

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)

SELECT NAVAL DOCUMENTS

HENRY VIII

WE choose this reign as our starting-point, not because it is the beginning of English naval history, but because Henry VIII originated a new epoch—that of the broadside sailing ship. The two following lists give the armament of the *Sovereign* in 1497 and in 1509, when she was rebuilt. Before the time of Henry VIII, English warships were armed with a large number of small breech-loading guns, meant to sweep the enemy's deck as a preliminary to capturing him by boarding, and therefore carried high; while their own crews were protected from the enemy's fire by many-storied fore- and stern-castles, in which most of the guns were mounted, the rest being placed in the waist. Retaining the breech-loaders as a secondary armament, Henry VIII introduced a small number of heavy guns, which could penetrate the hull of an enemy, and which would have to be carried on a lower gun-deck. This is the germ of the revolution which converted the warship from a transport, to be attacked and defended by soldiers, into a gun-carriage or floating battery.

The changes in armament involved changes in ship-construction. The old 'round-ship,' besides being top-heavy, was only twice as long as she was broad, and was therefore very slow. Importing Italian ship-wrights, accustomed to build 'galleons' with a length of three times their beam, Henry experimented throughout his reign with a view to building ships which should be more seaworthy, speedier, and better gun-platforms. The last four ships built in his reign—the *Hart*, *Antelope*, *Tiger*, and *Bull*—were flush-decked, and without any kind of superstructure. If this was too great a departure from tradition, Henry was only exaggerating a sound principle.

Two further points may be noticed: the publication of a code of laws for the Royal Navy, based largely on 'The Custom of the Sea,' and the establishment, in 1546, of a system of administration which remained essentially unchanged until 1832. The Navy Board (to use its later name) was responsible for the civil administration of the Navy. The 'Principal Officers' were the Treasurer of the Navy, the Comptroller, whose duty was to check the Treasurer's accounts, the Surveyor, who inspected and made inventories of ships and stores, and the Clerk of the Ships (later, of the Acts), who was secretary to the Board.

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)

2 SELECT NAVAL DOCUMENTS

I. INVENTORY OF THE *SOVEREIGN*, Jan. 31, 1497(As 'delivered to James Finch and other merchants for a voyage to be made into the Levant.' *N.R.S.* VIII, p. 216.)*In the Storehouse of the said Ship*

Serpentines ¹ of iron in the forecastle above the deck, with miches ² and forelocks to the same	16
Chambers of iron to the same	48
Serpentines of iron in the forecastle aloof, with miches and forelocks of iron	24
Chambers of iron to the same	72
Stone guns ³ of iron in the Waist of the said ship, with miches and forelocks to the same	20
Chambers of iron to the same	60
Serpentines of iron in the summercastle ⁴ , with miches and forelocks to the same	20
Serpentines of brass in the summercastle, with a miche and a forelock	1
Stone guns in the summercastle, with miches and fore- locks	11
Chambers to the said serpentines and stone guns	92
Serpentines of iron in the stern, with miches and forelocks	4
Chambers of iron to the same	12
Serpentines of iron in the deck over the summercastle, with miches and forelocks	25
Chambers to the same	75
Serpentines of iron in the poop ⁵ , with miches and fore- locks	20
Chambers to the same	60
Bows of yew	200
Chests to the same	4

¹ There is no contemporary description of a serpentine, but it probably weighed about 250 lbs., and was certainly a breech-loader, the powder and shot being placed in a cylinder (the 'chamber'), which locked into the breech.

² Mr G. A. R. Callender says (*Mariner's Mirror*, v, 36): 'I believe that Tudor "miches, bolts and forelocks" were simply trunnion-fittings. I think that the "miche" was what today we call the "cap-square."'

³ Guns for firing stone balls.

⁴ Probably the 'poop.'

⁵ Probably the 'poop royal.'

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)ARMAMENT OF THE *SOVEREIGN*, 1509 3

Arrows	800 sheaves
Spears	80
Gunpowder	5 barrels
Pellets of lead	400
Dice of iron of inch and a half square	200
Gun hammers of iron	12
Ladles of iron to melt lead in, for making of pellets	1
Moulds of stone for casting of pellets	6

2. ARMAMENT OF THE *SOVEREIGN* IN 1509*Letters and Papers, Henry VIII, No. 5721, f. 229.*

Hereafter followeth all the ordnance and artillery and harness
that is in the *Sovereign*.

Item 4 whole Cortos¹ (*sic*) of brass.

Item 3 half cortos of brass

Item 2 falcons of brass

Item 2 culverins of brass

Item one culverin of brass without a stock

Item 4 serpentines of brass

Item 6 }

longing to them 12 chambers

Item 7 great pieces of iron }

longing to them 14 chambers }

Item 4 slings of iron }

longing to them 8 chambers }

Item 42 serpentines of iron, great & small, }

longing to them 126 chambers with their }

miches, bolts, & forelocks.

Item 2 stone guns for the top

Item 7 harquebuses

Item 7 gavelocks² of iron

chambers of iron 209.

The inventory also gives the quantities of iron, stone and lead pellets, gunpowder, harness (*i.e.* armour), bows and arrows, bills, marlin-spikes, and stakes.

¹ The curtow, or curtall, was a short heavy siege gun, weighing 3000 lbs. The culverin was the long-range heavy gun: at a later period (and possibly in this reign) it was an 18-pounder. The falcon was a 3-pounder. The sling was a small breech-loader.

² Javelins or crowbars.

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)

4 SELECT NAVAL DOCUMENTS

3. HENRY VIII'S SEA LAWS

A Book of Orders for the War both by Sea and Land, written by Thomas Audley¹ at the command of King Henry VIII (c. 1530). (*Harl. MSS.* 309, f. 10.)

Orders to be used in the King's Majesty's Navy by the Sea

First, the laws which be written what every man ought to do in the ship towards his captain to be set in the main mast in parchment to be read as occasion shall serve.

If any man kill another within the ship, he that doeth the deed shall be bound quick to the dead man, and so be cast into the sea, and a piece of ordnance shot off after they be thrown into the sea.

If any man draw a weapon within the ship to strike his captain, he shall lose his right hand.

If any man within the ship draweth any weapon or causeth tumult or likelihood of murder or bloodshed within the ship shall lose his right hand as is before said.

If any man within the ship steal or pick money or clothes within the ship duly proved, he shall be three times dipped at the bowsprit, and let down two fathoms within the water, and kept on live, and at the next shore towed aland bound to the boat's stern, with a loaf of bread and a can of beer, and banished the King's ships for ever.

If any man within the ship do sleep his watch iiii times and so proved, this be his punishment: the first time he shall be headed at the main mast with a bucket of water poured on his head.

The second time he shall be armed, his hands haled up by a rope, and ii buckets of water poured into his sleeves.

The third time he shall be bound to the main mast with certain gun chambers tied to his arms and as much pain to his body as the captain will.

The fourth time and last punishment, being taken asleep he shall be hanged on the bowsprit end of the ship in a basket, with a can of beer, a loaf of bread, and a sharp knife, choose to hang there till he starve or cut himself into the sea.

¹ Speaker in 1529; afterwards Lord Chancellor.

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)

HENRY VIII'S SEA LAWS

5

If any mariner or soldier depart from the King's ships without license of his captain, the same is felony by statute.

The captain shall not permit his boat to go to shore without license from his ship at no time. If the boat must go for necessities, as water or other needful things, then the boatswain and one of the quarter-masters shall go, and they to choose such men to go to land as be of good rule to come again in time and none to run away as they will answer: the boatswain and the quarter-masters know the conditions best of every mariner.

If any man within the ship be a drunkard, not being content with the victuals of the ship, nor as the rest be of the company, the captain shall imprison him in the bilboes while he think him duly punished that so offendeth.

Orders for Captains to their Admiral

No captain shall take the wind of his admiral, but come under his lee, except necessity require the same.

All captains must be obedient to their admiral. If any be stubborn, the admiral shall set him on shore and put another in his place, and write to the King and his Council of his faults, truly without malice.

Whensoever and at all times the admiral doth shoot off a piece of ordnance and set up his banner of council on starboard buttock of his ship, every ship's captain shall with speed go aboard the admiral to know his will.

When and at all times the admiral will anchor or disanchor, he must shoot a piece that thereby the rest may know to do the same, and that no ship ride in another's wake, for in that is great danger.

The admiral ought to have a swift pinnace always abroad to ascry so far off that he may see the fleet out of his top, and if he seeth any enemies or any other sails give knowledge to the admiral; if they be enemies, let him shoot two or three pieces off.

If they meet with enemies, the admiral must apply to get the wind of the enemy by all the means he can, for that is the advantage¹. No private captain should board the admiral enemy

¹ Though it would be rash to assert that the ships of this period could not beat to windward, they were so clumsily built that they could only do so under favourable conditions.

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)

6 SELECT NAVAL DOCUMENTS

but the admiral English, except he cannot come to the enemy's, as the matter may so fall out without they both the one seek the other. And if they chase the enemy, let them that chase shoot no ordnance till he be ready to board him, for that will let his ship's way.

Let every ship match equally as near as they can, and leave some pinnaces at liberty to help the overmatched. And one small ship when they shall join battle to be attending upon the admiral to relieve him, for the overcoming of the admiral is a great discouraging of the rest of the other side.

In case you board¹ your enemy enter² not till you see the smoke gone and then shoot off all your pieces, your port-pieces, the pieces of hail-shot, [and] cross-bow shot to beat his cage decks, and if you see his deck well rid, then enter with your best men, but first win his top in any wise if it be possible. In case you see there come rescue, bulge³ the enemy ship, [but] first

¹ In fight, *to board* a ship is to bring the ship to touch the other; where you must note the advantages and disadvantages of every place in boarding, and know that when two ships fight, the defendant may choose whether you shall board him or no, but only in the quarter, which is a bad place to board, for men can worst enter there, in respect that it is the highest part of the ship's hull: and for that there is only the mizen shrouds to enter by; as also for that ships are hottest there, and men being entered there can do little good and are easily scoured off with murderers from the close fights. The best boarding for entering is, if you can, to board on bow, for then you may quickly bring all your broadside to; but the greatest advantage for use of ordnance is to board athwart her hawse, for then you may use all your ordnance on one side and she can only use her chase and her prow pieces.

² **Enter.** To enter is to come into a ship, but in fight they must be careful to clear the decks with fire pots or the like, if it be possible, from the trains of powder before men do enter; for it happens many times that there are more men lost in a minute by entering than in long fight board and board; and therefore being so dangerous it is fit that men should be well advised first; though many times if a ship is not well provided of close fights it is the speediest and safest way of taking her.

³ **Bilge or Bulge.** The bilge of the ship, is the breadth of the floor, whereon the ship doth rest when she is aground. A ship is *bilged*, that is, when she strikes on a rock or an anchor or the like, and breaks some of her timbers or planks there, and so springs a leak.

The above definitions are taken from Sir Henry Mainwaring's *Seaman's Dictionary*, written between 1620 and 1623, and printed, in an incomplete and careless form, in 1644.

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)

HENRY VIII'S SEA LAWS

7

take heed your own men be retired, [and] take the captain with certain of the best with him, the rest [to be] committed to the bottom of the sea, for else they will turn upon you to your confusion.

No captain presume to send his boat aboard any strange ship without leave of the admiral: if that should be suffered, they would pilfer things from our own nation as well of the King's dear friends.

If the lord admiral take the strange lord admiral enemy, it is indifferent whether he be the King's prisoner or his; but if any other private captain take him, the King shall have him, and reward the captain that takes him.

The admiral ought to have this order before he join battle with the enemy, that all his ships shall bear a flag in their mizen-top, and himself one in the foremast beside the mainmast, that every man may know his own fleet by that token. If he see a hard match with the enemy and be to leeward, then to gather his fleet together and seem to flee, and flee indeed for this purpose till the enemy draw within gunshot. And when the enemy doth shoot, then [he shall] shoot again, and make all the smoke he can to the intent the enemy shall not see the ships, and [then] suddenly hale up his tackle aboard, and have the wind of the enemy. And by this policy it is possible to win the weather-gage of the enemy, and then he hath a great advantage, and this may well be done if it be well foreseen aforehand, and every captain and master made privy to it beforehand at whatsoever time any such disadvantage shall happen.

The admiral shall not take in hand any exploit to land or enter into any harbour enemy with the King's ships, but he call a council and make the captains privy to his device and the best masters in the fleet or pilots, known to be skilful men in that coast or place where he intendeth to do his exploit, and by good advice. Otherwise the fault ought partly to be laid on the admiral if anything should happen but well.

And if he did an exploit without assent of the captains and [it] proved well, the King ought to put him out of his room for purposing a matter of such charge of his own brain, whereby all the fleet might fall into the hands of the enemy to the destruction of the King's people.

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)

ELIZABETH

THE powerful fleet created by Henry VIII was maintained almost at full strength by Edward VI and Mary, but allowed to decline by Elizabeth in the early years of her reign. In the 1570's, however, the views of the experts (especially of Sir John Hawkyns, Treasurer and Comptroller of the Navy) were embodied in a building programme of ships of the 'middle sort.' The existence of two schools of thought among builders and seamen, as illustrated in the first extract, must have led to improvements, one of which is described in the second passage. That this clash of opinion (and the supervision of Sir John Hawkyns) led builders to put good material and workmanship into their ships is proved by the testimony of Howard and Wynter.

4. RACE-BUILT V. LOFTY SHIPS

The Observations of Sir Richard Hawkyns, Knight, in his Voyage into the South Seas, Anno Domini 1593 (Hakluyt Society), p. 199¹.

Here is offered to speak of a point much canvassed amongst carpenters & sea captains, diversely maintained but yet undetermined: that is, whether the race or lofty built ship be best for the merchant, & those which employ themselves in trading. I am of opinion that the race ship is most convenient; yet so as that every perfect ship ought to have two decks, for the better strengthening of her; the better succouring of her people; the better preserving of her merchandise & victual; & for her greater safety from sea & storms.

But for the prince's ships, & such as are employed continually in the wars, to be built lofty I hold very necessary for many reasons. First for majesty & terror of the enemy; secondly, for harbouring of many men; thirdly, for accommodating more men to be fought; fourthly, for placing & using more artillery; fifthly, for better strengthening & securing of the ship; sixthly, for over-topping & subjecting the enemy; seventhly, for greater safeguard & defence of the ship & company. For it is plain that the ship with three decks, or with two & a half, shows more pomp than another of her burthen with a deck & a half, or two decks, & breedeth greater terror to the enemy, discovering herself to be a more powerful ship, as she is, than the other; which being indeed a ship of force, seemeth to be but a bark, & with

¹ This book was not printed until 1622, the year of Hawkyns's death.

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)THE *TEREDO NAVALIS*

9

her low building hideth her burthen. And who doubteth that a deck & a half cannot harbour that proportion of men, that two decks, & two decks & a half can accommodate to fight; nor carry the artillery so plentifully, nor so commodiously. Neither can the ship be so strong with a deck & a half as with two decks; nor with two, as with three; nor carry her masts so taunt¹; nor spread so great a clew²; nor contrive so many fights, to answer one another for defence & offence. And the advantage the one hath of the other, experience daily teacheth.

5. THE *TEREDO NAVALIS*Richard Hawkyns's *Observations*, p. 119.

These *arters* or *broma*, in all hot countries, enter into the planks of ships, and especially where are rivers of fresh water; for the common opinion is that they are bred in fresh water, and with the current of the rivers are brought into the sea; but experience teacheth that they breed in the great seas in all hot climates, especially near the equinoctial line; for lying so long under and near the line, and towing a shalop at our stern, coming to cleanse her in Brazil, we found her all under water covered with these worms, as big as the little finger of a man, on the outside of the plank, not fully covered, but half the thickness of their body, like to a jelly, wrought into the plank as with a gouge. And natural reason, in my judgment, confirmeth this; for creatures bred and nourished in the sea, coming into fresh water die; as those actually bred in ponds or fresh waters die presently, if they come into salt water.

In little time, if the ship be not sheathed, they put all in hazard; for they enter in no bigger than a small Spanish needle, and by little and little their holes become ordinarily greater than a man's finger. The thicker the plank is, the greater he groweth; yea, I have seen many ships so eaten, that the most of their planks under water have been like honey-combs, and especially those betwixt wind and water. If they had not been sheathed, it had been impossible that they could have swum.

¹ High.² 'The clew of a sail is the lower corner of the sail. A ship *spreads a great clew*; that is, hath very broad yards and so spreads much canvas.' (Main-warding.)

Cambridge University Press

978-1-108-00376-6 - Select Naval Documents

Edited by Harold Winter Hodges and Edward Arthur Hughes

Excerpt

[More information](#)

10 SELECT NAVAL DOCUMENTS

The entering of them is hardly to be discerned, the most of them being small as the head of a pin. Which all such as purpose long voyages are to prevent by sheathing their ships.

And for that I have seen divers manners of sheathing, for the ignorant I will set them down which by experience I have found best.

In Spain and Portugal, some sheath their ships with lead, which, besides the cost and weight, although they use the thinnest sheet-lead that I have seen in any place, yet it is nothing durable, but subject to many casualties¹.

But the most approved of all, is the manner of sheathing used nowadays in England, with thin boards, half inch thick; the thinner the better; and elm better than oak; for it riveth not, it endureth better under water, and yieldeth better to the ship's side.

The invention of the materials incorporated betwixt the plank and the sheathing, is that indeed which availeth; for without it many planks were not sufficient to hinder the entrance of this worm; this manner is thus:

Before the sheathing board is nailed on, upon the inner side of it they smear it over with tar half a finger thick and upon the tar another half finger thick of hair, such as the white-limers use, and so nail it on, the nails not above a span distance one from another; the thicker they are driven, the better.

Some hold opinion that the tar killeth the worm; others, that the worm passing the sheathing, and seeking a way through, the hair and the tar so involve him that he is choked therewith; which methinks is most probable; this manner of sheathing was invented by my father, and experience hath taught it to be the best and of least cost.

6. SEAWORTHINESS OF ENGLISH SHIPS

(a) Howard to Burghley, February 21, 1588. (*N.R.S.* 1, p. 79.)

I have been aboard of every ship that goeth out with me, and in every place where any may creep, and I do thank God that they be in the estate they be in; and there is never a one of them that knows what a leak means. I have known when an Admiral

¹ Hawkyns describes other methods:—double planks, canvas, burnt planks, and in China with varnish.