further, obſerving silence, and taking care not to be ſurpriſed by the parties which the enemy alſo may send out on that side, to watch whether there are any troops of the garriſon ready to fall upon the workmen.

When the side on which the enemy open their trenches is known, the great pieces of ordnance are mounted on the rampart of the town *en barbette,* and the ſmall ones on the covert-way, from whence they are to fire briſkly upon the trenches. And to point more exactly, fire-balls are thrown from the mortars, which will give light enough to discover the workmen. Just at this time, the besieged ſhould make the greatest fire againſt the enemy, becauſe it is then they are most uncovered, and conſequently most expoſed. As the besieged cannot have their batteries ready till the ſecond or third day after the opening of the trenches, during that time the guns may continue to fire *en barbette ;* but it will hardly be poſſible to fire in that manner when the enemy’s batteries are once erected. Mortars ſhould likewiſe be uſed for throwing ſhells on the workmen and thoſe employed on the batteries ; in ſhort, the best uſe ſhould be made of the artillery, before the enemy are in a condition to silence it.

It is cuſtomary to make two or three attacks in order to divide the attention of the garriſon ; and of theſe, general­ly speaking, there is only one real ; they must therefore endeavour to find out this real attack, and to uſe the utmost diligence in making good retrenchments, as well in the out­works, which the enemy must take before they can come to the body of the place, as in the gorge of the bastion of the front attacked. But to render theſe retrenchments ſtrong and firm, they ſhould have been begun and even finiſhed be­fore the opening of the trenches. A governor, who has a proper knowledge of fortification, ought to judge on which side a town is most accessible, and to preſume that here the enemy will commence their attack ; conſequently he ought to think of every method of defence, the best adapted to re­tard the approaches, and diſpute every inch of ground.

The besieged ſhould ſo dispoſe their artillery at the be­ginning of a siege, as to enfilade the branches, and to di­rect their fire against the head of the trenches or the saps. This must be their principal effort ; for it is by continually firing upon them that they may reaſonably hope to retard the works.

When the enemy have erected their batteries, it is very difficult for the besieged to maintain theirs, especially if they are placed on the produced faces of the pieces attacked. For as the cannon are continually firing *à ricochet* against theſe faces, and it being difficult to guard against this firing, it will be very dangerous for the ſoldiers to remain there : all that can be done is to make ſome traverſes, in order to diminiſh their effect ; which is difficult indeed to compaſs, becauſe the ſhot falling upon the traverſes will bound be­tween them. It is adviſable not to persist in firing always from the same place against the enemy’s batteries. By ceasing to fire from that part where the besiegers know there was a battery, they may be induced to think they have destroyed it, which will prevent their continuing to fire against it, and be a means of preſerving the battery for future service. But in order to give them trouble, ſmaller guns may be placed in the outworks, on the faces of the bastions, from whence the trenches and batteries of the besiegers can be diſcovered ; and they must often change place to perplex the enemy, who will find it very difficult to diſmount thoſe moving pieces. The besieged however must endeavour to repair the parapets destroyed by the enemy, and to take proper meaſures for firing again from thence, as ſoon as the besiegers have ſhifted their guns.

It is alſo adviſable that the batteries of the besieged

ſhould not fire in ſalvos, or all at a time : for it is well known, that the besiegers place ſoldiers in the trenches to obſerve, through ſmall loop-holes made with ſand bags in the parapet of the trench, when the batteries of the town are fired, and to give notice to thoſe who are at work in the trenches, which way the guns are pointed, that they may put themſelves under cover. If the besieged have only six pieces on a battery, and they fire them all at a time, the ene­my have ſome moments of security to look over the parapet and to examine the ground where they intend to work and to conduct the trenches : but when the garriſon vary their manner of firing, they give more uneasineſs to thoſe who are at work in the trenches, who will not be ſo ready to look over the parapet ; which, though it be neceſſary, in order to view the ſituation of the ground towards which the works are to be directed, is ever dangerous, but eſpecially when the trenches are brought within muſket-ſhot of the place.

4. *Of Sallies.*

A garrison that keeps within a place, without making ſallies, is, as the chevalier de Ville says, like thoſe who are not concerned when their neighbour’s houſe is on fire, and will not stir to extinguish it till it has reached their own. And indeed, as the besiegers continually carry on their ap­proaches towards the town, it is of the utmost importance to endeavour, in time, to stop their progreſs ; to which end, the making of ſallies is extremely conducive, eſpecially when they are well conducted, otherwiſe they would rather acce­lerate than retard the taking of the place.

How great ſoever the advantage of ſallies may be, the are proper only when a garriſon is numerous. A simple garriſon, although well stocked with all the kinds of necesſary ammunitions for making a defence, and for holding out, ought to be very careful how they venture to make a ſally. But a numerous garriſon, not ſo well provided, ought to fatigue the enemy as much as possible by frequent ſallies. The same meaſure ought to be followed when a town is but ill fortified ; the garriſon ſhould not ſhut themſelves up ſo as to be obliged to surrender, as it were, without making much resistance. It is best in thoſe cases to haraſs the ene­my continually, to keep them at a distance as long as poſſible, and to uſe every stratagem and endeavour that may retard their approaching the glacis, and the taking of the covert­-way. Thus it was that the marquis of Uxelles, afterwards marſhal of France, behaved at the siege of Mentz in 1689. He defended that large and ill fortified town upwards of two months, with the help of a very brave garriſon ; but was obliged to capitulate for want of powder and ammuni­tion, though he was still master of the covert-way, and even in ſome meaſure of the glacis.

When the besiegers are at a distance from the place, ſallies are very dangerous, becauſe the enemy may cut them off front the town with their horſe : but when they have made their second parallel, and advanced the branches of the trenches towards the third parallel at the foot of the glacis, then is the time for the garriſon to ſally. They may even venture, though with great caution, when the besiegers are at work upon the second parallel, and before it is entirely finiſhed ; but the most favourable opportunity of sallying, is when the besiegers are come to the third parallel, and want to make a lodgment on the glacis. Then there is no danger of being cut off ; and the enemy may be ſurpriſed the more easily, as the garriſon have it in their power to fall upon them all at once, and to throw them into confusion, without giving them time to recover themſelves.

Sallies may be either great or ſmall ; the former ought