

RN Pike Drill

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Antipersonnel cut, thrust and missile weapons have always been used in naval warfare for boarding or landing parties. The pike, a long-handled thrusting weapon, continued to serve as primarily a defensive naval anti-personnel weapon throughout the nineteenth century.

Weapon

Naval pikes feature an ash pole approximately eight feet in length, with a three or four-sided head.¹ Most boarding pike heads incorporated languets, which are metal straps or reinforcements that extend down the shaft, a useful feature for a weapon that might have to deal with blows from cutlasses or boarding axes.² Usually features a point, not a blade, which is narrower than the shaft, and no crossbar, in contrast to the infantry sergeant's pike.



Around 1800 the Board of Ordnance assumed responsibility for issuing pikes to the Royal Navy. Possibly designed by officers with primarily infantry experience, the naval pike initially featured a pointed metal ferrule on the butt, like the infantry sergeant's pike. On board ship it was soon found this spike damaged the deck and would become embedded in the wood when the pike was grounded. Boarding pikes generally have a wooden butt or a metal collar or fitting near the butt through which a wooden section of butt projects, sometimes blunt brass fittings are found.³



¹ An original can be seen in the Ft. Erie museum.

² Sarah C Wolfe, *Naval Edged Weapons in the Age of Fighting Sail 1775-1865* (Greenhill, 2006). Cited by Timo Nieminen, (<http://myarmoury.com/talk/viewtopic.php?p=255627>). Images posted at (<http://philosoph.blogspot.ca/2013/11/boarding-pikes.html>).

³ Charles Ffoulkes & E. C. Hopkins, *Sword, Lance and Bayonet: A Record of the Arms of the British Army and Navy* (Cambridge U Press, 1938), 118.

In 1888 the British naval pike was standardized. The model adopted was 7'6" long, with a triangular section spike head, and butt sleeve/collar with languets, and the haft protruding through the bottom. This model was used until 1926. Hafts and heads were either polished clean or painted white (hafts) and black (heads).⁴

Drill

No official service-wide drill for naval use of pikes existed during our period. We know pikes existed and were used, placed in beackets around the masts when a ship was cleared for action. Logs show that ships' crews regularly engaged in small arms exercise, but the absence of an official exercise for pikes suggests the nature of any drill involved likely varied by commander.

We do have some period hints. RN Lt. William Pringle Green, in an 1812 manuscript *Instructions for training a ships crew in attack and defense*, notes the pike is held in a position similar to "charge bayonet" for the musket:

*Armed with it, either for attack or defense he is to keep it on his right side, directed at the heart of the enemy.*⁵

The primacy of pikes for defensive use is indicated by John Nicol's comments regarding his RN service during the Napoleonic wars:

*I was one of the boarders. We were all armed, when required, with a pike to defend our own naval vessel should the enemy attempt to board; a tomahawk [boarding axe], cutlass and brace of pistols to use in boarding them.*⁶

Similarly, in his 1845 treatise for USN midshipmen James Ward notes the placement of marines behind a defensive pike formation:

*When boarding or repelling, the marines form in rear of the pikemen, and pour volleys over their heads, at the enemy, if he appears above the hammock rail.*⁷

Finally, the 1850s Naval Instructions, though past our period, indicate the continuing similarity between pike and bayonet exercise:

⁴ W Gilkerson, *Boarders Away, with Steel: Edged Weapons and Polearms of the Classical Age of Fighting Sail, 1626-1826* (Providence, RI: Andrew Mowbray, 1991), cited <http://myarmoury.com/talk/viewtopic.php?p=255627>

⁵ Lt. William Pringle Green, *Instructions for training a ships crew in attack and defense* (1812 manuscript, National Maritime Museum, Greenwich, London JOD/45), quoted in John McGrath & Mark Barton, *British Naval Swords & Swordsmanship* (Providence, RI: Seaforth Publishing, 2013). Lt. Green, RN, commanded HM Brig *Resolute*.

⁶ Quoted in McGrath & Barton, *ibid*.

⁷ James Harmon Ward, *An Elementary Course of Instruction on Ordnance and Gunnery* (Philadelphia: Carey & Hart, 1845),

*A party of men, already trained to the Naval Cutlass and Rifle Exercise, may readily be taught the following system of Bayonet or Pike Exercise, as it is based on the same principles.*⁸

We may surmise from this scanty evidence that naval pike exercise was similar to bayonet exercise, and emphasized defensive tactics against boarders. We need to keep in mind that apart from the “charge bayonets” position in the *Manual Exercise* for infantry and marines, no official bayonet exercise for the Army existed at this time.⁹ With the exception of horse and dragoon sabre manuals, most formal exercises for edged weapons were not created until slightly later in the 19th century.¹⁰ My working assumption is that some kind of exercises for bayonet & pike likely existed during our period, part of that vast body of undocumented military “customary practice”.¹¹ So, what follows is a reconstruction, based to some extent on the work of Henry Angelo, Jr., who codified the exercises for edged weapons for the British military during and slightly after our period.¹²

⁸ Quoted in McGrath & Barton, *op. cit.* In their work *Bayonet Exercise & Bayonet Fencing*, McGrath and Barton observe that the Royal Navy used the same drill for bayonet and pike. They cite the 1873 edition of *Manual of Gunnery for Her Majesty's Fleet* on this point, and on p. 17 reproduce a photo of the relevant section.

⁹ In 1805 Anthony Gordon proposed a system based on fencing (and also, I suspect, based on Cumberland's adaptation of pike drill, used at Culloden) in *A Treatise on the Science of Defense, for the Sword, Bayonet, and Pike, in Close Action* (London, B. Macmillan, 1805), pp. 40ff. A few regiments briefly experimented with Gordon's system, but it was not subsequently adopted by the Army. In Gordon's system the musket is held on the left side, presenting the body's right side to an opponent, as in sword fencing. However, the Army retained the traditional “charge bayonet” position adopted in the 1764 *Manual Exercise*, in which the musket is held on the right side, with the body's left side towards the opponent. Gordon's approach is discussed by McGrath & Barton, *Bayonet Exercise*, 5-9; and by Ben Miller “Major Anthony Gordon, and the Development of Bayonet Fencing in the British Isles: 1740-1820,” online article (<https://outofthiscentury.wordpress.com/author/benmillerresq/>).

¹⁰ For the history of British drill manuals and related military literature in the 18th century, see chapter three in J.A. Houlding, *Fit for Service: The Training of the British Army, 1715-1795* (Oxford: Clarendon, 1981).

¹¹ For example, the considerable repertoire of infantry battalion movements that existed as “customary practice” did not get systematized until 1792, when David Dundas' *Principles of Military Movements* (1788) was adapted as the *Rules and Regulations*. Prior drill manuals focused almost exclusively on the manual and platoon exercise. On the bringing of customary practice into standardized exercise via gradual inclusion in the military literature, see Houlding, *ibid.*

¹² In 1812 while visiting his brother Edward in the fleet blockading Dutch ports, Henry Charles Angelo, Jr. created a cutlass exercise for the Navy, which was adopted in 1813 (See chart below). His exercises for infantry sword were adopted in 1817; for sabre in 1819. He later served as Superintendent of Sword Exercise for the Army, 1833-1852; his exercise for bayonet

Manual exercise

This is the “manual of arms”, the various specified movements by which a weapon is moved about by the person bearing it. This form of weapons drill derives from the “military revolution” of the early modern period, in which formations of pike and shot became the main fighting unit, replacing the individual man-at-arms that had dominated medieval warfare. Group drill (“discipline”) thus replaced individual weapons training as soldiers learned to operate in a synchronized manner together in a company, which the weapons of the day (pike, matchlock musket) required. In this drill, weapons handling was broken down into discrete motions for the instruction of new recruits, and a number of illustrated drill manuals were created as training aids, the most popular utilizing the etchings derived from those in Jacob de Gheyn's *Exercise of Armes*, which featured over twenty plates each for pike and musket movements.¹³

Subsequent drill manuals retained this format (though sadly by our period the official manuals no longer featured illustrations for musket handling). Accordingly, we start with a Manual Exercise for pike—some basic positions and movements that facilitate its use.¹⁴ For comparison, equivalent 17th century postures from de Gheyn are shown adjacent to the directions.¹⁵

was published in 1849.. See Sources below for the titles of these works. Also, compare Richard F. Burton, *A Complete System of Bayonet Exercise* (London: William Clowes, 1853).

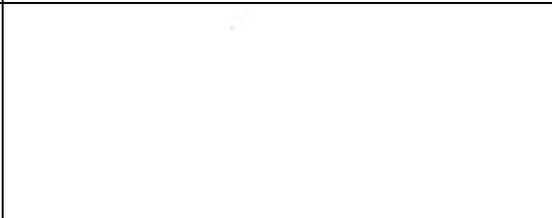
¹³ Reprinted as Jacob De Gheyn, *The Renaissance Drill Book*, ed. David J. Blackmore (Greenhill Books, 2003).

¹⁴ This is my adaptation for naval use of the British pike exercise for infantry sergeants. Such “Instructions for Serjeants” are found in the non-official period military literature, notably David Roberts, *Military Instructions* (London, T. Egerton, 1798), 31-32; and Anthony Suasso, *A Treatise on the British Drill* (London: W. Clowes, 1816), 269-271. As Roberts served in the Guards, and Suasso in several line regiments, I think it safe to assume they portray contemporary practice. Robert Henderson presents the pike exercise from Suasso' 1814 edition online as “British Sergeant's Pike Drill, 1814” (<http://www.militaryheritage.com/pike.htm>). It finally became the official “Pike Exercise” in *The Manual and Platoon Exercises* (Quebec: Cary and Co., 1824), 23-6.

The crew of the U.S.S. Constitution practices a naval pike drill that can be viewed online. (https://www.youtube.com/watch?v=amLM6E0o_mc) I am unaware of the period source for this drill, and suspect it is a modern reconstruction. Naturally, I prefer my own reconstruction.

¹⁵ Note on terminology. The use of the term “arms” instead of “pike” or “firelock” in the manual exercise originates from the period when a company would contain both types of weapons—musket and pike. As with many military expressions, it is retained long past the period (ca. 1700) when the development of the socket bayonet led to the musket replacing the pike in infantry formations. In his 1775 manual Timothy Pickering noted

*But as the musketeers and pike men were frequently exercised together, it became necessary to use some word which would apply to both; and **arms** was chosen for that purpose, as signifying both the arm, or weapon, of the musketeers, and that used by the pikemen.*

<p>Order Arms—stand at attention, pike held vertically at the right side, right hand flat, knuckles to the front, the palm pressing the pike into the hollow of the right shoulder.</p>	
<p>Shoulder Arms¹⁶ (1) raise pike with right hand, steady with left; (2) place right hand under butt of pike; (3) return left hand to the side.</p>	
<p>Order Arms (from Shoulder Arms) (1) grasp the pike with the left hand at the right shoulder; (2) let pike slide down until the butt touches the deck (3) right hand presses pike into the hollow of the right shoulder; left hand returns to left side</p>	
<p>Trail Arms—as Shoulder/Order Arms, with the difference that the pike is held horizontal in the right hand, arm extended, point slightly upwards.</p>	
<p>Ground Arms (1) step forward with the left foot to lay the pike directly forward on the deck with the right hand; (2) return to the original position of attention.</p>	

Timothy J. Pickering, *An easy plan of discipline for a militia* (Salem: Samuel & Ebenezer Hall, 1775), 19. Pickering cites William III’s *Exercise of Foot* on this point: “When **arms** is mentioned, it signifies both musketeers and pikemen.” Ibid. For the same reason I retain the term to facilitate the learning of both pike and bayonet drill.

¹⁶ In the old pike drill, this movement is called “advance arms”, whereas “shoulder arms” refers to a sloped carry. To keep things simple I have adapted terms from the 1804 musket Manual Exercise and the period infantry sergeant’s pike exercise, for the equivalent movement in pike drill. Note that “advance arms” survives into our period, signifying carrying the musket on the right (as with the pike in the previous century) instead of its usual carry on the left— thus preserving a 200 year-old practice. Compare the period infantry sergeant’s manual, *Rules and Regulations for the Manual and Platoon Exercises* (London: T. Egerton, 1807), 26.

<p>Raise Arms—Reverse the previous motion: (1) step forward with the left foot, grasp the pike with the right hand; (2) return to the position of Order Arms.</p>	
<p>Charge pike (single rank; front rank if doubled)¹⁷ (1) grasp pike with left hand, drop pike, extending right hand to the rear; at the same time (2) step to the rear with the right foot. Body should face to the right, presenting left side to opponent; tip of pike should point to opponent's chest.</p>	
<p>Charge pike (rear rank if doubled)¹⁸ (1) step a moderate pace to the right (which staggers the rear rank to the front rank); (2) grasp the pike at the shoulder with the left hand, raise it to a horizontal position above the shoulder.</p>	
 <p style="text-align: center;">Swiss pikes</p>	 <p style="text-align: center;">Naval pikes (USS Constitution)</p>

¹⁷ “Port your pike” in de Gheyn. The 2nd illustration is Plate XXIV showing “Charge Halberd” in the “Instructions for Serjeants” in David Roberts, *Military Instructions* (London, T. Egerton, 1798).

¹⁸ “Charge your pike” in de Gheyn. This position continued to be used by British infantry when the musket with socket bayonet replaced the pike ca. 1700. Prior to Culloden, Cumberland successfully inverted the stance, so that the weapon was held on the left side to engage the highlanders’ broadsword rather than their targe. The old overhand pike stance was retained for “Charge Bayonet” through the mid-Eighteenth century until replaced by the stance based on Prussian practice (musket held at waist height), introduced in the 1764 *Manual Exercise*.

Luckily for us, the majority of motions contained in the 17th century infantry manual of arms for the pike¹⁹ can be dispensed with, as they are not necessary for shipboard use.

Footwork

The strength of the pike formation depends on the coordinated movement of its members. Fortunately for us, shipboard movement of naval pike formations is necessarily limited by available deck space.

When **repelling boarders**, the formation is stationary, positioned at the bulwarks to impale anyone coming over the hammock netting. According to James Ward quoted above, marines could be posted behind the pike formation to shoot boarders. (Note the Marines just visible behind the *Constitution* pike formation in the picture above, presumably for this purpose.)

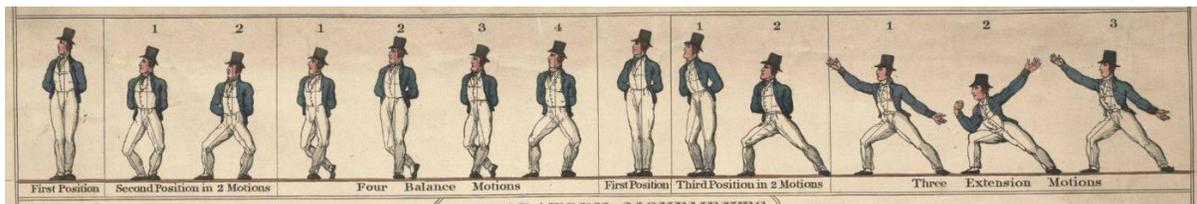
When **clearing decks** of boarders, the formation is limited to coordinated movement. The active footwork commonly associated with individual bayonet or sword fencing would undermine the cohesion of a pike formation, so footwork is limited to group movements forward and backwards.²⁰

From the “Charge Pike” position:

“**Advance**”—Step forward with the left (foremost) foot; close the right foot to the left.

“**Retire**”—Step to the rear with the right (rearmost) foot; close the left foot to the right.

“**Passade**”—Pass the right foot in front of the left; step forward with the left. Pass the left foot to the rear if retiring. Use this step to advance or retire more quickly. (Equivalent footwork illustrated at upper centre-left on Angelo’s *Naval Cutlass Exercise* below.)

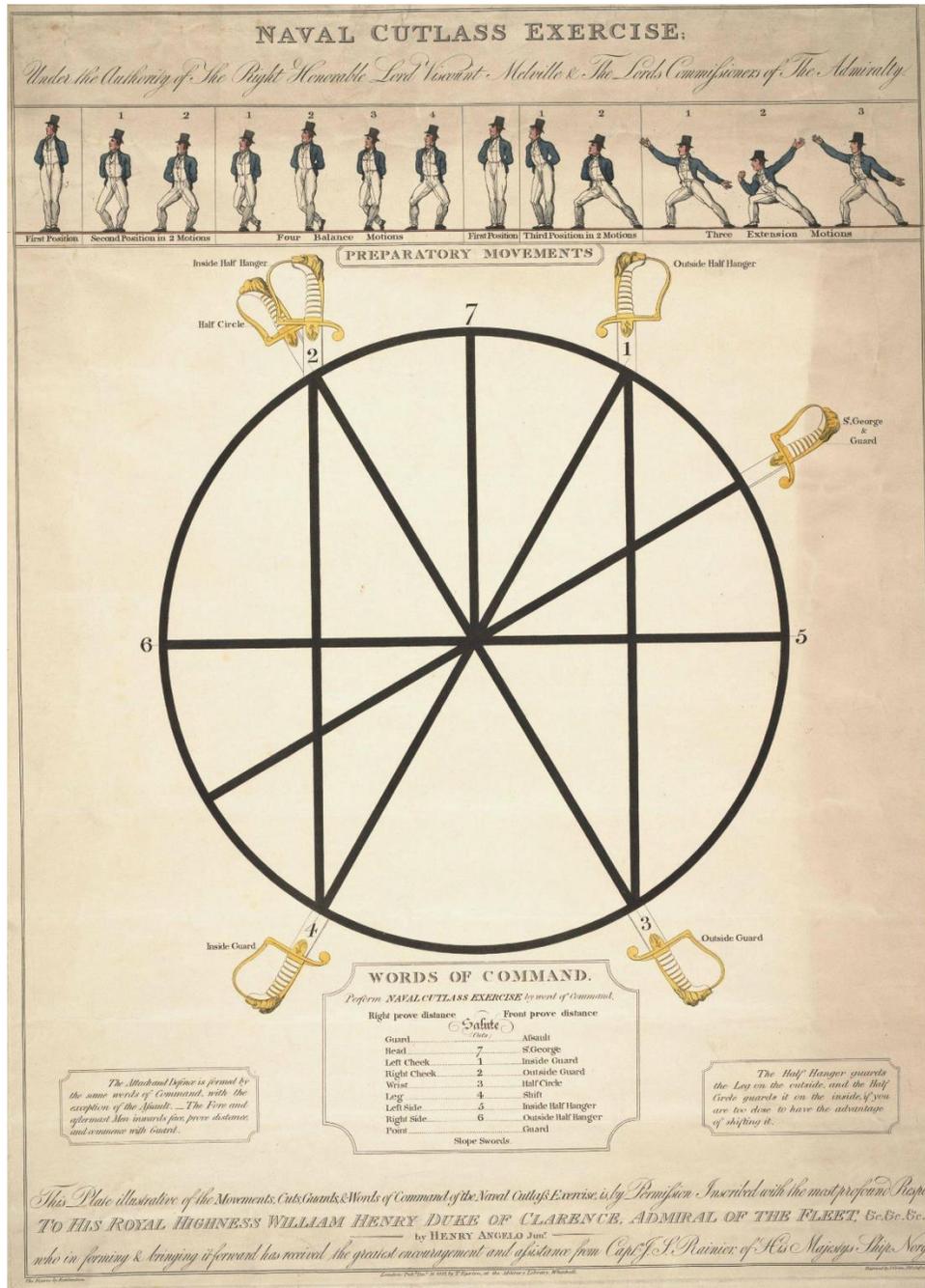


¹⁹ Clifford Walton lists **36** (!) “Postures for the Pike” in his *History of the British Standing Army, A.D. 1660 to 1700* (London: Harrison and Sons, 1894), pp. 507-508.

²⁰ What follows is an adaptation of the foot movements in Ward, 41. I have dispensed with his use of the term “tow”.

Parrys

A parry is a weapon movement intended to deflect or block an incoming attack. For our purposes the attack could consist of some combination of blow, cut, or thrust. Note the chart of cuts and parrys below, prepared by Henry Angelo in 1813 for naval cutlass exercise:²¹

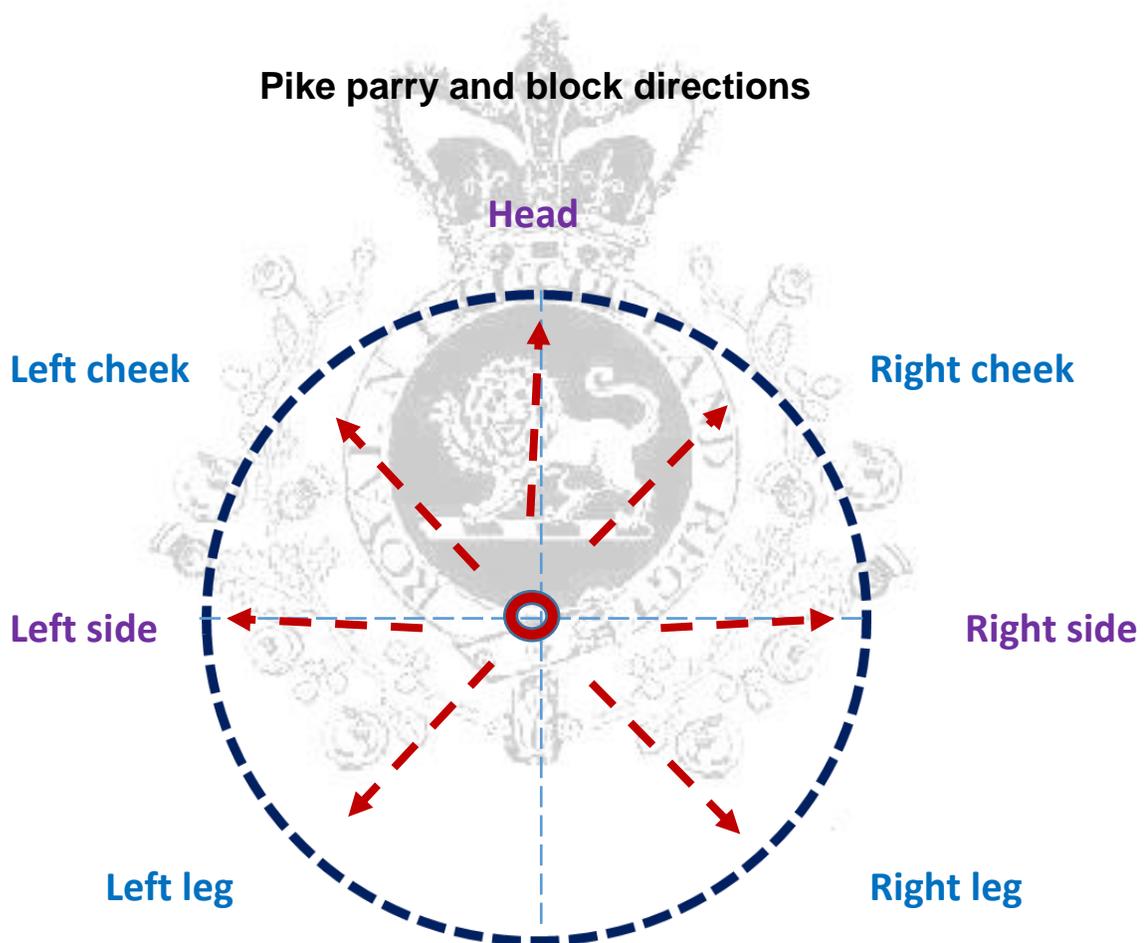


²¹ Henry Angelo, Jr., *Naval Cutlass Exercise* (London: T. Egerton, 1813).

To simplify: for the purpose of defense, cutlass cuts would come from either the left or right, be high or low; or come from above—which gives us seven areas to defend (the numbers correspond to the cuts in Angelo’s cutlass exercise):

- | | |
|----------------|---------------|
| 1. Right cheek | 5. Right side |
| 2. Left cheek | 6. Left side |
| 3. Right leg | 7. Head |
| 4. Left leg | |

These seven defense areas are represented by the chart below (parries in blue, blocks in purple).



Guard: The **charge pike** position: the pike is pointed at your opponent’s torso, represented by the centre of the circle.

To **parry** a cut at cheeks or legs, move the tip of the pike away from the centre of the circle in the direction represented by the arrows to deflect the cutlass blade; immediately return to the centre of the circle to be ready for a thrust or second parry.

To **block** a side cut hold the pike vertically at the left or right side, point up. Block an overhead cut by holding the pike overhead with both hands, the point to the left. Immediately parry from the blocks by sweeping the blocked cutlass blade *towards* your opponent as you return to guard position to thrust or parry.

Thrusts

Offensive motions of increasing intensity are used to impale an opponent:

Thrust—push the pike with both hands at your opponent; return to guard.

Develop—thrust the pike; develop the thrust further by fully extending the arms; return to guard.

Lunge—thrust the pike fully, at the same time leaning forward on the left leg while fully extending the right leg; return to guard. (Note the similar footwork illustrated at the upper right on Angelo's *Naval Cutlass Exercise*.)

Also, following a left side parry or block the pike may be quickly reversed over the left shoulder to thrust with the butt end.

Pike Exercise

Employ the foot movements, parries and thrusts in various combinations. For example:

Charge pike (guard)

Right cheek parry; guard

Thrust; guard

Advance

Advance

Retire

Left side block/parry

Thrust

Develop

Guard

Repeat as desired. Enjoy.

Sources

- Adjutant-General's Office. *The Manual and Platoon Exercises* [1823]. Quebec: Cary and Co., 1824.
- Adjutant-General's Office [Angelo], *Regulations and Instructions for the Cavalry Sword Exercise*. London: William Clowes, 1819.
- Adjutant-General's Office [Angelo], *Rules and Regulations for the Infantry Sword Exercise*. London: William Clowes, 1817
- Adjutant-General's Office. *Rules and Regulations for the Formations, Field-Exercise, and Movements, of His Majesty's Forces*. London: J. Walter, 1792.
- Adjutant-General's Office. *Rules and Regulations for the Manual and Platoon Exercises*. London: T. Egerton, 1807,
- [Angelo, Henry, Jr.]. *Angelo's Bayonet Exercise*. London: Parker, Furnivall, and Parker, [1849]1853.
- Angelo, Henry. *Naval Cutlass Exercise*. Artist, Thomas Rowlandson. Engraved by I. Girtin. London: T. Egerton, 1813.
- Burton, Richard F. *A Complete System of Bayonet Exercise*. London: William Clowes, 1853.
- De Gheyn, Jacob. *The Renaissance Drill Book*, ed. David J. Blackmore. Greenhill Books, 2003.
- Dundas, David. *Principles of Military Movements*. London: T. Cadell, 1788.
- Gilkerson, W. *Boarders Away, with Steel: Edged Weapons and Polearms of the Classical Age of Fighting Sail, 1626-1826*. Providence, RI: Andrew Mowbray, 1991.
- Gordon, Anthony. *A Treatise on the Science of Defense, for the Sword, Bayonet, and Pike, in Close Action*. London, B. Macmillan, 1805.
- Green, Lt. William Pringle. *Instructions for training a ships crew in attack and defense* (1812 manuscript JOD/45) Greenwich, London National Maritime Museum.
- Henderson, Robert, ed. "British Sergeant's Pike Drill, 1814". (<http://www.militaryheritage.com/pike.htm>).
- Pickering, Timothy J. *An easy plan of discipline for a militia*. Salem, MA: Samuel & Ebenezer Hall, 1775.
- Houlding, J.A. *Fit for Service: The Training of the British Army, 1715-1795*. Oxford: Clarendon, 1981.
- McGrath, John & Barton, Mark. *Bayonet Exercise & Bayonet Fencing*. Royal Navy Amateur Fencing Association. Southampton: Minuteman Press, 2007.
- McGrath, John & Barton, Mark. *British Naval Swords & Swordsmanship*. Providence, RI: Seaforth Publishing, 2013.
- McGrath, John & Barton, Mark. *Naval Cutlass Exercise*. Royal Navy Amateur Fencing Association. Southampton: Minuteman Press, 2002.

Miller, Ben. “Major Anthony Gordon and the Development of Bayonet Fencing in the British Isles: 1740-1820” (<https://outofthiscentury.wordpress.com/category/era/georgian-era/>).

Miller, Ben. “Methods of Using the Pike in Ireland: 1798-1921.” (<https://outofthiscentury.wordpress.com/category/era/georgian-era/>).

Roberts, David. *Military Instructions*. London, T. Egerton, 1798.

Suasso, Anthony, *A Treatise on the British Drill*. London: W. Clowes, 1816.

The Manual Exercise as Ordered by His Majesty in the Year 1764. Philadelphia: J. Humphries, R. Bell, J. Aitken, 1776.

U.S.S. Constitution Pike Drill Team. “Boarding Pike Drill”. Online video. (https://www.youtube.com/watch?v=amLM6E0o_mc)

Walton, Clifford. *History of the British Standing Army, A.D. 1660 to 1700*. London: Harrison and Sons, 1894.

Ward, James Harmon. *An Elementary Course of Instruction on Ordnance and Gunnery*. Philadelphia: Carey & Hart, 1845.

Wolfe, Sarah C. *Naval Edged Weapons in the Age of Fighting Sail 1775-1865*. London: Chatham, 2005.

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