

# AMERICAN BOARDING PIKES AND BOARDING AXES DURING THE WAR OF 1812

By: Alan Boyd

Boarding pikes and axes are relatively simple weapons comprising of a haft of wood and two to five pieces of metal, yet they can be very deadly. To the average collector, the axe and pike do not have the artistic or stylistic appeal of an eagle head pommel silver hilt sword nor the flash of a martial pistol or musket. These utilitarian weapons take a special person to have a soft spot in their heart for admiring them. Their pragmatic tasks did not make them prized possessions passed down through generations mounted over the fireplace; "That was your great-great grandfather's boarding axe when he was on the United States Frigate Constitution" was probably never uttered at the kitchen table. Therefore these weapons are often overlooked and could probably be worked into a Rodney Dangerfield routine about how they "don't get no respect." So much overlooked are they that the book "American Axes<sup>1</sup>" does not even mention the American Naval Boarding Axe. They were not completely neglected though since Harold L. Peterson, an early ASAC member, wrote an article on the boarding axe<sup>2</sup> which became a chapter in his "American Indian Tomahawks" book.<sup>3</sup> They were also discussed in *Boarders Away with Steel* by Gilkerson<sup>4</sup>, and *Small Arms of the Sea Services* by Colonel Rankin<sup>5</sup>, and *American Polearms* by Brown.<sup>6</sup> So it is time to take another look and perhaps clear up some erroneous conclusions from these references about boarding pikes and boarding axes.

Boarding axes were used hard and when broken or worn down until they could no longer be sharpened, they were discarded. Boarding axes that were brought home with a Sailor became useful tools around the house, shop, or farm and were often turned into a regular axe on the workbench or left in the barn. Boarding pikes were a bit more difficult to be brought home since they were approximately 8-foot long and fairly obvious when they were being removed from the ship. Many of the boarding axes and boarding pikes were lost when their vessel was sunk or sold off as surplus items, including in some early Bannerman catalogs. Therefore, true examples from the War of 1812 period are fairly rare and difficult to study as a collection.

## Boarding Pikes

What is a Naval boarding pike? It is an approximately 8 foot long wooden haft that is circular in cross section with a metal point on one end and a wooden ball or rounded end on the other. Before we go into detail on these aspects we should consider its origin. The boarding pike is a variation of the land based pike. Differences are the boarding pike is shorter and does not have a metal shoe on the base of the wooden haft. The pike, which had been around for centuries, was going out of favor as a weapon on land and no longer in standard use within the Federal period armies. The land based pike was often 13 to 16 feet long and would be used to create a wall of points by having several pikemen standing behind a kneeling pikeman in a column; each person had a slightly

longer pike and was situated so that the points were roughly in the same location. When several of these columns were placed next to each other in a row, they made quite a formidable wall of sharp points that was used to deter an enemy's cavalry or infantry. The configuration of wooden ships did not lend to the same tactical configuration on the deck at sea; quarters were too tight and personnel too limited to employ this tactic. Additionally, throw in the standing and running rigging and the 16-foot pike was essentially non-functional in the maritime environment; therefore the length was shortened to approximately 8 feet. Essentially half the length of the land based pike was functional on the deck of a ship; it was long enough to reach out to the enemy but short enough that it could be handled without becoming caught in the rigging or on a mast or accidentally hitting one of your shipmates. The majority of the boarding pike hafts are circular in cross section and have a consistent diameter. Several of the later made pikes have a bulbous haft that narrows where the forward hand would hold the haft, and it additionally had a wider bulb just after the point, which helped stop its penetration into your adversary.



Figure 1. US War of 1812 boarding pike, Type I pike, leaf point, top and side view. Note langlets on right side of image.



Figure 2. Revolutionary War Pike Leaf Point top and side view. Note no langlets present



Figure 3. Type II pike, transition point.



Figure 4. Type II Pike Transition Point with langet. Note width of sides is different



Figure 5. Type III pike spike point (tapered) All sides are same width



Figure 6. Type III pike spike point , tapered (top) and no taper (bottom).

### ***Type I, II, and III Boarding Pikes and their Construction***

The point of the pike falls into three major categories: leaf, transition and spike. They have been designated Type I, II and III respectively by Gilkerson.<sup>7</sup> The leaf version (Type I) is an earlier design and a bit more work to manufacture (Figure 1). Leaf pikes were hand crafted during the Revolutionary War and did not have langets (Figure 2). The leaf is similar to a beech tree leaf or the spade suit on a deck of cards; from the base it expands out in a circular manner till it reaches its widest part and then the width begins to narrow. Eventually the inflection changes and tapers up to the point. The expansion is about 1 ½ inches and the narrowing is about 3 ½ inches for a total length of 5 inches from the neck of the blade. The transition (Type II) is how the point changed from a leaf to a spike configuration (Figure 3). The transition has a very small expansion / shoulder about 1/4 inch and then instead of tapering up like a beech leaf, it narrows in a straight line transition to a point in about 9 inches. This is similar to a dagger or straight dirk blade (Figure 4). The final configuration is a spike (Type III), the US version is a four sided square that has a very small expansion from the neck of

the point (¼ inch), and then has a straight line tapering to the point about 5 ½ inches up (Figures 5 and 6). It should be noted that the cross section of the blades also changed as the leaf (Type I) has one side much wider than the other; the edges are thin and there is just a bit of thickness to the center. The transition point (Type II) has more thickness and begins to take on a diamond shape. Finally the spike (Type III) has all sides the same width thus becoming square in its cross section; the corner of the square can either be in line with the langet or rotated 45 degrees so that a smooth side of the pike is in line with the langet.

As shown in Figure 2, the Revolutionary War naval boarding pikes were simply attached to the end of the pike by a conical base and pinned/riveted to the wooden haft. During the War of 1812 the attachment had been refined to have langets, approximately 10 inches long, attaching the blade to the top of the wooden haft by metal rivets. The langets make the pike stronger and less likely to break at the end as there are two to three rivets that are holding the point onto the haft. Additionally it strengthens the pike so the point is less likely to be cut off by a cutlass or an axe. The langets are often flush with the wood on the pike (Figure 7). The Type I (leaf) pike has its langets only partially inset into the wooden haft (Figure 8). It is not conclusive if this is a remounted haft or the original haft. It had been in England for many years and is reported to be taken from the United States Frigate CHESEAPEAKE during her loss to the HMS SHANNON; only about a dozen of these boarding pikes are known including those in the Koch collection.<sup>8,9</sup>



Figure 7. Langet is inset flush with wooden haft.



Figure 8. Leaf langet partially flush with wooden haft.



Figure 9. Ball or rounded bottom finish to pikes.



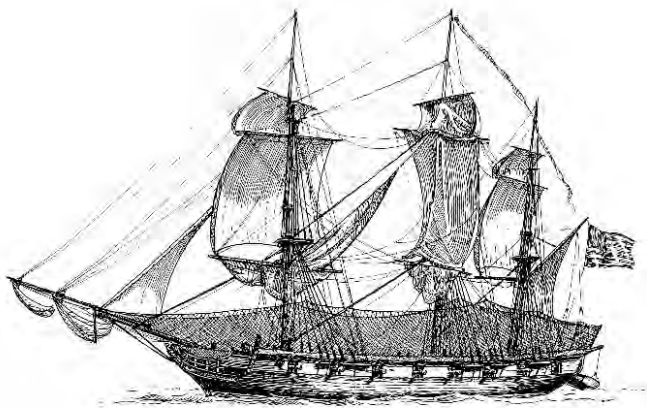
Figure 10. Metal cap on bottom - land pike or spontoon.

The bottom finish on the boarding pike will usually have either a wooden ball on the end or rounded finish to the haft (Figure 9). This is different than the land based pikes which usually have a metal cap on the bottom to prevent splitting of the haft and to assist in sticking the pike into the earth (Figure 10). Boarding pikes are not normally stuck in the ground and on board a ship the metal cap could create a spark and cause a fire or explosion. Additionally the metal cap would mar the wooden deck. Remember the boarding pike was used when the ships were alongside each other, which normally occurred after several broadside exchanges of cannon fire. Spilled powder would often be on the deck or buckets for a subsequent reload; therefore preventing sparks was a prudent design.

### Use and Tactics

Even though the naval battles at sea during the War of 1812 started with exchanges of cannonballs, it may not matter if who received the worse end of the barrage. Remember John Paul Jones' action of the BONHOMME RICHARD vs the SERAPIS; the BONHOMME RICHARD was sunk but John Paul Jones won the fight by sailing away in command of the SERAPIS. Therefore the hand to hand combat of a boarding action could turn the tide of the battle, so prior to pulling alongside the other ship, the Sailors would often raise netting to help prevent the enemy from being able to easily board their vessel (Figure 11).<sup>10</sup> The netting meant that one could not easily swing over on a line and land on the deck ready to fight. Instead it meant the Sailors would have to climb up the rope netting and then jump or climb down. While the person was climbing up the net, they were exposed to someone reaching out with a boarding pike to push them off or at least severely injure them. The boarding pike fit this function perfectly and this tactic was considered one of the primary uses of the weapon.

The boarding pike was not just a defensive weapon, it was infrequently used offensively. It was useful in a transition to close quarter combat. It doesn't require time to reload between uses and it doesn't fail in rain. It was used in daily practice for the art and discipline of war on the United States Frigate PHILADELPHIA.<sup>11</sup> Finally it is relatively silent in initial use which is one reason it reportedly was selected as a weapon for Stephen Decatur's night-time raid to board and burn the PHILADELPHIA from the Barbary pirates.<sup>12</sup>



4 The ship Jason of Boston with her boarding nettings rigged, from a water color made by Antoine Rouss, in 1802.

Figure 11. Netting to prevent boarding.<sup>10</sup>

### Differences from other Hafted Weapons

Differences between boarding pikes and other hafted weapons become fairly evident upon visual examination. The lack of a metal cap on the haft's bottom and the significantly shorter haft are differences with the traditional land pike that are discussed above. The British boarding pike of the period had a spike point but it only had three sides (Figure 12). Therefore it was triangular in shape compared to the American square shape. The spontoon is another hafted weapon from the period, but the boarding pike does not have the spontoon's small cross bar since that would likely be caught in netting or lines (Figure 13).



Figure 12. Triangular spike point British boarding pike.



Figure 13. French and Indian War/Revolutionary War spontoon.

### Shipboard Quantities

The Gilkerson's general rule of thumb for the quantity of pikes is two pikes per gun.<sup>13</sup> The initial three frigates had one hundred pikes delivered and each had 44 guns.

- 100 delivered to Frigate CONSTITUTION 12 Aug 1797
- 100 delivered to Frigate CONSTELLATION 31 Mar 1798
- 24 delivered to Frigate UNITED STATES 5 Apr 1798
- 76 Frigate UNITED STATES (John Barry, Command USN) 12 Jul 1798<sup>14, 15</sup>

Therefore Gilkerson's general rule of thumb initially appears close especially when rounded to integers (2 vs 2.3 will both be 2) for the number of pikes per gun, so maybe they carried a few spares (12 pikes). The boarding pikes were often stored around the mast and not just alongside the cannon, so it makes sense that there was not an exact correlation. But when the 29 March 1798 Estimate of Building, Rigging and Equipping three Ships of War (Figure 14) to carry 22, 20 and 16 guns together with the cost of manning and victualling the same for 12 months is referenced there is a much different number from the general rule:<sup>16</sup>

- 22 Guns 100 Boarding Pikes
- 20 Guns 100 Boarding Pikes
- 16 Guns 600 Boarding Pikes (60?)

Note the 600 pikes to 16 guns is a 37.5 pikes per gun which seems a bit high since there weren't 600 Sailors in the crew. This is believed to be an error in the handwritten version and most like-

ly should be 60 verses 600. Even so these averages are between four to five pikes per gun, a bit more than just rounding to the nearest integer. Note in the dates where the initial one hundred are delivered to each of the initial three frigates there are several more that are signed for receipt by the Navy, so it appears that they either had 300 extra spares in inventory or preordered the initial outfitting for the next three frigates.



Figure 15. Boarding pike US marking.



Figure 16. Boarding pike NYW (Navy Yard Washington) marking.

*Military Stores*

	Qty of 22 Ga. 1/2	Qty of 20 Ga. 1/2	Qty of 16 Ga. 1/2
Gun's bayonets	2660	2391	1330
Gun bayonets	797	720	600
Small shot	194 3/4	127 1/4	437 1/2
Large shot	217 2	290 90	167 2
Lead shot	254	197	140
Subs	110	90	40
Colony's 20 ga.	13	13	10
Small shot	20 10	20 10	13 40
Shot	23	25	15
Shot & pieces of shot and shot	33	33 20	26 00
Shot	3660	3600	2200
Musket and bayonet (complete)	626 50	626 50	393 25
Shot	230	250	120
Shot	410	400	240
Shot	100	100	600
Shot	30 25	30 25	24 79
Shot	10	10	5
Shot	30	30	15
Musket and shot bayonet	119 50	112 50	60
Shot	25	25	15
Shot	17 34	17 21	2 67
Shot	4 2	4 2	2 1
	2950 90	2201 95	4615 16
Major Clothing etc (small)	625	625	375
	3575 40	2826 95	4990 16

Figure 14. Estimate of building rigging and equipping ships of war.<sup>17</sup>

**Markings**

Markings on the boarding pikes are not as consistent as those on muskets, rifles or swords/cutlasses that the Federal Government accepted. The markings, when present are typically a combination of 1) US, 2) the Navy Yard that they were inspected (or possibly even manufactured), 3) the manufacturer, and/or 4) the acceptance inspector's initials.

**Boarding Pike Markings**

- United States – U.S. (Figure 15)
- Washington Navy Yard – NYW (Figure 16)
- Boston Navy Yard – NYB
- New York Navy Yard – NYNY
- Nathan Starr – Manufacturer
- Prahl – Manufacturer

**Inspectors**

- HHP - Henry H. Perkins (Inspector of Starr swords 1810-1816)
- JT - Joseph Tarbell (Inspector WNY till “approximately 1805 to 1812”) (NIAGARA pike on the Great Lakes)
- LS - Luther Sage (Inspector 1813-1836)



Figure 17. Boarding pike spike cover marked USNY (United States Navy Yard) Boston.

### Period Preservation against the Elements

Conditions at sea and in port were harsh and fought against the Sailors to preserve the boarding pikes for continued use. Some were whitewashed or painted on the wood and many had leather covers for the spike while stored. Figures 5, 7, and 9 show period whitewashing. The leather covers have a string to retain them on the boarding pike and many covers are marked with the Navy Yard where they were inspected (or manufactured, Figure 17 has USNY, United States Navy Yard, Boston).

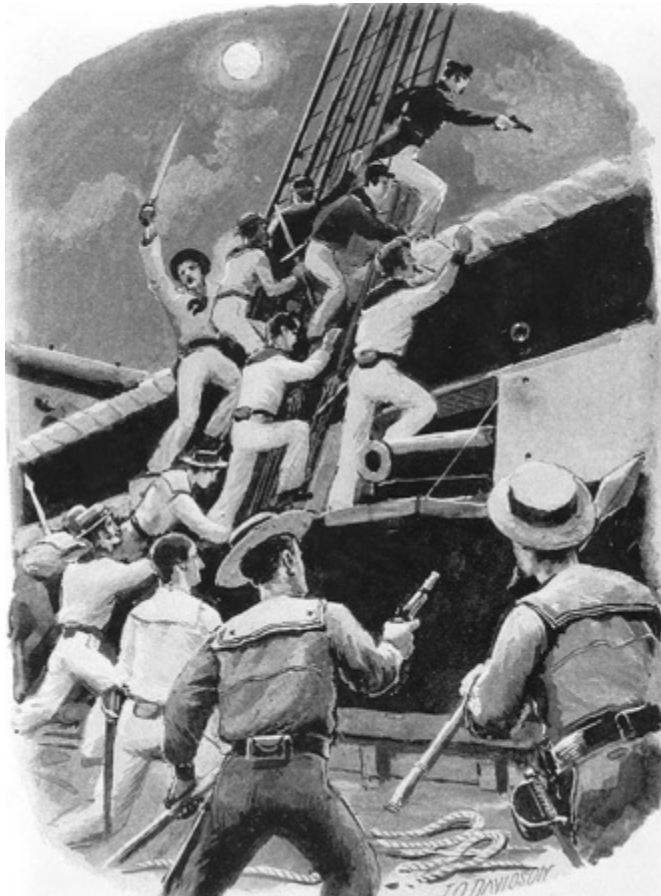


Figure 18. Boarding the Philadelphia by J.O. Davidson.

### Quarter Pikes

So far this article has focused on the 8-foot naval boarding pike, but a variant – the 3-foot quarter pike – does exist. These pikes have a large leaf point (8 1/8") and a turned wooden handle (28 3/8") and have been referenced in a few books<sup>21, 22</sup> which reference a receipt from the United States Frigate CONSTITUTION's initial outfitting. Several other period records refer to the initial frigate's outfitting as boarding pikes. There is an illustration of Decatur's assault to retake the PHILADELPHIA which has two Sailors carrying short quarter pikes (Figure 18). The illustration has the pre-War of 1812 Sailors in Civil War uniforms, about 55 years before they were designed, and the covers for the gun ports lower down like a drawbridge vice rising up like the actual ones did on the PHILADELPHIA.<sup>23</sup> Subsequently there has been some study of the quarter pikes which indicate that they are recent manufactured items that started during the CONSTITUTION's refurbishment in the early 1900s; they were presented to volunteers, donors, and VIP visitors.<sup>24, 25</sup> The letter from John Harris to Joshua Fox on 11 August 1797 is another example (Figure 19).<sup>26</sup> Remember these are the same personnel that list musket flints, Charleville style mus-

ket flints, and pistol flints as three separate items in the inventory. Also similar differences are done for entries about cannonballs that are of various weights. These flints, especially the musket flints and the Charleville style musket flints, are roughly the same size with much less than an inch difference. Yet the same storekeeper would list 8-foot and 3-foot boarding pikes as equivalent items?<sup>27</sup> On the John Harris letter one would think the Government would be willing to pay a bit more for the additional 5-foot of wood on the haft for the full length of boarding pike over a quarter pike.

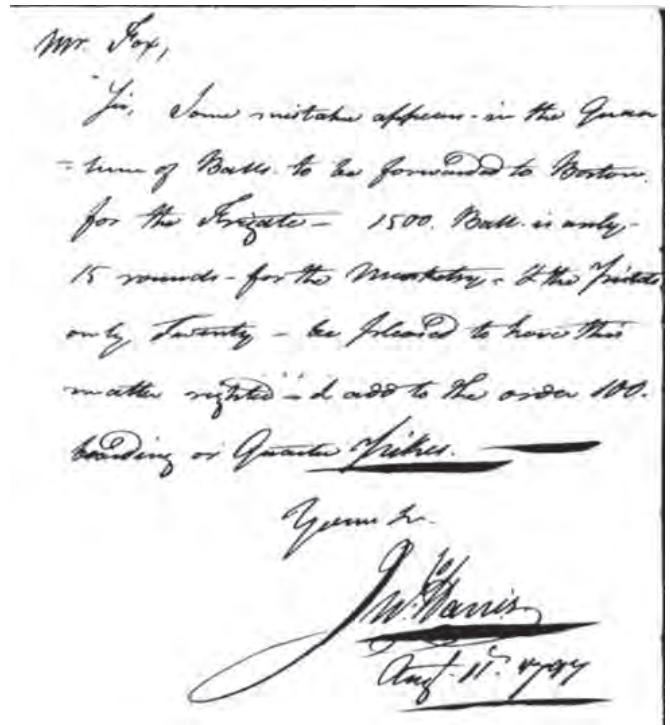


Figure 19. John Harris letter on boarding pikes 11 Aug 1797.<sup>27</sup>



Figure 20. Quarter pike.

Could it be that they were referencing the same item and that the quarter pike is a boarding pike that was used at quarters (battle quarters)? The Maritime Museum in Norfolk has their quarter pike displayed as "Edged Arms, Pike, Boarding, Reproduction".<sup>28</sup>

The quarter pikes in Figure 20, are japanned and show signs of wear. Their leaf heads are riveted onto the wooden haft and are constructed from steel, similar to items made during the War of 1812. Some of the quarter pikes have screws (instead of the rivets) attaching the head onto the haft and the blade is made out of aluminum. Those are definitely from recent manufacture. It is

not possible to tell if the wear on the quarter pike in Figure 21 is from 200 years ago or “only” from the last 100 years. The leaf head boarding pike had long transformed to the spike pattern before the Civil War. Therefore there is no definitive evidence that would withstand a lawyer’s cross examination to irrefutably prove or disprove that quarter pikes did not exist during that period, but N. Flayderman the publisher of Brown’s American Polearms had an “aged” one from his collection “thoroughly dismantled” which was instrumental in proving that the quarter pikes are recently constructed and not from the War of 1812.<sup>29</sup> The majority of the available information about quarter pikes implies that they were manufactured after the War of 1812. Although there are a few antique dealers out there with quarter pikes in their inventory that will disagree; but it also might explain why their quarter pikes are still in their inventory.

### Boarding Axe

It is time to discuss the next hand based weapon – the American Naval Boarding Axe. Like the boarding pike, the boarding axe doesn’t get much respect; one person transcribing the old records from their meticulous script handwriting lists them as boarding axes in the Federal Papers.<sup>30</sup> So unless the mischievous Sailors were ordering a bunch of extra playing cards to cheat during a “friendly” card game, the quartermasters were ordering replacement boarding axes. What is a boarding axe? It is the naval variation of a land based axe or tomahawk. The boarding axe is approximately two feet in length and its head approximately one foot in width from tip of the spike to the edge of the blade. The hafts have a circular cross-section and often terminate with a ball or oblong ball at the end away from the haft. The ball at the end ensures that the axe does not slide out of your hand, especially if you are using it to climb up the side of your adversary’s boat to attack on their deck. The blade portion of the boarding axe is directly descended from its land based tree felling cousin. It is longer than a hatchet but not as long as a logger’s felling axe. The spike or pick on the opposite side of the axe blade is similar to many of the tomahawks of the period that were used by Native Americans, Ranger units and frontiersmen. There are three recognized types of US boarding axes from the War of 1812 period; similar to boarding pike categorization.<sup>31</sup> All three types of American axes have one or two teeth on the side opposite of the blade or on the underside of the blade. This is a distinctly American innovation and is not present on boarding axes from any other country. The teeth made it easier to snag a burning line or sail and throw it overboard without having to physically grab it with your bare hands. We must remember that the boarding axe was primarily a tool aboard the ship except when engaged in close quarter melees or shore excursions, in which it was a very effective weapon. Additionally you could use the teeth to catch the edge of another ship’s rail that you were climbing up to board and attack. The main differentiations between the three types are the construction of the metal blade and their use of langets. The teeth made the American boarding axes easily identifiable as far back as 1932 by Mr. G. S. Laird Clowes, Director of The Science Museum, South Kensington London.<sup>32</sup>

#### Type I Boarding Axe

Type I axes have a blade that is much wider than the support that goes back to the haft. Its look is similar to a rectangular flag hanging down from a pole (Figure 21). The space on the back side of the blade is where the first teeth appeared on American board



Figure 21. Type I American boarding axe.



Figure 22. Type I Axe rivet perpendicular to wedge.



Figure 23. Type I axe rivet through wedge.

ing axes. There are two horizontal teeth that point back towards the haft. The blade is constructed by folding two pieces of metal around the haft and stronger piece of metal is folded in to increase the strength of the blade. The pick (spike) extends from the opposite side of the haft. The pick was in itself a deadly weapon, perhaps more lethal than the axe blade since all of the force of a swing was concentrated on the point of pick (spike). There are no langets to hold the metal head of the Type I’s axe head onto the haft and the axe is capless, so that you can see the top end of the haft. The metal head was attached by having a wedge of wood inserted into the top of the haft to hold the head’s ring in place, a practice that is still used on many axes today. This is how the head of the Type I axes marked VIM are attached; axes made by Fred Hoffman, Philadelphia, also include a rivet. On Hoffman’s axes there are two holes in the metal ring around the haft - where the rivet was inserted. The rivet pierces the wedge; with the intention that the wedge and the head were not to come loose. There are different configurations of the rivet on two axes examined. The first Hoffman Type I axe has its rivet piercing the wedge’s center. The rivet and the wedge are both the length of the haft’s diameter and

meet at a perpendicular angle (Figure 22). The second Hoffman Type I axe has its rivet piercing the length of the wedge. Again the rivet and wedge are along the length of the haft's diameter but essentially take up the same space (Figure 23).



Figure 24. Type II American boarding axe.



Figure 25. Type III American boarding axe.

triangular than the Type I's rectangular flag. The blade is a singular piece of metal with two langets used to attach the blade to the haft using two rivets. The axe head appears to be one integral casting for its construction. The Type II construction seemingly places it in between the Type I and the Type III. The Type II adds langets to the axe head, which is fairly similar to the Type I construction. Additionally it is a much simpler construction than the more intricate construction of the Type III axe head described below. The Type II's haft has wood removed so that the langets are flush with the surface of the haft. Since there is not a back portion of the blade, the singular tooth is cut into the bottom of the blade that points downward; the tooth is parallel to the haft and point towards it like the Type I's teeth. (Figure 24).

**Type III Boarding Axe**

The Type III axes also have a tomahawk blade shape, similar to the Type II (Figure 25). Additionally the Type III boarding axe has one tooth in the same location under the blade as the Type II boarding axe. The retaining head has a much more complex design than the Type II. There are two or three pieces to the Type III boarding axe head – depending on the variant. This had not been noted in the previously cited references but there are two cap variants – solid cap and split cap. The solid cap is one piece that has two langets (Figure 26); the split cap has two pieces – each piece has one langet (Figure 27). Both versions then go inside the



Figure 26. Type III boarding axe, solid cap.



Figure 27. Type III boarding axe, split cap.



Figure 28. Side by side split (left) and solid cap (right) Type III boarding axes.

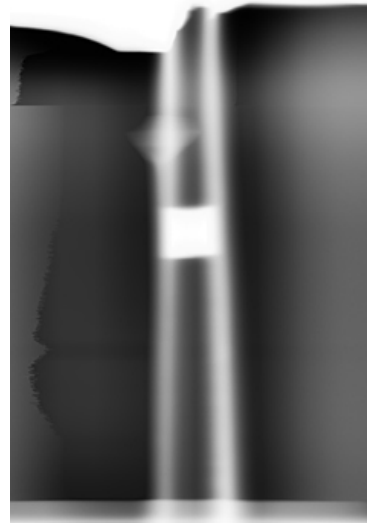


Figure 29. Panoramic X-ray of Type III US boarding axe displaying narrowing of the internal haft moving towards the top of the axe (dark vertical area in the center of the image is the haft, note that it tapers going towards the top) with the langets on either side (the parallel white lines on either side of the haft). The white square in the middle is a rivet.



Figure 30. Type III boarding axe reinforced socket bowl; note the reinforcement between the blade and socket.

**Type II Boarding Axes**

The Type II axes have blades that are more like a tomahawk blade. The blade tapers back to the support and looks much more

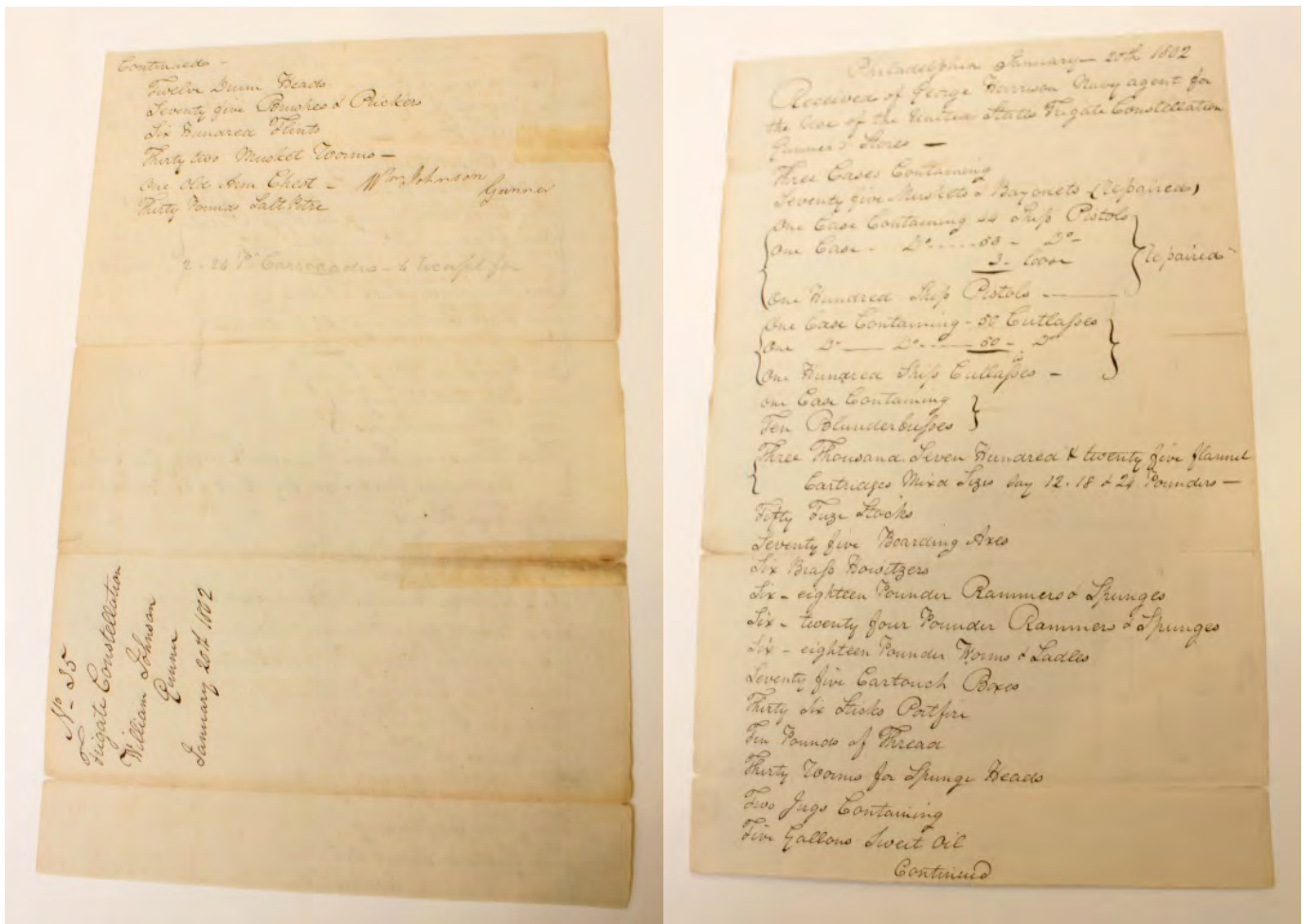


Figure 31. CONSTELLATION Gunners Stores Inventory 20 Jan 1802 front and back (right).

ring of the axe blade and pick and over the haft (Figure 28). The langets are then attached by two rivets through the haft. The lip of the solid cap (or the spilt cap) hold the axe head onto the haft. The ring with the axe blade and pick has the cap's lip on top and there is a wooden lip at the bottom; these two lips with the langets' rivets firmly hold the axe in place. One of the split head variants had been taken apart a few years ago, unfortunately pictures were not taken of the internals, but it was reported that the wood tapers up to a very narrow piece. Most of the Type III axe inside the ring is solid metal going down to the langets to provide the strength and retention of the head. X-rays of two Type III axes on their original hafts show the narrowing, as seen in Figure 29 for one axe on its original haft. It is noted that there are at least four solid cap variants of Type III boarding axes in existence in private collections; the majority of Type III boarding axes are of the split cap variant.

**Variants**

Gilkerson recognized a variant of the Type III boarding axes that is different than the solid cap/split cap variant identified above.<sup>33</sup> The second variant is how the axe head and the pick attach to the ring around the haft. This variant is called reinforced socket bowl and it has a reinforced connection of the axe head and the pick (spike) to the ring (Figure 30). It should be noted that this is very similar to many Peace Pipe Tomahawks that are attributed to the late 18th Century (examples from auction catalogs or Peterson's tomahawk book<sup>34</sup>).



Figure 32. British boarding axe, note the absence of teeth on the blade.



The two different variants identified above for the Type III boarding axe imply that there were at least three different manufacturing runs of the Type III boarding axe and possibly three manufacturers. One manufacturer appears to have made peace pipe tomahawks for the “Indian Trade” and reused the reinforced socket bowl for their boarding axe. It is interesting that all three variants do not have a visible manufacturer’s mark, but all were inspected at the Washington Navy Yard. The alignment which required the langets inlaid and flush with the wooden haft with a narrow tapering required a large amount of skill.

The bottom of the Type II and Type III boarding axes consist of a ball or oblong ball turned from the same wood as the haft. Parallel lines around the diameter of the ball are often included. Many boarding axes also have a hole drilled towards the end of the haft for a leather strap to go through which allowed the Sailor to prevent loss of the axe overboard by having the lanyard around his wrist.

**Shipboard Quantities**

Boarding axes are given a general rule of thumb for the quantity of two axes per gun.<sup>35</sup> Tench Cox received 350 boarding axes on 27 Aug 1797. The initial three frigates had 100 axes delivered and each had 44 guns. These numbers are the same quantities as the boarding pikes.

- 100 delivered to Frigate CONSTITUTION 29 Sep 1797
- 100 delivered to Frigate CONSTELLATION 31 Mar 1798
- 100 Frigate UNITED STATES 12 Jul 1798<sup>36</sup>

Note that boarding axes and boarding pikes were delivered to the United States Frigates CONSTELLATION and UNITED STATES on the same day.

On 20 January 1802, the Gunner’s Stores Inventory for the United States Frigate CONSTELLATION lists the inventory as 75 boarding axes (Figure 31).<sup>37</sup> Therefore there was a loss of at least 25 axes over a four year period. No mention is given for the 25% reduction in inventory; whether they were broken, lost over the side or taken home as a useful tool. Many possibilities exist especially since it is easier to hide a 2-foot axe while going ashore than it is for an 8-foot pike. The gunner’s inventory indicates that the boarding axes were used and had a fairly high turnover rate.

**Markings**

Markings on boarding axes are a bit different than those on most other naval arms (muskets, pistols, cutlasses or blunderbusses). One can consider the American boarding axe’s markings to consist of both the stamped letters and the teeth. Their teeth are distinctly an American marking; no other countries used this innovation on their naval boarding axes (Figure 32 for a British example). Additionally you don’t see any teeth on the peace pipe tomahawks of the period. This marking has been identified for many years.<sup>38</sup>

The other more standard markings are similar to the markings on boarding pikes. They have the U.S. and sometimes the manufacturer’s name, the inspector’s initials and/or the navy yard where the inspection occurred. It is interesting that the city of manufacturer was not stamped similar to firearms procured during this period.



Figure 33. Type I blade, F Hoffman marking.



Figure 34. Type I blade US Hoffman (no first initial F) marking.



Figure 35. Type I blade VIM marking, John McLean inspected.

**The markings on Boarding Axe:**

- United States – U.S.
- Washington Navy Yard – NYW
- Boston Navy Yard – NYB
- New York Navy Yard – NYNY
- Manufacturer**

Hoffman/F Hoffman (Type I) (Figures 33 and 34).  
 Company name (Reputedly there is a marked Type II axe, but it has not been examined) (Type II)

**Inspectors**

- VIM – John McLean (Commissary of Military Stores NY 1801-02) (Type Is) (Figure 35).
- JT - Joseph Tarbell (Inspector WNY) (Type IIIs) (Figure 36).
- Ord’ce 1852 [No inspector initials during reinspection](Figure 37)

The US stamp is fairly self-explanatory; marking the US Navy as the axe's owner. It is fairly prominent and much more obvious to the casual observer than the British broad arrow's mark for the Royal Navy (Figure 38). The vast majority of surviving US Naval boarding axes were inspected at the Navy Yard Washington (NYW), so it appears that location was the primary inspection location. Some even passed through twice as the one on display at the Washington Navy Yard Museum has one with an 1852 re-inspection date stamped on the reverse of the initial undated inspection. Some Type I and II boarding axes have their manufacturer names stamped on the blade. The majority of the Type II and all of the Type III boarding axes don't have a manufacturer's mark. This is different than the British boarding axes that frequently have a manufacturer's name or city. Why the change? To date a reason has not been found in the documents at the National Archives, but the older records are not well organized and it might take a lucky day for a blind squirrel to find a letter or document that has been misfiled sometime over the last two centuries.



Figure 36. Type III blade JT marking, J. Tarbell inspected.



Figure 37. NYNY (Navy Yard New York) 1852 reinspection marking.

The most compelling information provided by the markings comes from the inspector initials. These markings restrict the period to when the officer was actively engaged in inspection duties. Most inspectors would hammer their initials into the piece, some would have another person conduct the manual labor, but all did the inspection themselves and took their die when they stopped inspecting. It was not a practice to leave the die with the inspector's initials around until the new inspector arrived. These dates help us refine the dates for the boarding axes. The Type IIIs are listed as being from the 1820-1840s in Rankin's book.<sup>39</sup> The Type III axe on page 3 in Rankin's *Small Arms of the Sea Services* was owned by Norman Flayderman and is listed as being from this twenty year period. The markings on the axe displayed in subsequent pictures clearly show the inspection mark of Joseph Tarbell at the Washington Navy Yard. The US Navy 1809 Register lists him as a Masters [sic] Commandant<sup>40</sup> and The General Register of the United States Navy and Marine Corps for One Hundred Years 1782 to 1882 lists that Captain Tarbell died in November 1815.<sup>41</sup> So as asked about the boarding pikes, did the ghost of Captain Tarbell come back during the 1820-1840 period and start inspecting boarding axes? Joseph Tarbell's service does provide a bit more clarity on the period that the Washington Navy Yard was inspecting the Type III boarding axe. He was appointed a midshipman on 5 December 1798<sup>42</sup> and served in the Mediterranean Squadron on the USS CONSTITUTION and other ships during the period of 1800-1804. He was honored by Congress for his services under Commodore Preble during the demonstration before Tripoli in 1804. He was in command of a flotilla of small boats in Norfolk under Commodore Stephen Cassin. Tarbell successfully led an expedition against the British from 19 to 23 June 1813 at Craney Island and in the James River; he received a commendation from Commodore Cassin and from the army officers ashore.<sup>43</sup> Tarbell was promoted to Captain on 24 July 1813 and died in Norfolk in 1815.<sup>44</sup> Based on the dates and locations above he would be available for inspecting the Type III boarding axes sometime during the period of 1805 through 1812. Tarbell was promoted to Master Commandant on 25 April 1808<sup>45</sup> and he commanded the United States Ship of War JOHN ADAMS in 1809.<sup>46</sup>



Figure 38. British broad arrow marking.

No specific dates of the start of the Type II and Type III boarding axes are given and there are no separate entries for the different Types in any arsenal or ship inventories that have been found to date. Therefore the stamped marks are a great help to identify the dates for the Type I and Type III boarding axes. There appear to be a several deliveries of each type since there are variations of the markings. Type I boarding axes are marked with F Hoffman or just Hoffman or VIM. Type III boarding axes have some differences on the use of the period after the US or WNY initials. Variations in the individual markings occur when they are hand stamped; similar to period swords or flintlocks that were delivered to the Government. Remember that the Type III axes have two variants (identified above) for the peace pipe tomahawk support where the axe meets the support around the haft. Another previously unreported variant is the top cap of the Type III boarding axe. There are solid caps and split caps. The difference is the solid cap will have both langets and when combined with the axe and pick will have two metal pieces. The split cap will have a single langet on each piece and when combined with the axe and pick will have three metal pieces. There are four known solid caps and two of them are the reinforced peace pipe tomahawk style and two are the unreinforced connection. All of these variations indicate several shipments from a few manufacturers over a period of time. The Type Is were the first ones delivered but there does not appear to a clear cut line of when the Type IIs and IIIs were introduced.<sup>47</sup> So it was very likely that all three were carried aboard the US Navy's vessels during the War. The Type Is and IIs were from at least before the War started and the Type IIIs were definitely introduced prior to the end of the War.

#### *Where made*

Many of the boarding axes were made in Philadelphia. Fred Hoffman was based there<sup>48</sup> and the reinforced style Type III axes are similar to peace pipe tomahawks manufacturer in the area. The tomahawks were made from the 1780s through the early 1800s. It seems different that they were some of the later axes since the reinforcement style was used prior to the first order of the Type I axes in 1797, but it could be that the winner of a later contract pulled out an old pattern and modified it to meet the new requirements. The Washington Navy Yard Museum has a Type III boarding axe on display with the citation that they were made at the Washington Navy Yard in 1800-1810. Their axe has the traditional markings for the initial inspection and on the reverse has an ORD'CE and 1852 [mislabelled on the display as 1832] for its re-inspection during inventory or refurbishment. The documentation provided for the 1800-1810 manufacturing of axes at the WNY is a Flayderman catalog that states the axe is from the 1800-1810 period. If they were manufactured at the Washington Navy Yard it is very interesting that there are three variants of the axe – solid cap, split cap and the reinforced socket bowl. One would not typically consider that many variants to be coming from a sole manufacturing site. Until a more primary source of the manufacturing site is provided, it appears that the axes inspected at the WNY were not manufactured there.

There were several bidders in 1816 for manufacturing boarding axes so we have an idea of the locations that had the capability to make them. It is interesting to see the spread of prices that were offered: 62.5 cents to \$7 per axe. Since Henry Deringer was a bidder, does that mean the Deringer collectors now need to search for a brass boarding axe to have a “complete collection of Deringers”?

- Caton, MA (Daniel Dan, Adam Kinsley, & Charles Leonard) \$7 each
- Richmond, VA (Elijah Brown) \$2.50 each
- Philadelphia, PA (Henry Deringer) Brass Tomahawks \$2.50 each
- Philadelphia, (Fred Hoffman) \$1 each
- Georgetown, DC (Isaac Hoglan) \$0.95 Navy battle axes and \$0.75 boarding axes
- Washington, DC (Sam Johnson) \$0.62½ Navy battle axes<sup>49</sup>

#### **Conclusion**

The War of 1812 is approximately the height of the Navy's use of boarding pikes and axes. There were still numerous engagements where the two opposing vessels pulled within close proximity to allow boarding actions. The improved technology of ironclads, subsequent metal hulled ships and their longer ranged cannon made the wooden sailing ships and their boarding pikes and axes obsolete. They were weapons that could cause a lot of damage to an enemy and were very effective for relatively simple metal and wood weapons. For their period of use the boarding axes and boarding pikes were uncomplicated weapons that allowed the US sailors to be highly effective in close quarters. They were easily produced within the manufacturing capabilities of the fledgling nation. The growing US Navy did not have to import axes or pikes unlike it did with many sword blades or gun locks during the period. These weapons definitely deserve a higher level of respect in the arms collecting community.

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### Special Notes

Photos are by the author with the exception of Figures 2 and 5 by P. Guidi; Figures 21, 23, 25, 35 and 36 by a private collector; and Figures 1, 6a, 6b, 7a, 7b, 13b, 16, 22, 24, 27, 33, 34, and 38 are by J. Thillman.

Pike in Figures 2 and 5 are from the Guidi Collection. Pikes and axes in Figures 21, 21, 25, 35, and 36 are from a private collection. Axe in Figure 39 is from the Washington Navy Yard's Collection.

