably intended against the same targets. It may have been designed to fire arrows, but the gunners must have discovered very soon that it worked just as well with a stone or grape shot. In open combat it is however far inferior to a crossbow or longbow because the rate of fire is too low and it is lacking a proper way of pointing. But since it is easily transportable and it may easily have been concealed, it would have been very useful to set up ambushes. Since the names of those early guns in nearly all European languages compare them to snakes, they were probably used exactly in this role, in which they had a clear advantage over existing weapons. So also from a military point of view this gun makes sense.

From economical point of view it makes sense too. From a single church bell a considerable number could be made. They used only a little amount of the precious saltpetre.

Conclusions

Both guns make sense from a technical point of view, while the Loshult gun also makes sense from a military and an economical point of view while the Milemete gun does not. Does this mean that the picture of the Milemete gun shouldn't be taken serious? In my opinion certainly not. The artist gives an accurate picture of what he thinks he has seen. He was not familiar with guns, but has seen a demonstration of something like the Loshult gun. As it is good practice today not to stand in front of a loaded gun, it was probably too in the 14th century, so he had to stand behind it. Thus his view on the part between the touch hole and the muzzle was obscured and he has drawn it as he thinks it should have been: the shape of something familiar to him, a vase. For safety reasons he had to keep enough distance, so it was hard to assess the real dimensions of the gun, but given the amount of smoke and noise it had to be big. Since it was a small gun it could be easily handled and for the purpose of the demonstration it was fired from a table. So except the shape of the part between the touch hole and the muzzle and the dimensions, two things impossible for him to assess well, he has given an accurate illustration.

The second conclusion is that the building of big guns was too risky from an economical point of view as long as Venice had a monopoly on the trade of saltpetre, making saltpetre scarce, expensive and the supply uncertain (and the quality probably too). As long as this situation lasted, only small guns were used as auxiliary weapons; they didn't replace the existing weapons. Not before saltpetre could be domestically made and enough understanding of its nature was gained to set up a reliable system of quality control, did big guns become a viable alternative for the existing weapons.

For one aspect I didn't find a reference, but it may have been important. Until the advent of the gun the precious metal bronze was mainly used for church bells and statues. When the gun appeared the demand for bronze must have increased, driving the price further up and thus making a big gun still less attractive. When domestically made saltpetre became available big guns became a serious proposition and hence people tried to find another material than bronze, resulting in the use of wrought iron. I can't remember I have seen a

picture of a wrought iron construction the size of a big gun before the middle of the 14th century.

References

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Das Feuerwerkbuch, translation by Gerhard Kramer of the Freiburg manuscript 1388-1400, Journal of the Arms and Armour Society Volume XVII, 2001
Vannoccio Biringuccio, La Pyrotechnia, 1540, translation by Cyril Stanley Smith and Martha Teach Gnudi, ISBN 0 486 26134 4
Dudley Pope, Guns, ISBN 0 600 01648, pages 22 and 23
Computed from modern experiments
Computed from data in Robert Hardy, Longbow, a social and military history, ISBN 1 85260 412 3
Herman Nieuwland, Van Archimedes tot Nobel, a huge collection of sources about metallurgy and gunnery, never published but I own a copy and there are some in the libraries of the Netherlands Defence Academy

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A note about the Francis Bannerman Co by Robert Bohannon

Editor,: In reference to Rob Morgan’s implied query as to what sort of company Francis Bannerman & Co~ of New York could be. they were not an arms company as such. but a company that sold military equipment and supplies to just about anyone. Want an unused Union Army uniform? They had it. How about a couple of hundred 1863 Springfield rifled muskets with ammunition? Over in the next room, Swords? Bayonets? Gatling guns? All were available through Bannerman’s, as was rations, ammunition, tents, saddles, boots, and most any other munition of war imaginable. Over 30 million rounds of ammunition was stored on Bannerman Island (purchased when New York City said NO! to storing about 90 tons of explosives in their city showroom).

Mr. Bannerman, of Clan McDonald, built a full-sized replica of a Scottish Castle in 1901, but it burned in about 1956.

Still adding to my collection, the latest from D.P.& G are two handbooks for 1897 guns. These are for the **30-B.L.** and the **40-PR. R.M.L. of 35 cwt Siege and Movable Armament** and they follow the usual format of H.M.S.O. handbooks in comprising text describing the gun and its ammunition and “how to use it” followed by plates illustrating the text. The ISBNs seem not to have been thought of in these early days. The firm has also published a reprint of the **Handbook for the 14-inch (45cal) B.L. Gun on Rail Truck Mounting** as originally published by Sir W.G. Armstrong, Whitworth & Co. Ltd. In 1918,(ISBN 1-905265-94-8). It comprises 83 pages and 54 plates (most of them A3 gate folds) of A4 size with spiral binding that allows the full flat opening of the folded plates. The Rail Gun must have been the most complicated piece of artillery ever made. This manual describes, in conjunction with annotated drawings, the gun, which could have right and left hand breech mechanism, the main truck with its compartments for an air compressor and all the lifting slings, the two seven and eight axle bogies, the ammunition wagon, sights and slinging. This handbook is worth having for the plates alone, they are copies of the works general arrangement drawings; the mounting drawings being dimensioned. They make one realize the standard of draughtsmanship in those pre-CAD days since they show every single rivet. It would make a wonderful model coming out at over 7 ft. long in 5” gauge.

If ordnance is defined as firing a missile from a tube, I wonder why the torpedo is overlooked. **Torpedoes and Torpedo Warfare** by C.W.Sleeman, a reprint of the 1889 book of 350 pages and 79 plates, now published by Naval & Military Press Ltd. in association with Firepower, deals with harbour defence mines, uncontrollable and controllable torpedoes, torpedo boats and submarines. The synopsis of the principle events in the history of the torpedo begins with Zambelli’s attack on a Scheldt bridge in 1585 and continues to the destruction of a Chinese frigate in 1885. This book gives a very full description of what was going on underwater up to 1889.

Another reprint by the University of Michigan Library is the Ordnance **Manual for the use of Officers of the United States Army** of 1850, 475 pages and 19 plates, that appears to contain all the information on everything: from materials, all the then current foreign and U.S.guns, timber scantlings for carriages, composition of paints, mathematics and even a bibliography from 1739 to 1849. Not only are there descriptions of everything but tables giving the dimensions. Not everyone knows it took 850 lb. of junk for 100 wads for an 8-inch gun or that a 14-inch flat rough file was 0.35 –inches thick. Mine came from The Book Depository Ltd. Gloucester, GL2 5HS.

Home Office Guns.

Still cataloguing drawings for the Royal Artillery Historical Trust, I recently came across Royal Gun Factory drawing Nos.11047/1 to /6 of 1910 titled Design for Home Office Guns for the use with High Explosive. These are of four sizes, 2.165” bore 3 1/2ft. and 4 ft long and 2.756” bore of the same lengths. They are wire wound, have an external diameter of 19.6”and comprise a liner, “A” tube, six layers of wire and an outer jacket. The liner is blank at one end and open at the other. Has anybody any knowledge of for what purpose the Home Office wanted them?

An appeal from Commander Ian MacDonald Watson, Royal Navy.

I attach an appeal for information to help with the return and restoration of **HMS WHIMBREL**.

In addition to the general appeal, can I ask through the OSNL if any members have information on the whereabouts of technical and user handbooks for the WHIMBREL's 4 inch Mk 19 Twin Mountings. 40 mm Bofors Twin and 20 mm Oerlikon (I assume single Mk 7). In due course I also expect that they will need to make some representative inert ammunition, so details of the 4 inch ammunition would be handy. Although the berth planned in Liverpool is very close to the centre of the city, it may be just possible to fire some blank rounds (probably with a small charge) on special occasions. As you can see from the appeal, it sounds as though the transmitting station has been removed so details (or a handbook) for the fire control system would be very useful.

Ian MacDonald Watson Commander Royal Navy
01749 850973

HMS WHIMBREL (1942-1949) BATTLE OF THE ATLANTIC MEMORIAL —Appeal for information

The Project led by Vice Admiral Mike Gretton is forging ahead with its plans to raise £2m to return to Britain the former Second World War Escort Sloop HMS WHIMBREL which presently languishes in the Egyptian Naval Base at Alexandria. A detailed specification to conserve the ship and restore her to her 1940s RN condition has been completed but the Project needs much more authentic information to supplement presently available drawings and photographs.

An appeal is therefore made for any firsthand (or second-hand) knowledge of the Black Swan Class from former crew members, shipyard or dockyard workers, designers, historians or other experts who might be able to fill in the gaps. In particular any photographs of the interior of WHIMBREL or any others of the class could be very helpful. We need to collect a wide range of contemporary i.e. WW2 items to help tell the story of life on board during Atlantic Convoy days. Sometimes snaps of crew members can show good background detail, such as mess kit and domestic articles, engine room controls, bridge detail etc. Although the Egyptian Navy has made few major modifications to machinery and weapons systems, not surprisingly, hardly any original communications or Radar equipment has survived. This is an area that will take time to restore — in some cases using replicas, illustrations and display boards to give an impression of the former function and layout. Any information and especially photographs of WT, Transmitting Station & RDF rooms would therefore be extremely valuable.

But all information however slight would be welcome. For example,: Who remembers when the original Western Approaches blue and white camouflage paint scheme was changed, or what changes were made during her wartime refits? What was the colour of the deck in the crew's galley? and What colours were used for handwheels in the Engine Room? There are very few photographs of HMS WHIMBREL between first commissioning in January 1943 and leaving Chatham under the Egyptian flag in December 1949. Perhaps someone has snaps of her whilst being built at Yarrows or during her last refit?

If you think you can help please contact Rod Pudduck who is the naval architect and member of the project team who carried out the initial survey and has written the refit specification. He can be contacted at home by e-mailing: rodshome@dsl.pipex.com or at work: rod.pudduck@atkinsglobal.com. Please telephone 01454 288108 or send by post to Rod Pudduck, Atkins Ltd., 280 Aztec West, Almondsbury, Bristol BS32 4SY. All offered material will be carefully handled and returned if required, with acknowledgement and appreciation by the Project.

For more information and news visit the Project website at www.hmswhimbrel.org

A general note from George Slade

I also found the subject article (Hotchkiss Revolver) interesting because our local American Legion Post has one standing outside it. The only marking on it is '1883' which I presume is a date not a serial number. I would be interested in gaining more information on these weapons. To add to the note in Newsletter No. 77, Francis Bannerman and Co was the first large surplus dealer in the U.S.. The company bought up a massive amount of material after the American Civil War and continued to do so for a number of years. It not only provided arms and equipment to a number of needy countries, but to American collectors well into the Twentieth Century.

I am also a collector of military identity tags and have a couple of questions unrelated to ordnance. When did the British Army adopt the fiber tags? I have a thin aluminium tag which came in a 1914 Christmas box and a thick iron tag. Were these issue tags or privately purchased ones.? Thank you.

Another note from Rob Morgan

The article on the Bohler gun in Volume 18 of 'The Journal' was fascinating, and an appraisal long overdue I think.

On the specific subject of Dutch guns and Japanese captures. In Issue 31 of '*After the Battle- Singapore*', published in 1981, there's a short account of the ordnance, ammunition and small arms taken when the island fell. A Japanese compiled list, which seems to be taken directly from a report extant, written in March 1942 by Colonel Masataka Numaguclii of the Imperial Army Technical HQ, supported by a Major of the Heavy Artillery School.

The list is extensive, not surprisingly, and deals with the big coastal pieces, and the substantial, largely intact field park of almost 400 guns and ample ammunition stocks. There were also 9 Bohler 47mm's in 'perfect' condition. Possibly 'in transit' to a Dutch garrison?

The Japanese evaluated the two main British types the 25pdr (250 taken) and the 2pdr a/t (100 in all), and in 'Plan No.1' intended them to be shipped to Japan and used against the USSR. Some guns would be retained locally, they were seriously impressed with the 2pdr!

The article doesn't actually mention any evaluation of the nine Bohler guns; or their eventual fate. But nine decent modern pieces, of a type which the Japanese army must have encountered in action in China, if Terry Gander's correct, couldn't have been simply laid

aside and forgotten. There's no 47mm ammunition in the *'After the Battle* list, but presumably stocks were taken when the Dutch East Indies fell. Or perhaps no 47mm ammunition was captured as the Dutch were better at denying their materiel to the enemy than the British?

A query from Christian Cholet

Christian is a member from France who is a cannon enthusiast. He has sent me some interesting material about cannon he has found at Rochefort in France. He would like to know if we can help with some queries.

Firstly he looked at two cannon at the entrance to the Maritime Museum. He would like to know if they are of British origin.. Of special interest is that they both appear to have two touch holes. He did not check to see if both holes were fully drilled. Were double touch holes a common feature? These appear from the pictures to be at 90 degrees separation to each other.



Two views of the same gun ,showing the two touch holes.

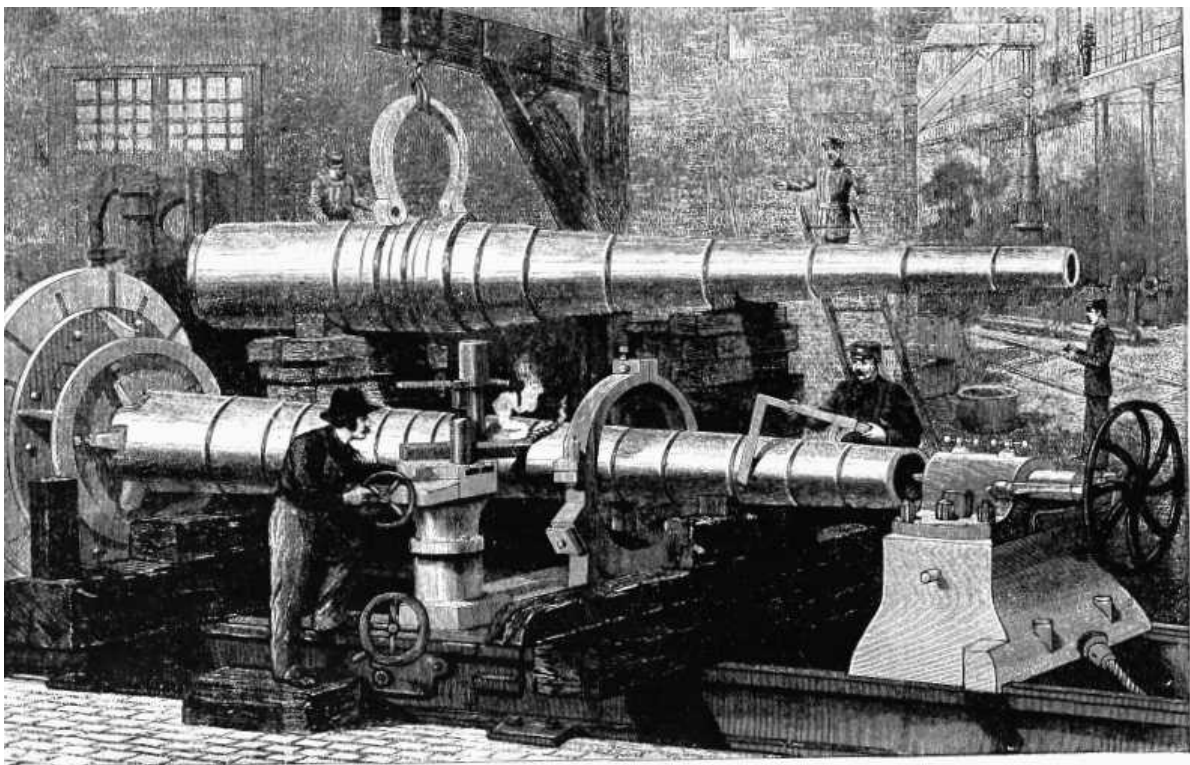
The other location is outside the fire station at Rochefort. Christian would like to know if this is also a British cannon`. The cannon is badly corroded and the only markings visible is a Roman XII. on the muzzle swell. See next page for a general view.



A query from Rob Morgan

This drawing comes from a freely copyable resource in the Faculty Library, and was originally in an American magazine in 1895 or 1896 called *'Harper's Roundtable'* its caption....'Manufacturing Heavy Guns in the U.S. Navy Yard, Washington.'

Maybe gun experts will be able to identify the calibre and type of guns, and maybe even explain the drawing in detail?



IRON 12 PDR CARRONADE, New pattern, 39 Inch 6¼ cwt
 National Maritime Museum, Greenwich

Drawing: Scale 1:5 by R. Roth

