hence the enemy’s van will become uſeleſs ſor ſome time ; and if it ſhould attempt to tack and double upon the wea­ther fleet, much time will be lost in performing that evolu­tion ; and it alſo runs the riſk of being ſeparated by the calm which generally happens in the courſe of a ſea-engagement in conſequence of the continual diſcharge of cannon. A conſiderable interval might alſo be left between the centre and van, provided the neceſſary precautions be taken to pre­vent the van from being cut off.

*To force the enemy’s line.*

This is a manœuvre which the lee fleet may execute to gain the advantage of the wind. It is performed by the van ſhip, if within gun ſhot, tacking when ſhe and the centre ſhip of the weather line are on a perpendicular to the direction of the wind ; then all the lee fleet tack in ſucceſſion, and thus may paſs through the enemy’s line, or perhaps a little more to­wards the enemy’s van, and go about again in ſucceſſion to windward of him. But as he will not be long, without doubt, before he performs the ſame manœuvre, he will thus be able to regain the wind, if he be not forced to give way before his evolution is finiſhed. The enemy to windward may even cauſe his van ſhip to tack, as well as the reſt of the van ſquadron to follow in ſucceſſion, as soon as the leading ſhip of the lee fleet ſhall have passed through his line and be ready to go about ; by which means he will bring them be­tween two fires. This manœuvre, well executed, might per­haps give no little trouble to the ſhip attempting to force the line.

This evolution may be performed with advantage, if, by ſome accident or fault in the manoeuvring, the centre divi­ſion of the weather-line be ſeparated from their van or rear. For example, when the centre diviſion to windward is en­cumbered with diſabled ſhips, then the ſhips of the centre diviſion of the fleet to leeward, having all sails ſet, are to tack in ſucceſſion, and force with promptitude through the weather fleet, leaving their own van diviſion to engage that of the enemy on the other tack.

To *prevent the line being forced.*

When the ſhips of the fleet go about in ſucceſſion, in or­der to force the weather line, the whole line to windward is to tack together, and at the ſame time to get upon the ſame hoard as the lee fleet ; then that fleet will neither be able to traverſe nor join them. To perform this evolution with ad­vantage, it will be requiſite to permit some of the van ſhips of the lee fleet to pass to windward ; then the weather fleet muſt go all about rapidly, in order to put and keep them between two fires : thus may theſe ſhips be deſtroyed with­out their own fleet being able to give them any effectual asſiſtance.

It is eaſy to perceive, from what has been ſaid, that there is little occaſion to fear being traverſed, as such a manoeuvre may turn out to be more prejudicial than advantageous to thoſe who perform it. Nevertheleſs, it may and ought to be put in practice when the weather fleet leave ſuch vacan­cies between their diviſions as to allow ſome ſhips of the lee fleet to be inactive. In this caſe, the ſhips which are without opponents abreaſt of them are made to tack, with all ſails ſet, in ſucceſſion, and paſs through theſe intervals in the weather line, in order to double the centre diviſion, or any other part of it, and bring it between two fires.

Chap. X. *Of Chasing.*

1. In thc caſe of single ſhips.— It is ſcarcely neceſſary to obſerve, that the ſhip which gives chase is uſually called the *chaser,* and that which is purſued is called the *chase.* Unleſs the chaſer be the faſteſt sailing veſſel of the two, it is generally ſupposed that ſhe will ſeldom or never come up with the chaſe : but we have heard experienced officers say, that a chasing ſhip, sailing equally faſt, in other circumſtances, will gain on her chase ; becauſe ſhe has an object to ſteer by, whereas the chaſe cannot steer ſo nicely by the compaſs. In what follows, however, we ſhall ſuppoſe the chaser to be the faſteſt ſailer.

When the chaſe is to windward, it is evident that as ſoon as ſhe perceives a ſtrange ſhip which ſhe takes for an enemy, fire will haul her wind, in order to prolong the chaſe, as otherwiſe her retreat would be soon cut off. The chaſer then stands on alſo nearly cloſe-hauled until he has the chaſe on his beam ; he then tacks, and stands on cloſe-hauled until the chase is again on his beam, and then retacks. In this manner he continues tacking every time he brings the chaſe perpendicular to his courſe on either board ; and by manoeuvring in this manner, it is very certain that the cha­fer will, by the ſuperiority only of his sailing, join the other in the ſhorteſt time. For since the chaſer tacks always as ſoon as the chaſe is perpendicular to his courſe, ſhe is then at the ſhorteſt diſtance poſſible on that board ; and ſince the chaſer is ſuppoſed to be the faſteſt ſailer, theſe ſhorteſt diſtances will decreaſe every time the chaſer tacks. It is therefore of advantage to the chaſe to keep conſtantly on the ſame courſe, without losing her time in going about ; as tacking cannot be ſo favourable to her as to her adverſary, whose sailing is ſuperior. If the chaſer ſhould ſo little underſtand his profeſſion as to ſtand on a long way, and tack in the wake of the chaſe, the beſt thing ſhe can do is to heave in ſtays, and paſs to windward of him on the other tack, unleſs ſhe would have a ſuperiority in going large ; for if the chaſer persiſts in tacking in the wake of the other ſhip, it is an unqueſtionable fact that the chaſe will be very much prolonged,

The chaſe being to leeward, the chaſer is to ſteer that courſe by which he thinks he will gain most upon her. If, after having run a ſhort time, the chaſe is found to draw more aft, the chaser is then to bear away a little more ; but if the chaſe draws ahead, the purſuer is to haul up a little, and by this means the courſe may be ſo regulated that the chaſe may always bear on the ſame point of the compaſs, and then the chaſer will get up with the chase in the ſhorteſt time possible ; for were any other courſe ſteered than that which keeps the chaſe always on the ſame point, the chaſer would then be either too far ahead, or too far aſtern ; and hence the chaſe would be prolonged.

The chase ought to run upon that courſe which will carry her directly from the chaſer; and, in general, to consult which is her beſt trim with reſpect to the wind, that ſhe may move with the greateſt rapidity poſſible from the ſhip which pursues her ; for some vessels have more advantage in going large than others, ſome with the wind right aft, and others again are to be found that sail beſt cloſe-hauled ; so that attention ſhould be paid by the officer to the known qualities of his ſhip, in order to take the moſt advantageous direction capable to effect a retreat.

Another method has alſo been proposed for chasing a ſhip to leeward, that is, by conſtantly fleering directly for the chaſe : In this case, the tract the purſuer deſcribes thro’ the water is called the line or *curve of purſuit.* In order to illuſtrate this, let A (fig. 54.) repreſent the purſuer, and B the chaſe directly to leeward of it, and running with leſs velocity than the purſuer, in the direction BC, perpendicular to that of the wind. Now, to conſtruct this curve, let B *b* be the diſtance run by the chaſe in any ſhort interval of time ; join A *b,* and make A I equal to the diſtance run by the purſuer in the ſame time. Again, make *b c, c d, de, ef,* &c. each equal to B b; join Ic, and make I 2 equal to AI ; join *2d,* and make 23 equal to AI ; in like manner pro­