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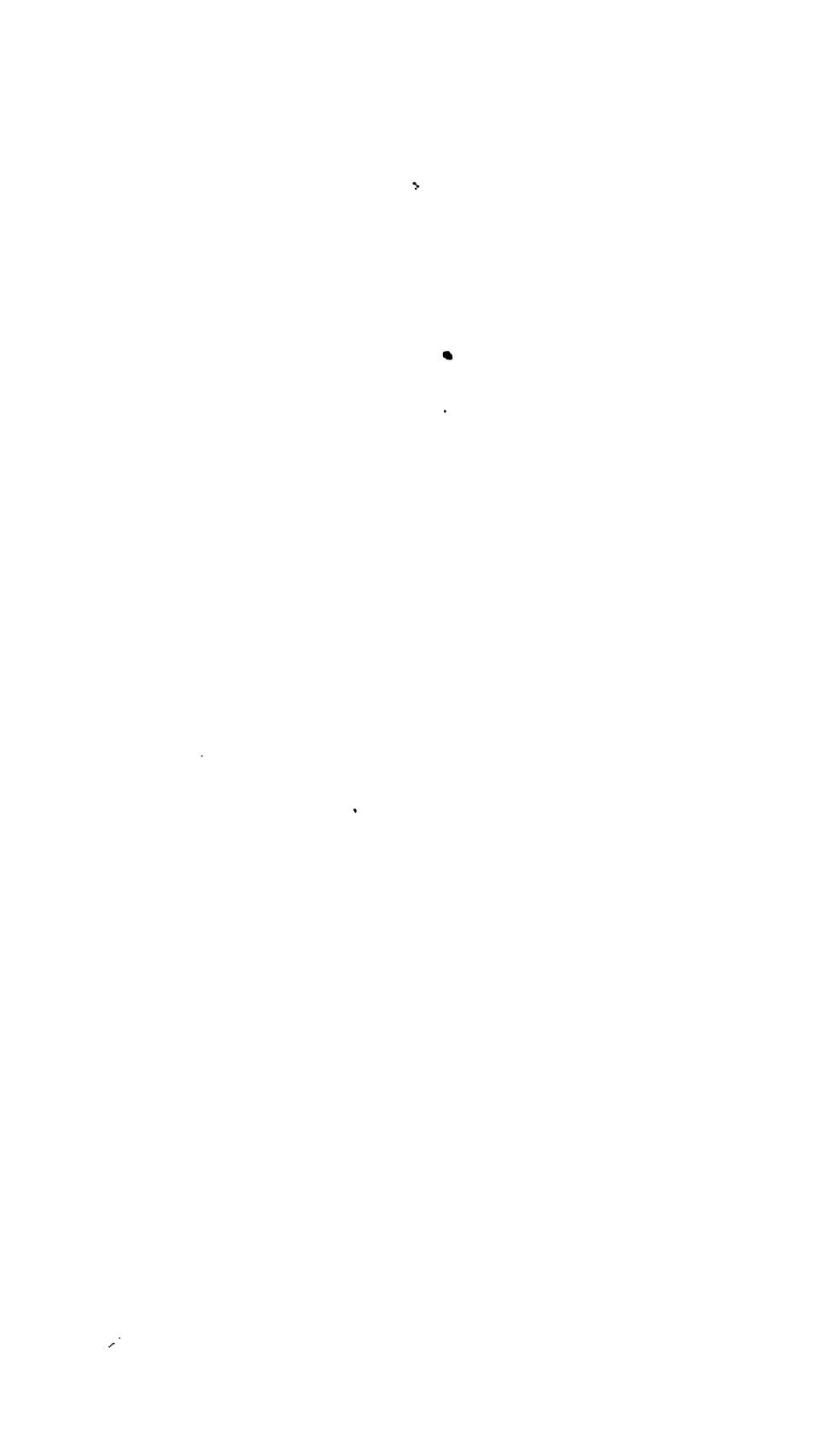
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AN ESSAY

Georg. Rodn. U. States & Vanc.
ON

NAVAL TACTICS,

SYSTEMATICAL AND HISTORICAL,

WITH

Explanatory Plates.

IN FOUR PARTS.

BY JOHN CLERK, ESQ. OF ELDIN,

FELLOW OF THE SOCIETY OF SCOTTISH ANTIQUARIES,
AND OF THE ROYAL SOCIETY OF EDINBURGH.

THIRD EDITION.

WITH NOTES BY LORD RODNEY,

AND

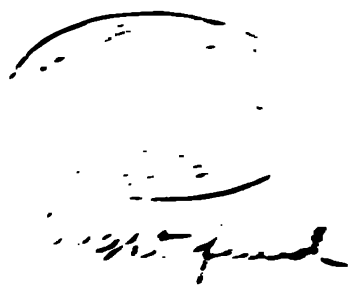
AN INTRODUCTION BY A NAVAL OFFICER.

EDINBURGH:

PRINTED FOR ADAM BLACK;

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MDCCCXXVII.



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ADVERTISEMENT TO THE FIRST EDITION.

A FEW copies of this First Part of an *Essay on Naval Tactics* being printed in 1782, were handed about among friends. But although the Author has been flattered with many letters of approbation, not only from gentlemen of literary fame, but from Naval Officers of distinguished merit, and of the highest rank, while others have taken the trouble to make copies in manuscript; and although, since that time, he has been occasionally employed in making additions, and, he hopes, some improvements, it is not without solicitude that his Work is now submitted to a more public examination.

The rest of the Work is in great forwardness, and will be published as soon as it is finished. In the mean time, it was thought proper no longer to delay the publication of this First Part.

EDINBURGH, *January* 1790.



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INTRODUCTION.

The splendid results which followed Mr Clerk's discoveries in Naval Tactics, sufficiently attest their value and importance. The publication of his theory forms indeed an era in the annals of maritime war. If we look to the battles which were fought prior to this, we find, notwithstanding the valour and enterprise both of our officers and seamen, that, with few exceptions, they were all indecisive and unprofitable. The object of our enemies, conscious of inferiority in close action, was to avoid a battle, and to act entirely on the defensive; and for this purpose they had brought to perfection a system of skilful manœuvres, by which they always contrived to disable and to keep at a distance the hostile fleets of Britain. Hence the British

commanders were always foiled in their attempts to force on a close action ; and though they often encountered the enemy's fleets, they generally parted, after some indecisive and distant cannonades. Hence also the enemy had no difficulty in transporting troops to the most distant parts, for the protection of his colonies, or for any purpose of offensive war. His fleets traversed the ocean in comparative security ; nor did the accidental encounter of a British fleet, which produced no decisive action, ever present any serious obstacle to his warlike plans ; nor did it at any time put a stop to their convoys or their trade. The simple, bold, and decisive manœuvre of passing through the enemy's line, suggested by Clerk, and of which he demonstrated the efficacy in a variety of the most conclusive illustrations, effected a complete revolution in maritime war, and gave a new and brilliant aspect to our naval history. The conflicts of hostile fleets were no longer signalized by the triumph of defensive

tactics. The skilful mode of attack now adopted never failed to bring on a close and general action, in which valour was sure to triumph; and since this period accordingly, a succession of the most brilliant naval victories has adorned our annals. The simple inspection of history is all that is necessary therefore to establish the importance and originality of Mr Clerk's views; and any farther proof on this subject would appear altogether superfluous, were it not for some recent attempts to detract from Mr Clerk's merits, and to give the credit of this discovery to Le Pere Paul Hoste, a French writer, who published a work on naval tactics, more than a century back. We shall shortly endeavour to refute this ill grounded surmise.

When we consider the nature of the bold manœuvre suggested by Mr Clerk, how susceptible it is of close and scientific demonstration, and what a signal revolution it was destined to effect in naval tactics, we may safely assert, that if it

had been discovered by Pere Hoste, the fact must have been placed beyond all dispute by his own precise and conclusive explanations on the subject, as well as by the subsequent history of maritime war. It is the necessary effect of all great improvements to make their own way by the mere force of their obvious and acknowledged utility. They are immediately adopted into practice; and when this is not the case, the presumption is that no great discovery has been made. Now we would ask those who claim the merit of this discovery for Pere Hoste, to point out the great victories which have been gained by following his counsel; or even a single battle to which any reference has been made to him as an authority in naval affairs. Nor does this writer seem at all to contemplate any great results from the breaking of the enemy's line. He has no conception of the nature or effects of this great manœuvre; it does not enter into his theory of tactics; and

though in the bustle and confusion of a sea fight, he sometimes speaks of vessels passing through the opposite line, he has no just notion, nor any systematical explanation of this mode of attack. It will accordingly be found, that as he proceeds to explain his theory of tactics, and to illustrate by plans and examples the movements of hostile fleets, he frequently ranges them in such relative positions as he would have seen, with the slightest knowledge of Clerk's tactics, to be hazardous and impracticable; and he recommends manœuvres for defence, which, under the same improved mode of attack, would have ensured instant destruction. It is manifest, in short, from the whole scope of Pere Hoste's illustrations and arguments, that he had no other idea than of ranging the hostile fleets in opposite and parallel lines.—
“ Dans un combat (he observes) les armées se naviguent sur deux lignes parallèles à une des deux lignes du plus près.” He then proceeds to give as

an example of this order of battle, the Duke of York's array in the action of the Texel, where he remarks that the order of battle was exactly observed for the first time; and he gives the Duke of York credit for bringing the line of battle to perfection. The two fleets fought for eight hours without doing much damage, when the signal was made by the Duke of York, "pour arriver tout-a-fait sur l'ennemi;" after which, Opdam's ship having blown up, the Dutch retired before the wind. In this action there was no manœuvring. The fleets fought in parallel lines, an order of battle which never would have been adopted by the English commander, if he had understood the advantages of breaking the line, and of bringing his whole force to bear on a part of the enemy.

Père Hoste explains, somewhat in detail, the supposed advantages possessed by a fleet of inferior force, which has the weather gage of its enemy; and his views on this subject show plainly his

total ignorance of the modern manœuvre of breaking the line; the different plans of attack which he recommends being entirely at variance with the principle of this movement.

Although there are certainly some parts of Clerk's treatise which might be criticised by a seaman, yet we do not think it deserves the censure bestowed on it by an officer of the Navy, and given to the public in Admiral Ekims' late work. We should recollect that Mr Clerk was not a seaman himself, and therefore we wonder so few errors are to be found in his tactics. If our limits permitted, and if it could be done with propriety, it would not be difficult to show that the officer quoted by Admiral Ekims has not evinced a correct knowledge of Mr Clerk's plan, and that he has not used the courteous language we should expect from an officer of the rank it appears he holds in the Navy. It is very different from the fair and manly view Admiral Ekims himself takes of the subject. He

gives his own opinion in most proper terms, and very handsomely states the opinions of others more favourable to Clerk's, though in opposition to his own; concluding with these words—"between conflicting opinions it is for the reader to decide." We are certain Mr Clerk's book has been a most useful production for the British Navy, and ought at least to be treated with respect by every British officer. We think we have proved that it differs most materially and essentially from that of Le Pere Hoste; and his plan cannot be said to have been copied from the theory of that writer, neither was it taken from the practice of more ancient times. Hoste may have contemplated, but did never produce any thing like the cutting off a part of the enemy's fleet, for the purpose of bringing the whole force of the attacking fleet on the part so cut off. Even with a superior fleet to windward of its enemy, Hoste would persevere in bringing the van of the former abreast of the van of the lat-

ter, before he would double the unoccupied ships of his rear on those of the enemy. It was precisely the trying to bring van abreast of van, which caused the failure of all our naval actions for so many years. No one can deny that our naval actions had for long ended in doubtful victories, if victories they could be called. There was no decisive action fought for many years back until Rodney's in 1783. It was Clerk's tactics which caused our Admirals to find out and practise the method of forcing an enemy's fleet to close action. We know his book was in the possession of Rodney, the first man who did practise it; and we are sure his practice was taken from this book, because before he sailed for the West Indies, when asked his opinion of it, he is known to have said, "I will show what is my opinion, the first time I meet an enemy's fleet. With this opinion on his mind, and with the book itself in his possession, he went to the West Indies, and there fought the battle of the 12th of

April. Had the captains of the fleet understood, or even imagined the plan proposed by Clerk, that action would have been much more glorious than it was; the van of Rodney's fleet would have cut the French line, and the whole of the rear of the French fleet would have been taken; but such a manœuvre had never been contemplated by the captains of Lord Rodney's fleet, which proves indisputably that the merit of it was due to Clerk. We may blame Lord Rodney for not having imparted to those under him the tactics he was in possession of; but we must do justice to the man who invented them, by giving him all the praise he deserves. It should be remarked, that Clerk's book had not then been published, and it was a manuscript which Lord Rodney had in his hands. We do not mean here to enter into a minute examination of the naval actions fought, either before or since Lord Rodney's battle; but the preface to the part of Clerk's works shows that no such plan as his had oc-

curred to the members on the court-martial of Keppel, Matthews, or Byng, or they would have pointed out the defective system of attack which had caused the failure of all these Admirals. Our own recollection will remind us, that Lord Howe attempted, but did not exactly follow Clerk's system. He broke the line, it is true; but he brought his fleet parallel to that of the enemy, and made the signal for each ship to engage his opponent. This was not bringing his whole force on a part of that of the enemy; and we are certain we are justified in saying, that had he followed implicitly Clerk's plan of attack from the windward, the result would have been far more glorious than it was. Indeed, had he understood and practised Clerk's plan, the French fleet would have been defeated before the 1st of June. Had Lord St Vincent followed implicitly Clerk's plan, he never would have stood on so long before he tacked, and he would not have owed his victory to the prompt and mas-

terly manœuvres of one man. Had Nelson not been in that fleet, there would have been no ship taken that day. Had Nelson commanded the fleet, very few of the enemy's ships would have escaped. Lord Duncan's action was fought quite on Clerk's system; and his Lordship most liberally and handsomely acknowledged that he had learnt that system from Clerk. Lord Nelson's famous orders for the disposition of his fleet before the battle of Trafalgar, is almost an exact repetition of Clerk's tactics. It was Clerk, then, who gave to our naval commanders the first idea of the proper mode for attacking and bringing on a decisive action. The Navy must admit they did learn this from Clerk. Clerk was our master, whoever taught him; whether his natural genius was his master, or whether he had derived his information from what had existed, but what had before his day become extinct and lost in practice to the British Navy. Indeed, even with Clerk's plan before them, our

Admirals have only taken to it by degrees; nor was it fully proved and acknowledged until so late as the time of Nelson, when the orders before alluded to acknowledged the theory, and the battle of Trafalgar most gloriously proved the practice. We are most happy to see another edition given to the Navy. We strongly recommend not only the perusal, but the study of it to the young officer; and even the oldest and most experienced will gain information and knowledge by reading it. The great necessity of doing away the chance which must exist in all naval actions, is not yet sufficiently appreciated by British seamen. Their valour leads them yet to consider tactic and manœuvre as two secondary objects; but reflection and the study of tactics will show them, as well as the result of late practice, that in all cases it is well to bring the whole force on a part of that of the enemy, and secure first a certain victory, by the capture of a part of the adverse ships, instead of, in the hope of

capturing the whole, to bring on an action ship to ship, which must, even with skill and bravery on one side, be attended by doubtful results. We conclude this by declaring our firm opinion, that Great Britain and her Navy owe to the late Mr Clerk the greatest obligations.

THE AUTHOR'S PREFACE.

THOUGH a superior degree of knowledge in naval affairs be evidently of the utmost consequence to the inhabitants of this island, yet the subject of Naval Tactics had long remained among us in a very rude and uncultivated state. Of this I was convinced at an early period of life, and I had long applied to this study before I ventured to communicate my thoughts upon it to the Public.

Since the appearance of the following system in print, about twenty-two years ago,* it has been a source of the greatest satisfaction to me to observe a total change in the mode of conducting engagements with great fleets, on the part of our gallant British Admirals. The spirit, perseverance, and superior skill of our seamen, uniformly displayed in close engagements in the case of single ships, but which, from the dexterous manœuvres of the enemy, could not formerly be brought into proper effect, on account of a total neglect of the study of

* The first impression of Part First consisted of a few copies, not for sale, but to be given away.

Naval Tactics, have at last been exhibited also in the case of great battles with numerous fleets, in a manner which has led to naval victories that must ever appear with the greatest lustre in the British annals. The letters of approbation which I have received, not only from men of learning, but from naval officers of distinguished ability and of the highest rank,* and the numerous compliments that have of late been paid to me, might exempt me from the imputation of vanity, if I should now conclude, that my work, however imperfect, has essentially contributed to the service of my country.

As I never was at sea myself, it has been asked, how I should have been able to acquire any knowledge in Naval Tactics, or should have presumed to suggest my opinions and ideas upon that subject. The following detail, which I trust I shall now be excused for entering upon, will, it is hoped, obviate every prejudice of this kind.

I had acquired a strong passion for nautical information, when almost an infant. At ten years

* I was, in particular, much flattered by the decided approbation of my Essay, by Lord Duncan and other naval officers at Portsmouth, conveyed by his Lordship, then Captain Duncan, in a letter to my relation, Sir John Clerk, so long ago as October 4. 1785 ; in which is mentioned also the attention paid to my work by his Royal Highness the Duke of Clarence.

old, before I had seen a ship, or even the sea, but at a distance of four or five miles, I formed an acquaintance at school with some boys who had come from a distant sea-port, and who instructed me respecting the different parts of a ship from a model which they had procured. After this apprenticeship, I had frequent opportunities of seeing and examining ships at the neighbouring port of Leith, which increased my passion for the subject; and I was soon in possession of a number of other models, some of them even of my own constructing, which I often sailed on a piece of water of some size in my father's pleasure-grounds, where there was also a boat with sails, which furnished me with much employment. Besides this, I had studied Robinson Crusoe, and had read a number of voyages. A desire of going to sea could not but be the consequence of all this. Checked it was, however, at all times by my family, who already had suffered heavy losses in both sea and land service.

During the course of two long wars, the first of which commenced about this time, I had the advantage of the conversation of many of my own near relations, who had been bred to the sea-service. Besides this, I had at all times courted a connexion with other professional seamen and ship-builders, of all ranks and capacities, wherever they were to be met with, as at London, and in almost all the other sea-ports round the island. At the

same time, I was unwearied in my attention to the many valuable experiments of the ingenious and liberal-minded Mr Patrick Miller of Dalswinton ; to whom, whether in ship-building or in constructing artillery, both musketry and great guns, his country is more indebted than has hitherto been properly acknowledged.

Meanwhile, I took every opportunity which offered of making short expeditions or trips on the water, with the sole intention of observing the effect of the sails, of the waves, and of the rudder. At some times, for hours, it was my custom to contemplate the effect of the wind upon ships of all kinds, small and great, on their departure from a mole, or pier-head, such as that of Leith, one of the best places for the purpose which I have known. Of this sort of amusement I never tired ; but continued the practice, with the fore-mentioned models rigged in different ways, of making experiments in sailing, in every way that could be thought of, and on all occasions correcting and fixing my ideas, by committing them to paper, both by drawing and writing.

By these means, I had begun to have some conception of that most difficult problem, hitherto not sufficiently elucidated,—the way of a ship to windward : but having it in view to bring forward something on that subject at some future period, and for which already I have collected a number

of materials, let this rest for the present, and let it be supposed that my attention to Naval Tactics, more particularly, commenced about the year 1770, when a most ingenious gentleman, the late Commissioner Edgar, came to reside in my neighbourhood. He had been in the army, and, with his company of foot, detached from Gibraltar, had been put on board Admiral Byng's own ship, to supply the want of marines; and was present in the action off the island of Minorca, which soon followed, on May 20th 1756. Mr Edgar afterwards, as the friend of Admiral Boscawen, had the great good fortune to accompany that accomplished commander on the more fortunate occasion of Lagos Bay. In the course of much conversation and animadversion, which naturally might be supposed to arise from these two subjects, we happily had for our assistance a copy of the trial of Admiral Byng, in which Mr Edgar himself had been examined as a witness. I have been informed, that among other remarkable circumstances which often attend trials of this kind, the use of every species of plan, drawing, or delineation, was most unaccountably denied the unfortunate Admiral.

The attack in this battle was from the windward: and as it appeared to me extremely ill conducted, the subject occupied my mind for years. In this discussion, I had recourse not only to every species of demonstration, by plans and drawings,

but also to the use of a number of small models of ships, which, when disposed in proper arrangement, gave most correct representations of hostile fleets, extended each in line of battle; and being easily moved and put into any relative position required, and thus permanently seen and well considered, every possible idea of naval system could be discussed without confusion, and without the possibility of any dispute.

The war in 1775, meanwhile, commenced; during the continuation of which, my studies advanced; so that by the time it was surmised that the two fleets, British and French, might have put to sea, an anxiety inexpressible laid hold of my mind; and the desire of being present at the meeting of the hostile fleets was so great, that, could my private concerns in any way have admitted of it, or rather had I not been at such a distance from Portsmouth, from whence the armament on the part of Britain was fitted out, I certainly should have been on board some one ship of Lord Keppel's fleet.

The rencounter which followed on the 27th of July 1778, became the subject of two other long trials; the first that of Lord Keppel the Admiral; the second that of Sir Hugh Palliser, the second in command, which, far from giving satisfaction, proved only fresh cause of disquiet among the officers of the navy. The subject was new—an at-

tack from the leeward: it had never occurred before, at least in these later times; and therefore it was the less wonderful that it might be subject to animadversions, or that the most able officers might differ in opinion with respect to the manner of conduct. But it is remarkable, that not only in the course of these two long trials, but also in the course of the two trials formerly mentioned, of Admiral Matthews in 1744, or that of Admiral Byng in 1756, not one single hint has escaped, from any one concerned, that it was possible any thing defective could be attributed to the system of the attack itself, or that any kind of improvement should be attempted.*

The investigation, however, of many things in this engagement, which to me seemed to be palpable blunders, and most important, roused a desire which could not be resisted, and hurried me on to put in writing a number of strictures, accompanied with drawings and plans, containing sketches of what might have been attempted in this new kind of rencounter of fleets upon contrary tacks, more particularly applicable to this attack, as it

* Alluding to what has since been put in practice—the cutting the enemy's line asunder—the directing the greater part of the force of a fleet against a few ships, either in the van or the rear, or even making prize of the slower-sailing or crippled ships of the enemy. P. 144. § II
P. 153.

was from the leeward, which, after communicating to friends, naval officers, and others in my neighbourhood, copies were sent to London.

The next example of a sea engagement which followed, was that of Admiral Byron off the island of Grenada, July 6th 1779. The attack was from the windward, and similar both to that of Matthews and that of Admiral Byng. These attacks, together with this of Lord Keppel, made four cases, in which it appeared to me, that neither the difficulty of bringing on an engagement, nor that of pursuing the enemy, arose from any abatement in the spirit of the seamen, nor of any defect in the shipping, on the one side, nor even from any superiority of sailing on the other; but must be attributed alone to the unskilful manner in which the several attacks were conducted.

P. 71. No. 73.

In January 1780, when I was in London, being fully impressed with the importance of the naval ideas which long had been working in my imagination, and in consequence of the strictures on Lord Keppel's engagement sent the year before, some appointments, for the purpose of farther communication on this subject, were made by my friends. Among the first of these, was an appointment with Mr Richard Atkinson, the particular friend of Sir George Rodney, who was then in London, and was immediately to set out to take the command of the fleet in the West Indies. At

this meeting, the whole of my acquisitions on the subject of Naval Tactics, for many years back, was discussed. I communicated to Mr Atkinson the theories of attack from both the windward and the lee-ward; the first as contained in the first part of this Essay; the last as contained in the second part, now published a second time. I particularly explained my doctrine of cutting the enemy's line, &c. as set forth in both first and second parts. I also produced the paper of strictures on Lord Keppel's rencounter of the 27th of July, which contained all my general ideas on the subject of Naval Tactics. All this Mr Atkinson undertook to communicate to Sir George Rodney, which he could have no difficulty in doing, as I left in his custody sketches made according to my usual method of demonstration, together with the necessary explanations.

P. 120. No.
115.

From the best authority, I have been informed that Lord Rodney himself at all times acknowledged the communication; and having, from the first, approved of my system, declared, even before he left London, that he would strictly adhere to it in fighting the enemy.

Soon after this, Admiral Rodney sailed with a strong fleet for the West Indies. Off Cape Finisterre, he fell in with and captured a number of Spanish transports; and off Cape St Vincent, meeting with a Spanish squadron, he took several

ships, and made prisoner Don Languara the commander. Proceeding to the West Indies, on the 16th April 1780, he came in sight of the French fleet, to the leeward of the Pearl Rock, west end of the island of Martinico. On the 17th, the French were still to leeward; and Admiral Rodney brought on an action, by an attack from the windward. In his official dispatches describing the battle, there is the following remarkable passage: "At forty-five minutes after six in the morning, I gave notice, by public signal, that my intention was to attack the enemy's rear with my whole force."

Page 87.

This was a language altogether new, either from Admiral Rodney, or any of his predecessors; and as it was the first instance in which a British Admiral had ventured to deviate from the old practice, I could not help immediately ascribing it to the communications I had made to Mr Atkinson, as mentioned before. Elated as I was by the above passage, I was disappointed by another in the same letter. "At fifty minutes after eleven A. M. I made the signal for every ship to bear down, and steer for her opposite in the enemy's line, agreeable to the 21st Article of the Additional Fighting Instructions."

Page 88.

Afterwards on the 15th May, and again on the 19th, Admiral Rodney came to actions with Count de Grasse; but I was extremely mortified, that al-

though, on both occasions, he met the enemy on contrary tacks, and from the leeward, he showed no intention whatever of attempting to cut asunder the enemy's line, or even of separating, or cutting off a single ship from the rest of the line, although this could have been accomplished with the most perfect ease. Page 105.

In four other engagements which followed, P. 120. No.
115.
1. That of Admiral Arbuthnot, on the 16th March 1781, off the mouth of the Chesapeak; 2. That of Admiral Hood on the 29th April, off Port Royal, Martinico; 3. That of Admiral Parker, on the 5th August, on the Dogger Bank; 4. That of Admiral Graves, on the 5th September, off the mouth of the Chesapeak, the former practice was still continued; and accordingly, our fleets did not take a single ship from the enemy, and completely failed to accomplish the purpose of their destination. And though I must take notice, that on the 16th of March 1781, Admiral Arbuthnot had much merit, in disappointing the intentions of the French upon the Chesapeak, that officer knew nothing beyond the old erroneous system of tactics; and, very soon after, the French entirely succeeded in their purposes in that quarter, to the great mortification of the British.

Having convinced myself of the effects that would follow a change of system, every fresh dispatch from our fleets gave me new pain. The

fatal errors, to which our want of success was to be attributed, still prevailed.

In the mean time, so often as dispatches with descriptions of these battles were brought home, it was my practice to make animadversions, and criticise them, by fighting them over and over again, by means of the foresaid small models of ships, which I constantly carried in my pocket; every table furnishing sea-room sufficient on which to extend and manœuvre the opponent fleets at pleasure; and where every naval question, both with respect to situation and movement, even of every individual ship, as well as the fleets themselves, could be animadverted on;—in this way not only fixing and establishing my own ideas, but also enabling many handsmen to form a judgment with respect to the subject of tactics as well as myself.

Often, on these occasions, I had been pressed to publish my ideas, and had certainly done so long before, had it not been for two objections, both of which were of great weight with me. 1. Not being a professional man, and having even to learn many of the sea terms, I thought such a work from me would come very ill recommended; 2. Having always employed my mind in mechanical studies, and in drawing only, I found myself extremely deficient, too, in the art of writing. I had therefore wished to find some professional sea-

man, who, approving of my ideas, would either communicate them to the public, or fall upon means of getting them attended to in the Navy.

At last, however, I found myself irresistibly impelled, by the melancholy accounts of the transactions which followed the 5th September 1781; when Admiral Graves, instead of entering the Chesapeak, and relieving Lord Cornwallis, which he could have done with perfect ease, unadvisedly followed Count de Grasse to sea, and, after making an attack not less feeble and indecisive, than any which had preceded it, found himself obliged to retire, leaving Lord Cornwallis and his fine army to their fate; which was followed with consequences not less important, but far more dreadful, than those that happened on the loss of the island of Minorca, when abandoned by the unfortunate Admiral Byng in 1756. P. 79.

In prosecution of my tactical ideas at the time, put in motion by the strictures upon Lord Keppel's engagement, on the 27th of July 1778, now twenty-six years ago, I had made considerable progress in forming diagrams for illustrating the attack from the leeward, as appearing to me to be both new, and a manœuvre of greater ingenuity than the attack from the windward; when it occurred that, in composing an Essay on Naval Tactics in general, it would be necessary to begin by saying something, 1. On the method of attack in P. 119. 121. 202. P. 21. & 22.

26. the case of single ships; 2. On the mode of bringing a number of ships, or that of great fleets, to action: and I had, by way of illustration, made a collection of engagements which had formerly taken place, such as that of Admiral Matthews in 1744, that of Admiral Byng in 1756, and of Lord Keppel's in 1778, &c. to which were added, plans, with observations, founded upon dispatches from the several Admirals. And laying hold of an opportunity to read this Essay to a number of gentlemen assembled on purpose, it was so much approved of, that I was encouraged to finish it immediately, that, being published, it might be of some use in the very critical situation we were brought into by this last misfortune and disgrace of our fleets in the mouth of the Chesapeake.

45. 126. 195. The attack from the leeward, it is true, was the first begun to be wrote. But as the materials of the attack from the windward were in greater forwardness, it was determined that this part of the subject, the attack from the windward, should be first executed; and accordingly, after getting it finished with as great speed as possible, it was published by the 1st of January 1782. A few copies, only 50 in number, were printed, and handed about among friends: some copies I took the liberty to present to professional men. Very soon, however, I found that my system, so far as it then went, had excited a good deal of attention; and I

was much gratified by the many flattering letters of approbation which I received, not only from men of letters, but from naval officers of distinguished merit, and of the highest rank. Thus encouraged, I was advised to send copies to his Majesty's Ministers at the time, which was in spring 1782; and my opinions, if just, no doubt deserved the immediate attention of Government.

Our affairs at sea soon after took a different turn; and I have since had the great satisfaction to see, by the adoption of my system, a decided and permanent superiority given to our fleets. I shall say nothing, in this place, of the brilliant enterprise of Lord Hood for the relief of St Christopher's, the account of which arrived about this time. The public joy on this glorious occasion had not subsided, when intelligence came of the memorable and glorious victory gained by Lord Rodney, upon the 12th April 1782; a victory far more decisive and important than any which had been gained by our fleets during the last century. The general exultation was excessive; and I flattered myself I could distinctly perceive, even from the first accounts of the engagement, that the victory was owing to the adoption of my system; and especially to the manœuvre of cutting the enemy's line in attacking from the leeward.

P. 283.

Sir George Rodney himself, when he arrived

in Britain, made no scruple to acknowledge, that I had suggested the manœuvres by which he had gained the victory of the 12th of April 1782. I may here also be permitted to observe, that although Sir George should be supposed to have had the merit of adopting the manœuvre by which he gained the victory of the 12th April 1782, without any previous suggestion or knowledge of my ideas upon the subject, still it is impossible to deny the efficacy of the method; and the system on which it proceeded might have remained unknown and unexplained: And perhaps it would not have been followed in other instances, had not my Essay attracted the notice of the Navy; for the manœuvre was so new and uncommon, and so little agreeable to the former practice, that its adoption by Sir George Rodney, as well as its consequences, in that instance, must naturally have been ascribed to accident or good fortune, more especially as Sir George had not, on former occasions, departed from the old rules, and, in his dispatches giving an account of this victory, made no allusion to the manœuvre as a new one, from which he had antecedently expected such effects; for which reason, though I will not presume to estimate the merit, or put a value on the invention, as of signal use to my country, I will not disguise the satisfaction, and even the consolation I have, in thinking (in which I have been

joined by many) that I have been the means of introducing a system of tactics, which has given to the British fleets that evident superiority over their enemies, to which the gallantry and skill of the officers and men, and the construction and force of the ships, always entitled them.

ELDIN, *May* 19. 1804.



NAVAL TACTICS.

PART I.

INTRODUCTION.

UPON inquiring into the transactions of the British Navy, during the two last wars, as well as the present,* it is remarkable, that, when single ships have encountered one another, or when two, or even three, have been engaged of a side, British seamen, if not victorious on every occasion, have never failed to exhibit instances of skilful

* By the present war is understood the American war ; this tract being written in October 1781, immediately after the surrender of Lord Cornwallis's army, the consequence of Admiral Greaves's unsuccessful rencounter with the French fleet off the mouth of the Chesapeake. A few copies only were printed, and at that time distributed among friends.

seamanship, intrepidity, and perseverance; yet, when ten, twenty, or thirty great ships have been assembled, and formed in line of battle, it is equally remarkable, that, in no one instance, has ever a proper exertion been made, any thing memorable achieved, or even a ship lost or won on either side.*

Whoever studies the history of the times, will be convinced of the truth of both these assertions. But many, without properly attending to the first, acknowledge, and endeavour to account for, the last, by insinuating, that as our seamen, whatever they were in former times, are now, in no respect, preferable to those of our rivals, it would be absurd to expect from them a greater degree of exertion; and that the ships of our enemies, being better constructed, have had it always in their power to avoid an engagement, by outsailing us. As these opinions, unhappily, have already had too much influence, even among seamen, it will be partly the business of the following treatise to show, that they are ill-founded; and that it is neither to any abatement of spirit in our men, nor even to any fault in the construction of our ship-

* Neither the gallant manœuvres off St Christophers, nor the memorable 12th of April, took place till the spring following.

ping, that the want of success in the late great sea-battles ought to be attributed.

From our insular situation, we are led to avail ourselves of a naval force, in some such manner as that in which all animals are directed to make use of the weapons or talents with which nature has furnished them, whether for support or defence.

Why the effect of this propensity to sea affairs was not more conspicuous in the earlier part of our history, may be accounted for likewise from our insular situation. Occupied with disputes, while divided into two kingdoms, our attention was withheld from the rest of Europe; and, separated as an island, we were much less the object of foreign interference. But as soon as these internal disputes began to subside, which in a great measure they did, from the influence that the hope of succeeding Elizabeth had upon Mary Queen of Scots, and her son James, this naval disposition broke forth with irresistible force; and, cherished by successive improvements in commerce, every obstruction being removed by the union of the two kingdoms, it has produced effects which have been the admiration of the world.

It is obvious that, from the greater extent of coast, number of bays, dangerous ferries, and from the various sea-carriage which our produce consequently requires, a greater portion of our people must be bred to a seafaring life than is necessary

in other nations. From these causes, as well as from the tempestuous nature of our seas, rapidity of our tides, and inconstancy of our climate, it may be expected, that our seamen, besides being numerous, ought at the same time to acquire courage and dexterity sufficient to encounter the difficulties to which they must unavoidably and constantly be exposed; and that, from a combination of all these circumstances, a national character will arise, distinguished by a hardy and persevering intrepidity, which, without such causes, can never exist.

A prepossession in favour of one's countrymen is both natural and commendable; but, where they have undertaken and uniformly succeeded in great and glorious enterprizes, it does not require the influence of national prejudices to conclude that they are distinguished by an extraordinary character. Whether this may have arisen entirely from the causes above enumerated, or in some degree also from the nature of our government, is not the object of our present inquiry: it is sufficient, for the purpose of this Essay, that such a character is actually found to exist in this island.

During the reign of Elizabeth, not to dwell upon the famous expeditions of Drake, Cavendish, Norris, and the Earl of Cumberland, for which we refer to our best historians,* where can a more il-

* See Hume's History, Chap. 51. 52. and 53. 4to. edit.

lustrious example of naval skill be met with, than the conduct displayed in the destruction of the Spanish Armada? in which we may observe, that the prudence of sustaining a defence, by suffering that immense armament to waste its force in a contention with the winds and waves, was no less conspicuous than the intrepidity with which the repeated attacks were made.—Sir Martin Frobisher's exploits and death before the harbour of Brest reflect additional glory on his countrymen.—Neither ought the spirited behaviour of James Lancaster before Fernambuco, in the Brazils, to be forgotten. Seeing the shore lined with great numbers of the enemy, he ordered his men to row their boats with such violence against the shore, as to split them in pieces. By this bold action he both deprived his men of all hope of returning, unless by victory, and terrified the enemy, who fled after a short resistance.—We may also mention the second enterprize at Cadiz, when Essex threw his hat into the sea.—But the true character of the British sailor is so justly displayed in the obstinate resistance made by Sir Richard Greenville, in a single ship, against a numerous Spanish fleet, as described by Mr Hume, that an account of the action shall here be given in the very words of that great historian.

“ Lord Howard being sent with a squadron of seven ships to intercept the West India fleet,

“ was attacked by a Spanish squadron of fifty-five
“ sail. By the courageous obstinacy of Sir Richard
“ Greenville, the Vice-Admiral, who refused to
“ make sail with the rest of the squadron, one ship
“ was taken, being the first English man of war
“ that had fallen into the hands of the Spaniards.
“ This action of Sir Richard Greenville is so sin-
“ gular as to merit a more particular descrip-
“ tion. He was engaged alone with the whole
“ Spanish fleet, of fifty-five sail, which had ten
“ thousand men on board; and from the time the
“ fight began, which was about three in the after-
“ noon, to the break of day next morning, he re-
“ pulsed the enemy fifteen times, though they had
“ continually shifted their vessels, and boarded with
“ fresh men. In the beginning of the action, he
“ himself received a wound, but he continued doing
“ his duty above deck till eleven at night, when,
“ receiving a fresh wound, he was carried down to
“ be dressed.

“ During this operation, he received a shot in
“ the head; and the surgeon was killed by his
“ side. The English began now to want powder;
“ all their arms were broken or become useless; of
“ their number, which was but a hundred and three
“ at first, forty were killed, and almost all the rest
“ wounded; their masts were beat overboard, their
“ tackle cut in pieces, and nothing but a hulk left,
“ unable to move one way or other. In this situ-

“ ation, Sir Richard proposed to the ship’s com-
 “ pany to trust to the mercy of God, not to that of
 “ the Spaniards, and to destroy the ship, with them-
 “ selves, rather than yield to the enemy. The mas-
 “ ter-gunner, and many of the seamen, agreed to
 “ this desperate resolution ; but others opposed it,
 “ and obliged Greenville to surrender himself pri-
 “ soner. He died a few days after ; and his last
 “ words were, ‘ Here die I Richard Greenville,
 “ with a joyful and quiet mind, for that I have
 “ ended my life as a true soldier ought to do,
 “ fighting for his country, his Queen, religion, and
 “ honour. My soul willingly departing this body,
 “ leaving behind the lasting fame of having be-
 “ haved as every valiant soldier is in duty bound
 “ to do.’ The Spaniards lost in this sharp, though
 “ unequal action, four ships, and about a thousand
 “ men ; and Greenville’s vessel herself perished
 “ soon after, with two hundred Spaniards on
 “ board.”*

It would be endless to enumerate every achieve-
 ment, where the capture, almost of every ship, must
 have furnished materials for a particular panegyric.
 Mr Hume, in treating of this subject, expresses
 himself in the following manner ; “ In every ac-
 “ tion, the English, though they had long enjoyed

* See Hume’s Hist. ch. 43. first edit. 4to.

“ domestic peace, discovered a strong military disposition; and the Queen, though herself a heroine, found more frequent occasion to reproach her Generals for encouraging their temerity, than for countenancing their fear or caution.” However much Elizabeth might wish to temper the ardour of her subjects on some occasions, on others she does not seem to be wanting in her endeavours to rouse their spirit sufficiently; for, in a harangue before Parliament, when speaking of the Spanish Armada, she said, “ But I am informed, that when he, Philip, attempted this last invasion, some upon the sea coast forsook their towns, fled up higher into the country, and left all naked and exposed to his entrance; but I swear unto you, by God, if I knew those persons, or may know of any that shall do so hereafter, I will make them feel what it is to be so fearful in so urgent a cause.”*

Notwithstanding the great attention which Elizabeth gave to the navy, yet, at her decease, it consisted of forty small ships only, of which number four did not exceed forty guns, and but two of these amounted to a thousand tons; twenty-three others were below five hundred tons; of the rest, some were of fifty, and some even did not exceed twenty

* Hume's Hist. *ubi supra*.

tons ; and the whole number of guns belonging to this fleet was 774. If such brilliant and glorious actions were performed by so inconsiderable a force, what might we not expect from our navy in its present state ? For the honour of the English at that time, it must be remarked, that, while the Royal navy consisted of these forty ships only, so great was the national spirit, and so much was it united, that an infinite number of other ships of war was soon fitted out, as well by private gentlemen, at their own expence, as by the different sea-ports. Thus, the ill-concerted,* but formidable attempt of the Spanish Armada, by farther exciting the resentment, and affording the greater occasion of gratifying the military genius of the nation, now about this period first seriously exerted in naval enterprize, may be said to have laid the foundation for that renown, which, ever since, has been maintained with so great spirit.

One would have thought, however, that the naval force should not have increased much during the reign of Elizabeth's successor James, when it is considered that the practice of the English merchants then was to carry on their trade in foreign bottoms ; yet, from the year 1582, when the number of seamen, upon a computation, amounted to

* See Note A.

14,295, until the year 1640, at the beginning of the domestic troubles, that number was found to be tripled.

After an interval of twelve years, the Dutch war was the next occasion of a farther display of our naval character. But, it must be observed, that, while the English seamen had been so often engaged, and generally successful, in the lesser battles, or rather enterprizes, yet, till now, they had never been tried in the greater, where a number of ships were assembled together. However, their wonted intrepidity, far from forsaking them on this new and unexperienced occasion, seemed to be augmented, or rather exalted to a state of enthusiastic fury, which was supported with an unremitting perseverance during the course of three dreadful wars; in the first of which we had nine pitched battles; in the second five; and in the third not less than five also; making in all nineteen general engagements; in one of which the fight was renewed for three additional days successively; in another for two days; and in a third for one day; which may fairly be stated for other six engagements; making, when taken together, twenty-five days of general actions. And, what would now be considered as ridiculous and impracticable, many of the officers appointed to the command of these fleets had never been in sea service till they were past the age of forty, and some even of fifty years. Of the last number was

Blake, who, although renowned for the many obstinate battles he had been engaged in, particularly that in the Downs, where he had no more than fifteen ships, did not refuse the combat when attacked by forty-two ships of the enemy, led on by the great Van Trump. Yet for nothing was he more conspicuous than for his patriotic virtue. When in opposition to the party then in power, "It is still our duty," said he to the seamen, "to fight for our country, into whatever hands the government may fall."

In all of these enterprizes, whether with the Spaniards or the Dutch, whether in making the attack on castles, ships in harbours, or encountering ship with ship in close action, and formed in line of battle, we shall find the British seamen, whether equal or inferior in number, victorious or worsted, invariably fired with such enthusiastic courage, that these battles, though not always decisive, were constantly marked with strong effect; ten, twenty, thirty, or more ships, being taken or destroyed, two thousand men killed, and as many taken prisoners.

Therefore, without derogating from the gallant behaviour of the Dutch, which was equally displayed in those wars, we are bound, from these proofs and examples, to believe, that British seamen are, by nature or habit, endued with a peculiar extraordinary character. And, though the

spirits of the people might have been, for a little time, depressed by the unfortunate battles of Beechy-head and Bantry-bay, which were fought some time after; yet the natural impressions, so justly in favour of our seamen, soon recovered our confidence; which was so much increased by the battle off La Hogue, that, many years afterwards, the victories off Malaga and Messina were things to be expected of course.

The long intervals between these actions, and that of the war 1743, nowise abated the sanguine impressions respecting our seamen. Much effect was expected from the powerful fleet sent into the Mediterranean under the command of Matthews and Lestock, who encountered the combined fleets of France and Spain on the 11th of February 1744. But, intending afterwards to give a more particular description of this affair, we shall only add, that Matthews, who commanded, accompanied with the Marlborough and Norfolk, his two seconds a-head and a-stern, together with the Berwick in another place, broke out from the line of battle, got within a proper distance, and fought with great bravery; but, being ill supported by the rest of the fleet, little more was done, than to show what cannon-shot, at a reasonable distance, might effect. The two Admirals mutually accused each other; and Matthews, in consequence of a trial, was broke. But the late king, without at-

tending to the nice distinctions which had determined the court-martial, and being satisfied that the Admiral had behaved like a brave man, refused to confirm the sentence.

Happily some other more favourable opportunities offered, during the course of this war, in which, having a greater superiority, we were more successful. These, with the unremitting exertions in the many lesser sea-combats, removing the evil impressions made by the miscarriage in the Mediterranean, we still flattered ourselves that the glory of the British flag was yet untarnished.

But, be that as it may, we could not, without some emotion, recal to mind those tremendous and glorious battles with the Dutch, in which the spirited and *united* exertions of our seamen had been so justly celebrated, that, when the last war broke out, our minds were so prepossessed with enthusiastic partiality, that there were but few of our countrymen who did not firmly believe and trust, that if one British sailor was not a match for two of the enemy, he was at least a very superior being.

How great, then, was the disappointment of the nation, when it was known, that Admiral Byng, commanding a British fleet of superior force, in a general engagement with the French, without losing a ship, almost without the loss of a man, half of his fleet not having fired a shot, had acknowledged himself worsted, by flying to Gibrat-

tar,* abandoning Minorca, and leaving the garrison at the mercy of the enemy, who were then masters of the sea !

Meanwhile, it is with astonishment that we must remark the innumerable lesser conflicts during the course of this war, where examples of persevering courage and daring intrepidity were invariably exhibited in private as well as public service, and generally of such effect, that one or other of the combatants, of necessity, was obliged to strike. A complete catalogue of which, however acceptable, would be too great for the bounds of this work.

It must be owned, indeed, that several fortunate and important occasions occurred during the course of this war, where numbers of ships were assembled, particularly that of Hawke with *Conflans* ; but then the enemy, though nearly equal, after discovering great want of determination, fairly ran away, without coming to an engagement. But, as we had a great superiority on all these occasions, excepting the one now mentioned, the decision that took place, by means of that superiority, will never destroy the force of the general observation.

* *Note by Lord Rodney.*—His orders were, to be most attentive to Gibraltar, by the Council of War, which was unanimous, and of course equally to blame with their Admiral ; but his orders were very vague from the Admiralty.

Again, while we remark the wonderful exertions, and constant success, attending the lesser conflicts; while we remark how much, and how often, our ships have been put to severe trial, by being exposed, in all weathers, during the storms of winter, the enemy not daring to set out their heads;* when, after recollection, we remark, that, to the numerous bold and successful enterprizes, *coups de main*, performed during the last 250 years, and that our enemies have only the single disgrace which befel us at Chatham to counterbalance so great an account, should we not at the same time remark, that this boasted intrepidity, this persevering courage of British seamen, has never once been brought to trial, where it would have been of the greatest importance; that is, in the greater engagements; of which, because this superiority has never had an opportunity of being displayed, the result has always been the same, namely, that, in such actions, our fleets, in the two last wars and the present, have been invariably baffled, nay worsted, without having ever lost a ship, or almost a man?

While we remark these circumstances, is it not evident, and will it not be admitted, that one of

* Alluding to the squadron of British ships kept in the Bay of Biscay during the course of last war, to watch over the motions of the enemy, in winter as well as in summer.

three things must be the fact, either that our enemy, the French, having acquired a superior knowledge, have adopted some new system of managing great fleets, not known, or not sufficiently attended to by us? Or that, on the other hand, we have persisted in following some old method, or instructions, which, from later improvement, ought to have been rejected? Or, lastly, that these miscarriages, so often and fatally repeated, must have proceeded from a want of spirit in our seamen?

But as, from the many instances given, both of public and private exertion, the mind must revolt at this last supposition, it follows, that these repeated miscarriages must have proceeded from one or other of the two first, or from both.

During the course of the wars with the Dutch, before mentioned, much improvement was made, particularly in the invention of signals. But the naval instructions* then framed, although founded upon experience and observation, and though they might be admirably fitted for fighting in narrow seas, where these battles were fought; yet, from later experience, it will be found, that they have been but ill qualified for bringing on an action

* *Note by Lord Rodney.*—The naval instructions want a thorough reformation; but 'tis not in the power of every commander-in-chief to make what additions he pleases.

with a fleet of French ships, unwilling to stand a shock, having sea-room to range in at pleasure, and desirous to play off *manœuvres* of defence, long studied with the greatest attention.

But if it were possible that there could have remained a doubt of the truth or force of these observations before the breaking out of the present war, will not this doubt be resolved, if they shall be confirmed by every case that has followed since; whether we consider the intrepidity and exertion so conspicuous in the lesser conflicts, or the defect of conduct and address, so palpable in most of the greater engagements, although, at the same time, our Admirals, whether by good fortune, by skilful seamanship, or by permission of the enemy, have never failed, on every occasion, to acquire their wish, viz. the circumstance of being to windward; excepting, indeed, on those occasions, where the French have chosen to keep such an advantage, without availing themselves of it; a circumstance which is plainly a confirmation that their system or mode is different from ours, and that they are uniformly determined never to be brought to make the attack, if it can be avoided.*

From all which these three conclusions will naturally follow: 1st, That, in bringing a single ship to close action, and in conduct during that action,

* *Note by Lord Rodney.*—This is too true.

the British seamen have never been excelled.* *2dly*, That the instructions, (by which is meant the method hitherto practised of arranging great fleets, so as to give battle, or to force our enemy, the French, to give battle upon equal terms), after so many and repeated trials, having been found unsuccessful, must be wrong: And, *lastly*, that, on the other hand, the French having repeatedly

* *Note by Lord Rodney.*—And it is well known, that attempting to bring to action the enemy, ship to ship, is contrary to common sense, and a proof that that Admiral is not an officer, whose duty is to take every advantage of an enemy, and to bring if possible the whole fleet under his command to attack half or part of that of the enemy, by which he will be sure of defeating the enemy, and taking the part attacked, and likewise defeating the other part by detail, unless they make a timely retreat. During all the commands Admiral Rodney has been entrusted with, he made it a rule to bring his whole force against part of the enemy's, and never was so absurd as to bring ship against ship, when the enemy gave him an opportunity of acting otherwise; and, as he told the King before any of his actions took place, that he would always take the lee gage; first, because it prevented the enemy's retreat; secondly, because if any of his ships were disabled, by putting their helm a-weather the next ship closed the line, and secured the disabled ship.

Note by a Naval Officer.—Yet Lord Rodney did not act in this way. On the 12th April, he gave up the lee-gage, and took the weather; and instead of doubling in and over-powering the rear, he followed the van.

and uniformly followed a *mode* which has constantly the effect intended, they therefore must have adopted some new system, which we have not discovered, or have not yet profited by the discovery.

But, it may be asked, have the French ever effected any thing decisive against us? Have they ever, in any of these rencounters, taken any of our ships? Have they ever, presuming upon their superior skill, dared to make the attack?—No. But, confident in their superior knowledge in naval tactics, and relying on our want of penetration, they have constantly offered us battle to leeward, trusting that our headlong courage would hurry us on to make the customary attack, though at a disadvantage almost beyond the power of calculation; the consequences of which have always been, and always will be, the same, as long as prejudices prevent us from discerning either the improvements made by the enemy, or our own blunders.

To be completely victorious cannot always be in our power; but, to be constantly baffled, and repeatedly denied the satisfaction of retaliation, almost on every occasion, is not only shameful, but, in truth, has been the cause of all our late misfortunes.

Before concluding this part of the subject, it may be proper further to observe, that, though our apprehensions of suffering in character and

importance, as a naval power, might have been very great at the breaking out of the war with the colonies, from an idea that the recent increase of that importance had arisen alone from the growth of these colonies; yet, from experience, from the great exertions made, and from the continuance of the war itself, it has been clearly proved, that that increase must have arisen from other resources, which will every day more and more be found to exist in the mother country herself. At the same time, from that superior exertion, so constantly and gloriously exhibited by our seamen in the lesser conflicts, as well during the course of the present as of the two last wars, we may rest satisfied that the character of the British tar is not in the least debased, but still as predominant as formerly.

Hence, if the American colonies shall accomplish their wished-for separation, Britain, by her force being more collected, and with these resources, will yet be more powerful than ever.*

* *Note by Lord Rodney.*—This I believe to be fact; for I am convinced that the British fleet, when full manned, never had 2000 Americans on board them: they were never to be trusted. /

OF THE ATTACK FROM THE WINDWARD.

DEMONSTRATIONS.*

SECTION I.

METHOD OF ATTACK IN THE CASE OF SINGLE SHIPS.

1. SUPPOSE a single ship to windward at B
(Plate I. Fig. 1.) discovering an enemy's ship to

* As it is by the influence of the wind alone that all the movements of shipping are performed, for this reason, as well as for rendering the following demonstrations more simple, we have made the course of the wind to proceed from the top of the page in the plans presented in this Work.

N. B. In what follows, we have confined ourselves more particularly to the attack from the windward; reserving what relates to the attack from the leeward for an after part of the work.

The British ships are distinguished by a red colour, and letters of reference beginning with the alphabet and ending at E; and the ships of the enemy are distinguished by a black colour, with letters beginning at F.

leeward at F, Is it the practice for B, in making the attack, to bear directly down, endwise, on F? No. Because, if B did so, the case would stand thus:—Suppose the two ships of eighty guns each, the receiving ship F, by lying-to (as in Fig. 2.), would present a broadside of forty heavy guns bearing upon B, during a course of two miles, in which every shot might take effect, while B, in this position (Plate I. Fig. 2.), has it only in her power to bring the two light guns of her fore-castle, or bow-chase, to bear on F, a disadvantage greatly exceeding twenty to one. But the receiving ship F, by lying broadside to, will have all her masts and rigging more open, and consequently will allow shot to pass with less effect; her men, also, will be less exposed to the impression of shot, as it must take the breadth of the ship only; whereas the ship B, coming endwise down, must be greatly affected by every shot that may take place in the extensive area of her hull and rigging; the masts and shrouds, from being seen in a line, and the whole space, from the situation, being quadruply darkened with rigging, a shot taking place in that area, therefore, must carry away something of considerable consequence; and a shot taking place in the hull must rake the men from one end of the ship to the other: Which situation, or position of B to F, is understood to mean, that the ship B is raked by the ship F; and the

consequence would be, that B would be disabled in her rigging, &c. long before she could arrive at a proper position for annoying F; and, when she has attained this position, F, by being entire in her rigging, will have it in her power to fight, or make off at pleasure.

2. The method then is, B having the wind, will run down astern, as per dotted line, and getting into the course, or near the wake of F, or a position that will bring her parallel to the course of F, at a proper distance, she will then run up close along side of F, upon equal terms (as in Fig. 3.); or, otherwise, on shooting a-head, she will wear, and run down on the weather bow of F (as in Fig. 4.), till she shall force F to bear away to leeward, keeping close by F on equal terms; but, during the course, in both cases, carefully watching that F shall not have it in her power to bring her broadside to bear upon B, without retaliation,

SECTION II.

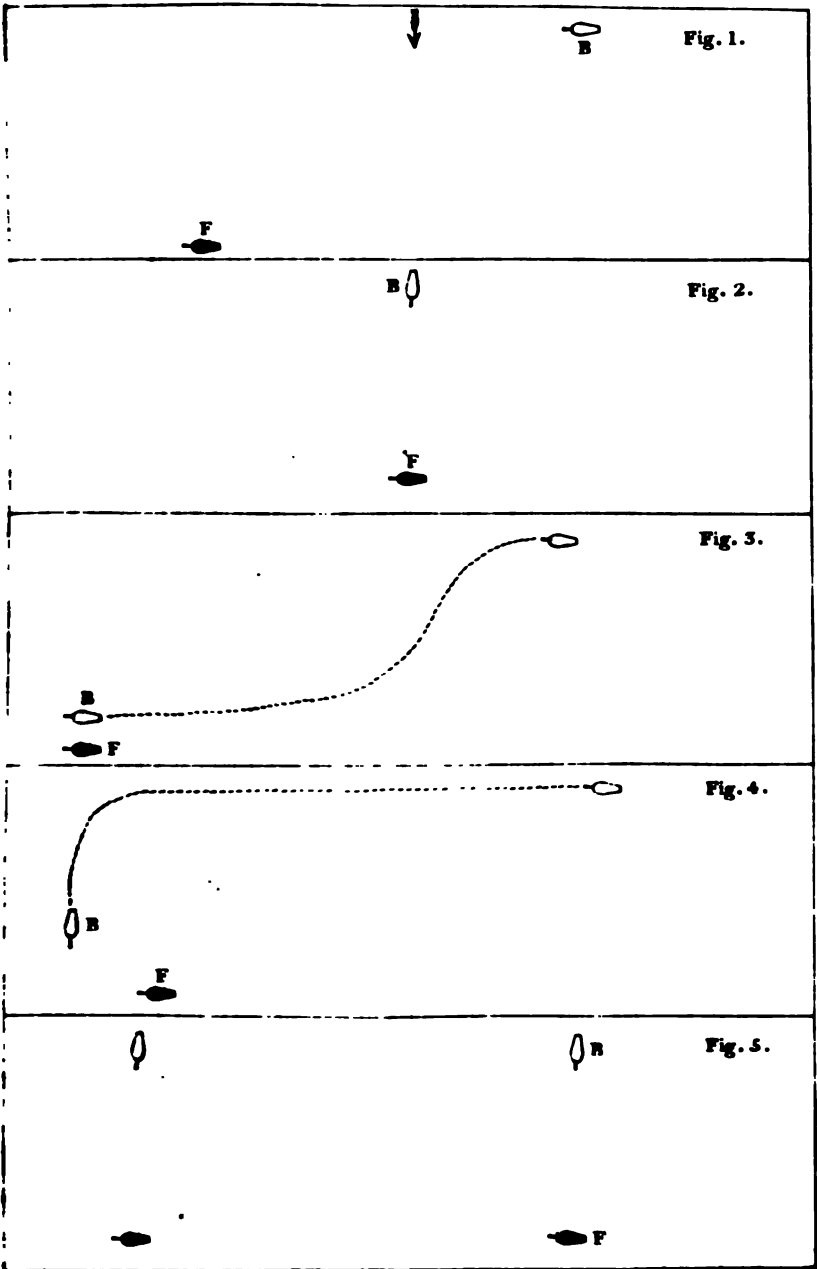
COMPARISON OF THE EFFECT OF SHOT DIRECTED AGAINST
THE RIGGING OF A SHIP, WITH ITS EFFECTS WHEN DI-
RECTED AGAINST THE HULL.

3. IT having been often said, that the French have made it a rule to throw the whole effect of their shot more particularly into the rigging of their enemy, and that the British, on the other hand, have been as attentive to point the force of their fire against the hull of the ship, it may be proper here to state the two cases, and compare the effect.

4. Let us suppose a ship of eighty guns wishing to avoid the effects of a close engagement, but, at the same time, lying-to,* as at F (Plate I. Fig. 5.), intending to receive, with every advantage, an enemy, B, of equal force, coming down with an intention to fight her; and let us suppose that F, by aiming her fire at the rigging of B, shall have car-

* *Note by Lord Rodney.*—By lying-to, she would expose herself to be attacked with advantage by the enemy. The only way to be on her guard, is to be on easy sail, and ready to make more sail, bear away, or wear, as occasion may require.

PLATE I. Part I. p. 26.



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ried away any of the principal stays, eight or ten windward shrouds, or a fore-top mast, or any other rigging, though of much less consequence, but, at the same time, without having wounded a single man of the ship B; and suppose a second ship, consort to F, receiving such another ship as B, and by firing at her hull only, shall, without other damage, have killed thirty or forty of her men:—

5. In this critical juncture, when F and her consort are desirous of avoiding a close engagement, which of the two ships of B will be most disabled from following after, and closing with the enemy? Is it not evident, that it must be the ship which has lost part of her rigging; for, as she will not be able to make sufficient sail, till after having been repaired, this necessary stoppage must be of greater consequence at this time than if she had lost a hundred, or even two hundred of her complement of men; the remainder being always sufficient to navigate the ship.

6. Again, let the comparative bulk of the two objects be considered; the hull of a ship, taken by itself, on the one side, and the whole area of the masts, rigging, and hull, taken on the other; and, as the killing and destroying of men may be the principal view in firing at the hull, suppose, for example, a ship of seventy-four guns, which has two decks, the breadth, or rather the height of the line exposed, which will comprehend both these

decks crowded with men, cannot exceed twelve feet, which sum, multiplied by 120, the length of the ship, will give 1440 feet, the whole area of the vulnerable mark : But the area, comprehending the rigging and hull, of such a ship, will give a surface of twenty times these dimensions.

SECTION III.

OF BRINGING GREAT FLEETS TO ACTION.

And, first, A preliminary case, showing, that any one ship, in her station in the line of battle, must be at a considerable distance to admit of being exposed to the fire of three or more ships, bearing upon her at one and the same time, extended, as they must be, in the line of the enemy.

7. As it has also been often said, that some particular ship has been exposed, in battle, to the cannonade of three, four, or even five ships, all extended in the enemy's line, and all bearing upon her at one and the same time, Figure 1. of Plate II. is intended to prove, that this ship must have been at a very great distance before she could have been

exposed to the fire of even three ships, supposing them to be extended in line of battle a-head, and at one cable's length asunder. Suppose a line of battle, in which four or five ships are extended, as I, H, F, H, I, the spaces between each ship to be two hundred and forty yards, or one cable's length, and the length of each ship to be forty yards, so that the whole space between head and head, of any two ships, is two hundred and eighty yards; and let the perpendicular line F K, proceeding right out from the beam of the middle ship F, be divided into a scale of six cables' length, making in all a distance of 1440 yards: Quere, At what distance may any opposite ship of an enemy be exposed to the fire of three ships bearing upon her at one and the same time? and let H, F, H, be the three ships lying-to, and extended in line of battle a-head; and let the opponent ship be stationed in any of the lines drawn through the points E, C, G, and parallel to the line I, I.

8. From inspection, it will be evident, that the opponent ship, stationed at the point E, 720 yards distant, cannot, for any length of time, be exposed to the fire of more than the centre ship F. For the ship H a-head, in *lying-to* in line of battle, will not be able to bring her head so much nearer the wind as to admit of her broadside to bear on E. But, supposing this to be practicable, will she not disorder her own line by being thrown

out of her station, and also leave her head exposed to a raking fire from her opposites in the enemy's line?

9. Neither will it be more proper for H, the ship a-stern, to bring her broadside on E; for, in doing this, she will run to leeward, and expose her stern to be raked by her opposites.

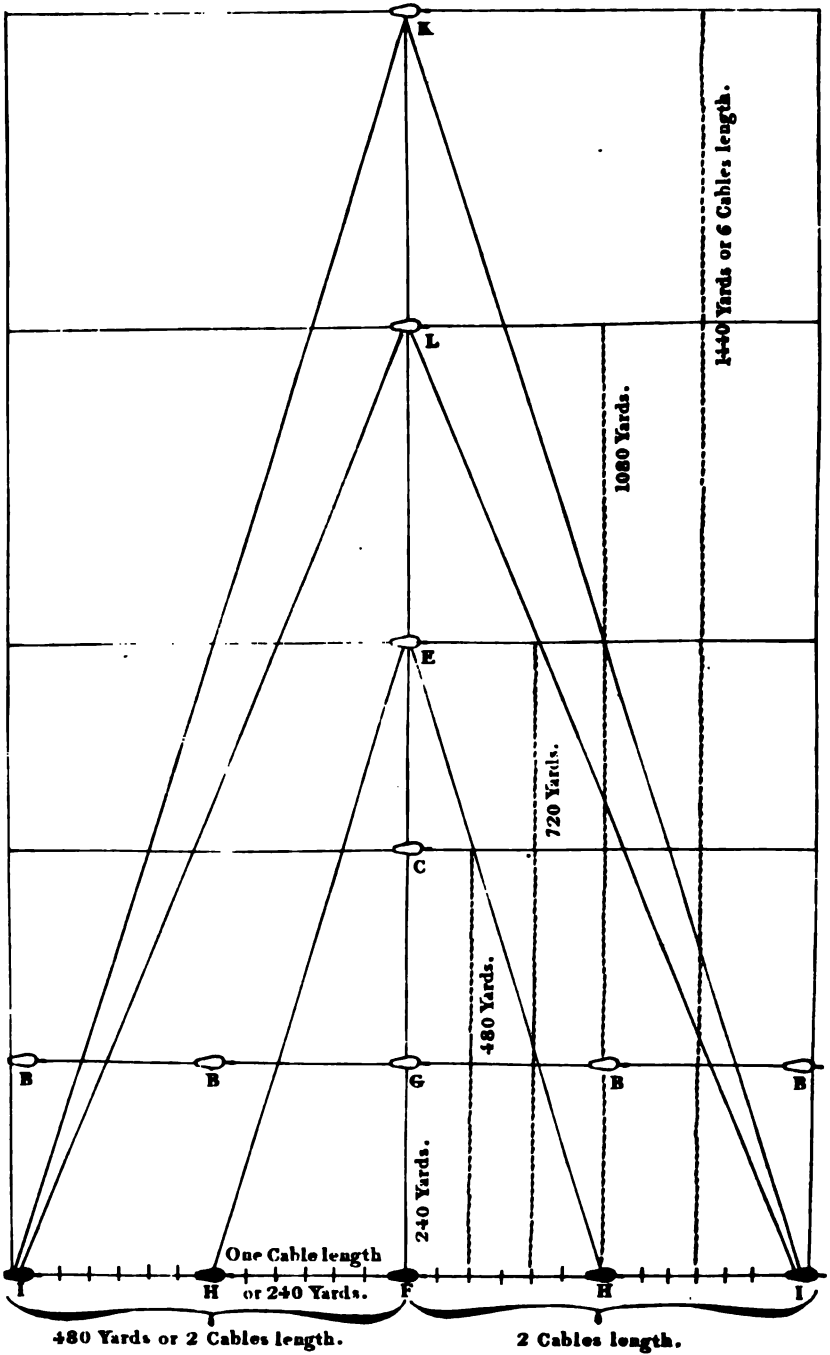
10. But if the opponent ship cannot well be exposed to the fire of the two ships, H, H, at the point E, she must be still less exposed at the point C, 480 yards distant; and it will be almost impossible for the ships H, H, to touch her at the point G, 240 yards, or one cable's length distant.

11. But one cable's length asunder is too small an allowance for accidents that may happen to ships extended in line of battle a-head. Therefore, let us suppose I, F, I, to be the three ships extended at two cables' length asunder, or 480 yards between each of the three ships:

12. Then it will be evident, if the opponent's ship could not be much exposed, at the point E, to the fire of the three ships, when at one cable's length asunder, that, proportionally, she would not be more exposed at the point K, from the fire of the three ships now, when at two cables' length asunder, which is double the distance, or 1440 yards.

13. But as ships cannot well be kept in line of battle at a less allowance than one and a half

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cable's length asunder, it follows, that a ship must be at least 1080 yards distant, before she can be exposed or annoyed by a cannonade from three ships extended in line of battle, and bearing upon her at the same time, which let be supposed at L.

14. Hence, it may be concluded, that, when it has been said, that any ship has been exposed to the fire of five, four, or even three ships of the enemy's line, that such ship has been at a very great distance. For, from what has been said, it will not be admitted, that either of the ships I, I, or H, H, a-head and a-stern of the principal, F, will have time to bring their broadsides to bear directly upon the ship in question; their attention, as is supposed, being too much engrossed by their opposite ships in the enemy's line, at the points B, B, B, B, who assuredly would take the advantage then offered, and rake them fore and aft.

SECTION IV.

OF THE PRINCIPLES NECESSARY TO BE KNOWN FOR ENABLING US TO JUDGE OF THE DIFFERENT MODES OF BRINGING GREAT FLEETS TO ACTION.

15. Let us suppose a fleet of ten, twenty, thirty, or more ships, of eighty guns each, extended in line of battle to leeward, and *lying-to* at F (Plate III. Fig. 1.), with the intention of avoiding an attack; and suppose another fleet at B, of equal number and force of ships, also extended in line of battle, three or four miles to windward, and desirous of making an attack, and coming to close action, on equal terms, with the said F:

16. From the nature of the attack on a single ship, (see Plate I.) it must be evident, that, if the fleet B shall attempt to run down headlong, ship for ship, upon the squadron F, (as represented in Plate III. Fig. 2.) each individual ship of B, having been exposed, during a course of two miles, to a cannonade, at a disadvantage of above twenty to one, must be disabled long before it can reach such a point of distance from F, as properly may be termed close action, or even to reach a situation proper for annoying her antagonist in the line F.

17. Again, let it be supposed that B, though

much disabled in his rigging, while in his course a, a, a, from the windward, has made his ships bring to, at a distance from whence he can hurt F, (Plate III. Fig. 3.) Is it to be expected that F, whose desire has always been to avoid a close engagement, and has already disabled the ships of B, will patiently lie still, or wait until B shall have time sufficient to disable him in his turn? Is it not evident that F, while unhurt, before he may feel the effects of a cannonade from B, and while enveloped in his own smoke, as well as that of the enemy, will withdraw himself, by bearing away to leeward to attain a new situation, where he may be out of reach of cannon-shot, outsailing B, who would be obliged to repair his rigging, before he can be in order to follow, and make a second attack?*

18. Again, suppose that B, in place of going headlong, and endwise down, shall attempt to run down in an angular course, or lasking, as it has been called, (as in Plate III. Fig. 4.) Is it not evident that this will be a means of protracting the course of B, and, consequently, the duration of the unequal cannonade from F, with the cer-

* *Note by Lord Rodney.*—This is incontrovertibly true, and what an enemy who wishes to fight at a distance will always do, and keep the enemy from closing with him.

tainty of having his headmost ships exposed to more than their share of the damage?

19. But it is also evident, (from Fig. 5.) that, should any ship B in this angular line come to be crippled, her way, being stopped, may, of consequence, occasion a confusion amongst the ships that are next a-stern, some running to leeward, while others are endeavouring to get to windward of the disabled ship; and, while this point is settling, the time may be lost, and, of consequence, the necessary support to the ships a-head, now so far separated, may be too long retarded, as in the case of Mr Byng. But as it may be said, that a stoppage of one ship a-head will not necessarily produce a stoppage in every ship a-stern, because they may go to leeward of the disabled ship: We answer, that it is precisely what happened to Mr Byng, to be afterwards illustrated by the case of the *Intrepide*, when we come to give a description of that gentleman's engagement. Besides, by the supposition, the ships a-head, in the van A, (Plate IV. Fig. 1.) may be now engaged, and, of consequence, not having much headway, may be said to be stationary; therefore, every ship a-stern, if she shall attempt to bear down, as at D, D, from being confined to a determined course, must be brought into the position of being raked, when coming down before the wind, (as in Fig. 2. Plate III.), and, consequently,

of being completely disabled long before she can get close enough along-side of the enemy.

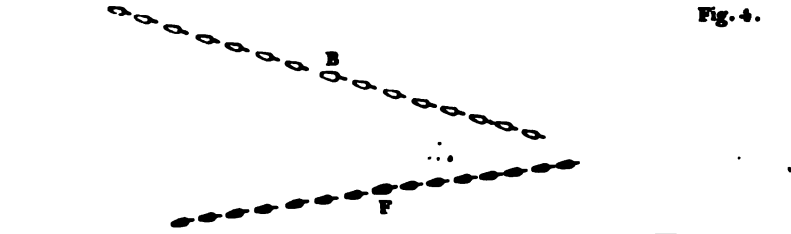
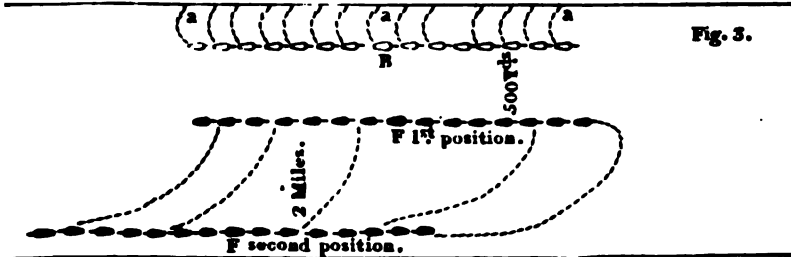
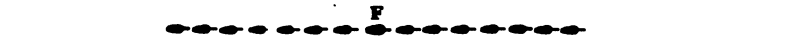
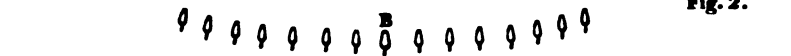
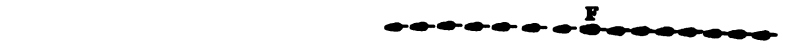
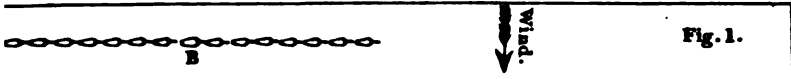
20. Again, the headmost ships, or van of B, having attained their station at A, that is, a-breast of the van of F, (as in Plate IV. Fig. 1.), and having begun the cannonade, may we not suppose that F, whose conduct, or desire, has always been to save his ships, has instructed, that, so soon as any of his ships, particularly the van, shall begin to feel the effect of a cannonade, they shall immediately withdraw from danger ?

21. And we are also to suppose, that so soon as they have thrown in their fire upon the van of B, each ship, one after another, as instructed by F, shall bear away in succession, as at H, to form a new line at I I, two or three miles to leeward.* Now, is it not evident, from this cautious conduct, that F, seeing the embarrassment of B, and that his ships are disabled, and his van unsupported, will, by making a crowd of sail, endeavour to range past B, ship by ship, in succession, till his whole squadron has poured in their fire upon the van of B ; and that he, F, will then bear away to join his headmost ships, and form a new line of battle to leeward, at I I, to be in readiness to re-

* *Note by Lord Rodney.*—The French almost always act in this manner.

ceive a second attack, if B shall be so imprudent as to attempt it?

22. Is it not also evident, that if any one or more ships of the squadron of F shall be crippled, they will have it in their power to quit their station, being covered with smoke, at any time, and to fall to leeward, as at G, where they will be in safety? As a farther part of the system of manœuvre supposed to be adopted, it may be conceived, that ships in this manner shall be made to withdraw from battle, leaving intermediate ships as a cover, to keep up a good countenance in the line, and amuse the enemy. But, by the supposition and demonstration, the ships of the squadron B must be crippled, and much separated, long before they can get to their station, whether the attack shall have been made in the perpendicular direction (as in Plate III. Fig. 2.), or in the lasking manner (as in Fig. 4. and 5.); therefore, in both cases, B's van must inevitably be exposed to the effect of the last described movement, which was, that F, perceiving the ships of B in disorder, unsupported, and disabled from following him, will make sail, and discharge the fire of his whole line upon the van of B, ship by ship, as they pass in succession, and will form a new line to leeward, to be prepared, if another attack shall be made upon them.



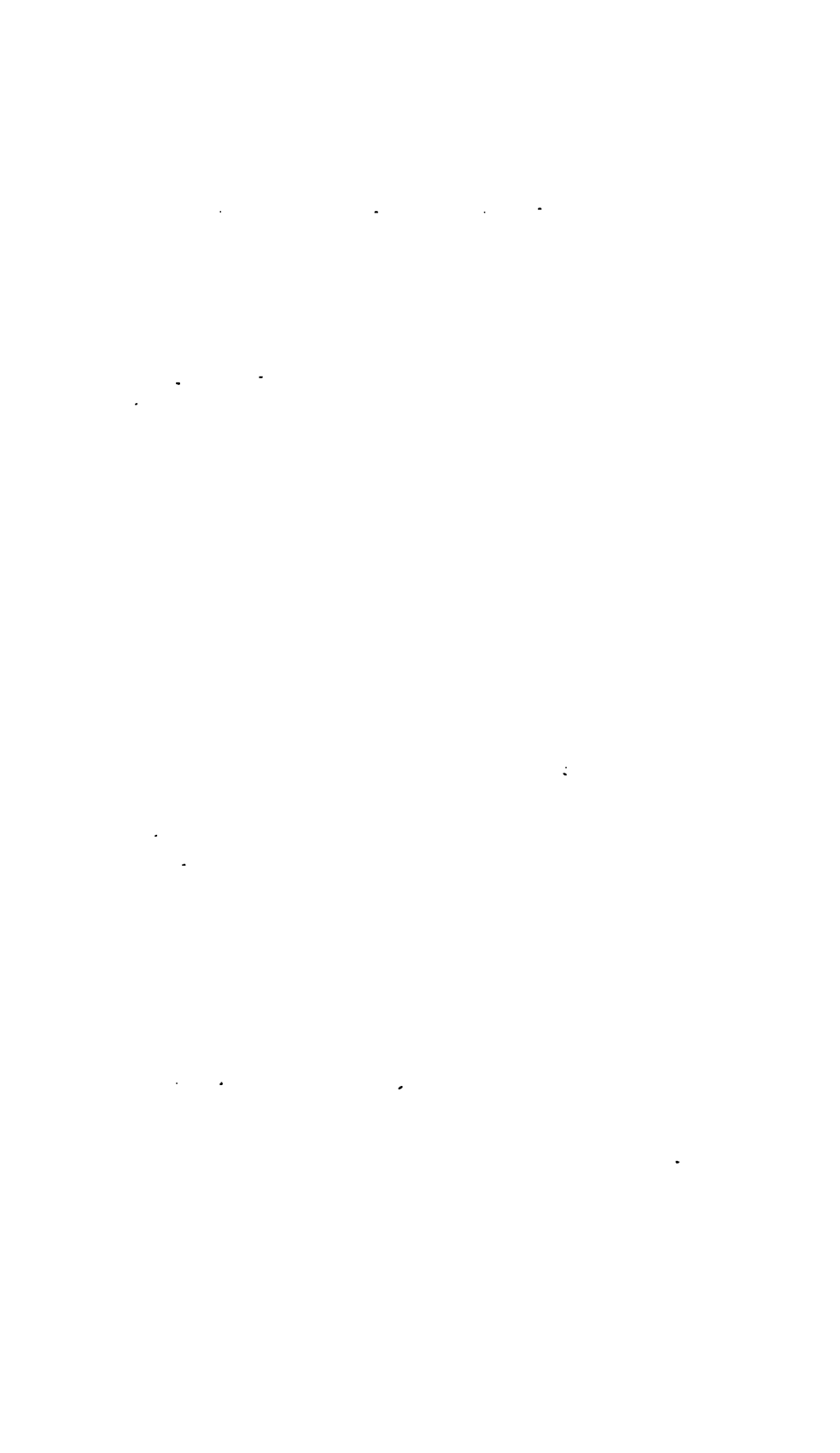




Fig. 1.

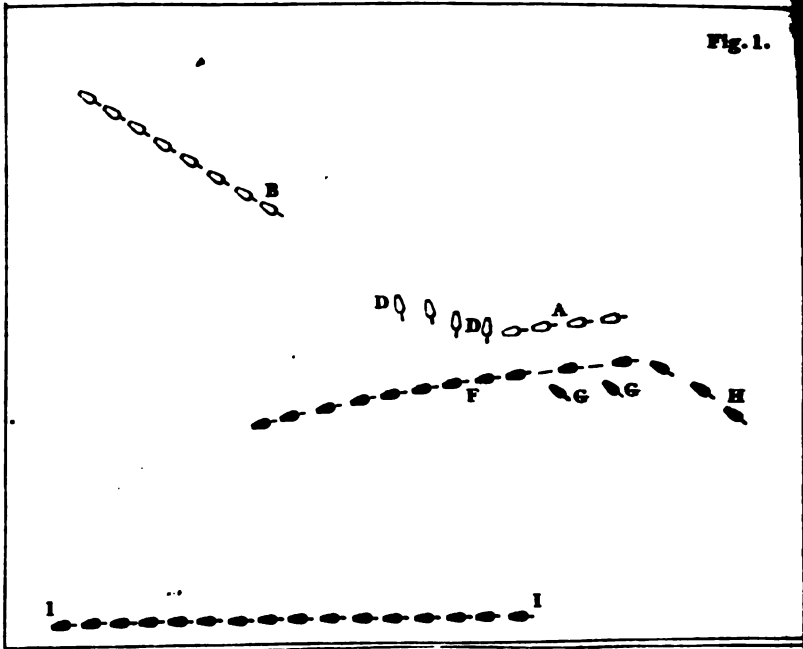
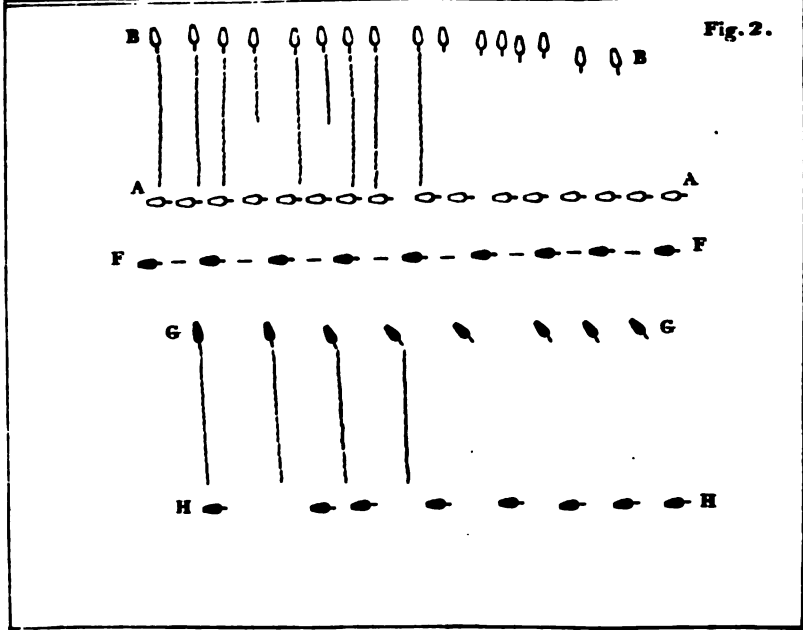


Fig. 2.



A FARTHER ILLUSTRATION.

23. Again, let B (Plate IV. Fig. 2.) represent a fleet putting before the wind, each ship with an intent, when brought to, at a determined distance at A, to take up her particular antagonist in the line of the enemy F, to leeward; and, for argument's sake, let F be supposed at rest, without any motion a-head whatever.

24. From what has been said, (No. 22.), it may be admitted, that alternate ships of F's line, under cover of the smoke, being made to withdraw from battle, as at G G; the intermediate ships left behind them in the line will be sufficient to amuse even the whole of B's fleet, while the ships G shall be forming a new line H H, as a support, from the leeward: That in such case, B, after being disabled, as he must be, and not having foreseen the manœuvre, will neither be able to prevent these intermediate ships from bearing away to join their friends, nor, were he able, would it be advisable to follow them; for the same manœuvre, with equal success and effect, can again and again be repeated.

25. In order to show the relative movements of both fleets, with respect to each other, Plate V. is divided, by a scale, into squares of a mile each, in which let F (Fig. 1.) represent a fleet to leeward,

with motion a-head, as required for good steering, each ship having sufficient to keep her under command of the rudder, and let it consist of twelve ships occupying a space of two miles, as extended in line of battle, at one cable's length asunder* ; and F's motion through the water, if at the rate of four miles per hour, may be expressed by the space comprehended by the perpendicular lines marked by F and G on the scale below. These four lines comprehended by F and G will also express the time in which any fleet, B, may perform his course, when coming down to the attack from the windward.

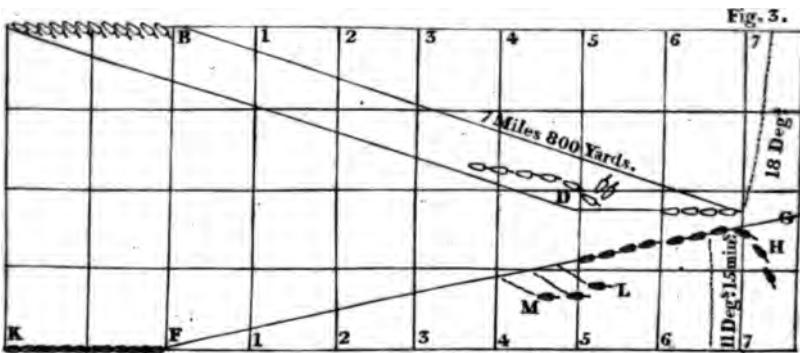
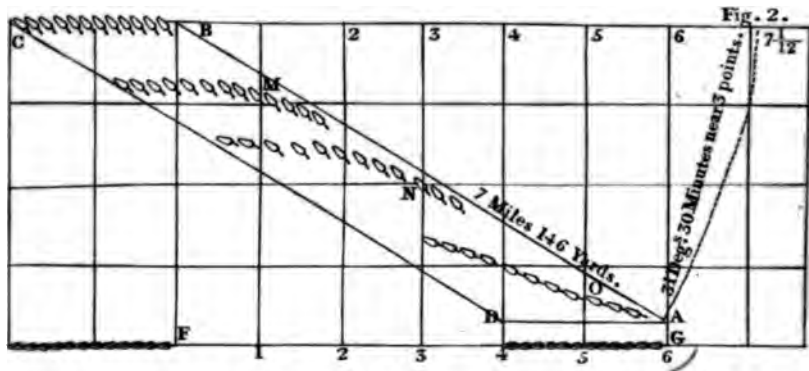
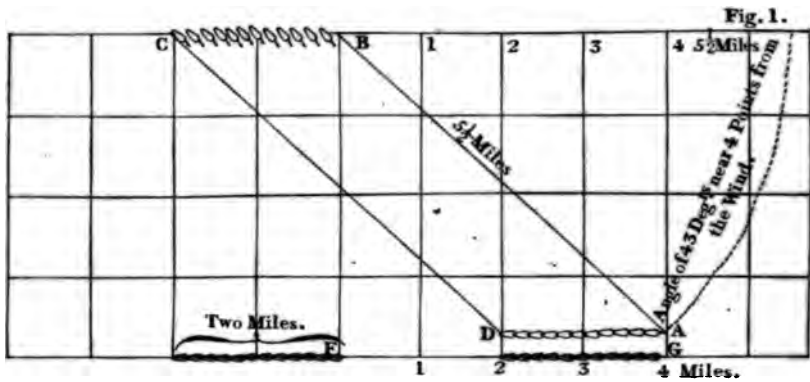
26. Let B be the opponent fleet, consisting also of twelve ships, and four miles to windward ; and let the point A be 440 yards, or one quarter of a mile right to windward of the point G.

* The length of a ship of 74 guns is about	54 yards
Interval between two ships at one cable's length asunder	240
	6
The sixth part of a mile	294
	6

Six ships, formed in a line of battle a-head, will extend about a mile in length, or 1760 yards 1764
 And four large ships, when at $1\frac{1}{2}$ cable's length asunder, may form another scale sufficiently correct for a mile.



PLATE V. Part I. p. 40.



27. Then B, by putting before the wind, if he shall arrive at the point A, in the same time that F, the fleet to leeward, has arrived at the point G, his motion will have been at the rate of $5\frac{1}{2}$ miles per hour, as must be evident from the scale of miles placed at the top of the figure; and his course, as described by the lines B A and C D, will be slanting or diagonal, forming an angle of 43 degrees with B C, his line a-head, and nearly 4 points large from the wind.

28. Again, if F, (Plate V. Fig. 2.), by carrying more sail, shall move at the rate of six miles per hour, that is, from F to G; then B, having his course made thereby the more slanting, will have just so much the greater difficulty of keeping his ships in line a-breast while coming down to the attack. For the leading ship meeting with no obstruction in her course, will push on, whereas every accident of obstruction accumulating, as it happens to each ship progressively, the rear, being affected in the greatest degree, will, for that reason, be left the farther a-stern. But, from the very form of this slanting course, every ship a-stern will be apt to get into the wake of the ship a-head. Therefore, the whole fleet of B, van and rear, will not arrive in the same time at the line A D, so as to be in a perfect line a-breast, and parallel with the fleet to leeward, but will have assumed the lask-

ing form, as represented at the points M, N, and O, in the different parts of the course.

29. And again (in Plate V. Fig. 3.), if the fleet to leeward shall keep his wind, so as to lie up one point, as per line of course F G, making an angle of $11\frac{1}{2}$ degrees with his former line of course K F K: Then the rears of the two fleets will thereby be removed at a much greater distance, and the van A, of consequence, must be sooner up with the enemy's van, and evidently so much the farther from support, while F, by bringing up his ships in succession, will have it in his power to disable the van A, (No. 21.) and will afterwards bear away as at H, unhurt, and at pleasure; while B, at this time, by the supposition, being crippled, or having his rear, D, obstructed, and at a distance, will be unable to prevent him. And, in all the three cases, it is evident that the fleet B, so soon as he shall approach within reach of gun-shot, must be exposed to the fire of F's whole line, for he will be a-breast of B continually in every part of his course.

30. But the difficulty of bringing the rear of the windward fleet to action will still be more increased, if the sternmost ships of the fleet to leeward, in place of keeping their wind, shall bear away occasionally, as at M L, (Fig. 3.)

31. All which being admitted, the difficulty of bringing opponent fleets to close engagement may

be accounted for, without being obliged to have recourse to that supposed inferiority, in point of sailing, imputed to our ships, compared to those of the French, our enemy.

32. Hence it appears, that a fleet, B, to windward, by extending his line of battle, with a design to stop and attack a whole line of enemy's ships to leeward, must do it at a great disadvantage, and without hope of success: For the receiving fleet, F, to leeward, unquestionably will have the four following advantages over him, which will be more particularly proved when we come to examine the real practice.

33. First, The superiority of a fire, above twenty to one, over the fleet B, while coming down to attack.

34. Secondly, That, when the ships of B are brought to at their station, if it blows hard, the shot from F, by the lying along of the ships, will be thrown up into the air, and will have an effect at a much greater distance; whereas, on the other hand, the shot from B, from the lying along of the ships also, will be thrown into the water, and the effect lost.

35. Thirdly, That F will have the power of directing, and applying at pleasure, the fire of his whole line against the van of B, who is now unable to prevent it, his ships being disabled, separated, and, therefore, unsupported.

36. *Fourthly*, That F will also have a greater facility of withdrawing from battle, the whole, or any one of the disabled ships of his line.*

37. If, then, after a proper examination of the late sea engagements, or rencounters, it shall be found, that our enemy, the French, have never once shown a willingness to risk the making of the attack, but invariably have made choice of, and earnestly courted a leeward position:† If, invariably, when extended in line of battle, in that position they have disabled the British fleets in coming down to the attack: If, invariably, upon seeing the British fleet disabled, they have made ~~still~~, and demolished the van in passing: If, invariably, upon feeling the effect of the British fire, they have withdrawn, at pleasure, either a part, or the whole of their fleet, and have formed a new line of battle to leeward: If the French, repeatedly, have done this upon every occasion: And, on the other hand, if it shall be found that the British, from an

* *Note by Lord Rodney*.—All this will certainly be the case.

† *Note by Lord Rodney*.—A lee gage has certainly a very great advantage, and should always be taken when a proper opportunity offers of being close; and in case the enemy retreats, the heaviest ships should be placed in the van, to attack the enemy's rear, which, as the heavy ships advance along the enemy's line, will leave an easy conquest to the fleet that follows.

irresistible desire of making the attack, as constantly and uniformly have courted the windward position : If, uniformly and repeatedly, they have had their ships so disabled and separated, by making the attack, that they have not once been able to bring them to close with, to follow up, or even to detain one ship of the enemy for a moment : Shall we not have reason to believe, that the French have adopted, and put in execution, some system, which the British either have not discovered, or have not yet profited by the discovery ?



EXAMPLES.

INTRODUCTION.

It is proposed to illustrate the preceding DEMONSTRATIONS by EXAMPLES taken from late Engagements; of which the following is a Catalogue, according to the order of time in which they happened.

ENGAGEMENTS IN FORMER WARS.

1. Admiral Matthews' engagement with the combined fleets of France and Spain, off Toulon, February 11. 1744.
2. Admiral Byng's engagement with the French fleet, off Minorca, May 20. 1756.

ENGAGEMENTS OF THE LATE WAR;—TWELVE IN NUMBER.

1. That of Admiral Keppel, off Ushant, July 27. 1778.

2. Admiral Byron, off Grenada, July 6. 1779.
3. Admiral Barrington, at St Lucia.
4. Sir George Bridges-Rodney captures the Spanish transports off Cape Finisterre, takes the Spanish men of war off Cape St Vincent.
5. His engagement with the French fleet, off the Pearl Rock, Martinico, April 17. 1780.
6. His rencounter with the same fleet, to windward of Martinico, May 15. 1780.
7. His second rencounter, about the same place, May 19. 1780.
8. Admiral Arbuthnot, off the Chesapeak, March 16. 1781.
9. Sir Samuel Hood, off Fort Royal, Martinico, April 29. 1781.
10. Admiral Parker, on the Dogger Bank, August 5. 1781.
11. Commodore Johnston, Porta Praya, island of St Julian.
12. Admiral Greaves, off the Chesapeak, September 5, 1781.

From this Catalogue, that the proposed Illustration may be made with the greater advantage, we shall begin with those engagements the most applicable to the subject, selected without attending either to the dates, or order in which they took place.

SECTION I.

Of Engagements, where the British fleets being to windward, by extending their line of battle, with a design to stop, take, destroy, or disable, the whole of the ships of the enemy's line to leeward, have been disabled before they could reach a situation from whence they could annoy the enemy;—and, on the other hand, where the French, perceiving the British ships in disorder, unsupported, and thus disabled, have made sail, and, after throwing in their whole fire upon the van of the British fleet, ship by ship, as passing in succession, have formed a line to leeward, to be prepared if another attack should be made.

1. Admiral Byng's engagement with the French fleet, off Minorca, May 20. 1756.
2. That of Admiral Byron, off Grenada, July 6. 1779.
3. Admiral Arbuthnot, off the Chesapeake, March 16. 1781.
4. Admiral Greaves, off the Chesapeake, September 5. 1781.
5. Admiral Sir George Bridger-Rodney, off the Pearl Rock, west end of Martinico, April 17. 1780.

I. THE DESCRIPTION OF ADMIRAL BYNG'S ENGAGEMENT
WITH THE FRENCH FLEET OFF MINORCA, MAY 30.
1756.*

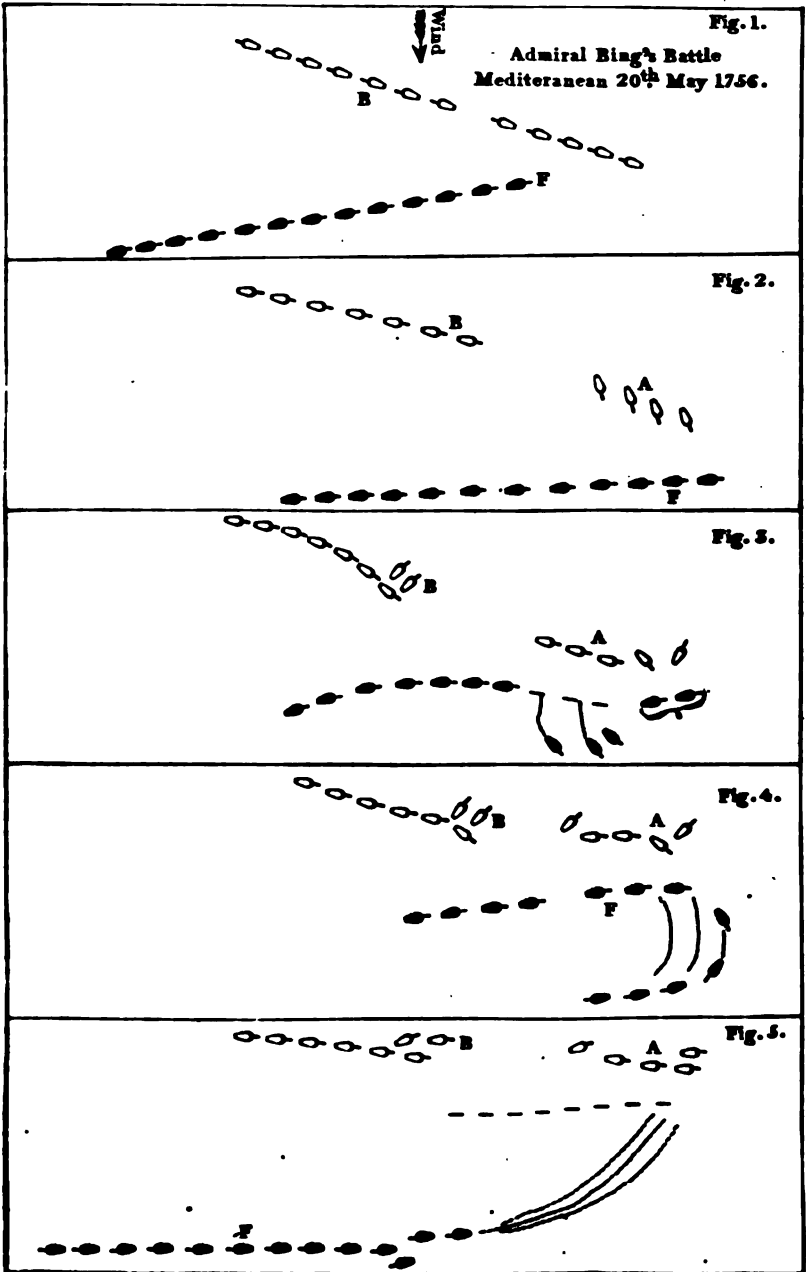
38. B. (Plate VI. Fig. 1.) The British fleet, about one o'clock afternoon, upon the starboard tack, and after they had weathered the French fleet, F, then upon the larboard tack.

39. B. (Plate VI. Fig. 2.) The British fleet edging or lasking down to attack the enemy, F, lying to, to receive them. (Vide No. 18. 38. and 39.)

40. A. The van of the British obeying the signal, by bearing away two points from the wind, but each ship steering upon her opposite in the enemy's line.

41. A. (Fig. 3.) The five headmost ships of the British line *brought to*, and engaged in a smart cannonade, but not till after having greatly suffered in their rigging by three broadsides received from the enemy, during a course of some miles, while, at the same time, they had it not in their power to make retaliation. (No. 17.)

* British, 13 ships, 4 frigates, 1 sloop. French, 12 ships, 5 frigates.





42. G. The fourth ship of the enemy having received some little damage, or being so instructed, as Mr West has conjectured, bore away, that is, quitted the line, and, in a very little time after, the fifth ship, H, then the two headmost, I, and, after them, the third ship, for the same reason, it is presumed, followed their example, and quitted the line also ; each ship, as she went off, occasioning repeated huzzas from the British tars, who conceived that the superiority of their fire had beat these ships out of their line ; and, lastly, about the same time, but in another part of the line, the third ship a-stern of the French Admiral, (the ship against which the Ramillies more particularly directed her fire), quitted the line likewise, and withdrew from battle. (No. 20. and 24.)

43. While matters were going on after this manner in the van, the Intrepid, the sixth ship of the British line, at B, having lost her fore-top mast, was so taken a-back, that her course was stopped. This, of consequence, produced a disorder and stoppage to the ships next a-stern, some designing to go to leeward, and others endeavouring to get to windward of the distressed ship, as at B. (No. 19.)*

* The rate at which the ships were supposed to move through the water at this time, having their fore-sails and fore-top-sails set, might be full three miles per hour ; and,

44. (Fig. 4.) Meanwhile, the centre and rear of the French, who, though at a great distance, had been busy firing random shot, perceiving this disorder in the British line, (at B. Fig. 4), made sail, and with impunity threw in the fire of their whole line, each ship as she ranged past the van of the British; after which they bore away in succession to join their own van, and form a new line of battle three miles to leeward, (as in Fig. 5.) to be prepared, should the British Admiral have any thought of making a second attack. (No. 21. and 22.)

OBSERVATIONS.

45. This engagement of the unfortunate Mr Byng, whether we shall consider the British mode of making the attack, or the French mode of avoiding the attack, while it offers an example strictly applicable to the principles laid down (Sect. IV.), is also a proof, that neither the one mode nor the other is a new practice, but is of a date as far back as the former war 1756.

with all their sails set, near six miles. *Admiral Byng's Trial*, p. 45.

46. The British fleet being to windward, in running down to the attack in an angular course, and extending their line of battle, with a design to stop, take, destroy, or disable, the whole of the ships of the enemy's line, by having their headmost ships the longer exposed to an unequal cannonade, and therefore to a greater share of the damage, have been disabled before they could reach a situation from whence they could annoy the enemy.

47. That a single ship, in their line of course (No. 28.), to make the attack, the Intrepid (No. 19.) having lost her fore-top mast, and her way by that means being stopped, occasioned a disorder among the ships immediately a-stern, some endeavouring to pass her to windward, and some to leeward;* by which accident of losing a mast, how much soever impossible it is to guard against it, much time was lost, and support to the ships a-head retarded at a time the most necessary, when far separated from the rest of the fleet, and while obliged to sustain a fire from almost every ship in the enemy's line in passing. (No. 21.)

48. On the other hand, that the enemy, from their position to leeward, perceiving the effects of that superiority of fire which undoubtedly

* *Note by Lord Rodney.*—They ought all to have gone to leeward, as the enemy were to leeward.

they had over the British fleet coming down to make the attack, whether it was in the mode of running end-ways right before the wind, as it was said the van did for some part of their course, or lasking, as was the form in the approach of the centre and rear divisions, laying hold of the advantage, that is, of the disorder occasioned in consequence, and without loss of time, or remaining till they might be crippled themselves in their turn, crowded sail, and, in the mean time, made sure of disabling a part of the British fleet, that is, the van; and whether it might, or might not, have been practicable for the enemy to have cut off any one, or more, of these headmost ships, now so far separated and unsupported, is not disputed; but, as they could not hope to succeed in an attempt of this kind without sustaining some damage, they, wisely preferring a more cautious conduct, kept their ships unhurt, to be the better prepared when formed in a new line of battle to leeward (No. 21.), to give the British Admiral a proper reception, should he again think of repeating the like attack, or should he afterwards attempt to throw in relief to the Castle of St Philips, or molest their troops employed in the siege, their particular object.

49. It has been said, that first the fourth ship from the head of the enemy's line soon bore away, quitting the line; then the fifth ship; afterwards the two headmost; and then the third ship after

that followed their example; and, lastly, the third ship a-stern of the Admiral, and about the same time, quitted the line also. This, as a manœuvre, no doubt makes a part of their system, that alternate ships shall be made to withdraw from battle (No. 24.), leaving intermediate ships, as a cover to sustain the line; and in this way to amuse the enemy in the mean time:—And it was not in consequence of the superior fire of the British van; for these ships of the French that withdrew, as described, had received no damage, and were in no way disabled. One gentleman, a witness in the long trial which followed this action, has these words:—“ The French fourth or fifth ship from
“ the van, seemed to me to have bore up from the
“ fire of our ships in the van, and very soon afterwards the three headmost of the enemy, but none
“ of them appeared to me to be disabled; so that,
“ whether it was to avoid action, or by a signal
“ from their commander-in-chief, I know not; I
“ should rather imagine the latter, as I had not
“ observed any such close* engagement, to oblige

* The distance, on this occasion, between van and van of the opponent fleets, does at no time seem to have been less than four hundred yards. By many of the witnesses on Mr Byng's trial, it seems to have been understood, that nobody had been killed or wounded on board the fleet by musketry, not even in the van. On board the *Defiance*, the leading ship

“ ships of their seeming force to avoid an action.”*

50. Another witness in the trial, the commander of the Portland,† the second ship of the van, being asked, “ Did you beat away the ship opposed to you by yourself, without the assistance of any other ship?” answered, “ No; I can’t say that: She was a very heavy ship the second ship, of greater force than the Portland, and the third still greater, which must be a seventy-four gun ship: Neither did I expect they would have bore away so soon; but their fourth and fifth ships bearing away before, from the Captain and Buckingham, they bore away also, really to our great surprise.”

51. Here it might be proper to observe, alluding to what was premised in the Introduction (page 2.), that neither was the usual spirit of British seamen any way deficient on this occasion, nor could the cause of miscarriage be attributed to any fault of construction in our ships. For the only opportunity given, by which any comparison could be made,

of the British squadron, small arms were, for some time, made use of;—as also by the enemy, as was conceived by some;—but without effect on either side, as it would appear; for they were soon laid aside.

* Admiral Byng’s Trial, p. 38.

† Ditto, p. 58.

in point of sailing, was when our fleet weathered that of the enemy, at one o'clock, immediately before the engagement. And this circumstance, if it was not a proof that the British ships were the better sailers of the two fleets, showed plainly, on the other hand, that the French, in their giving up the contest about the wind, were not only unwilling to hazard the danger of making the attack, but indeed preferred the leeward situation, from whence they could with the greater certainty disable their adversary's ships, while they might preserve their own unhurt. (See *Intro.* page 17.)

ADMIRAL BYRON'S ENGAGEMENT WITH THE FRENCH
FLEET, OFF GRENADA, THE 6TH OF JULY 1779.

EXTRACT OF A LETTER FROM ADMIRAL BYRON, RELATIVE TO HIS
ENGAGEMENT.

“ It being my intention, from this intelligence,
“ to be off St George's Bay soon after day-break, I
“ drew the ships of war from among the transports,
“ leaving only the Suffolk, Vigilant, and Mon-
“ mouth, for their protection, under the orders of
“ Rear-Admiral Rowley, who was intended to con-
“ duct the debarkment of the troops; but he was
“ to join me with these ships if I saw occasion for
“ their service. One of the enemy's frigates was

“ very near us in the night, and gave the alarm of
“ our approach. Soon after day-light (on Tuesday
“ the 6th), the French squadron was seen off St
“ George’s, most of them at anchor, but getting
“ under way, seemingly in great confusion, and
“ with little or no wind. The signal was imme-
“ diately made for a general chase in that quarter,
“ as well as for Rear-Admiral Rowley to leave the
“ convoy; and as not more than fourteen or fifteen
“ of the enemy’s ships appeared to be of the line,
a “ from the position they were in, the signal was
“ made for the ships to engage and form as they
“ could get up: In consequence of which, Vice-
“ Admiral Barrington in the Prince of Wales,
“ with Captain Sawyer in the Boyne, and Captain
“ Gardner in the Sultan, being the headmost of
“ the British squadron, and carrying a press of sail,
“ were soon fired upon, at a great distance, which
“ they did not return till they got considerably
b “ nearer. But the enemy getting the breeze of
“ wind about that time, drew out their line from
“ the cluster they were lying in, by bearing away,
“ and forming to leeward, on the starboard tack,
“ which showed their strength to be very differ-
“ ent from our Grenada intelligence; for it was
“ plainly discovered they had thirty-four sail of
“ ships of war, twenty-six or twenty-seven of which
“ were of the line, and many of these appeared of
“ great force. However, the general chase was

“ continued, and the signal made for close engage-
“ ment; but our utmost endeavours could not
“ effect that; the enemy industriously avoiding it,
“ by always bearing up when our ships got near
“ them; and I was sorry to observe, that their su-
“ periority over us, in sailing, gave them the op- c
“ tion of distance, which they availed themselves of,
“ so as to prevent our rear from ever getting into ac-
“ tion; *and, being to leeward, they did great da-*
“ *mage to the masts and rigging, when our shot* d
“ *could not reach them.* The ships that suffered
“ most were those *the action began with*, and the
“ Grafton, Captain Collingwood, the Cornwall, Cap-
“ tain Edwards, and the Lion, Captain Cornwallis.
“ The spirited example of Vice-Admiral Barring-
“ ton, with the former three, exposed them to a se-
“ vere fire in making the attack; and the latter
“ three happening to be to leeward, sustained the
“ fire of *the enemy's whole line, as it passed on*
“ *the starboard tack.* The Monmouth likewise e
“ suffered exceedingly, by Captain Fanshaw's hav-
“ ing bore down, in a very gallant manner, *to stop*
“ *the van of the enemy's squadron, and bring it to* f
“ *action.* But, from the very smart and well-
“ directed fire kept up by these ships, and others
“ that were engaged, I am convinced they did
“ the enemy great damage, although *their masts,*
“ *rigging, and sails, appeared less injured than*

“ours.* The four ships last mentioned, with the
“Fame, being so disabled in their masts and
g **“rigging** as to be totally incapable of keeping up
“with the squadron, and the Suffolk appearing to
“have received considerable damage in an attack
h **“made** by Rear-Admiral Rowley upon the ene-
“my’s van, I took in the signal for chase, but
“continued that for close engagement; formed
“the best line which circumstances would admit
“of; and kept the wind, to prevent the enemy
“from doubling upon us, and cutting off the
“transports, which they seemed inclined to do,
“and had the latter very much in their power,
“by means of their large frigates, independent
“of ships of the line. The French squadron
“tacked to the southward, and I did the same,
“to be in readiness to support the Grafton, Corn-
“wal, and Lion, that were disabled, and a great
“way a-stern. But the Lion being likewise much
“to leeward, and having lost her main and mizen
“top-masts, and the rest of her rigging and sails
“being cut in a very extraordinary manner, she
“bore away to the westward when the fleets tack-

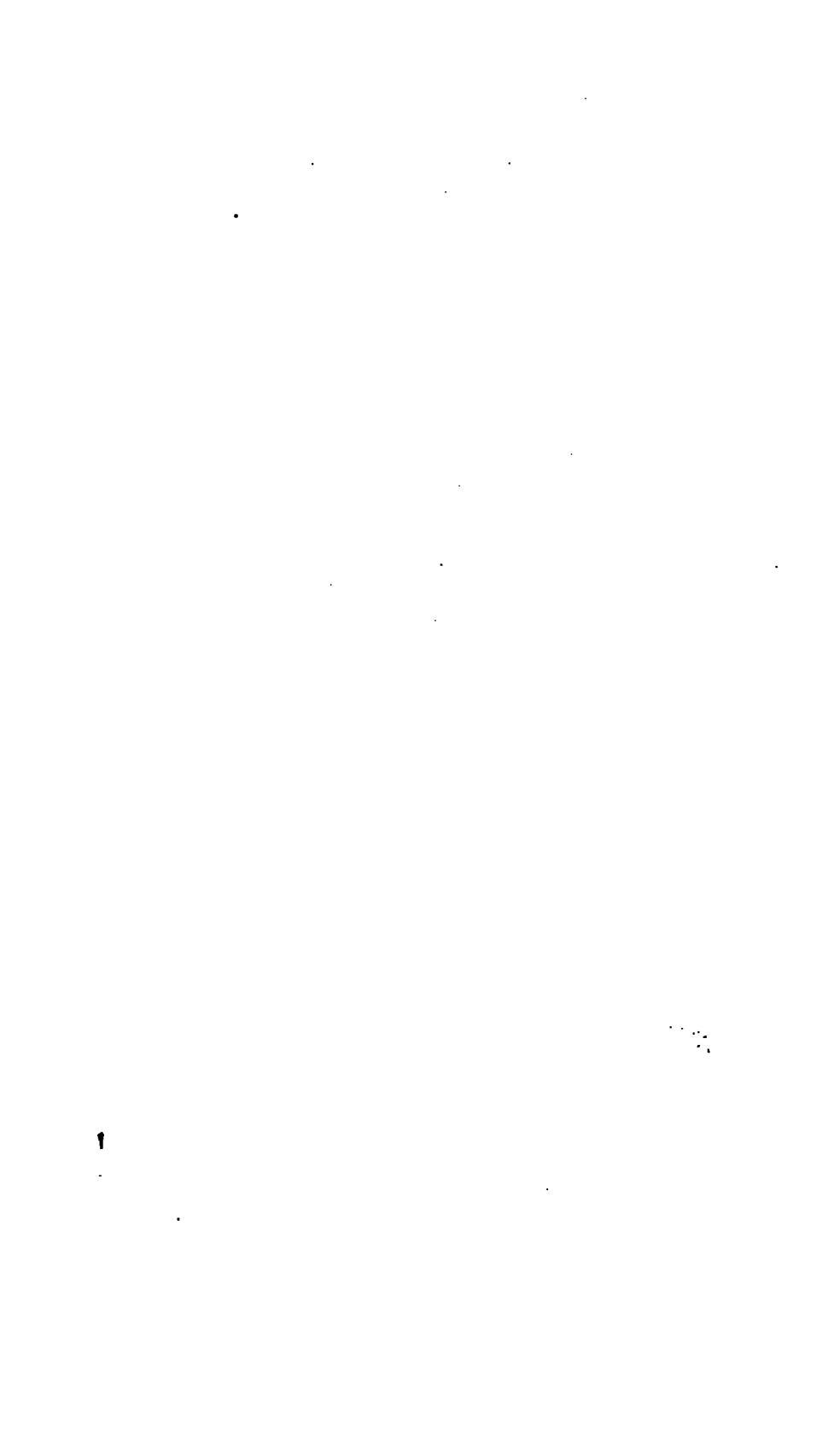
* A strong proof of the advantage of demolishing an ene-
 my’s rigging, in preference to the killing his men, or
 striking the hull of his ship. (No. 4th, 5th, and 6th).

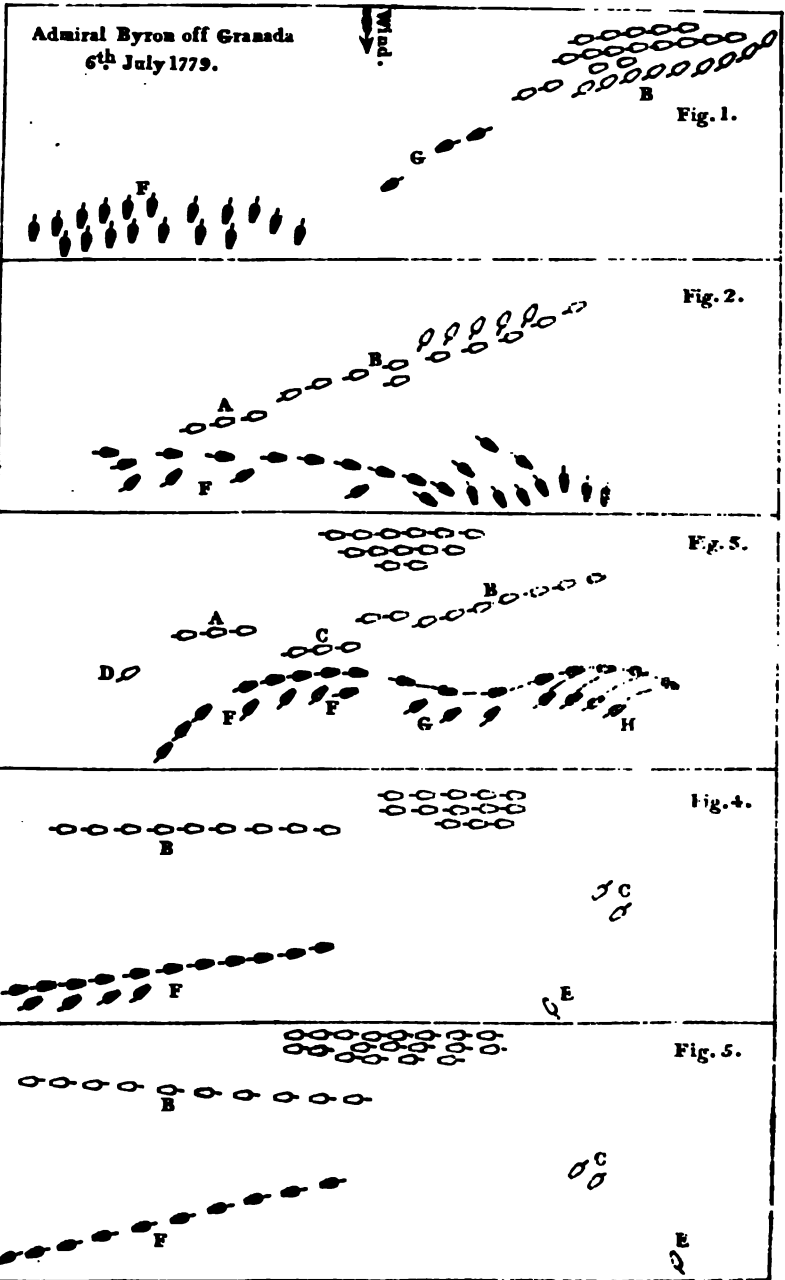
“ ed, and, to my great surprise, no ship of the
“ enemy was detached after her. The Grafton i
“ and Cornwall stood toward us, and might have
“ been weathered by the French, if they had kept
“ their wind, especially the Cornwall, which was
“ farthest to leeward, and lost her main top-mast,
“ and was otherwise much disabled; but they per-
“ severed so strictly in declining every chance of
“ close action, notwithstanding their great superio-
“ rity, that they contented themselves with firing
“ upon these ships, when passing barely within gun-
“ shot, and suffered them to rejoin the squadron,
“ without one effort to cut them off. The Mon-
“ mouth was so totally disabled in her masts and
“ rigging, that I judged it proper to send direc-
“ tions, in the evening, for Captain Fanshaw to
“ make the best of his way to Antigua; and he
“ parted company accordingly.

“ When we were close in with St George's Bay,
“ the French colours were seen flying upon the
“ fort, and other batteries; which left no doubt of
“ the enemy being in full possession of the island.
“ To dislodge them was impracticable, considering
“ the state of the two fleets. I therefore sent or-
“ ders to Captain Barker, the agent, to make the
“ best of his way with the transports to Antigua
“ or St Christopher's, whichever he could fetch, in-
“ tending to keep the King's ships between them
“ and the French squadron, which, at the close of

k “ the evening, was about three miles to leeward of
“ us, and, I had no doubt, would at least be as
“ near in the morning : For, although it was evi-
“ dent from their conduct throughout the whole
“ day, that they were resolved to avoid a close en-
“ gagement, I could not allow myself to think,
“ that, with a force so greatly superior, the French
“ Admiral would permit us to carry off the trans-
“ ports unmolested : however, as his squadron was
“ not to be seen next morning, I conclude he re-
“ turned to Grenada.

“ It is my duty on this occasion to represent,
“ that the behaviour of the officers and men of his
“ Majesty’s squadron was such as became British
“ seamen, zealous for the honour of their country,
“ and anxious to support their national character.
“ The marines, likewise, and troops that were em-
“ barked, with their officers, in the King’s ships,
“ behaved as brave soldiers ; and, from the exem-
“ plary good conduct of those who got into action ;
“ from the visible effect which the brisk and well-
“ directed fire had upon the enemy’s ships, and
“ from that cool, determined resolution, and very
“ strong desire of coming to a close engagement,
“ which prevailed universally throughout the squa-
“ dron, I think myself justifiable in saying, that
“ the great superiority in numbers and force would
“ not have availed the enemy so much, had not
“ their advantage over us in sailing enabled them





“ to preserve a distance little calculated for deciding such contests.”

THE DESCRIPTION OF ADMIRAL BYRON'S BATTLE OFF
GRENADA, JULY 6. 1779, TAKEN FROM THE FORE-
GOING LETTER.*

52. F (Plate VII. Fig. 1.), The French fleet, as they were seen at day-light off the town of St George, most of them at anchor, but getting under way, and seemingly in confusion, with little wind.

G, Frigates on the outlook.

B, The British fleet discovering them from windward.

53. B (Fig. 2.), The British now extended in line of battle a-head.

A, The three headmost ships under Vice-Admiral Barrington, carrying a press of sail, in consequence of the signal for general chase, were soon fired upon by the enemy, which fire was not returned till he got considerably nearer.

F, The enemy having now got the breeze of

* British, 21 ships, 1 frigate, with a fleet of transports.
French, 26 ships, 7 frigates.

wind, are seen drawing out their line from the cluster they were lying in, and forming to leeward on the starboard tack.

54. B (Fig. 3.), The British fleet after the signal for close engagement, which, with their utmost endeavours, they could not effect; the enemy industriously avoiding it, by always bearing up when our ships got near them, as at F. Their superiority over us in sailing gave them the option of distance, which they availed themselves of, so as to prevent our rear from ever getting into action; *and being to leeward, they did great damage to the masts and rigging, when our shot could not reach them.* Though the three headmost ships, A, were exposed to a severe fire in making the attack, yet the Grafton, the Cornwall, and Lion, being farther to leeward, at C, and consequently nearer the enemy, suffered most, *having sustained the fire of the enemy's whole line as it passed them, to leeward, upon the starboard tack.* The Monmouth, D, also suffered considerably, by Captain Fanshaw's having gallantly *bore down to stop the enemy's van, and bring it to action*; as did the Suffolk, in another attack upon the enemy's van.

55. B (Fig. 4.), The British fleet forming the best line that circumstances would admit of, to prevent the enemy from doubling back upon us,

and cutting off our transports, which they seemed inclined to do, by means of their large frigates, as well as their ships of the line.

C, The Grafton and Cornwall left far a-stern.

E, The Lion, being much shattered, making off to leeward.

56. F (Fig. 5.), The enemy, having tacked to the southward, and upon the larboard tack.

B, The British, after having immediately got upon the same tack, to be in readiness to support the Grafton and Cornwall, who were disabled, and had been left a great way a-stern, as at C. But the Lion, being much more shattered, had bore away to the westward, as at E; and, to our great surprise, no ship of the enemy had been detached after her.

57. The similarity of this battle with that of Mr Byng, already described, is so great, that, whether the mode in which the British made the attack, or the mode in which the French avoided it, shall be considered, we have no doubt of showing, that the circumstances in either case were equally effected by the principles laid down (Section IV.); but as the importance of the subject requires that this should be done in the most satisfactory manner, the observations made shall be supported by extracts from the Admiral's letter.

I.

OBSERVATIONS ON THE BRITISH MODE OF ATTACK.

EXTRACTS FROM THE ADMIRAL'S LETTER, IN SUPPORT OF THESE OBSERVATIONS.

58. That the Admiral by extending his line of battle, in an attempt to stop the van of the enemy, and bring it to action, it may be admitted, that it was with the intent of taking, destroying, or disabling every opponent ship.

59. In this attempt, however, the ships in the van, by the nature of the course they were obliged to take (No. 27. 28.), were exposed, for a long time, to a heavy fire, which they could

' The Monmouth likewise suffered exceedingly, by Captain Fanshaw's having bore down in a very gallant manner to stop the van of the enemy's squadron, and bring it to action (e).—And the Suffolk appearing to have received considerable damage in an attack made by Rear-Admiral Rowley upon the enemy's van ;' (g.)

' The signal was made for the ships to engage and form as they could get up ; in consequence of which, the Prince of Wales, the Boyne, and the Sultan, the headmost ships of the Bri-

not return, or did not return.

60. That by this course, which must have been in the slanting or lasking form (No. 28.), the ships of the van having got far a-head of the rear, were therefore the sooner in with the enemy; but being disabled by the fire they received in coming down, and becoming in a manner immovable, or stationary, compared with the enemy, they were obliged to sustain the continued fire of their whole line, ship by ship, as they passed in succession, without having it in their power to stop the van, as intended, or even to bring a single ship of them to action.

61. That the rear, by the nature of this course also, not from any inferiority in point of sailing, compared with the enemy, being at

tish, and carrying a press of sail, were soon fired upon, at a great distance, which they did not return till they got considerably nearer.' (Vid. a)

'The ships that suffered most, were those the action began with, the Grafton, Captain Collingwood, the Cornwall, Captain Edwards, and the Lion, Captain Cornwallis. The spirited examples of Vice-Admiral Barrington, with the former three, exposed them to a severe fire in making the attack; and the latter three happening to be to leeward, sustained the fire of the enemy's whole line, as it passed on the starboard-tack.' (Vid. d.)

'Their superiority over us in sailing gave them the option of distance, which they availed themselves of, so as to prevent our rear

first left far a-stern by the van (No. 28.), and afterwards, as may be supposed, having met with obstruction from disabled ships a-head, might have been prevented from carrying support to the van, in like manner as was occasioned by the Intrepid in Mr Byng's action, ships a-stern endeavouring to go to windward of the disabled ship, but some for certain passing to leeward; for how, otherwise, can we account for the situations of the Grafton, Cornwall, and Lion, or for the gallant attempt of Captain Fanshaw to stop the van of the enemy, and bring it to action? from ever getting into action.' (Vid. c.)

II.

OBSERVATIONS ON THE
FRENCH MODE OF RE-
CEIVING THE ATTACK.

EXTRACTS FROM ADMIRAL
BYRON'S LETTER CONTI-
NUED.

62. The French, on the other hand, seeing the British squadron coming down to attack them, drew out their line of battle by forming to leeward; of necessity on this occasion, but admirably fitted for their manner of fighting, which peculiarly might be said to consist in an address qualified for saving their own ships, while they should have it in their power to disable those of their enemy. According to this system, then, so soon as the British squadron approached within what might be thought the greatest possible range of cannon-shot, and while it

' The enemy getting the breeze of wind about that time, drew out their line from the cluster they were lying in, by bearing away and forming to leeward on the starboard-tack, which showed their strength to be very different from our Grenada intelligence; for it was plainly discovered they had 34 sail of ships of war, 26 or 27 of which were of the line, and many of these of great force. However, the general chase was continued, and the signal made for close engagement; but our utmost endeavours could not effect that, the enemy industriously avoiding it, by

was coming down before the wind, the French, from their whole line, kept up a heavy fire; but, as soon as any of the British ships had brought-to, and they, in their turn, began to be annoyed by the British fire, the ships the most exposed bore away, and withdrew from battle (No. 20.) And whether this was in the van or centre, most probably it was in the manner as represented in Plate IV. Fig. 2. that alternate ships should withdraw, while intermediate ships should be left to fill up the intervals, and support the line (No. 49.); while the rear, to avoid every possibility of being forced into action, kept bearing away (as at H, Fig. 3. Plate VII.) in like manner as before described (No. 30. and Plate V. Fig. 3.)

63. And now again taking advantage of the disordered condition of the British squadron (for, at that time, several of the

bearing up when our ships got near them.' (Vid. *b.*)

‘From the very smart and well-directed fire kept up by these ships, meaning the Prince of Wales, the Boyne, and the Sultan, and

headmost ships, from the severe fire received in coming down, lay crippled, while the Grafton, the Cornwall, and the Lion, having got considerably to leeward with the intention of covering their friends, were therefore the more exposed) the French, I say, laying hold of the opportunity, and without delay, or remaining till they might be disabled themselves (No. 48.), made sail, and ship by ship, as many as could reach in passing, threw in upon the above ships the whole of their fire, when, having formed again, for the second time, to leeward, they were prepared again and again to play the same manœuvre, so often as the like attack should be repeated. (No. 21. 22. 48. and 49.)

64. Whether it might or might not have been practicable to cut off either of these ships, the Grafton, Cornwall, or Lion, is not disputed; but, as they did

afterwards the Grafton, the Cornwall, and the Lion, with the Monmouth and others that were engaged, I am convinced they did the enemy great damage, although their masts, rigging, and sails, appeared less injured than ours, the four ships last mentioned, with the Fame, being so disabled in their masts and rigging, as to be incapable of keeping up with the rest of the fleet; and the Suffolk appearing to have received considerable damage, &c. (Vid. f.)

‘ The Grafton and Cornwall stood toward us, and might have been weathered by the French, if they had kept their wind, especially the Cornwall, which was

not think they could succeed in that attempt, without sustaining some damage, they, as usual, preferred a conduct more cautious, and kept their fleet entire, that the reduction of the island Grenada, their particular object, might be carried on with the greater certainty of success. (No. 48.)

65. The damage received by the French ships must have been but trifling; for, otherwise, the British Admiral would not have had reason to express an apprehension that they might be able to double upon him and cut off his transports, which were, at the time, a considerable way to windward.

66. On this occasion, the whole of the French system seems to have been as completely followed out as in the former affair, that of Mr BYNG; they preserved

farthest to leeward, and lost her main topmast, and was otherwise much disabled; but they persevered so strictly in declining every chance of close action, notwithstanding their great superiority, that they contented themselves with firing upon these ships, when passing, barely within gun-shot, and suffered them to rejoin the squadron, without one effort to cut them off.' (Vid. i.)

'I took in the signal for chase, but continued that for close engagement; formed the best line which circumstances would admit of; and kept the wind, to prevent the enemy from doubling upon us, and cutting off the transports.' (Vid. h.)

'The French squadron tacked to the southward; and I did the same to be in readiness to support the Grafton, Cornwall, and Lion, that were disabled,

their own ships entire, while they disabled those of their enemy ; and so intent were they in keeping their main object in view, the making themselves masters of the island, that they cautiously avoided every chance that could lead them into a scrape, which a close engagement possibly might have been, even when opportunities offered, apparently fortunate, such as the cutting off the transports, or the capture of those fore-mentioned ships, the *Grafton* and *Cornwal*, or the *Lion*.

and a great way a-stern ; but the *Lion* being likewise much to leeward, bore away to the westward, and having lost her main and mizen topmasts, and the rest of her rigging and sails being cut in a most extraordinary manner, she bore away to the westward, when the fleets tacked ; and, to my surprise, no ship of the enemy was detached after her.

‘ For although it was evident, from their conduct throughout the whole day, that they were resolved to avoid a close engagement, I could not allow myself to think, that, with a force so greatly superior, the French Admiral would permit us to carry off the transports unmolested.’ (Vide *k*.)

66. But besides the causes mentioned for retarding the rear of a fleet to windward, from getting into action with a fleet to leeward, there is another, which, being a manœuvre of course, may therefore have taken place on this occasion, although not taken notice of by Mr Byron in his

letter.—For illustration's sake,—If the opponent fleet to leeward, as extended in line of battle, shall lie up but one single point to the wind (No. 29.) the vans of the two fleets must mutually approximate, and get within fighting distance; while the two rears, of consequence, may still be some miles asunder; and the more numerous the two fleets are, and the more they are extended, each of them in their proper line of battle, the greater will this proportional distance be: For, if two squadrons, consisting of twelve ships each (as represented in Plate V. Fig. 3.), shall make this distance between the two rears amount to one mile and a half; in this engagement of Mr Byron's, where the two squadrons, each of them, consisted of 21 ships, even the least numerous, it follows, that the distance between the two rears, according to the same ratio, might, by this reason alone, have amounted to 4620 yards, or $2\frac{5}{8}$ miles.

67. Again, should the ships in the rear of the fleet to leeward, at the same time, keep bearing away (as represented in Plate V. Fig. 3. at L and M, or in Plate VII. Fig. 3. at G and H), and which undoubtedly they did in this engagement, then the space between the two rears will be still more increased.

68. From all which, the several advantages which a fleet to leeward has over an extended fleet making an attack from the windward, *as formerly*

enumerated, are so fully confirmed, that in recapitulating them, we are obliged to make use of almost the same words as are made use of by Mr Byron himself in his letter.

69. *1st*, By their superiority of fire, the ships in the van were disabled, in coming down to the attack; *and, before they were brought-to, in a situation from whence they could annoy the enemy,* (No. 33.)

70. *2dly*, By being to leeward, the enemy, he says, did great damage to our masts and rigging, while our shot could not reach them, *by being thrown into the water.* (No. 34.)

71. *3dly*, The Cornwall and Lion, part of the van, from being separated and unsupported, or being farther to leeward, as he says, suffered most, having sustained the fire of the enemy's whole line as it passed to leeward. (No. 35)

72. *4thly*, And is it not evident, as well from his letter, as from the description, that the enemy, from their leeward situation, laid hold of that advantage, by stealing away at pleasure? (No. 36.)

73. *Lastly*, From the letter it is clearly demonstrated, that the difficulty of getting the rear of the fleet brought into action, did arise from the nature of the attack itself, not from any abatement of spirit in the seamen, nor from any defect of the shipping on the one side, or even from any degree of superiority on the other.

III. ADMIRAL ARBUTHNOT'S ENGAGEMENT WITH THE
FRENCH FLEET OFF THE MOUTH OF THE CHESAPEAKE,
THE 16TH MARCH 1781.

EXTRACT OF A LETTER FROM ADMIRAL ARBUTHNOT, 20TH MARCH
1781, LIMNEHAVEN BAY.

74. " On the 16th, at six A. M. the Iris made
" the signal for discovering five strange sail, to the
" N. N. E. and soon afterwards hailed that they
" were large ships steering for the Capes of Vir-
" ginia, and supposed to be distant about three
" miles. I immediately concluded it must be the
" enemy I was in search of, and accordingly pre-
" pared the squadron for battle, by forming the
" line a-head a cable's length asunder, on a wind
" which was then fresh, and proceeding towards
" them with a press of sail. At this time Cape
" Henry bore S. W. by W. distant about 14
" leagues, wind at west; the French bearing from
" us N. N. E. the weather so hazy, that the length
" of the British line could scarcely be discerned.

" At a quarter of an hour after eight A. M. the
" wind veered to N. W. by W. and soon after to
" N. by W. which gave the enemy the advantage
" of the weather-gage. About this time several

“ of the enemy's ships were discovered to wind-
“ ward, manœuvring to form their line.

“ At twenty-five minutes after eight, the Gua-
“ daloupe ranged up under our lee, bringing the
“ same intelligence with that already given by the
“ Iris, and was ordered to make sail, and endea-
“ vour to keep sight of the enemy.

“ At thirty-five minutes after eight, I directed
“ the Iris, by signal, to make sail a-head, and keep
“ sight of the enemy, as the haze appeared to
“ thicken. The British line was by this time
“ completely formed, and close hauled on the lar-
“ board tack.

“ At twenty minutes after nine, the headmost of
“ the French ships tacked, as did the rest in suc-
“ cession, and formed the line on the starboard tack.

“ At thirty-five minutes after nine, the weather
“ being very squally, I formed the line a-head, at
“ two cables' length asunder.

“ At a quarter of an hour after ten, I made the
“ signal for the squadron to tack, the headmost
“ and weathermost first, and gain the wind of the
“ enemy.

75. “ At a quarter of an hour after eleven, the
“ headmost of the French line tacked; but one of
“ them having missed stays, the rest wore, and
“ formed the line on the larboard tack.

“ At forty minutes after eleven, I re-formed
“ my line, at one cable's length asunder.

“ At twelve o'clock, there being a prospect of
“ the van of my line reaching the enemy, the
“ whole of my line tacked by signal, the van first,
“ and the leading ship continued to lead on the
“ other tack.

“ At one o'clock, the French squadron having
“ completed their form in a line a-head, consisting
“ of eight two deckers, bore E. by S. the British
“ line close hauled, steering E. S. E. wind at
“ N. E.

76. “ At half an hour after one o'clock, the
“ enemy being very apprehensive of the danger
“ and inconvenience of engaging to windward,
“ from the high sea that was running, and squally
“ weather, wore, and formed their line to leeward
“ of the British line.

77. “ At two o'clock, the van of my squadron
“ wore in the line; and, in a few minutes, the
“ Robust, which led the fleet, and afterwards be-
“ haved in the most gallant manner, was warmly
“ engaged with the van of the enemy. The ships
“ in the van and centre of the line were all en-
“ gaged by half an hour past two, and by three
“ o'clock the French line was broke; their ships
“ began soon after to wear, and to form their line
“ again, with their heads to the south-east into
“ the ocean.

78. “ At twenty minutes after three, I wore,
“ and stood after them. I was sorry to observe

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Admiral Arbuthnots Battles of the Chesapeake 16th March 1781.



Fig. 1.

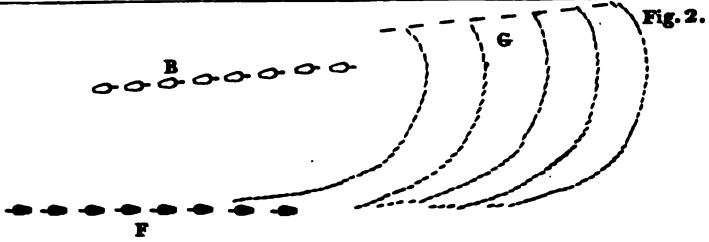
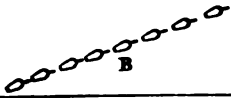


Fig. 2.

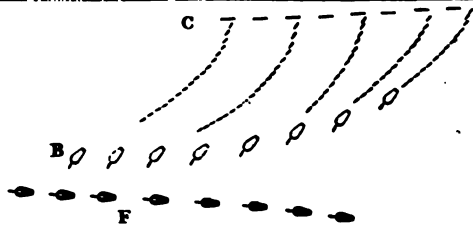


Fig. 3.

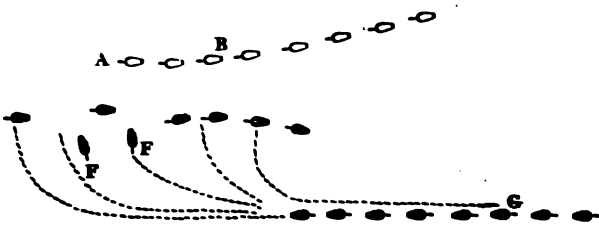


Fig. 4.

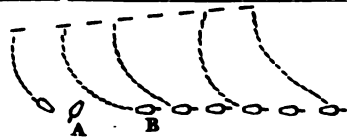
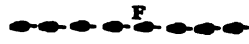


Fig. 5.



“ the Robust, Prudent, and Europe, which were
 “ the *headmost* ships, and received the whole of
 “ the *enemy's fire* at their rigging, as they *bore*
 “ *down*, so entirely *disabled*, and the London's
 “ main-top-sail yard being carried away, the two
 “ first unmanageable, lying with their heads from
 “ the enemy, as to be incapable of pursuit, and
 “ of rendering the advantage we had gained de-
 “ cisive.

79. “ At half an hour after four, the haze came
 “ on so very thick, as entirely to intercept the
 “ enemy from my view. The Medea joined me
 “ soon after, which I directed to follow, and ob-
 “ serve the route of the enemy, while I proceeded
 “ with the squadron to the Chesapeak, in the hope
 “ of intercepting them, should they attempt to get
 “ in there.”

THE DESCRIPTION OF ADMIRAL ARBUTHNOT'S BATTLE
 OFF THE CHESAPEAK 16TH MARCH 1781*

F, (Plate VIII. Fig. 1.) The French fleet to
 windward, formed in line of battle, on the larboard
 tack.

-
- * British, eight ships and three frigates.
 - French, eight ships and four frigates.

B, The British fleet to leeward, on the same tack, at twelve o'clock, and in hopes that their van would be able to reach the enemy, (No. 75.)

F, (Fig. 2.) The French fleet now formed to leeward, at half after one, having quitted their windward position G, from an apprehension of the danger and inconvenience there would be in engaging to windward, from the high sea that was running, and the squally weather. (No. 76.)

B, The British fleet in chase, keeping their wind.

F, (Fig. 3.) The French extended in line of battle, and receiving the attack, by firing upon the van of the British, as they came down before the wind.

B, The British, who had wore at two o'clock, left their position at C; are now attempting to stop the van, and steering every ship upon his opposite of the enemy.

Mr Arbuthnot says, "At two o'clock, the van of my squadron were in the line; and, in a few minutes, the Robust, which led the fleet, and afterwards behaved in a most gallant manner, was warmly engaged with the van of the enemy."

(Fig. 4.) The ships in the van A, and the centre B, of the line, were all engaged by half past two, and by three o'clock the French line was broke at FF.

Their ships began soon after to wear, and form

their line again, with their heads to the south-east, into the ocean, as at G, Fig. 4. (No. 77.)

80. (Fig. 5.) " At twenty minutes after three, I wore and stood after them, (as at B, Fig. 5.); but was soon sorry to observe the Robust, Prudent, and Europe, which had been the headmost, now the sternmost at A, as they had received the whole of the enemy's fire at the rigging, as they *bore down*, so entirely disabled, as was also the London, who had her top-sail yard carried away, that we were incapable of pursuit." (No. 78.)

OBSERVATIONS.

81. Mr Arbuthnot, by this battle, having defeated this first attempt of the enemy to acquire a footing in the Chesapeak; and having relieved us of our apprehensions for the little army under General Arnold, that is, having had the singular merit of accomplishing, in the fullest manner, the principal object of his destination, it is much to be regretted, that an equal degree of praise is not due to the action itself. For, by this mode of attack (Section IV.), as well as by the attempt to stop the van of the enemy, his headmost ships were so disabled, that they could neither get into close ac-

tion, nor pursue ; whereas, on the other hand, the enemy being unhurt, and perceiving the disorder of the British fleet, that they were disabled from following them,—to avoid the effects of their fire, made sail, *wore*, and formed a new line of battle to leeward, (No. 77.), where they were prepared to receive a new attack, should the British Admiral attempt to make it.

82. This engagement, however, is distinguished from the two former, by a manœuvre peculiar to itself ; and must be of some weight in support of what has been advanced with respect to French ideas. For, quitting the windward situation, which they were possessed of, and assuming their post to leeward, as they did, (No. 76.), they plainly showed, that they were confident in their superior knowledge in naval tactic ; that they relied on our want of penetration ; and, getting to leeward, that they trusted our irresistible desire would hurry us on to make the customary attack, (Introd. page 20.) though at a disadvantage almost beyond the power of calculation ; by which, the British Admiral, having his ships crippled in the first onset, never after was able to close with, follow up, or even detain one single ship of them for one moment. (No. 37.)

IV. ADMIRAL GRAVES' ENGAGEMENT WITH THE FRENCH FLEET OFF THE MOUTH OF THE CHESAPEAK, THE 5TH OF SEPTEMBER 1781.*

EXTRACT OF A LETTER FROM VICE-ADMIRAL GRAVES, AUGUST 31ST 1781, OFF SANDYHOOK.

83. " I beg you will be pleased to acquaint my
" Lords Commissioners of the Admiralty, that the
" moment the wind served to carry the ships over
" the bar, which was buoyed for the purpose, the
" squadron came out; and Sir Samuel Hood, get-
" ting under sail at the same time, the fleet pro-
" ceeded together, on the 31st of August, to the
" southward.

" The cruizers which I had placed before the
" Delaware could give me no certain information,
" and the cruizers off the Chesapeake had not join-
" ed. The wind being rather favourable, we ap-

* *Note by Lord Rodney.*—In this battle, the whole of the British rear (though to windward) never came within two random shot, though the signal was for close battle. This I had from Count de Grasse, who commanded the French fleet, and seemed astonished at the behaviour of the British rear.—Vide Admiral Graves' letter of complaint to the Admiralty.

“ proached the Chesapeak the morning of the 5th
“ of September, when the advanced ship made the
“ signal of a fleet. We soon discovered a number of
“ great ships at anchor, which seemed to be extend-
“ ed across the entrance of the Chesapeak, from
“ Cape Henry to the middle ground : They had a
“ frigate cruizing off the Cape, which stood in and
“ joined them ; and, as we approached, the whole
“ fleet got under sail, and stretched out to sea, with
“ the wind at N. N. E. As we drew nearer, I
“ formed the line first a-head, and then in such a
“ manner as to bring his Majesty’s fleet nearly
“ parallel to the line of approach of the enemy ;
“ and, when I found that our van was advanced as
“ far as the shoal of the middle ground would admit
“ of, I wore the fleet, and brought them upon the
“ same tack with the enemy, and nearly parallel to
“ them, though we were by no means extended
“ with their rear. So soon as I judged that our
“ van would be able to operate, I made the signal
“ to bear away and approach, and soon after, to en-
“ gage the enemy close. Somewhat after four,
“ the action began amongst the headmost ships,
“ pretty close, and soon became general, as far as
“ the second ship from the centre, towards the rear.
“ *The van of the enemy bore away, to enable the*
“ *centre to support them, or they would have been*
“ cut up. The action did not entirely cease till
“ a little after sun-set, though at a considerable

“ distance ; for the centre of the enemy continued
“ to bear up as it advanced ; and, at that moment,
“ seemed to have little more in view, than to
“ shelter their own van, as it went away before the
“ wind.

“ His Majesty's fleet consisted of nineteen sail
“ of the line ; that of the French formed twenty-
“ four sail in their line. After night, I sent the
“ frigates to the van and rear, to push forward the
“ line, and keep it extended with the enemy, with
“ a full intention to renew the engagement in the
“ morning ; but, when the frigate Fortune return-
“ ed from the van, I was informed, that several of
“ the ships had suffered so much, that they were
“ in no condition to renew the action until they
“ had secured their masts : we, however, kept well
“ extended with the enemy all night.”

“ We continued all day, the 6th, in sight of
“ each other, repairing our damages. Rear-
“ Admiral Drake shifted his flag into the Alcide,
“ until the Princess had got up another main-top
“ mast. The Shrewsbury, whose Captain lost a
“ leg, and had the first Lieutenant killed, was
“ obliged to reef both top-masts, shifted her top-
“ sail yards, and had sustained very great damage.
“ I ordered Captain Colpoys of the Orpheus to
“ take command of her, and put her into a state
“ for action.

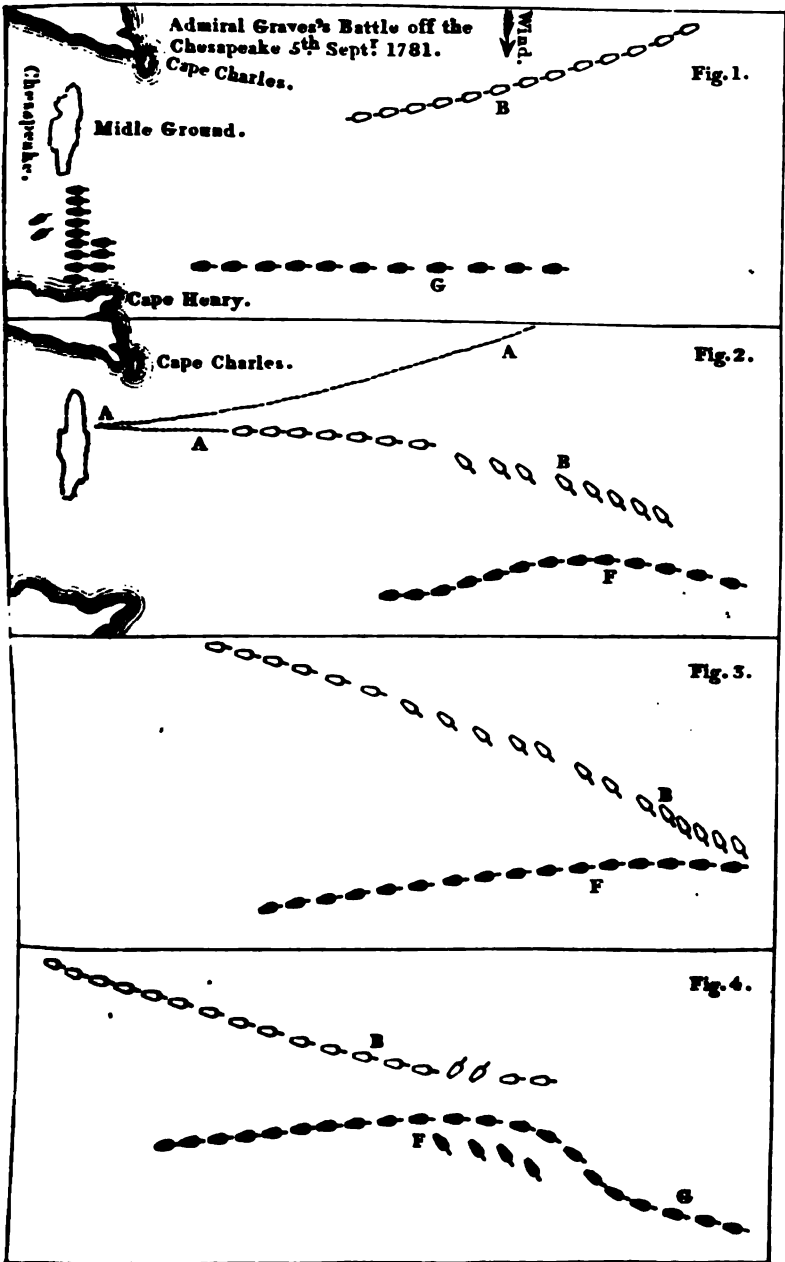
“ The Intrepid had both top-sail yards shot
 “ down, her top-masts in great danger of falling,
 “ and her lower masts and yards very much da-
 “ maged, her Captain having behaved with the
 “ greatest gallantry to cover the Shrewsbury. The
 “ Montague was in great danger of losing her
 “ masts; the Terrible so leaky as to keep all her
 “ pumps going; and the Ajax also very leaky.

“ In the present state of the fleet, and being
 “ five sail of the line less in number than the ene-
 “ my, and they having advanced very much in the
 “ wind upon us during the day, I determined to
 “ tack after eight, to prevent being drawn too far
 “ from the Chesapeak, and to stand to the north-
 “ ward.”

THE DESCRIPTION OF ADMIRAL GRAVES' ENGAGEMENT
 OFF THE CHESAPEAK, THE 5TH OF SEPTEMBER 1781.*

84. (Plate IX. Fig. 1.) The French fleet at anchor, and extended across the entrance of the Chesapeak, from Cape Henry to the middle ground, who, as soon as they perceived the Bri-

* British, 19 ships, 7 frigates, and a fire-ship. French, 24 ships. Frigates.



The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be clearly documented, including the date, amount, and purpose of the transaction. This ensures transparency and allows for easy auditing of the accounts.

The second section outlines the various methods used to collect and analyze data. It describes how different types of information are gathered, such as through direct observation, interviews, and the use of specialized instruments. The analysis process involves identifying patterns and trends within the collected data to draw meaningful conclusions.

The third part of the document focuses on the ethical considerations that must be taken into account during the research process. It highlights the need to obtain informed consent from participants and to ensure that their privacy is protected throughout the study. Researchers are also encouraged to be open about their methods and findings.

Finally, the document concludes by summarizing the key findings and their implications. It notes that the research has provided valuable insights into the behavior being studied and offers suggestions for further research in this area. The overall goal is to contribute to the understanding of the subject matter and to inform future practice.

tish fleet approaching, got under sail, and stretched out to sea upon the larboard tack, as at G.

B, The British fleet advancing to the middle ground, but not till after the French had left it, formed in a line nearly parallel to that of the French at G.

B, (Fig. 2.) The British fleet, after having advanced as far as the shoal upon the middle ground, as per course A, wore; and having stood after the enemy, are now upon the larboard tack, extended in line of battle a-head, and almost a-breast of them.

(Fig. 3.) Mr Graves says: "So soon as I judged that our van would be able to operate, I made the signal to bear away, and approach as at B; and soon after, to engage the enemy close."

(Fig. 4.) "Somewhat after four, the action began amongst the headmost ships, pretty close, and soon became general, as far as the second ship from the centre, towards the rear. The van of the enemy bore away," as at G, "to enable their centre to support them," as at F; Fig. 4. "or they would have been cut up.

"The action did not entirely cease till after sunset, though at a considerable distance; for the centre of the enemy continued to bear up as it advanced; and, that moment, seemed to have little more in view than to shelter their own van, as it went away before the wind."

85. Mr Graves might have added, that the French fleet, by making this movement, not only covered their own van as it went off, but they completely disabled the van of the British, now separated and unsupported, and who had been before greatly hurt in their rigging, by making the attack as they did, insomuch, that hardly a ship was able to stand after, and prevent the enemy from forming a new line to leeward.* (No. 16. to 37. inclusively.)

86. The fleets continued in sight of each other for five days successively, and, at times, were very near; but ours had not speed enough, in so mutilated a state, to attack them, and they showed no inclination to renew the action; but they generally maintained the wind of us, yet did not make use of that power.†

* *Note by Lord Rodney.*—Had Admiral Rodney's letters or orders been obeyed, the British fleet had been six more line of battle ships; and the British fleet had been off the Chesapeake before the French, and of course Lord Cornwallis' army had been preserved.—Vide letter to Sir Peter Parker at Jamaica, and his letter to the commanding Admiral in America, both of which were timely received, but neglected to be complied with.—Vide his letters of correspondence 1781, which have been printed.

† Certain French Officers on board their own fleet, it is said, having received an invitation from the Admiral to dine

87. The anxiety of the French to avoid a battle on this occasion, and their manœuvres in consequence, that they might not again be prevented in their designs upon the Chesapeak, in which they had been disappointed by Mr Arbuthnot, are so much alike to what has already been described in two engagements, the one with the unfortunate Admiral Byng, and the other with Admiral Byron off Grenada, that the observations then made being equally applicable in this case, it will be unnecessary to repeat them.

with him, on seeing the British squadron approaching the Chesapeak in the morning, and dreading they might be attacked before they could be prepared for action, pleasantly said to a gentleman, then prisoner on board, we have received an invitation from the Admiral to dine with him to-day, but it must have been from your Admiral, not our own;—expressing, by this, an apprehension that they might lose their ship, and be taken prisoners.

V. SIR GEORGE BRIDGES-RODNEY'S ENGAGEMENT WITH
THE FRENCH FLEET OFF THE WEST END OF MARTI-
NICO, APRIL 17. 1780.*

EXTRACT OF A LETTER FROM ADMIRAL SIR GEORGE BRIDGES-ROD-
NEY, 26TH APRIL 1780, OFF FORT-ROYAL, MARTINICO.

88. " In this situation, both fleets remained till
" the 15th instant, when the enemy, with their
" whole force, put to sea in the middle of the
" night; immediate notice of which being given
" me, I followed them; and, having looked into
" Fort-Royal Bay, and the road of St Pierre's, on
" the 16th we got sight of them, about eight
" leagues to leeward of the Pearl Rock. A gene-
" ral chase to the north-west followed; and, at
" five in the morning, we plainly discovered that
" they consisted of twenty-three sail of the line,
" one fifty gun ship, three frigates, a lugger, and
" a cutter. When night came on, I formed the

* It may be proper here to state (see Preface), that Mr Clerk's views of naval tactics, with sketches illustrating his plans of attack, were, previous to the operations treated of in this chapter, communicated to Sir George Bridges-Rodney, through the medium of Mr R. Atkinson, his particular friend.—*Editor.*

“ fleet in a line of battle a-head, and ordered the
 “ Venus and Greyhound frigates to keep between
 “ his Majesty’s and the enemy’s fleets, to watch
 “ their motions, which was admirably well attend-
 “ ed to by that good and veteran officer Captain
 “ Fergusson.

“ The manœuvres the enemy made, during the
 “ night, indicated a wish to avoid battle, which I
 “ was determined they should not, and therefore
 “ counteracted all their motions.

“ At day-light, in the morning of the 17th, we
 “ saw the enemy distinctly beginning to form the
 “ line a-head. I made the signal for the line a-head,
 “ at two cables’ length distance. At forty-five mi-
 “ nutes after six, I gave notice, by public signal,
 “ *that my intention was to attack the enemy’s*
 “ *rear with my whole force;** which signal was *a*
 “ answered by every ship in the fleet. At seven
 “ A. M. perceiving the fleet too much extended, I
 “ made the signal for the line of battle at one
 “ cable’s length asunder only. At thirty minutes
 “ after eight A. M. I made a signal for a line of
 “ battle a-breast, each ship bearing from the other
 “ N. by W. and S. by E. and bore down upon
 “ the enemy.† This signal was penetrated by *b*

* *Note by Lord Rodney.*—And never altered.

† *Note by Lord Rodney.*—In a standing line.

“ them, who discovered my intention, wore, and
 “ formed a line of battle on the other tack; I im-
 “ mediately made the signal to haul the wind, and
 “ form the line of battle a-head. At nine A. M.
 “ made the signal for the line of battle a-head, at
 “ two cables’ length, on the larboard tack.

“ The different movements of the enemy obliged
 “ me to be very attentive, and watch every oppor-
 “ tunity that offered of attacking them to advan-
 “ tage.

“ The manœuvres made by his Majesty’s fleet
 “ will appear to their Lordships by the minutes of
 “ the signals made before and during the action.
 “ At eleven A. M. I made the signal to prepare
 “ for battle, to convince the whole fleet I was de-
 “ termined to bring the enemy to an engagement.
 “ At fifty minutes after eleven A. M. I made the sig-
 c “ nal for every ship *to bear down, and steer for her*
 “ *opposite in the enemy’s line,** agreeably to the 21st
 “ article of the additional Fighting Instructions.
 “ At fifty-five minutes after eleven A. M. I made

* *Note by Lord Rodney.*—That was in a slanting position, that my leading ships might attack the van ships of the enemy’s centre division, and the whole of the British fleet be opposed to only two-thirds of the enemy. The moment before the battle began, the signal for the line was hauled down, and no other signal kept up but for battle, and close battle, which signals were repeated by the frigates appointed for the purpose.

“ the signal for battle; a few minutes after, the
 “ signal that it was my intention to engage close,
 “ and, *of course, the Admiral's ship to be the* *d*
 “ *example.* A few minutes before one P. M. one
 “ of the headmost ships began the action. At one
 “ P. M. the Sandwich in the centre, after having
 “ received several fires from the enemy, began to
 “ engage. Perceiving several of our ships en-
 “ gaging at a distance, I repeated the signal for a
 “ close action. The action in the centre con-
 “ tinued till fifteen minutes after four P. M. when
 “ Monsieur Guichen in the Couronne, in which
 “ they had mounted ninety guns, *the Triumphant* *e*
 “ *and Fendant, after engaging the Sandwich*
 “ *for an hour and a half, bore away.* The su-
 “ periority of the fire from the Sandwich, and the
 “ gallant behaviour of her officers and men, enabled
 “ her to sustain so unequal a combat; though, be-
 “ fore attacked by them, *she had beat three*
 “ *ships out of their line of battle, had entirely*
 “ broke it, and was to leeward of the wake of the
 “ French Admiral.

“ At the conclusion of the battle, the enemy
 “ might be said to be completely beat; but such
 “ was the distance of the van and rear from the
 “ centre, and the crippled condition of several
 “ ships, particularly the Sandwich, who, for twenty-
 “ four hours, was with difficulty kept above water,
 “ that it was impossible to pursue them that night

“ without the greatest disadvantage. However,
“ every endeavour was used to put the fleet in or-
“ der; and I have the pleasure to acquaint their
“ Lordships, that, on the 20th, we again got sight
“ of the enemy’s fleet, and, for three successive
“ days, pursued them, but without effect, they
“ using every endeavour possible to avoid a second
“ action, and endeavoured to push for Fort-Royal,
“ Martinico: We cut them off. To prevent the
“ risk of another action, they took shelter under
“ Guadaloupe.

“ As I found it was in vain to follow them with
“ his Majesty’s fleet in the condition they were in,
“ and every motion of the enemy indicating their
“ intention of getting into Fort-Royal Bay, Mar-
“ tinico, where alone they could repair their shat-
“ tered fleet, I thought the only chance we had of
“ bringing them again to action, was to be off Fort-
“ Royal before them, where the fleet under my
“ command now is, in daily expectation of their
“ arrival: I have dispatched frigates to windward
“ and to leeward of every island, to give me notice
“ of their approach.”



Sir Geo. Brydges Rodney off the West
end of Martinico 17th April 1780.

Fig. 1

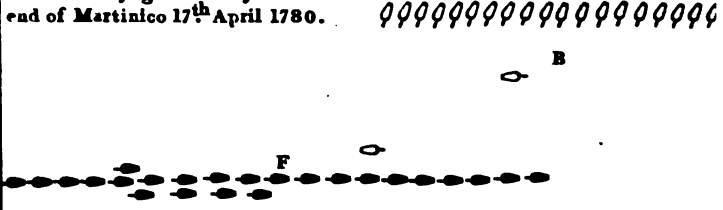


Fig. 2

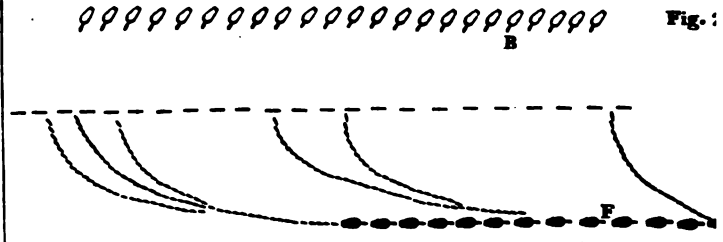


Fig. 3

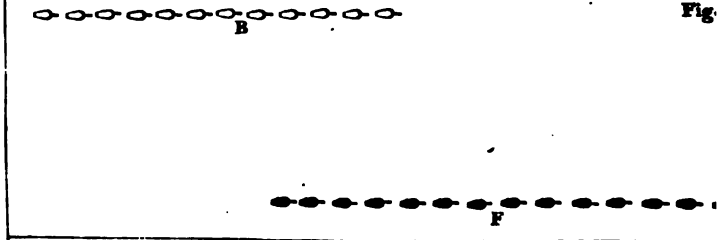


Fig. 4

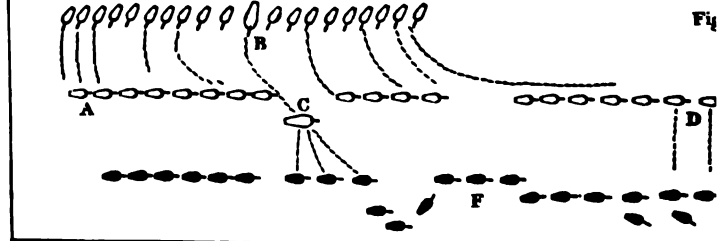
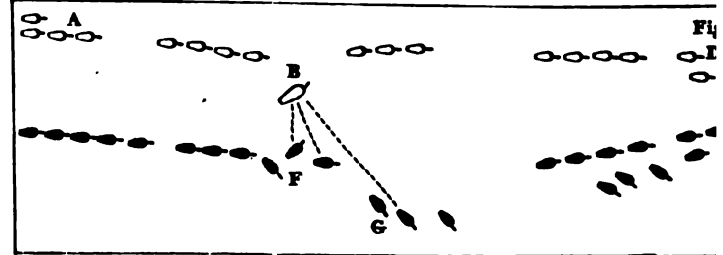


Fig. 5



THE DESCRIPTION OF SIR GEORGE BRIDGES-RODNEY'S
BATTLE OFF THE WEST END OF MARTINICO, THE 17TH
OF APRIL 1780.*

89. F, (Plate X. Fig. 1.) The French fleet to leeward, at day-light, distinctly seen forming the line a-head, and upon the starboard tack.

B, The British fleet to windward, thirty minutes after eight, formed in line of battle a-breast, and bearing down on the enemy, and after Sir George had given notice, by public signal, that his intention was to attack the enemy's rear with his whole force, which signal was answered by every ship in his fleet. (Vide *a*.)

F, (Fig. 2.) The French fleet in the act of wearing, and forming upon the larboard tack, having penetrated Sir George's signal. (Vide *b*.)

B, The British fleet still in line a-breast, bearing down.

B, (Fig. 3.) The British fleet formed in line of battle a-head, at two cables length asunder, on the larboard tack, the signal to haul the wind being previously made at nine o'clock.

* British, 20 ships of the line, 1 fifty, and 4 frigates.
French, 25 ships, 8 frigates.

F, The enemy in line waiting to receive the attack.

B, (Fig. 4.) The British fleet, fifty minutes after eleven o'clock, every one of which bearing down, and steering for her opposite in the enemy's line, agreeable to the 21st article of the additional Fighting Instructions, according to the signal made for that purpose, (vide c.) and after Sir George's signal to prepare for battle, which was intended to convince the whole fleet that he was determined to bring the enemy to an engagement. In five minutes after, the signal for battle was given; and in a few minutes after this last, the signal that it was his intention to engage close, *and of course, the Admiral's ship, B, to be the example.* (Vide d.)

A, The British fleet extended in line of battle. A few minutes before one o'clock, one of the headmost ships at D began the action, and at one, the Sandwich, the Admiral's own ship, after having received several fires from the enemy, began to engage at C.

F, The enemy in line as before.*

* *Note by Lord Rodney.*—Standing on in a very extensive line of battle, which gave the Admiral an opportunity of bringing the whole British fleet against a part of the enemy; and had his orders been obeyed, the whole of the enemy's centre and rear divisions had been disabled before their van could have made a motion to assist them.

(Fig. 5.) The action continued above three hours, when Mons. Guichen in the Couronne, mounting ninety guns, the Triumphant, and the Fendant, after engaging the Sandwich, B, for an hour and a half, bore away, as at F, the superior fire from the Sandwich enabling her to sustain so unequal a combat, though, before she was attacked by them, she had beat three ships, G, out of the line of battle, had entirely broke it, and was to leeward of the wake of the French Admiral. At the conclusion of the battle, the enemy might be said to be completely beat. But such was the distance of the van D, and rear A B, from the centre, and the crippled condition of several ships, particularly the Sandwich, that we could not pursue the enemy.

90. Though Sir George had the merit of great personal courage upon this occasion, yet it must be admitted, that the attack, as put in execution, being the same, was, of course, attended with the like want of effect, which, unfortunately, has uniformly marked all our other sea-battles. For, notwithstanding all that has been said, he could not prevent the wary Frenchman from sliding away from him almost unhurt, (in like manner as described in No. 23. 24. and Plate IV. Fig. 1. and 2.); while he got his ships so greatly disabled that he could not *follow up*, or even detain a single ship of the enemy for one moment. It is in vain,

therefore, to lay the blame of this miscarriage upon the supposed distance of the van and rear; for, if both had been completely closed with the centre, from our hypothesis, as well as from the examples given, we have a right to conclude, that the van and rear of the French fleet might, as usual, have slid away with the same ease as the centre had done (vide *c*), as soon as they perceived themselves in any danger of being hurt.

91. Sir George has first told us, that he had given notice, by public signal, that his intention was to attack the enemy's rear with his whole force (vide *a*); and then he afterwards says, at eleven o'clock A. M. I made the signal for every ship to bear down, and steer for her opposite in the enemy's line. (Vide *c*.) Why did Sir George change his resolution?*

92. Had he carried the intention of his first signal into execution,† it is more than probable that he might have taken or destroyed six or eight

* *Note by Lord Rodney.*—It was never changed. His fleet disobeyed his signal. His rear tacked without orders, and his van disobeyed and stood to windward of the enemy's van at a distance, and scarce within random shot.

† It has been said, that the French Admiral, upon perceiving the approach of the British fleet, according to the first

ships at least of the enemy's rear;* but, by carrying down his whole line, every ship steering upon her opposite, according to the intention of the last signal, from the experience of former engagements, he might have been assured of getting every ship so disabled by the raking fire of the enemy, as to be incapable of any future pursuit.†

93. That the Sandwich, the Admiral's own ship, in particular was crippled, is not surprising; for, after having beat three other ships of the enemy, she had obliged the Couronne, the Triumphant, and the Fendant, to bear away and withdraw from battle. But, in the manœuvre of these six ships of the enemy quitting the line, as they did on this occasion, it is impossible not to perceive a resemblance to what has been before ex-

intention, broke out with an exclamation, That six or seven of his ships were gone!*

* *Note by Lord Rodney.*—This is true, and he sent him word that if his signals had been obeyed, he should have been his prisoner. The Marquis De Bouillie told him the same afterwards.

• *Vide* Mode of Attack proposed.

† *Note by Lord Rodney.*—The Sandwich, the Admiral's ship, was totally disabled; her foremast gone, her mainyard down; yet in that condition she beat the French Admiral and his two seconds, though unsupported; but in less than 24 hours, such was the diligence of his officers and seamen, that all was aloft again, and in pursuit of the enemy.

plained in the case of the alternate ships, &c. (No. 24. Plate IV. Fig. 1. and 2.); or in the case of the *Grafton*, the *Cornwal*, and the *Lion*, in Mr Byron's action, where, with similar gallantry, getting to leeward to cover their friends, they were constrained to sustain the fire of the enemy's whole line, as they passed them to leeward.

Having now given five examples where the British, in display of their innate desire of making the attack, having always attained the windward position, and where they have made this attack in an extended line, where each ship was steered down upon her opposite of the enemy, and where an idea has generally prevailed, of making the attack upon the enemy's headmost ships, in preference to an attack upon the sternmost; the consequence of which has been, that the ships making such attack could not be supported but with difficulty; and likewise, where the French, on the other hand, as earnestly courting and attaining the leeward situation, have always disabled the British fleet: We now proceed to give other examples, where the French, by their anxiety in keeping to windward, have clearly shown their dislike, as well of making the attack themselves, as of suffering the British fleet to approach them, while in this windward situation.

SECTION II.

OF ENGAGEMENTS WHERE THE FRENCH, BY KEEPING THEIR FLEETS TO WINDWARD, HAVE CLEARLY SHOWN THEIR DISLIKE, AS WELL OF MAKING THE ATTACK THEMSELVES, AS OF SUFFERING THE BRITISH FLEET TO APPROACH 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.

4. Admiral Keppel, off Ushant, July 27. 1778.

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

EXTRACT OF A LETTER FROM ADMIRAL SIR GEORGE BRIDGES-RODNEY, MAY 31. 1780, DATED 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 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 ne-
“ cessary for the fleet to anchor in Chocque Bay,
“ St Lucia, in order to put the wounded and sick
“ men on shore, and to water and refit 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 Mar-
“ tinico, the only place they could refit at in these
“ seas. Having landed the wounded and sick
“ men, watered and refitted the fleet ; on the 6th
“ of May, upon receiving intelligence of the ene-
“ my’s approach to windward of Martinico, I 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 Mar-
“ tinico 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 en-
“ gaging; but their resolution failed them when
“ they drew near; and, as they sailed 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
“ sailing, it emboldened them to run greater risks,
“ and approach nearer to his Majesty’s ships than
“ they would otherwise have done; and, for seven-
“ ral days, about two in the afternoon, they bore
“ down in a line of battle a-breast, 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 retiring, and with a press of
“ sail approached us much nearer than usual. I
“ suffered them to enjoy the deception, and their
“ van ship to approach abreast of my centre, when,

* *Note by Lord Rodney.*—All of the British fleet but four very foul, leaky, and much out of repair.

“ by a lucky change of wind, perceiving I could
“ weather the enemy, I made the signal for the
“ third in command, 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 manœuvre, 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
“ 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 even-
“ ing, 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 wasting his
“ Majesty’s powder and shot. The enemy wanton-

* *Note by Lord Rodney.*—Though the wind would then have permitted the British fleet to get to windward, the moment the British van had got near the enemy, the signal was ready to take the lee gage close, had not the wind changed six points at once.

“ly 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 rencounter. But I am
“sure, from the slackness 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 these 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 Hotham; and with pleasure

* *Note by Lord Rodney.*—Though the British ships might have had it in their power to have weathered the enemy's van, Sir George never intended to have taken the weather gage, but to have bore away close under the enemy's lee, and prevented their getting into Martinique, and have engaged them close to leeward.

“ 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 ren-
“ counter.

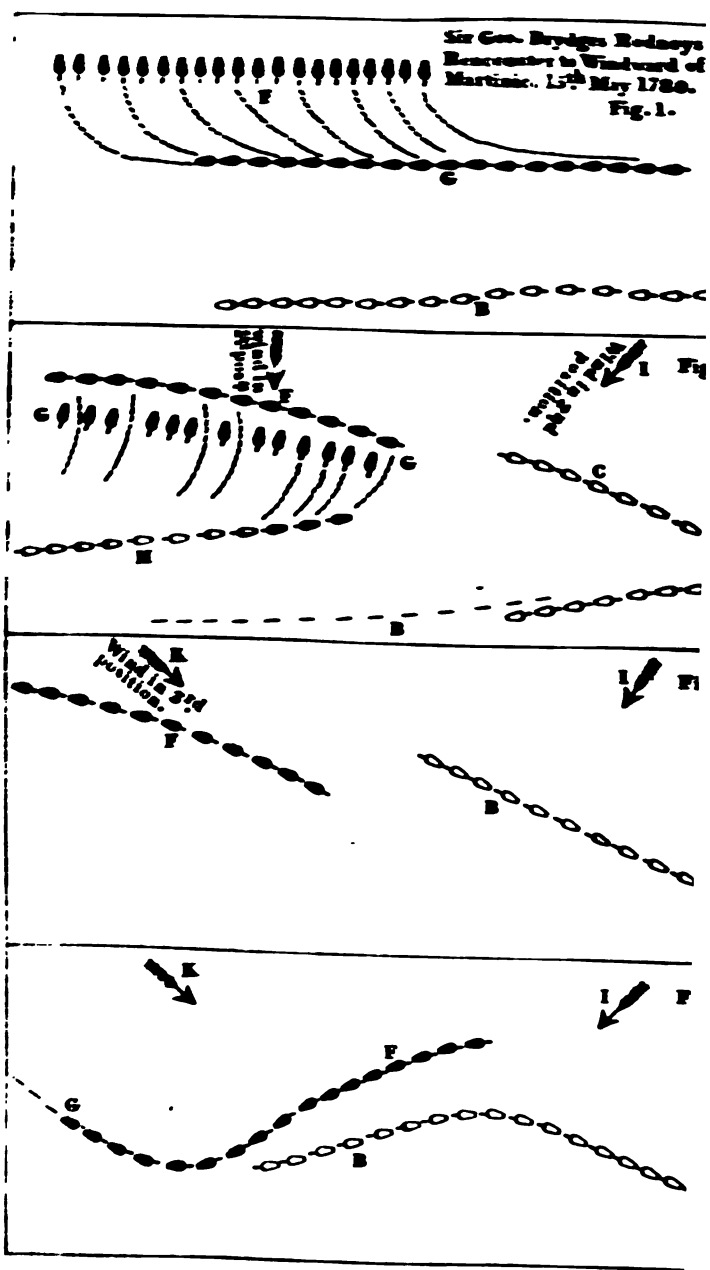
“ The Albion and Conqueror suffered much in
“ this last action, and several other ships received
“ considerable damage; a list of which, as likewise
“ of the killed and wounded, I have the honour to
“ inclose.

“ The pursuit of the enemy had led us forty
“ leagues directly to windward of Martinico; and,
“ as the enemy had stood to the northward with all
“ the sail they could possibly press, and were out of
“ sight the 21st instant, the condition of his Ma-
“ jesty’s ships being such as not to allow a longer
“ pursuit,* I sent the Conqueror, Cornwall, and
“ Boyne, to St Lucia, and stood with the remain-
“ der of his Majesty’s ships towards Barbadoes, in
“ order to put the sick and wounded on shore, and
“ repair the squadron.”

* *Note by Lord Rodney.*—Every day during the cruise Admiral Rodney had letters from many of his captains that their ships were sinking, and many of them were never in a condition again to go to sea, and two sunk in St Lucia.



Sir Geo. Brydges Rodney's
 Encounter to Windward of
 Martinic. 15th May 1780.
 Fig. 1.



I. DESCRIPTION OF SIR GEORGE BRIDGES-RODNEY'S ENCOUNTER WITH THE FRENCH FLEET, TO WINDWARD OF MARTINICO, THE 15TH MAY 1780, TAKEN FROM THE ABOVE LETTER OF 31ST MAY 1780.

95. B, (Plate XI. Fig. 1.) The British fleet extended in line of battle to leeward, and endeavouring to get to windward.

F, The French fleet, for several days, about the hour of two in the afternoon, bore down in a line of battle abreast (as at F), 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 (*vide* 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.)

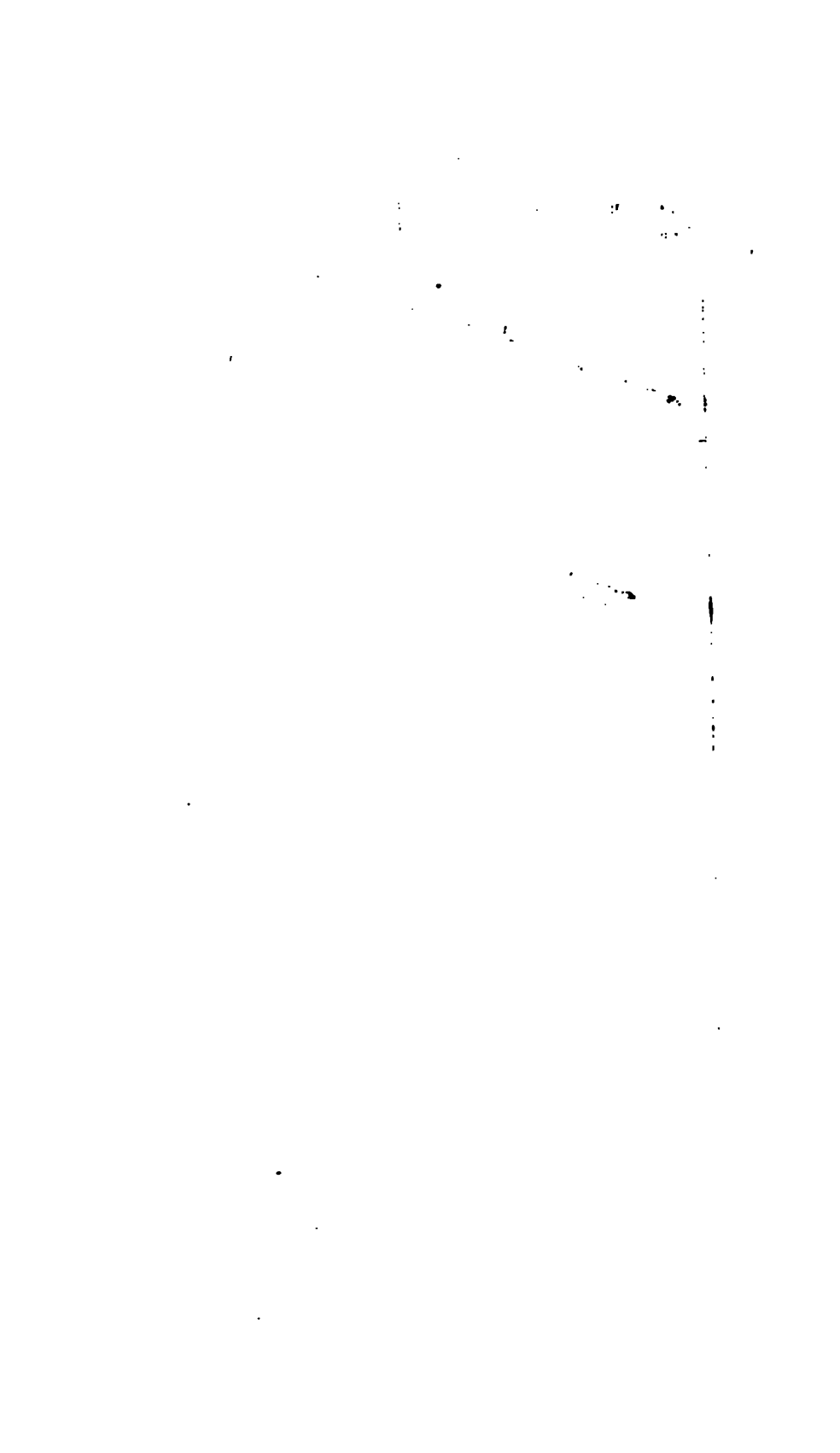
F, (Fig. 4.) The French recovering the weather-gage, the wind having changed from I back to K.

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."



Sir Geo. Brydges Rodney
Rencontre of the 19th May 1780.

↓
wind

Fig. 1.

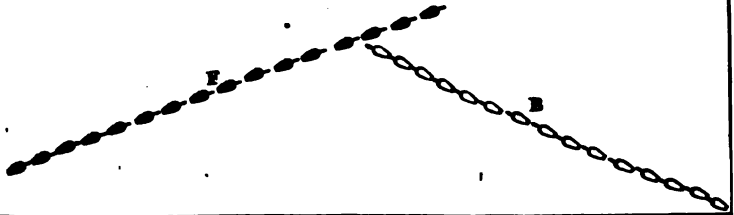


Fig. 2.



**II. DESCRIPTION OF SIR GEORGE BRIDGES-RODNEY'S
RENCOUNTER WITH THE FRENCH FLEET, TO WIND-
WARD OF MARTINICO, MAY 19TH 1780, TAKEN FROM
HIS LETTER OF MAY 31ST 1780.**

96. 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 instant (says Sir George), when I was again
“ in hopes that I should have weathered them ;
“ but I had the mortification 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 risking 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 Com-

* See Fig. 1. B, British. F, French.

modore Hotham. Sir George says, "It is with pleasure I can say, that the fire from the British ships was far superior to that of the enemy, who must have received great damage by the encounter."

97. Without farther observation at present on the nature of the manœuvring which took place in either of these rencounters, 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 farther hurt, so they neglected to manœuvre to accomplish their object; and the feints 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 any thing more than accidental rencounters, our general observations will remain with the same force as before, and will confirm us in the belief, that the French will never 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 entire to the conclusion of the war.

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

EXTRACT OF A LETTER FROM REAR-ADMIRAL SIR SAMUEL HOOD,
MAY 4. 1781.*

98. "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 ap-

* *Note by Lord Rodney.*—There is a mistake in this letter. The Amazon joined Sir Samuel Hood the day before, and gave intelligence that a superior fleet was to windward of the island. Sir S. Hood, instead of turning to windward of the Diamond Rock, amused himself in forming a line of battle, and lay-to all night, holding a council, and gave the four sail he had been so long blockading an opportunity to get out and join their fleet; whereas, had he been to windward of the Diamond Rock, he had prevented the junction, and had it in his power either to have given battle, or retreated into the Bay of Gross Islet, St Lucia. By laying-to, the lee current drove him to leeward, and afterwards, by keeping from the wind, gave the enemy an opportunity of cutting him off St Lucia, where all our stores and provisions were deposited.

“ peared, forming the line of battle. Twenty
“ minutes past nine, the Prince William joined
“ me from Gross-Islet 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 fleet. At fif-
“ teen 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 lie. 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 no-
“ tice of. At this time the ships in Fort-Royal
“ Bay slipped their cables, and got under sail. At
“ twenty minutes past eleven, I tacked the squad-
“ ron 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 pass-
“ ing 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, find-

“ing 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 imme-
“diately 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 a-head. 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 sig-
“nal 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; and, though the French Admiral had
“ten sail a-stern of him, and three others to wind-
“ward, he did not make a nearer approach.* The
“merchant ships, at this time, were hauling in

* *Note by Lord Rodney.*—See Admiral Rodney’s letter to the Governor of Barbadoes on this occasion, to know the real truth of this strange affair.—Vide his correspondence with the Governor, &c. 1781.

“ 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 Cap-
“ tain 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 Russell
“ was in great distress, having received several
“ shot between wind and water; that the water
“ was over the platform of the magazine, and gain-
“ ing upon the pumps; and that three of their
“ guns were dismantled. At eighteen minutes
“ past six, made the Russell’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 Rus-
“ sell 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.

“ 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 fluttering 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 steering 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, lest, by endeavouring to regain the
“ line ahead, it might become extended. At
“ eleven, made the signal for a line ahead, at two
“ cables length asunder, the wind backing to the

“ eastward, favoured by forming in that order, the bet-
“ ter 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 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 In-
“ trepid 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 there-
“ fore 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 astern,
“ 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 for-
“ mer 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 bear-
“ ing 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 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 Vin-
“ cent's.” *

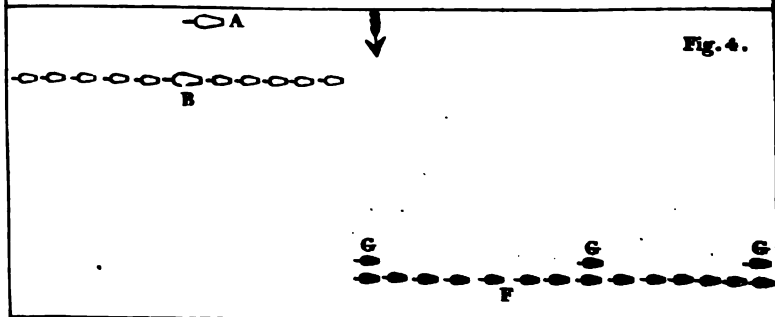
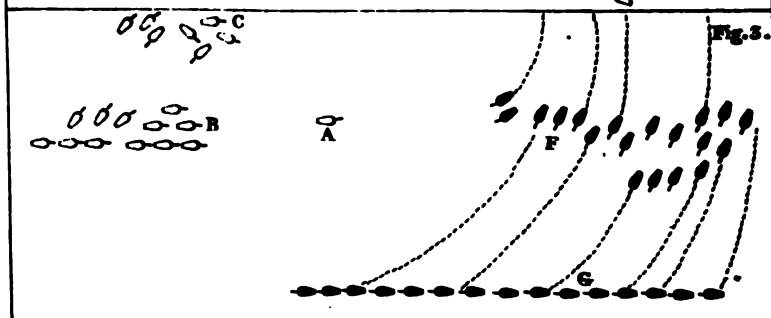
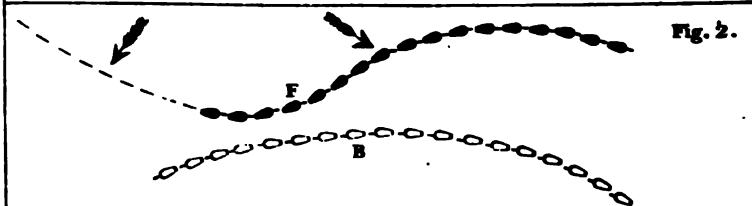
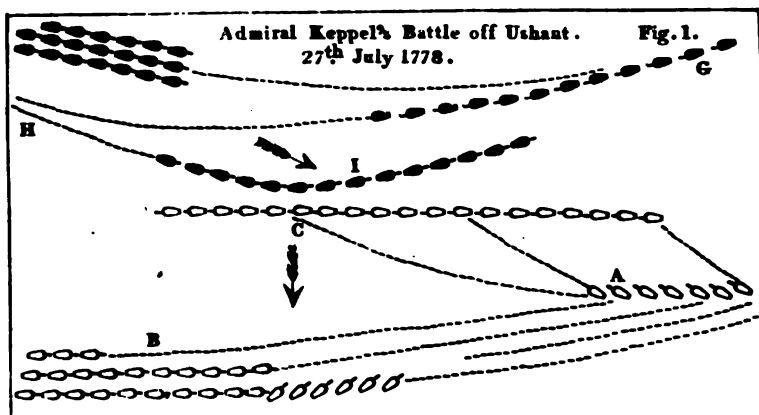
* *Note by Lord Rodney.*—The whole affair, and Admiral Hood's letter to Sir G. Rodney, was such that he sent the original letter to the Admiralty, that it might not be thought he had made a mistake in copying.

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 established 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 afloat.

3



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 Brest.

F, The French fleet to windward, and nearly west, having kept that situation for four days before, as mentioned in Mr Keppel'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

* British, 20 ships, 6 frigates.

French, 28 ships

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 G, where they 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 wore 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. 2.) 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 pre-

paring 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 fetched, and given and received a broadside with the French Admiral, and other ships, as she 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*.

105. G, The French forming in a new line of battle to leeward, upon the starboard tack, with their heads to the southward.

106. B, (Fig. 4.) Admiral Keppel, now to windward of the French fleet, between four and six o'clock in the afternoon, on the starboard tack, with his ships' heads to the southward, and in hopes that the enemy would lie 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, also on the starboard tack, lying to, to receive the British Admiral, should he think fit to make an attack.

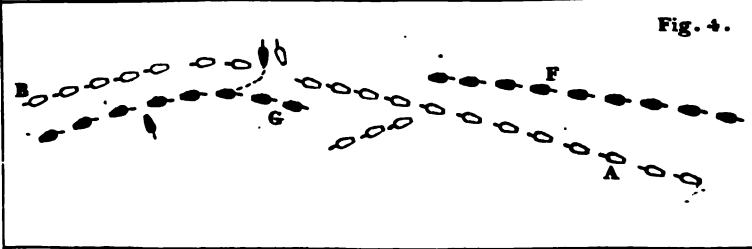
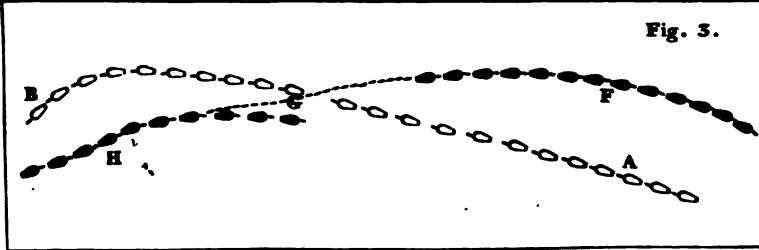
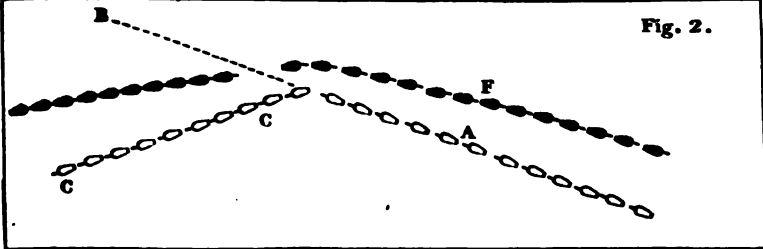
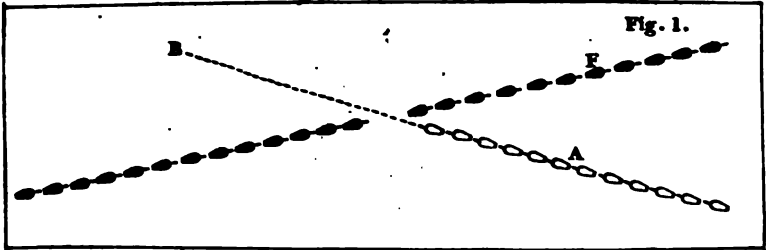
103. GGG, Three swift sailing frigates left with lights in their poops to amuse the British Admiral, while the rest of the fleet should slip into port before morning.

109. Mr Keppel, 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 Arbutnot off the Chesapeak; but, in accomplishing this movement, it must be evident, from former examples, that they could have no intention or inclination 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.

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 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 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 111. 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 112.

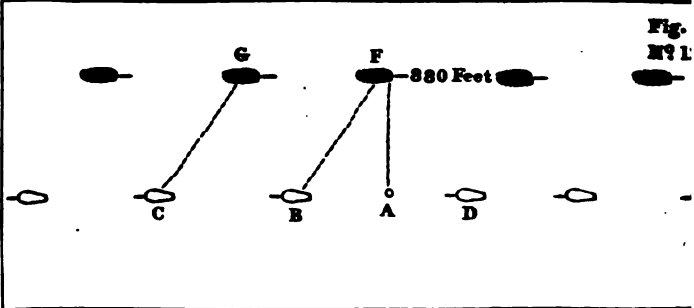
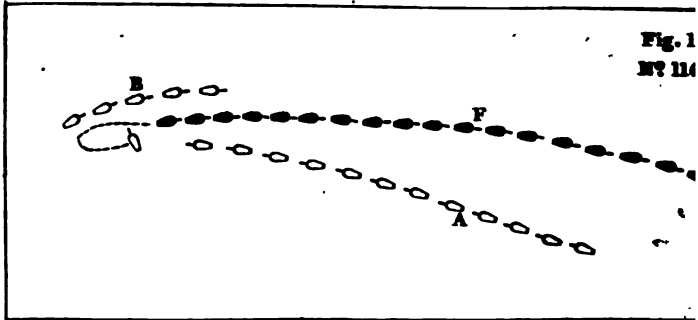
* With respect to the above observations, it seems necessary here to mention, that they made part of a former description of this rencounter of the 27th of July 1778, written soon after, and then put into the hands of a few friends: That the author being in London in January 1780, many discussions were held, at the desire, and in presence of the same friends, as well for improving upon, as for the communicating of, these and other ideas on naval tactics, 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 rencounters of Lord Rodney, of the 15th and 19th of May

113. 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, as at 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 astern 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 or 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 one other mode of attack whatever.

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 any thing doubtful, no example of cutting an enemy's line, in an attack from the leeward, before that time, having been given.





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, might have been appointed to tack, and, by doubling back, as per course B (Plate XV. 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, or the enemy, of consequence, must have abandoned their rear, as in the former case. Not having been able to foresee, provide for, or advise upon either the one or the other of the cases, during the four days the British squadron was in pursuit of the enemy, is very extraordinary; because, by being to leeward, the enemy, desirous of going off, and the wind not changing, it is without doubt demonstrable, that the rencounter 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 opposite 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 (say 300 yards, No. 25.), their whole line (founded upon the same 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	5280	
multiplied by 10, gives the velocity of the	10	
transit ten miles, or 52,800 feet, performed	52800	
in one hour ; which sum being divided by 60,	60	(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 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 300 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 con-

fined 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 a 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, could be exposed to a cannonade of six minutes and a half duration only: And, in place of five miles, if the two fleets had passed each other with a velocity equal to $2\frac{1}{2}$ 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 occa-

sion), 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 rencounter of horsemen, where the parties, on coming on 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 rencounters, 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.

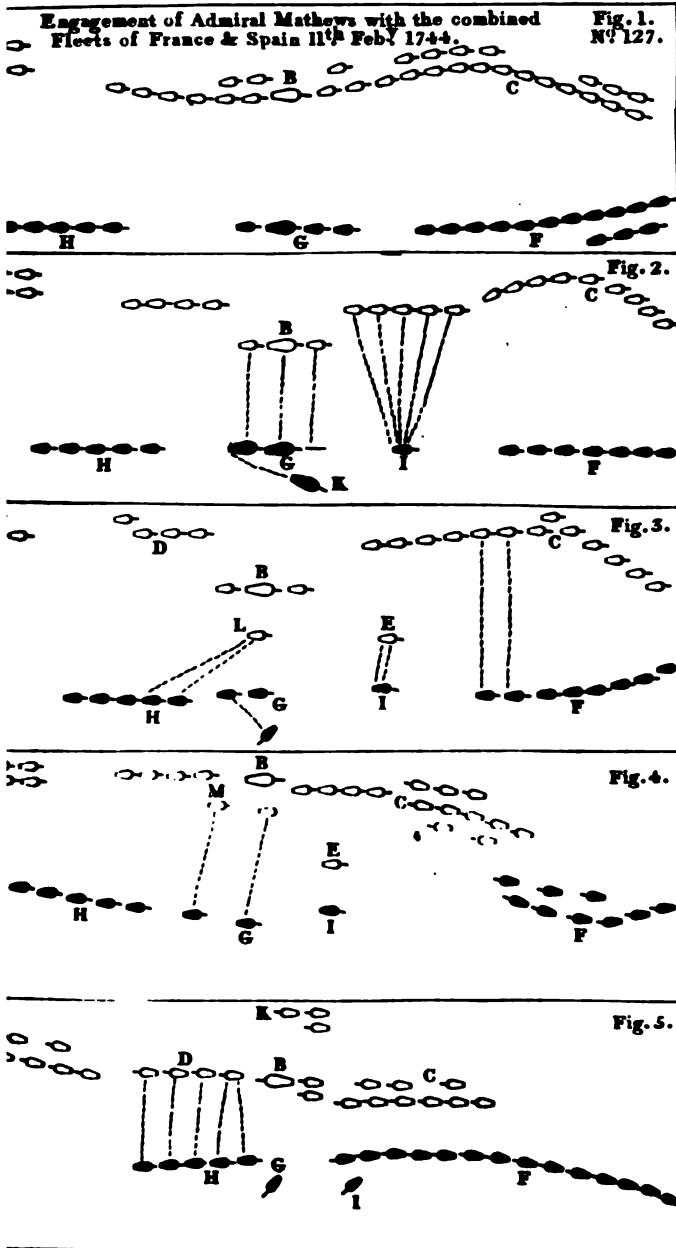
SECTION III.

126. THE ENGAGEMENT OF THE BRITISH FLEET UNDER THE COMMAND OF MR MATHEWS,* WITH THE COMBINED FLEETS OF FRANCE AND SPAIN, IN THE MEDITERRANEAN, OFF TOULOUN, FEBRUARY 11. 1744.†

127. B, (Plate XVI. Fig. 1.) Admiral Mathews in the *Namur*, commanding the centre of

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

† 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



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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 astern.

C, The van, under Mr Rowley, some miles ahead, and to windward, said 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, The Spanish Admiral, Juan Josepho 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.

128. B, Mr Mathews, in the Namur, at one o'clock, three hours after the signal for battle,

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 condemned to be broke.

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.*

* *Note by Lord Rodney.*—The conduct of Admiral Lestock from the beginning, was such as plainly showed he meant to betray his country, even to his Admiral. The night before the battle, when Mathews made the signal to bring to, Lestock, instead of coming into the wake of his commander in chief, agreeable to the known practice, brought to three

132. B, Mr Mathews, assisted 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.

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

leagues to windward, by which means, when the signal was made in the morning for the line abreast, the whole was greatly delayed, and he never was in his proper station. Had any Captain under his command acted in that matter, he would certainly have broke him. Yet this very man, from party and faction, found friends to support him, and from a partial jury, gave him an opportunity of disgracing a brave and honest Admiral; but impartial posterity has done justice to his memory, and execrated the memory of Lestock.

* In a little time afterwards, the Poder, lowering her

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.

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.

colours, was boarded, at one and the same time, by boats sent 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.

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 fleet.

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

138. 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 contrary tacks, and thought to be within reach.

I, The Poder, retaken by the French.

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

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 Poder, and quitted her, where she was afterwards burned by the Essex.

Without entering into the merits of the dispute between Messrs 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 :—

139. That, if Mr Mathews and his seconds 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 position 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.

* *Note by Lord Rodney.*—This is too true. Few ships followed the example of their truly brave Admiral and his seconds.

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 she staid, 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

*	BRITISH FORCE.				
	<i>Guns.</i>	<i>Men.</i>		<i>Guns.</i>	<i>Men.</i>
Royal Philip	114	1350	Norfolk	80	600
Isabella	80	900	Namur	90	780
Constant	70	750	Marlborough	90	750
	<hr/>	<hr/>		<hr/>	<hr/>
	264	3000		260	2130

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?*

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' ship, when going down to battle, as Admiral, in the

* *Note by Lord Rodney.*—I believe none of the ships were in what I call close action, and in which Britain will always succeed.

† 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.

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.*

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

* British, seven ships, four frigates.
 Dutch, eight ships of two decks.

“ them, as the great number of their large frigates
“ might otherwise have endangered my convoy.
“ Having separated the men of war from the mer-
“ chant 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 ap-
“ peared to be in as bad a condition. Both squa-
“ drons *lay-to* a considerable time near each 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 differ-
ent from the many we have had with another ene-
my, yet, with respect to the subject before us, *viz.*
the mode of attack, is perfectly similar. The gal-

lantry 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 extended 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.

150. 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.

151. 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 shown 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 shown, as well in avoiding, as in refusing to make the attack.

152. 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, or dis-*

* Section I. No. 38.

abling 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 expence 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

* *Note by Lord Rodney.*—Certainly, and a good officer will act accordingly.*

* *Note by a Naval Officer.*—Yet officers of that day did not so act, and Lord Rodney himself should have secured the rear of the enemy's fleet on the 12th of April, instead of pursuing the van, and the victory would then have been much more complete.

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 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.

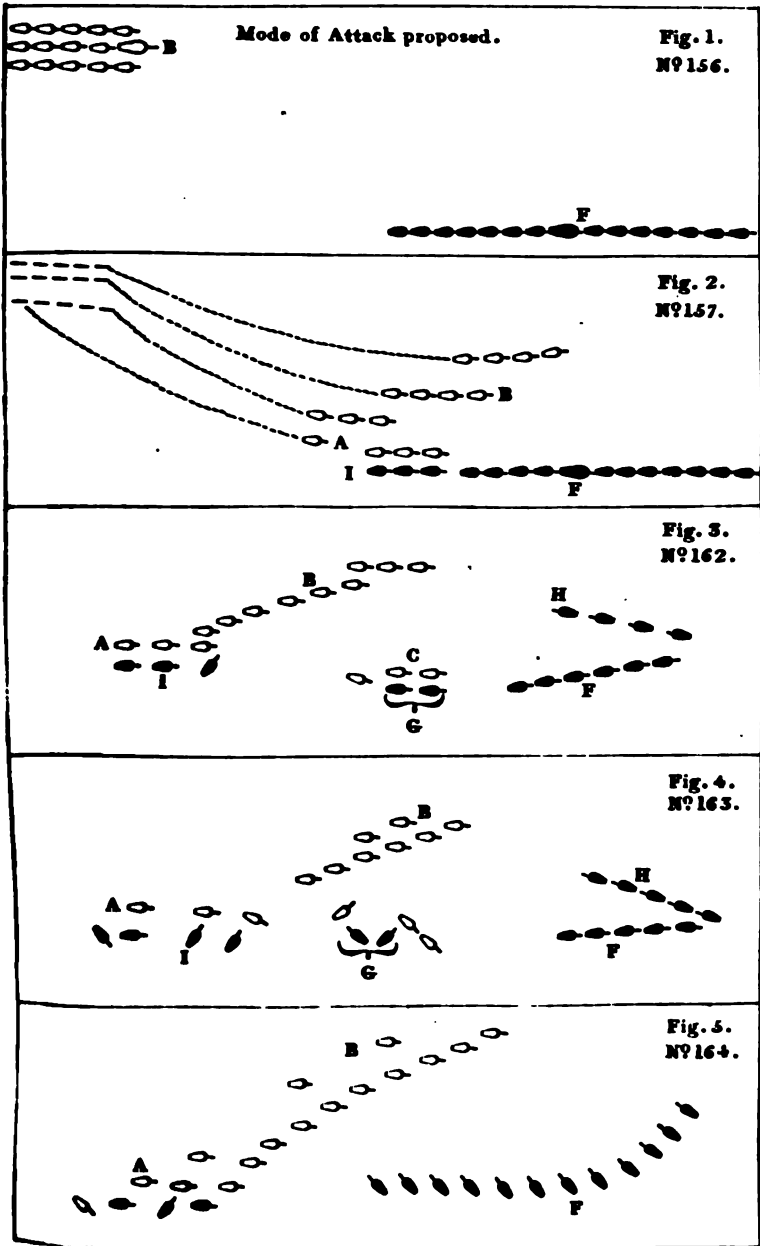
MODE OF ATTACK PROPOSED.

SECTION I.

THE ATTACK FROM THE WINDWARD UPON THE REAR OF THE ENEMY.

156. Suppose a fleet of ten, twenty, or more ships, extended in line of battle at F, (Plate XVII. Fig. 1.), endeavouring to avoid a close engagement, but, at the same time, keeping under an easy sail, with the intention of receiving the usual attack from another fleet of equal number, three or four miles to windward, at B, sailing in any form; but let it be in three lines or divisions: It is required, by what method shall B make the attack on F with advantage?

The improbability, or rather impossibility, of attacking and carrying the enemy's whole line of ships having already been demonstrated (Vid. Nos. 32. 38.), the next consideration will be, How many ships may be attacked and carried with advantage? Let it be supposed that the three stern-





most ships only, and not exceeding the fourth, are possible to be *carried*; let a sufficient strength, **A**, be sent down to force an attack upon these three ships, disposed and supported according to the judgment of the Admiral, while, in the mean time, he should keep to windward with the rest of his fleet, formed into such divisions as might best enable him to attend to the motions of the enemy, and the effect of his attack; being himself so far disengaged from action, as to be able to make his observations, and give his orders, with some degree of tranquillity.

157. By placing the fleet **B** in the division (as in Plate XVII. Fig. 2.), means only that the attacking fleet shall be so disposed, and so connected together, as to be able to give the support and attention that may be required to any ship, or any part of the fleet, and in preference to a long extended line of six or seven miles in length (No. 25.), where it must be impracticable to give the necessary support to such ships as may be disabled.*

* Vide Section IV. No. 15.

SECTION II.**ATTACK UPON THE ENEMY'S THREE STERNMOST SHIPS
MORE PARTICULARLY.**

158. Though the number of ships contained in each squadron may, by many, be thought a proper rule for determining the number of the ships to be attacked, yet, as there will be next to a certainty of carrying three, we would choose to keep by that number. Wherefore, although it may afterwards be found proper to give other opinions, and to enter into a fuller discussion of the choice, and the best arrangement of the particular ships destined for the approaching and making this attack, it is necessary here to carry on the following demonstration upon the supposition of three ships being the number proper to be attempted.

159. It will be evident, however, that the headmost, or swiftest sailing ships of B may get close along-side of the sternmost of the enemy F, even though the ships of F should, in general, be faster sailers than those of B; *an opinion which, for argument's sake alone, shall be for once admitted.* But it will not, therefore, be admitted, that every

individual ship of a great fleet, or even of the number 15, as in the figure, will be able to outsail every individual ship of a numerous British fleet, or even of the number 15, as in the plan. Therefore, there will be a necessity that the swiftest ships of B must come up along-side of the sternmost and dullest sailing ships of the enemy F; while, at the same time, F (by an attempt of outsailing B) must be thrown into the disorder of a downright flight: Therefore, of course, it must be admitted, that, if the enemy F continues going off in line of battle, and endeavouring to avoid a close engagement, it will be impossible to prevent the fleet making the attack from getting into the position of Figure 2.

160. By this position then, it is evident, that these three ships at I, will be in the power of the Admiral of B. For, by keeping so many ships to windward, he will be enabled to send down fresh ships from time to time, either for the support, or to supply the station of any of those that may be disabled in making the attack, while it may be imagined, that the three ships in question, by being disabled, or being deprived of the wind, now taken out of their sails by the ships to windward, will be prevented from following their friends.

161. From hence the enemy ahead must either abandon his three sternmost ships, or he must

double back to support them,* which must be done either by tacking or by wearing. But let it be first examined what is naturally to be done by tacking, and for the greater satisfaction, let every possible case that can happen be examined separately.

SECTION III.

THE ENEMY'S ATTEMPT TO SUPPORT HIS THREE STERN-MOST SHIPS BY TACKLING HIS FLEET.

162. (Plate XVII. Fig. 3.) First let us suppose, that the enemy at F has continued to protract his course in line of battle, upon the same tack, and that the headmost ship H, with the three next astern of her, have tacked to windward, and that the whole remaining ships intend to tack the same way, but in succession (as in Fig. 3.), is it not evident, that F has then left his three stern-

* *Note by Lord Rodney.*—There will ever be a manifest advantage in obliging your enemy to depart from their original intention, and attacking them in a different mode from that they offer you.

most ships, at I, in the power of the ships at A? that he must also leave exposed his fourth and fifth ship G to another attack from another division of the British at C, which will also be on equal terms as with his three sternmost at I? and, lastly, if he prosecutes his intention of supporting his three ships, he will be obliged to begin a disadvantageous attack upon the Admiral, with the main body of the fleet lying ready to receive him.

163. (Plate XVII. Fig. 4.) The consequence of all which will be, that he will not only lose his three sternmost ships, but, in all probability, the fourth and fifth also, as at G in Fig. 4., and will be forced to begin an attack, and close, and mix, ship with ship, on equal terms; a situation which he, at all times, with the greatest anxiety, hath avoided, and we, with equal anxiety, have always courted.

164. (Plate XVII. Fig. 5.) Again, suppose that his three sternmost ships have been attacked, and that he shall order his fleet to tack all at one time, as in Fig. 5. The consequences will then be, that this movement having required some time, and some length of course, will have produced a considerable distance between his main body and his three ships; or, in other words, that they have been deserted; for it will not be in their power to tack with the rest of their friends.

165. He must also, in bringing his ships' heads

round, expose the ships nearest his enemy to be raked by a dreadful cannonade.

166. (Plate XVIII. Fig. 6.) He must also run the risk of having his fleet thrown into a general disorder, by many of his ships missing stays, wearing, and running to leeward, as in Fig. 6. Lastly, upon a supposition that his ships have all tacked, and none of them missed stays, still he must, of necessity, begin the attack, mix ships, and come to a close engagement, as in the former case.

SECTION IV.

THE ENEMY'S ATTEMPT TO SUPPORT HIS THREE STERNMOST SHIPS, BY WEARING HIS FLEET.

167. Having shown the consequences of an attempt to windward, let us also examine what may be expected from an attempt to leeward. Suppose the two fleets in the same position as in Plate XVII. Fig. 2.; that is, the main body of the enemy extended in line of battle to leeward, his three sternmost ships entangled with the fleet B, whose Admiral, with the main body, keeps to

Mode of Attack proposed.

Fig. 6.
Nº 166.

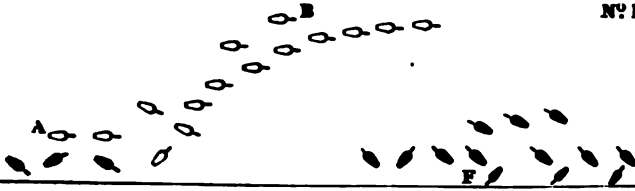


Fig. 7.
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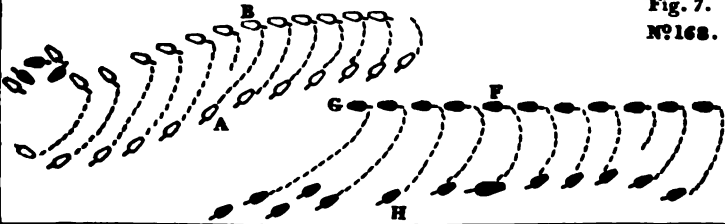


Fig. 8.
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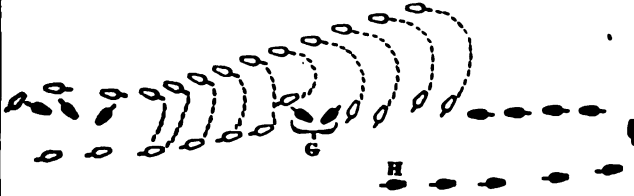


Fig. 9.
Nº 170.

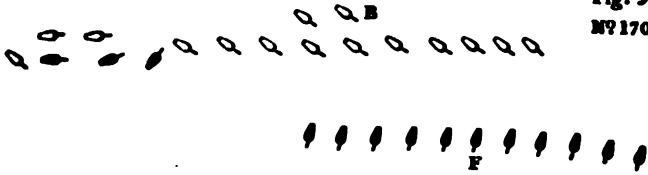
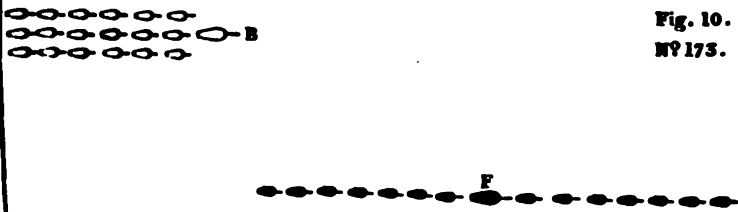
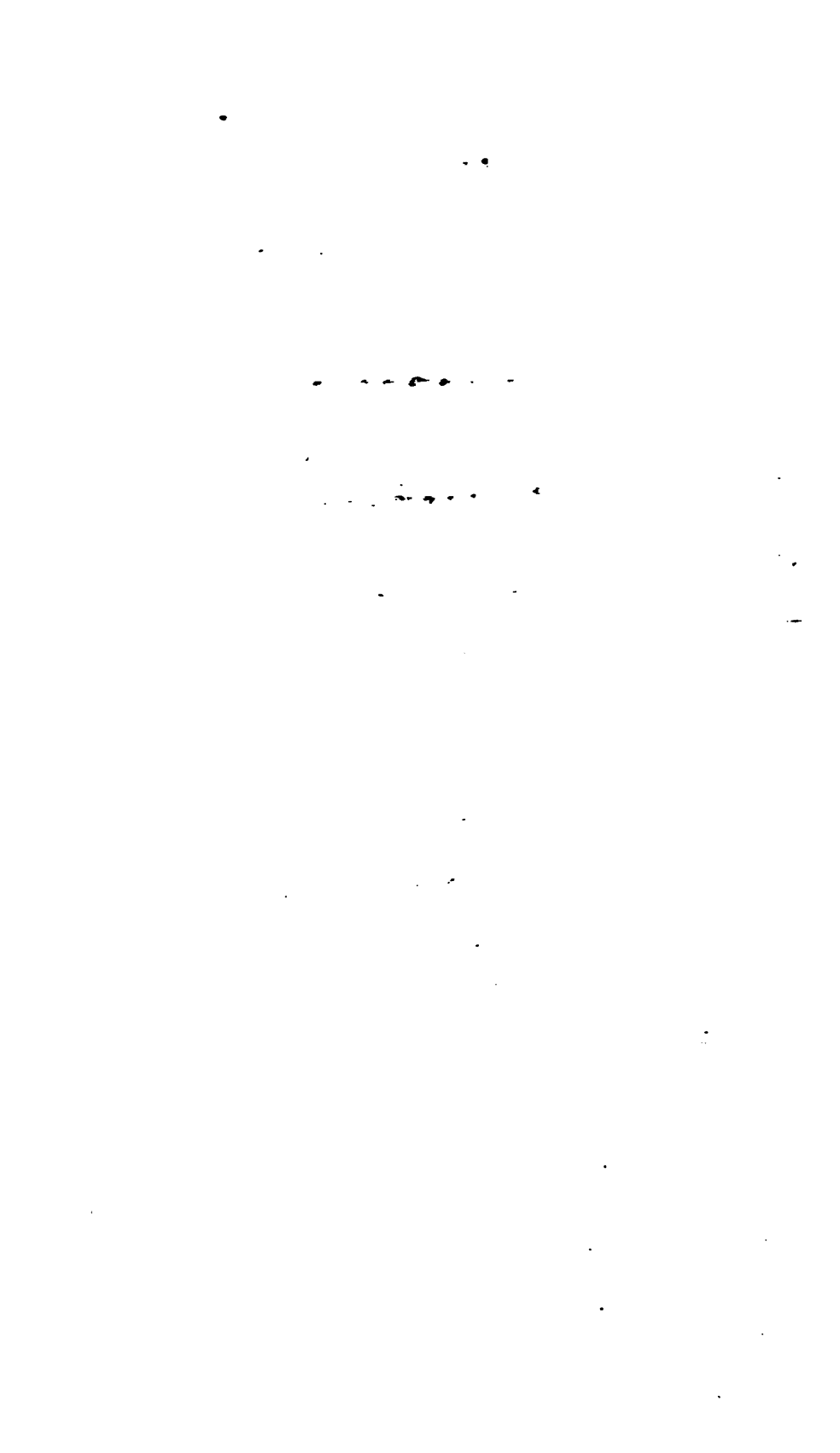


Fig. 10.
Nº 173.





windward, to observe, with a rigid attention, the motions of the enemy.

168. (Plate XVIII. Fig. 7.) At the same time, suppose that the Admiral F has ordered his sternmost ship G to wear, and afterwards the whole line, and that he is now running upon a contrary tack to leeward, as at H, wishing to support or bring off his three ships.

From inspection, it will be evident, that this attempt may be more dangerous than the attempt to windward; for it will expose a number of his ships to a raking fire while in the act of wearing; and the squadron, by getting so far to leeward, will be unable to give the proper support to the three ships.

It will open a gap for the fleet of B (who will immediately wear also, and follow him) to break in, as at A, and cut off the three ships, without hope of recovery.

And, if F shall still persist in the endeavour to recover his three ships, he will be obliged to begin the attack, under all the usual disadvantages.

169. (Plate XVIII. Fig. 8.) Again, upon another supposition, that the headmost ship of the enemy H, with the four or five next astern, have wore, and are running upon a contrary tack, wishing, as before, to support or bring off the three ships, the rest of the fleet intending to wear also,

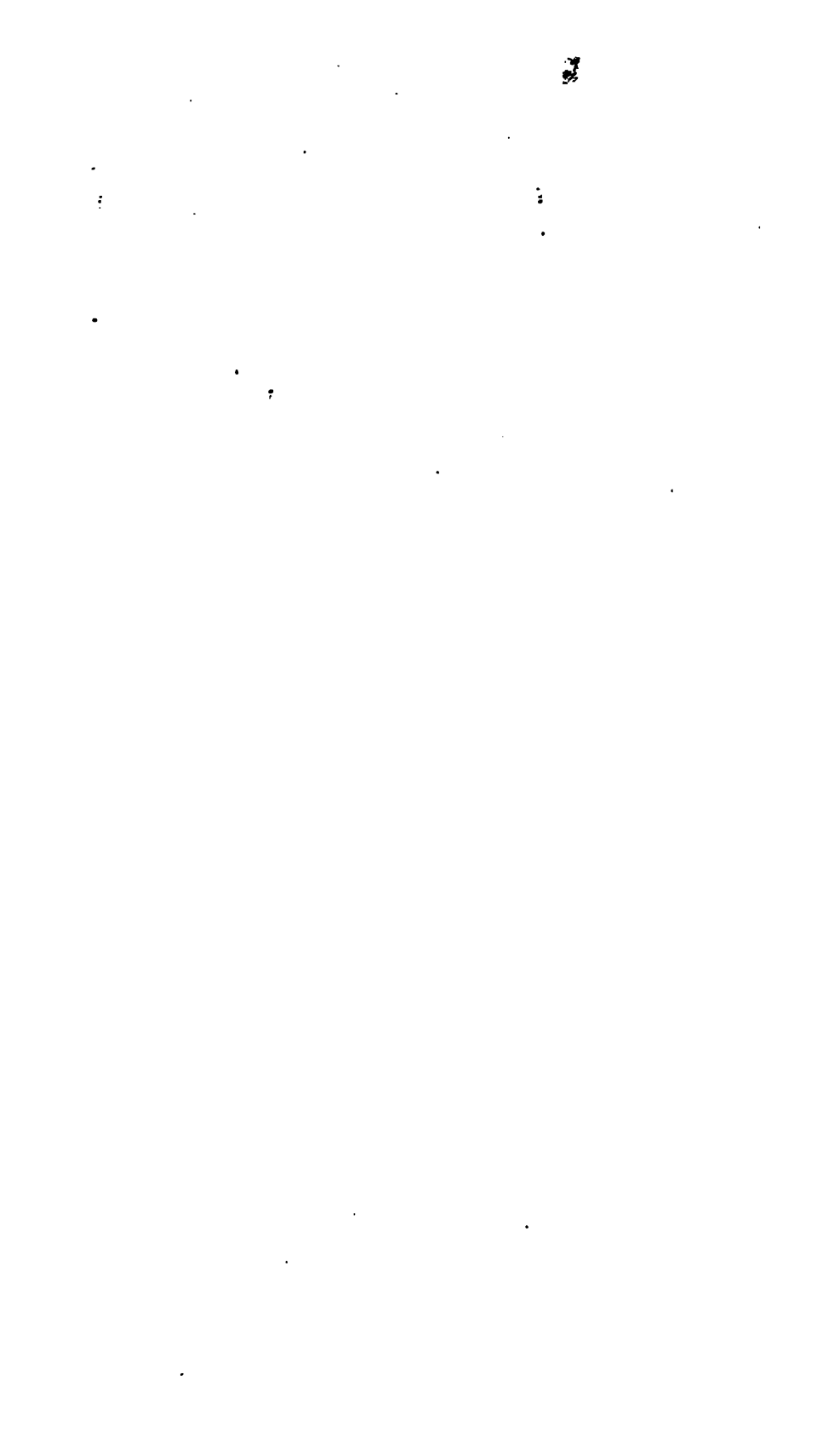
and follow in succession, is it not evident that this movement, being more unseamanlike, will be worse than the last ?

It will expose an additional number of ships, particularly the last two, as at G, and will, at the same time, make an opening for the main body of B's fleet to fall in and cut off the three ships, as in the former case.

170. (Plate XVIII. Fig. 9.) Again, should the enemy F wear and bear away with his whole ships at one and the same time, as in Fig. 9. it is evident that this movement must have the consequence of a downright flight, with the certainty of losing the three ships.

171. Lastly, upon the supposition that such an attack has been made, and that the three ships are entangled, it generally follows, that, though the wind may be blowing a fresh gale at the beginning of the battle, yet it often falls away so much from the effect of a violent cannonade, that it may be impossible for the headmost ships of F's fleet to give the least assistance to his ships distressed in his rear.

172. From what has been said, it will appear, that a fleet B, keeping connected in a body to windward, *may* come up with, and entangle the three sternmost ships of an enemy F, extended in line of battle, and going off to leeward, and, at the same time, be able to overawe the remaining main



Mode of Attack proposed.



Fig. 11.

Nº 174.

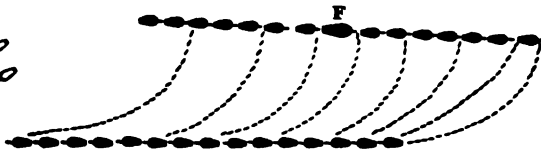
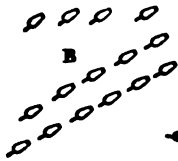


Fig. 12.

Nº 174.

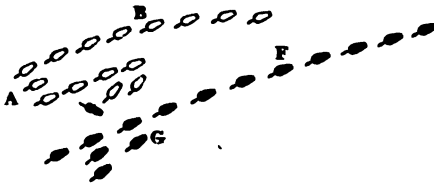


Fig. 13.

Nº 176.

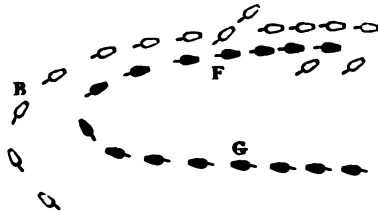


Fig. 14.

Nº 178.

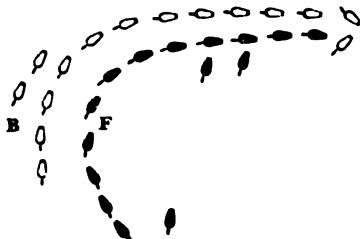


Fig. 15.

body of their fleet ; and that, having forced the position, as in plan 2d, the whole consequences, as already described, must follow ; that is, F must submit to the loss of three ships.

What has been hitherto said proceeds upon a supposition, that the fleet F has kept on his course till the fleet B has come up with his rear ; let it then be examined what other attempts the enemy F can make to avoid coming to close engagement upon equal terms.

SECTION V.

THE ENEMY ENDEAVOURING TO AVOID THE ATTACK UPON HIS REAR, BY WEARING, AND PASSING ON CONTRARY TACKS TO LEEWARD.

173. (Plate XVIII. Fig. 10.) Suppose a fleet of ships of the enemy standing on the larboard tack to leeward, and going off as before at F, and a fleet of ships in a collected state or position to windward, as at B, Fig. 10.

174. (Plate XIX. Fig. 11. and 12.) And suppose that the enemy F, perceiving the fleet B pointing an attack against his rear, as in Fig. 11. ; and that, in place of keeping on his course upon the

same tack, he should wear, and endeavour to pass on contrary tacks to leeward, (for it will not be admitted that he can get to windward, see plan 12.), What will then be the effect ?

175. Is it not evident, that the headmost ships of F must be forced to leeward by the fleet B obstructing his line of direction, or the line of his course? They must be forced to begin an attack at any distance B may choose.

176. (Plate XIX. Fig. 13.) That they may receive such damage as will stop their way : That their way being stopped, will of course be an obstruction to the next astern ; or, that these subsequent ships, to prevent this stop, must bear away to leeward of their crippled ships, as at G, which will not only prevent these ships from damaging the headmost ships of B, but will give time and opportunity to B to bring down his windward ships to fall in, either ahead or astern, that is, to the right or left, of his headmost ships A, and oppose ship for ship of the enemy upon equal terms. *Vide* Fig. 13. Plate 19.

177. But, should none of the headmost ships of the squadron F be crippled ; that is, should F pass B without reach of cannon-shot, which undoubtedly he will do, still, while bearing away, he may be forced to suffer a distant cannonade, ship with ship, on equal terms.

178. (Plate XIX. Fig. 14.) Whether he wears



Mode of Attack proposed.

Fig. 16.
Nº 180.

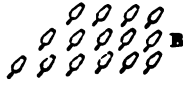


Fig. 17.

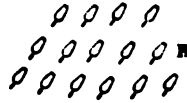


Fig. 18.

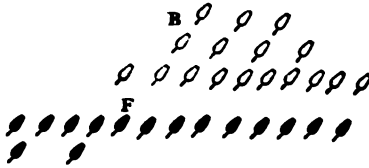
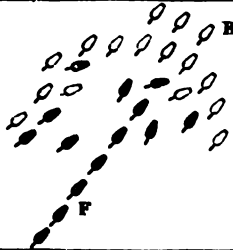


Fig. 19.



and gets back upon his former tack, as at G, in Fig. 14.

179. Or continues to run before the wind, as at P, in Fig. 15.

180. (Plate XX. Fig. 16.) But, if F persists to pass on a contrary tack to leeward, and without reach of cannon-shot, is it not evident, that B must some time or other come up with the rear of F, whether B shall, at any time, be abreast of his centre, as in Fig. 16. ?

181. Or of his rear, (as in Fig. 17. Plate XX.)

182. Or whether F puts right before the wind, (as in Fig. 18. Plate XX.)

Or runs off, ship by ship, as he best can, (as in Fig. 19. Plate XX.)

SECTION VI.

THE EFFECT AND CONSEQUENCES OF THE WIND SHIFTING DURING THE ATTACK FROM THE WINDWARD, CONSIDERED; IN WHICH SHALL BE ENDEAVOURED TO BE COMPREHENDED EVERY CASE, AS WELL POSSIBLE, AS WHAT MAY BE PROBABLE.

183. So far the attack has proceeded with the wind fixed in one and the same quarter. To make the demonstration the more complete, it will be necessary to inquire, What might be the effect

produced by a change of wind, should that take place during the action? For this purpose, let the opponent fleets be placed in some one of the preceding positions, representing the attack upon the three sternmost ships of the enemy (as in Fig. 20. Plate XXI. *Vide* No. 158. Plate XVII. Fig. 2.)

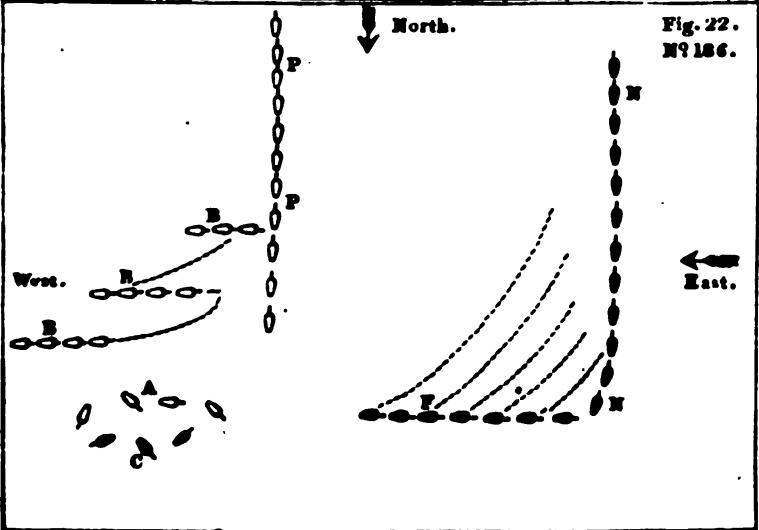
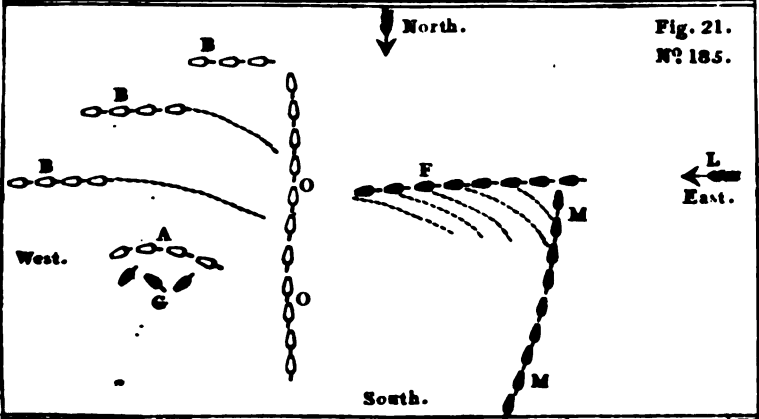
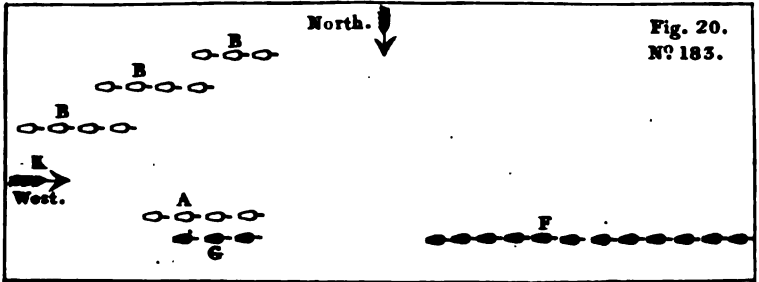
In which the fleet desirous of making the attack is represented in four divisions, as at B B B, A.

F, The fleet desirous of avoiding the attack, and abandoning his three sternmost ships at G.

CASE I.

THE WIND SHIFTING BY DEGREES, AND COMING AFT.

184. In the commencement of the attack, let us suppose the wind, from being in the north at N, on the first onset, that it shall come more and more after and by the western quarter to K. Then it is evident, by the disposition of the two fleets, that the fleet F, by such change, will have acquired no advantage whatever; on the contrary, it will thereby be thrown just so much the farther to leeward.



THE HISTORY OF

THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF

SCOTLAND

IN

SEVEN VOLUMES

THE SECOND

VOLUME

CASE II.

THE WIND SHIFTING AND COMING BY DEGREES ROUND
AHEAD.

185. Again, if the wind, by taking an opposite course, shall shift ahead, and shall come round by the eastern quarter to L (Plate XXI. Fig. 21.), neither will F have it in his power to avail himself of this, providing the fleet B, in continuing carefully to attend his motions, and, affected by the impulse of the veering wind, shall stretch his fleet to leeward of him, but, at the same time, to windward of the ships as at O O, should F endeavour, by bearing round-up, to rejoin his own ships that are engaged in the rear at G.

186. (Plate XXI. Fig. 22.) Representing both fleets on the starboard tack, shows, at the same time, that F has not thereby acquired any advantage.

CASE III.

OF THE EFFECT, SUPPOSING THE WIND TO VEEB CONTI-
NUEDLY ROUND AHEAD.

187. Again, upon the supposition that F, by this last change, has now gained the wind (*Vide*

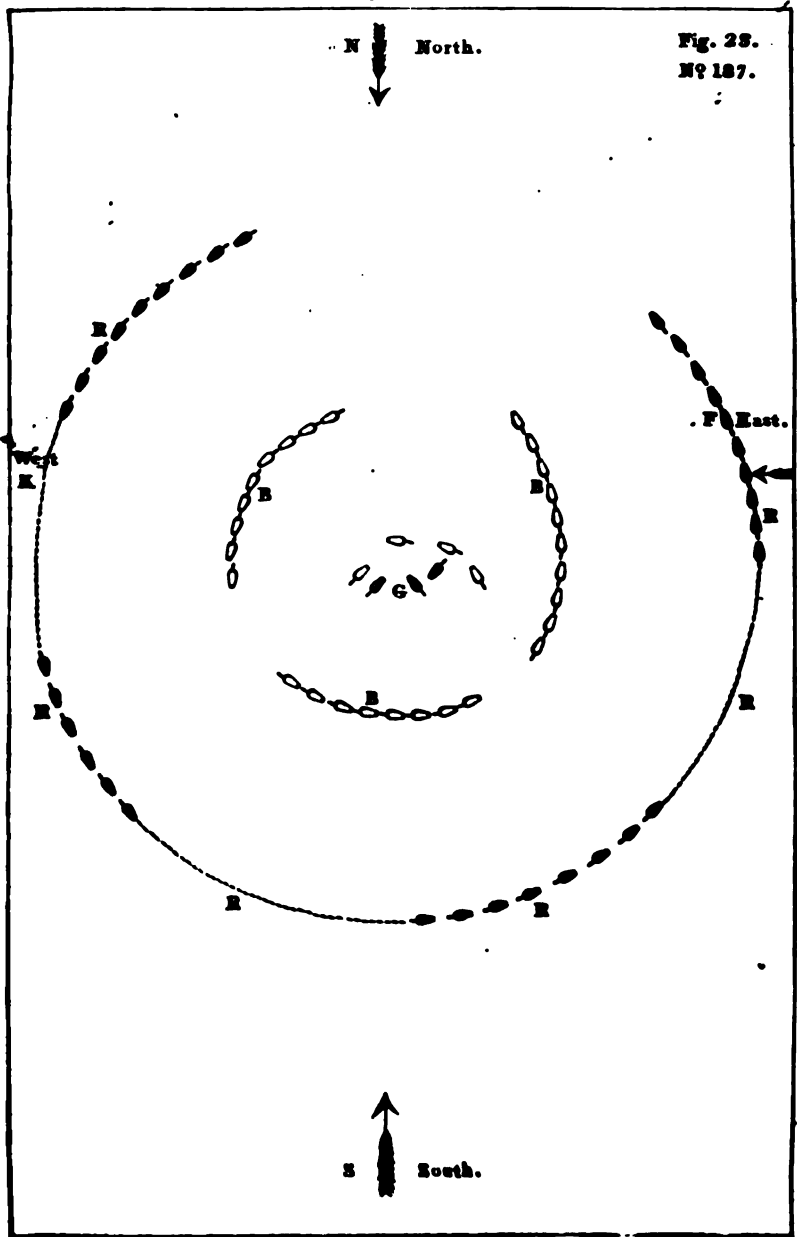
Plate XXII. Fig. 23.), it will not be denied that, in this case, he may maintain it, and that it may be possible for him to make a circular course R R R to windward of B, keeping the wind, as it may be disposed to veer round, by the eastern quarter, from the north at N to the south at S, or to the west at K, or even round to the north at N, from whence it set out; but, as he can be attended all the while by the fleet B, who will cut him off to leeward, he never will be able to recover his three ships at G.

CASE IV.

THE WIND, IN ONE INSTANT, SHIFTING IN DIRECT OPPOSITION.

188. Lastly, If the wind, in changing, shall, in one instant, shift in direct opposition to where it was when the attack began, that is, from the north at N to the south at S (*Vide* Plate XXII. Fig. 24.), then, and in that case, before one can judge whether such change shall be favourable for F or not, it will be necessary that the relative situation of the two fleets should be determined such as it was when the change took place. For example:

189. If the headmost ships of the fleet F, that is, if his van and centre shall have separated at



STATE OF NEW YORK

IN SENATE
January 10, 1911.

REPORT OF THE

COMMISSIONERS OF THE LAND OFFICE

IN ANSWER TO A RESOLUTION PASSED BY THE SENATE

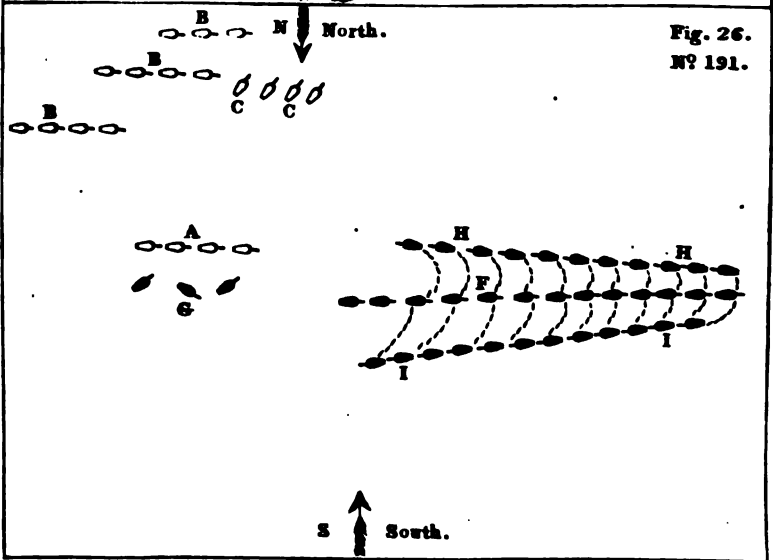
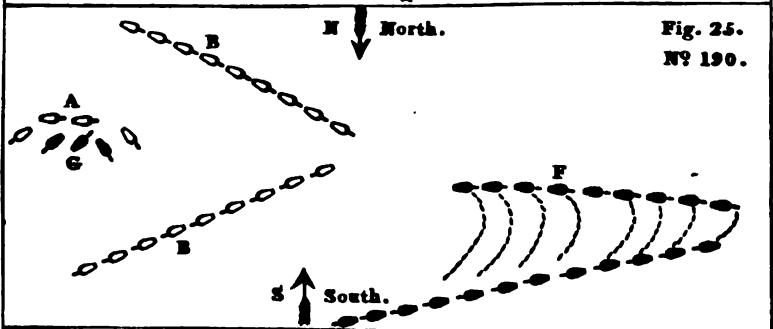
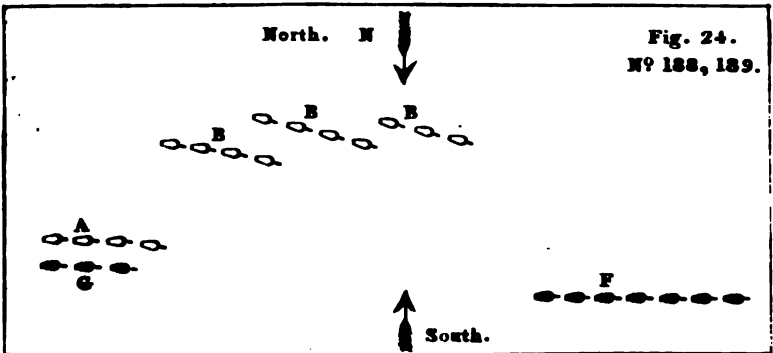
APRIL 11, 1907, AND BY THE ASSEMBLY

APRIL 11, 1907, CONCERNING THE

LANDS BELONGING TO THE STATE

1911





any considerable distance from his rear, as per Plate XXIII. Fig. 24.

190. Or if, in the farther prosecution of this mode of attack, it shall have advanced to the position represented in Fig. 25. ;* it is evident, in both cases, that F, though by this change he shall have got to windward, yet, notwithstanding, he will not be able to avail himself of this seeming advantage, the fleet B having it still in their power to cut him off from his three ships.

191. On the other hand, if this instantaneous change of wind, in direct opposition, shall have taken place more early in the action, that is, when the positions of the two fleets shall be such as represented in Fig. 26. Plate XXIII. viz.

The fleet B in the position of four divisions B B B and A, and the enemy in the positions F and G.

Then F, who before was to leeward, by this instantaneous change of wind from the north (at N) to the south (at S), having now got to windward of every division of the fleet B, is it not evident, that it may be practicable for him to carry assistance to his three ships (at G) in the rear, and, perhaps, even to cut off some one of B's ships (at A), if they do not, with all convenient speed,

* *Vide* Plate XVIII. Fig. 7. No. 168.

bear away (as at C C), to put themselves under the protection of their friends (B) to leeward ?

192. But whether he (F) shall attempt to effect this manœuvre, by wearing his ships in the line (as at H H), or, what seems most eligible, by making his ships tack (as at I I), as it is to be presumed that his three ships, which have been some time engaged, must be considerably crippled, and not able to make sufficient sail, while endeavouring to bring them off, it will be difficult for him to prevent being drawn into a general and close engagement, which, by the supposition, he has all along endeavoured to avoid.

193. A farther prosecution of demonstrations, which are likely to lead us on to the *attack from the leeward*, we think proper to decline for the present. It is a new subject, and, of itself, requires a separate discussion. We will therefore proceed to bring into view those other accidents only which more immediately can affect the *attack from the windward* ; not that such can be attended with consequences much different from what have already been treated of, but, the ideas once being started, and having great apparent importance, it becomes necessary to give them a full investigation.

SECTION VII.**OF PARTIAL BREEZES OF WIND.**

194. *When the fleet in pursuit shall be favoured with a breeze of wind, while the fleet desirous of avoiding the attack shall be becalmed :*

(Plate XXI. Fig. 20.) Is it not self-evident, how unfavourable this must be for the enemy F? He will thereby be the more easily overtaken in the pursuit; and, should the attack be begun upon his three ships, they will with the greater certainty be ruined.

195. *When the fleet desirous of avoiding the attack shall be favoured with the breeze, while the fleet in pursuit shall be becalmed.*

It being evident, that the enemy (F) will have it in his power to make his escape with his whole fleet, if this partial breeze in his favour shall take place before the attack has begun, we shall pass on to the opposite case.

When the attack upon the three ships shall have commenced before this partial breeze in favour of F, the fleet pursued, has taken place.

196. (Plate XXI. Fig. 20.) The variety of positions in which the two fleets may be affected is so great, and the consequences which can be supposed attendant on this case so numerous, it will not be attempted to give a separate discussion of each. The reader, however, by applying his own ideas upon the subject to the plans before him,* will be able to supply this for himself. In the mean time, as it is imagined nothing in such investigation will be found that can materially affect the general issue, and since no breeze whatever can favour the fleet F, so as to enable it to sail round and round the fleet B, (the fleet B all the while supposed to be lying becalmed), it will not be too much to say, that *this partial breeze in favour of the fleet F, taking place after the attack began*, although it may facilitate the escape of his van and centre, will not avail him much in the recovery of the three ships in his rear, perhaps not in any case as yet exhibited, excepting in this one, where the wind, in one instant, had shifted in direct opposition, No. 191.

* Comprehended in Plates 17. 18. 19. 20. 21. 22. 23.

When the attack shall have commenced before the partial breeze in favour of F, the fleet pursued, has taken place, supposing the wind in one instant to have shifted in direct opposition.

197. That, even in this case, No. 191. (Plate XXIII. Fig. 26.), the same breeze which would favour F in the attempt to bring off his three ships, would, at the same time, favour the escape of the ships of B at A, as formerly described. That this partial breeze would require to be of considerable duration, otherwise F, in thus attempting to bring off his three ships, crippled as they will be, must hazard a general engagement, in like manner as already described, No. 192.

SECTION VIII.

OF WINDS BLOWING IN CONTRARY DIRECTIONS.

198. In supposing, at any place, the existence of two distinct streams of wind actually blowing in opposite directions, the one from the north (for example), the other from the south, or from any two other opposite points of the compass; at that place also must be supposed an intermediate space, a line of separation between the two streams, parallel to both, and to be often distin-

guished by a sort of calm upon the surface of the water, occasioned by the eddy winds partaking of the effect of the adjacent and contrary streams.

199. That the requisite examples may the more easily be exhibited, suppose Plate XXIV. to represent a space at sea, in which two distinct streams of wind are discovered blowing from opposite directions, the wind N N on the left side of the plate blowing down the page from the north, and the wind S S on the right blowing up the page from the south, and let Y Y be the line of separation between the two streams; under which description also let Plate XXV. be comprehended, and let the usual characters serve to distinguish the different parts, viz.

B, the fleet in pursuit;

F, the fleet pursued;

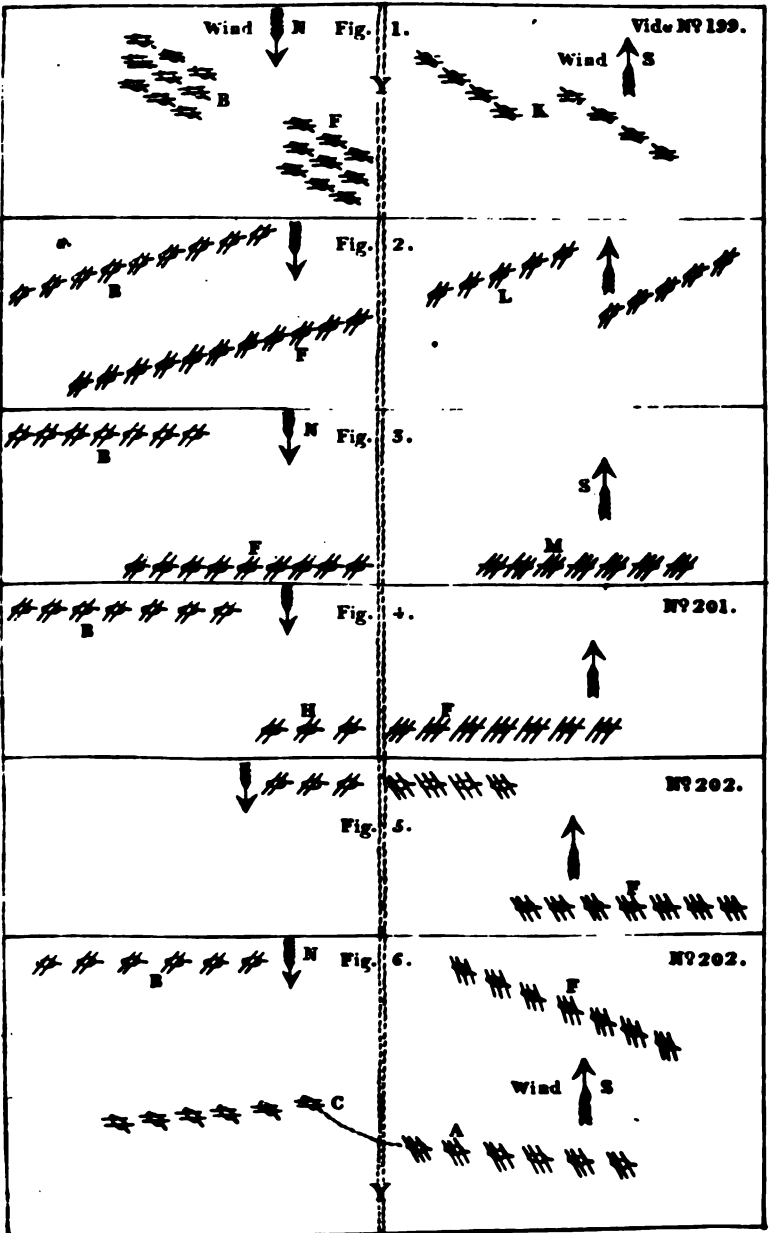
G, the three ships attacked;

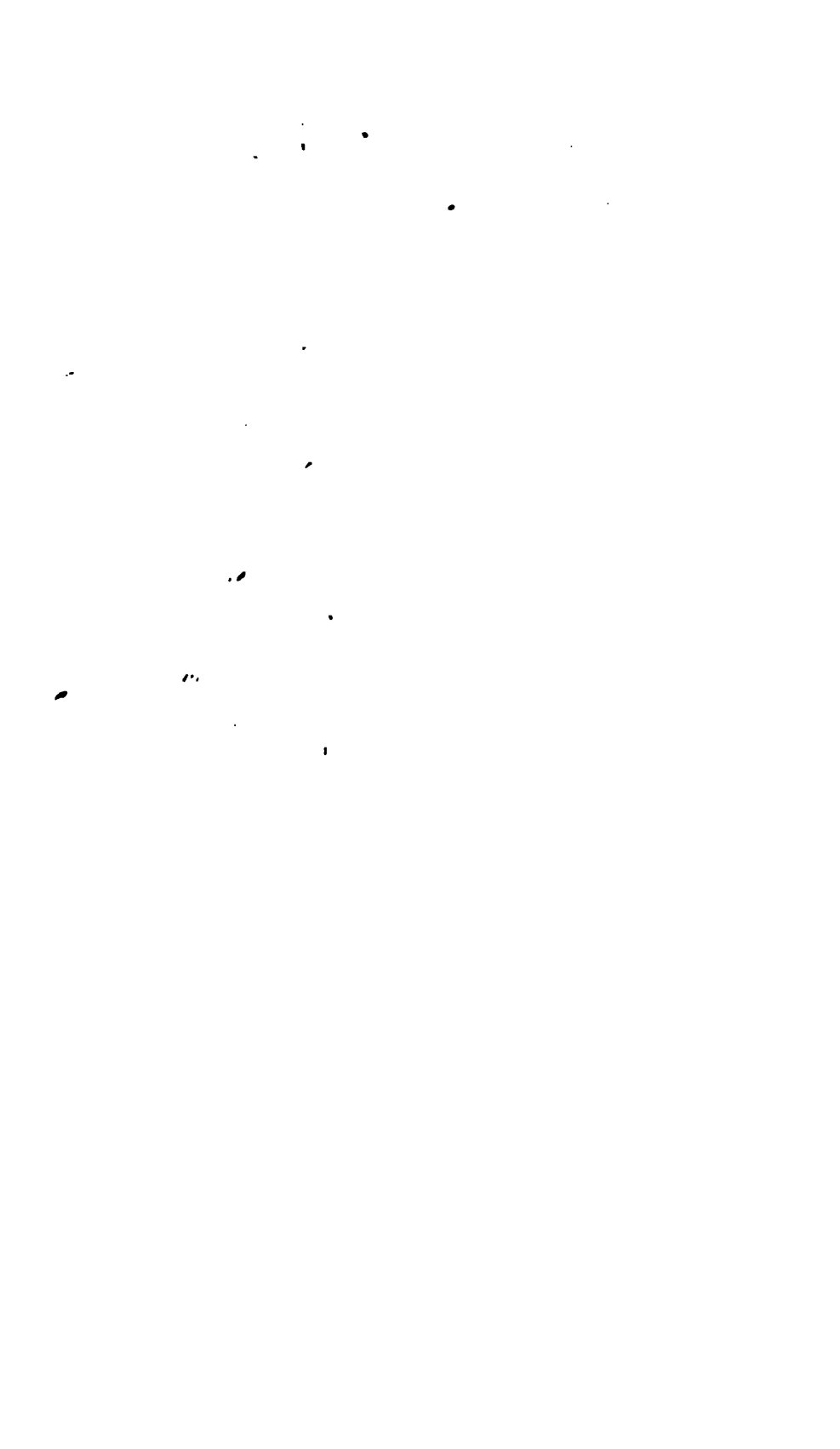
A, the four ships making the attack.

200. Now, whether ships shall be going large (as in Fig. 1.), or close haul'd (as in Fig. 2.), or running with the wind on the beam (as in Fig. 3), still their encounter with the line of separation Y Y will be similar, and to the same effect; and in no other direction whatever can fleets encounter this accident of contrary winds, than what can be comprehended under these three cases.

The letters K, L, and M (Fig. 1. 2. and 3.) represent the corresponding cases, when fleets coming

PLATE XXIV. Part I. p. 142.





from an opposite direction shall encounter, in like manner, such contrary streams of wind.

OF FLEETS ENCOUNTERING CONTRARY STREAMS OF WIND, BEFORE THE ATTACK SHALL BE BEGUN.

201. For example, after the two opponent fleets have been manœuvring for some time in the same stream of wind, and have assumed positions as before described, No. 156., or as B and F, (Fig. 4. Plate 24.) Let us suppose F the farthest ahead, that he has perceived the wind as changing to a direct contrary direction, and from having had his ships on a larboard tack, as when at H, that he has got, or must be getting, his starboard tacks aboard, as at F F; or, in other words, that he has passed from one stream of wind, and has got into another and contrary stream—is it not evident, if the fleet B shall stand on and follow, and shall get into this new stream of wind, the same with his enemy F, that he will be to leeward (as in Fig. 5.), and, of course, that the mode of his attack must be changed? (*Vid.* No. 192.)

202. Again, on the other hand, suppose B, in declining to stand on, shall continue in the northern stream of wind, (as in Fig. 6.)—will it not be

possible for him, by putting before the wind, as at C, to recover a position A to windward of F, so soon as ever he shall choose to pass from the one stream of wind to the other ?

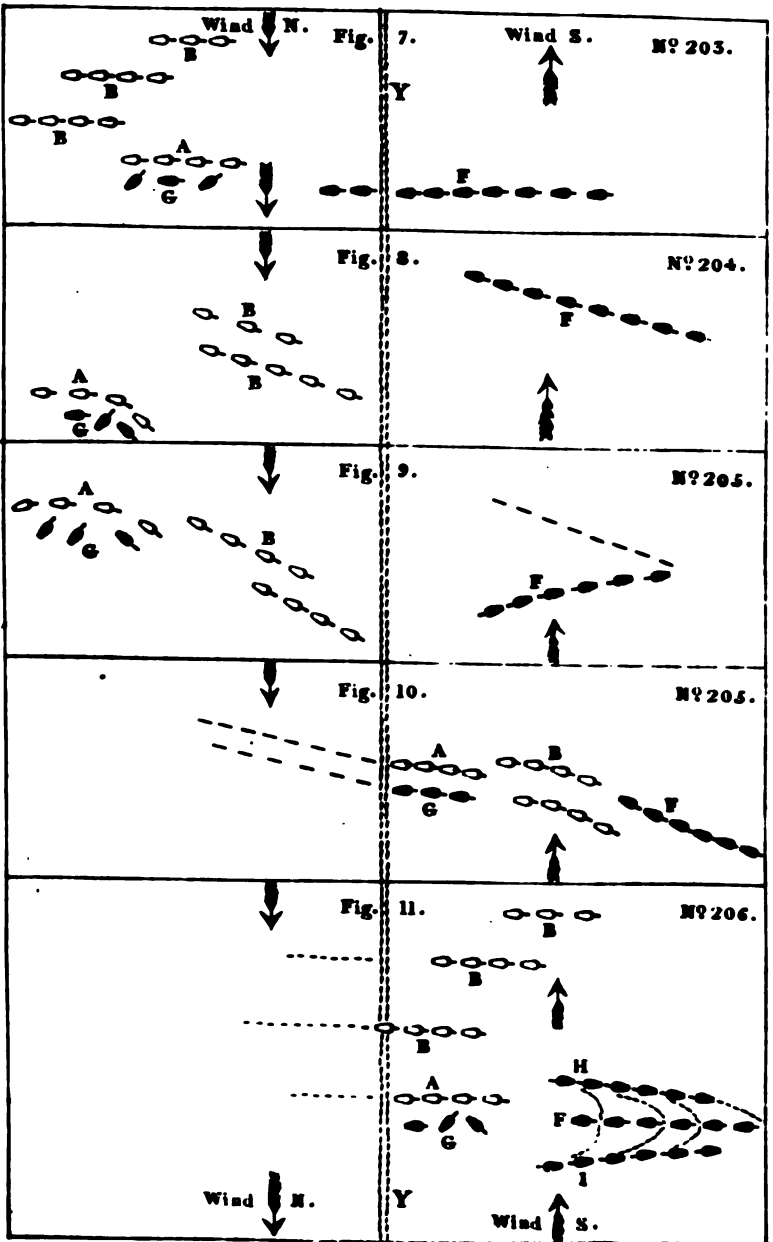
CASES AFTER THE ATTACK SHALL BE BEGUN.

203. Plate XXV. Fig. 7. represents the attack already begun,* and continuing in the northern stream, while F, abandoning his three ships, has got into the southern stream with his van and centre.

204. (Fig. 8.) The attack continued in the northern stream, and B, with his whole fleet, dropping down the wind together, evidently will have the advantage of getting to the southward equally with F, the enemy, notwithstanding the efforts of F to get to windward in the opposite stream.

205. The fleet B in another view (Fig. 9.) is represented as aware of the accident before him, and having pushed ahead with his van and centre,

* Plate XVII. Fig. 2. and 3. Nos. 156. 157. 158. 159.



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THE UNIVERSITY OF CHICAGO
1892-1893

will be prepared to support his attack of the three ships, whether he shall continue in the northern stream, as at C, or shall pass into the contrary stream, as at D, (Fig. 10.)

206. (Fig. 11.) Again, on the other hand, should the fleet B, in continuing the attack, stand on, as at B B B, and, without precaution, shall have followed, and got into the same stream of wind with the enemy F; then F, of consequence, being to windward, will immediately have it in his power to carry assistance to his three ships, but whether by wearing his other ships in the line, as at H H, or by tacking, as at I I, will still be exposed to the hazard of a general engagement, as before described, No. 192.

207. From all which it follows, that a collected and connected fleet of ships to windward will, on every occasion, be able to make an advantageous attack upon a fleet of ships to leeward, and wishing to avoid a close engagement; and that the attacked fleet, lying at such disadvantage as no manœuvring whatever can compensate, must be worsted.

SECTION IX.

OTHER OPINIONS HOW THIS ATTACK FROM THE WIND-
WARD SHOULD BE CONDUCTED.

208. Many eminent seamen, however much they may be convinced that an attack made upon the rear of an enemy's fleet will have a much better chance of success than in the case of an attack upon the whole line, or even on the van, as hitherto practised, have still different opinions how this attack should be conducted. These, as given to me, it is proper should be laid before the reader, although they are not what I would approve of.

209. (Plate XXVI. Fig. 1.) *First*, If it is supposed that the attack shall be made by the greater part of the force of B's fleet, coming right before the wind, upon the six sternmost ships of an enemy F, is it not evident, that the ships of B, by making the attack in this manner, must be exposed, without a possibility of return, to as many broadsides from each of these six ships of F as can be got ready during a course of two miles ?

Hence, as the said ships of B will assuredly be disabled, before they will have it in their power to

Mode of Attack proposed.

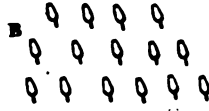


Fig. 1.
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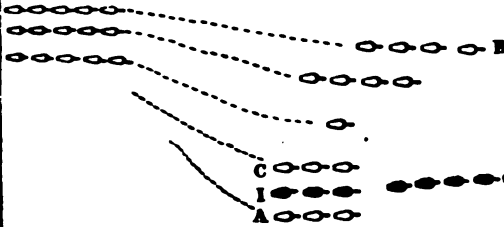


Fig. 2.
Nº 210.

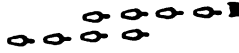


Fig. 3.
Nº 211.

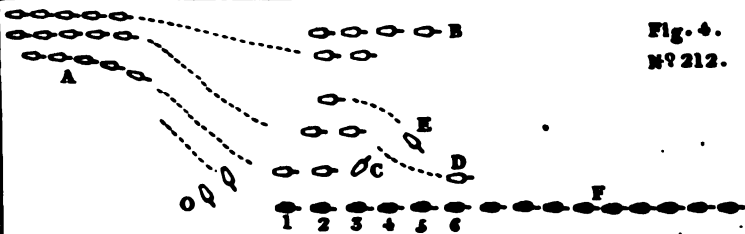
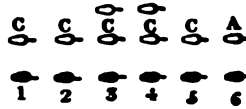


Fig. 4.
Nº 212.

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hurt the enemy, this disadvantage should determine the impropriety of this mode.

210. (Plate XXVI. Fig. 2.) Suppose again, that some part of the force chosen to make the attack shall be sent to leeward (as at A), as well as to windward of the three ships determined to be attacked, (as at C).

But the danger supposed, of shot passing over the enemy's ships, and striking those of friends, may be an objection to this mode.

211. (Plate XXVI. Fig. 3.) Others have been of opinion, that the headmost ship A, chosen to make the attack, shall come close up along-side of the sternmost of the enemy, and, having delivered her fire, shall push along the line as far as possible, which may be supposed to be the sixth ship of the enemy F; and, as it is evident that this first ship A may have received six broadsides, that is, a broadside from every one of the six enemy's ships, during her course in passing them, it has been thought possible that the other five ships C C C C C, by following close after her, may attain their stations, each abreast of her opposite, without having received a greater number of broadsides than they have had it in their power to return; and, therefore, that by this mode the number of ships to be attacked will be determined: For as many ships as the leading ship shall be

able to reach, as many ships will the attacking fleet be able to carry.

212. (Plate XXVI. Fig. 4.) A fourth mode of attack, which seems to be composed from a medium taken from the last. Let it be supposed, as in the former cases, that the fleet B has been brought up to action in a collected manner, but subdivided only so far as the service may require (as formerly stated in Fig. 2.), and that the leeward division A shall be more particularly destined for the immediate attack, while, at the same time, the body of the fleet, keeping to windward, shall be supposed attentive to give the necessary support where required.

Then let it be supposed, that the headmost ship C, making the attack, having been soon crippled, shall not have been able to push farther than the third or fourth ship of the enemy's line :

Is it not easy to conceive, say they, that some one, or more, of the ships to windward, attentive to support and supply her place, may bear down on the fourth ship of the enemy, under cover of the smoke, throw in her fire, and push on to the fifth or sixth ship, as at D, or, perhaps, farther ; and that so far as this fresh ship D, or a second fresh ship E, may be able to push, so many ships of the enemy may be expected to be carried ?

For, whatever ships of the enemy can be got

abreast of, at a proper distance, *may be disabled, and therefore commanded*, by the numerous fresh ships kept to windward for this purpose.

§13. In all the different attacks upon the rear, it has, by some, been thought a great object, if practicable, to throw a raking fire into the rear of an enemy's line of battle, by ships detached for that purpose, as at O. For if shot, as has been said, can take effect at the distance of two miles, from this position it will surely reach the sixth ship, if the enemy's line shall be formed at two cables' length asunder; and, if formed at one cable's length asunder, it will reach, and may cripple the twelfth ship.

SECTION X.

CONCLUSION, WITH GENERAL OBSERVATIONS.

In the preceding Narrative and Demonstrations, we think it is shown,

§14. 1. That British seamen, from the nature, as well as the greater extent of the navigation upon our coasts, must, of necessity, be superior, both in skill and intrepidity, as well as in number, to those of other nations.

§15. 2. That deficiency in point of sailing,



APPENDIX TO PART I.

ADMIRAL SIR GEORGE POCOCK'S ENGAGEMENTS WITH
THE FRENCH FLEET, COMMANDED BY MONSIEUR
D'ACHÉ, IN THE EAST INDIES, *anno* 1758.*

*“ Admiralty-Office, October 12th 1759.—Cap-
“ tain Latham, late of the Tyger, arrived at
“ Portsmouth on the 9th instant, in the East
“ India Company's ship the Admiral Watson,
“ with Letters from Vice-Admiral Pocock,
“ giving the following account.”*

*“ Admiral Pocock being joined by Commodore
“ Stevens, in Madras road, with the reinforcements*

* The printing had advanced thus far, before the Author thought of including these engagements. They were in the same war; and about two years after that of Admiral Byng. A description thereof, giving an opportunity of introducing new matter, will the more elucidate the subject, and will at

“ from England, and having put his ships in the
 “ best condition possible, April 17th 1758, sailed
 “ in order to get to windward of Fort St David’s,
 “ to intercept the French squadron, which by in-
 “ telligence he was made to expect was on their
 “ approach from the westward, from the Isle of
 “ France: The 29th, in the morning, saw seven
 “ ships in Fort St David’s road, getting under
 “ sail; they joined two others in the offing; and,
 “ concluding them to be the enemy, immediately
 “ gave chase: These ships, nine in all, standing
 “ off shore under top-sails, formed the line of battle
 “ ahead: Admiral Pocock formed his line of battle
 “ too; and, as soon as his ships had got into their
 “ station, being nearly within random shot of the
 “ enemy, bore down upon the Zodiaque, on board
 “ which ship Monsieur D’Aché wore a cornette;
 “ but observing the Newcastle and Weymouth

the same time complete the collection of those sea engage-
 ments, in which British fleets, *being to windward, by ex-
 tending their line with the design to stop, take, destroy, or
 disable the whole of the enemy’s line to leeward, have been
 disabled before they could reach a situation from whence they
 could annoy the enemy, &c. &c. Vide p. 45. sect. 1.*

British Ships.

Elizabeth, 64	} Yarmouth, the Admiral, 64	Weymouth, 60	} Queenborough, Protector store- ship.
Tyger, 60		Cumberland, 64	
Salisbury, 50		Newcastle, 50	

“ that they did not bear away at the same time,
 “ he made their signals. The enemy began to fire
 “ upon the English as they were going down; but
 “ the Admiral did not make the signal to engage
 “ till he was within half musket-shot of the Zo-
 “ diaque, which was about three o’clock. A few
 “ minutes after, perceiving the ships were not all
 “ got close enough to the enemy, he made the sig-
 “ nal for a closer engagement; which was imme-
 “ diately complied with by the ships in the van.
 “ At half-past four, observing the rear of the
 “ French line had drawn up pretty close to the
 “ Zodiacque, the Admiral made the Cumberland,
 “ Newcastle, and Weymouth, signals to make sail
 “ up and engage close. Soon after, Monsieur
 “ D’Ach e broke the line, and put before the
 “ wind: his second astern, who kept on the Yar-
 “ mouth’s quarter most part of the action, then
 “ came up alongside, gave his fire, and bore away.
 “ The other two ships in the rear came up in like
 “ manner, and then bore away; and a few minutes

French Squadron.

Le Bien Amie,
 Le Compt de Pro-
 vence,
 Le Vengeance,

Le Zodiacque,
 Mons. D’Ach e,

{ Le St Louis,
 Le Duc de Or-
 leans,
 Le Duc de Bour-
 goyne,

Frigates.

Le Sylphide,
 Le Diligent.

Le Conde,

—

Le Moras joined after the battle.

“ after, observing the enemy’s van to bear away
“ also, the Admiral hauled down the signal for the
“ line, and made the signal for the general chase.
“ About six, observing the enemy join two ships
“ four miles to leeward, and at the same time
“ hauling their wind to the westward, and seeming
“ to form a line ahead, and the Yarmouth’s masts,
“ yards, sails, and rigging, as well as the Elizabeth’s,
“ Tyger’s, and Salisbury’s, being so much damaged
“ as to prevent their keeping up with the ships
“ that were in the rear during action, who had re-
“ ceived but little damage, and night approaching,
“ the Admiral followed the enemy as well as he
“ could, standing to the south-west, in order, if
“ possible, to keep to windward of them, in hopes
“ of being able to engage them next morning.
“ But as they showed no lights, nor made any
“ night-signals, that could be observed, he did not
“ see them through the night, nor next morning ;
“ and therefore, concluding that they had weathered
“ him in the night, by being able to carry more
“ sail, he continued his endeavours to work up
“ after them, until six in the morning, May 1st,
“ when finding he lost ground considerably, he
“ came to an anchor about three leagues to the
“ northward of Sadras, where he was informed that
“ the *Bien Amie* of 74 guns (a ship of the enemy)
“ had received so much damage in the action, that
“ they were obliged to run her ashore a little to

“ the southward of Alemparve, where the French
“ squadron was at an anchor.

“ The French arrived in St David's road at
“ nine in the morning, the day before the British
“ Admiral fell in with them. They had not land-
“ ed any troops before the engagement. The ac-
“ tion was about 7 leagues W. by N. of Alem-
“ parve. The Admiral observes, that Commodore
“ Stevens, Captain Latham, and Captain Somer-
“ set, who were in the van, and Kempenfelt, the
“ Commodore's Captain, behaved as became gallant
“ officers; and that Captain Harrison's behaviour,
“ as well as all the officers and men belonging to
“ the Yarmouth, gave him sensible satisfaction;
“ and that, had the Captains in the rear done their
“ duty as well, he should have had a great pleasure
“ in commending them; but, their manner of act-
“ ing in the engagement appeared so faulty, that,
“ on his return to Madras, he ordered a court-
“ martial to assemble, and inquire into their con-
“ duct. In consequence of which, Captain Nicho-
“ las Vincent was sentenced to be dismissed from
“ the command of the Weymouth, Captain Legg
“ of the Newcastle to be cashiered from his Ma-
“ jesty's service, and Captain Brereton of the Cum-
“ berland to lose one year's rank as a post-captain.

“ Admiral Pocock having repaired the most ma-
“ terial damages of his ships, put to sea May 10.
“ with an intent to get up to Fort St David's, but

“ was not able to effect it. He got sight of Pondicherry the 30th, and the next morning the French squadron, which had been there ever since the 5th, stood out of the road, and got away, notwithstanding the Admiral’s utmost endeavours to come up with them. On the 6th of June, upon receiving an account that Fort St David’s had surrendered to the French, he judged it prudent to return immediately to Madras, to refresh his squadron.

“ The Admiral sailed again, July 25th, in quest of the enemy ; and on the 27th, in the evening, got within three leagues of Pondicherry road, where he perceived their squadron at anchor, consisting of 8 sail of the line, and a frigate. They got under sail the next morning, and stood to the southward. The Admiral made the signal to chase, and endeavour to weather them, as the likeliest means of bringing them to action ; which, however, he was not able to accomplish till August 3d, when, taking advantage of the sea-breeze, he got the weather-gage, and brought on the engagement about one o’clock. Monsieur D’Aché set his foresail, and bore away in about 10 minutes, his squadron following his example, and continuing a running fight, in a very irregular line, till 3 o’clock. The Admiral then made the signal for a general chase ; upon which the French cut away their boats, and made all the

of the world, and the progress of the human mind, and the state of the

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PLATE XXVII. Appen. p. 156. Part I.

Sir G. Pococks Engagement
East Indies 29th April 1758.



Fig. 1.



Fig. 2.

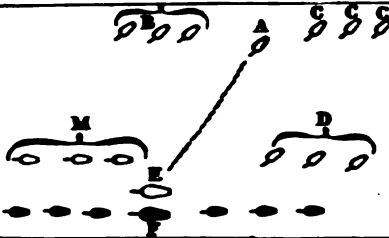


Fig. 3.

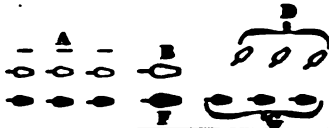


Fig. 4.

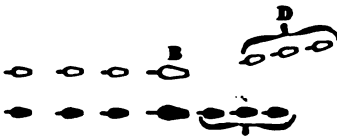
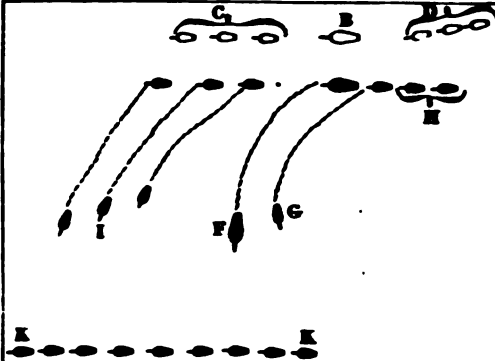


Fig. 5.



"and they could. He pursued them till it was
 "dark, when they escaped, by outstriking him, and
 "got into Pondicherry road. The Admiral
 "anchored the same evening off Carrizal, a French
 "settlement."

British loss on this occasion 31 killed, 116
 wounded. French loss, says the Admiral's ac-
 count, 540 killed and wounded.

MEMOIRS OF ADMIRAL SIR GEORGE ROOCK'S EN-
 GAGEMENT WITH THE FRENCH FLEET COMMANDED
 BY MESSIERS D'ACHE, EAST INDIES, OFF FORT ST
 DAVID'S, 29TH APRIL 1758.

From the foregoing letters, although we have
 not been informed either of the particular direction
 of the wind at the time, or even upon what tack
 the two fleets were during this engagement, yet
 circumstances are so far explained, that there can
 be no doubt of forming a description, which,
 in all other respects, will be sufficiently satisfac-
 tory.

(Plate XXVII. Fig. 1.) F, The French squad-
 ron formed in line of battle to leeward, upon the
 starboard tack, as it is supposed; for it was stand-
 ing off from the land, with the wind in the west-
 ern quarter.

B, Admiral Sir George Pocock's squadron ; each ship come to her station, and formed in line of battle, thought to be about random shot distance to windward.

(Plate XXVII. Fig. 2.) **F**, The *Zodiaque*, on board which ship Monsieur D'Aché, the French Admiral, wore a cornette.

A, The British Admiral in the Yarmouth bearing down upon the *Zodiaque*, but making signals to the ships **C C C** astern, the *Cumberland*, the *Newcastle*, and the *Weymouth* ; the Captains of these vessels, as it appeared, not having bore away together and at the same time with the Yarmouth, and the other ships in the van **B**. The enemy all the while kept firing upon the British fleet during their course in coming down ; nor did Sir George Pocock, the British Admiral, make the signal to engage till he was within half musket-shot of the *Zodiaque*, as at **E**, about three o'clock in the afternoon.

Neither the ships **D** in the rear, nor the ships in the van **M**, were yet come to their stations, that is, at fighting distance.

Fig. 3. **B**, The Admiral, in the Yarmouth, arrived at a station, within half musket-shot of the *Zodiaque F* ; but, perceiving that all his other ships had not even yet got sufficiently close in with the enemy, he made signal for a closer engagement,

which was immediately complied with by the ships of the van, as at C.

Plate XXVII. Fig. 4. The Admiral, in the Yarmouth B, observing that the ships in the rear of the French line had drawn close up, as at G, with a view to support their Admiral in the Zodiaque F, he made the signals of the Cumberland, Newcastle, and Weymouth, D, to make sail up and engage, that is, to support him in his ship the Yarmouth.

Plate XXVII. Fig. 5. B, the Yarmouth. Sir George does not say that the ships D in his rear complied with this last signal, but he says that Monsieur D'Aché, in the Zodiaque, immediately broke his line, and put before the wind, as at F F: That his second astern, who had kept upon the Yarmouth's quarter the whole of the fore part of the engagement, afterwards came up alongside, gave his fire, and then bore away in like manner, as at G. Immediately after this last, the two remaining ships H in the rear made sail, came up, and poured in their fire, reserved for the purpose (of disabling the Yarmouth), and in succession bore away also. Last of all, the ships in the van I, taking example from the Zodiaque and the ships in the rear, quitted the line also, and put before the wind; and leaving the British van, which by this time were disabled from following them, they soon rejoined their centre and rear, when the other

forming a new line of battle four miles to leeward, as at K K, they were again prepared to give the British squadron a reception, should they have the least inclination to make a second attack,

OBSERVATIONS ON ADMIRAL SIR GEORGE POCOCK'S EN-
GAGEMENT OF THE 29TH APRIL 1758.

Sir George has not been particular in giving us the positive situation of his ship the *Yarmouth* when he bore away to attack the *Zodiaque*. Supposing him to have been right to windward, and in bearing down to attain a station at B, Plate XXVIII. Fig. 6. abreast, and at half musket-shot from the *Zodiaque*, had he assumed the lasking course, so as to have formed the line of intersection A A, as in Fig. 6, his ships, in going down, by suffering greatly, must have been crippled. Considering likewise, that the enemy, by running under top-sails, must have been getting much ahead, he therefore would have had the greater difficulty in getting the ships in his rear up into action, as has already been explained by former examples, of Admiral Byng, Admiral Byron, &c.

Plate XXVIII. Fig. 7. Again, had he been astern of the enemy, as at A, Fig. 7. when he set

PLATE XXVIII. Appen. p. 160. Part I.

Sir G. Pococks' Engagement
East Indies 29th April 1758.

Fig. 6.

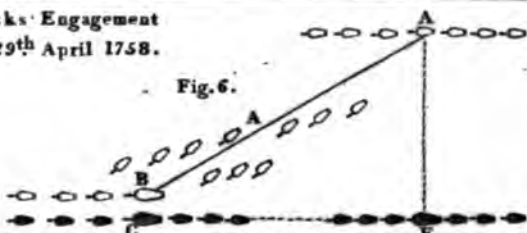


Fig. 7.

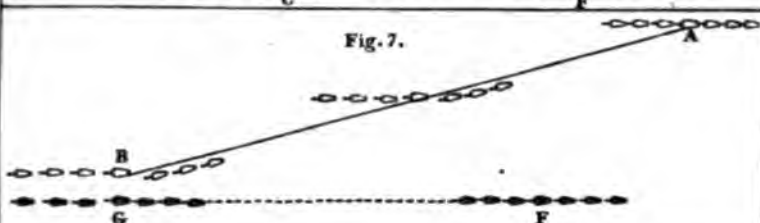
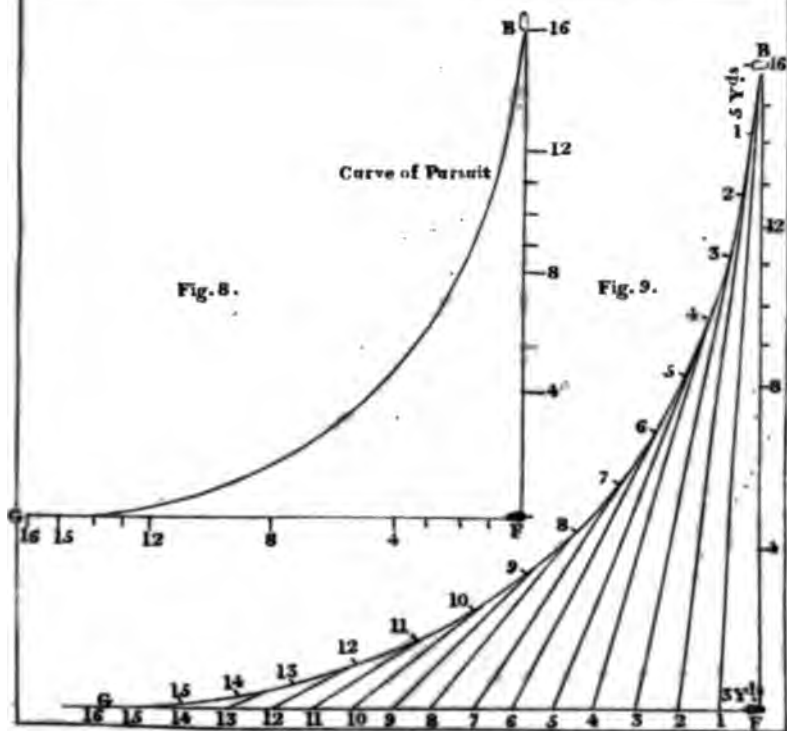


Fig. 8.

Curve of Pursuit



1871

out on this course, still the difficulty of getting the ships in the rear brought up would have been increased.

The attack, it seems, was not made according to this lasking form. Sir George has said, he bore down upon the *Zodiaque*, by which expression, and by what followed, it must be understood that it was his intention not only to steer his own ship with her head steadily directed upon the *Zodiaque*, but that his other ships, in the same manner, should be steered each with her head steadily directed upon her particular opponent.

In the prosecution of which intention, and while the enemy had way ahead, at the rate, perhaps, of two miles and a half per hour, the *Yarmouth* and every other ship of the squadron, of necessity, must have assumed a course forming each of them a curve, as represented in Plate XXVIII. Fig. 8.; which course, in mathematical disquisitions, has been termed the line or curve of pursuit.

The very specious and favourable aspect of this kind of attack, attempted so soon after that of the unfortunate Admiral Byng, and considering also the case of the officers who commanded the ships in the rear, who were disgraced on this occasion, will make the discussion thereof under a particular head by itself the more necessary.

OF THE CURVE OF PURSUIT.

By the curve or line of pursuit is understood that curve described in the water by one ship in pursuit of another, when the ship in pursuit from the windward, in bearing down, shall steer her head continually directed upon the ship pursued.

Plate XXVIII. Fig. 8. Let F represent the ship pursued, to leeward, having motion ahead in the line F G, as required for good steerage. Let B be the ship in pursuit, two and a half miles right to windward; which distance being expressed by the perpendicular B F, let it be called the line of distance, or the line of common departure. And F's motion through the line of course F G, suppose it at the rate of two and a half miles per hour, let it be expressed by the Figures 4, 8, 12, in the line F G; and the velocity of B required to overtake F, must be greater than the velocity of F.

THEOREM.

To discover what space the ship F must run through in the line F G, before B, in describing the curve of pursuit, can overtake F; say, as the difference of the squares of the velocities assumed is to the product of the velocities, so is B F, the

line of common departure, to the space $F G$ that the ship pursued must run through before she can be overtaken. Thus, when the velocities assumed shall be as 5 to 3;—say, as 16, the difference of the squares of these numbers, is to 15, the product of these numbers, so is 16, (of any quantity, furlongs, for example) the distance of B right to windward at the beginning of the course, to 15 furlongs, the space required for F to run before she can be overtaken.

THE CURVE OF PURSUIT CONSTRUCTED
MECHANICALLY.

Plate XXVIII. Fig. 9. The line of common departure, $F B$, supposing it perpendicular to the line of course $F G$: Let any proportion, 5 to 3, be assumed: That while the ship F moves in the line of course $F G$ through the first space No. 1. suppose it three yards, the ship B from the windward, by steering a course continually directed upon him, shall in the same time move through the space No. 1. in the curve of pursuit, at the rate of 5 yards; and, while F shall move through the space 1 2, or second division in the line of course, that B in the same time shall have run through the corresponding space 1 2 in the curve, being other 5 yards, and so on continually, projecting each their separate courses, in the propor-

tion as 5 to 3, until they shall come in contact, or close alongside of each other, that is, until the lines of their several courses shall meet in a point, as at G. Draw the lines 1 1, 2 2, and 3 3, &c. and they will nearly represent the curve of pursuit.

OF THE APPLICATION OF THE CURVE OF PURSUIT
IN SIR GEORGE POCOCK'S ENGAGEMENT.

That Sir George intended to make his attack in some such fashion, and that he attempted it with his own ship, the Yarmouth, there can be no doubt; but not having communicated his intention, or given it out in orders, or by instruction, to the commanders of his other ships, it is not surprising that this mode of attack, in the execution, did not come up to his expectation.

Plate XXIX. Fig. 10. After much previous practice of the manœuvre, had Sir George given instruction that each ship, in bearing down, should steer with her head continually directed upon her particular opponent in the enemy's line, then each of his ships, P, Q, R, with equal velocity assumed, would, along with B, the Yarmouth, have run down spaces, each in their several similar curves, equal to the divisions 1, 2, 3, 4, marked as velocities at the rate of 5, in the particular curve described by the Yarmouth, and in the same time in which the Zodiaque, with her associates, would



have moved through the corresponding divisions 1, 2, 3, 4, marked as velocities at the rate of 3, in the line of course F G: then B, the British Admiral, with his three ships astern, when arrived at the line C D, a station of fighting distance* which cuts the curve in the point numbered 10, (if the enemy had not gone off), could also have continued his course until his ship the Yarmouth, as well as every other ship of his squadron, might have come into contact, or close along-side, each of her particular opponent; that is, the Yarmouth in contact with the Zodiaque at G, and the three ships in the rear of the Yarmouth, with the three corresponding ships in the rear and astern of the Zodiaque.

It is to be observed, however, that the Admiral, B, when arrived at the point marked 10 in the curve, as formerly remarked, within fighting distance, far from having got abreast of the Zodiaque, by this time arrived at the correspondent point 10 in its line of course, has got little farther than abreast of H, the third ship astern of the Zo-

* Made parallel to F G, the enemy's line of course, about 400 yards distance, termed sometimes pistol-shot, or half musket-shot. By Mr Byng's engagement it does not appear that his van was within this distance; as musket-shot was not known, or thought, to have taken effect in any of the ships even in that division.

diaque; and the three ships D, in Sir George's rear, at this time, are left astern of the enemy's whole fleet.

The Yarmouth never was in this particular situation at any time of the engagement. For, however well Sir George's three ships astern might have preserved their course, each in their proper curve, according to instructions, or according to the direction of their steerage with which they might set out in the beginning of the pursuit, it is evident that Sir George had not kept his intended curve: For, had he preserved his course in his proper curve, he would infallibly have been at the point number 10 in the curve of pursuit, when the Zodiaque was got to her correspondent point number 10 in the line of course F G.

From this situation at the point 10 in the curve of pursuit, he must have passed along, and sustained the fire of the whole ships in the enemy's rear, before he could have attained a station at A, abreast, and at half musket-shot distance from the Zodiaque. That he never was in the situation at the point 10 in the curve of pursuit, as described, and did not pass along the enemy's rear, and receive their fire, may be presumed, since he has not told us; but he has told us, that he did not give the signal to engage (that is, to begin firing) till he was within half musket-shot of the Zodiaque,

by which must be understood a station somewhere at **A** nearly abreast of the **Zodiaque**.

In which case, however much Sir George, in the beginning, might have wished to keep his course according to the curve of pursuit, yet, from farther consideration afterward, and while running down, foreseeing the consequences, he for certain made a change, and had given his course the lasking form, as **M N**, in order that he might attain this station at **A**, abreast of the **Zodiaque**, at half musket-shot distance, which he said he did.

This change from the first intention in the **Yarmouth's** course was not a thing of that kind which could, in one instant, be comprehended by a signal; and, if it was not in one instant comprehended, and put in execution by the ships in the rear, of necessity they were to be left considerably astern.

But this reasoning, all the while, is founded upon the supposition, that each ship of the squadron, by her course and her velocity assumed, had or could, without previous practice, have preserved her station in the curve of pursuit, should it even have been allotted to her by the Admiral, which will not be admitted. For in such case, each ship in succession, of necessity taking the rule for her velocity from the ship immediately ahead, would imperceptibly and unavoidably get into her wake as a leader, and by that means the ships in the rear,

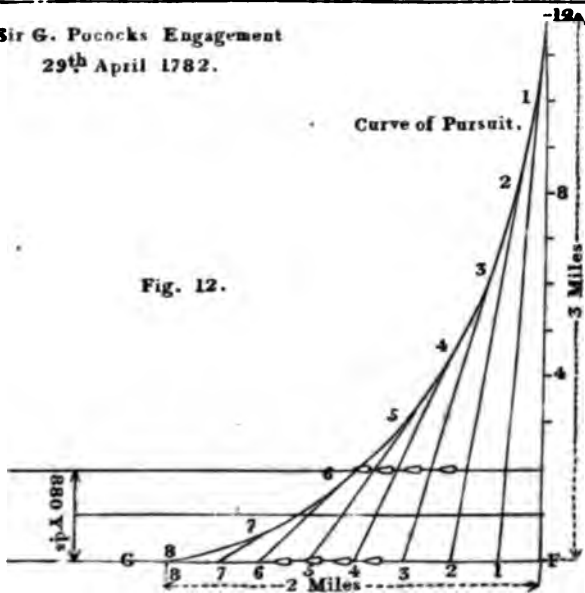
one after another, would fall more and more astern, from the very beginning of the course, in form as at E.

Plate XXIX. Fig. 11. The curve of pursuit begun from a distance astern, with the velocities 5 to 3 assumed as before; and if this distance F I shall be equal to the distance to windward I B, the resolution will stand thus—*As the difference of the squares of the velocities is to double the product of the velocities, so is the distance to windward I B, 16 furlongs to 30 furlongs, the space which the ship pursued must run through, before she can be overtaken; in which case, the ships in the rear making the attack, when arrived at a station of fighting distance, the line L M, parallel to F G, the course of the enemy's line of battle, will be left at a double distance astern, as appears from the figure.*

Plate XXX. Fig. 12. Again, suppose the course of B to be begun from right to windward, and that the velocities shall be as 4 to 2 (a double proportion); say, as the difference of the squares of the velocities 12, is to the product of the velocities 8, so is the distance to windward B F, 12-4ths of a mile to 8-4ths of a mile, the space which the ship pursued has to run before she can be overtaken; and supposing L M, the parallel line of fighting-distance, to be 440 yards as before, the ships in the rear, in approaching this station, will still be left astern about 400 or 500 yards.

Sir G. Pococks Engagement
29th April 1782.

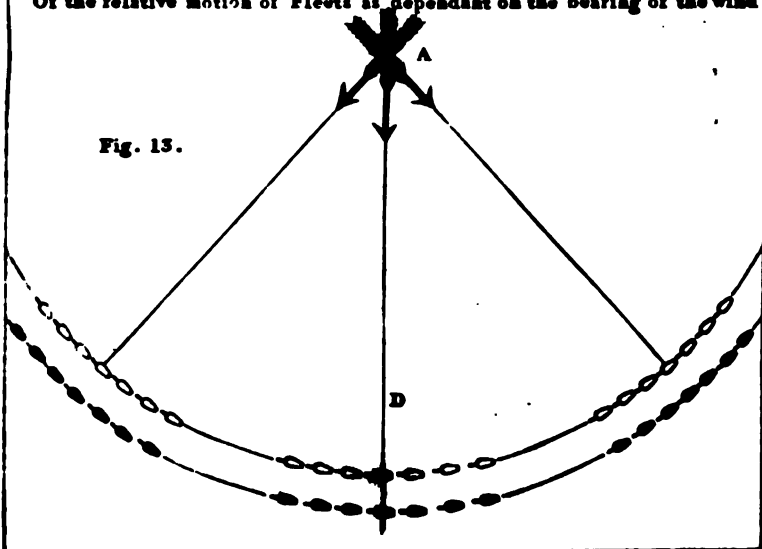
Fig. 12.



HISTORICAL SKETCH

Of the relative motion of Fleets as dependant on the bearing of the wind

Fig. 13.





From all which it may be concluded, that whatever shall be the proportion and rate of the velocities assumed, or how much soever shall be the previous practice, the mode of attack, by this curve of pursuit, will in no way be found preferable to the mode in the lasking form ; but will be found so much the worst of the two, as it will be more difficult in the execution, and the ships in the rear will be left the farther astern ; and in general it is evident, that the curve of pursuit, though a curve well adapted to bring one ship into the wake of another, is not at all suited for bringing one ship abreast of another, and within a given distance.

With respect to general observations, they are the same as have formerly been introduced. By the nature of the attack, equally as in the engagements of Mr Byng and Mr Byron, the headmost ships must have approached the enemy, before it was possible for the ships in the rear to get into fighting distance. By the nature of this approach, the van and centre were disabled, before they could get into a position from whence, by retaliation, they could annoy the enemy. By the address of the enemy, as in Admiral Byron's engagement, the rears of neither squadron had got into action. Though the Admiral, like Sir George Rodney, in his engagement off the Pearl Rock, had the merit of great personal courage, yet the attack, as put in execution by his ship the Yarmouth, being

nearly the same as that of the Sandwich, of course was attended with the like want of effect.

On the part of the enemy in this engagement, and similar to every one of the other five of this class described, the Admiral, Monsieur D'Aché in the *Zodiaque*, so soon as he felt himself exposed to the British fire, quitted the line, and withdrew from battle, leaving his second and other ships astern, not only as a cover to keep up a good countenance, and to amuse Sir George Pocock, but, each ship after another, throwing in their fire upon the *Yarmouth* in passing, by particular instruction, bore away in succession, to form a new line to leeward.

Admiral Sir George Pocock's second engagement, of the 3d of August 1758, being so much alike with that of the 29th of April, no new description will be necessary.

NAVAL TACTICS.

PART II.

INTRODUCTION.

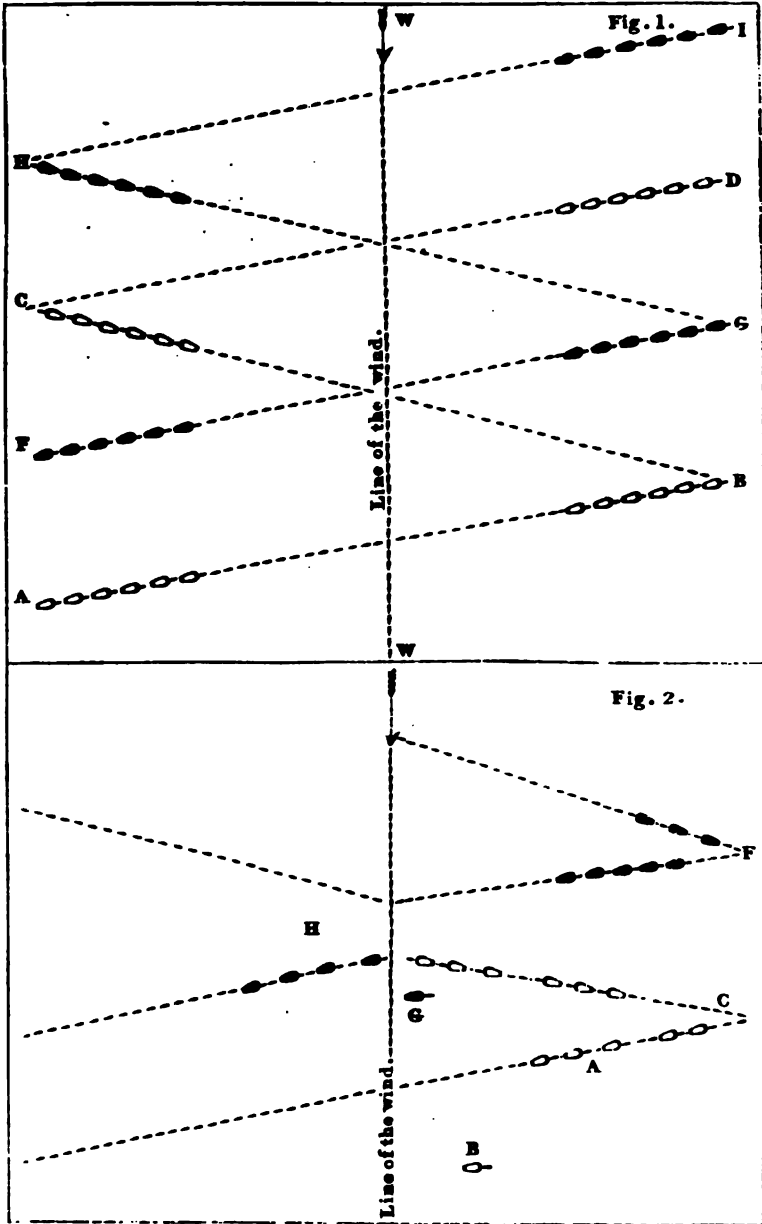
IN the first part of this work, it has been established, upon the clearest conviction, that the intention of our enemy, the French, in their mode of encountering our fleets, has constantly been to disable the rigging, and, if possible, to avoid the bringing their ships to a close engagement. It has been shown, no less clearly, that an Admiral, commanding an opponent fleet, and being in pursuit anywhere from the windward quarter, may have it in his power to bring the enemy either to give him battle on equal terms, and in a close engagement, or otherwise to force him to abandon a number of his ships, let him be as shy, as artful, and cautious as he will. In this second part, after the same manner, we shall endeavour to demonstrate the

practicability of forcing also an attack upon such an enemy, and with equal success, from the leeward quarter. And as in the first part it has been proved, that the fleet to windward, by making the attack, will, by this, have attained a superiority over the fleet endeavouring to avoid the attack; so, there can be little doubt it will be found, that a fleet, by making the attack from the leeward, must also attain an advantage over an enemy, who is desirous of avoiding the attack by making off to windward.*

* Great part of this subject, the attack from the leeward, having been executed almost twenty-six years ago, and immediately after the 27th July 1778, already a part thereof has been introduced in illustration of the action of that day.—*Vide* Part I. Observations, Keppel's Engagement, page 103.

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THE ATTACK OF FLEETS FROM THE LEEWARD

DEMONSTRATIONS.

SECTION I

OF FLEETS WORKING TO WINDWARD.

THE following demonstrations, upon the working of fleets to windward, although perfectly known to all seamen, yet as they may afford some information to others not conversant on that subject, it is hoped they will not here be thought superfluous.

1. (Plate I. Fig. 1.) Let us suppose a fleet of ten, twenty, or more ships to windward, as at F (Plate I. Fig. 1.), endeavouring to avoid being brought to an engagement; and another fleet of an equal number of ships some leagues to leeward,

as at A, ardently desirous of getting up with F, and bringing him to an engagement: If every ship of the fleet F, to windward, shall be found to sail equally well with every individual ship of the fleet A to leeward, then, unless some change of the wind or some accident shall take place, each fleet, in turning to windward, having uniformly kept their boards proportional, the distance between the two fleets will continually remain the same as at first setting off; and the fleet A to leeward will never be able to get within reach of his antagonist F: That is, the board A, to be made by the fleet A, making the same angle with the perpendicular line W W (the line of the wind), as the board F G to be made by the enemy F; and as it will be performed in the same time and with the same speed, the distance between the two fleets, when they shall have arrived at the points B and G, will be the same as when they were at the two points A and F, the places where they set off.

Again, supposing both fleets shall tack at the same time, and get upon a starboard course, B C and G H, then the two fleets, when they shall have arrived respectively at the points C and H, the distance between them will still remain proportionally the same as at first setting off; and the fleet A will never be able to get up with, or reach, the fleet F, his antagonist.

But if the wind, during the course of a few days,

should make some change, and if some rigging should be carried away by an overpress of sail, which are accidents not to be prevented for any considerable time with fleets supposed to be engaged in a struggle of this kind ; it is evident that such accidents will be of more dangerous consequence to the fleet endeavouring to get off to windward, than to the fleet in pursuit from the leeward. As, for example :

Let us suppose the enemy's squadron, in its progress to windward from H to F (Plate I. Fig. 2.) ; that one of their ships, from being crippled, had fallen to leeward, as at the point G ; is it not evident that she must be cut off by the very next board, which part of the squadron A shall make, as at C ; or otherwise, that the squadron F, upon bearing away, or shortening sail, as at H, to protect this crippled ship, by falling within the reach of the squadron A in pursuit, must immediately be forced to come to action ? Whereas, *on the other hand*, should any ship of the squadron A come to be crippled, and fall to leeward, as at B, she will still continue to be under the protection of the squadron A, and will not thereby be exposed to the fleet of the enemy.

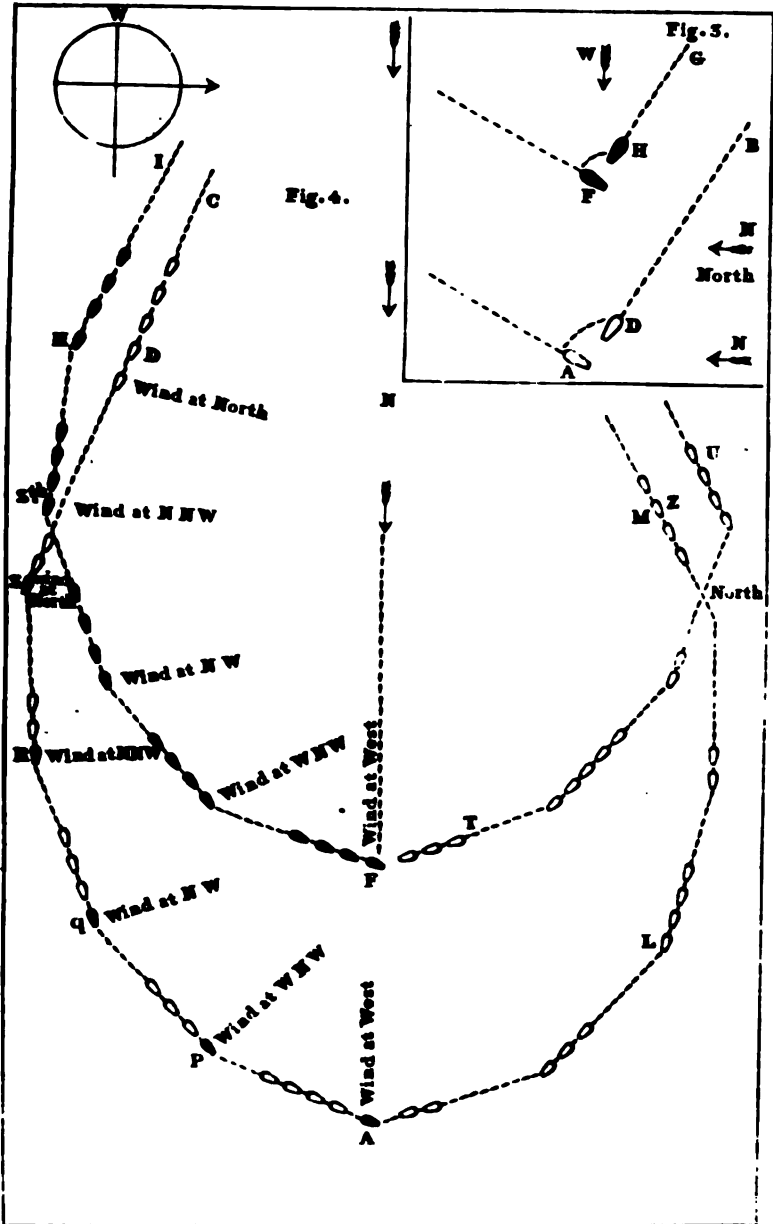
Again, upon a supposition that the wind may change in the course of a few days, the following demonstrations will show, that a wind from few

other points of the compass will make a change unfavourable for the squadron to leeward.

Let us suppose two ships, the one several miles to windward at F (Plate II. Fig. 3.), endeavouring to get off, and the other in pursuit from the leeward at A; and let the wind be at west at W.

To show the effect of changes of wind upon these two ships, let this change be from west to north, at N N, in one instant; then the ship A, which was several miles to leeward when the wind was at west apparently, will lie up with her course towards B, to windward of the ship F, now that the wind has got about to north, and evidently will have a course so much farther to windward (*vide* H G), though the distance between the two ships A and F may remain nearly the same.

Again, let A and F (Plate II. Fig. 4.) be two fleets; and let the wind, in passing from west to north, have changed so gradually, that each fleet has had sufficient time to lie up and keep to the wind with the whole of their respective ships, extended in line of battle ahead, mutually as the wind shall shift: Yet, still in this case, the fleet A, which was seven miles to leeward when the wind was west, will now have got to windward, the wind having come fully shifted to the north, as may be seen by course last of F, at the line H I, and course last of A, at the line C D.





For, if the fleet A can lie up to the wind two points at the station A, it will be able to lie two points up at the station P, when the wind shall have changed two points, and will do the same at Q, and the same at the station R, and also at S, when the wind has got full to the north.

In like manner, by the fleet F keeping the wind two points at the similar stations, and at the same rate of motion on the different and equal boards; the two fleets, when the wind shall have got to the north, will still be at the same distance from one another as before; but the fleet A, which was to leeward, will now have got far to the windward.

Fig. 4. Again, upon a supposition that the wind, in passing from west to south, has changed in like manner, so gradually, that each fleet shall have had time to lie up, as per lines L M and T U, then the fleet M, when the wind shall have come to the south, and the ship Z, will be found as far to the windward of the ship U, as when the wind came round by the northern quarter.

From all which it may be conceived, that the leeward fleet in pursuit, by a steady perseverance, will some way or other at last get up with, and force an attack upon the enemy going off, either by getting to windward of him, or by fetching some part of his fleet from the leeward; and as this must be accomplished either while the opponent fleets shall be running upon the same tack, or when they

shall be brought to pass each other on contrary tacks, the attack of fleets from the leeward quarter will naturally divide itself into two separate cases; and let the one be called the Simple Attack, the other the Cross Attack.

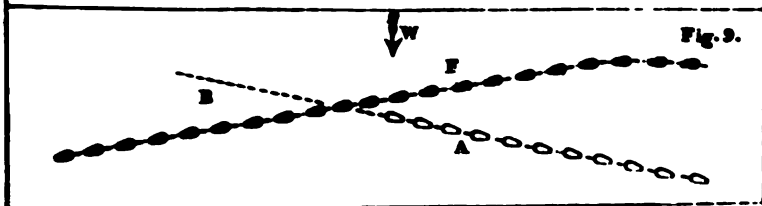
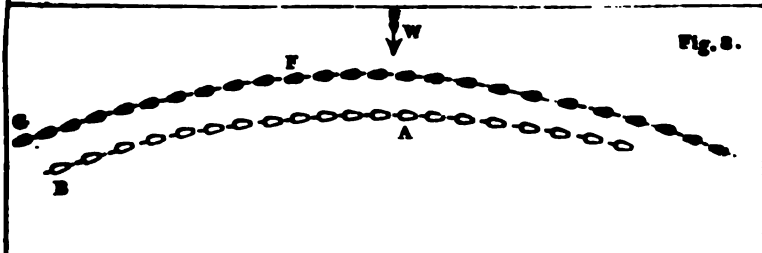
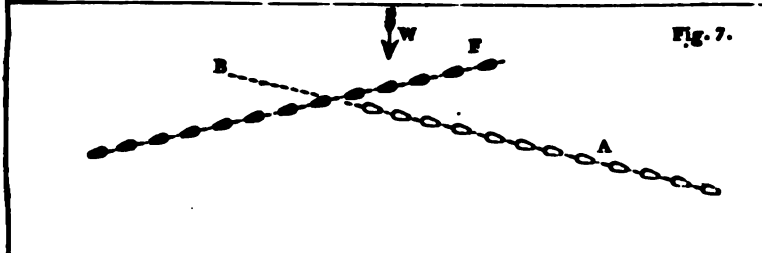
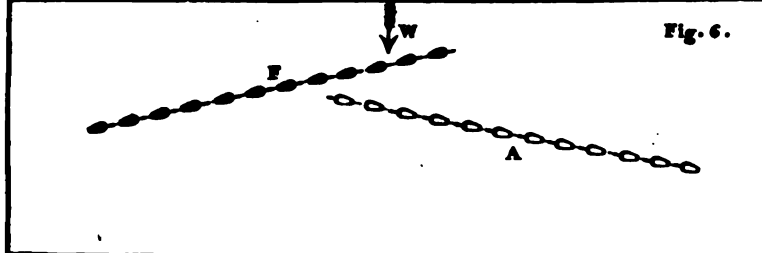
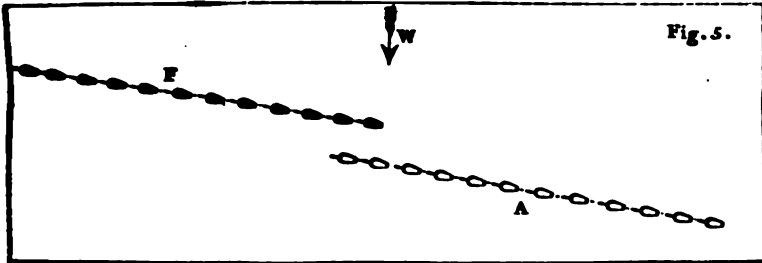
1st, By the Simple Attack, let it be understood to be that case, when the fleet A to leeward shall be able to fetch some part of the enemy to windward, and on the same tack (as per Fig. 5. Plate III.)

2d, By the Cross Attack, let it be understood to be that case, where the two opponent fleets shall be brought to pass one another on contrary tacks, as A and F (Fig. 6. Plate III.)

SIMPLE ATTACK.

SECTION II.

WITH respect to the first of these, the Simple Attack, few examples can be produced; for the French commanders, upon an apprehension of the smallest risk of being overtaken from the leeward, have hi-





therto found means to throw the fleets under their command on the opposite tack to that of the fleet in pursuit.*

But whether this shall have arisen from the enemy's anxiety of avoiding a shock, or from a natural consequence attendant on the necessary movements of two fleets on such occasions, certain it is that the meeting, or rencounter of adverse fleets, upon opposite tacks, have been more frequent than the rencounter of fleets on the same tack; and of which meeting, on opposite tacks, there are four examples before us: That of the 27th July 1778; two others of the 15th and 19th May 1780; and, lastly, that of the 12th April 1782.

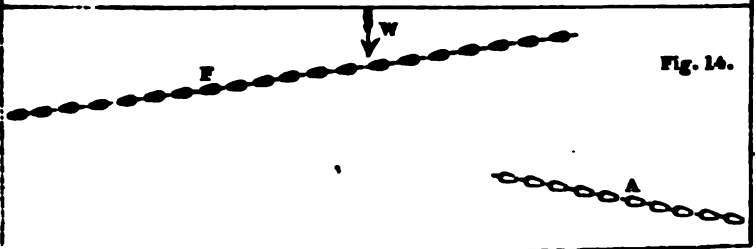
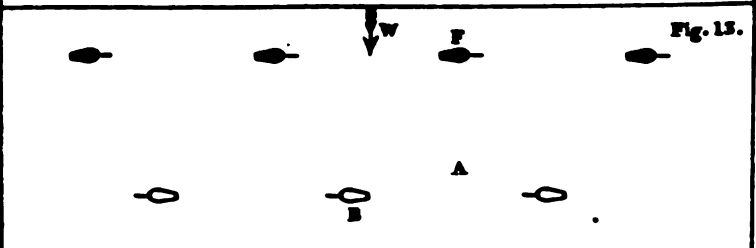
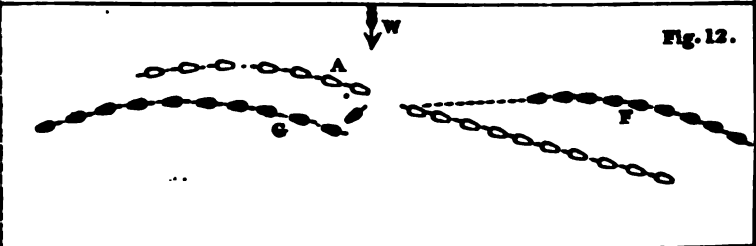
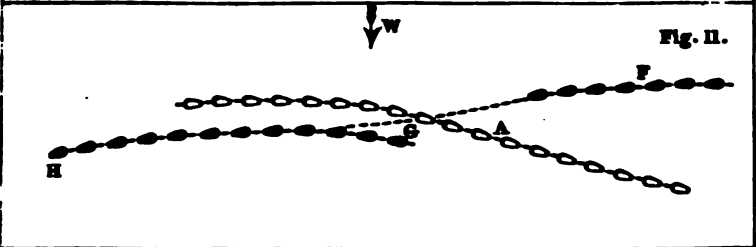
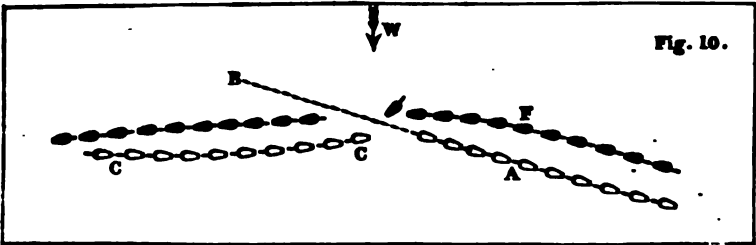
Which last, the 12th of April, though perfectly decisive in the end, was in the beginning of the battle so far alike, and of the same nature with the three first, that the adverse fleets having met, and the leading ships of the enemy having gained the wind (as in Fig. 7. Plate III.), the two fleets ranged past each other in opposite directions, each ship giving and receiving their mutual fire until the line of battle of the one fleet was completely extended abreast of the other (as per Fig. 8. Plate III.); that is, when B, the van of the one, had

* Admiral Arbuthnot off the Chesapeak.

got abreast of G, the rear of the other mutually. Of these several actions, the three first already have, in some measure, been described. With respect to the fourth, the 12th of April, the attention it requires is such, that it would be improper to bring it into view until the whole subject on the attack from the leeward shall be completely discussed. In the mean while, by way of introduction to this design, it will be necessary to look back and recapitulate a few of the remarks formerly introduced, (Part I. p. 119, beginning No. 10.)

RECAPITULATION OF A FEW OF THE REMARKS ON THE
BATTLE OFF USHANT, 27TH JULY 1778.

“ Let us suppose two adverse fleets in contention to get to windward the one of the other; and, by dint of sailing, or by a change of wind, that the leading ships of the enemy F (Fig. 9. Plate III.) 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 their first course A B, and were not all to bear away, as per course C C (Fig. 10. Plate IV.), that, with great advantage, the enemy's line of battle might be cut in twain (as at G, Fig. 11. Plate IV.), and



THE HISTORY OF THE

REPUBLIC OF THE UNITED STATES OF AMERICA

The history of the United States is a story of growth and change. From the first European settlers to the present day, the nation has expanded its territory and diversified its population. The early years were marked by struggle and hardship, but the spirit of innovation and freedom prevailed. The American dream of a better life for all has inspired generations to strive for progress and justice. The challenges of the past have been met with courage and resilience, leading to the nation's current status as a global superpower. The future holds promise and opportunity for all who believe in the values of liberty and democracy.

have thereby their rear H separated from their van F (as per said Fig. 11.) Again, by such an attempt, the course of all the enemy's ships, astern of this attack, would thereby be so far stopped; or retarded, that a close engagement with the enemy's whole line must be the consequence; or otherwise their rear G, of necessity, must be abandoned by the van F, (as per Fig. 12. Plate IV.)

“ Perhaps it may be said, that the risk or danger of an attack of this kind might be greater than the advantage proposed. To which it is answered: As soon as ever we shall have the spirit and steadiness to make the experiment, conviction will follow, that the risk and damage to shipping making the attempt will be found to be less than in any other mode of attack whatever.

“ Again, upon taking the subject in another view, suppose, for example, that two, three, or more ships (Fig. 13. Plate IV.) 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 suppose, for the sake of demonstration, the one fleet at rest, and the other in motion, at the rate of ten miles per hour; then each ship of the squadron in motion will pass through 880 feet in one minute of time.

“ According to which, then, each ship of the squadron A will pass each ship of the enemy F,

with the interval between ships included, in one minute; that is, she will make a transit of 380 feet, or 300 yards (the general allowance of space for ships drawn up in line of battle) *in one minute*.

“ Therefore, if the two fleets did pass one another on the 18th of July 1778, at the rate of 5 miles per hour, and if it were possible that the loading of a ship's guns could be repeated once every minute of time, still each British ship could be exposed to the fire of each French ship during the space of one quarter of a minute only; that is, while the two ships were in direct opposition; and as there were 26 ships of the enemy, each ship, on the whole, could be exposed to a cannonade of six minutes only. And if the fleets had passed each other at the rate of two miles and a half per hour (a motion absolutely necessary to make a ship answer the rudder well), each ship could then be exposed to a fire of 13 minutes duration.

By such investigation only can it be explained, how two adverse fleets, amounting to 30 ships of the line each, carrying above 36,000 men, after having been brought in opposition of battle, and mutually sustaining a furious cannonade from above 4000 guns, besides musquetry; how, I say, they have been brought to be separated again without effect, without the smallest apparent decision; that is, without the loss of a ship on either side, and sometimes with scarcely the loss of a man,

though the rencounter has often been said to have been within pistol-shot.

From all which it must be concluded, 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 in 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 step can be devised, as has already been described.

CROSS ATTACK.

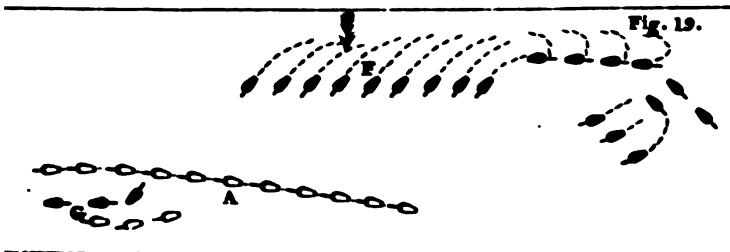
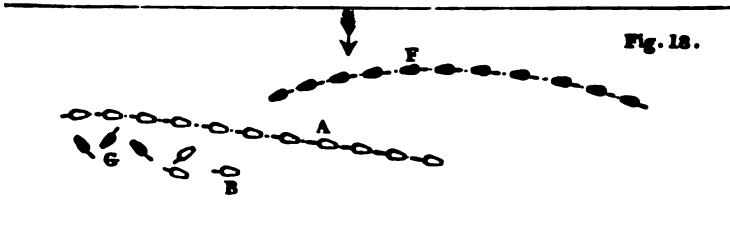
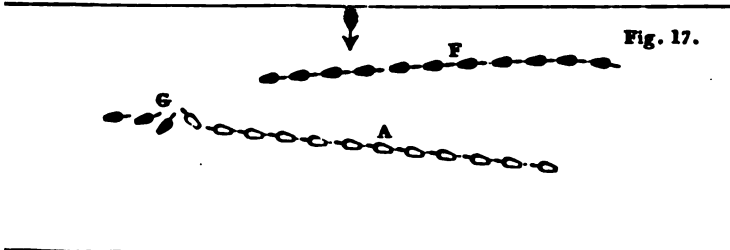
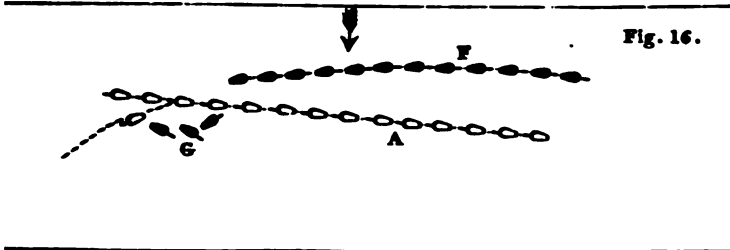
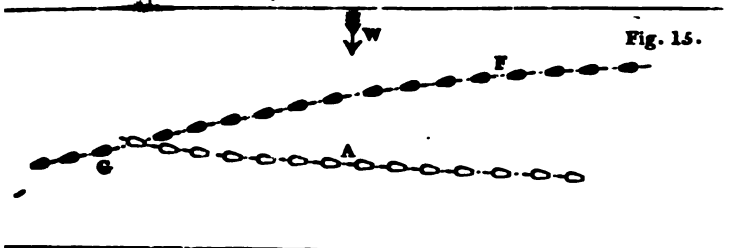
SECTION III.

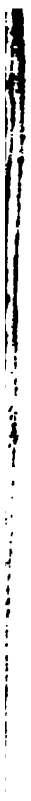
MODE OF ATTACK FROM THE LEEWARD ILLUSTRATED.

LET us suppose two fleets, the one to windward, endeavouring to make off as at F (Fig. 14. Plate IV.), and the other to leeward, having sufficient desire to get up with him as at A. We hope it will be granted, that A, the fleet in pursuit from the leeward, within the course of a few

days, may be able to get up with, and bring the other, his enemy F, to some rencounter. Or, otherwise, that F, the fleet to windward, may have the utmost difficulty to make his escape with his whole line entire. Also, that this rencounter, as it hitherto has been, may continue to be most frequently on an opposite tack.

Again, let us suppose that the enemy F (Fig. 14. Plate IV.), from the desire of getting off, will have exerted his whole art of seamanship to enable him to avoid the attack, it follows, that the fleet A in pursuit, though not able to fetch the van of the enemy now far got to windward, as at F, may still be able to fetch a part of his rear, as at G (Fig. 15. Plate V.); and as this may be conceived to take place with his headmost ships in the first instance, we will, for that reason, begin with these examples, when this manœuvre, of cutting an enemy's line with the greatest propriety, can be put in execution by the leading ships of the squadron in pursuit.





**EXAMPLES OF CUTTING AN ENEMY'S LINE OF BATTLE
BY THE HEADMOST SHIPS OF THE SQUADRON IN
PURSUIT FROM THE LEEWARD.**

1. When the leading ships have fetched the rear of the enemy, suppose the three sternmost ships.
 2. When the leading ships have fetched the centre of the enemy's line.
 3. When the leading ships shall have fetched the fourth or fifth ship, and shall cut off the van from the centre and rear of the enemy's line.
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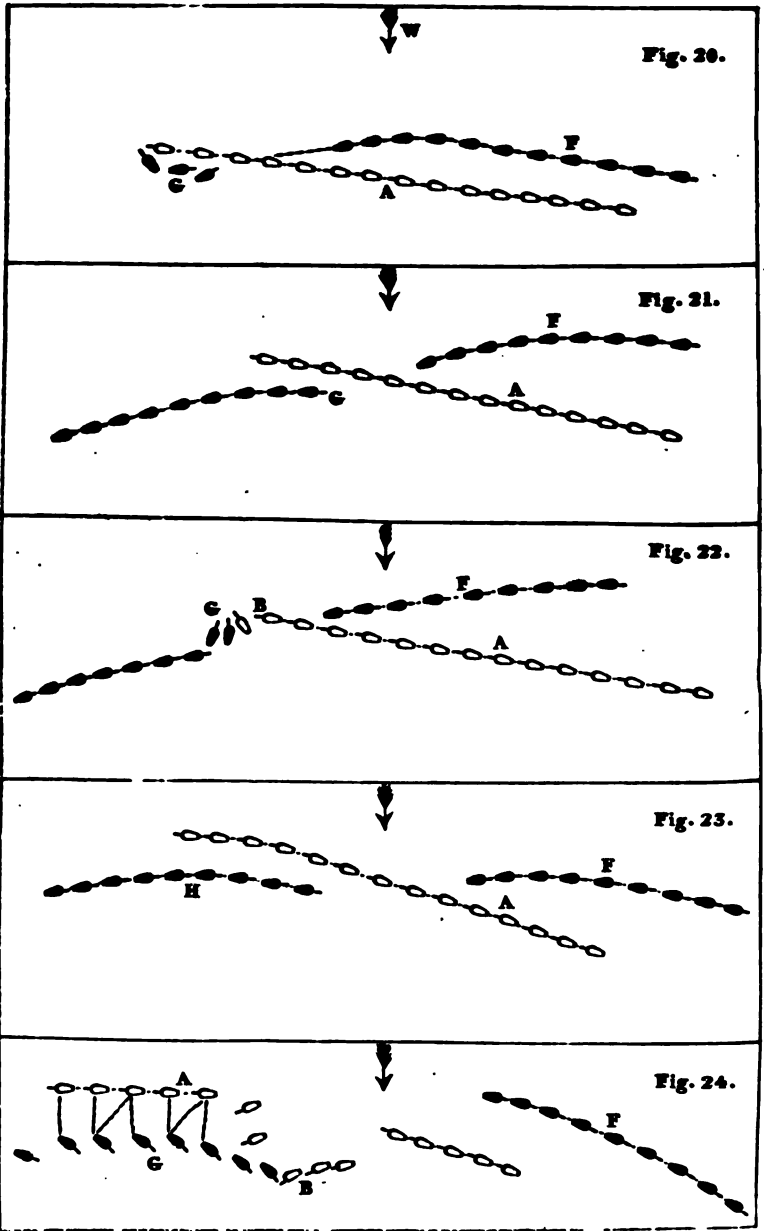
**1. WHEN THE LEADING SHIPS SHALL HAVE FETCHED
THE REAR OF THE ENEMY'S LINE, SUPPOSE THE
THREE STERNMOST SHIPS.**

Let it be supposed, in the course of some fortunate trip in working to windward, that any number (say three or four) of the headmost ships of A have had it in their power to fetch an equal number of ships of the enemy F (as at G, Fig. 15. Plate V.) And let it be supposed, that the headmost, or any one of these ships, by keeping her wind, shall attempt to pierce between any one of the sternmost of the enemy's ships, between the

third and fourth, for example, at G, (Fig. 16. Plate V.); the consequence will be, that the ship making this attempt will force her way through the interval between these two ships; or otherwise, by getting foul, or running aboard of the third ship (as in Fig. 17. Plate V.), will not only stop her course in the line, but will also throw the ships astern of her into disorder. In whichever case this shall happen, here are three sternmost ships of the enemy which will be forced to leeward, as at G (Fig. 18. Plate V.), where they must be entangled with the remaining part of the ships of A, which may now be pushing up, as at B, to prevent their escape.

If this manœuvre shall be put in execution happily, and with spirit, we have a right to think it will succeed; and that the enemy, F, must inevitably lose these three ships. For his van, by the supposition, having by this time got far to windward, as at F, the matter would be determined before assistance could be given; and, in attempting to give this assistance, he would be reduced to the necessity of making the attack as at F (Fig. 19. Plate V.), which he before had endeavoured to avoid, and when in possession of his whole force; therefore he will abandon these three ships; as A, by this time, may be supposed to have environed them with sufficient force.





Again, suppose the enemy, upon perceiving the danger his rear must be exposed to, in place of holding his wind (as in Fig. 17. and 18.), shall bear away along the line of A (as in Fig. 20. Plate VI.), nothing can be gained by this ; for it must be done on equal terms, exchanging a few shot only as he ranges past to windward, and must still be under the necessity of giving up his three ships at last.

WHEN THE LEADING SHIPS SHALL HAVE FETCHED THE
CENTRE OF THE ENEMY'S LINE OF BATTLE.

WHEN the leading ships of the fleet A (Fig. 21. Plate VI.), shall have fetched the centre of the enemy F, the ship B, which shall attempt the passage, as in the former case, will either make her way through the interval which will be given her, and the ship G, with all the ships astern, will be forced to leeward, as in Fig. 21. ; or the ship B, by running aboard of G, and both ships coming to the wind (as per Fig. 22.), the whole ships astern of such attack will be stopped and retarded. But, in whichever of these ways it shall take place, the line will be cut in twain (as in Fig. 23.) ; the rear will be separated from the van ; and the whole ships of the enemy astern, will be forced to lee-

ward (as in Fig. 23.) Meanwhile, the van A (Plate VI. Fig. 24.) ranging to windward, and B, the centre and rear of A, by this time come up; the rear of the enemy G prevented from getting ahead, and finding it impracticable to regain their van F, will prepare to put before the wind, as in Fig. 24.

G, (Plate VII. Fig. 25.) The rear of the enemy putting before the wind encompassed by the whole force of A, van and rear.

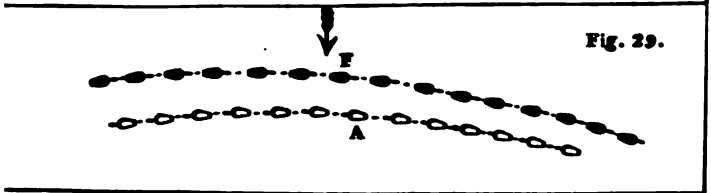
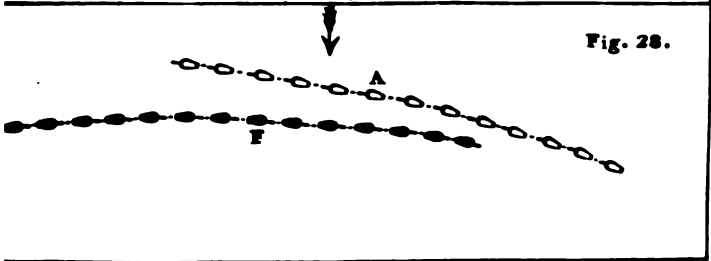
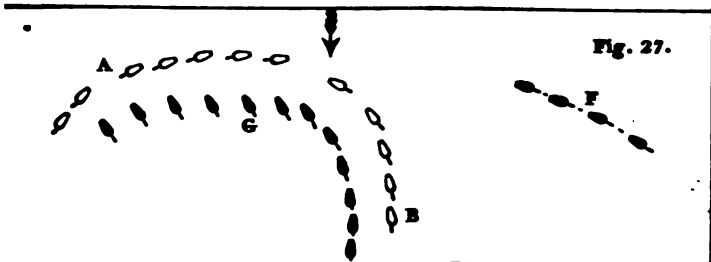
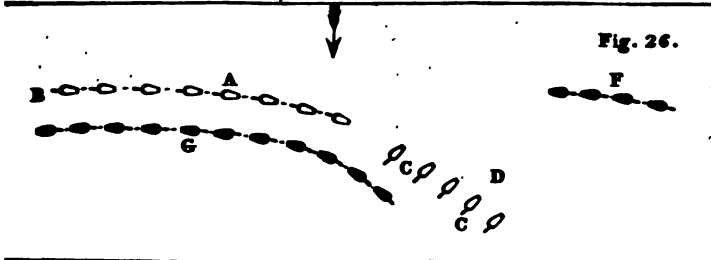
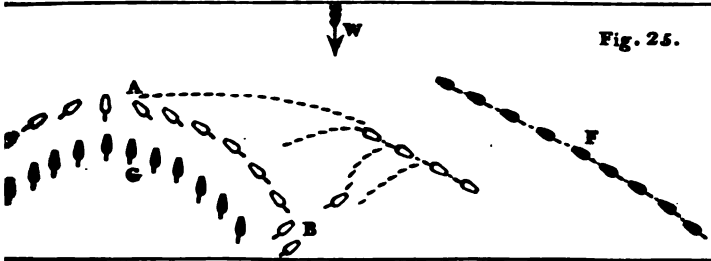
A, The ships in the van, after having forced the rear of the enemy to leeward, are now put before the wind in pursuit.

B, The centre and rear of A having prevented the enemy's rear from rejoining his van, are now in pursuit on his larboard quarter.

F, The van of the enemy (evidently) not having it in their power to prevent the effect of any part of these movements.

WHEN THE LEADING SHIPS SHALL HAVE FETCHED THE FOURTH OR FIFTH SHIP, AND SHALL CUT THE VAN OFF FROM THE CENTRE AND REAR OF THE ENEMY'S LINE.

The headmost ships of the van A (Fig. 26. Plate VII.), having fetched near the van of the



THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF

SCOTLAND

AND

OF

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REIGN OF

JAMES THE SECOND

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JAMES THE SECOND

enemy, and having cut his line between the fourth and fifth ship, and having ranged along to windward, as at B, his ships are now backing sail to give time for the remaining part of his fleet to get up, &c. That is, while D, the rear, having bore as per course C C, is preparing to intercept the enemy.

By which means the van A (Fig. 27. Plate VII.) having got to windward, and the rear B having pressed forward, the remaining part of the enemy's fleet now diminished by four ships, the number cut off, must be forced to leeward, where an action sufficiently close must ensue.

Fig. 27. A, The van in pursuit and endeavouring to get upon the starboard quarter of the enemy.

B, The rear division sticking close upon his larboard quarter.

G, The enemy inferior by four ships.

F, The enemy's four ships now cut off.

OBSERVATIONS ON THE THREE FOREGOING CASES OF
THE ATTACK WHEN MADE BY THE HEADMOST SHIPS
OF A SQUADRON.

Of these three cases, as it is easier to fetch the rear than any other part of the line of a

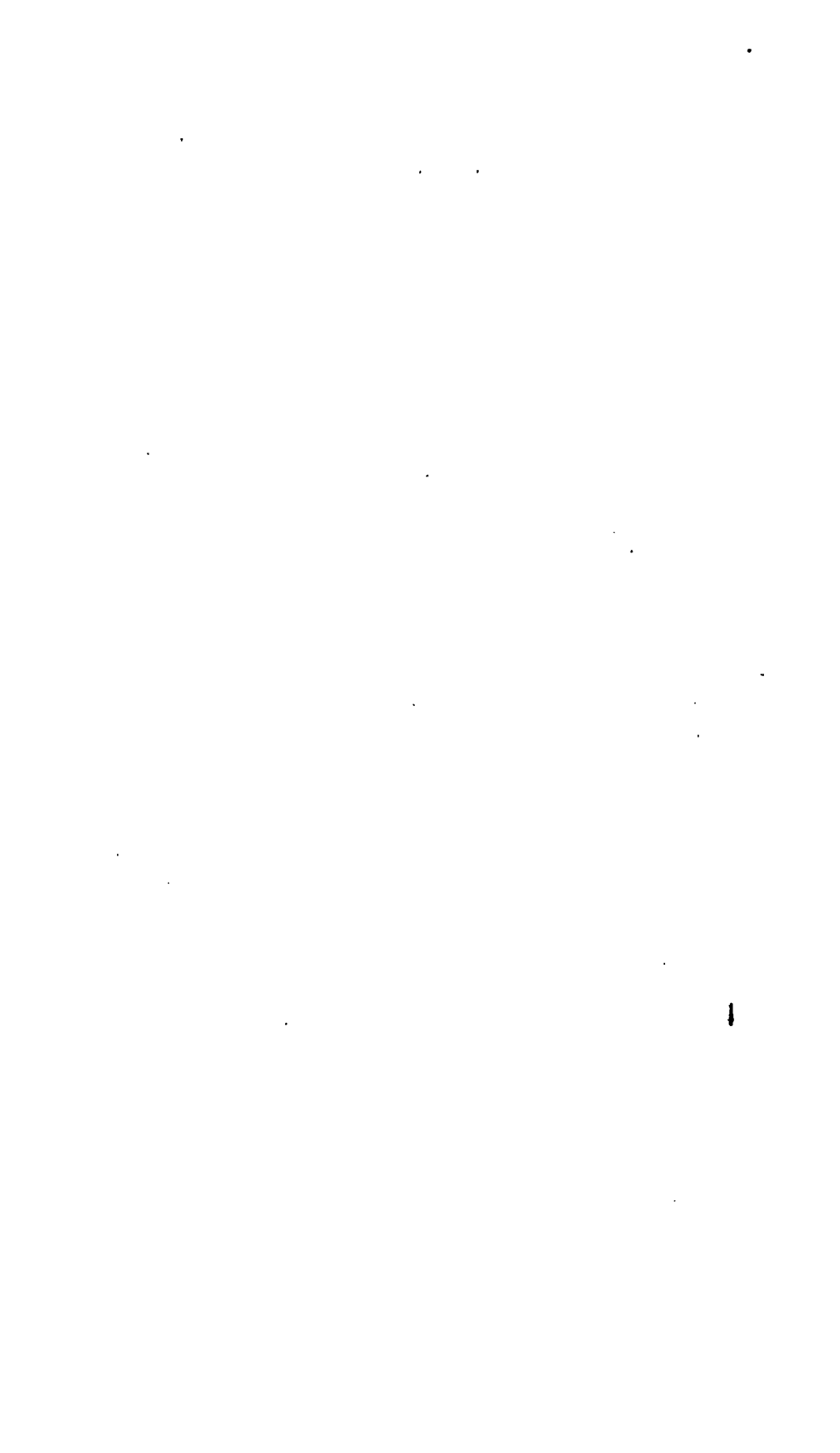
fleet going off, so the attack will be the more assured of success.

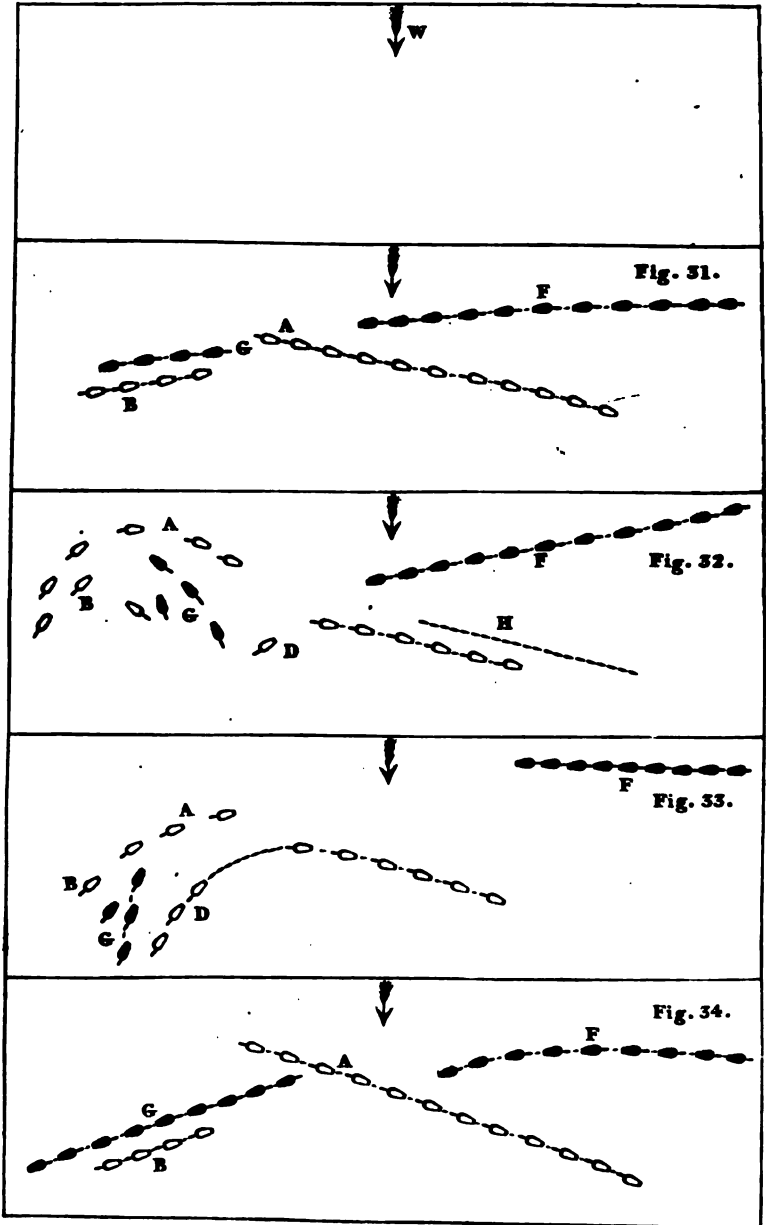
The second, the attack on the centre, or anywhere near the centre, as the object is greater and the success equally probable, so ought it always to be attempted, if possible, to be fetched by the van of the fleet in pursuit.

The third, under which is comprehended the attack upon the van, or anywhere ahead of the centre, as it must be more upon an equality with the enemy than any of the former two, so the success must therefore be more doubtful, and particularly where an enemy shall be desirous of fighting.

Fig. 28. Again, let us suppose the leading ship of the squadron A, after a long struggle, to have gained the weather gage of the enemy, and are now ranging past him to windward, giving and receiving a heavy fire, (as per Fig. 28. Plate VII.)

This supposed advantage, which, notwithstanding it has upon every occasion been the object of our most earnest efforts to obtain, must evidently be of as little importance as the ranging to leeward after having failed of gaining the wind (as per Fig. 29. Plate VII.), a movement which we have long been well acquainted with.





OF CUTTING THE ENEMY'S LINE WITH THE FIFTH OR SIXTH SHIP, OR ANY ONE NEXT ASTERN OF THESE, IN THE VAN OF THE LINE, BUT LET IT BE THE FIFTH SHIP, FOR EXAMPLE; WHICH ALSO, LIKE THE FORMER, MAY BE DIVIDED INTO THREE SEVERAL CASES.

1. The attack on the rear of the enemy's line with the fifth ship from the van.

2. Of cutting the enemy's line, at the centre, with the fifth ship.

3. The attack on the van of the enemy's line, with the fifth ship.

THE ATTACK ON THE REAR OF THE ENEMY'S LINE, WITH THE FIFTH SHIP FROM THE VAN.

Fig. 31. Plate VIII. In which, let it be supposed that it shall be the lot of A, the fifth ship from the van, to make the attack, and cut the line of the enemy; and let this be between the fourth and fifth ship of his rear at G; while, in the mean time, the four headmost ships B, after having stretched under the lee of the four ships G, are preparing to put about and stand after them, on the same tack.

Fig. 32. Plate VIII. The consequence of which will be, that these four ships G, having already received the fire of eight ships, A and B, will at last be stopped, and forced to leeward, by the weight of the centre and rear now coming up, as at D; while F, the van, not foreseeing, or perhaps not having it in his power to prevent this misfortune in his rear, may be much more desirous of making off to windward, than of ranging along the line of A, as at H.

A, The fifth ship, with those astern of him, which had cut the line and had gone to windward, now put about in pursuit of the four ships G.

B, The four headmost ships of A, which ranged to leeward, now put about also in pursuit.

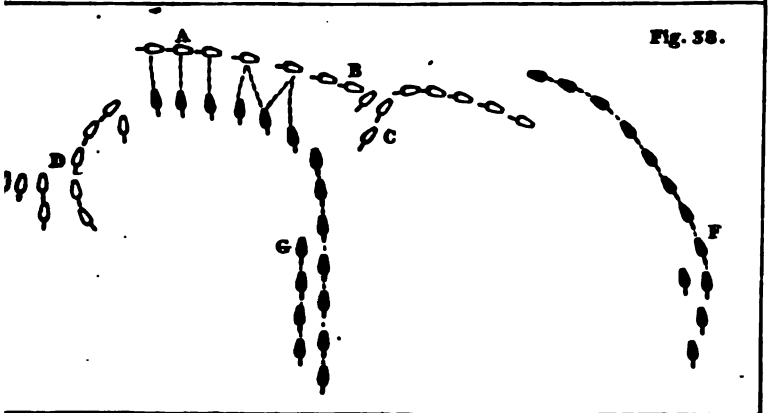
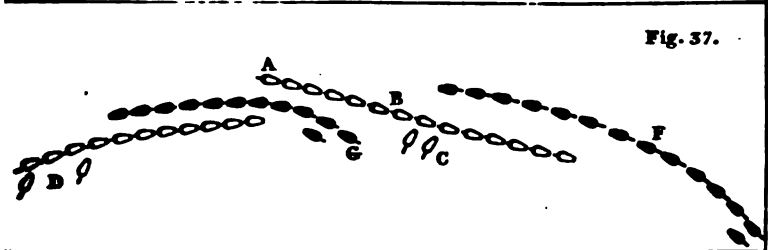
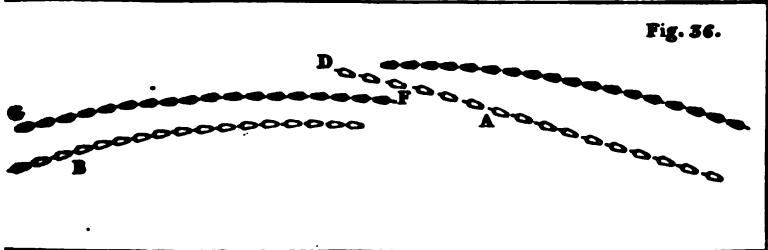
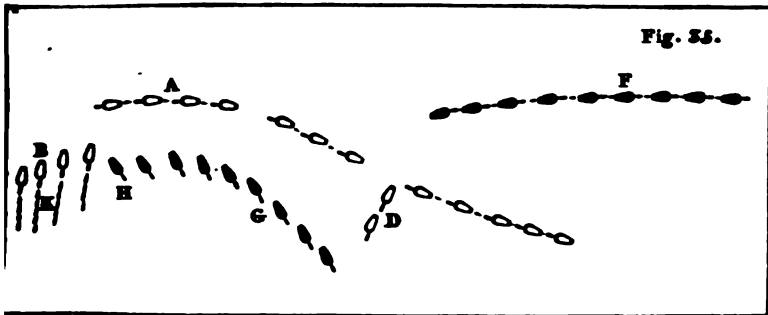
Fig. 33. Plate VIII. shows the inevitable ruin of these four ships G, driving along before the wind, and encompassed with eight ships, A and B, the centre and rear following after, as at D.

F, The van of the enemy going off.

OF THE CUTTING THE ENEMY'S LINE AT THE CENTRE
WITH THE FIFTH SHIP.

Fig. 34. Let it be supposed that the fifth ship A has been appointed to cut the enemy's line at the centre, and that the four leading ships B, are in course ranged along under G, the enemy's rear.

Fig. 35. Plate IX. The consequence will be,



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that all the ships of the enemy G H, which were astern of this attack, will not only be forced to leeward by A and the ships astern who followed him to windward, but will be stopped in their way ahead, and must be pressed farther to leeward by the remaining part of the fleet coming up at D. By which time it may be supposed that the ships astern in their rear, seeing the stop ahead, will be preparing to put before the wind, as at H, when a complete rout of the whole of this division of the enemy must follow.

B, The four headmost ships, having ranged past the enemy, are putting about to cut off their escape towards K.

F, The enemy's van going off.

THE ATTACK ON THE VAN OF THE ENEMY'S LINE WITH
THE FIFTH SHIP.

In this attack, as well as that of the former case, the danger to which the four headmost ships may be exposed is so great, that it is not probable that either the one or the other will often be attempted.

THE ATTACK WITH THE CENTRE.

FIG. 36. PLATE IX.

Let us suppose that the leading ships of the fleet A, having fetched somewhere in the van of the enemy, and that they have ranged along the whole of their line, and under their lee; and that B, the headmost of these ships, has advanced nearly abreast, or in immediate opposition to the sternmost of the enemy's ships G; and, at the time that some of the heaviest ships D in the centre, having kept their wind, shall have cut the line somewhere near the enemy's centre, at F, in like manner as described in the former cases.

Fig. 37. Plate IX. The enemy's fleets having been cut in twain in this manner, their van F from their rear G, the separation will be such, it will be next to impossible that these two divisions can ever be re-united together again. But the van F and the rear G making two distinct objects, the pursuit, with propriety, ought to be confined to either the one or the other, as the attempt to carry both evidently must be inconsistent. And whereas, in the course of the preceding demonstrations, the whole

force of the fleet making the attack, has, of necessity, been more particularly directed against the rear division, in preference to that of the van of the enemy; and as the same cause for this preference evidently subsists in this case, as well as in any of the former, we will proceed, in the first place, with the demonstration of the attack upon the rear G.

(Fig. 37. Plate IX.) The headmost ships of the rear division of the enemy having been forced to the leeward by A, the ship which cut the line will still be continued to be pressed farther and farther down the wind by the additional weight of the ships astern coming up in succession as at B.

C, Some ships astern of the ships B, preparing to bear away and stand after the enemy's rear division G.

D, The headmost ships of the van having already ranged past the enemy, and being assured of the improbability of any part of his rear division being ever able to get to windward, are preparing to put about, to be in readiness to follow which way soever it shall direct its course.

F, The van division of the enemy thus separated from his rear, and seeing the danger it must be exposed to, and that it will never be able to get to windward, are putting before the wind, as well to effect a retreat as to take all chances of effecting

a junction with the ships of the rear, which may afterwards be so happy as to make an escape.

Fig. 38. Plate IX. shows the attack with the centre a little farther advanced.

A, The ship which cut the line, and part of those ships which followed up after him, still ranging past to windward, and preparing to put about; in the mean while are keeping up a heavy raking fire upon the enemy going off.

G, The rear division of the enemy, having the greatest part of them disengaged themselves of the van of their adversaries, are endeavouring to make off, by putting through the gap.

B, These ships having stopped the headmost ships of the rear division of the enemy, and having forced them to put before the wind, are preparing to follow him.

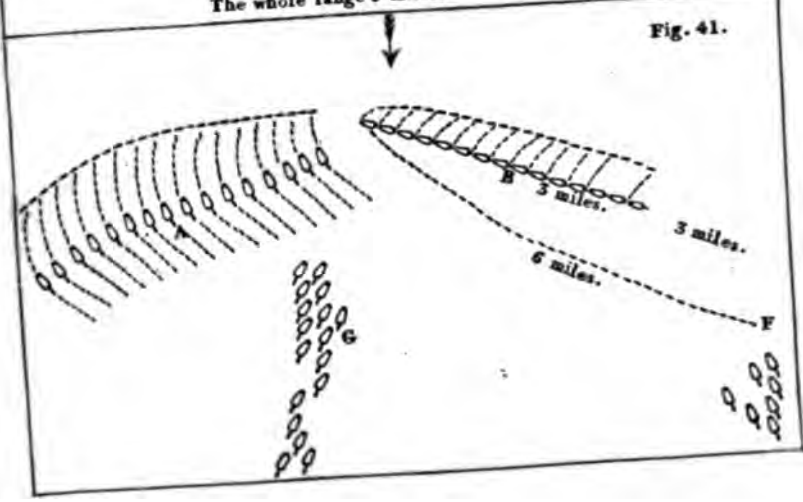
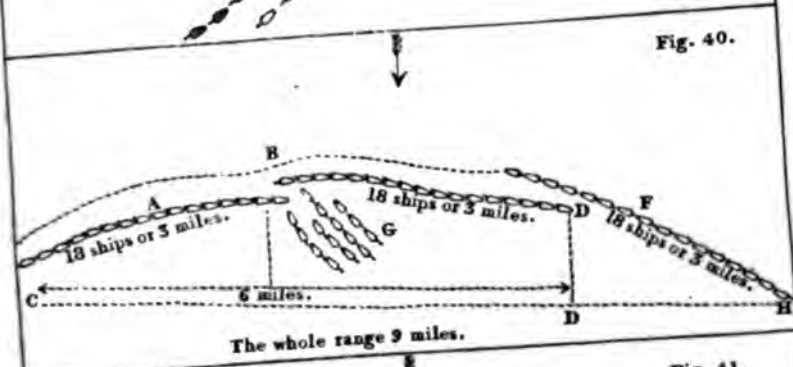
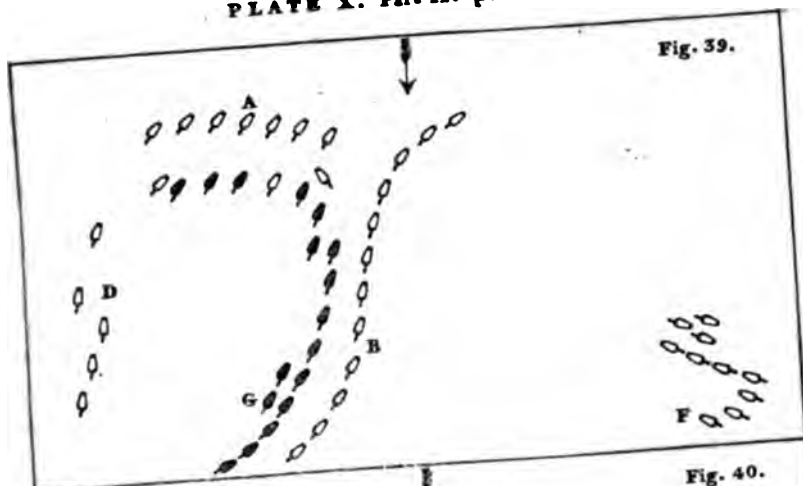
C, The rear of A, having now pushed forward, will be in sufficient time to get close upon the larboard quarter of the enemy, and keep by him wheresoever he shall go.

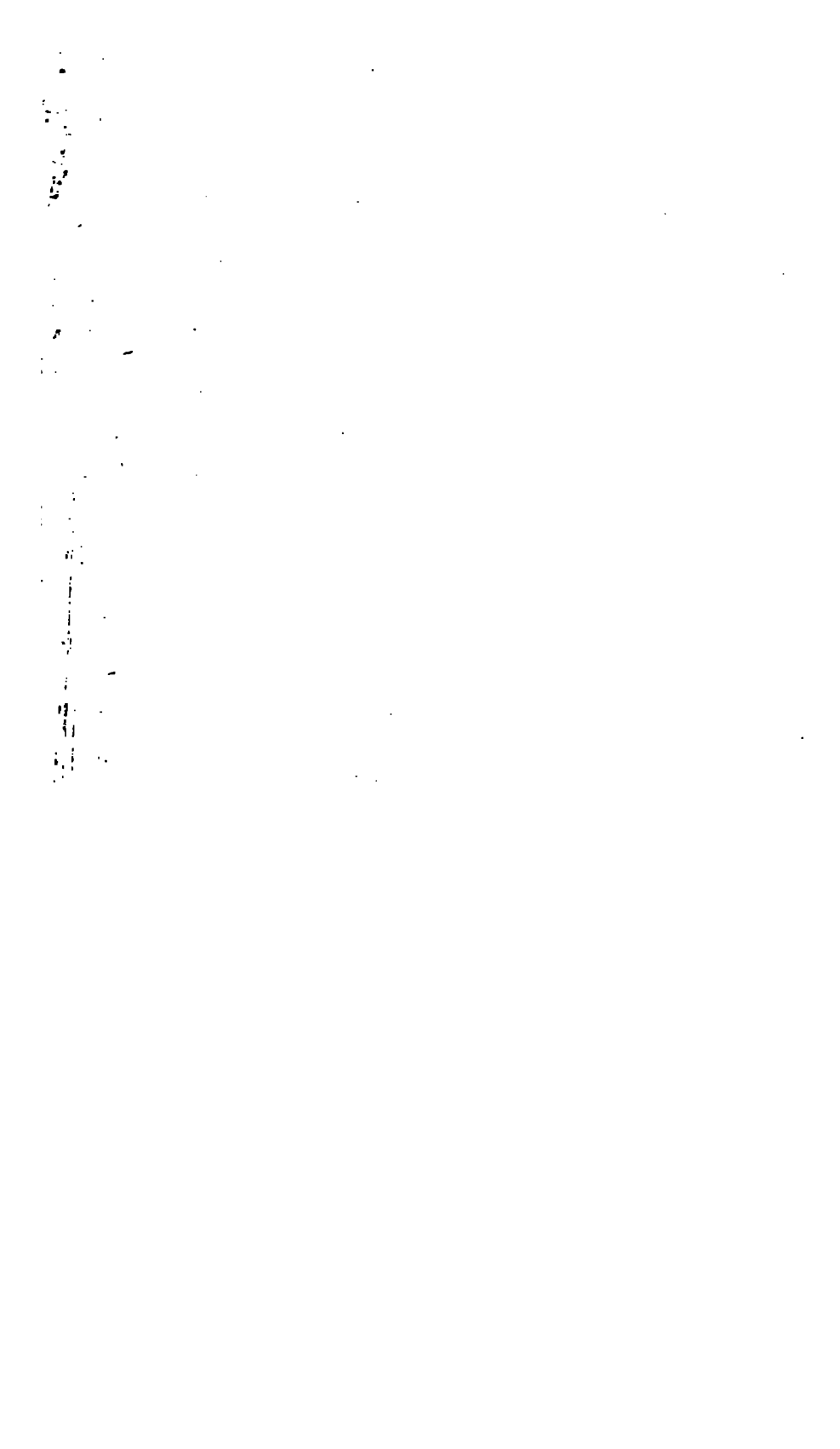
F, The van of the enemy.

Plate X. Fig. 39. G, The rear division of the enemy completely encompassed by the whole fleet, viz.

A, With the ships which cut the line and went to windward, now carrying every sail in pursuit.

B, The ships in the rear having had sufficient





time to come up, and are now bearing upon the larboard side of G the enemy.

D, The ships of the van keeping close upon his starboard side.

F, The van of the enemy putting before the wind, and anxiously attending the issue of this unequal contest.

Notwithstanding it must already have been self-evident, why the prosecution of the attack on the rear of the enemy's line, and not on the van, has constantly been considered, in the preceding demonstrations, as the object of greater attention, it is still hoped that the following reasons will not prove unacceptable.

Because a part of the force, by the supposition, having been detached, and already far advanced in the attack of the enemy's line,* it would be a manifest impropriety not to follow the blow, and still more unpardonable not to give the necessary support to the few advanced ships (B B, Fig. 31. and 34.), which otherwise might be left at the mercy of the enemy's rear.

The pursuit of the rear is also more immediately practicable: For while the ships in the van D,

* *Vide* the four ships at B (Fig. 31.); the four ships at B (Fig. 34.); and more particularly the ships in the van at B (Fig. 36.)

which have ranged past the enemy's line (Fig. 38.), are putting about to entangle his sternmost ships cut off, the centre ships of A, together with his rear B, having now got almost in contact with the ships in the rear of F, are preparing to surround them.

Whereas, in the pursuit of the van, the headmost ships of the enemy having at the time in question got above three miles distance even from the sternmost and nearest ships of A (Fig. 40.), and above nine miles distant from his headmost ships; to put about ship, and get up with the van of the enemy at F, that is, to recover the time lost, would be a work of great difficulty.

DEMONSTRATION.

Plate X. Fig. 40. Let A B be the van division, consisting of 18 ships, which have ranged past to the northward; and let B, which cut the enemy's line, be the ship at the head of the rear division, consisting of eighteen ships likewise. Then, as 300 yards is the space usually allotted for each ship, 6 ships will require a space of one mile;*

* *Vide* Part I. No. 25.

and 36 ships, the number of the fleet A and B, will require a space of six miles. But the van of the enemy F, supposed to consist of 18 ships also, will likewise require a space of three miles. And as it is evident, that a space of six miles must be required for extending the whole line of the fleet A; that is, from C to D, and a space of three miles must be required for extending the van of the enemy F; then the whole distance between the headmost ship of the fleet A, and the headmost of the fleet of the enemy, that is, the distance between the points C and H, must be a space of nine miles.

G, the rear of the enemy on the point of being surrounded.

Fig. 40. By the prosecution of the attack upon the rear division, you will have your whole force, van and rear, undivided, say 36 ships combined against 18 ships, the number cut off from the van division of the enemy. Whereas, in the case of pursuing the van, it must be evident, that your force being divided, the rear of your line only, after putting about ship, can with advantage be employed in the chase of the van of the enemy, now got to the distance of three or four miles; and if overtaken, to be fought with upon a perfect equality; while at the same time the ships in your van are either rendered useless, by having stretched too far ahead, or, at the best, will be obliged to follow the rear of the enemy, now got many miles to lee-

ward, and equal in number, ship for ship, if ever they can be overtaken.

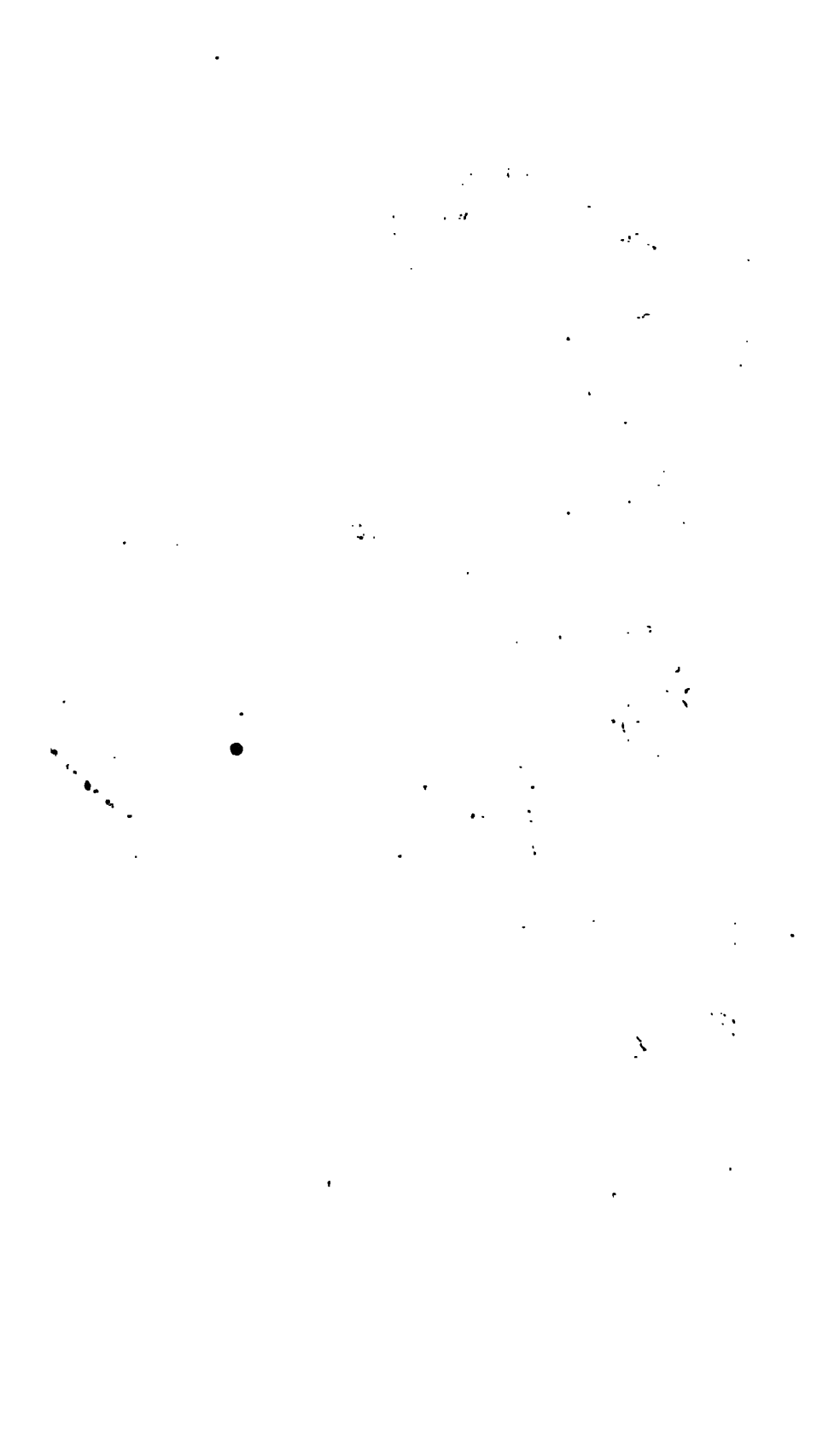
Fig. 41. Is supposed to show the van A, in the act of wearing to stand after the rear of the enemy G; while B, the rear of A, is supposed to get upon the larboard tack to stand after the van F, and prevent his junction with his rear G.

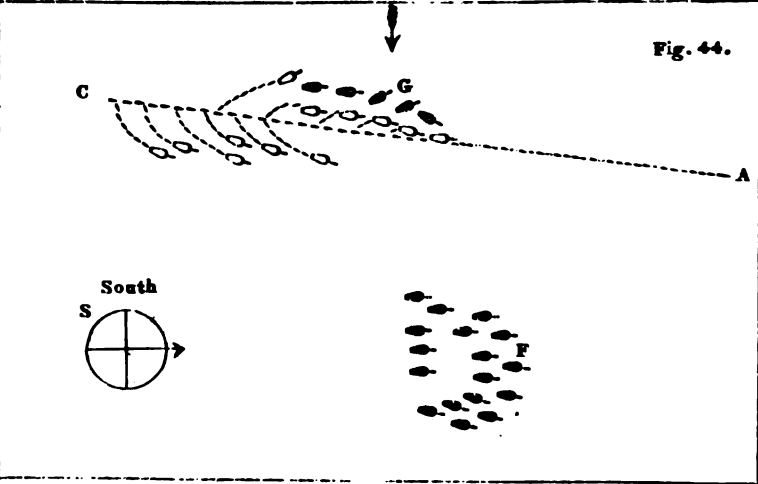
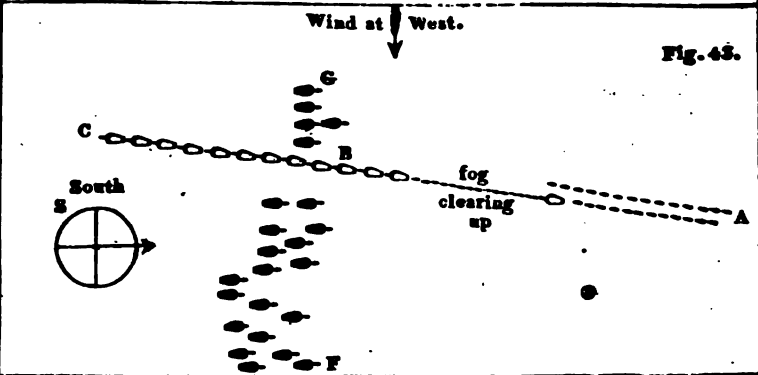
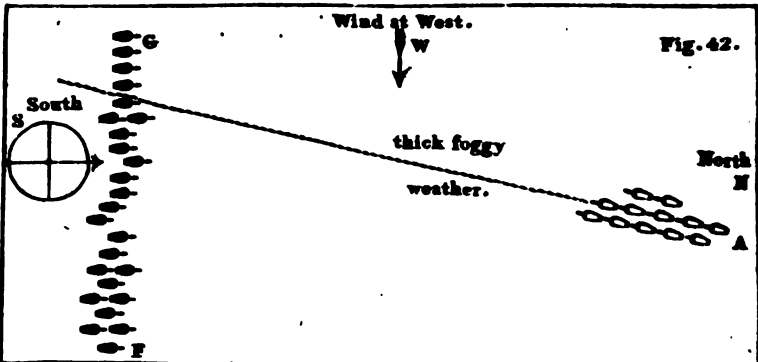
Upon the whole of this investigation, Part I. and Part II. with respect to the nature of both attacks, it may be concluded, that the attack from the leeward quarter can be executed with the greatest number of advantages, of which it is not one of the least, that when a ship of the leeward fleet comes to be crippled, she will still continue to remain under the protection of her friends. Whereas, on the contrary, should a ship of the fleet to windward come to be crippled, she will fall immediately into the power of her enemies, (as per Fig. 2. Plate 1.)

SECTION IV.

THE PERPENDICULAR ATTACK, OR THE ATTACK AT RIGHT ANGLES.

The following case, not very probable indeed, but as it some time or other may happen, and as





it has some affinity to the attack from the leeward, is introduced in this place.

Plate XI. Fig. 42. Let us suppose the wind at west at W, and the numerous fleet F G in an irregular and disorderly line abreast, extended to a great length from windward to leeward, that is, from the western to the eastern quarter, and let them be proceeding on their way to the northward from F towards A. At A, let an opponent fleet be discovered ahead at some miles distance, and suppose this fleet A shall be greatly inferior in number, yet still the fleet F G must be considered as in a very dangerous situation.

How the fleet F G has got into such a situation, is not so easy a matter to be explained, unless we shall be allowed to imagine, that its being found extended in a line abreast from windward to leeward, might be accounted for in this manner; that having, for some time before, been working to windward, with the wind either at south at S, or at north at N; and afterwards the wind coming around all of a sudden to the west at W, that there was not time to arrange the ships accordingly. Again, let us suppose this to have taken place near day-break, that there was a fog so thick that the situation of the ships could not be discerned, and that, unsuspecting of the neighbourhood of an enemy, which could be able to contend with them,

they were careless, but that they were firing guns as signals for restoring their intended order.

Again, let us suppose an opponent fleet A, in the course of a cruise, and upon the look-out, that he shall have heard the above signals, and, upon the clearing up of the fog, that he shall discover this enemy in the circumstances as described, but extended to such a length from windward to leeward, as to satisfy him, that, although their numbers were great, yet it might be possible to attack them with much advantage. It might be reasoned thus: The right wing F, of this enemy, is at so great a distance, and so far to leeward of the left wing G, that should an attack be made upon this left wing, so far to windward, and this should be done with celerity, and before any material change could be effected in the disposition of their force, it will be next to impossible for this left wing G to receive the smallest assistance from F, the ships so far to leeward.

Plate XI. Fig. 43. Accordingly, let us imagine that this opponent A, with his fleet, although inferior in number, as two to one, shall push on, with every sail set, and at right angles, that he shall cut asunder this enemy's line abreast at B, but in such proportion that he shall be superior in force to the ships G to windward, so cut off and separated.

Plate XI. Fig. 44. Again, suppose this fleet of A to have passed on ahead towards the south at C, and that the whole of the force, and in particular the rear, shall have tacked and come up again with G, is it not easy to conceive, that this unfortunate division being in this manner cut off and prevented from flying to leeward, must submit to superior force, while, in the mean time, their friends, so far to leeward at F, after attempting every thing they can, will not have it in their power to give them the smallest assistance? In this singular case, it must be observed, that the several ships of the fleet A, in making this attack, must be on equal terms with those of the enemy, ship for ship, with their heads in opposition to each other.

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NAVAL TACTICS.

PART III.

AN

HISTORICAL SKETCH

OF

NAVAL TACTICS.

SINCE the study of Naval Tactics is of the greatest importance to this empire, and since the abilities and skill of British seamen, in the conduct and management of single ships, are so manifest, that nothing higher has existed in any one profession or department of life; it is therefore the more worthy of inquiry from what cause or accident it should have proceeded, that so little progress has been made, in the most important part of the subject; I mean, the mode of arranging and conducting of ships, when assembled in great fleets, for the purpose of advancing to battle.

It is not, however, intended that the Naval Tactics of the ancients should be understood to be affected by what has been said ; on the contrary, from history, we are made to believe that the conduct of their commanders, in most of their military operations at sea, was founded on principles equally applicable, and equally understood, with those which governed their military operations by land. Of this, the battles of Salamis, of Actium, &c. are examples.

That Naval History, in modern times, has not been so perfect in its information, may be admitted, if it is true, that, of all the numerous engagements at sea, with the Spaniards, with the Dutch, and with the French, spirited and successful as they sometimes were, not one satisfactory plan or description has been obtained, by which even the arrangement or movement of the different fleets could be discovered, more early than that of Admiral Matthews, in 1744 ; nor one, from which an idea of any system, of either attack or defence, can be formed, more early than that of Admiral Byng, in 1756.

From a distinction so remarkable as this, an idea has been suggested, of having Naval History divided into Periods, in which, by comprehending and distinguishing the particular changes of the weapons, in the shipping, or in the modes of practice, some cause, some essential error in principle, some

defects in conduct, will be discovered, from whence should have originated this singular difference of information, between the Naval Tactics of ancient and modern times; for it never can be imputed to the historian alone.

The History of Naval Tactics may therefore be divided into the following Periods:

The First Period will comprehend the time in which the progressive motion of ships and fleets, advancing to battle, had continued to be dependent upon, and confined to, the propulsive power of the oar, and while the decision of the contest was entrusted to the sword, as in the sea battles of antiquity, Salamis, Actium, &c. as before mentioned; with which also may be included the battle of Lepanto in 1571.

The Second Period includes the time that sails became the necessary, and almost the only means of the progression of ships, now of greater dimensions, more unwieldy, and no longer manageable by the exertion of the men within by oars. This Period begins with the Spanish Armada, comprehends the engagements between the English and the Dutch, together with the battles of Bantry Bay, Beachyhead, La Hogue in the seventeenth century, and of Malaga in 1719, of none of which have we been able to procure any particular plan or description, down to the year 1740.

The Third Period, then, with propriety, will

begin with those engagements of which we have been able to give a particular plan and description; that of Admiral Matthews in 1744, including Admiral Byng's engagement in 1756, Sir George Pocock's in 1758, together with those of the American war, from the year 1778 to 1782.

The year 1782, so much distinguished by extraordinary exertions of naval ability, at the same time that it will form the commencement of a Fourth Period in the History of Naval Tactics, will also give occasion to add a Fourth Part to this Work.

PERIOD I.

As long as the progressive motion of ships and fleets, advancing to battle, was dependent upon, perhaps confined to, the propelling power of the oar, and the decision of the contest was entrusted to the sword, so long the principles of arrangement and disposition of force, whether at sea or at land, setting aside the more immediate influence of storms of wind, could not but be nearly alike. For, when it is considered that the men engaged in both cases, at sea and on land, were often the same, actuated equally by courage or revenge, by fear or despair; that the means of advancing and retreating, and advancing again, were equally in

their power, and the weapons, offensive and defensive, nearly the same ; ships of war, with their complements of men on board, under such circumstances, not unaptly might be said to bear a near resemblance to cohorts, or battalions of infantry, or even to squadrons of cavalry, in the shock of battle.

Again, when we consider that ships, in those ancient days, were of small size, of little draught of water, and unembarrassed by the ebbing and flowing of tides, as in the Mediterranean ; that, by keeping close by the shore at all times, they could be concealed or covered behind headlands or islands ; fleets of this description, composed of numbers of ships, in like manner might be considered as resembling numerous corps of troops assembled and acting as armies at land, not only because they could form ambuscades or stratagems, but also could, on similar principles, attack, secure, or defend a strength, or strait, choosing and occupying their ground at pleasure, as at Salamis, or Actium, and as in many other instances exhibited between the Romans and Carthaginians, which it is needless to mention. And, to extend the bounds of this period, the battle of Lepanto, in 1571, may be included ; which differs only in this respect, that gunpowder was then known and used, but similar to, and even strictly connected with, ancient practice ; in so far, that the contest, notwithstand-

ing this knowledge of gunpowder, was decided by the sword alone. The vessels engaged, if not precisely of the same construction, were still about the same size, and were, in like manner, propelled in their motions with oars, by the manual exertion of the men on board.

That a fleet of this description, in these circumstances, when to windward, had advantages over the fleet to leeward, will not be denied. When advancing to make an attack, the effect of their impetus or shock must have been the greater from their having the wind in their favour; and, when desirous of declining an engagement, it was more in their power to retire, and more difficult for the leeward fleet to get up with them. But, in advancing to battle, both fleets were upon an equal footing, propelled by their oars, each galley having her prow opposed to that of her adversary. Whatever, therefore, were the weapons in use, catapultas, balistas, or cannon shot, as at Lepanto, placed, as they were, as a battery, in the fore part of the vessel, whether in making or sustaining an attack, neither fleet, in this respect, had any particular advantage over the other, whichever of them was to windward or leeward.

PERIOD II.

THE concurrence of many things uniting, would seem to mark out the bounds by which a second period in naval history may be distinguished. The extension of commerce and naval power to America and to the East Indies, while it protracted the length of voyages, increased also the hazard of the sea. The use of great guns being introduced, while at the same time they were increasing in weight and dimensions, were also multiplied in number, sometimes to the amount of an hundred on board. Ships, for these reasons, requiring to be of stronger construction, large and unwieldy, and no longer manageable by the manual exertion of the oar, were obliged to have recourse to the sail, as dependent on the wind alone, for carrying the requisite manœuvres into execution.

**OF SAILS, CONSIDERING THEIR EFFECT ON THE MOTION
OF A SHIP, COMPARED WITH OARS.**

But sails, however necessary for the managing of the motions of ships of larger construction, compared with oars, were inadequate to the various operations and movements required in the ancient practice and mode of battle. In a calm, they were

of no use ; and with the wind, could command, in the direction of the motion of the ship, little more than one half of the plane of the horizon, and this only to leeward.

OF CANNON SHOT, CONSIDERING ITS EFFECT AS COMING FROM THE PROW OF A GALLEY, OR FROM A SHIP'S BROADSIDE.

When guns were planted as a battery in the fore-castle, as they generally at first were in a galley, the application of their force, though inferior, at least with respect to number, was still in the same direction with the line of their course, and which course was perfectly under the command of the people within. But when planted on the sides of a ship, their force and effect, from the greater number, though irresistible compared with a galley, yet being at right angles with the line of her course, and this course depending upon a foreign agent, the wind, and not under an equal command of the people within, the effect and consequences of course became so completely changed and different, that every former idea of naval tactics was immediately overturned.

In the mean time, even during this extraordinary transition of circumstances, the naval exploits and enterprises were, many of them, spirited, and though not all of them decisive, were constantly

marked with strong effect. But when the ship itself, the means of moving that ship, and the weapons, were undergoing transitions so very extraordinary, it is not easy to conceive, that conduct adapted to such novelties could at once be established.

In the Introduction,* many of these exploits have already been enumerated; but how far the mode of conducting them was or was not the result of any particular system, remains yet a matter of inquiry.

OF THE SPANISH ARMADA.

Philip the Second, possessed of Spain, Portugal, and the riches of America, in planning the armament of the Spanish Armada, confident, and trusting in his great superiority, thought only of gratifying his resentment against Elizabeth and her subjects. His ships being constructed with lofty buildings at head and stern, which, like castles, might overtop and command the decks of the smaller ships of the English, neither himself nor his admirals were aware how unfit such unwieldy, ill-constructed, and, if possible, worse manned vessels, were for navigating seas that were narrow,

* See the General Introduction prefixed to Part I.

and in a northern climate, and where, at the same time, there was not one friendly port to leeward sufficient to receive or afford them shelter in case of accidents. But this cumbrous fleet (irresistible in his imagination), on approaching the Channel, while the ships of the English were everywhere to skulk or fly before it, was to proceed to the eastward to take on board the Prince of Parma with his troops, collected in the Low Countries, and, without interruption or difficulty of any kind whatever, was to enter the Thames, and at one blow to overwhelm Elizabeth.

On the part of the English, where can a more illustrious example of naval skill and foresight be met with, than in the conduct displayed in accomplishing the defeat and ruin of this Spanish Armada, in which the prudence of sustaining a defence, by suffering that immense armament to waste its force in an idle contention with the winds and waves, was no less conspicuous than the intrepidity and perseverance with which the repeated attacks were made?*

* See Introduction, p 5. Part I.

OF THE BRITISH CHANNEL.

That an estimate may be made of the probable success, or of the consequent hazard and risk, to which a numerous armament of great ships, engaged in an hostile enterprise of this kind, may be exposed, the British Channel should be carefully considered :

In the first place, as a barrier or boundary, defending and dividing us from all the rest of the world.

In the next place, as a sea, narrow, winding, and contracted by head-lands, in which the navigation, with all the skill and attention that can be given, is both difficult and dangerous to mariners, even the most familiar with it.

As a barrier or boundary, it forms one continued canal, connecting the German and Northern Oceans with the Atlantic, and extends in length to above 1000 miles. The banks of this canal, on the British shore to the south, where washed by the Channel, and opposite to France, far from being open and easy of descent to every invasion, as we have been made to believe, like this of the Spanish Armada, or any other of them, with which, as bugbears, we have been so often and long threatened, the coast is bold and dangerous ; and if it should be accessible in any one particular and

more interesting spot, as at Portsmouth, the country behind and within is so strong, that from the south, or across the Channel, every attempt to approach the capital, or to overrun the kingdom, with common attention given, must always be defeated.

Considering the Channel as a sea, narrow, winding, contracted and broken by head-lands, it is affected by rapid tides, forming innumerable dangerous shelves and banks. By the climate, and by its form, it is subjected to tempestuous and sudden changes of wind, so that the boldest and most experienced mariners, from arriving in soundings in approaching the mouth of the Channel, even with a leading wind, and keeping in the fair way, till they get into port, seldom are at ease. This is meant in the case of a single ship. But let any one, ever so conversant in this navigation, with every advantage of ports in his favour, say what his feelings have been, when on board of a British fleet cruising in the Channel, and then we may judge with respect to a numerous fleet of large ships, strangers, with dark nights and blowing weather, what the apprehensions and feelings may be as well of the officers on board, as of the statesman on shore, who wantonly commits and puts to hazard so great a part of the marine of his nation in one enterprise, and in such perils.

By an easterly wind (as often is the case with

our own ships) an hostile fleet may be long detained from entering the mouth of the Channel; and by a wind at west, when once embayed, suppose within the head-lands of Portland on the one shore, and La Hogue on the other, it will not be easy for them to return.* If the wind from the west continues, and begins to blow with violence, which it often and suddenly does, this fleet must put before it (for there is not one port on the opposite shore sufficient to receive and afford shelter for large ships for above 1500 miles from Brest, round to the entrance of the Baltic); and, passing the straits between Dover and Calais, over sands and through shelves, they must get, without remedy, into great disorder. But all the while this fleet, by the supposition, has hitherto met with no interruption or annoyance of any kind from Britain, the greater part of her force being occupied at a distance. What then ought to be the consequences, if followed by numberless ships, of every size and denomination, which, in such a case, and for this occasion only, may be fitted out, and collected from the different ports, which, incessantly hanging on the rear, are enabled to take advantage of every accident, many of them at all times,

* No fleet of French men of war has been within these head-lands since the battle of Cape La Hogue, May 19. 1692.

from the situation of the ports from whence they can be fitted out, being necessarily to windward, which way soever the wind shall blow? After considering these circumstances, is it to be imagined, that a fleet of ships from the southward, hostile to Britain, so large and so numerous, will ever, without great loss, be able to effect a return through the Channel? Will it not be expected, that they must be forced into the North Seas, where, if late in the season, in the high latitude of 60 degrees, they will have to encounter all the horrors of winter, long nights, and continual storms, not less formidable than any thing experienced by Lord Anson when doubling Cape Horn, as lately felt by the armament commanded by Monsieur Thurot?

Of such a nature was the route planned for the Spanish Armada by Philip the Second, and by following which route was this mighty enterprise defeated.

OF THE BATTLES WITH THE DUTCH.

The engagements with the Dutch, still later, by almost one hundred years, than the Spanish Armada, glorious as they were to both nations, as exhibitions of courage and perseverance, give little information with regard to a progress or improvement in Naval Tactics. The only idea which I

have been able to form of them, is that of numerous squadrons assembled, to the amount of 250 or 300 ships, jambed together in narrow seas (the Channel), where they have been confined by the shores on each side, and deprived, in a great measure, of every chance of manœuvring.—Here, in one place, ships in clusters entangled with one another, and, independent of all order, getting foul, each of their antagonists; there, again, in another part of the scene, one ship, single and alone, unsupported, and beset with many enemies, left to make the most gallant resistance she could. Of course, on both sides, much bloodshed and loss of shipping must have been sustained. But, in these engagements, they differed in this from the case of the Spanish Armada, that each of the parties had their ports under their lee, to which they could retire, and from whence they could sally forth at pleasure, so soon as refitted.

OF SIGNALS, THE INVENTION OF WHICH, ABOUT THIS TIME, IS ASCRIBED TO THE DUKE OF YORK.

The invention of signals is generally ascribed to the Duke of York about this time. This, however, is absolutely incredible. He might, indeed, have improved them, but the invention must have been of older date. How could any military operation at sea or on land be conducted without sig-

nals? It cannot be believed that, in reducing the subject of signals to any kind of *system*, he had made much progress, if it is necessary that Admirals, to this day, when entering upon the command of an expedition, have to compose a particular system for themselves; an attempt which must be attended with much inconvenience; for it is not conceivable of any new code of signals, however simplified it may be, that it can be made familiar to every officer in a numerous fleet in the course of a few days, or even weeks; and therefore is the more absurd if an enemy is to be encountered with immediately, which has sometimes been the case after a few hours departure from port.

OF NAVAL INSTRUCTIONS.

The Naval Instructions about this time formed, for having ships extended in line of battle, and which were founded upon the occasion of the above mentioned battles with the Dutch, in order to serve the immediate purpose of fighting in narrow seas, if ill qualified (as said in another place *) for bringing on an action with a fleet of ships unwilling to come to a shock, and having sea-room to

* See Introduction prefixed to Part I. p. 16.

range in at pleasure, they have been no less unfortunate in promoting the means of information ; since, of all those numerous engagements, so little of system, so little of the disposition or movement of fleets has been comprehended, that the historian Mr David Hume, accurate and intelligent as he was in every other subject of inquiry, giving up the point, as it would seem, has the following passage :
“ There is a natural confusion attending sea-fights, even beyond other military transactions, derived from the precarious operations of winds and tides, as well as from the smoke and darkness in which every thing is there involved ; no wonder, therefore, that relations of these battles are apt to contain uncertainties and contradictions, especially when compared by writers of the hostile nations, who take a pleasure in exalting their own advantages, and suppressing those of the enemy.”*

The part of Mr Hume's history from which this passage is quoted, was not finished till almost an hundred years after the battles in question, and not till after he might have consulted the description of these others, Bantry Bay, Beachy-Head, and La Hogue. He had likewise the assistance which might be procured from the battles fought in his own time ; that of Malaga in 1719, that of

* History of England, Vol. VII. p. 507. 8vo. edit. 1778.

Admiral Matthews in 1744, and that of Admiral Byng in 1756 ; together with every degree of information which could be acquired from the trials which took place in consequence of the two last, both long and circumstantial.* Mr Hume, at the same time, nothing at a loss when a battle at land is to be described, but, like other historians, with infinite pains, is sure to preface the same with a detail of every circumstance of situation, advantage or disadvantage of ground, by which the reader is made to foresee whichever of the parties shall obtain the victory.

Other writers, equally successful in their detail of military transactions at land, but not a whit more fortunate in their conceptions of operations at sea, talk of agility of shipping, of their heroes rushing furious through the squadrons of the enemy, of rushing to battle, of presenting themselves to every danger, of plunging into the middle of the foe, &c. ; phrases applicable only to military operations at land, and consistent and perhaps in use, in speaking even of transactions at sea, when galleys, as in the ancient times, were propelled in every di-

* A later writer still, Mr M'Pherson, when speaking of the battle of La Hogue, has these words : " The confusion " and want of plan which prevails in all naval engagements, " ought to have saved the victors from the censure which " writers have thrown on their conduct."

rection with the oar, and actuated upon, and influenced by, the passions of men within the vessel; but altogether inconsistent with the motions of unwieldy shipping, manageable only with the sails, confined, as they must always be, to particular movements, as mere machines, dependent on the immediate effect of the wind alone, as they are in these days.

Is it to the historian, then, that we are to impute this confusion of ideas, the continuation of the use of such phrases, and this so particular defect of information? No; for historians must have adhered to the spirit of the descriptions which have been put into their hands. Is it to the vanity of commanders, desirous of extolling and magnifying their own exploits? No; it can only be attributed to the particular state of things at the time, that the intellectuals of men, deranged by so complete a transition of so many circumstances combined, as before enumerated, have not as yet recovered any proper idea of system, or principles of conduct, adapted to such novelties.

PERIOD III.

Supposing Period Third to commence about anno 1740, and to conclude with the end of the year 1781, it will be distinguished by those sea en-

gagements of which we have been able to procure such an authentic and substantial information of circumstances, as could authorise a particular plan and description. But, before proceeding farther with this investigation, it will be necessary to premise a few general principles.

GENERAL PRINCIPLES.

CASE I. A commander who shall have so disposed of his force, that no one division or part can be attacked, without a possibility of being immediately supported by the whole, or at least by some other part, has taken not only the first precaution to prevent a defeat, but also has taken the first step to obtain a victory.

CASE II. The commander who, in leading on his force, shall make his attack with great superiority, upon any one division or part of his enemy, and while this division shall be posted so as it cannot be supported, has, in like manner, not only taken the first step to obtain a victory, but also has laid hold of the first precaution to secure a retreat, should it ever be necessary.

CASE III. Hence, on the other hand, and in opposition to Case I. should ever a commander have so disposed of his force, that any one division or part may be attacked, by a great superiority, without a possibility of having it supported by the

whole, or by any one part of his remaining force, that commander must be defeated.

CASE IV. Hence also, in reverse of Case II. a commander who, by the mode of his attack, shall so dispose of his force, that any one division or part, difficult to be supported, shall be exposed to his enemy when greatly superior, suppose it a cannonade greater, by many degrees, than he can bring up to oppose it, such commander undoubtedly will be worsted.

That rules, such as these, are applicable to, and should have influence upon, military operations at sea as well as at land, every one will allow. By them, the following strictures upon modern naval practice, and the modes of attack which have been proposed, must be judged; and to some error or neglect of them it is, that the defect of information, which has distinguished the former period, must be imputed.

**OF THE MOVEMENTS OF SHIPS AND FLEETS IN RELATION
TO EACH OTHER.**

Ships, or fleets, managed as they are in these days with sails only, though not, as animals, self-moving bodies, that is, under the perfect command of the men within, to be carried with oars against wind and tide, at pleasure, in every direction, yet, considered as machines, governed by, and confined

to, the laws of mechanics ; their paths in the sea, and their military evolutions, may be traced and delineated upon proper principles. Now, the moving power or agent being the wind, and this affecting any number of them mutually, at one and the same time, and in the same direction, as in the case of fleets when in opposition, the movement of the several ships or fleets, in relation to each other, will be reciprocal, consonant, and regular.

Not only ships, but whole fleets, in hostile opposition, when in the same stream of wind, must equally, and, at the same time, both of them in their motions relatively, be so affected, that, supposing the face of the sea to be conceived as a plane, on paper, and the wind as a point A (Plate XII. Fig. 13.), from which both fleets B and F are operated upon ; we also may carry the supposition so far as to conceive that both might be affected in some way, as suspended from the same point, as at the pendulum D, D, D.

Hence, when considering the connexion between two fleets, supposing the one to be to windward of the other, whatever way the wind shall veer about, both being dependent on the same wind, the motion and manœuvring of each, in relation to each other, can still be of the same nature.

HISTORICAL SKETCH

Of the relative motion of Fleets as dependant on the bearing of the wind

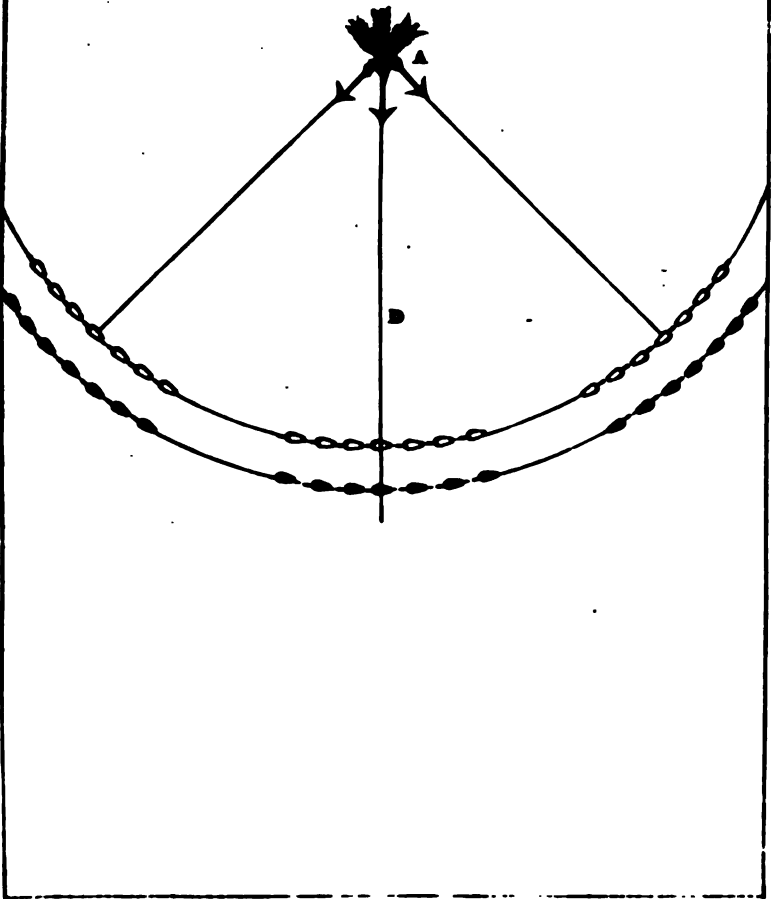


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PLATE 29

PLATE 30

OF THE FACE OF THE OCEAN, CONSIDERING IT AS A FIELD FOR THE MILITARY OPERATIONS OF HOSTILE FLEETS.

That the face of the ocean, considering it as a field for military operations, but more particularly as a field for immediate engagement, the hostile fleets opposed, having neither rivers, ravines, banks, woods, or mountains, to stop progress, or interrupt the sight, so that ambuscades or stratagems can be formed, and while each are extended in line of battle, where every individual ship, and the line into which she belongs, is operated upon by the same wind, at the same time, and, by the laws of mechanism, confined to movements in every respect consonant in relation to each other; should not every occurrence, every transaction, for these reasons, and in such circumstances, be the more easily conceived, understood, and explained, than even in military operations on land?

A fleet on the face of the ocean, on the defensive, extended in line of battle, and prepared to receive an enemy coming down to make an attack, as has been the late practice, from the windward, may be compared to an army posted to great advantage, and provided with numerous batteries of cannon, impenetrable if attacked in front; and should any such attack be made, that each ship,

comparing it with a single battalion, or party of cavalry, may retire, suppose to leeward, under cover of seconds on either side (ahead and astern), and choosing a new position, from whence the enemy could be annoyed again and again, this may be repeated with equal advantage as at first, while the fleet, and each ship that makes such an attack must be ruined, crippled, and rendered incapable of pursuing or following.

OF THE APPLICATION OF THE FOREGOING PRINCIPLES
AND IDEAS, WITH SOME OF THE SEA ENGAGEMENTS
OF THIS PERIOD OF NAVAL HISTORY.

Admiral Matthews' engagement in 1744 is the first of this Third Period of Naval History; it is also the first in the list of those of which we have been able to procure authentic and substantial information of circumstances; it is also the first to be considered, with respect to the application of the foregoing principles, &c.

APPLICATION OF THESE PRINCIPLES TO THE CONDUCT
OF ADMIRAL MATTHEWS, AS MAKING THE ATTACK.

According to Case II. for example, the commander who, in leading on his force, shall make his attack with great superiority, upon any one division or part of his enemy, and this division so

posted that it cannot be supported, has taken the first step to obtain a victory.

By the position of Admiral Matthews' fleet before the engagement, his force was so disposed, that, had that force been led on, or had the force which was led on been supported as it should have been, the attack might have been made with such a superiority, that the Spanish Admiral, with the ships in his rear astern of him, separated as they were from the van and centre of the combined fleet, there is not a doubt that the whole might have been cut off.

But, considering this attack in another view, and according to principles, Case IV. that Mr Matthews, by carrying down his ship the *Namur*, and her seconds the *Norfolk* and *Marlborough*, in the manner he did, had them exposed to a cannonade, unfortunately greater, by many degrees, than he could at the time bring to oppose against it, and by which these ships were so disabled, that, had the Spaniards thought fit to retire (a manœuvre which the French, their allies, have many times since, on the like occasion, put in practice), Mr Matthews neither could have stopped them, nor could he have followed them.*

* *Vide* Admiral Matthews' Engagement, Part I. p. 126. and Plate XVI. Fig. 2.

APPLICATION OF THE SAME PRINCIPLES TO THE CONDUCT OF THE SPANISH ADMIRAL.

Considering that the fleet of the Spanish Admiral was extended to a great length, that he was separated at a great distance from both his van and centre, and that his own division was left unsupported; according to principles, Case III. he should have been defeated.

Again, in another view, had the principles, as laid down, been thought applicable by the Spanish commander, or had he been instructed, or aware of what has since been the practice of French commanders; neither would he have neglected to avail himself of disabling Mr Matthews, while coming down to attack him, that is, while he had the superiority of fire in his favour; nor would he, by patiently lying still, have given time sufficient for Mr Matthews to retaliate, by disabling him in his turn, but, unhurt, would have withdrawn his ships from battle for the present; and, by bearing away, would have attained a new situation, where he might be out of the reach of cannon-shot, and where he might be in preparation to form a new line of battle to leeward, No. 17.

OF ADMIRAL BYNG'S ENGAGEMENT, CONSIDERING HOW IT MAY BE AFFECTED BY THE APPLICATION OF THE FOREGOING PRINCIPLES.

In Admiral Byng's engagement, twelve years after that of Mr Matthews, the French *now* themselves alone the opponents, their mode of defence adopted,* though defective with respect to the disposition of their force, according to principles, Case II. and which has been proved in another place;† yet, considering the mode in which the attack was made upon them, seems to be the best which could be imagined in their situation and circumstances. In great strength, arranged in line of battle themselves, they not only disabled their enemy while coming on to attack them, but, unhurt, they retreated, and accomplished, in the most complete manner, the full purpose of their destination, by making prize of the castle and island of Minorca.

That the French were in noways beholden to chance for such defence, but that it was studied and intended, must be evident from this, that, in every one of the many engagements which they

* *Vide* No. 48. Part I. Byng's Engagement.

† The mode of attack proposed, p. 142. Part I.

have had with our fleets since that time, when to leeward, as on this occasion, it has been the mode they have put in practice, and it has been justified by an equal degree of success, in every instance.

If, then, this state of the subject shall be admitted to be just, Admiral Byng's engagement off Minorca, May 20. 1756, will be the first in modern times from which any degree of system can be formed.

Again, with respect to the mode of attack, the part which Mr Byng had in the action, how applicable soever it is with principles Case IV., his van, by this mode of attack, was so disposed, that it could not be supported. It was exposed, while coming down, to a cannonade greater by many degrees than could be brought at the time against it; and being thereby disabled, and rendered incapable of following or pursuing his enemy, and the purpose of his destination left unaccomplished, Mr Byng must be allowed to have been worsted. This attack appears to have been founded upon an idea of taking, destroying, or disabling, the whole of an enemy's fleet, and, upon this idea, to have assumed a line of approach improper, as having given the enemy the greatest possible advantage.

In the mode of attack according to this idea, of taking, destroying, or disabling the whole of an enemy's fleet, extended in line of battle, two lines of approach have been distinguished; the first, the

line of intersection, the line of nearest approach, or lasking line, as put in practice, and so named by Mr Byng; the other, that line put in practice by Sir George Pocock in his engagement, April 29. 1758, two years after, in the East Indies, and which, for distinction sake, has been termed the line of pursuit, or curve of pursuit.

Of the first of these lines (the lasking line), five examples have been collected; and, upon these examples, as classed in Section I. p. 45. Part I. the observations and demonstrations, pointing out the defects in the accustomed mode of attack from the windward, are founded.

Of the second of these lines, the line of pursuit, it has *also* been defined in the description given of Sir George Pocock's engagement in the East Indies. It is not, however, wished to be understood that some one, or all of these five examples given, do not, in some degree, partake of the properties of both of these lines, or that Sir George Pocock's engagement, because of this distinction, should not be included in the same class with these five examples, but because, on no other occasion, has any thing been said that could give rise to have this line of pursuit defined so accurately as in this engagement of Sir George Pocock.

OTHER OBSERVATIONS, BUT APPLICABLE TO PERIOD
THIRD ONLY.

1. That, in the many engagements with which this third period has been distinguished, the enemy, whether they were to windward or to leeward, have never once attempted to make or begin the attack.

2. That not only through the whole, has this period been distinguished by a fashion of exalting the character of the ships of the enemy, in point of sailing, compared with our own ; but, for the greater part, it has been distinguished by a fashion, as pernicious as unjust, viz. that of deprecating the character of British seamen.

A gentleman*, but not of the profession, after reading the foregoing naval inquiry as it was first printed, communicated to me the following observation :—“ The only thing which tempts one to entertain a doubt with respect to your system is, that the beneficial effects are so manifest, that one wonders they should not have occurred to professional men.”

To which observation, after what has been said, it is sufficient to reply, that some defect has existed somewhere ; for if the many examples given

* Dr Adam Smith, author of the Wealth of Nations.

during this last period shall be considered, the uniformity of effect, shown by them to have taken place, authorises us to conclude, that chance of war had not been concerned; for otherwise some one unlucky ship might have been taken or sunk, or might have been blown up in the air, accidents frequent, nay infallibly attendant on such other occasions, during the course of the former period of naval history.



NAVAL TACTICS.

PART IV.

INTRODUCTION.

WITH the year 1782, the last of the American war, remarkable for a series of interesting events, and of new and singular exertions of naval ability, we will begin the Fourth part of this work. The fortunate turn which then was given to naval affairs, and the splendid achievements then performed, render that important year the proper commencement of a Fourth period in the history of Naval Tactics. But, although victories, equally splendid with those of the year 1782, have been recently obtained,* and merit particular examination in a treatise on Naval Tactics, yet this part of the present

* Earl Howe's, 1st of June 1796.—Earl of St Vincent's, 14th of February 1797.

work does not profess to embrace any account of these late glorious transactions, and will extend no farther than what was originally proposed.

That the whole of this fourth part was written while the author was under the immediate impression of the enthusiasm excited by the merit of the actions at the time, he cannot deny: nor will he dissemble, that the event, with the consideration of which this part is to commence, viz. the plan and enterprize to relieve the island of St Christophers, is, of all naval exhibitions, the first which had given him any real pleasure in making the description. With respect to the other observations, they express what were the feelings of most people at the time; and now, after a lapse of more than twenty years, he has not yet seen reason sufficient to induce him to make any alterations.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is essential for ensuring transparency and accountability in the organization's operations.

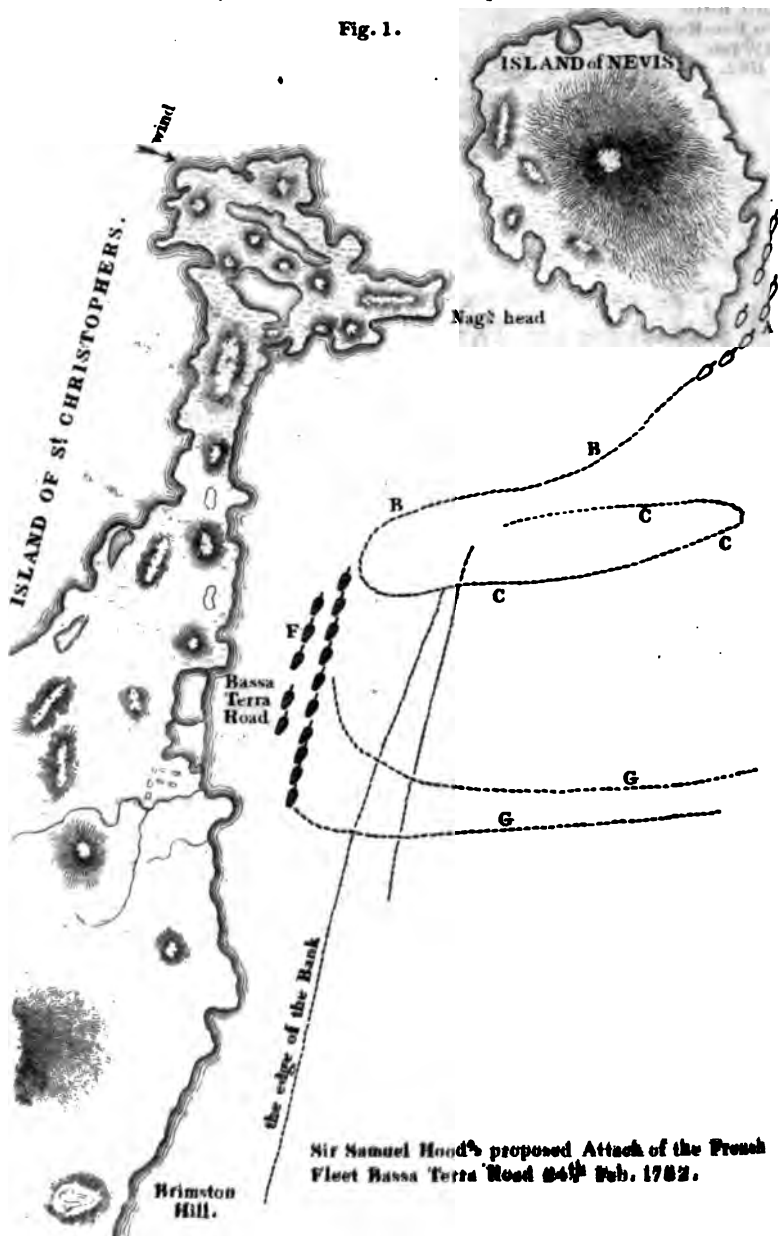
2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to support informed decision-making.

3. The third part of the document focuses on the role of technology in data management and analysis. It discusses how modern software solutions can streamline data collection, storage, and reporting, thereby improving efficiency and accuracy.

4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and privacy. It provides strategies to mitigate these risks and ensure that data is used responsibly and ethically.

5. The fifth part of the document concludes by summarizing the key findings and recommendations. It stresses the importance of ongoing monitoring and evaluation to ensure that data management practices remain effective and up-to-date.

Fig. 1.



Sir Samuel Hood's proposed Attack of the French Fleet Bassa Terra Road 24th Feb. 1782.

SIR SAMUEL HOOD'S ENGAGEMENT.

DESCRIPTION OF THE SEVERAL ACTIONS BETWEEN THE BRITISH FLEET, COMMANDED BY SIR SAMUEL HOOD, AND THE FRENCH FLEET, COMMANDED BY COUNT DE GRASSE, OFF ST CHRISTOPHERS, THE 24TH, 25TH, AND 26TH OF FEBRUARY 1782.

A few months after the unfortunate catastrophe of Lord Cornwallis's army at York-Town in the Chesapeake river, Sir Samuel Hood being at Barbadoes, and hearing that an attack had been made upon the island of St Christophers, by a powerful armament under the command of Count de Grasse, set sail for its relief with twenty-two ships of the line, five frigates, and two schooners. He arrived off the south-east end of the island of Nevis, at day-break of the 24th February 1782; when, directing the squadron to be formed in line of battle, he determined to attack the fleet of the enemy, consisting of thirty-three ships, and then lying at anchor in Bassa Terra Road, island of St Christophers.

Plate XIII. Fig. 1. A, The British fleet supposed on their course round the island of Nevis, on the morning of the 24th. F', The fleet of the

enemy at anchor in Bassa Terra Road, having their van far to windward of the rear.

Sir Samuel's instructions to each ship, given in St John's Road, Antigua, were, "To stand on till abreast of the van of the enemy, as per course B B; and after having delivered each ship her whole fire upon the two headmost ships of the enemy, to haul off in succession, as per course C C C; and then, by tacking, to return in the same succession, and again, and again, to repeat each ship her whole fire." By which ingenious method it was intended, first, to cut off or destroy these two headmost ships, which being effected, to repeat, in the same manner, the attack upon the next two ships astern.

The misfortune of the ship Alfred running aboard of the Nymph in the morning, soon after the signal was thrown out, occasioning much delay, the enemy had intelligence of Sir Samuel's approach; and, dreading the consequences of an attack, in the situation they were then in, quitted their anchorage and put to sea, as per course G G; and in the afternoon, and during the whole night of the 24th, kept three or four miles to leeward of the British fleet, which was still under the west end of the island of Nevis.

EXTRACT OF SIR SAMUEL HOOD'S LETTER.

“ At day-light of the 25th, we plainly discovered 33 sail of the enemy's ships, 29 of which of two decks formed in a line ahead. I made every appearance of an attack, which threw the Count De Grasse a little from the shore: And as I thought I had a fair prospect of gaining the anchorage he left, and well knowing it was the only chance I had of saving the island, if it was to be saved, I pushed for it, and succeeded, by having my rear and part of my centre engaged.

“ The enemy gave a preference to Commodore Affleck; but he kept up so noble a fire, and was so supported by his seconds, Captain Cornwallis and Lord Robert Manners, that the loss and damages sustained in those ships were but trifling, and they very much preserved the other ships in the rear,” &c. (*And afterwards he says*), “ Would the event of a battle have determined the fate of the island, I would without hesitation have attacked the enemy, from a knowledge how much was to be expected from an English squadron, commanded by men amongst whom is no other contention than who should be most forward in rendering services to his king and country: herein I placed the utmost confi-

“ dence, and should not, I trust, have been dis-
 “ appointed.

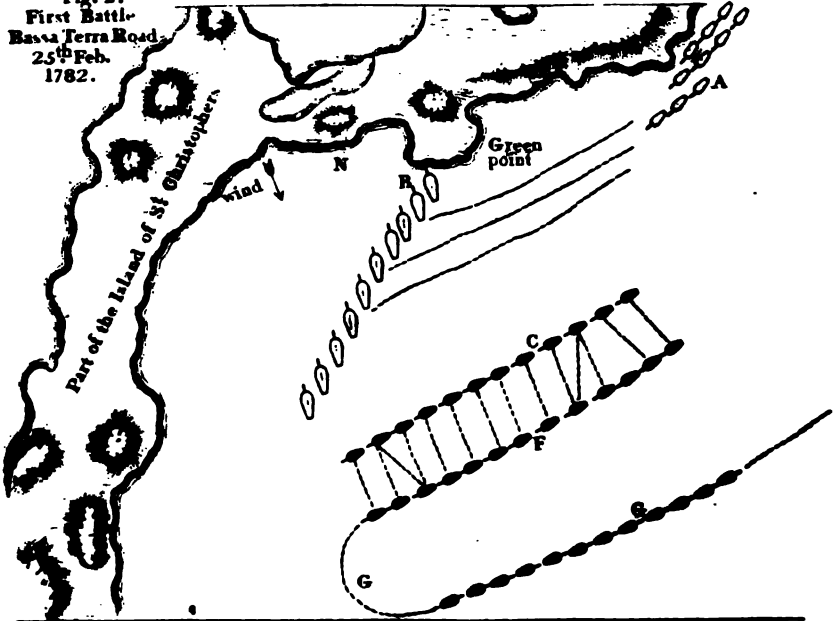
“ I anchored his Majesty’s squadron in a close
 “ line ahead. Next morning about eight o’clock,
 “ I was attacked from van to rear with the whole
 “ force of the enemy (29 sail), for nearly two hours,
 “ without having the least visible impression made
 “ upon my line. The French ships then wore
 “ and stood off again, and in the afternoon began
 “ a second attack upon my centre and rear, with no
 “ better success than before; since which the Count
 “ De Grasse has kept a safe distance.—Many
 “ of the French ships have suffered considerably.”

DESCRIPTION.

Plate XIV. Fig. 2. A, Sir Samuel Hood, with the British fleet lying off the north-west end of the island of Nevis in the morning of the 25th February at day-light, and intending to bring his fleet to an anchor in the ground Count de Grasse had left; but, at the same time, endeavouring to amuse the Count with the appearance of a design of making an attack upon him.

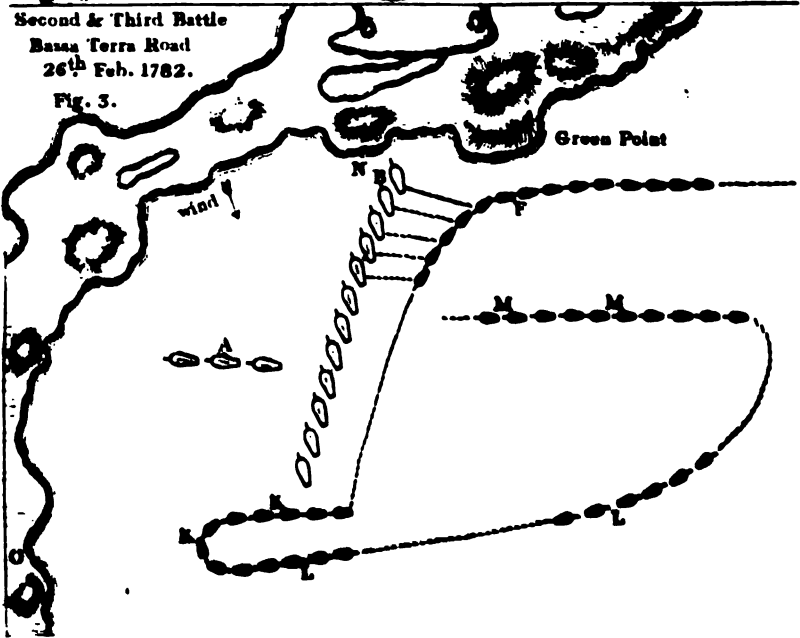
B, The van of the British squadron now come to an anchor under Green Point in a close line ahead, and with springs to bring the broadside of each ship to bear upon an enemy, who might attempt to come down and attack them.

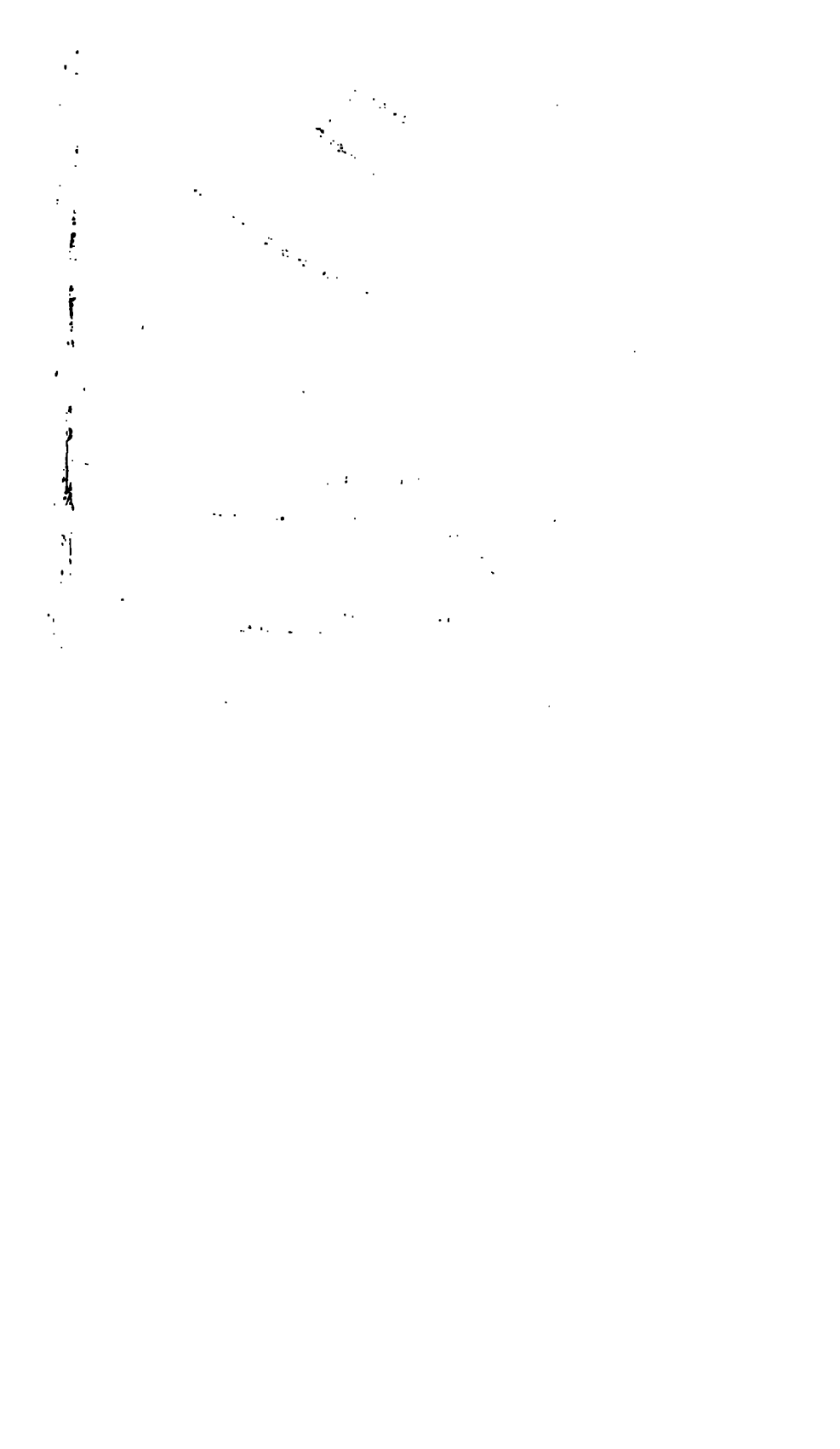
Fig. 2.
First Battle
Bassa Terra Road
25th Feb.
1782.



Second & Third Battle
Bassa Terra Road
26th Feb. 1782.

Fig. 3.





C, The rear of the British fleet under Commodore Affleck, with part of the centre, sustaining, while coming to anchor, an attack from the enemy.

F, The French cannonading; but at such a distance, as nowise obstructed the British squadron from coming to an anchor.

The French fleet then wore and stood off to sea again, as per course G G.

Plate XIV. Fig. 3. A, The Alfred, Canada, and Resolution, in the morning of the 26th, at six o'clock, having been ordered to shift their ground, as the evening before they had anchored too far to leeward, and too near to the edge of the bank,* and being under way, these ships, from this position, had it more in their power to overawe the enemy, and prevent them from doubling back upon the British squadron, when they came to make the attack some hours after.

B, The British squadron in the morning, consisting of other 19 ships, at an anchor with springs, so that each ship in the line might, at one and the same time, be brought to bear upon an enemy coming down to make an attack.

F, The French fleet, about eight o'clock in the morning, advancing to the attack with 29 ships; and,

* Without the bank, from the immediate depth of water, there is no anchorage.

having begun the attack upon the van, as at H, they ranged along the whole British line, as per dotted line of course I I; then hauling up astern, as at K K, they evidently meant to rake the ships in our rear, or might have intended to have doubled back towards A; but overawed by the three fore-said ships, the Alfred, Canada, and Resolution, under way at A, they wore in succession, and hauled off to sea, as per course L L L.

M M, The enemy now on the starboard tack, and on the return to the second attack, which they made upon the centre and rear, in the afternoon of the same day, after having taken such an offing as enabled them to fetch our fleet.

N, Guana Hill, from which the British squadron was threatened to be bombarded.

O, Mooring's Hills, where General Prescott had the skirmish with the Irish brigade; and where Monsieur de Bouille declined attacking him.

The enemy afterwards kept in the offing, not choosing to make another attack upon Sir Samuel, who, not having it in his power to give further assistance to the island, after ten or twelve days, cut his cables, laying hold of the opportunity, while the enemy had come to an anchor off the island of Nevis; and taking his course by the north end of the island of St Christophers, and by Sambriro, stood to the northward.

OBSERVATIONS.

The singularity, or rather novelty, of this affair, so very important in all its consequences, cannot be passed over without endeavouring to give it a full consideration; and that this may be done with the greater impartiality, it will be necessary to state the facts simply as they are.

Hearing that a fleet of 33 ships of the enemy were lying at anchor, Bassa Terra Road, in support of the powerful attack which they were then making upon the island of St Christophers, Sir Samuel Hood, with a much inferior force, consisting of 22 ships only, resolves to attack them in this situation.

The French, discovering his intentions before his approach, and feeling, it seems, the situation which they were in disadvantageous, quitted it, and put to sea.

Sir Samuel, thus disappointed in his intended attack, but confident that the obtaining a communication with, and supporting the same, was the only chance left him of saving the island, by a daring stroke in seamanship, seldom before this time attempted, in the face of this enemy, and even while in the act of sustaining a furious attack from the enemy, brings his fleet to an anchor in the self-same position, or station, which they but a little

before, and with a fleet so very much superior, had quitted, as thinking it untenable.

The enemy first having suffered themselves to be dislodged, and afterwards having suffered this inferior fleet to come to an anchor, determined, if possible, to wipe off the double affront, by attempting an attack in their turn.

But this attack was either so ill-conducted, or so feebly supported, that, though it was twice attempted, they, as unequal to the task, patiently permitted the British Admiral to keep his post for 12 days, without ever afterwards attempting to disturb him.

On the part of the enemy there were here no accidents, which, as in all other former cases, might be laid hold of, and held up as an excuse for want of success; nothing from winds, tides, or blowing up of particular ships; not the loss of a single mast or yard to furnish the shadow of an excuse, either for quitting their anchorage, or, after they had, for not overpowering with their numbers so inferior a fleet, occupying, and even fixed to, an anchorage, and affording an equal opportunity of being attacked for 12 successive days.

On the part of the British will be found a plan, gallantly, but prudently formed, to attack a force superior, as three to two, which if it was not put into execution, it was because the enemy had prudently declined. Again, in consequence of a still

more daring plan having been formed immediately upon the above disappointment, we find them, in defiance of all former rules (in the face of this superior fleet, who had taken every means of obstruction, and even while they were maintaining a combat with this fleet), bringing their ships to an anchor without a possibility of being prevented. Afterwards, we find them disposed at anchor in so masterly a manner, that little loss was sustained, though two several attacks were made in the same day, by an enemy who had it in their choice to take every advantage.

Lastly, that there might be nothing wanting to establish a complete proof of British superiority, we find them keeping, without difficulty, that post which had been thought untenable, sending relief on shore, and maintaining a communication with the island for 12 days, without interruption.

During the more ancient and even more heroic days of naval prowess, one fleet, at one time, might have had the good fortune to show their valour in the attack, as those at Cadiz, at Vigo, &c.; and another fleet, at another time, might have been so happy as to have an opportunity of exhibiting their steadiness in sustaining an attack, such as that under Blake in the Downs; but on no occasion whatever has one and the same fleet been so fortunate, as in this of Sir Samuel Hood forcing their opponents to so complete and unequivocal an

acknowledgment of their superiority in both cases, whether we shall consider their courage and perseverance, or their skill in seamanship.

As there can be no doubt that this contrast drawn between the two fleets is a just one, what ought then to be the feelings of our countrymen upon this occasion, compared to that state of universal despondence into which the whole nation was plunged but a few months before ?

Perhaps it may be said, by those who wish to lower or depreciate the importance of this event, that the enemy, being conscious of their great superiority in the West Indies, had, without thinking it necessary to take the proper precautions, come to an anchor in disorder ; but, not thinking it proper for them to sustain, or permit an attack in this state from a fleet even much inferior, had prudently quitted their anchorage ; or, being advised of the approach of the British fleet, inferior in strength, they had put to sea, with the intention to cut off all hopes of their making a retreat ; or, being satisfied of the importance of possessing a superior fleet to the end of the war, and knowing, at the same time, that nothing could be done effectually to retard their operations in taking the island, they were determined to risk nothing.

All this, however, if it proves any thing, proves their inferiority in seamanship, or that they were determined to fight shy, as they had done on every

former occasion, and should as effectually exalt the spirits and courage of British seamen, as it should depress those of the enemy.

It has been asked, it is true, Why should not this fleet have put to sea? Twenty-two well coppered ships, of which it consisted, might be said to have been a match sufficient for the fleet of Count de Grasse, although superior in number. No opinion will be given on this point; but, from the whole of the conduct, and, by keeping this station so long in the face of such a superior force, it should show what might have been the fortunate issue, had the British fleet at once been carried into the Chesapeak in support of Lord Cornwallis, in place of the vain and fruitless attempt of bringing the enemy to action, but a few months before, on the 5th of September 1781, which was afterwards attended with such dreadful consequences.*

* About two or three years after these engagements off St Christophers, being in conversation with a gentleman, an officer who commanded a ship there at the time, and who, rather offended with the observations expressed as above (for he, it seems, had been of a different opinion from the Admiral, about the plan of the service projected), upon being asked, what truly had passed in his mind on seeing his gallant friend Commodore Affleck bringing to an anchor the rear of the fleet, while yet warmly engaged with the enemy? (for the ship commanded by this officer had been among the first

**SIR GEORGE BRYDGES RODNEY'S
ENGAGEMENT,****ON THE 12TH APRIL 1782.****INTRODUCTION.**

IT is with great pleasure that we still are able to bring forward an accurate description, and in all its great extent, of Sir George Brydges Rodney's most celebrated battle of the 12th of April; and that the accuracy of this description may be properly supported, we have only to mention, that besides Lord Rodney's letters to the Admiralty, we

in the van to be brought to an anchor), "Why, ay," says he, with an enthusiastic agitation, "why, ay, that was a magnificent sight, a sight the most interesting that ever was seen!" And how was it the next day, while the enemy made their attack, and twice run down along your line from van to rear, without being able to make impression upon a single ship? "Why, ay," returned he again, "that was still more glorious indeed; and there was not a boy on board the whole fleet, who did not feel he was a sea-man." And a British seaman, thought I, a character the like of which never did in the world exist before. This is all I have to require, was my reply; for it was the spirit and gallantry displayed in the execution of the enterprise itself, which was the object of importance with me.

have the testimony of the late Lord Cranstoun, one of the Captains of the Admiral's ship the *Formidable*. This very able and intelligent officer, who first took possession of the *Ville de Paris*, Admiral Count De Grasse's ship, and was sent home with the dispatches, did me the honour to seek me out, and was so kind as to furnish a number of sketches, and even to assist with a great part of the description. Lord Rodney too himself, in a private letter, of a date so late as 14th June 1789, has given an account, by way of narrative, of his transactions, campaign 1782, in which is included this battle of the 12th April.*

* This letter was transmitted to me by a common friend, the late General Robert Clerk, together with a copy of *Naval Tactics*, as printed January 1. 1782; which copy contains a number of valuable marginal notes in his Lordship's own handwriting; but, coming too late, they could not be introduced, though particularly relating to part first of this work, when reprinted and published 1790.

FROM THE LONDON GAZETTE.

Admiralty-Office, 18th May 1782.

Lord Cranstoun, one of the Captains of his Majesty's ship the Formidable, and Captain Byron of the Andromache, in which ship his Lordship came a passenger, arrived early this morning with dispatches from Admiral Sir George Brydges Rodney, Bart., Knight of the Bath, and Commander in Chief of his Majesty's ships at the Leeward Islands, to Mr Stephens, of which the following are copies.

Formidable, at Sea, April 14. 1782.

It has pleased God, out of his divine providence, to grant to his Majesty's arms a most complete victory over the fleet of his enemy, commanded by the Count De Grasse, who is himself captured with the Ville de Paris, and four other ships of his fleet, besides one sunk in the action. This important victory was obtained the 12th instant, after a battle which lasted, with unremitting fury, from seven in the morning till half-past six in the evening, when the setting sun put an end to the contest. Both fleets have greatly suffered; but it is with the highest satisfaction I can assure their Lordships, that though the masts, sails, rigging, and hulls of the British fleet are damaged, yet the loss of men has been but small, considering the length of the battle, and the close action they so long sustained, and in which both fleets looked

upon the honour of their king and country to be most essentially concerned. The great supply of naval stores lately arrived in the West Indies, will, I flatter myself, soon repair all the damages his Majesty's fleet has sustained.

The gallant behaviour of the officers and men of the fleet I have the honour to command, has been such as must for ever endear them to all lovers of their king and country. The noble behaviour of my second in command, Sir Samuel Hood, who, in both actions, most conspicuously exerted himself, demands my warmest encomiums. My third in command, Rear-Admiral Drake, who, with his division, led the battle on the 12th instant, deserves the highest praise; nor can less be given to Commodore Affleck for his gallant behaviour in leading the centre division. My own Captain, Sir Charles Douglas, merits every thing I can possibly say; his unremitting diligence and activity greatly eased me in the unavoidable fatigue of the day. In short, I want words to express how sensible I am of the meritorious conduct of all the captains, officers, and men, who had a share in this glorious victory, obtained by their gallant exertions. The enemy's whole army, consisting of 5500 men, were on board their ships of war. The destruction among them must be prodigious, as, for the greatest part of the action, every gun told; and their Lordships may judge what havock must have been

made, when the *Formidable* fired near eighty broadsides.

Enclosed, I have the honour to send, for their inspection, the British and French lines of battle, with the account of the killed and wounded, and the damages sustained by his Majesty's fleet. Lord Cranstoun, who acted as one of the Captains of the *Formidable* during both actions, and to whose gallant behaviour I am much indebted, will have the honour of delivering these dispatches. To him I must refer their Lordships for every minute particular they may wish to know, he being perfectly master of the whole transaction. That the British flag may for ever flourish in every quarter of the globe, is the most ardent wish of him who has the honour of being, with great regard,

SIR, &c.

G. B. RODNEY.

EXTRACT OF A LETTER FROM SIR G. B. RODNEY TO MR STEPHENS.

Formidable, at Sea, April 14. 1782.

On the 5th of April, I received intelligence that the enemy were embarking their troops on board the ships of war, and concluded they intended to sail in a very few days. Captain Byron of the *Andromache*, an active, brisk, and diligent

officer, watched their motions with such attention, that, on the 8th instant, at day-light, he made the signal of the enemy's coming out, and standing to the north-west. I instantly made the signal to weigh; and having looked into the bays of Fort Royal and St Pierre, where no enemy's ships remained, I made the signal for a general chase; and, before day-light, came up with the enemy under Dominique, where both fleets were becalmed, and continued so for some time. The enemy first got the wind, and stood towards Guadaloupe. My van division, under that gallant officer Rear-Admiral Sir Samuel Hood, received it next, and stood after them. At nine the enemy began to cannonade my van, which was returned with the greatest briskness. The baffling winds, under Dominique, did not permit part of the centre division to get into action with the enemy's rear till half past eleven, and then only the ship next to me in the line of battle.

Their Lordships may easily imagine the mortification it must have been to the sixteen gallant officers commanding the ships of the rear, who could only be spectators of an action in which it was not in their power to join, being detained by the calms under Dominique. The enemy's cannonade ceased upon my rear's approach, but not before they had done considerable damage to the ships of the van, and disabled the Royal Oak and

Montague, and his Majesty had lost a gallant officer, viz. Captain Bayne of the *Alfred*, and a number of officers and seamen, as mentioned in the account transmitted to their Lordships; but such was the steady behaviour of Sir Samuel Hood, and the ships of the van, that the enemy received more damage than they occasioned. The night of the 9th instant the fleet lay to, to repair their damages. The 10th, they continued to turn to windward under an easy sail, the enemy's fleet continuing to do the same, and always had it in their power to come to action, which they cautiously avoided, and rendered it impossible for me to force them in the situation they were in, between the Saints and the island of Dominique. On the 11th of April, the enemy having gained considerably to windward, and the wind blowing a fresh and steady gale, I made the signal for a general chase to windward, which continued the whole day. Towards sun-set, some of the headmost ships of the fleet had approached near to one of the enemy's ships that had received damage in the late action, and had certainly taken her, if Count De Grasse had not bore down with his whole fleet for her protection, which brought him so near, that I flattered myself he would give me an opportunity of engaging him the next day. With that view I threw out the signal for the form of sailing, and stood with the whole fleet to the

southward till two o'clock in the morning ; then tacked, and had the happiness, at day-light, to find my most sanguine desire was near being accomplished, by my having it in my power to force the enemy to battle. Not one moment was lost in putting it into execution. The consequence has been such as I have had the honour to represent in my former letter of this day ; and can say no more, than that too much praise cannot be given to the gallant officers and men of the fleet I had the honour to command.

G. B. RODNEY.

THE DESCRIPTION OF THE BATTLES OF THE 9TH AND 12TH OF APRIL 1782, FOUGHT BETWEEN THE BRITISH SQUADRON, COMMANDED BY SIR GEORGE BRYDGES RODNEY, AND THE FRENCH SQUADRON BY COUNT DE GRASSE.

On Monday, the 8th of April 1782, signal was made from the British cruisers off Fort Royal Bay, Martinico, that the French fleet, attended by a number of transports, were then got under way. Our fleet immediately weighed from Grosse Islet Bay, St Lucia, and stood after them to the northward, under the west end of Martinico, and soon got sight of part of their men of war. The pursuit was continued, during the night, with all the sail that could be made, directed by the enemy's night signals, The wind a fresh gale at N. E. by

E. At two in the morning, the *Valiant*, being to windward, discovered the enemy under the north end of the island of *Dominica*. At three o'clock the fleet brought to by a signal; the enemy at that time nearly bearing north, &c.

Plate XV. Fig. 1. **A,** The British fleet, at two in the morning of the 9th of April, discovering part of the French fleet under the north end of *Dominica* at **F**; at three o'clock brought to by signal; at half past five the signal was thrown out to prepare for battle. The line to be formed at two cables length asunder, and the fleet to fill and stand on.

G, The French fleet afterwards, at five in the morning, on the starboard tack, working to windward in the Channel, between the islands of *Dominica* and *Guadaloupe*, where they had a steady breeze.

H, One of the enemy's ships, at this time so far to leeward, that she must have been taken, had not the wind failed us, while she had it so fresh as served her soon to recover her station.

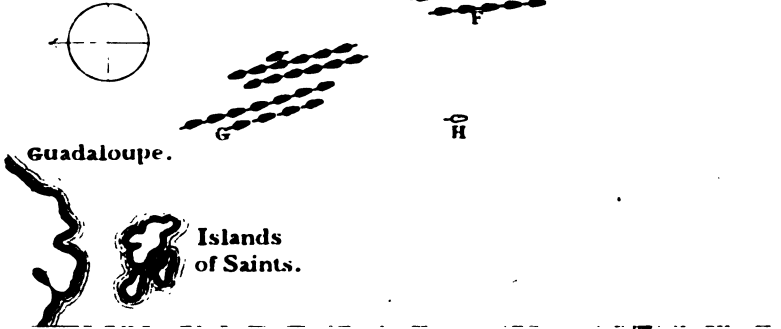
Plate XV. Fig. 2. **A,** The van of the British having at last got the breeze, fetched up with the centre of the enemy, still upon the starboard tack, when they were fired upon about nine o'clock, where, for the space of an hour, they sustained a distant cannonade from as many of the enemy's ships as could be brought to bear upon them. The

PLATE XV. Part IV. p. 248.

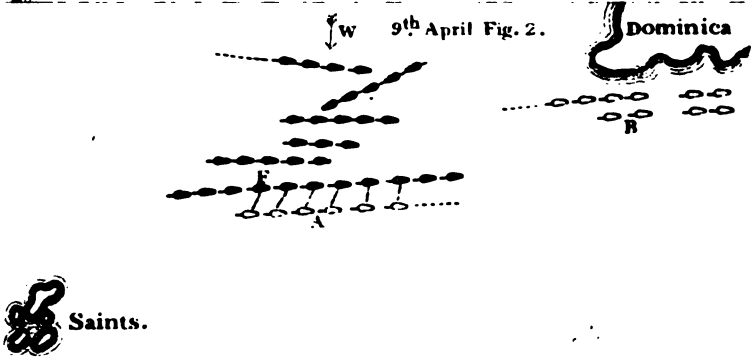
Sir Geo. B. Rodney's Battle off Dominica
9. 10. 11. & 12th April 1782.

ISLAND of DOMINICA
9th April 1782.

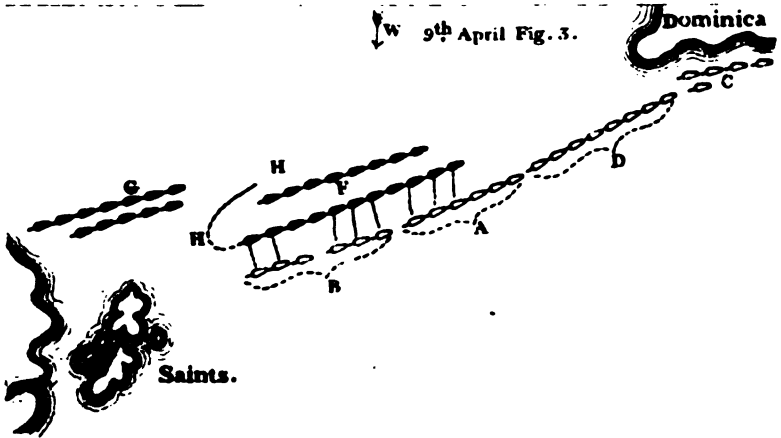
Fig. 1.

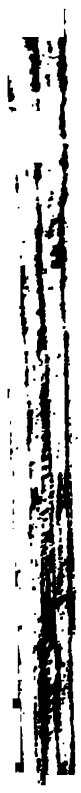


9th April Fig. 2.



9th April Fig. 3.





centre and rear, in the mean time, lying still becalmed under the island of Dominica, at B.

F, The French not all in order of battle, as some of their ships were endeavouring to work to windward.

Plate XV. Fig. 3. A, The centre of the British having afterwards got the breeze, joined the van about noon, when the action, after an interval of two hours, was renewed; but the Duke, the Formidable's second astern, was the sternmost ship engaged upon this occasion; the 16 ships in the rear division, and astern of her, not being able to get up.

B, The van of the British.

The centre now having joined the van, the cannonade was continued an hour and three quarters, until the rear, which had, in the mean while, been becalmed at C, began to join and close the line also, as at D.

F, The enemy (who, during all this time, kept, as usual, at such a distance as showed that they meant to disable), as soon as they saw the junction of the whole British fleet, hauled off to windward, tacking from the van, as per line of course H H.

G, The enemy's fleet of transports stretching away to windward of the Saints.

The enemy did not at first appear to have suffered much; but soon after, however, one of them seemed to be crippled; and, afterwards, we found

two had received so much hurt, that they were obliged to bear away to Basse Terre, Guadaloupe, to refit; so that they were not in the second action, which was afterwards fought on the 12th.*

The 10th of April was spent in refitting and keeping our wind, and shifting the van and rear divisions, as the van had suffered in the action of the ninth.

Plate XVI. Fig. 4. A, The British fleet, in the morning of the 11th, perceiving two disabled ships

* *From Lord Rodney's Narrative, contained in his private letter above mentioned.*

" About two o'clock in the morning of the 9th of April, the British fleet came up with the enemy's under Dominique; both were becalmed. The enemy first got the wind, and stood towards Guadaloupe; the British van followed, as did the centre, when the breeze reached them. The enemy attacked the van, and a cannonade ensued; but it ceased when the Admiral and his two seconds joined his van. In vain; when the Admiral got abreast of the Ville de Paris, he laid his main-top sail aback for the French Admiral to bear down and engage: He kept his distance; and plainly indicated it was not his business to bring on a battle, as the enemy's whole fleet had got the wind, and could have brought them to engage half of the English. Admiral Rodney had his signal ready to wear and stand to his rear, seven sail of which were becalmed at a very considerable distance. However, the enemy would not risk the attack; and the breeze soon reaching the rear, it soon joined the centre."

Sir Geo. B. Rodney, April 1782

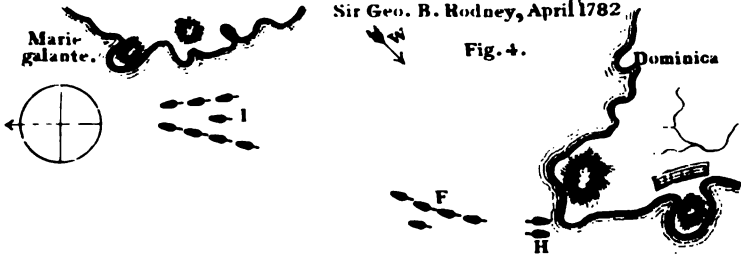


Fig. 4.

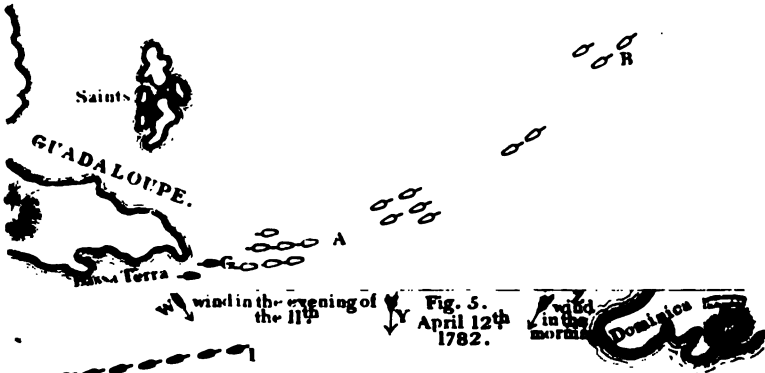
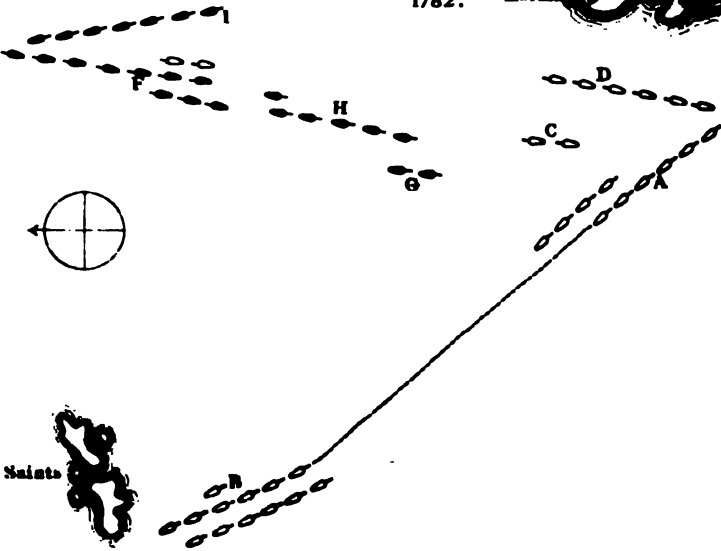


Fig. 5.
April 12th
1782.



10

11

12

13

under the islands of Saints, at G, chaced them into Basse Terre, Guadaloupe; but, soon after, discovering two others far to windward, and disabled, at H, near the north end of Dominica, a general chace was ordered, only three or four of the French fleet being at this time visible, at I, from the Formidable's mast-head. But, upon the Agamemnon, and others, at B, coming near the ships, at H, Count De Grasse, though far to windward, bore down, as at F, to protect his two disabled ships. Upon this the Agamemnon, and the other ships, advanced in the pursuit. Upon the signal to call in all cruisers, they returned to their respective stations in the line.

Plate XVI. Fig. 5. A, The British fleet, at two o'clock in the morning of the 12th, after having run to the southward from B, their position the evening before, having taken advantage of the wind, as at W, which generally hauls to the northward in the West Indies in the evening. At which time (viz. two o'clock), having tacked to the northward, the French were discovered broad under their lee-bow, in some confusion, at F; and one of their ships was directly to leeward, at G, with her bow-sprit gone, and her fore-mast across her fore-castle, towed by a frigate, and the wind at E. S. E. as at Z.

C, The Valiant and Monarch were ordered down from the rear to engage this disabled ship

with her consort, which obliged Count De Grasse to edge down, as at H, to their protection.

D, The van of the British, about four or five o'clock, leading on the starboard tack; and the Admiral judging the Count De Grasse might now have got so far to leeward, by the last mentioned movement, that it would not be possible for him to avoid an action, the Valiant and Monarch, the ships in chace, were ordered into their stations.*

I, The French, aware of their situation, forming on a larboard tack; and the wind afterwards coming about from E. S. E. to nearly east, as at Y, they conceived hopes of regaining their usual fighting

* LORD RODNEY'S NARRATIVE *continued.*

“ The 10th and 11th April were employed in endeavouring to bring the enemy to battle; and on the 11th, late in the afternoon, the enemy bore down to protect two of their ships, who were in danger of being cut off. This brought them to the position the Admiral wished. He instantly issued orders to sail during the night, according to the order of sailing; to put all lights out; to stand to the southward till two o'clock in the morning; and then the whole fleet to tack without signal. This deceived the enemy, who had no conception that the British fleet should be so near them at day-light, and instantly formed the line of battle upon the starboard tack; the enemy formed theirs upon the larboard tack, and had made the signal to wear; but the nearness of the British fleet prevented its being put in execution; and the British fleet taking the lee-gage, the Admiral made the signal to engage and close.”



Rodney's engagement 12th April 1782. ↓ W

Fig. 6.

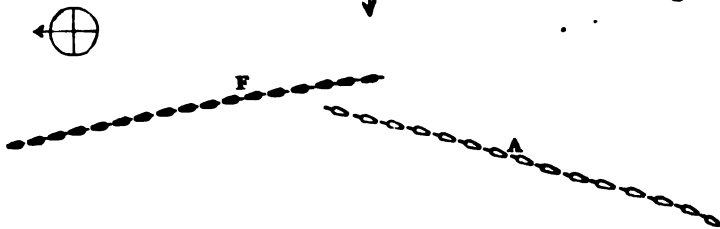


Fig. 7.

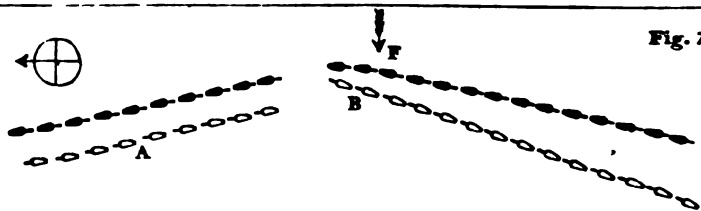


Fig. 8.

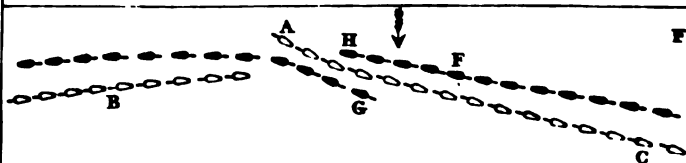
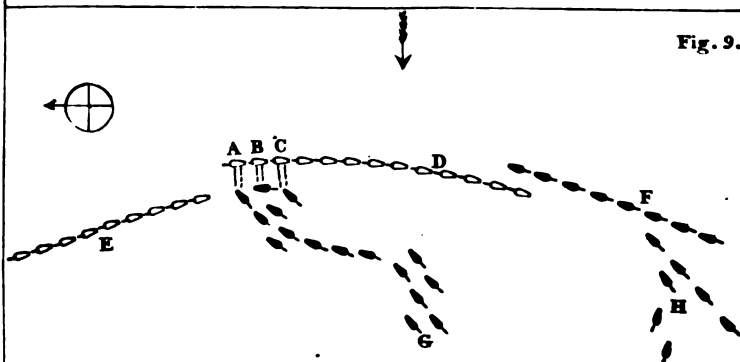


Fig. 9.



distance, more especially as their van, at this time, began to point to windward of the British.

Plate XVII. Fig. 6. A, The British fleet.

F, The French fleet; their leading ships having gained the wind.

At half-past seven in the morning, the Marlborough, the leading ship of the van of the British, having fetched the fifth ship of the line of the enemy, was fired upon;* when the signals for close action, and to close the line, were thrown out.

Plate XVII. Fig. 7. A, The van of the British ranging slowly and closely (but on opposite tacks) along the enemy's line, each ship giving and receiving a heavy fire.

F, The enemy's fleet having gained the wind, ranging in like manner in opposite directions.

B, The Formidable, the Admiral's ship, not bearing away, but keeping the wind, &c. at the time when the two fleets might be supposed to be completely abreast of each other.

Plate XVII. Fig. 8. A, The Formidable, the

* " N. B.—This ship, the Marlborough, having fetched the
 " fifth ship, as mentioned; and after suffering a cannonade
 " from thirty-one ships, the remaining part of the enemy's
 " line, along the whole of which she had run, and close under
 " their lee; in performing this and other service, from the
 " ninth to this day the twelfth, had three men killed only,
 " and sixteen wounded.

British Admiral's ship, after having given her first fire to the enemy's fifth ship, and having passed the *Ville de Paris*, F, and her seconds almost in contact, kept her wind, and piercing the enemy's line between the fourth and fifth ship astern of Count de Grasse's own ship, the *Ville de Paris*, was followed by the *Namur* and *Duke*, the two next ships astern.* By which spirited, bold, and new mode of attack, the enemy's line was not only cut in twain, their van from their rear, but the headmost ships of their rear division, then coming up, were forced away to leeward, as at G.

B, The van of the British still ranging along the remaining part of the enemy's rear.

C, The rear of the British line following up after the Admiral.

H, The *Glorieuse*, the last ship of the van of

* LORD RODNEY'S NARRATIVE *continued*.

“ The British Admiral's ship, the *Formidable*, reached the enemy's fourth ship from their van, and began a very close action within half musket-shot, and continued such action close along the enemy's line, under an easy sail, till an opening appeared at the third ship astern of the enemy's Admiral, which gave an opportunity of breaking their line, and putting their rear in the utmost confusion ; when six of their ships falling on board each other, in that condition the Admiral and division attacked them, tore them to pieces, and the moment they had disengaged themselves, they bore away right before the wind.”

the French, stretching past the rear of the British line.*

Plate XVII. Fig. 9. A, B, C, The Formidable, Namur, and Duke, after having cut the line, kept up a powerful raking fire upon these ships of the rear division of the enemy, which they

* Whether it was between the third and fourth ship that the line was cut, or between the fourth and fifth ship, as the text has it, is of little moment. But we cannot well omit the following anecdote, as related to me by the late Admiral C. Inglis. He commanded the *St Alban's*, one of the next ships astern of the *Formidable*, in cutting the French line. When he got alongside of this ship H, supposed to be the *Glorieuse*, the last of the van division of the enemy, where it was cut asunder from the rear, he remarked that she did not return a single gun, nor was any body to be seen on board, but one man upon the poop; and some accidental musket-shot being fired by the marines, this poor fellow dropped, and was no more to be seen. After Captain Inglis had passed on ahead, directing his attention still to this ship H, as well as to the *Canada*, the British ship which followed him next astern, he observed that neither did the *Glorieuse* return a gun to this ship: But the *Canada*, pouring in a whole broadside into the *Glorieuse*, so dreadful was the appearance to Captain Inglis, who saw the dust, the pieces of timber, and smoke, which flew to a great distance from the side opposite to that where she had received the blow, it seemed as if the ship (literally speaking) had been blown out of the water, and as if the whole in a mass had been driven to windward.

before had forced to leeward, and which are now going off before the wind, as at G.

D, The rear of the British, under Sir S. Hood, following up after the Admiral.

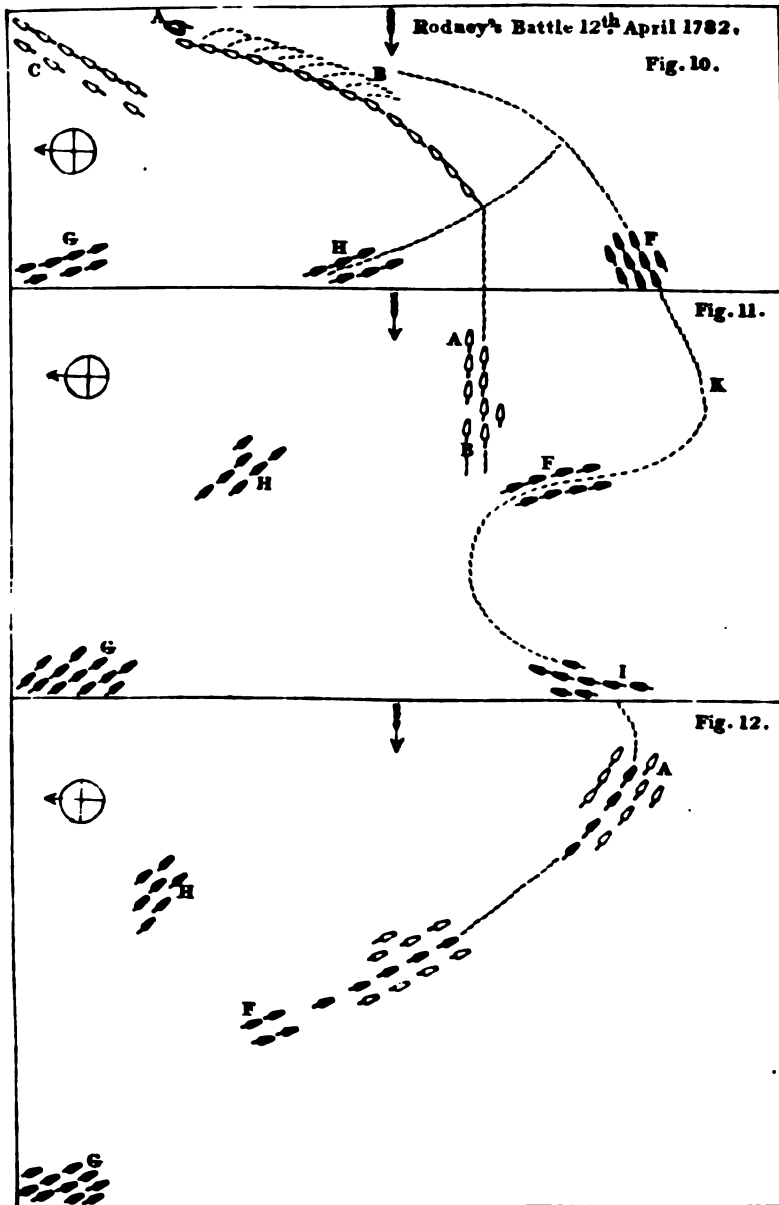
E, The van of the British, under the command of Admiral Drake.

G, The headmost ships of the rear division of the enemy, which were forced to leeward by the *Formidable*, &c. having got into a huddle, or group, were, for some time, exposed to a cannonade from three ships, the *Formidable*, the *Namur*, and the *Duke*; when the whole of this rear division of the French line, consisting of the rear and part of the centre, now under the conduct of M. Bougainville, as soon as the British van had stretched past, put before the wind with all the sail that could be carried, escaping through the gap, evidently made in the British line, between the van and the attack made by the *Formidable*; which part of the enemy's fleet, for distinction's sake, shall be called the northern division of flight, which was not pursued.

F, The van of the enemy, stretched past the rear of the British line, preparing to break into two divisions.

H, The middle division which made to the west.

Plate XVIII. Fig. 10. So soon as the van division of the enemy had stretched past the rear of



the British line, in bearing away, it broke into two divisions; one, consisting of seven ships, steering west, as at H, and which may be called the middle division; the other, taking a S. S. W. course, consisting of about 12 or 13 ships, and where Count de Grasse was himself, making the southern division of flight, as at F.

A, The Formidable, with part of the centre, putting about in pursuit of the enemy's van.

B, The rear of the British line putting about for the pursuit also. The signal for the rear to close the centre being soon after made, both these divisions, in pursuit of the southern division F, where Count de Grasse was himself, passed to windward of the middle division of the enemy H, without annoying it.

C, The British van.

F, The Count de Grasse, with the southern division, flying under every sail he could set, pursued by the rear and part of the centre of the British, and steering a S. S. W. course. It was from this division of the enemy from which all the captures were afterwards made.

H, The middle division of the enemy steering a more westerly course; and, as they were not pursued, they did not carry a press of sail; but, repairing the damage they had received, waited for, and the same evening, after it was dark, rejoined

the ships of the southern division which had escaped the pursuit.

G, M. Bougainville, with the rear division of the enemy, crowding sail, and fast advancing to the westward.

Plate XVIII. Fig. 2. Upon the breaking of the van division of the enemy, the southern division, which had at first steered to the S. S. W. as at K, soon afterwards got with their heads to the northward, as at F, with the view of rejoining their other divisions, and forming a new line of battle to leeward, Count de Grasse making repeated signals for that purpose; but seeing, after every pains taken, these signals without effect, and, at the same time, perceiving, if this northerly course was continued, that the line of the British pursuit would thereby be much shortened, he changed his direction again, and is now, about two o'clock in the afternoon, with his ships' heads to the S. S. W. as at I.

A and B, The centre and rear of the British in pursuit of the southern division of the enemy.

C, The van of the British.

G, The rear division of the enemy advancing still farther to the westward.

H, The middle division of the enemy, not being pursued, under an easy sail repaired their damage.

Plate XVIII. Fig. 12. F, The southern divi-

sion of the enemy with their heads again to the northward, at six o'clock, at sun-set, having run through the dotted line of course H H, in which they were outsailed, and turned from their southerly direction, by the British ships in pursuit, as at A.

During this pursuit, five ships were taken from the enemy. The *Glorieuse* having lost her masts by the fire which she received in the morning, while ranging past to windward, struck to the fleet at 12 o'clock, upon their bearing away large for the pursuit.—The *Cæsar* struck to the *Centaur* at four o'clock.—The *Hector*, at half-past four, struck to the *Canada* and *Alcide*.—The *Ardent*, a little after five, struck to the *Belliqueux* and *Prince William*.—And the *Ville de Paris*, *Count de Grasse*, at six o'clock, about sun-set, struck to the *Barfleur* and *Canada*. At this time, *Count de Grasse* had got above five leagues to the westward and leeward of the field of battle; and, night immediately coming on, Admiral Rodney thought proper to give over further pursuit.*

* *Lord Rodney's Narrative continued.*

“ *Count de Grasse*, in the *Ville de Paris*, having behaved most bravely, and his ship being entirely crippled, and three British Admirals being very near him, struck his flag about ten minutes after the sun had set. Admiral Rodney made the signal for a night battle; but looking about him,

By saying that these ships of the enemy struck particular ships of the British, is meant only,

“ and observing that his fleet were greatly dispersed ; that
“ two of his 90 gun ships were totally disabled ; his own
“ (the Formidable) greatly damaged ; that his van and centre
“ were much hurt ; that none of the prisoners from the cap-
“ tured ships were taken out ; that a very dark night, of
“ twelve hours, was come on, he thought it most prudent to
“ make sure of the victory, and not run the risk of a reverse
“ of fortune, or the danger of a night battle, wherein his own
“ fleet might receive more damage from one another than
“ from the ships of the enemy ; that, by running to leeward
“ in the night, the enemy might deceive him by ordering
“ some of their frigates to hoist the lights of their Admirals,
“ and steer a course to lead him (Rodney) a different course
“ from them ; and as the night was extremely dark, being
“ the first day of a new moon, they might have hauled their
“ wind to the north, or to the south, without being seen ; at
“ the same time they most carefully had hid all lights what-
“ ever. The British fleet, by pursuing, might have found
“ themselves far to leeward in the morning, without a possi-
“ bility of their getting to windward, by the crippled condi-
“ tion they were in. These reasons, and his experience of a
“ night battle, induced the Admiral to secure the victory,
“ and not to hazard a reverse of fortune. He therefore made
“ the signal for the British fleet to bring to, on the starboard
“ tack, then so dark that one ship could not see another.
“ Day-light the next morning proved the wisdom of that sig-
“ nal ; for notwithstanding it was the duty of every ship to
“ obey it, thirteen made sail, yet not one of them fired a shot,
“ or came up with an enemy. This was a convincing proof

that those of our ships mentioned were engaging the prizes close at the instant of hauling down their colours, while the whole of the fleet was surrounding them at the time.

G, Monsieur Bougainville, with the rear division of the enemy, advanced now above ten leagues to the westward and to the leeward of the field of battle.

I, The middle division of the enemy, consisting of seven ships, having waited for, rejoined the ships of the southern division, which afterwards effected an escape.*

“ of what might have happened had the whole fleet gone to leeward, and the enemy have hauled their wind ; not only the captured ships might have been re-taken, but some of the British crippled been taken.”

* Lord Rodney's Narrative *continued*.

“ On the morning of the 13th, frigates were dispatched to St Christophers and Eustatia, to see if any of the enemy's ships had sheltered themselves in those roads. Upon the report returned, that none were there, but that some ships had passed these islands in a crippled state, Rear Admiral Hood and his division were sent to intercept such ships as might go to the south side of Porto Rico and St Domingo, while Admiral Rodney took care of the prizes and his own shattered ships ; and, so soon as he was enabled to put his squadron in a condition to bear away, he got to St Domingo, where Admiral Hood soon joined him with two other enemy's ships of the line, which had been taken in the Mona Passage.

“ On the British fleet arriving off Cape Tiberoon, the west
“ end of St Domingo, Admiral Hood was sent with a fleet of
“ 25 sail of the line to blockade the island of St Domingo,
“ while Admiral Rodney himself bore away for Port Royal,
“ Jamaica, with the prizes, and those of his ships which
“ were most shattered, with the view of having the whole
“ put in repair. The enemy’s shattered ships, in the mean
“ time, made their escape to the Havanna, some to America,
“ and some even to France ; and the British fleet, within a
“ month, were completely refitted, stored, and manned. The
“ van was gone out of harbour ; the centre going ; and Ad-
“ miral Rodney himself, with the whole fleet, in pursuit of
“ the enemy to America, was ready to leave Jamaica the
“ next day, when Admiral Pigot arrived from England, and
“ took the command.”

LINE OF BATTLE OF THE BRITISH FLEET

Under the command of SIR G. B. RODNEY (the Royal Oak to lead on the starboard tack, and the Marlborough on the larboard tack), with the List of the Killed and Wounded in both the battles of the 9th and 12th of April. The damage which the ships in the van sustained in the battle of the 9th, made it necessary that this order of the line should be reversed; and SIR FRANCIS DRAKE'S division becoming the van, the Marlborough, as the headmost ship, led the fleet on the 12th of April.

Ships.	Commanders.	Guns.	Men.	Killed.	Wounded.
Royal Oak,	Capt. Burnet,	74	600	8	30
Alfred,	— Bayne,	74	600	12	42
Montague,	— Bowen,	74	600	12	31
Yarmouth,	— Parry,	64	500	14	33
Valiant,	— Goodall,	74	650	10	28
Barfleur,	{ Sir S. Hood, Bart. } { Capt. Knight, }	90	767	10	27
Monarch,	— Reynolds,	74	600	16	33
Warrior,	— Sir James Wallace,	74	600	5	21
Belliqueux,	— Sutherland,	64	500	4	10
Centaur,	— Inglefield,	74	600	-	-
Magnificent,	— Linzee,	74	650	6	11
Prince William,	— Wilkinson,	64	500	-	-
Bedford,	{ Commodore Affleck, } { Capt. Graves, }	74	617	-	17
Ajax,	— Charrington,	74	550	9	10
Repulse,	— Dumaresque,	64	500	3	11
Canada,	— Hon. W. Cornwallis,	74	600	12	23
St Albans,	— Inglis,	64	500	-	6
Namur,	— Fanshaw,	90	750	6	25
Formidable,	{ Sir G. B. Rodney, Commander-in-Chief, Sir Cha. Douglas, first Captain, Capt. Symons, — Lord Cranstoun,	90	750	15	39
Duke,	— Gardner,	90	750	13	61
Agamemnon,	— Caldwell,	64	500	15	22
Resolution,	— Lord Robert Manners,	74	600	5	34
Prothée,	— Buckner,	64	500	5	25
Hercules,	— Savage,	74	600	7	19
America,	— S. Thomson,	64	500	1	1
Russell,	— Saumarez,	74	600	10	39
Prudent,	— Barklay,	64	500	-	-
Fame,	— Barber,	74	550	3	12
Anson,	— Blair,	64	500	3	13
Torbay,	— Gidoin,	74	600	10	25
Prince George,	— Williams,	90	750	9	24
Princess,	{ Francis S. Drake, Esq. } { Capt. Knatchbull, }	70	577	3	22
Conqueror,	— Balfour,	74	600	7	23
Nonsuch,	— Truscott,	64	500	3	3
Alcide,	— C. Thomson,	74	600	-	-
Arrogant,	— Cornish,	74	600	-	-
Marlborough,	— Penny,	74	600	3	16

37

2,704

21,361

230

759

1 Deduct the Prudent not with the fleet in the action, 64

36

2,640

FRIGATES.

Present in the Action.

Champion, to repeat.	Andromache.
Zebra.	Flora, to repeat signals.
Alecto.	Alert.
Endymion.	Triton.
Alarm.	10 Eurydice, to repeat signals.

Not present in the Action.

Lizard.	Pegasus.
La Nymph.	Salamander.
Convert.	Germain.
Fortune.	Blast.
Sybil.	10 Santa Monica.

LIST OF THE FRENCH FLEET.

	<i>Ships.</i>	<i>Guns.</i>
	La Ville de Paris,	110
	L'Auguste,	80
	Le Duc de Bourgogne,	80
	Le Languedoc,	80
	Le Neptune,	80
	Le Zele,	74
	La Glorieuse,	74
	Le Citoyen,	74
	Le Souverain,	74
	Le Magnanime,	74
	Le Cesar,	74
	Le Hector,	74
	Le Pluton,	74
	Le Hercule,	44
	Le Scipion,	74
Arrived with the Brest convoy,	{ La Couronne,	80
	{ Le Dauphin Royal,	74
	{ Le Magnifique,	74
	{ Le Bourgogne,	74
	{ Le Bien Aime,	74
	{ Le Sceptre,	74
	{ Le Northumberland,	74
	{ Le Conquerant,	74
	{ La Marselloise,	74
	{ Le Palmire,	74
	{ L'Ardent,	64
	{ L'Eveil,	64
	{ Le Caton,	64
Joined at St Kitts,	{ Le Jason,	64
	{ Le Frier, armé en flute,	64
	{ Le Minotaur, ditto,	74
	{ Le Brave,	74
Out of repair.	{ Le Triomphant,	80
	{ Le St Esprit,	80
	{ Le Destin,	74
	{ Le Reflechi,	64
	{ Le Sagittaire,	60
	L'Experiment,	60
	Thirteen Frigates,	
	Seven armed Brigs,	
	One Cutter.	

Total, 36 of the line, two 50 gun ships, 13 frigates, 7 armed brigs, 2 fire ships, and 1 cutter.

OBSERVATIONS ON THE BATTLES OF THE 9TH AND 12TH
APRIL 1782.

In the course of these Actions, there will be found a complete Illustration of the following particulars :

1. The difficulty which an enemy's fleet will find in making an escape to windward.

2. That the crippling of some of his ships will be a necessary consequence of the efforts made to effect this escape.

3. That the protection given to ships crippled in consequence of these efforts, as it was the cause of bringing on the actions of both the 9th and 12th, and had nearly produced an action on the 10th,—will also be a cause of bringing on an action on all future occasions of the like nature, or in like circumstances.

The attack made by the British in the action of the 9th, may be considered as an example of the simple attack, and shows how little may be expected from any rencounter between two fleets on the same tack, when an attempt shall be made from the leeward.

The judicious movement made by the British fleet, from a northerly course to a southerly one, on the night between the 11th and 12th, as it

shows the advantage that may be made by a change of wind, at the same time shows the necessity of attention to such periodical changes. For it was by this means only that the British fleet got within the reach of the enemy on the morning of the 12th April.

The little loss sustained by fleets, while ranging past an enemy's line, particularly exemplified in the case of the leading ship, the Marlborough, in this battle, as well as in others, viz. the three battles formerly mentioned,—the 27th July 1778, the 15th and 19th May 1780,—sufficiently and incontrovertibly should establish how little can be effected by the rencounter of two adverse fleets passing on opposite tacks, without having something more important in view than the simply effecting the said passage.

From the facility with which the Formidable, the Admiral's ship, kept her wind, and forced her passage through the line of the enemy, and the necessary consequence that the headmost ships of the rear division must thereby be forced and driven to leeward, should with certainty establish, that breaking or cutting an enemy's line, by an attack from the leeward, is not only a practicable manœuvre, but a manœuvre attended with little additional danger, or risk of shipping; and that, with the same facility, and with equal probability of success, it might have been attempted, in for-

mer rencounters, as already mentioned.* And although Admiral Rodney, in either of his former rencounters of the 15th or 19th of May, had not then been convinced of the importance of this manœuvre—still, having been the first to put it in execution, as on this occasion of the 12th April, he has acquired a name renowned over the whole world, as well as among his countrymen, who must ever remember this essential effort of service with the utmost gratitude.

The glorious consequences, from having cut and divided the enemy's line on this occasion, as they may be admitted to be illustrations of the foregoing demonstrations, may also be admitted as a proof of what ought to be expected in future on every similar occasion.

The hurry and precipitation with which the rear division of the enemy made their escape through the gap in the British line, as it showed their apprehensions, should also be a proof of the danger of their situation.

The effort to escape, made by the van division of the enemy, as it confirms the general position, their desire of evading a conflict, confirms also the idea of that superiority of British seamen, which

* Keppel's engagement of the 27th July 1778, and Rodney's two engagements of the 15th and 19th May 1780.

seems, indeed, to have been incontestible from the beginning of the whole affair to the end thereof.

The manner by which the van of the British was rendered almost without effect, shows that the rear division of the enemy, and not the van, ought to have been the object of pursuit.*

The proximity of the rear of the British to the rear division of the enemy, should sufficiently point out the object of pursuit they also should have chosen.*

Therefore the British line, van and rear, not having been prepared to take advantage of their necessary mutual proximity to the rear division of the enemy was a loss.*

Again, the rear division of the British, by having been obliged to put about ship, in pursuit of the van of the enemy, already got some number of miles distant, is a full confirmation of the hypothesis laid down, That the pursuit of a rear division, cut off from the van of an enemy's fleet passing on contrary tacks, ought in general to be preferred.

Lastly, The facility with which the rear of the British came up with the flying van of the enemy, after consideration had to all the foregoing circumstances, without doubt shows, that neither was there any inferiority of sailing in the British ships on this occasion.

* *Vide* Attack with the Centre, Part II. pages 207. 208. 209. and 210.

**BATTLES BETWEEN THE ENGLISH AND FRENCH
SQUADRONS IN THE EAST INDIES, 1782.**

**EXTRACT OF A LETTER FROM SIR EDWARD HUGHES,
BART. TO MR STEPHENS, DATED ON BOARD THE
SUPERBE, AT SEA, OFF THE COAST OF COMANDEL,
4TH APRIL 1782.**

I sailed on the 31st of January from Trincomalé for Madras Road, in order to get a supply of provisions and stores, of both which the ships were then in want.

On the 8th of February I anchored in Madras Road; and the same day received advice from Lord Macartney, the governor of that place, that a French squadron, consisting of thirty sail of ships and vessels, was at anchor about twenty leagues to the northward of that part. In the afternoon of the 9th Captain Aims, in his Majesty's ship *Monmouth*, with the *Hero*, *Isis*, and the armed transport *Manilla*, joined me in the road. I continued to use all possible diligence in getting the necessary stores and provisions on board the several ships, until the 15th of February, when the enemy's squadron, consisting of 12 sail of line of battle ships, 6 frigates, 8 large transports, and 6 captured

vessels, came in sight to the northward, standing for Madras Road; and, about noon, the same day, anchored about four miles without the road. In the mean time, I placed his Majesty's ships in the most advantageous manner to defend themselves, and the other ships in the road, with springs on their cables, that they might bring their broadsides to bear more effectually on the enemy should they attempt an attack.

At four in the afternoon, the enemy weighed and stood to the southward, when I immediately made the signal to weigh, and stood after them, having received on board a detachment of 300 officers and men of his Majesty's 98th regiment, who were distributed to the ships of the squadron that were worst manned. I stood with the squadron, as per margin,* to the southward all that night under an easy sail; and in the morning, at day-light, found the enemy's ships had separated in the night; their 12 line of battle ships and a frigate bearing east of me, distant about four leagues, and 16 sail of their frigates and transports bearing south-west, distant about three leagues, and steering a direct course for Pondicherry; on which I instantly made the signal for a general

* Superbe, Exeter, Monarca, Hero, Worcester, Burford, Monmouth, Eagle, Isis, Seahorse, Combustion.

chase to the south-west, in order, if possible, to come up with and take their transports, well knowing the enemy's line of battle ships would follow to protect them all in their power.

In the course of the chase, our copper-bottomed ships came up with, and captured six sail of ships and vessels, five of which were English, taken by the enemy, when to the northward of Madras, out of which I ordered the Frenchmen to be taken, and the vessels to proceed, with their own crews, to Negapatam; the sixth was the *Lauriston*, a transport, having on board many French officers, and 300 men of the regiment of Lausanne, and laden with guns, shot, powder, and other military stores. This ship, so valuable to us, and of so much consequence to the enemy, was taken by Captain Lumley of his Majesty's ship *Isis*.

So soon as the enemy's squadron discovered my intention to chase their transports, they put before the wind, and made all the sail they could after me; and, by three o'clock in the afternoon, four of their best sailing line of battle ships were got within two or three miles of our sternmost ships; and the ships in chase were very much spread, by the enemy's ships they were chasing steering different courses, some to the south-east, others to the south, and several to the south-west. I therefore judged it necessary to make the signal for the chasing ships to join me, which they all did about seven o'clock

in the evening ; and I continued standing to the south-east, under an easy sail, all that night, the enemy's squadron in sight, and making many signals.

At day-light, in the morning of the 17th, the body of the enemy's squadron bore north by east of ours, distant about three leagues, the weather very hazy, with light winds and frequent squalls, of short duration, from the north-north-east, the enemy crowding all the sail they could towards our squadron.

At six in the morning, I made the signal for our squadron to form the line of battle ahead ; at 25 minutes past eight, our line ahead being formed with great difficulty, from the want of wind, and frequent intervals of calms, I made the signal for the leading ship to make the same sail as the Admiral, and made sail, formed in the line ahead, intending to weather the enemy, that I might engage them closely. At ten, the enemy's squadron having the advantage of the squalls from the north-north-east (which always reached them first, and in consequence continued longest with them), neared us very fast ; and I made the signal for our line to alter the course two points to leeward, the enemy then steering down on the rear of our line, in an irregular double line abreast. At half-past noon, I made the signal for our squadron to form the line of battle abreast, in order to draw the rear

of our line closer to the centre, and prevent the enemy from breaking in on it, and attacking it when separated.

At three in the afternoon, the enemy still pushing on to our rear in a double line abreast, I again altered my course in the line, in order to draw our rear ships still closer to the centre; and at forty minutes after three, finding it impossible to avoid the enemy's attack, under all the disadvantages of little or no wind to work our ships, and of being to leeward of them, I made signal for our squadron to form at once into the line of battle ahead. At four, the *Exeter* (which was the sternmost ship in our rear, when formed in line of battle ahead, on the larboard tack), not being quite closed to her second ahead, three of the enemy's ships in their first line bore right down upon her, whilst four more of their second line, headed by the *Hero*, in which ship M. Suffrein had his flag, hauled along the outside of the first line, towards our centre.

At five minutes past four, the enemy's three ships began their fire upon the *Exeter*, which was returned by her and her second ahead. At ten minutes past four, I made the signal for battle; and at twelve minutes past, the action became general from our rear to our centre; the commanding ship of the enemy, with three others of their second line, leading down to our centre, yet never

at any time advancing farther than opposite to the *Superbe*, our centre ship, with little or no wind, and some heavy rain during the engagement.

Under these circumstances, the enemy brought eight of their best ships to the attack of five of ours. As the van of our line, consisting of the *Monmouth*, *Eagle*, *Burford*, and *Worcester*, could not be brought into action without tacking on the enemy; and although the signal for that purpose was at the mast-head ready for hoisting, there was neither wind sufficient to enable them to tack, nor for the five ships of our centre and rear, then engaged with the enemy, hard pressed, and much disabled in their masts, yards, sails, and rigging, to follow them, without an almost certainty of separating our van from our rear.

At six in the afternoon, a squall of wind from the south-east took our ships, and paid them round ahead on the enemy to the north-eastward, when the engagement was renewed by our five ships, with great spirit and alacrity, from our starboard guns; and at twenty-five minutes past six, just before dark, the enemy's ships engaged with ours, having visibly suffered severely, the whole of them hauled their wind, and stood to the north-east.

At this time the *Superbe* had lost her main-yard, shot into two pieces in the slings, had five feet water in her hold, which continued for some time to gain on all her pumps, until several of the

largest shot-holes under water were plugged up, and neither brace nor bow-line left entire; and the *Exeter*, reduced almost to the state of a wreck, had made a signal of distress. The other three ships in our rear, the *Monarca*, *Isis*, and *Hero*, had suffered less, as the enemy's fire appeared plainly to be directed principally against the *Superbe* and *Exeter*.

DESCRIPTION OF THE BATTLE BETWEEN THE FRENCH AND BRITISH SQUADRONS ON THE COAST OF COROMANDEL, 17TH FEBRUARY 1782, TAKEN FROM THE FOREGOING LETTER.

Sir Edward Hughes having left Trincomalé the 31st of January 1782, came to an anchor in the road of Madras the 8th of February; and, the same day, he received advice, that a French squadron was at anchor about twenty leagues to the northward of that place; and, all diligence being used in getting the necessary stores aboard the several ships, the enemy's squadron, on the 15th, came in sight from the northward; and, at noon, anchored about four miles without the road. In the mean time, the men of war were placed in the most advantageous posture of defence, with springs on their cables, that they might bring their broadsides to bear more effectually on the enemy, should they attempt to make an attack.



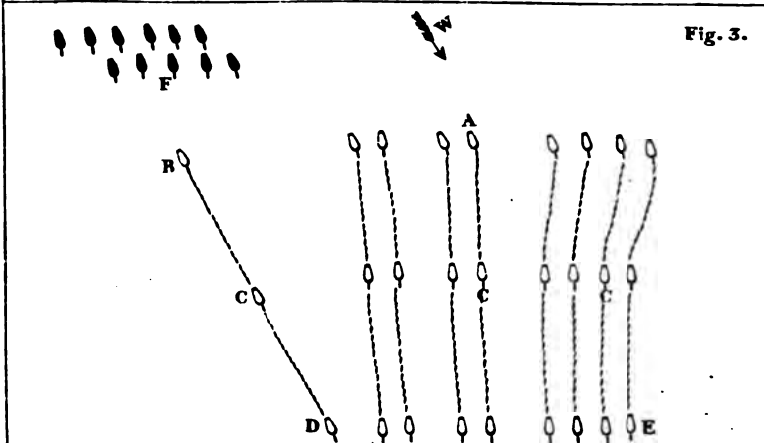
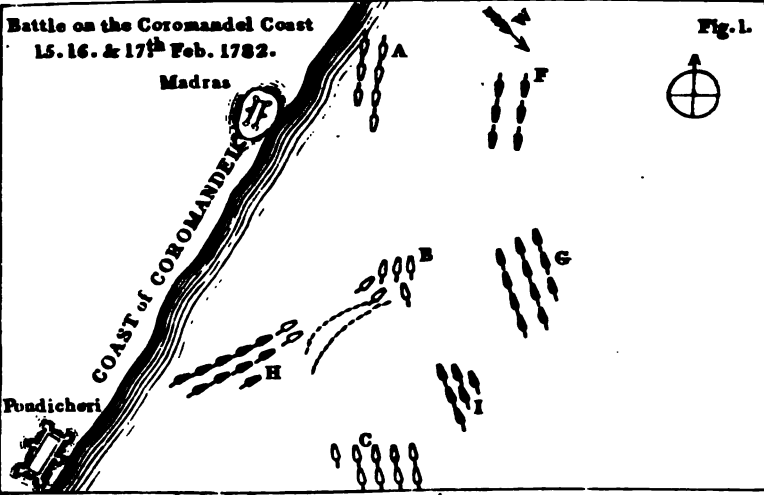


Plate XIX. Fig. 1. The British squadron at anchor in the road of Madras, the 15th of February, at A, with springs on their cables, prepared to receive an attack.

F, The French squadron come to an anchor likewise, the morning of that day, and about four miles distant, without the said road; but not finding it convenient to attack Sir Edward Hughes, as he was then situated, they got up their anchors that same afternoon, and stood away to the southward. The British squadron soon after weighed, and stood after them, carrying an easy sail all the night; and, in the morning of the 16th, at day-light, the enemy's ships having separated during the night-time, the positions of the different fleets lay as follows:

B, The British squadron standing to the southward.

G, The enemy's line of battle ships, supposed to be 12 in number, with one frigate, bearing east from the British squadron, and distant about four leagues.

H, The enemy's transports and frigates, 16 sail, bearing S. W., distant about four leagues, and making for Pondicherry.

The British squadron being thus situated between the enemy's men of war and their transports, signal for a general chase to the south-west was instantly made, in the hope of taking some of their

transports, not doubting that their line of battle ships would follow and endeavour to protect them. In the course of the pursuit, the copper-bottomed ships came up with and captured six of these transports; but by this means the British squadron was much separated.

In the mean time, the enemy's squadron, so soon as they perceived the danger their fleet of transports were in, having put before the wind, some of their best sailing coppered ships had got within three or four miles of the sternmost of the British, about three o'clock in the afternoon; upon which, a signal was made by Sir Edward Hughes for the chasing ships to join the squadron, which they all did about seven o'clock in the evening, when, afterwards, he continued, all the following night, standing to the south-east, under an easy sail, as at C, while the enemy still kept in sight, as at I, making many signals.

Plate XIX. Fig. 2. A, The British squadron, on the 17th, at 10 o'clock forenoon, extended in a line of battle ahead, on the larboard tack; at this time the ships in the rear of the line were too far astern, particularly the Exeter, B, the sternmost, occasioned by the light irregular breezes of wind.

F, The enemy having the wind more constant, steering down on the rear of our line in an irregular double line abreast, and nearing us fast.

Fig. 3. The ship B, the Exeter, in the rear of



Battle on the Coromandel Coast 17th Feb; 1782.

Fig. 4.

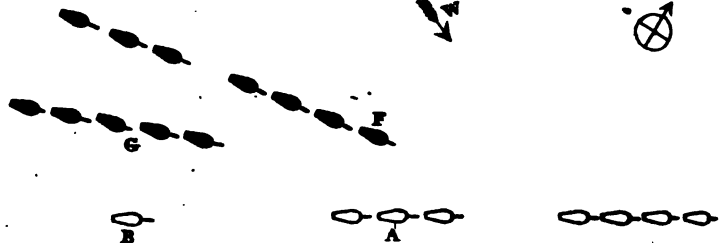


Fig. 5.

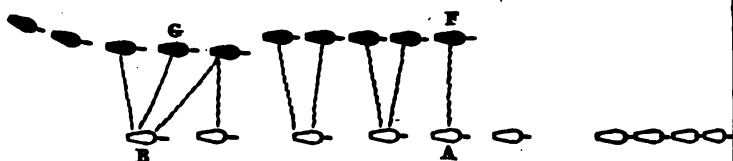


Fig. 6.

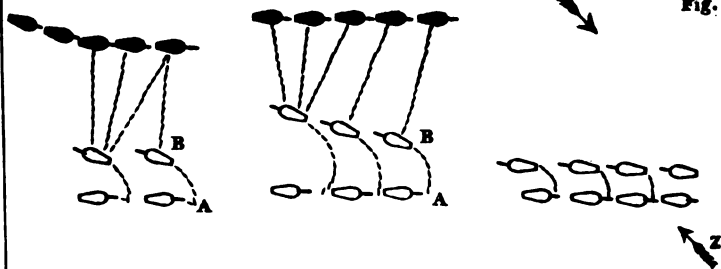
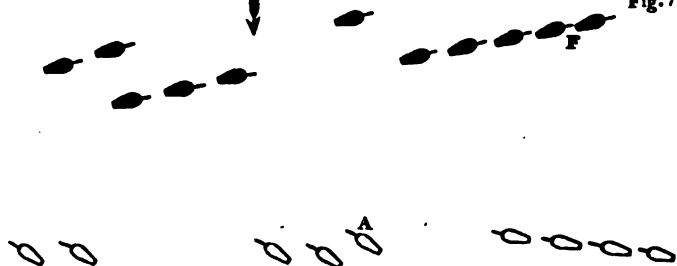


Fig. 7.



the British, from the irregularity of the wind, continuing still to be far separated ; at half an hour past noon, a signal was made for the squadron to form a line of battle abreast, as at A, to give an opportunity for each ship in bearing away, particularly those in the rear, to close with the centre, as at the points C C C, which, if accomplished, would prevent F, the enemy, from taking the rear at a disadvantage.

The enemy, F, still pushing on for the rear. At three in the afternoon, the course of each ship in the line was attempted to be still farther changed, and with the intention to draw the ships in the rear still closer to the centre, as from D to E.

Plate XX. Fig. 4. At 45 minutes past three o'clock, finding it impossible to avoid the enemy's attack, a signal was made for the British squadron to form at once into the line of battle ahead, as at A.

B, The *Exeter*, the sternmost ship, not having been able to close with the next ship ahead,—

G, Three of the enemy's ships of their first line bore right down to attack her, while four ships of their second line, headed by the *Hero F*, in which ship *Monsieur Suffrein* had his flag, hauled along the outside of these three ships which were firing on the *Exeter*, intending to attack our centre, the *Superbe* with her seconds, at A.

Plate XX. Fig. 5. G, The enemy's three ships began to fire on the *Exeter* at five minutes past four.

B, The *Exeter* and her second returning the fire.

F, The Admiral's ship, *Monsieur Suffrein*, with three others of the enemy's second line, having led down on our centre *A*, the engagement commenced from our rear to centre about 12 minutes after four.

In this manner *Monsieur Suffrein* had it in his power to bring eight of his best ships to make an attack on five of the British only;—the wind at N. N. E.

Fig. 6. At six o'clock in the afternoon, the wind having changed, a squall from the south-east, as at *Z*, took our ships, and paid them head round on the enemy to the north-east, viz. from the first position *A*, to the position *B*; that is, from a larboard tack to a starboard tack, when again the engagement was immediately begun with fresh spirit from the starboard guns of our five ships.

Fig. 7. At twenty-five minutes past six, just before it was dark, the enemy's ships which had been engaged having suffered severely, the whole of their squadron hauled their wind, and stood off to the north-east, as at *F*; and the British squadron being on a contrary tack, standing to the north-west, as at *A*, the two fleets were soon separated.

LIST OF THE BRITISH SQUADRON,

*With the Killed and Wounded, in the Battle of the 17th
February 1782.*

	<i>Killed.</i>	<i>Wounded.</i>
Superbe,	11	25
Exeter,	10	45
Monarca,	1	5
Hero,	9	17
Worcester,	0	0
Burford,	0	0
Monmouth,	0	0
Eagle,	0	0
Isis,	1	3
Seahorse,	0	0
Combustion,	0	0
	<hr/>	<hr/>
	32	95

Officers Killed and Wounded.

- Superbe, Captain Stevens wounded (since dead).
 Lieutenants Hughes and Newcombe wounded,
 Exeter, Captain Reynolds killed.
 Lieutenant Charles Jones wounded.

LIST OF THE FRENCH SQUADRON

Now on the Coromandel Coast, and of the Land Forces embarked in it, and the Transports at the Mauritius, the 7th December last, and now landed to join HYDER ALI.

	<i>Guns.</i>		<i>Men.</i>
L'Hero, . . .	74	{ M. D. Suffrein, Chef D'Escadre, }	625
L'Orient, . . .	74	Capt. Du Pallaire,	625
L'Annibal, . . .	74	Tromelin, . . .	625
Le Brilliant, . . .	64	St Felix, . . .	516
L'Ajax, . . .	64	Bouvet, . . .	516
Le Severe, . . .	64	Sultier, . . .	516
Le Sphinx, . . .	64	Duchaleau, . . .	516
L'Artesien, . . .	64	L'Alandrois, . . .	516
Le Vengeur, . . .	64	Forbin, . . .	516
Le Flamand, . . .	50	De Queberville,	430
Eng. Hannibal, . . .	50		

FRIGATES.

La Purvoyeus, . . .	50	Cap. Du Galle,	400
La Fine, . . .	40	Perier de Salvert,	400
La Bellona, . . .	36	Bovard, 1st Officer	350
La Subtile, . . .	22	De Beaulieu, . . .	140
La Silphide, . . .	18	200
La Diligente, . . .	8	80

FLUTES AND TRANSPORTS.

Lauriston, Bon Ami, Maurepas Brison, Deux Amis, Fille Unique, St Anne, Duc de Tuscany.

SIR E. HUGHES'S ENGAGEMENT. 315

LAND FORCES.

Regiment D'Austrasie,	659
———— D'Ile de France,	800
De Legion de Lausanne,	455
Volontaires de Bourbon,	139
De Regiment d'Artillerie,	200
Caffres of the Islands,	1,157
Sepoys,	47
	<hr/>
	3,457

OBSERVATIONS ON THE BATTLE OFF THE COAST OF COROMANDEL, 17TH FEBRUARY 1782.

As the British navy has hitherto afforded so few examples of an inclination to evade or avoid battle, our object has hitherto been confined to treat of the mode of attack only, not that of defence. On this occasion, however, it must be admitted, that M. Suffrein, the commander of the squadron of the enemy, has given us something new, not only by obliging Sir Edward Hughes to act on the defensive, but by having, in his masterly seamanship, attempted a change, and put in practice a new mode of attack from the windward. He is also the first of an enemy, for this century at least, who will be allowed the honour to have made an attack upon a British squadron.

In the course of this action, there will be found an illustration of the following particulars :

1. That the swift-sailing vessels of the squadron in pursuit were coming fast up with, and would have cut off, the slow-sailing vessels of the squadron endeavouring to make off.

2. That to prevent the loss of these slow-sailing vessels, and to protect them from the enemy, Sir Edward Hughes was induced to abide an engagement, which otherwise he was inclined to have avoided.

3. That M. Suffrein, by carrying down his squadron in two divisions; sending three of his headmost ships to force an attack upon two ships in the rear of the British, at B, Fig. 5. Plate XX.: bringing up the remainder of his squadron in support of these three ships; hauling past them to windward, so as to attack, and confine himself to the attack of the British centre, the *Superbe* and her seconds, has put in practice a new mode; and it is also an illustration of that mode which we have formerly demonstrated and endeavoured to recommend.

Though the full effect of this admirable disposition of attack made by M. Suffrein, was in the end prevented, by the British squadron being brought round on the starboard tack, and thereby enabled to get all its ships into action by the change the wind made; yet nothing but a consciousness of inferiority somehow in his seamen can excuse M. Suffrein, or account for the retreat he made, or why he drew off his superior number of ships after once having had the merit of bringing up his squadron to so masterly and advantageous an attack, where in one place he had three ships opposed to one, and in another place had brought five ships against three; and after having had the additional advantage, when the British ships might have been much hurt by his raking fire, while they were forced, with their heads round, by the change the wind made in the heat of action.

**SIR EDWARD HUGHES'S ENGAGEMENT IN THE EAST
INDIES WITH M. SUFFREIN, THE 12TH APRIL 1782.**

**EXTRACT OF A LETTER FROM SIR EDWARD HUGHES TO
MR STEPHENS, DATED ON BOARD THE SUPREME, IN
TRINCOMALÉ BAY, 10TH MAY 1782.**

In my last I mentioned the junction of his Majesty's ships Sultan and Magnanime with the squadron on the 30th of March. Both ships were then very sickly, and much reduced by the scurvy; but as I had on board the squadron a reinforcement of troops for this garrison, and a quantity of military stores, I judged it most for the public service, especially as I knew the enemy's squadron was to the southward, not to return to Madras to land the sick and scorbutic of these two ships, but to proceed directly for Trincomalé, and there to land the reinforcement and military stores, as well as the sick of the Sultan and Magnanime, without either seeking or shunning the enemy.

In pursuance of this resolution, I stood with the squadron to the southward; and, on the 6th of April, fell in with a French ship, last from Mauritius, having on board dispatches from France for their Commanders in Chief by sea and land. This ship was chased on shore, and burnt near Tranque-

bar, the officers and men escaping with the dispatches.

On the 8th, about noon, I came in sight of the enemy's squadron, consisting of 18 sail, in the N. E. quarter; and continued my course for this place, on the 9th, 10th, and 11th, the enemy still in sight; on the 11th, having made the coast of Ceylon, about 15 leagues to windward of Trincomalé, I bore away for that place. On the 12th, at day-light, the position of the enemy's squadron being altered by my bearing away, so as to give them the wind of ours, I discovered them crowding all the sail they could set after us; and their copper-bottomed ships coming fast up with the ships in our rear, I therefore determined to engage them.

At nine in the forenoon, I made the signal for the ships in our squadron to form the line of battle ahead on the starboard tack, at two cables length distance from each other. The enemy then bearing N. by E. distant about six miles, and the wind at N. by E. they continued manœuvring their ships, and changing their positions in their line, till fifteen minutes past noon, when they bore away to engage us; five sail of their van stretching along to engage the ships of our van, and the other seven sail steering directly on our centre ships, the *Superbe*, the *Monmouth* her second ahead, and the *Monarca* her second astern.

At half past one, the engagement began in the van of both squadrons, three minutes after I made the signal for battle. The French Admiral in the *Hero*, and his second astern, the *L'Orient*, bore down on the *Superbe* within pistol-shot. The *Hero* continued her position, giving and receiving a severe fire for nine minutes; and then stood on, greatly damaged, to attack the *Monmouth*, at that time engaged with another of the enemy's ships, making room for the ships in his rear to come up to the attack of our centre, where the engagement was hottest. At three, the *Monmouth* had her mizen-mast shot away, and, in a few minutes after, her main-mast, and bore out of the line to leeward. At forty minutes past three, the wind unexpectedly continuing far northerly, without any sea-breeze, and being careful not to entangle our ships with the shore, I made the signal for the squadron to wear, and haul their wind in a line of battle, ahead, on the larboard tack, still engaging the enemy. At forty minutes past five, being in fifteen fathom water, and apprehensive lest the *Monmouth* might, in her disabled state, drift too near the shore, I made the signal for the squadron to prepare to anchor. At forty minutes past six, the enemy's squadron drew off in great disorder to the eastward, and the engagement ceased; their Admiral having shifted his flag from the *Hero* to the French *Hanibal*, on account

of the Hero's disabled state; and soon after I anchored with the squadron, the Superbe close to the Monmouth, in order to repair our damages, which, on board the Superbe and Monmouth, were very great in the hulls, masts, sails, and rigging; and almost all the ships had suffered considerably in their masts, sails, and rigging.

Much about this time, the French frigate La Fine, being ordered, I suppose, to tow and assist their disabled ship the Hero, fell on board his Majesty's ship the Isis, and had actually struck his colours to her; but taking advantage of the darkness of the night, and the state the Isis was in, just come out of action, in which she had a number of men killed and wounded, and otherwise ill manned, the frigate got clear of the Isis and escaped.

An account of the officers and men killed and wounded, on board the several ships of the squadron, is herewith enclosed.

On the morning of the 13th, at day-light, I found the enemy's squadron had anchored about five miles without us, in much disorder and apparent distress, but they had lost no lower masts.

Both squadrons were busily employed in repairing damages, drawing into order for defence, the enemy seeming to apprehend an attack from us; and I myself uncertain if they would not re-

new the engagement in order to get hold of the Monmouth.

In these situations, both squadrons continued at anchor till the 19th, in the morning, when the enemy's got under sail with the land wind, and stood out to sea close hauled; and at noon tacked with the sea breeze, and stood in for the body of our squadron, as if with intent to attack; but after coming within two miles of us, finding us prepared to receive them, they again tacked, and stood to the eastward by the wind; and I have not since been able to learn certainly where they are gone. Having refitted the Monmouth in the best manner our situation would admit, with jury, main, and mizen-masts, I sailed with his Majesty's squadron for this place on the 22d, and anchored here on the evening of the same day, immediately landing the reinforcement and military stores destined for the garrison, and the sick and wounded.

In this situation of the squadron and its men, I thought it best for his Majesty's service, to remain at anchor here, and to set about the repairs of the hulls, masts, and rigging of the several ships, while the sick enjoy every benefit of fresh meat, vegetables, and wine, on shore for their recovery.

I have the satisfaction to inform their Lordships, that I shall be able to re-mast the Monmouth by the end of this month, from the spare stores on board of the several ships; and that the

damage they sustained in the last engagement will be every way made good about that time.

ABSTRACT OF THE OFFICERS AND MEN KILLED AND WOUNDED ON BOARD THE SEVERAL SHIPS OF THE BRITISH SQUADRON.

	<i>Killed.</i>	<i>Wounded.</i>	<i>Total.</i>
Superbe,	59	96	155
Exeter,	4	40	44
Magnanime,	—	7	7
Monmouth,	45	102	147
Monarca,	7	28	35
Worcester,	8	26	34
Burford,	6	36	42
Eagle,	—	22	22
Hero,	2	13	15
Sultan,	—	9	9
Isis,	6	51	57
	<hr/>	<hr/>	<hr/>
	137	430	567

Among the killed were the following Officers :

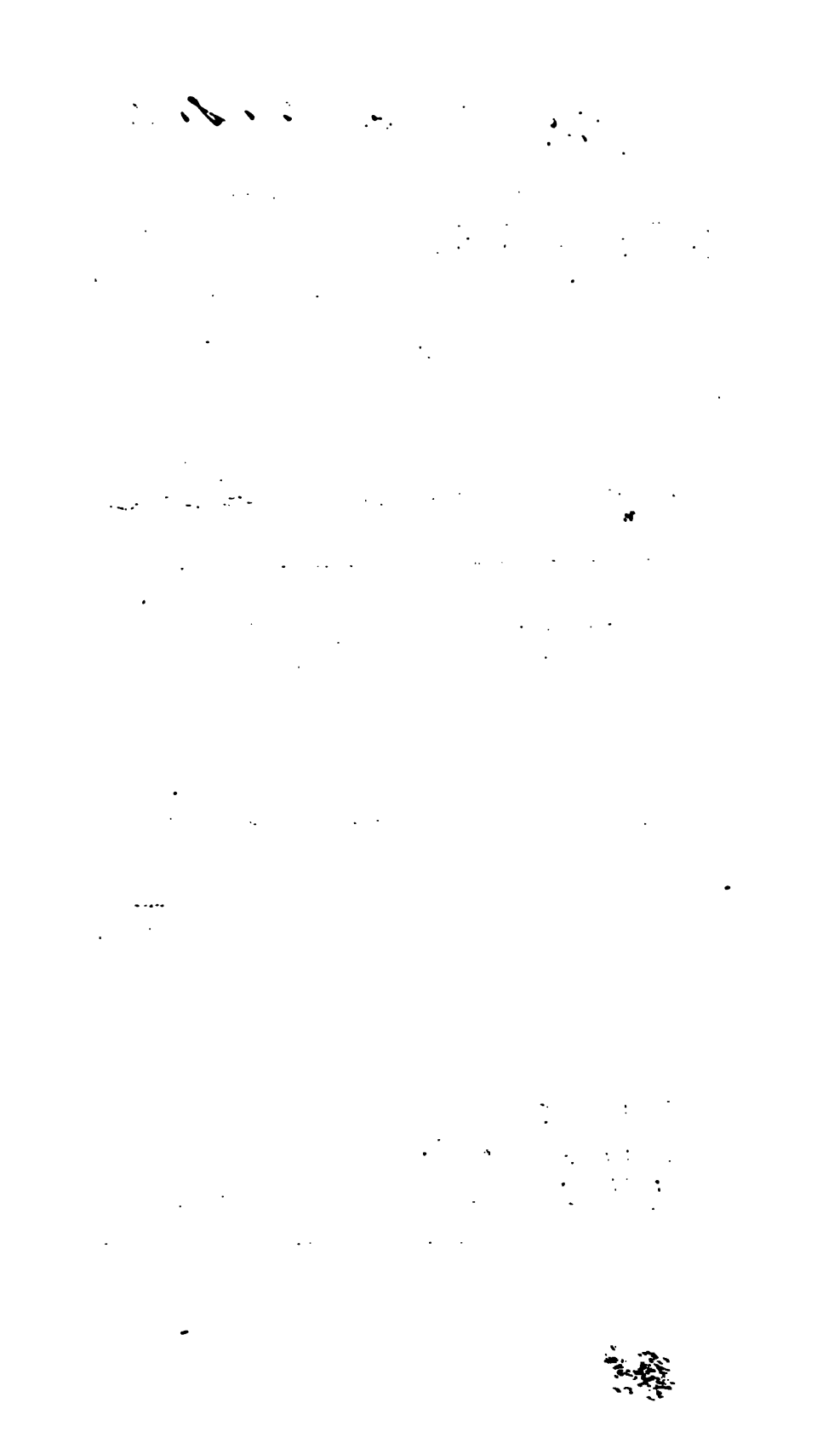
- Superbe, two Lieutenants,—Master.
- Monmouth, one Lieutenant of Marines.
- Worcester, one Lieutenant.
- Burford, one Lieutenant of Marines,—names not mentioned.

DESCRIPTION OF THE BATTLE OFF CEYLON, THE
12TH OF APRIL 1782.

THE FRENCH SQUADRON, CONSISTING OF TWELVE SHIPS
AND FRIGATES, COMMANDED BY M. SUFFREIN; THE
BRITISH SQUADRON, CONSISTING OF ELEVEN SHIPS AND
FRIGATES, COMMANDED BY SIR EDWARD HUGHES.

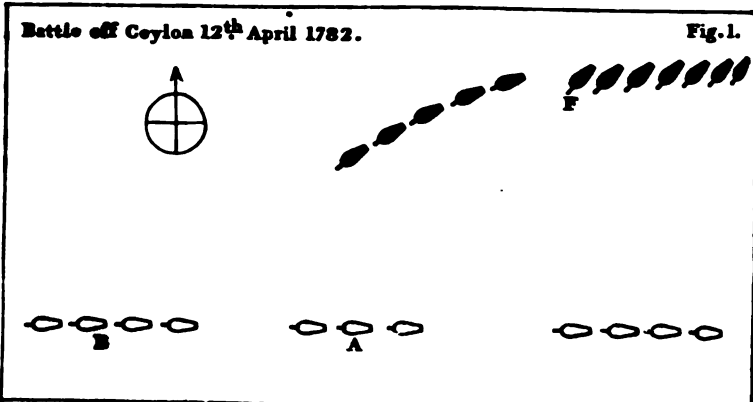
SIR Edward Hughes, in his letter of the 10th May, acquaints us, that while he was on his way down the coast of Coromandel, from the northward to Trincomalé Bay, he came in sight of the enemy's squadron, consisting of 18 sail, in the north-east quarter, about noon, on the 8th of April: That he continued his course; but the enemy following, kept in sight of him during the 9th, 10th, and 11th; and having made the coast of the island of Ceylon on the 11th, about 15 leagues off Trincomalé, he bore away for that place.

On the morning of the 12th of April, at daylight, perceiving that the enemy had got the wind of his squadron, by reason of his bearing away during the night; and perceiving also that, by crowding every sail, their copper-bottomed ships were coming fast up with the ships in his rear, he therefore came to the resolution to wait for and engage him.



Battle off Ceylon 12th April 1782.

Fig. 1.



5 Ships.



Fig. 2.

7 Ships.

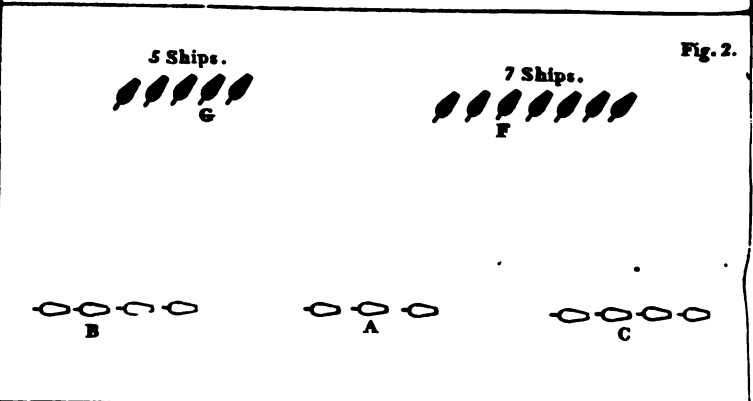
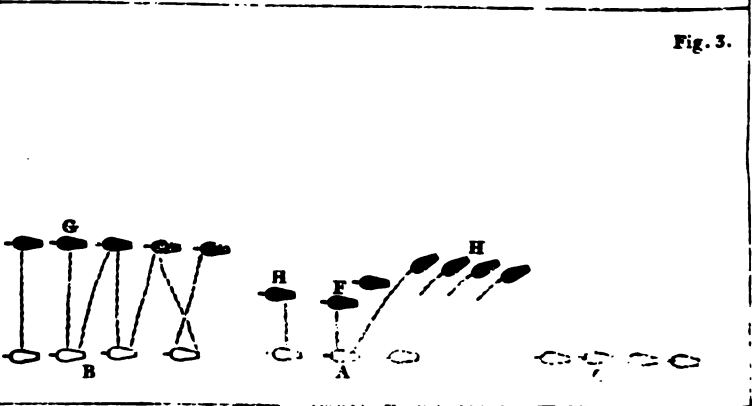


Fig. 3.



At nine in the forenoon, a signal was made for the British squadron to form the line of battle ahead, on the starboard tack, at two cables length distance from each other; the enemy being directly to windward, distant about six miles, and the wind N. by E.

The enemy continued manœuvring their ships and changing their positions in the line, till fifteen minutes past noon, when they bore away to engage us; five sail of their van stretching along to engage the ships of our van, while the other seven sail steered directly on the ships of our centre.

Plate XXI. Fig. 1. A, The British squadron on the starboard tack, formed in line of battle ahead, at two cables asunder.

F, The enemy right to windward, bearing N. by E. distant six miles, by crowding sail fast coming on.

Fig. 2. B, The van of the British, consisting of four ships.

A, The centre, consisting of three ships.

C, The rear, consisting of four ships.

G, The van of the enemy, consisting of five ships, stretching along to engage the four ships in the van of the British.

F, The French Admiral, with the other seven ships of their line, steering directly on to the centre of the British, consisting of the Superbe

and her two seconds, viz. the Monmouth ahead and the Monarca astern.

Fig. 3. F, The French Admiral in the Hero, with the L'Orient his second astern, bearing to attack the Superbe. It is said the Hero came within pistol-shot.

H H, The other five ships of the enemy supporting the Hero in the attack of the centre.

A, The British Admiral, in the Superbe, receiving the fire of the Hero, within pistol-shot, as it is said.

B, The four ships in the van of the British, sustaining the attack from the five sail of the enemy.

C, The four ships in the rear of the British, which seem not to have been much engaged.

G, The five ships in the van of the enemy attacking the van.

Plate XXII. Fig. 4. F, Suffrein, in the Hero, after having been greatly damaged by the fire of the British Admiral, A, stood on to the attack of the Monmouth, E, who was engaged with another of the seven ships; making room at the same time for others of the ships in his rear to get up in succession to the attack of the centre, and where it is said the engagement was the hottest.

C, The Monmouth, about three o'clock falling out of the line, after having lost her mizen-mast and her main-mast.

PLATE XXII. Part IV. end.

Battle off Ceylon 12th April 1782.

Fig. 4.

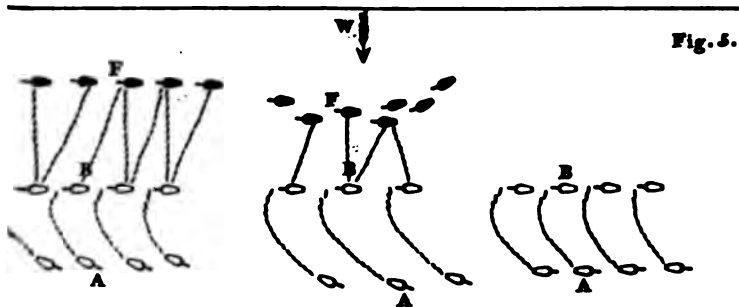
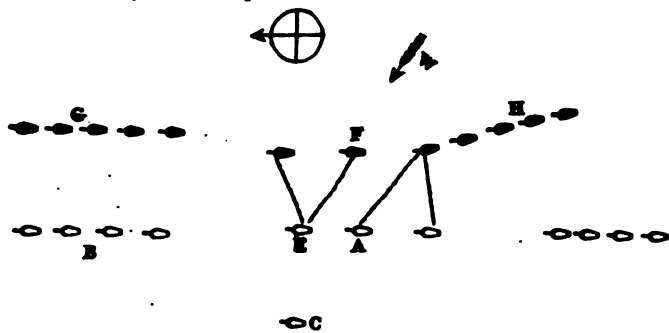


Fig. 5.

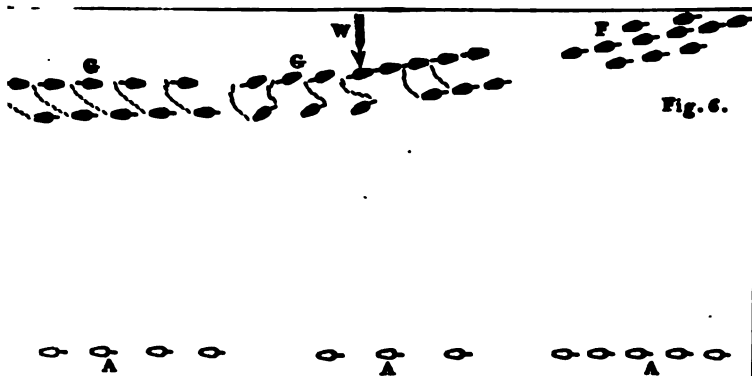


Fig. 6.

B, The four ships in the van, sustaining the attack from the five ships of the enemy.

Fig. 5. At forty minutes past five, the wind unexpectedly continuing far northerly, without any prospect of a sea breeze, and careful therefore not to entangle our ships with the shore of Ceylon, Sir Edward Hughes made signal for the squadron to wear and haul their wind in a line of battle ahead on the larboard tack, the engagement continuing all the while.

At forty minutes past five, being in fifteen fathoms water, and apprehensive lest the Monmouth, in the disabled state she was, might drift too near the shore, the signal was made for the squadron to prepare to come to an anchor.

At forty minutes past six, the enemy's squadron drawing off to the eastward in great disorder, the engagement ceased. M. Suffrein, on account of the disabled state of the Hero, shifting his flag from that ship to the French Hannibal.

A, The ships of the British squadron in the act of wearing, and while exposed to a raking fire from the enemy, after having quitted their starboard position, B B B.

F, The enemy's squadron.

W, The wind at north.

Fig. 6. The British ships having wore, and withdrawn to leeward, in manner like the system of defence already observed to have often been

practised by the enemy, are now with their heads to the east at A, when the action was renewed from the larboard guns, and continued above an hour; but the apprehension of the Monmouth's getting ashore still continuing, the signal was made for the squadron to come to an anchor.

F, The French Admiral not choosing to renew an attack, which, according to the above mentioned system, might have been attended at this time with much loss, drew off his ships in great disorder to the eastward, after having quitted their starboard position, G G; but whether this was effected by wearing or tacking the squadron, is not mentioned.

REMARKABLE PARTICULARS OF THE BATTLE OFF CEYLON, 12TH APRIL 1782.

That it was on the same day in which Lord Rodney fought and beat Count de Grasse, in the battle between Dominica and Guadaloupe, in the West Indies, the opposite quarter of the globe.

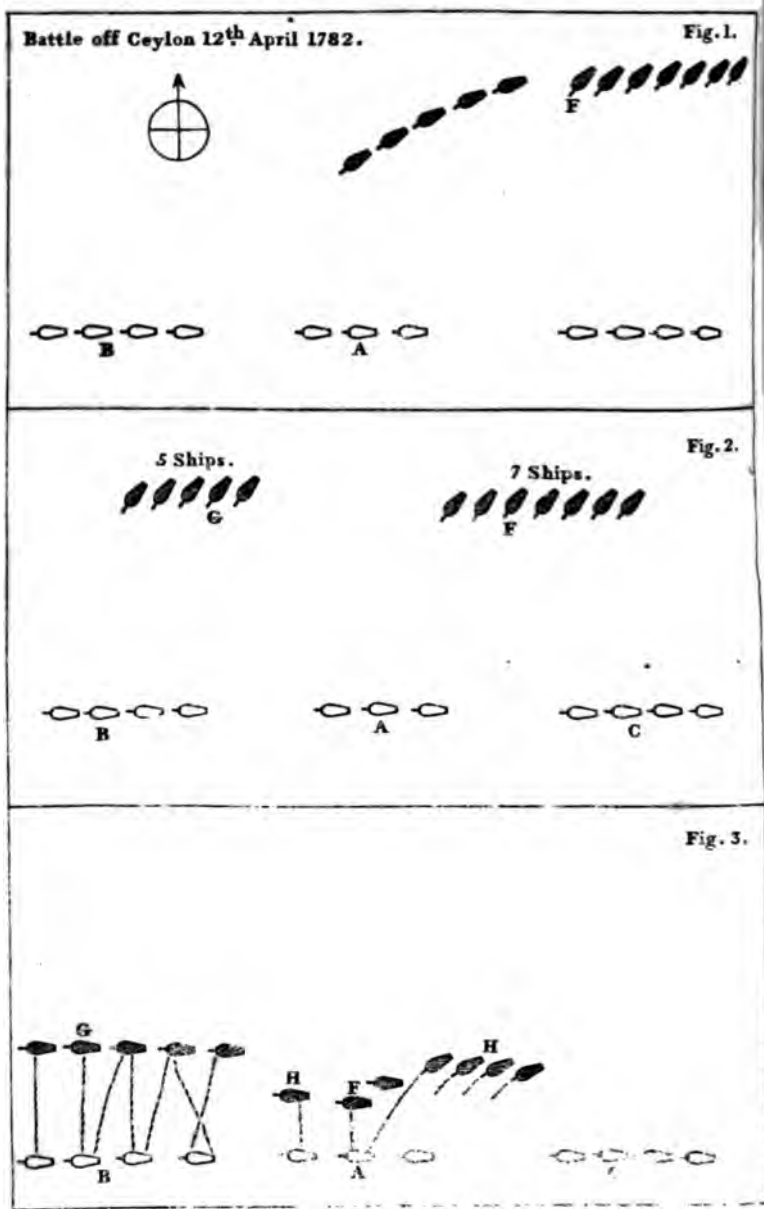
That the protection of his slow sailing vessels, who were in danger of being overtaken by the swift sailing vessels of an enemy who had been in pursuit of his squadron for four days, was the reason which induced Sir Edward Hughes to abide an engagement, which otherwise (in this case as well as in his former battle) he was inclined to

have avoided ; and it sufficiently illustrates the difficulty and danger, not to say impracticability, of a fleet making off to leeward, as has been before demonstrated.

M. Suffrein not having had the hoped for success in the attack upon the rear of the British squadron the 17th February, his attempt upon the van, equally well concerted on this occasion, evidently proves him to be an officer of genius and great enterprise.

If M. Suffrein had wind enough first to bring down the van of his fleet to the attack of the British, and afterwards to bring up the rear division to support it, even within pistol shot of the British centre ; and if the ships in the British rear could not in time get up to annoy a crippled enemy, this the more particularly illustrates the propriety and practicability of bringing up and directing the whole, or any part of a force, against a smaller part of the force of an enemy ; and that the effect ought to have important consequences, in battles at sea, as well as in battles at land.

But at the same time that it proves the above, it also proves this, that though the British squadron was at first inclined to avoid battle, yet those ships which were attacked, being once engaged, showed no inclination to quit the field to a superior force, or to give room to the fresh ships astern, even though they could have got up to their assistance.



At nine in the forenoon, a signal was made for the British squadron to form the line of battle ahead, on the starboard tack, at two cables length distance from each other; the enemy being directly to windward, distant about six miles, and the wind N. by E.

The enemy continued manœuvring their ships and changing their positions in the line, till fifteen minutes past noon, when they bore away to engage us; five sail of their van stretching along to engage the ships of our van, while the other seven sail steered directly on the ships of our centre.

Plate XXI. Fig. 1. A, The British squadron on the starboard tack, formed in line of battle ahead, at two cables asunder.

F, The enemy right to windward, bearing N. by E. distant six miles, by crowding sail fast coming on.

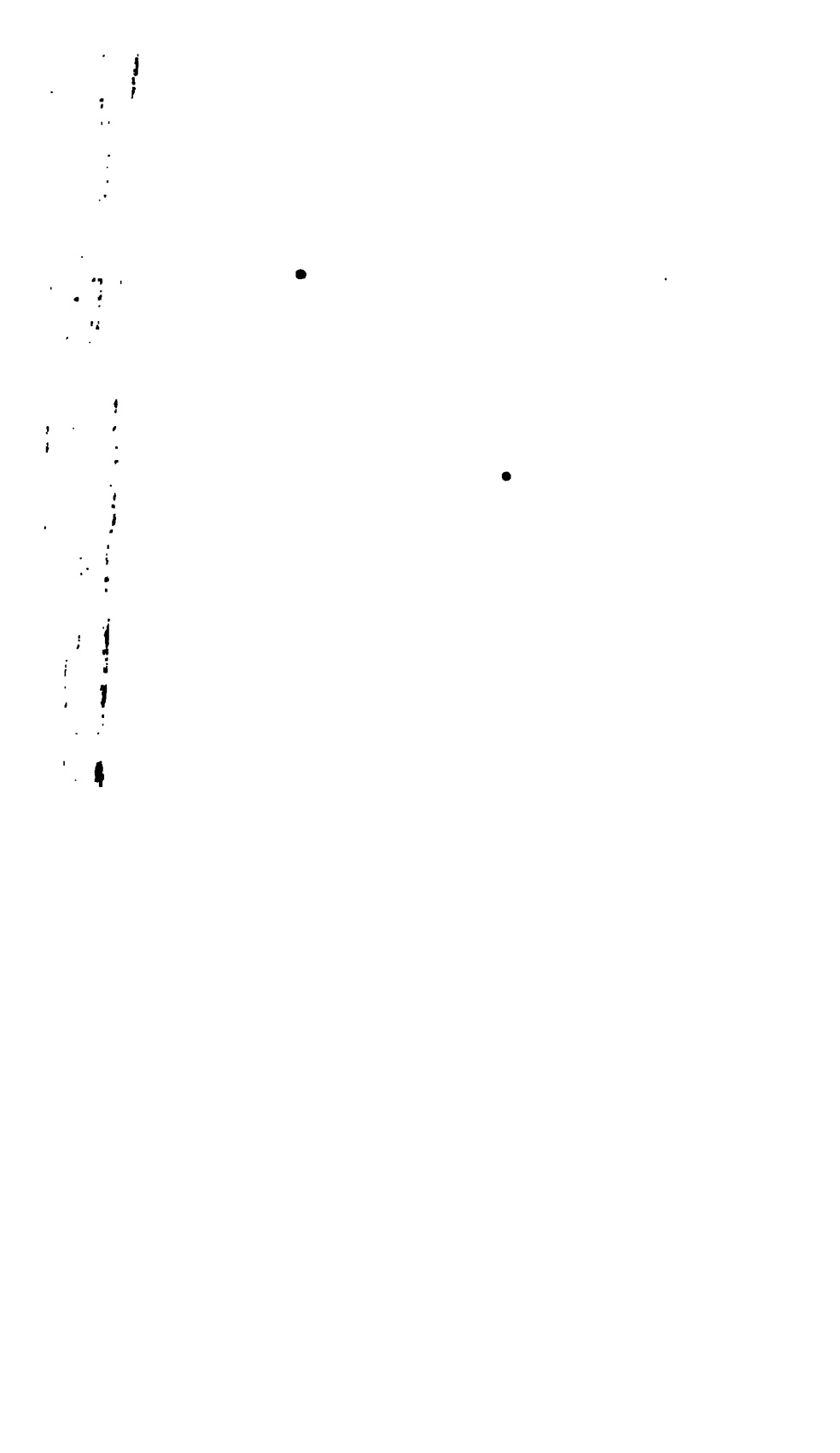
Fig. 2. B, The van of the British, consisting of four ships.

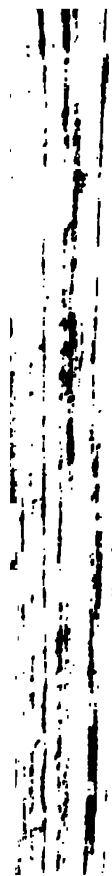
A, The centre, consisting of three ships.

C, The rear, consisting of four ships.

G, The van of the enemy, consisting of five ships, stretching along to engage the four ships in the van of the British.

F, The French Admiral, with the other seven ships of their line, steering directly on to the centre of the British, consisting of the *Superbe*







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