

This is NewsLetter Issue No. One ~ For the year 2014

The American Revolutionary War Cannon Ball

During the American Civil War, cannon balls were huge spheres of iron and steel ~ at least that is what seems apparent when we view the conical stack of eight to ten-inch diameter



cannon balls positioned beside the bronze statue of the Civil War soldier in the park or beside the front entrance to the county court house. The largest piece of ordnance fabricated during the War Between The States, the Rodman Gun, fired a 450-pound solid ball from the 15-inch bore of its thirteen-feet, nine-inch long barrel. That

simply emphasizes the assumption that all the cannon, and cannon balls, were large. The fact of the matter was that smaller bore cannon ~ with bores ranging from 3 to 6-inches ~ were far more common during that conflict. And although stacks of cannon balls from the American Revolutionary War are not commonly found anywhere, let alone near the county court house entrance, it will be found that they were most often small too.

People are surprised when they have their first encounter with a Revolutionary War cannon ball. They were generally small.

The size-name of the projectile (*e.g.* 3-pounder or 12-pounder) was signified by the size of the bore diameter of the cannon's barrel. That size was noted as the *caliber* in inches. The caliber size, in only a few cases, matched the weight of the solid iron ball shot. (In other words, a cannon with a bore diameter of 3 inches would shoot a slightly smaller iron ball that weighed between 3 and 4 pounds, but a cannon with a bore diameter of 5.29 inches would shoot a ball that weighed 18 pounds.) The size of the cannon came to be referred to in terms of the average weight of the solid ball shot they could fire. A cannon that shot a 3-pound ball was called a *3-pounder*, one that shot a 6-pound ball

was called a *6-pounder*, and so on. Nearly thirteen different calibers were employed in the guns at the time of the American Revolutionary War. The most common calibers included:

2.46 (which shot a 2-pound ball),
2.91 (which shot a 3-pound ball),
3.67 (which shot a 6-pound ball),
4.20 (which shot a 9-pound ball),
4.62 (which shot a 12-pound ball),
5.29 (which shot an 18-pound ball),
5.82 (which shot a 24-pound ball),
6.41 (which shot a 32-pound ball) and
6.95 inches (which shot a 42-pound ball).

Larger caliber guns, such as mortars, were generally utilized as siege guns. They included: 8.0 (which shot a 46-pound ball), 10.0 (which shot a 93-pound ball) and 13 inches (which shot a whopping 200-pound ball).

The photo that accompanies this article displays two 12-pounders and one 2-pounder cannon balls along with an assortment of smaller musket balls. All of these items were recovered at the Revolutionary War battlefield and encampment sites near Saratoga, New York. The three cannon balls exhibited here are solid. All three balls are probably composed of steel rather than iron as evidenced by their lack of rusting. (The sole difference between iron and steel was that a greater amount of oxygen infused into the molten iron ore when it is forged results in steel).

Cannon balls were either solid or hollow. Hollow balls could be filled with shrapnel that

would scatter when the ball struck its target or with powder and a fuse that, when lit, would cause the ball to explode either before or upon impact. A solid cannon ball did not explode upon impact, and as a result can be found today at battlefield sites. The purpose of the solid ball was to cause damage by its impact with either human bodies or manmade structures. The small, 2-pounder ball shown here has a noticeable flat spot on its spherical surface ~ evidence that it must have struck something.

To fire a cannon ball from a cannon, a powder cartridge was first inserted into the barrel of the cannon. The cartridge consisted of a measure of black powder. [Gunpowder that was used in artillery during the American Revolutionary War was a mixture of what is known as *black powder*. At the time of the American Revolutionary War, black powder consisted of six parts saltpeter (*i.e.* potassium nitrate), to one part charcoal and one part sulphur by weight.] The measure of black powder would often match the weight of the solid shot. A three-pound ball would be matched by a three pound measure of powder. In some cases, such as with scatter shot, the cartridge would contain the projectile itself. If a solid shot was to be fired, it was inserted directly after the cartridge. A fuse would be lit, causing the black powder to explode and the force would thrust the cannon ball from the cannon's barrel.



Opening comments by Larry D. Smith, Historian of the Frontier Patriots Chapter ~

This is the first newsletter issue under the name of the Frontier Patriots Chapter. It will contain articles on a wide range of topics. That means articles pertaining to topics appropriate to our central Pennsylvania region, along with a serialized chronological history of the American Revolutionary War. I would like to point out that

although I will be happy to produce the bulk of the articles for the newsletter, your contributions of either articles or even just suggestions for topics will be welcome.

One thing to keep in mind if you do wish to contribute to the newsletter is that it is intended for historical educational, genealogical and fraternal purposes; overtly political submissions will not be published.

About The Masthead

I want to talk a bit about the masthead that I have designed for this newsletter.

The central panel was created as a logo in August 2007 with the intention of being used for a newsletter following the name change of the chapter from *Blair County* to *Frontier Patriots*. That central panel consists of a number of authentic American Revolutionary War objects.

The piece of fabric is a *linsey-woolsey* blanket. Linsey-woolsey was a combination of two types of thread: linen (derived from spun flax) and sheep's wool. In traditional linsey-woolsey the linen thread was used for the warp while the wool thread was used for the weft. The resulting fabric was very strong, and although they were quite scratchy, their warmth was unbeatable. The Patriots who carried these linsey-woolsey blankets and covered up with them on chilly nights, would have been snugly warm.

Displayed on the blanket are a number of items used by Patriots during the War. There are two powder horns in the display. The most prominent powder horn is multi-colored. The purpose of the multi-coloring was partly functional and partly decorative. The lighter portion of the horn is the part of the horn which was uncarved; the lighter color represents the original horn in its unfinished state. The darker portions of the horn represent the result of having been scraped thin by the hornsmith. The thinner the horn was scraped, the more translucent it became, allowing the Patriot to actually see how much powder he carried. In this particular example, a light colored ring was carved into the horn; that was strictly for decorative purposes. The base, *i.e.* a piece of wood shaped to fit tightly into the wide end of the horn's body, is flat and has an eye-screw screwed into it. A piece of leather 'string' was tied on one end to the eye-screw in the base and tied on the opposite end around the horn's spout. The base and only a small portion of the horn's body of the second powder horn is visible at the left side of the panel. The base of that second horn was carved into a round or dome shape.

A pair of steel spurs are positioned to the

left of center, below the prominent powder horn. Although it cannot be seen easily in this image, the arms of the spurs culminate in rings, to which leather straps or catgut strings would have been tied. The spur would have been positioned onto the back of the Patriot's boots, hugging the heel, and the straps or strings would have been pulled tightly forward and tied on the front of the boot. The short tail of the spur holds a tiny spoked (free to rotate) wheel, which was used by the Patriot to goad the horse to move. The Patriot who wore these spurs on his boots, by jabbing his heels against or into the sides of the horse, would poke the horse's hide with the tiny spokes of the spur's tails. The tiny spokes would not have been long enough to penetrate the horse's hide and cause lasting damage, but they would definitely have made the horse uncomfortable, causing it to move. Cavalry officers, and other commanders who would have ridden horses, could afford to buy, and often did buy, expensive spurs made of silver, but the ordinary cavalry soldier wore spurs, such as this pair, made of steel. Steel was strong and durable and could withstand getting wet without rusting.

There are two metal balls resting in the upper, left corner of the panel. The smaller of the balls is a *musket ball*. The musket ball preceded the bullet used in later rifles, and because the muskets' barrels were not 'rifled' the projectile fired from them did not need to be cast with a conical shape. The Patriots, themselves, while bivouacked in camp, would melt down whatever metal objects they could scrounge up and pour the molten metal into hand-held molds. The larger metal ball, which measures about two-and-one-half inches in diameter, is a cannon ball. This particular cannon ball is solid and was called a *two-pounder* because that is what it weighs (as noted in the previous article). Cannon balls tended to be cast of either iron or steel; the steel ones which survive, such as the one included in this display, have not rusted. The only blemishes that appear on this cannon ball's surface tends to be slightly flat spots ~ evidence that the ball must have struck a solid object.

Flanking both sides of the central panel

are twelve flags which were used by various factions of the Patriots who supported the Patriot Cause during the American Revolutionary War.

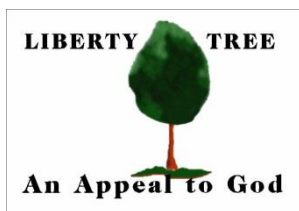
Occupying the top position on the left side is the “Liberty” flag. The British *Red Ensign* was the standard flag used by the English prior to the War. It consisted of the Union Jack in the canton on a field of solid red. The solid red field was often comprised of damask fabric. *Damask* was a type of fabric woven with an overall floral pattern. Many people nowadays do not know what damask was, and are surprised to see the floral pattern covering the surface of the red



field. And it should be noted that there was also a British *Blue Ensign* and a British *White Ensign*. The different colored flags were used in

different situations (e.g. naval, fortifications, etc.) When it became evident that the colonists would come to blows with the British mother country, the British Red Ensigns, at the time being flown from just about every land fortification throughout the colonies, were taken down to have the word “Liberty,” or the phrase “Liberty and Union,” painted on the bottom of the red field. The Patriots instantly had a flag to express their position and attitude toward the mother country.

The flag occupying the second from top position on the left column was known as the “Liberty Tree” Flag. It was included in a portrait of Commodore Esek Hopkins by Thomas Hart. In 1776 Hopkins was commander of the fledgling “American Fleet”. It is not known if this flag actually existed, or if the artist simply fabricated it himself.



The third flag was designed by Benjamin Franklin and John Adams in 1778. It consisted of thirteen repeating (top to bottom) red, white and blue stripes with a canton of a blue background on which were thirteen eight-point stars in three rows of four / five / four stars.



The “Gadsden” Flag has recently been embraced by numerous factions advocating for a variety of socio-political issues around the country ~ perhaps because it bears the image of a coiled rattlesnake and the legend “Don’t Tread On Me.” The image and legend make it appear fierce and formidable. This flag has been acclaimed as the official flag of the United States Navy since it is claimed to have been the ‘first’ flag used by the Commander-In-Chief of the Continental Navy. Unfortunately none of that ‘history’ is true. No original flag exists to show what the design was. The flag that is proudly embraced today as the ‘official navy flag’ was designed in 1849 by



B.J. Lossing for his book, *The Pictorial Field-Book Of The Revolution*. Christopher Gadsden has been credited with designing this flag, but that is only because he presented a flag bearing the image of a rattlesnake and the “Don’t Tread On Me” legend to the South Carolina Provincial Congress in February 1776. The notes for that assembly states only that Gadsden ‘presented’ the flag, not that he ‘created’ or ‘designed’ it. Irregardless of the actual facts, this design has been embraced as one of the truly ‘revolutionary’ statements of the War.

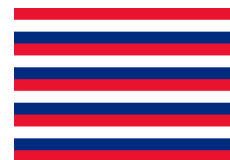
The only flag used during the American Revolutionary War to bear blue and white stripes and a canton of white stars on a red background was the “Fort Mercer” flag flown at Fort Mercer in 1777. Fort Mercer stood on the New Jersey side of the Delaware River, opposite Fort Mifflin. No one knows why the flag had the red and blue portions reversed.



was the “Fort Mercer” flag flown at Fort Mercer in 1777. Fort Mercer stood on the New Jersey side of the Delaware River, opposite

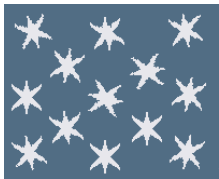
The flag shown at the bottom of the left column was known as the “Tri-Colored Stripes” flag.

It consisted of thirteen alternating red, white and blue stripes (top to bottom) filling the field without any canton. This flag was flown on the brigantine, *Lexington*, and in 1777 was hoisted over Fort Stanwyx. F.J. Hudleston, in his book, *Gentleman Johnny*



Burgoyne stated that tradition told that the flag was made from a woman's petticoat, a soldier's shirt and Colonel Gansevoort's military coat.

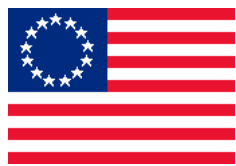
Now we come to the six flags displayed in a column to the right side of the central panel. And topping that column is "Washington's Headquarters Standard." Throughout the War, General George Washington flew this flag alongside the marquee that he used as his



traveling headquarters. The flag consisted of a solid blue field onto which were affixed thirteen six-pointed white stars. The orientation of the stars varied from one to the

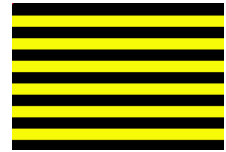
next. They were arranged in a 3 / 2 / 3 / 2 / 3 top to bottom pattern.

The second from top flag on the right side column is the well known "Betsy Ross" flag. It has thirteen alternating red and white stripes filling the field and a blue canton on which lies a circle of thirteen white stars. Traditionally, the stars were five-pointed, but the flag was often depicted in artwork with stars that had six points. The *tradition* that Betsy Ross created the flag's design as a response from a request by General George Washington has been proven to be just that ~ a 'tradition', rather than a fact. Apparently two of Mrs. Ross' grandsons began telling the story of their famous grandmother in 1870, but there exists no proof of their story. This is the flag that came to be known as the "Stars And Stripes" and is the one depicted as being carried on the boat carrying General Washington and others across the Delaware River on Christmas Eve 1776.



The flag occupying the position of third from top in the right side column is one of the more unusually colored ones: it consisted of a field of alternating yellow and black stripes and

no canton. This flag was called the "Naval Privateer" flag. There was also a variation of this flag in which the black stripes were substituted by white stripes.



One of the most unique flags of the American Revolutionary War was the one displayed fourth from the top of the right-side column. This flag, known as the "Bedford Militia" flag was named for Bedford, Massachusetts. It was carried at the Battle of Concord on 19 April 1775 by the Bedford Company of the Middlesex Regiment of the Massachusetts Militia. The flag's field is made



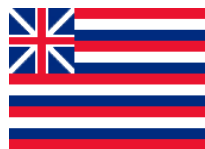
of crimson damask fabric on which is painted an arm covered in armor and holding a sword upright. The arm is emerging from a cloud. A floating ribbon banner that surrounds the sword

holding arm bears the motto: "Vince Aut Morire," which translates as "Conquer Or Die." The Bedford Militia Flag is sometimes referred to as the "Concord Flag" due to it having been carried at the Battle of Concord.

The flag that is displayed second from the bottom on the right side is an example of a French regimental standard. It was used by the French army's Champagne Regiment. A detachment of that regiment participated in the Siege of Savannah on 09 October 1779 and carried this standard.



The final flag displayed on the right side column was called the "Continental Union". Similar to the British Red Ensign which bore the Union Jack in the canton, this flag, instead of



having a solid red field, had thirteen stripes consisting of alternating top to bottom red, white and blue stripes.

Reminder:

The next meeting of the Frontier Patriots Chapter is scheduled for
06 September 2014 at King's Restaurant, at 3000 6th Avenue, Altoona.

Also Note:

The Frontier Patriots Chapter's website can now be accessed at:

<http://www.motherbedford.com/FrontierPatriots.com>

The Bedford County Resolves

On the 9th of May, 1775 a meeting was held at Bedford, Pennsylvania. That meeting, of various influential residents of the county, was held in response to a notice that had been sent out

by the Bedford County Committee of Correspondence. What follows is the text of a set of *Resolves* that were "*unanimously entered into*".

Resolved, That this County will immediately form themselves into Military Associations, and prepare themselves, in order to defend their lives, liberties, and properties, from any illegal attempts made against them.

Resolved, That each Township in this County shall be immediately notified to assemble themselves at a certain day and place most convenient for that purpose, and then and there, by ballot or otherwise, choose Officers in their respective Townships.

Resolved, That the said Officers, when chosen, shall make out a Roll, and each man shall subscribe his name in said Roll; and that the Captain shall immediately transmit a copy thereof to the Committee of Correspondence at Bedford.

Resolved, That the Committee of this County shall purchase all the Powder and Lead in any store that may be had within the said County, and have the same put up in some safe Magazine in the Town of Bedford, for the use of the said Soldiers; and that each Company shall, by subscription, make up a proportionable part of the same; which Ammunition shall not be distributed without the orders of the Committee of Correspondence of the said County, or until it shall be thought necessary by this Committee or a majority of them.

Resolved, That each Company in this County shall use their utmost endeavors to purchase or provide all the Ammunition they can, so that no person in the said Company shall have less than one pound of Powder, and Lead in proportion.

Resolved, That as soon as the said Companies are formed, they and each of them shall be subject to military regulations and discipline, in the same manner as any other of His Majesty's Troops are (corporeal punishment only excepted.)

Resolved, That in case any person or persons in this County shall refuse to subscribe himself in a roll of some Company in the said County, in order to defend the cause of liberty now contending for, or by any ways or means whatever discourage or disunite the said Associations, that then he or they so offending shall be immediately reported by some of the officers of their respective Townships, to the Committee of Correspondence at Bedford, in order that such steps may be taken as by the said Committee may be thought most prudent; and that, in the mean time, no person or persons within the said County shall, directly or indirectly, have any dealing or commerce, by either buying or selling, borrowing, or lending to or with any of the said offenders.

Resolved, That all persons within this County that are not at present provided with Guns, Swords, or Tomahawks, in case of ability shall provide for themselves, and in case of inability, that the Captain of each Company shall immediately transmit their names, or their number, to the Committee of Correspondence at Bedford, that proper measures may be taken in order to provide for them.

Resolved, That each Township shall meet and choose their Officers, and make return agreeable to the above Resolves, within the space of ten days from this date.

By order of the Committee of Correspondence: David Espy, Clerk