SECTION II

OF ENGAGEMENTS WHERE THE FRENCH, BY KEEPING THEIR
FLEETS TO WINDWARD, HAVE CLEARLY SHOWN THEIR
DISLIKE, AS WELL OF MAKING THE ATTACK THEM-
SELVES, AS OF SUFFERING THE BRITISH FLEET TO AP-
PROACH THEM WHILE IN THIS WINDWARD SITUATION.

1. That of Sir George Bridges-Rodney, to windward
of Martinico, May 15, 1780.
2. Sir George Bridges-Rodney, near the same place,
May 19, 1780.
3. Sir Samuel Hood, off Fort-Royal, Martinico, April
29, 1781.

SIR GEORGE BRIDGES RODNEY'S RENCONTRE WITH THE
FRENCH FLEET, TO WINDWARD OF MARTINICO, MAY
15, 1780.

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EXTRACT OF A LETTER FROM ADMIRAL SIR GEORGE BRIDGES-RODNEY,
MAY 31, 1780, ON THE CARLISLE BAY.

94. Since my letter of the 26th of April from Fort-Royal
Bay, sent express by the Pegasus, I must desire you will please
RODNEY’S ENGAGEMENT

to acquaint their Lordships, that, after greatly alarming the island of Martinico, whose inhabitants had been made to believe his Majesty’s fleet had been defeated, but were soon convinced to the contrary, by its appearance before their port, where it continued till the condition of many of the ships under my command, and the lee currents, rendered it necessary for the fleet to anchor in Chocque Bay, St Lucie, in order to put the wounded and sick men on shore, and to water and relist the fleet; frigates having been detached both to windward and to leeward of every island, in order to gain intelligence of the motions of the enemy, and timely notice of their approach towards Martinico, the only place they could retreat at in these seas. Having landed the wounded and sick men, watered and relisted the fleet; on the 6th of May, upon receiving intelligence of the enemy’s approach to windward of Martinico, put to sea with nineteen sail of the line, two fifty gun ships, and several frigates.

From the 6th to the 10th of May, the fleet continued turning to windward between Martinico and St Lucia, when we got sight of the French fleet, about three leagues to windward of us, Point Saline on Martinico then bearing N. N. E. five leagues, Captain Affleck, in the Triumph, joining me the same day.

The enemy’s fleet consisted of twenty-three sail of the line, seven frigates, two sloops, a cutter, and a lugger. Nothing could induce them to risk a general action, though it was in their
power daily: They made, at different times, motions which
indicated a desire of engaging; but their resolution failed them
when they drew near; and, as they failed far better than his
Majesty's fleet, they, with ease, could gain what distance they
pleased to windward.

As they were sensible of their advantage in failing, it embold-
dened them to run greater risks, and approach nearer to his
Majesty's ships than they would otherwise have done; and, for
several days, about two in the afternoon, they bore down in a
line of battle abreast, and brought to the wind a little more
than random-shot distance.

As I watched every opportunity of gaining the wind, and
forcing them to battle, the enemy, on my ordering the fleet
to make a great deal of sail, on the 15th, upon a wind, had the
vanity to think we were nothing, and with a press of sail ap-
proached us much nearer than usual. I suffered them to enjoy
the deception, and their van ship to approach abreast of my
vessel, when, by a lucky change of wind, perceiving I could
weather the enemy, I made the signal for the third in com-
mand, who then led the van, to tack with his squadron, and
gain the wind of the enemy. The enemy's fleet instantly wore,
and fled with a crowd of sail.

His Majesty's fleet, by this manoeuvre, had gained the
wind, and would have forced the enemy to battle, had it not
at once changed six points, when near the enemy, and enabled
them
them to recover that advantage. However, it did not enable them to weather his Majesty's fleet so much, but the van, led by that good and gallant officer, Captain Bower, about seven in the evening, reached their centre, and was followed by Rear-Admiral Rowley's squadron, who then led the van; the centre and rear of his Majesty's fleet following in order.

As the enemy were under a press of sail, none but the van of his Majesty's fleet could come in for any part of the action, without waisting his Majesty's powder and shot. The enemy wantonly expended a deal of theirs, at such a distance as to have no effect.

The Albion, Captain Bower, and the Conqueror, Rear-Admiral Rowley, were the ships that suffered most in this renewal. But I am sure, from the slowness of their fire, in comparison to that of the van of his Majesty's fleet, the enemy's rear must have suffered very considerably.

The enemy kept an awful distance till the 19th instant, when I was in hopes that I should have weathered them, but had the mortification to be disappointed in those hopes; however, as they were convinced their rear could not escape action, they seemed to have taken a resolution of risking a general one; and, when their van had weathered us, they bore away along our line to windward, and began a heavy cannonade, but at such a distance as to do little or no execution; however their rear could not escape being closely attacked by the ships
of the van, then led by Commodore Hornam; and with pleasure I can say, that the fire of his Majesty's ships was far superior to that of the enemy, who must have received great damage by the rencontre.

The Albion and Conqueror suffered much in this last action, and several other ships received considerable damage; a list of which, as likewise of the killed and wounded, I have the honour to enclose.

The pursuit of the enemy had led us forty leagues directly to windward of Martinico; and, as the enemy had fled to the northward with all the sail they could possibly prise, and were out of sight the 21st instant, the condition of his Majesty's ships being such as not to allow a longer pursuit, I sent the Conqueror, Cornwall, and Boyne, to St Lucia, and followed with the remainder of his Majesty's ships towards Barbadoes, in order to put the sick and wounded on shore, and repair the squadron.

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95. B, (Plate XI. fig. 1.) The British fleet extended in line of battle to leeward, and endeavouring to get to windward.
RODNEY'S ENGAGEMENT.

1. The French fleet, for several days, about the hour of two in the afternoon, bore down in a line of battle abreast (as at I), and brought to the wind a little more than random-shot distance (as at G).

(Fig. 2.) The French, upon the 15th May, having imagined that the British were retiring, came down with a press of sail and approached nearer than usual (as at F, first position).

B. The British fleet in first position.

Sir George says, 'I suffered them to enjoy the deception, and their van ships to approach abreast of my centre at B. when, by a lucky change of wind (viz. I), perceiving I could weather the enemy, I made the signal for the van to tack, as at C, and gain the wind of the enemy. The enemy's fleet instantly wore, as at GG; and fled with a crowd of sail on the contrary tack, (as at H.)'

B, (Fig. 3.) The British fleet having now gained the wind (See I), would have forced the enemy to battle, had not the wind at once changed six points to K, when near the enemy, which enabled them to recover the weather-gage, (as in Fig. 4.)

F, (Fig. 4.) The French recovering the weather-gage, the wind having changed from I back to K.

G, The former line of course of the French fleet when the wind was at I.
B. The British van having now lost the weather-gage, by the wind changing from I to K, and endeavouring to reach the centre of the French line.

C. The line of the British course before the wind changed.

Sir George says, 'The van, led by Captain Bower, about seven in the evening, reached the enemy's centre, and was followed by Rear-Admiral Rowley's squadron, who then led the van, the centre and rear of his Majesty's fleet following in order. As the enemy were under a press of sail, none but the van of the British fleet could come in for any part of the engagement, without wasting powder and shot; the enemy wantonly expending a deal of theirs, at such a distance as to have no effect.'

II. DESCRIPTION OF SIR GEORGE BRIDGES-RODNEY'S REN

COUNTER WITH THE FRENCH FLEET, TO WINDWARD OF MARTINICO, MAY 19, 1780, TAKEN FROM HIS LETTER OF MAY 31, 1780.

... B, (Plate XII. Fig. 1.) The British fleet, on the 19th May, again disappointed in gaining the wind.

F. The van of the French fleet weathering that of the British.

The enemy kept an awful distance till the 19th inst. (says Sir George), when I was again in hopes that I should have weathered.

* See Fig. 1. B, British. F, French.
thered them; but I had the perdition to be disappointed in these hopes. However, as they were convinced their rear could not escape action, they seemed to have taken a resolution of effecting a general one; and, when their van had weathered us, they bore away, along our line, to windward, (as in Fig. 2.)

F, (Fig. 2.) The French van having weathered the British, bore away, along the line, to windward, and began a heavy cannonade, but at such a distance as to do little or no execution; however, their rear G could not escape being closely attacked by the ships of the British van B, led by Commodore Horsham. Sir George says, 'It is with pleasure I can say, that the fire from the British ships was superior to that of the enemy, who must have received great damage by the rencontre.'

97. Without farther observation at present on the nature of the manœuvring which took place in either of these encounters, it may be proper to remark, that the French, in both, contrary to their usual practice, have kept a windward situation. However, it will be evident, from Sir George's letter, that as it was their earnest desire to get back to Fort-Royal without being further hurt, so they neglected to manœuvre to accomplish their object; and the facts which they made of approaching the British fleet for four or five days in succession, could be intended only as an attempt to throw the Admiral off his guard. Therefore, as neither of these affairs can be considered as anything more than accidental encounters, our general observations will remain with the same force as before, and will confirm us in the belief, that the French will ne
NAVAL TACTICS.

...ver be induced, in prejudice of their object in view, either to make or sustain an attack, if it can possibly be avoided, whether that object shall be getting back to a port, an attack upon a particular place, the saving of their fleet in general, or the preserving of it entirely to the conclusion of the war.

III. SIR SAMUEL HOO D'S ENGAGEMENT WITH THE FRENCH FLEET OFF FORT-ROYAL, MARTINICO, 29. APRIL 1781.

EXTRACT OF A LETTER FROM REAR-ADMIRAL SIR SAMUEL HOO D, MAY 4. 1781.

...Saw nothing of the enemy or Amazon at day-light. A little before nine the Amazon joined me, the enemy then in sight, coming down between Point Salines and the Diamond Rock; made the signal for a close line, and to prepare for action. At nine the enemy appeared, forming the line of battle. Twenty minutes past nine, the Prince William joined me from Gros-Illet Bay; and, as I sent for her but the night before, Captain Douglas's exertion must have been great, and does him much credit, to be with me so soon, having the greatest part of his crew to collect in the night. Twenty-seven minutes past nine, hoisted our colours, as did the French Admiral and his flag. At fifteen minutes past ten, made the Shrewsbury's signal to alter her course to windward, she being the leading ship; but soon perceived the wind had shifted, and that she was...
as close to the wind as she could lye. At thirty-five minutes past ten, tacked the squadron altogether, the van of the enemy being almost abreast of our centre, and at eleven began to fire, which I took no notice of. At this time the ships in Fort-Royal Bay flitted their cables, and got under sail. At twenty minutes past eleven, I tacked the squadron altogether, and repeated the signal for a close order of battle. At twenty-five minutes past eleven, finding the enemy's shot to go over us, hoisted the signal for engaging, and, in passing our van and the enemy's rear, exchanged some broadsides. At forty minutes after eleven, the enemy tacked. At forty-five minutes after eleven, made the signal for the rear to close the centre. At fifty-five minutes past eleven, finding it impossible to get up to the enemy's fleet, I invited it to come to me, by bringing the squadron to under their top-sails. At half past twelve, the French Admiral, in the Bretagne, began to fire at the Barfleur, which was immediately returned, and the action became general, but at too great a distance; and, I believe, never was more powder and shot thrown away in one day before: but it was with Monsieur de Grasse the option of distance lay: it was not possible for me to go nearer. At one, I made the signal for the van to fill, the French having filled, and drawn ahead. At seventeen minutes past one, made the Shrewsbury's signal, the leading ship, to make more sail, and set the top-gallant sails. At thirty-four minutes past one, repeated the signal for a close line of battle; and finding not one of ten of the enemy's shot reach us, I ceased firing; the enemy did the same soon after, but their van and ours being somewhat nearer, continued to engage.
engage; and, though the French Admiral had ten sail astern of him, and three others to windward, he did not make a nearer approach. The merchant ships, at this time, were hauling in close under the land, attended by two ships of two decks, supposed to be armed en flute, and two frigates. At eighteen minutes past three, the firing ceased between our van and that of the enemy; made the Shrewsbury's signal to make more sail, in order to get to windward of the enemy. At forty-five minutes past four, sent Captain Finch to the Shrewsbury to order Captain Robertson to keep as near the wind, and carry all the sail he could, so as to preserve the line of battle, and to return back along the line, to acquaint every Captain of the same. At fifty-seven minutes past five, the packet going to Antigua, which had kept company with the squadron, came within hail, to acquaint me, by order of Rear-Admiral Drake, that the Russel was in great distress, having received several shot between wind and water; that the water was over the platform of the magazine, and gaining upon the pumps; and that three of their guns were dismounted. At eighteen minutes past six, made the Russel's signal to come within hail, which was answered; the enemy's fleet, consisting of twenty-four sail of the line, at this time about four miles to windward. At half past seven, Captain Sutherland of the Russel came on board, whom I ordered, if he could possibly, by exertion, keep the ship above water, to proceed to St Eustatius, or any other port he could make, and acquaint Sir George Rodney of all that passed. At forty-five minutes past nine, the Lizard came within hail, to inform me, by the desire of Captain Sutherland, that he had bore away.
HOOD'S ENGAGEMENT.

On Monday, April 30th, at day-light, found the van and centre of the squadron separated at some distance from the Barfleur and rear, owing to fluctuating winds and calms in the night, which would not allow us to keep the Barfleur's head the right way, and she went round and round two or three times, while the other ships had light airs, and, finding the enemy's advanced ships steaming for our van, made all possible sail towards them, and threw out the signal for a close line of battle, the enemy's line being a good deal extended and scattered. At seven, the squadron under my command being pretty well formed, the enemy's advanced ships hauled off. At fifty-six minutes past seven, made the signal for the rear to close the centre, as the enemy seemed to show a disposition to attack it. At thirty-five minutes past eight, having very light airs of wind, the squadron was thrown nearly into a line abreast; made the signal for continuing in that form, left, by endeavouring to regain the line abreast, it might become extended. At eleven, made the signal for a line ahead, at two cables length astern, the wind backing to the eastward, favoured by forming in that order, the better to receive the enemy, then about three miles to windward. At fourteen minutes past eleven, made the signal for the rear to close the centre. At twelve, falling little wind again, and all the ships being thrown into a line abreast, made a signal for a line abreast, to keep the squadron as close together as possible. At twenty-five minutes past twelve, the wind blowing steady at S. E., made the signal for a general chase to windward, with a design of weathering the enemy, which I should certainly have succeeded in, had the breeze
breeze continued; but the wind dying away at four, I found it impracticable to weather the enemy, and therefore made the signal for a line ahead; and having been informed that the Intrepid made so much water they could scarce keep her free, and that the Centaur was in the same state, owing to the number of shot between wind and water, and that her lower masts were very badly wounded, I judged it improper to dare the enemy to battle any longer; and therefore thought it my indispensable duty to bear up, and made the signal for it at eight o'clock.

At ten, brought to for the squadron to close; at forty minutes past ten made sail. At five A. M., the 1st instant, saw the enemy's fleet after, about eight or nine miles distant. At twenty-six minutes past five, brought to for the Torbay and Poccahunta to come up, which were then within reach of the enemy's guns; and the former received a good deal of damage in her masts and rigging. At forty-five minutes past seven, the enemy ceased firing upon the Torbay; sent the Amazon to tow the Poccahunta up. At eight, made the signal for a close line, bearing north and south of each other. At twenty minutes past twelve, made the signal, and brought to upon the larboard tack, and made the signal for the state and condition of the squadron, the enemy bearing east, standing to the northward.

Thirty-three minutes past three, made the signal for a close line north and south. At four, the enemy tacked to the southward, and were standing that way at sun-set. In the evening, though it was almost calm, the main top-mast of the Intrepid fell to pieces over the side. At seven, made sail to the northward, it being the opinion of the officers of the squadron acquainted
quainted with this country, that it was the only way of getting
to windward, as the currents run very strong to leeward, to the
southward of St Vincents.'

The conduct of the French, in this affair with Sir Samuel
Hood, is much the same with the two last of Sir George
Rodney's. It is the third time where, contrary to their esta-
blished practice, they have kept the wind. But, aware of the
danger of this position, they approached so near the British only,
as to be able to amuse them with a distant cannonade, while their
merchant ships and transports might, with sufficient security, get
into port.

Besides the above object, and the usual unremitting attention
to the safety of their ships, they had to secure an easy access, by
keeping to windward of their port; from which the armaments,
for carrying into execution the great schemes they had then in
contemplation, were to be fitted out. Of these, the first soon
after unfortunately took place in the Chesapeak.

From this battle, we may judge of the propriety of cannonading,
even where there may be the smallest chance of reaching
an enemy. For, notwithstanding the great distance of the two
fleets, and though the French were to windward; yet many of
their shot took place in the hulls of our ships, so far below the
water-line, that three of them could, with difficulty, be kept a-
float.
IV. ADMIRAL KEPPEL'S BATTLE OFF USHANT,
JULY 27. 1778.*

99. B, (Plate XIII. Fig. 1.) The British fleet, at six o'clock in the morning, standing upon the larboard tack, and lying up about W. by N.; that is, with their heads northwards, and ranging between the fleet of the enemy and their port of Breit.

F, The French fleet to windward, and nearly west, having kept that situation for four days before, as mentioned in Mr. Keppeil's letter; they had their heads also to the north.

A, At ten o'clock, the whole British fleet tacked together, and stood for the enemy, after having run through the dotted lines, their supposed course, and now upon the starboard tack, with their heads southward.

C, The British fleet advancing in as regular a line as the pursuit would admit; and the van having neared the enemy, a firing began between the headmost ships of both fleets about eleven o'clock.

While the British fleet was going through these movements, a squall of wind, attended with rain, arose, which prevented either fleet from seeing each other's motions; during which time, that is, from six o'clock, till half an hour after ten, the French had first stretched away north, on the larboard tack, to Q, where they tacked.

* British, 20 ships, 6 frigates. French, 28 ships.
tacked, then returned on a starboard tack to the south, as far as H, here they attempted a second tack, but some ships missing stays, from the effect of the squall, they were altogether, and were got again with their heads to the north, when the weather cleared up, and discovered the British fleet hard upon them but on contrary tacks. The wind veering a little about to the south in this critical moment, favoured the fleet of the French, by enabling them to lie better up, while, of course, the British fell off.

100 B, (Fig. 1.) The van of the British, after having got as near as they chose, each ship, as soon as it came within gun-shot, bore away, and run along the line of the enemy, firing at each ship in passing, the whole fleet following the same example.

101 F, Shows the course of the French, wishing to avoid the battle, and taking the advantage of the wind, now more southerly, by which means the rear of the British was able to fetch the centre of their fleet only, while, at the same time, the French van was now far to windward, and preparing to wear and run to leeward of the British fleet.

102 B, (Fig 3.) The British Admiral, in the Victory, together with other ships of his division, after having passed the rear of the French, in the act of wearing, to return to the support of their rear, or to give chase to the enemy.

103 A, The Formidable, Sir Hugh Palliser's ship, after having touched, and given and received a broadside with the French Admiral, and other ships, as the passed along the line.

C, The van of the British somewhat farther to windward.
104. F The French fleet, after having wore and running down before the wind, which, at that time, would give them the appearance of being in disorder, when seen from Sir Hugh Palliser's ship, the Formidable.

106. B, (Fig 4.) Admiral Knyvett, now to windward of the French fleet, between four and five o'clock in the afternoon, on the starboard tack, with his ship heads to the southward, and in hopes that the enemy would try to and try their fortune in battle with him next morning.

A. The supposed situation of the Formidable.

107. F The French fleet in order of battle to leeward, alo on the starboard tack, lying to, to receive the British Admiral, should he think fit to make an attack.

108. GGG. Three swift sailing frigates left with lights in their poop to amuse the British Admiral, while the rest of the fleet should slip into port before morning.

109. Mr. Knyvett, discovering the French fleet to windward, struggled hard for four or five days to get up with them; at last, the French, willing to give up the contest, passed to leeward, and formed their line of battle in their favourite position, as in the fore-mentioned case of Mr. Arbutnott, off the Chequers; but, in accomplishing this movement, it must be noticed from former examples, that they could have no intention.
tion to come within cannon-shot of the British fleet, when passing on contrary tacks, as they were forced to do, by the effect of a dark squall of wind and rain, and which also prevented them from seeing where they were, till close upon the British fleet.

Mr Keppel, in his letter to the Admiralty, having given his reasons why he did not attack the French fleet in the afternoon, it will be improper here to make any further remark upon it.

OTHER OBSERVATIONS.

110. Let us suppose two adverse fleets, A and F, (See Plate XIV. Fig. 1.) with hostile intention, contending to get to windward, the

With respect to the above observations, it seems necessary here to mention, that they made part of a former description of this encounter of the 27th of July 1778, written soon after, and then put into the hands of a few friends. That the author being in London in January 1780, many discussions were held, at the desire, and in presence of the same friends, as well for improving as for the communicating of, these and other ideas on naval ethics, and particularly on one occasion, by appointment with an officer of most distinguished merit. That they were afterwards intended to be inserted in the first edition of this Essay, printed January 1. 1782, as being applicable to the two similar encounters of Lord Rodney, of the 15th and 19th of May 1780, as well as to this of the 27th of July, where the adverse fleets had passed each other on contrary tacks. But it was afterwards thought proper then to omit them, as it was conceived it might be of prejudice to the other parts of the subject to advance anything doubtful, no example of cutting an enemy's line, in an attack from the leeward, having then been given.
the one of the other, and, by dint of sailing, or by change of wind, that the leading ships of the enemy F, shall have gained the wind of the fleet A; it seems evident, if the van, or any part of the leeward fleet A, was to continue the line of direction of their first course AB, and were not all, ship after ship, to bear away, as per course CC (Fig. 2.), that, with great advantage, the enemy’s line of battle might be cut in twain, at or G (Fig. 3.), and have thereby their rear, H, separated from their van F. (Fig. 3.); or otherwise, by such attempt, the course of all the ships after of this attack being thereby stopped, or retarded, the enemy F (Fig. 4.), to support these ships, will be compelled to hazard an engagement, that shall be close indeed, or he must altogether abandon the ships so stopped in his rear at G, (Fig. 4.)

Perhaps it will be said, that the risk of danger attending an attack of this kind, might be greater than any advantage that can be proposed.—To which, it is answered, The very first time ever we shall have the spirit to make the experiment, the success will be sufficient to justify the attempt, by convincing us, that the risk or damage to shipping in making the attempt, will be found to be of less moment than in any other mode of attack whatso-

116. But, since the attempt of cutting the enemy’s line had not been thought an advisable measure upon this occasion, should not some other efficient plan of attack have been concerted, by which, upon a supposition, if the two fleets should be brought to pass each other on contrary tacks, that the leading ships of the British squadron, after having ranged past the line of the enemy, should
have been appointed to tack, and, by doubling back, as per
contre B (Plate X V Fig 1), have brought the ships in the rear
of F between cross fires?

117 A movement of this kind would likewise have brought on
a closer and more general engagement, of the enemy, of conseq-
quence, must have abandoned their rear, as in the former case.
Not having been able to foresee, provide for, or advise upon ei-
ther the one or the other of the cases, during the four days the
British squadron was in pursuit of the enemy, is very extraor-
dinary, because, by being to leeward, the enemy, desirous of go-
ing off, and the wind not changing, it is without doubt dem-
onstrable, that the encounter of adverse fleets in such position, and
under such circumstances, will never be on the same tack, but,
of necessity, will always be on contrary tacks.

118 The two fleets, upon this occasion, passed each other in op-
posite directions, at the rate of five miles per hour. That of the
French consisted of 26 ships; and, as the space occupied by each
ship, including the intervals between may be about 294 yards,
(112 yards, No 25), their whole line (founded upon the
time proportion) may be supposed to be about five miles in
length. From which it will be evident, that the whole extent of
the respective line of each fleet must have passed the complete
line of the other in one hour; and each ship in the British line
must therefore have ranged past the length of the whole French
line (admitting nothing extraordinary to cause a stoppage) in the
one half of that time.
119. Again, let us make a supposition, that two, three, or more ships, in line of battle, are passing each other in opposite tacks, at the rate of five miles per hour; then will the velocity of the transit be equal to ten miles per hour. Or, which is the same thing, let us, for the sake of demonstration, suppose the one fleet at rest, that is, without any motion ahead whatever; but let the motion of the other ahead, and in an opposite direction, be equal to ten miles per hour, then each ship of the squadron in motion will pass through a space of 880 feet in one minute of time.

For the number of feet in one mile, being 

\[ \frac{5280}{10} \]

multiplied by 10, gives the velocity of the transit ten miles, or 52,800 feet, performed in one hour; which sum being divided by 60, \( \frac{60}{60} \cdot \frac{52800}{880} \) will give 880 feet, the velocity of one minute.

And as the length of each ship will not much exceed 200 feet, then it is evident, that the duration of time in which one ship will continue in direct opposition to any one other ship, of equal length, in the enemy's line, so as mutually to annoy each other, cannot exceed one quarter of a minute of time.

120. Again, suppose any number of ships, six, seven, or eight, running upon a starboard tack, at the rate of five miles per hour, and an equal number of the enemy, passing in opposite direction, at the rate of five miles per hour likewise, (as in Plate XV. fig. 2.); then, according to what has been said, each ship of the squadron.
squadron B, will pass each ship of the enemy F, with the interval between ships included, in one minute; that is, (the motion of both ships comprehended), will amount to 880 feet in one minute, say 500 yards, that being the usual allowance of space for each ship as extended in line of battle.

121. But, on such a supposition, the ship F (Plate XV. Fig. 2.) will be confined, in point of time, so far, that she will be able to give her fire to the ship B, while she shall be in direct opposition to her at the point A, because she must be in preparation to give a second broadside, when the ship D shall have come in direct opposition also; but, by the supposition, the transit of each ship is confined to one minute of time only. Therefore, though it were possible that the guns of the whole of the ship’s broadside could be loaded, prepared, and repeated, in the space of one minute, still it would be impracticable for the ship F to give more than one broadside to the ship B, even by following her in an angular direction, as that represented by G firing upon C, and afterwards to be in sufficient time prepared to give a proper reception to the ship D, now fast approaching.

122. Therefore, if the two fleets did pass one another, each at the rate of five miles per hour, and if it were possible that the loading and firing of a ship could be repeated once every minute of time, each ship still could be exposed to the fire of her antagonist during the space of one quarter of minute only, that is, while the two ships in question were in direct opposition, as at A from F; and, as the fleet of the enemy, on this occasion, consisted of 26 ships, each British ship, in ranging along the whole of their line,
line, could be exposed to a cannonade of six minutes and an half duration only: And, in place of five miles, if the two fleets had passed each other with a velocity equal to 2½ miles per hour, (a rate of motion required to make a ship answer the helm, but absolutely necessary to keep her under proper management in line of battle, when working to windward, as on this occasion), then, and in that case, each ship would be exposed to a cannonade of not more than thirteen minutes duration.

123. Again, if it shall be found impracticable to load and discharge a complete broadside in the space of one minute, and that this operation shall require six, eight, or ten minutes, one time with another, when it comes to be repeated, in an engagement of any duration, how much then will the effect be different! It must be observed, however, that these calculations are founded on the average of motion and time, taken upon the whole number of the ships comprehended in the French line of battle, and that particular British ships, from accidents, might have made their transit, by ranging past the fire of the enemy, some with more motion, and some with less.

124. Let any one imagine a rencontre of horsemen, where the parties, on coming to the ground appointed, had pushed their horses at full speed, exchanging a few pistol shot as they passed one another in opposite directions, at a distance of forty or fifty yards, and then some idea may be formed of the effect of encounters, where adverse fleets are brought to pass each other on contrary tacks, having nothing further in view than exchanging the few cannon shot which can take place on all such occasions.
125. From all which it must be evident, that the most artful management of sails, the closest approximation, or the most spirited cannonade, will avail nothing under such circumstances, and that it is vain to hope, that ever any thing material can be effected against an enemy's fleet keeping to windward, passing on contrary tacks, and desirous to go off, unless his line of battle can be cut in twain, or some such other stop can be devised, as has already been described.
SECTION III.


4th. B. (Plate XVI. fig. 1.) Admiral Mathews in the Xeres, commanding the centre of the British fleet, at 10 o'clock, when the signal for battle was given, and three hours before the engagement began.

A. The rear under Mr. Lestock, at that time several miles ahead.

C. The van, under Mr. Rowley, some miles ahead, and to windward, laid by Mr. Lestock to be in disorder.

F. The van and centre of the enemy closed, and composed of some Spanish, but, the greatest part, of French ships, then going at the rate of three or four miles an hour.

G.

British, 21 ships of the line, 2 of 50 guns, and 9 frigates.
French and Spaniards, 28 ships, and 4 frigates.

4th. To this battle, distinguished as it is by peculiar circumstances, and the better to express a desire of doing justice to the Admiral who commanded, it has been thought proper to assign a place by itself. The account of it is taken from plans, with descriptions, presented to the House of Commons, by Vice-Admiral Lestock, who commanded the rear of the British fleet, and who was the accuser before the Court-martial, by the sentence of which Mr. Mathews was sentenced to be hanged.
G, The Spanish Admiral, Juan Joseph Navarro, in the Royal Philip, with three ships of the rear division, a great way separated from the centre.

H, Five other Spanish ships, also belonging to the rear division, but far astern of the Admiral.

A, (Plate XVI. fig. 2.) The rear division of the British, under Mr Lestock, at one o'clock, still very far astern.

123. B, Mr Mathews, in the Namur, at one o'clock, three hours after the signal for battle, having broke the line, bore down, accompanied only by the Norfolk and Marlborough, his two seconds ahead and astern, and began the engagement with the Royal Philip and his seconds.

129. C, The van, under Mr Rowley, not yet engaged, but watching carefully to prevent the van of the enemy from getting the wind.

F, The centre and van of the enemy still far ahead of the rear.

G, The Royal Philip engaged with the British Admiral.

H, The five Spanish ships still far separated from the Admiral.

130. I, The Poder, a Spanish ship, cannonaded, but at a great distance, by five ships in the British line.

131. K, The Constant, the Spanish Admiral's second ahead, beat out of the line by the Norfolk, the Admiral's other second astern firing at her to make her to return.

A, (Plate XVI. fig. 3.) Mr Lestock still astern.
NAVAL TACTICS.

132. B, Mr Matheus, allisted by his seconds, silences the fire from the Royal Philip, and sends the fire-ship down the wind to set him on fire; which fire-ship, as she blew up somewhere at L, in the intermediate space between the two squadrons, did no hurt to either. The Lieutenant, Gunner, and four men, perished in the flames; the remainder of the crew escaped in their boats.

C, The van of the British cannonading the French, but at a great distance.

D, Four ships, which did not go down to support the Admiral and his seconds.

132. E, The Berwick, commanded by the gallant Mr Hawke, though in the van division, broke the line, bore down within half right shot, (while other ships kept to windward), gave battle to the Peder, and, at the first broadside, killed twenty-seven of her men, and dismounted seven of her lower-deck guns*.

F, The French, still on the larboard tack, and far ahead.

134. G, The Royal Philip preserved from the flames, but a perfect wreck. Such a consternation took place on board, upon the approach of the fire-ship, that many of her crew leaped overboard and were drowned.

135. H, The sternmost ships of the enemy firing at the fire-ship as she was coming down, but did not seem to reach her.

* In a little time afterwards, the Peder, lowering her colours, was boarded, and out and the first time by ten feet from several ships of the British fleet; but the commander, like a true Spaniard, declaring that he had struck to the Berwick, only, delivered up his sword to the officer from that ship.
MATHEWS'S ENGAGEMENT.

A, (Plate XVI. fig. 4.) Mr LESTOCK still astern; but it is said had very little wind.

B, Mr MATHEWS, in the Namur, got to windward, Mr LESTOCK having said, that, soon after the engagement began, he (MATHEWS) quitted his station, and left the Marlborough.

M, in the heat of action.

C, The van of the British, now upon a contrary tack, and returning to join the centre.

E, The Berwick quitting the Poder.

F, The centre and van of the enemy now upon the starboard tack, and doubling back to support their rear, conceived to be in great danger.

G, The Royal Philip; H, the five ships in his rear.

136. I, The Poder, which was retaken by the French, with a Lieutenant of the Berwick and twenty-three men on board.

N. B.—At this period (says Mr LESTOCK) Admiral MATHEWS thought proper to haul down both signals, that for engaging, and also that for line of battle.

A, (Plate XVI. fig. 5.) Mr LESTOCK, with his division, (as he has said himself), falling into the line of battle ahead, according to the signal then abroad.

137. B, Mr MATHEWS, at half an hour after five, again made the signal of line of battle ahead, and put about; but there being little wind, some ships tacked, and others wore, as did the Admiral himself, and formed the line of battle ahead on the other tack, viz. the starboard, leaving the Poder, as Mr LESTOCK says,
to be retaken by the French squadron, with the Berwick's Lieutenant and twenty-three of her men. So precipitate was his flight from the French (says he) that there was not time to save his men.

N. B.—Admitting all this speed and hurry, it might have been said that Mr Mathews rejoined his rear,—not that his rear had advanced much to support and rejoin him, as Mr Lestock would have it believed, when pointing out his own situation.

C. Mr Rowley, with the van, standing after the centre of the line.

D. The four ships, the Dorsetshire, Essex, Rupert, and Royal Oak, firing at the five ships in the Spanish rear, now within gunshot, having fallen to leeward in wearing, when the Admiral did.

E. F. The French squadron passing the British van, within pistol-shot, (as has been said), but without firing a shot, being intent only on disengaging the Spanish squadron in the rear, which ought to have been taken or destroyed long before this time, even without Mr Lestock's assistance, had every one done their duty.

G. The Spanish Admiral.

H. The five Spanish ships firing at the four ships, now on enemy's tack, and brought to be within reach.

I. The Rover, retaken by the French.

K. The Mähdon in tow, with frigates attending on her, on her way to Mahon.

Night
Night coming on, the combined fleets being to leeward, carried off their disabled ships, by having them in tow, and taking with them the Lieutenant of the Berwick, with twenty-three of her men, who had been put on board the Polder, and quitted her, where she was afterwards burned by the Eflex.

Without entering into the merits of the dispute between Mellis Mathews and Lestock, what might have been the most proper time for giving the signal for bearing down to close engagement, we have no doubt that the following observations will now be found just:

129. That, if Mr Mathews and his friends had been properly supported, the greatest part of the Spanish rear might have been cut off: Therefore, that the attack made by him upon the rear of the enemy, as it was so far separated from the centre and van, was both bold and well designed at the time.

140. That, as Mr Rowley's petition with the van did overawe the van of the enemy, it was a proper one.

141. That it is evident that the French, on this occasion, as well as on all the others that have followed since that time, had the safety and preservation of their ships only as the principal thing in view.

142. Again, from this battle, we may be able to form some judgment of the effect of cannon-shot, with respect to distance.
The Royal Philip, the Spanish Admiral *, in his combat with the British Admiral and his seconds, had all his rigging destroyed, not a top-mast left standing on end, his main-yard upon the deck, and two or three port-holes beat into one. He had 238 men killed, and 262 wounded.

The Constant, the Spanish Admiral's second ahead, during the short time the flail, had 25 men killed, and 43 wounded.

On the other hand, the Marlborough, opposed to the Spanish Admiral and his seconds, had her main and mizen-masts beat overboard, and, though otherwise a wreck, had her ensign nailed to the stump of the mizen-mast which remained. She had 43 men killed, and 128 wounded;—amongst the first was Captain Cornwall, her brave commander, and Captain Godfrey of the marines.

143. Great and dreadful as these effects were, yet the distance between the combatants must have been very considerable, that could have admitted of a fire-ship being put in motion, set on fire, time for her men to take to their boats, to quit her, and to get off, and, lastly, to blow up without injury to so many ships surrounding her. After so many circumstances being allowed to take place, can the distance be thought to be less than 400 or 500 yards at least?

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<th>Guns</th>
<th>Men.</th>
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<td>Guns.</td>
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<td>Royal Philip</td>
<td>104</td>
<td>1,572</td>
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<td>Belfast</td>
<td>80</td>
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MATHEWS'S ENGAGEMENT.

144. Again, the Poder of 64 guns, another Spanish ship, after having been exposed a long time to a cannonade from five ships in the British line, without having suffered material damage (vid. No. 14.); yet the first broadside from the Berwick (which had broke the foresaid line, and had approached within half musket-shot *) killed twenty-seven of her men, dismounted seven of her lower-deck guns; and, when she struck to the Berwick, had not a mast standing.

145. A General at the head of his troops, and leading them on to action, has long been considered as a sufficient signal; and Mr Mathews's ship, when going down to battle, as Admiral, in the centre, should have been the example for his whole fleet, whether the signal was given at ten or twelve o'clock. The brave commanders of the Norfolk and Marlborough, his seconds, were of this mind; as has also been Sir George Rodney upon a later occasion: Therefore, every ship which kept her wind, and did not follow the Admiral, Mr Mathews, down to fight the enemy, ought only to be considered as breakers of the line. And hence that Sentence of the Court-Martial which broke Mr Mathews, ought virtually to be considered as the source of all the many naval miscarriages since.

Q

The distance between these two ships at this time may be supposed to be about 400 or 500 yards, not less than that between the two opponent flag ships. The boats from several ships of the British fleet getting on board the Poder when she struck, at one and the same time, is in some degree a confirmation of this opinion.
SECTION IV.

146. ADMIRAL PARKER'S ACCOUNT OF THE ENGAGEMENT WITH THE DUTCH ON THE DOGGER BANK, 5TH AUGUST 1781.

Yesterday morning we fell in with the Dutch squadron, with a large convoy, on the Dogger Bank. I was happy to find I had the wind of them, as the great number of their large frigates might otherwise have endangered my convoy. Having separated the men of war from the merchant ships, and made a signal to the last to keep their wind, I bore away, with a general signal to chase. The enemy formed their line, consisting of eight two-decked ships, on the starboard tack. Ours, including the Dolphin of forty-four guns, consisted of seven. Not a gun was fired on either side until within the distance of half musket-shot. The Fortitude being then abreast of the Dutch Admiral, the action began, and continued with an unceasing fire for three hours and forty minutes. By this time our ships were unmanageable. I made an effort to form the line, in order to renew the action; but found it impracticable. The Bienfaisant had lost her main top-mast, and the Buffalo her fore-yard; the rest of the ships were not less shattered in their masts, rigging, and sails; the enemy appeared to be in as bad a condition. Both squadrons lay-to a considerable time near each other,

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*British, seven ships, four frigates. Dutch, eight ships of two decks.
other, when the Dutch, with their convoy, bore away for the Texel. We were not in a condition to follow them.

147. This affair, though in itself greatly different from the many we have had with another enemy, yet, with respect to the subject before us, viz. the mode of attack, is perfectly similar. The gallantry of the Dutch refusing to fire a gun until the British Admiral should have made choice of his distance, could have no prior influence upon the determination of the British Admiral in his mode of attack; nor will it make any other difference in the manner the French may afterwards receive us, than to redouble their anxiety not to lose the least possible chance of annoying our ships, let the distance be what it will, whenever we shall be disposed to attack them.

148. Though this battle has a greater resemblance to the old Dutch than the present French manner of fighting, we cannot help recalling to remembrance those glorious and obstinate conflicts of former times, which did so much honour to both nations.

SECTION V.

GENERAL OBSERVATIONS.

149. From these examples, it appears, that the attack, in every one of them, without variation, has been made by a long ex-
tended line, generally from the windward quarter, by steering or directing every individual ship of that line upon her opposite of the enemy, but more particularly the ships in the van.

450. That the consequences of this mode of attack have proved fatal in every attempt; that is, our ships have been so disabled, and so ill supported, that the enemy have been permitted not only to make sail and leave us, but, to complete the disgrace, have, in passing, been permitted to pour in the fire of their whole line upon our van, without a possibility of retaliation on our part. The cause, then, of these miscarriages, can never be said to have proceeded from a fault in our shipping, and far less from a want of spirit in our seamen.

451. And, though we have not yet been so happy as to see their innate naval spirit exerted with advantage in the greater fights, we may yet have the consolation of being assured, even from these examples, that it does exist, if we take into consideration the habitual desire they constantly have shewn of making the attack, in spite of every discouraging affront: On the other hand, that the enemy may justly be said to have it not in that degree, if we consider the habitual desire they have constantly shewn, as well in avoiding, as in refusing to make the attack.

452. From the mode of this attack, followed throughout most of the examples we have given, it would seem that an idea had been formed, by stopping the van, of taking, destroying,
GENERAL OBSERVATIONS.

...ing, or disabling the whole of the enemy's line *. The event has proved this attempt impracticable. But will not this idea be also found contradictory to the general complaint of the deficiency of our ships in point of sailing? For, if this deficiency is a truth, would it not have been more natural, upon a chase of the enemy, to make sure of the slowest sailing vessels to be found in the rear, than to attempt to get up with the swiftest ships to be found in the van?

153. Another reflection will naturally occur: That, by the great destruction of rigging, the consequence of this mode of attack, the nation has been thrown into a most enormous expense of repair, while our enemy, by their cautious conduct, preserving their ships often unhurt, has been enabled not only to protract the war, but, if persisted in, will, without doubt, ensure the possession, perhaps, of a superior navy, complete and entire to the conclusion.

154. Having now demonstrated, from evidence which should be satisfactory, that the mode or instructions hitherto followed for arranging great fleets in line, so as to be able to force an enemy to give battle on equal terms, must be somewhere wrong, it will be required to show whether any other mode may be devised, or put in practice, that will have a better effect.

But, as nothing can be devised of worse consequence than what has so long and repeatedly been put in practice, an offer of any

* Nos. 32. and 58.
any thing new, it is to be hoped, may be examined with that attention which the importance of the subject demands.

By the phrase *new*, is not here meant, that what follows was never either spoke of, or thought of before; but it is surely so far new, as never to have been put in demonstration by writing; nor is there any examples of its having been put in practice in actual combat.

155. But, if the method or practice of bringing single ships into action has been found, by long experience, to succeed so well, why should not this practice, in some degree, be applied to numerous fleets? And if we have proved that the intrepidity and perseverance of our seamen must be equal, if not superior, to the enemy, ought we not at once to endeavour to bring this superiority to avail us where it best can, that is, in getting as close alongside of the enemy as possible? And that this may be done, not only upon equal, but upon far superior terms, will be endeavoured to be proved by demonstration in the following mode of attack.

MODE