to be with 500 or 600 men at least, or proportioned to the guard in the trenches ; the latter are only with 10, 15, or 20 men.

The intent of great sallies ſhould be to destroy a conſiderable part of the works of the besiegers, in order to oblige them to begin again ; to nail up their guns ; to retake ſome post which had been abandoned ; and lastly, to obstruct the enemy’s works as much as poſſible, and thereby retard the taking of the place.

In regard to ſmall ſallies, they ſerve for no other end than to interrupt the workmen at the head of the trenches, ſo as to frighten them, and oblige them to run away. As it requires ſome time to bring them back, and to make them return to their work, this will occaſion delay, and retard the approaches.

The best time for great ſallies, is two hours before day­light, the troops being then fatigued and ſleepy ; therefore more easily ſurpriſed, and leſs capable of making a vigorous resistance. And when it has rained very hard in the night, ſo that the guard in the trenches may be unable to make uſe of their fire arms, this is alſo a favourable circumstance : in short, no opportunity ſhould be neglected to ſurprife the enemy ; for ſallies ſeldom prove advantageous any other way. The following is the order which Μ. Vauban pro­poses to be obſerved.

There ſhould be a detachment of 90 men drawn up, 30 in front, and three deep ; to which must be added a fourth rank of 30 grenadiers. The three first ranks of this detach­ment ſhould be armed with cuiraſſes ; each ſoldier ſhould have a ſword and pistol at his belt, and a partizan, or long iron fork with a hook, in his hand. This detachment is to be followed by another of 180 men, 30 in front, and six deep ; the first rank of theſe is to be armed as the former, with cuirasses and long weapons, the rest as uſual. The first rank in this detachment is to make up the rear in the retreat. After this second detachment 200 workmen are to follow with proper tools to destroy the enemy’s works, and ſeveral of theſe with combustibles to burn what they cannot otherwiſe destroy. Some of them are to be provided with long nails of steel, and of different magnitude, to ſpike the cannon ; there must be ſome of a very large fize, becauſe the touch-holes happen frequently to be ſo very wide, that common nails will not fill them up exactly.

Besides the two detachments and workmen above men­tioned, another body of 300 or 400 men ſhould be ordered to ſupport them, and to follow them ſlowly as far as the head of the trenches ; where, if they find that thoſe who went before them have no need of assistance, they ſhould halt to be ready to act if occaſion requires it. If the guard of the trenches ſhould make a vigorous attack upon the tally, this detachment will ſupport them, and jointly encounter the besiegers. If the latter are repulſed, which must be the case if the ſally is not foreſeen and expected, the workmen must ſet about demoliſhing the works, and filling up the trenches as fast as poſſible. Theſe troops ſhould also endea­vour to penetrate as far as the batteries, in order to nail up the cannon, and to maintain themſelves in the trenches long enough for the workmen to destroy great part of them. When they have done what they propoſed, they retreat to the covert-way in good order ; and if the enemy ſhould be ſo imprudent as to purſue them as far as the glacis, they must be received with a briſk fire as well from the cannon of the ramparts as from the troops in the covert-way.

In ſallies, and generally in all actions performed by night, the ſoldiers ſhould put ſomething in their hats, as a white paper or handkerchief, to know one another in the dark. The troops designed for this purpoſe are drawn up in the place of arms within the town, or in the ditch if it be dry, or else in the covert-way. When they are to march out by different gates, ſome signal ſhould be agreed upon, that they may all move at the same time. If there are more attacks than one against the town, as generally is the case, then ſeveral ſallies may be made at the same time upon theſe attacks. It might be proper to make a great noiſe on one side, in order to draw all the attention of the enemy that way ; and while they are buſy in the repulse, to act vigorouſly on the other side ; for then they will meet with leſs resistance, and will be more capable of hurting the be­siegers. However, as a ſally which has not all the ſuc­ceſs that might be expected, ought not to diſcourage the garriſon from repeating the attempt; ſo one that has been crowned with ſucceſs ought not to render them too confi­dent, or inſpire them with too great a contempt for the enemy. The mistakes the latter may have committed, will rouſe their attention, and put them upon their guard. We ought ever to ſuppoſe, that they will do all that we ſhould do, were we in their place, and that they will take proper meaſures to remove every obstacle that may oppoſe them.

Hitherto we have taken no notice of the uſe of cavalry in ſallies ; and yet on ſome occasions they may be of service, which is when the besiegers are at a distance from the place. In this case, two detachments of horſe are ordered to the right and left to ſupport the ſallies, and to hinder the ene­my’s horſe from falling upon them. Theſe detachments ſerve also to protect their retreat, and to prevent their being cut off ; but when the besiegers have finiſhed their third parallel, the ſallies are then made with foot only, and ſhould, as we have above obſerved, be often repeated, provided the garriſon is numerous enough to diſpute every inch of ground with the enemy.

As ſoon as the troops are returned from the ſally, fire-balls ſhould be thrown into the trenches, to diſcover the workmen who are employed in repairing the miſchief that has been done, and are at that time in ſome meaſure un­covered. The fire of the place well ſerved at this juncture, must kill a great many of the enemy. So far relates to great ſallies.

The ſmall ſallies, which are intended merely to disturb the besiegers without being able to do them much hurt, are conducted in the manner following. The governor orders out parties of 10, 15, or 20 stout men only, as hath been already obſerved, who are to advance softly to the head of the trenches, and to jump into them quickly, making a great noiſe, and throwing grenades ; after which they are to retire with all expedition : the alarm which they will occaſion is ſufficient to make the workmen take to their heels, who desire nothing better than to have a ſpecious pretence, as Μ. Goulon obſerves, to run away upon the least alarm ; and it is impossible to prevent it, or to bring them back the same night ; ſo that the besiegers must loſe all this time. If, says the same author, the besiegers be­come accustomed to theſe little ſallies, ſo as to grow ſecure and take no notice of them, the besieged obſerving this must make one in good earnest, which coming unexpected, will easily overturn the workmen and the troops that cover them : after which they may retire without fighting, lest they ſhould draw the whole guard of the trenches upon their backs.

*5. Of the Defence of the Glacis and the Covert-way.*

Besides the ſallies which retard the lodgment of the besiegers on the glacis, mines may increaſe the difficulty of approaching. We have already taken notice of theſe in the ſection of *Attack ;* we have only to obſerve here in general, that the besieged must make the best uſe of them poſſible, in order to blow up the enemy as often as the ground will