

United States was dazzled by the brilliant prospect afforded of signaling his administration by adding nearly half the North American continent to his rule.

It is evident that if the States were properly prepared and able to inflict a decisive defeat on the British North American Squadron, a very material effect would be produced on the state of the belligerents on the European continent—but although some steps had been taken to put the Naval force on a respectable footing and to render the army effective, the open opposition of the people of the Eastern States rendered all efforts futile—the war was unpopular with the people—such being the ostensible motives for hostilities—the relative condition of the belligerents demands attention.

With all the advantages of an unchecked and unimpeded Naval administration without the routine or jobbery which characterised the English Admiralty of the period, the United States Executive dealt directly with the Contractor and had their ships built under the immediate supervision of the officers which were destined to risk their lives and professional reputation in command of them, it is no wonder if those vessels were effective or whose individual inventive ability had such ample scope, startling innovations in Naval architecture and appliances should have resulted.

As an instance of the effect thus produced the circumstances which led to the construction of those so called Frigates which created such a sensation during the war will be interesting.

Inspired by feelings of hatred to England and wishing to aid the cause of Revolution in France the United States administration in 1794, pushed their complaints against England to the verge of war. To meet such a contingency the President ordered the construction of two 74 gun ships and one 44 gun Frigate, the former to measure 1620 tons according to the American method, but nearly 1750 tons according to the English mode, the difference appears to have been in the manner by which the length between the *perpendiculars* intended to allow for the *rake of stem or stern* is taken—thus the length of the keel for tonnage of the United States Frigate President is taken according to the first system at 145 feet; according to the English it would be 146 feet 7½ inches—the first multiplication of the American system would be the breadth across the *frame* or *moulded breadth* usually called the *breadth of beam*, but the first multiplier of the British is that breadth with double the *assumed thickness* of the plank on the bottom, which thickness would be in vessels of this class *five inches*—this is technically speaking called the *extreme breadth*, the second multiplier of each is the *respective half breadths*. The American divisor is 95, the British 94. Thus—

AMERICAN METHOD.

$$145 \times 43.6'' = 6308 \times 21.9 = 137198 \div 95 = 1444\frac{1}{2} \text{ tons.}$$

BRITISH METHOD.

$$146.7\frac{1}{2} \times 44.4 = 6502 \times 22.2 = 143044 \div 94 = 1533\frac{1}{2} \text{ tons.}$$

As the number and size of a ship's guns or the nature of her armament depends in a very great degree upon her scantling, it will be easily understood that a British Frigate of nominal equal tonnage with a so called United States ship was in reality considerably over matched.

Owing to Mr. Jay's treaty all hostile designs against England were laid aside, and as the most eligible means of rendering the timbers prepared for the two *seventy-fours* useful, it was resolved that although begun as line of battle ships they should be converted into frigates being more useful as cruisers and less expensive to maintain. This was to be accomplished by contracting the breadth of beam about three feet and a half and discontinuing the *topside* at the *clamps* of the quarter deck and fore-castle—the 44 gun frigate was to be rated as of 36 guns.

In the spring of 1798, the cost of building those two forty-four gun frigates and one of thirty-six guns came to be submitted to Congress, an explanation of the excess of cost over the original estimates was required—the Secretary at War delivered the following Report:—

"It appears that the first Estimate rendered to Congress was for frigates of the common size and dimensions rated at 36 and 44 guns, and that the appropriations for the armament were founded on this Estimate. It also appears that when their size and dimensions came to be maturely considered due reference being had to the ships they might have to contend with, it was deemed proper so to alter their dimension without changing their rates as to extend their sphere of utility as much as possible. It was expected from this alteration that they would possess in an eminent degree the advantage of sailing—that separately they would be superior to any single European frigate of the usual dimensions—that if assailed by numbers they would be always able to lead ahead that they would never be obliged to go into action but on their own terms—and that in heavy weather they would be capable of engaging double decked ships."

Good sufficient and judicious reasons for the alterations, suggestive of a vigorous and enlightened Naval administration—but these Frigates were intended to mount in reality 62 guns—and the President moulded on similar lines wanted only about five feet beam to be a larger ship than the generality of British 74 gun ships—her yards were as square and masts as stout and the thickness of her topsides greater—measured at the main deck portside it was 1 foot 8 inches, while in any British 74 of 1,800 tons it was only 1 foot 6 inches—at the quarter deck port side, of the latter the thickness is 1 foot 1 inch, of the former 1 foot 5 inches.

The armament of those Frigates were in proportion to their dimensions—the President had *fifteen* ports and a *bridle* of a side on her main deck—*eight* of a side on the quarter deck, and *four* of a side without reckoning the *chase port* on the fore-castle—this gave the ship *fifty four* ports for broad-

side guns, but there were means for mounting sixty-two broadside guns. Instead of her gangways (or passage from the quarter deck to the fore-castle) being four or five feet in width they were *ten feet*—this was to allow room for the carriage and slide of a 42 pounder carronade—to avoid the necessity of uniting the quarter deck and fore-castle barricades (bulwarks) and thus destroying the single decked appearance which for purposes of deception it was necessary to maintain the *stanchions* for supporting the hammock clothes were of extraordinary thickness and so arranged along the gangways as to form ports for four guns on each side, the breechings were to pass round the iron stanchions: chocks were fitted to these gangways to receive the carriages and the guns could be as effectively mounted and worked as any in the ship—the waist still remaining open as in any other vessel of her nominal class. Experience eventually proved that the vessel worked better without the gangway guns and it was decided to add two carronades to the 54 she carried which was effected by fitting the gangway or entrance port to receive a carronade. The United States frigate of 44 guns mounted 30 long 24 pounder guns on the main deck, 18 carronades 42 pounders on the quarter deck, and 6 carronades 42 pounders with 2 long 24 pounders on the fore-castle, total 56 guns. The crew of an American 44 gun frigate was 475 men and boys distributed according to rating as follows, viz: officers and petty officers 80—able bodied seamen 180—ordinary seamen 145—marines 56, and boys 5.

The dimensions of an English 44 gun frigate belonging to the same nominal class as the President (of which there were ten in the British navy at the beginning of the war) would be of a burthen of 1374 tons—length between perpendiculars for keel measurement 143 feet by 42'6" beam. Thus— $143 \times 42.6 = 6077 \times 21.3 = 129136 \div 94 = 1374$ tons. The guns of the American frigates were mounted on high carriages and the elevation between decks allowed this being over eight feet, while those of the English vessels did not exceed six feet. The advantages possessed by the former at long ranges is sufficiently evident, and in the then state of Naval tactics fully sufficient to turn the tide of victory—the classes below that described in the British Navy were inferior to those in the American Navy in every respect. The cause of defeat is therefore not far or difficult to seek, nor would it be necessary to detail or analyse it at all, if people would not view national quarrels as matters of personal concern and not refuse to recognise the value of the powers and ability of the enemy of their country.

The prolonged hostilities between Great Britain and France constituted the United States the great carrier of the commerce of the latter power—as England insisted on the "right of search," i. e. that of visiting every vessel encountered on the Ocean to