of the energy with which he took advantage of the all but despotic power which he possessed to increase his naval force. For this purpose not only many ships were built during the protectorate, but numbers of merchant-vessels were bought for the service of the state.

After the restoration, Charles II. paid great personal at­tention even to the minutiae of his navy, as we find by the following curious extract from a letter of his to Prince Ru­pert, preserved in the state-papers, and also by continual references to his naval predilections in Evelyn’s and Pepys’s Memoirs and writings. The letter is dated 4th August 1673. It says, “ I am very glad the Charles does so well ; a gerdeling this winter when she comes in will make her the best ship in England ; next summer, I believe, if you try the two sloops that were builte at Woolidge that have my invention in them, they will outsail any of the French sloops. Sir Samuel M∞reland has now another fancy about weigh­ing anchors ; and the resident of Venice has made a model also to the same purpose. We have not yet consulted them with Mr Tippet nor Mr Deane ; but hope when they are well considered, we may find one out of them that will be good.”

In Pepys’s Diary, 19th May 1666, we find the following notice relating to one of the gentlemen mentioned in the above letter : “ Mr Deane and I did discourse about his ship the Rupert, which succeeds so well, as he has got great honor by it, and I some by recommending him. The king, duke, and every body, say it is the best ship that was ever built. And then he fell to explain to me his manner of casting the draught of water which a ship will draw before­hand, which is a secret the king and all admire in him ; and he is the first that hath come to any certainty beforehand of foretelling the draught of water of a ship before she be launched.” This gentleman appears therefore to have been the first who applied mathematical science to naval archi­tecture in this country. Pepys also says, “ another great step and improvement to our navy, put in practice by Sir An­thony Deane,” was effected in the Warspight and Defiance, . which were “ to carry six months’ provisions, and their guns to lie 41/2 feet from the water.” This was in 1665.

We have hitherto in our historical sketch several times adverted to the probability that the merchant-shipping of England were superior in their sea-going qualities to those composing the royal navy. In a “ Discourse touching the Past and Present State of the Navy,” by Sir Robert Slinge- by, knight-baronet, and comptroller of the navy, dated 1669, we have the following interesting statement, which points to a reason why this superiority of the merchant-shipping may have existed. “ But since these late distractions be­gan at home” (the Commonwealth), “ forraigne trade de­cayed, and merchants so discouraged from building, that there hath been scarce one good merchant-ship built these twenty years past ; and of what were then in being, either by decayes or accident, there are very few or none remaining. The merchants have found their private conveniences in being convoyed att the publick charge ; they take noe care of making defence for themselves if a warr should happen.” Yet he says in the time of Charles I. “ the merchants con­tinued their trade during the wars with France and Spain, if there could but two or three consort together, not care- ing who they met,” they being little inferior in strength or burthen to the ships of the royal navy. The Discourse ex­presses much regret at this decay in the importance of the mercantile shipping, and recommends that measures should be taken to check the evil.

About 1684 Sir Richard Haddock, comptroller of the navy, adopted the example already set by Mr, afterwards Sir Anthony Deane, and directed an inquiry to be made as to “ the number of cube feet that are contained in the bodyes of several draughts to their main water-line, when all materialls are on board fitt for saileing.” The result of this inquiry was a very voluminous statement of the weights which made up the whole displacement of the fourth, fifth, and sixth rate ships, including minute details of their masts, yards, armament, &c. accompanied by perfect drawings of each ship. The original document is now in the possession of the writer of this article, having successively belonged to Sir Jacob Ackworth, Sir Jacob Wheate, and Mr Edward Hunt. The following table contains the dimensions and displacements, &c. of each class.

Table of Dimensions, from a Manuscript dated **1684.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A First Fourth- rate near the largest di men­**  **tione.** | **A Second Fourth-rate near the dimen­sions of the Ad­venture.** | **A Fifth-rate of the largest di­mensions.** | **A First Sixth- rate.** | **A Second Sixth« rate.** | **A sixth- rate of the largest di­mensioni.** | **A Sixth, rate of the old fashion.** |
| Length on the gun-deck from the rabbitt of the stem to the rabbitt of the post (  Maine breadth to the outside of the  Depth in hold from the seeling to the upper side of the beame  Breadth at the afte side of the maine transome | **Feet. In.**  124 6  35 0  14 0  21 0  5 9  C 0 6 6  13 6  69 0  102 0  14 6  15 10  885  260  50  29,814  **Tβ. ct. qr. lb.**  851 16 2 8  418 000  1  **433** 16 2 8  4 | **Feet. In.**  116 6  32 9  13 2  18 4  6 0  6 0  6 3  12 9  62 0  96 9  13 6  15 0  580  180  44  22,346  **Tβ. ct. qr. Ib.**  638 9 0 16  314 0 0 0  324 9 0 16  3 | **Feet. In**.  103 9  28 8  11 4  18 0  5 9  6 0  6 7  9 10  54 6  84 0  12 0  13 0  362  135  34  13,195  Ts. ct. qr. lb.  377 0 0 3  160 0 0 0  216 0 0 0  3 | Feet. In.  87 8  23 6  10 9  14 0  5 7  6 3  7 6  45 0  71 0  9 8  10 8  85  24  8906  **Ts. ct. qr. Ib.**  254 9 0 16  120 0 0 0  134 9 0 16  2 | **Feet. In.**  70 0  21 6  9 10  13 0  5 6  6 2  6 6  36 0  57 0  8 6  9 6  70  18  6790  **Ts. ct. qr. lb.**  194 0 0 0  98 0 0 0  2 | **Feet. In.**  92 6  23 6  11 9  14 0  10 0 50 0 73 0 10 0  11 0 230  90  22  **Ts.**  135 | Feet. In.  93 0  22 9  10 0  15 0  9 6 49 6 74 0  8 0  9 0 220  90  24  **Ts.**  130 |
| Height on the gun-deck from planke to planke ..... afore...midships...abafte...  The center of the...fore...maine...mizion...mast from the rabbitt of the stern...  Draft of water...afore...abaft... |
| Number of tuns, tunage |
|  |
|  |
| Cube feet in the several draughts to) their main water line j'  Weight of each ship’s hull, and all manner of materials on board  Each ship’s hull at first launching  Burthen in tuns, what she will really carry  No. of months’ provisions and water |