delivered to every private ſhip. In the firſt, the evo­lutions, movements, and other operations of ſervice, are ſet down in one column, and their correſponding ſignals in another. The firſt column is arranged, either alphabetically, by the diſtinguiſhing phraſe, or ſyſtematically, according to the arrangement of the sailing and fighting inſtructions. The officer whoſe duty it is to make the ſignals, turns to this column for the order which he is to communicate, and in the other column he finds the appropriated ſignal.

In the other book, which is consulted for the inter­pretation of the ſignals, they are arranged in the lead­ing column, either by the flags, or by the places of their exhibition. The firſt is the beſt method, becauſe the derangement of the flag ſhip’s maſts and rigging in time of action may occaſion a change in the place of the ſignal.

The *Tactique Navale* of the Chevalier de Morogues contains a very full and elaborate treatiſe on ſignals. We recommend this work to every ſea-officer, as full of inſtruction. The art of ſignals has been greatly sim­plified ſince the publication of this work, but we can­not but aſcribe much of the improvements to it. We believe that the author is the inventor of that ſyſtematic manner of addreſſing the order or effective signal to the different squadrons and diviſions of the fleet, by which the art of ſignals is made more conciſe, the exe­cution of orders is rendered more ſyſtematic, and the commanders of private ſhips are accuſtomed to conſider themſelves as parts of an army, with a mutual depend­ence and connection. We are ready enough to ac­knowledge the ſuperiority of the French in manoeuv­ring, but we affect to conſider this as an imputation on their courage. Nothing can be more unjuſt ; and dear- bought experience ſhould long ere now have taught us the value of this ſuperiority. What avails that cou­rage which we would willingly arrogate to ourſelves, if we cannot come to action with our enemy, or muſt do it in a ſituation in which it is almoſt impoſſible to succeed, and which needleſsly throws away the lives of our gallant crews? Yet this muſt happen, if our admirals do not make evolutions their careful ſtudy, and our captains do not habituate themſelves, from their firſt hoiſting a pendant, to conſider their own ſhip as con­nected with the moſt remote ſhip in the line. We can­not think that this view of their ſituation would in the leaſt leſſen the character which they have ſo juſtly ac­quired, of fighting their ſhip with a courage and firmneſs unequalled by thoſe of any other nation. And we may add, that it is only by ſuch a rational ſtudy of their profeſſion, that the gentleman can be diſtinguiſhed from the mercenary commander of a privateer.

II. Night Signals.

It is evident, that the communication of orders by night muſt be more difficult and more imperfect than by day. We muſt, in general, content ourſelves with ſuch orders as are neceſſary for keeping the fleet toge­ther, by directing the more general movements and evolutions which any change of circumſtances may ren­der neceſſary. And here the diviſion and ſubordinate arrangement of the fleet is of indispenſable neceſſity, it being hardly possible to particulariſe every ſhip by a ſignal of addreſs, or to see her ſituation. The orders are therefore addreſſed to the commanders of the diffe­

rent diviſions, each of whom is diſtinguiſhed by his poop and top-lights, and is in the midst of, and not very re­mote from, the ſhips under his more particular charge. Yet even in this unfavourable ſituation, it is frequently neceſſary to order the movements of particular ſhips. Actions during the night are not uncommon. Pursuits and rallyings are ſtill oſtener carried on at this time. The common dangers of the ſea are as frequent and more disaſtrous. The ſyſtem of ſignals therefore is very incomplete till this part be accompliſhed.

Night ſignals muſt be made by guns, or by lights, or by both combined.

*Gun-ſignals* are ſuſceptible of variety both in num­ber and in difpoſition. The only diſtinct variation which can be made in this diſpoſition, is by means of the time elapſed between the diſcharges. This will easily admit of three varieties, flow, moderate, and quick.— Half-minute guns are as flow as can easily be liſtened to as appertaining to one ſignal. Quarter-minute guns are much better, and admit of two very diſtinct ſubdivisions. When the gunners, therefore, are well train­ed to this ſervice (eſpecially ſince the employment of firelocks for cannon), intervals of 15 or 12 seconds may be taken for slow firing, 8 or 10 ſeconds for mo­derate, and 4 or 5 ſeconds for quick firing. If theſe could be reduced one half, and made with certainty and preciſion, the expreſſion would be incomparably more diſtinct. A very ſmall number of firings varied in this way will give a conſiderable number of ſignals. Thus five guns, with the variety of only quick and moderate, will give 20 very diſtinguiſhable ſignals. The ſame principle muſt be attended to here as in the flag ſignals. The moſt simple muſt be appropriated to the moſt im­portant orders, ſuch as occur in the worſt weather, or ſuch as are moſt liable to be miſtaken. Quick fi­ring ſhould not make part of a ſignal to a very diſtant ſhip, becauſe the noiſe of a gun at a great diſtance is a lengthened found, and two of them, with a very ſhort interval, are apt to coalesce into one long continued found. This mode of varying gun-ſignals by the time muſt therefore be employed with great caution, and we muſt be very certain of the ſteady performance of the gunners.

Note, that a preparatory ſignal or advertiſement that an effective ſignal is to be made, is a very neceſſa­ry circumſtance. It is uſual (at leaſt in hard weather) to make this by a double diſcharge, with an interval of half a ſecond, or at moſt a ſecond.

Gun-ſignals are seldom made alone, except in or­dinary ſituations and moderate weather ; becauſe ac­cident may derange them, and inattention may cauſe them to eſcape notice, and, once made, they are over, and their repetition would change their meaning. They are alſo improper on an enemy’s coaſt, or where an ene­my’s cruiſers or fleets may be expected.

Signals by lights are either made with lights ſimply ſo called, *i. e.* lanthorns ſhown in different parts of the ſhip, or by rockets. Lights may differ by number, and by poſition, and alſo by figure. For the flag ship al­ways carrying poop or top-lights, or both, preſents an object in the darſkeſt night, ſo that we can tell whether the additional lights are exhibited about the mainmaſt, the foremaſt, the mizenmaſt, &c. And if the lights ſhown from any of theſe ſituations are arranged in cer­tain diſtinguiſhable ſituations in reſpect to each other, the