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A TREATISE ON THE MILITARY SCIENCE, WHICH COMPREHENDS THE GRAND OPERATIONS OF WAR, AND GENERAL RULES FOR CONDUCTING AN ARMY IN THE FIELD, FOUNDED UPON PRINCIPLES FOR THE IMPROVEMENT OF THE SAME, WITH OCCASIONAL NOTES: TO WHICH IS ADDED, THE MANNER OF ATTACKING AND DEFENDING OF MILITARY POSTS, VILLAGES, CHURCH-YARDS, MILLS, HOUSES, &c. DEDICATED (BY PERMISSION) TO HIS MAJESTY.

By THOMAS SIMES, Esq.

LATE OF THE QUEEN'S ROYAL REGIMENT OF FOOT, ONE OF THE GOVERNORS OF THE HIBERNIAN SOCIETY, FOR THE ORPHANS AND CHILDREN OF SOLDIERS; AUTHOR OF THE MILITARY MEDLEY, MILITARY GUIDE, MILITARY COURSE, AND MILITARY INSTRUCTOR.

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KING.

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DEDICATION.

It is the observation of one of the wisest of the Roman Historians, that war is, in a particular manner, the province of a Prince; and that though civil accomplishments are by no means to be neglected; yet to the person of the Sovereign more immediately belongs the merit and praise of being a good General; and, indeed, as it is among the principal duties of a King, to protect his subjects from foreign invasions, and check the attempts of ambitious and aspiring Tyrants, and to guard against the encroachments of powerful neighbours, nothing can be more evident, than that a due institution in the art of war, ought to be considered as an essential part of the study of a Prince, who is ultimately the judge of the conduct of his Officers.

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If this Book should prove acceptable to Your Majesty, I shall obtain the utmost of my wishes, it being the greatest ambition of my heart, ever to act so as to merit my most Gracious Sovereign's approbation, and to subscribe myself,

Your Majesty's

Most dutiful,

And most faithful

Subject and Servant,

Fort Harvey,
Bushey, Herts.
February 26, 1780.

THOMAS SIMES.
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My Lords and Gentlemen,

From the small experience I have had in the field, perhaps I may be censured for assuming this task; but as it proceeds from that zeal, which arises from a sincere attachment for His Majesty's service I hazard the publication; may I not humbly presume you will indulge me with your protection, though I should happen to fail in the execution.

Confiding in this hope, and that you may find the useful intermingled with the amusing, is the sincere wish of him, who has the honor to be, with all due gratitude and respect,

My Lords and Gentlemen,

Your most obedient,
And much obliged,
Humble Servant,

THOMAS SIMES.
THROUGH the whole of the Work, the Author has endeavoured to avoid prolixity as much as possible, but repetitions could not be helped consistently with the nature of the subject. As he necessarily had recourse to several antient, as well as modern authors; from the first he has extracted their sense, divested of their obscurity; and as to the latter, the discipline and manoeuvring of the British troops of late years, having undergone so many changes, and light troops formed for action, that he has been under the necessity of expunging such parts as were become obsolete, and by substituting the new, to adapt them to the present theatre of war.

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(DEDICATED TO HIS MAJESTY)

A THIRD EDITION OF

THE MILITARY GUIDE,

IN QUARTO;

With Alterations, Improvements, and several additional Plates:

AND

The Historical Part of the Dictionary will be brought down to the Day of Publication.
ERRATA.

2. The last word omit reading, that of "order."

24. Last lines but two and one instead of "pallisadoed," read "pallisaded," and so in the course of the first part of the Work.

51. Eighth line of note, omit reading the first of "the other is."

53. Twenty-third line instead of "me" read "the."

55. Sixteenth line, after the word "cut" read "off."

178. Eighth line, instead of "drew" read "threw."

180. Line three from bottom, instead of "centries" read "centuries."

187. After "Laufeld" pay no regard to "i. e."

205. Tenth line, read "time" between the words "some and place."

222. Eleventh line, instead of "sinure" read "insure."

268. Ninth line, instead of "covered" read "uncovered."

285. Fifth line, instead of "part" read "park."

289 and 290. For "Mareschal" read "Marshall."
A TREATISE ON THE MILITARY SCIENCE.

Of the PREPARATIONS before taking the FIELD, and the MARCH of an ARMY on leaving its Quarters to go into CANTONMENTS.

The Quarter-Master General, his Deputy, or an able Engineer should sufficiently reconnoitre the country and navigable rivers, to obtain a just knowledge of them and the enemy, before he ventures to form his routs. If strongest in cavalry, plain and open ground should be preferred; if superior in infantry, choose a situation full of enclosures, ditches, morasses, and eminences.

The time for an army to march out of winter-quarters, is always regulated by the plan which the General has formed for the ensuing campaign. They leave them very early when they are at a distance from the country where the war is to be carried on; but later, if, by their situation, the operations of the campaign can be commenced after having made
made two or three marches: but whether, by the situation of the quarters, the army is enabled to enter immediately on the campaign, or whether it must be first of all cantoned, the magazines should be so situated as always to be within reach, especially in that early season of the year, when there can be no forage upon the ground, and consequently the cavalry must be subsisted out of the magazines.

The magazines ought to be distributed about in different parts, that the troops may have less way to go for their forage.

The General is to issue his orders to the Intendant of the army for whatever regards the magazines, and to mark those places to him where he should have them established; and for the greater security of these places, there must be troops posted in them; the roads should be good, and the communications well guarded, by which means the convoys will arrive in safety.

The distribution of the magazines should be regulated by the movements which the General foresees the army will make on leaving its quarters, supposing it leaves them when there is only dry forage; but if the army is in an enemy’s country, and their forage upon the ground, it is certainly better to reserve the magazines intire, by which not only great trouble will be avoided in transporting the forage, but also a great expence saved.

Of what nature soever the country may be (an enemy’s country is supposed) it should be foraged in front as much as possible, in order to reserve that which is in the rear, that, when the campaign is over, it may be laid up in barns; &c. if this precaution is not attended to, the army will be destitute of forage at its return, and will in course be obliged to draw it from home, and consume those magazines which were before spared; consequently there will be nothing saved, the expence will only have been deferred, but it will be increased by transporting the forage from the magazines to the army.

The forming of the magazines should never be delayed till the time for opening the campaign approaches. The Intendant, pursuant to the General’s order, should lay in the provisions during the winter, and distribute them in the
the frontier towns, by which means they can easily be transported to whatever place the General may order. By these precautions, the General will not only avoid the inconvenience of being obliged to wait till there is forage upon the ground, but he will be enabled to be the first in the field.

The same precautions should also be taken with respect to the artillery; whether for that wanted for a siege, if it is intended to open the campaign by that operation, or whether for that which is necessary in the course of a campaign, it should be assembled upon the glacis of the frontier towns, or rather upon that of the conquered places; the more it is within reach of readily joining, the sooner the operations will be commenced.

From prudence in the execution of these dispositions, as well for magazines and for the artillery, as for everything that is necessary to an army, it follows, that a General hath often formed a siege, or at least invested a place, and compleated his lines of circumvallation * before the enemy could be in a condition of coming out of his quarters; he will likewise have made many marches, and have possessed himself of many advantageous posts, without the enemy having it in his power to oppose him.

* Circumvallation, or line of circumvallation, implies a fortification of earth, consisting of a parapet and trench made round the town intended to be besieged, when any molestation is apprehended from parties of the enemy which may march to relieve the place.

Before the attack of a place is begun, care is to be taken to have the most exact plan of it possible; and upon this the line of circumvallation and the attack are projected. This line being a fortification opposed to an enemy that may come from an open country to relieve the besieged, ought to have its defences directed against them, that is, so as to fire from the town; and the besiegers are to be encamped behind this line, and between it and the place. The camp ought to be as much as possible out of the reach of the shot of the place; and the line of circumvallation, which is to be farther distant from the place than the camp, ought much more to be out of the reach of its artillery.

As cannon are never to be fired from the rear of the camp, this line should be upwards of 1200 fathoms from the place; we will suppose its distance fixed at 1400 fathoms from the covert-way. The depth of the camp may be computed at about 50 fathoms, and from the head of the camp to the line of circumvallation, 130 fathoms, that the army may have room to draw up in order of battle at the head of the camp behind the line. This distance, added to the 50 fathoms, makes 150 fathoms, which being added to the 1400 makes 1550 fathoms, for the distance of the line of circumvallation from the covert-way. The top of this line is generally twelve feet broad, and seven feet deep; the parapet runs quite round the top of it, and at certain distances, is frequently strengthened with redoubts and small forts; the base eighteen feet wide, the height within six, and on the outside five feet, with a banquet of three wide and one and a half high.
The success of the General's design is ascertained by his own forecast, and the dispatch with which his orders are executed. Negligence and sloth are always productive of miscarriages.

"In great affairs," says Cardinal d'Offat, in a letter to M. Villeroy, "in order to avoid a great evil, or to gain a great good, one must venture, and put something to the risk, and resolve at once, and without delay, to get out of a bad situation in the briskest and quickest manner possible."

A General should observe, that in order to make an army come out of its Quarters, and cause it to be cantoned within a march of the country where he designs to commence the operations, he must order all the troops to leave their quarters together; assemble them in many bodies, in different frontier towns, proportioning the marching days to the distance of the quarters, and the rendezvous that shall have been appointed for them, that they may arrive on the day appointed, and that from thence they may march in a body to the place where they are to canton.

All the bodies march either in the number of columns, that the situation of the country will allow, and arrive at the cantonment together, or else they may march separately and arrive on different days; but in either of these cases, the cantonments for each regiment ought to have been marked out, and, if possible, forage for at least three or four days distributed to each quarter.

In the marching-orders which are sent to each commanding-officer, the situation and name of the place where each regiment is to canton, should be expressed; whether on the right, the left, or in the center; the discipline to be observed; the place where to go and receive orders, and that where to receive forage should also be specified.

Troops, when upon a march, should always observe the most exact discipline, and never be suffered to advance, but in the same order, and with the same precaution, as if they were in danger of being molested or attacked.
Whenever an army is cantoned, it is generally in an enemy's country; therefore, for the better security of the cantonments, there should be at least one place that may serve for a support. In 1746, Brussels was the center of the cantonments of M. Saxe's army. In 1747, his quarters were sustained by Anvers on the left, Malines and Louvain supported the center, and Namur the right. If no place of this sort can be found, the army must then march out together and encamp, instead of going into cantonments.

As the cantonments are properly nothing more than a halting quarter, where the troops are to remain till the season permits them to take the field, till the proper quantity of forage is collected, or till the necessary preparations for the intended operations are completed; they should necessary be more connected than the winter quarters; but as soon as the weather permits, and all the necessary preparations, which should have been forwarded during the winter, are finished, there is then no time to be lost: For an army will always find its advantage in encamping early, getting the start of the enemy as much as it possibly can, and beginning the campaign, no matter by what operations, before the enemy can have time to assemble.

The greatest Generals, formerly, have constantly adhered to this rule; and, in our times, it hath always been followed by Marshal Saxe. The cantonment of his army under Brussels, in 1746, and the famous march he made in 1748, to invest Maestricht, on leaving his quarters, are examples which ought to serve as models; but all these cases, the varying of circumstances must be attended to.

It is undoubtedly true, that an army commanded by one General, and who only receives orders from his Sovereign, ought to be in a condition to take the field on the shortest notice; but with a combined army, it is quite different.

If any particular column, upon the march, presents its flank to any one of the enemy's towns, although it is indispensibly necessary for every column to observe all possible order and discipline on the march, yet this column is more particularly obliged to it; necessity makes it become a duty; but that it should not be too much exposed, some light cavalry ought to march upon its flank.
flank, who should be ordered to advance till they come within sight of those towns. This column, whether consisting of infantry or cavalry, must detach some troops to sustain the light cavalry in case they should be attacked and repulsed. By posting these detachments upon the flank, the enemy will be kept at a distance from the column, and the light cavalry sustained.

In a word, every measure that shall appear necessary for the disposition of the army on leaving its quarters, either to go into cantonments or to encamp, ought to have been provided for, and laid down with such exactness, that there shall remain no obstacle to prevent the army assembling in a very few days.

The like attention is also requisite for the artillery, the baggage-waggons for the infantry, the waggons for the provisions, and the magazines of forage, as well as for every equipage that is necessary for a campaign, so that they may be able to march on the shortest notice; and the General should also be well assured, that before the army quits its cantonments, it shall be in a condition of entering the enemy's country, compleatly furnished with every thing necessary, both for subsistence and battle.

When the encampments is to be formed, the general officers, &c. are appointed to their several posts and stations, and the army divided into brigades, columns, wings, or lines.

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OF MAGAZINES, SUBSISTENCE, &c.

Famine makes greater havock in an army than the enemy, and is more terrible than the bayonet. Time and opportunity may help to retrieve other misfortunes; but where forage and provisions have not been carefully provided, the evil is without remedy. The main and principal point
point in war, is to procure plenty of provisions, and to destroy the enemy by famine.

It was said by a certain great General, that in order to have a good army, you must begin by providing well for the belly, which is the main spring of every operation. I shall divide this subject into two separate branches; in the first of which, I shall mention the places where, and the manner how, to establish your magazines; and in the other, I shall consider the method of using and transporting them.

The general rule is, to establish your most considerable magazines in the rear of your army, and, if possible, in a fortified place. When Silesia and Bohemia were the theatres of war, we fixed our grand magazines at Breslau, on account of the Oder, which enabled us to recruit it with facility.

If your magazines are in front of your army, they are in danger of being lost upon the least rebuff; but if you fix them one in the rear of another, you act prudently, and a small misfortune cannot cause your entire ruin. In the Electorate of Brandenburg, the best places for magazines are Spandau and Magdeburg; the latter, on account of the Elbe, would be most convenient in case of an offensive war with Saxony; but in a war against Bohemia, Schweidnitz is the best place.

It is very necessary to be circumspect in the choice of Commissaries, for if these gentlemen happen to be rascals, the state and the soldier will suffer considerably; you must therefore endeavour to find a Superintendant of known probity, who will frequently and minutely examine their conduct and proceedings.

There are two methods of forming magazines; the first is, by ordering the principal gentry and the peasants to supply the necessary quantity of grain, for which they are paid according to the tax of the finance chamber, or by deducting the sum from their contributions: But if the country happens not to abound in forage, you must agree with some Entrepreneur for the quantity required; this is the Commissary's business, who must sign the agreement.
It is likewise necessary to construct proper vessels for transporting corn and forage.

These Entrepreneurs should never be employed but in cases of absolute necessity; for in general, they are such mere Jews, as to enhance the price of provisions, and sell them as dear as they possibly can.

Your magazines should be formed as early as possible, that your army may be provided with every thing before it takes the field. If you wait too long, you will be hindered by the ice, or by the badness of the roads, from forming your magazines, except with the greatest difficulty.

Beside your regimental bread-waggons, the Commissary should be provided with caissons capable of conveying a month’s subsistence.

But if there are navigable rivers, we must avail ourselves of them, for without these, there can be no plenty of provisions in an army.

Your waggons should be drawn by horses; we have tried oxen, but to our disadvantage. Your waggon-masters must take great care of their horses, and the General should be attentive; for by a loss of horses, your number of waggons is diminished, and consequently the quantity of subsistence.

There is yet another reason, viz. that your horses being not well fed, are unable to bear fatigue; in consequence of which, you lose not only, on the march, the horses themselves, but the wagons, and the meal or bread they may contain: Such losses, frequently repeated, will disconcert the most rational projects; therefore a prudent General, knowing this detail to be important in its consequences, will not think it beneath his attention.

In a war with Saxony, you must convey your subsistence upon the Elbe; and in Silefia, upon the Oder: In Prussia you have the sea; but in Bohemia and Moravia, you must have recourse to waggons.

It
It is sometimes necessary to establish three or four magazines on the same line, as we did in Bohemia, in 1742; we had one at Pardubitz, one at Vienburg, one at Podjebrod, and another at Brandeis, that we might be able to march in a line with the enemy, and follow him to Prague, in case he had thought proper to take that rout.

During our last campaign in Bohemia, Breslau supplied Schweidnitz, and that place furnished Jeromirtz, and from thence we conveyed subsistence to the army.

Besides waggons, we had several iron ovens, the number of which not being found sufficient, was afterwards augmented. You should bake bread as often as you halt. On every expedition, you should be provided with bread or biscuit for ten days: Biscuits is an excellent thing, but our soldiers do not like it in their broth, and are in general unacquainted with the use of it.

When you march in an enemy's country, your meal must be deposited in some neighbouring town, where you will place a garrison.

In the campaign 1745, our magazine of meal was first at Neustadt, then at Jeromirtz, and afterwards at Trautenau; if we had advanced further, our next place of security would have been Pardubitz.

I have ordered a hand mill to be provided for each company, which they will find to be extremely useful: The soldiers who work these mills, are to carry the meal to the baker, and to receive bread in return. Thus you will not only spare your magazines, but will, by these means, be frequently enabled to continue in a camp, which otherwise you would have been obliged to quit; besides, fewer convoys will be required.

Having mentioned convoys, I shall here add what is necessary upon that subject.

Your escort must be stronger or weaker in proportion to your apprehensions from the enemy. It is proper to post detachments of infantry in the towns through
through which the convoy is to pass, in order to relieve the escort during their halt. Sometimes it is requisite to cover your convoy by strong detachments, as was the case in Bohemia.

In a mountainous, woody, or inclosed country, your convoy must be escorted by infantry, attended by a small number of light horse, which are to give notice of those places where the enemy may form an ambuscade. I have even employed infantry upon this duty, in an open country, and had reason to be satisfied.

A General of an army can never use too much precaution for the security of his convoys; one good method is, to send detachments to a considerable distance in front, in order to secure the defiles through which your convoy is to pass, and to push your escort a league from the line of march towards the enemy. This will mask your convoy, and secure it.

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**SUTLERS, BEER, SPIRITS, &c.**

**W**hen you have any enterprise in view, your Commissaries must order all the beer and spirits upon the road, or near it, to be collected, that the army may be in no want of either, at least during the first three or four days. As soon as you enter an enemy's country, you must secure all the brewers and distillers which are to be found in the neighbourhood, and oblige them to furnish a proper quantity of liquor.

As to the Sutlers, they must be protected, particularly where the inhabitants have left the country, and where, consequently, provisions are not to be had for money; in that case, the peasants have no right to expect lenity.

The Sutlers, and soldiers' wives, are to be sent out in search of provisions, roots, and greens; and the price must be so regulated, that the soldier may be able
able to buy them, and the Sutler to make a reasonable profit. In short, every
convoy should be followed by some cattle for the subsistence of the private
men, as well as the officers.—N. B. In some services, there is a douceur for
the private men, and upon the nicest calculation which I have made, on account
of the great rise of provision in Great Britain and Ireland, I am sure the sole
cause of the great desertion in our army, is owing to the very poor pittance they
receive; for after paying for many articles, in some corps, I will venture to
affirm, the soldier does not receive above Five Guineas and a Half to support
upon for the whole year; but however distressful this may appear, and how-
ever improper to introduce under the head of such articles as before recited,
yet I cannot drop the subject, or write without the feelings of an old Subaltern
(which station I was long in); I therefore now shall speak of the Ensign, &c.
and to which I shall add, a scheme of his expences, which, in a former publi-
cation, I have before done.

**SCHEME of an ENSIGN's CONSTANT EXPENCE.**

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Cloaths nor pocket-money included.

Beside this, when in barracks, there will be an additional expence for
washing of sheets, pillow-cafes, bed-curtains, towels, and bed-rug.
A TREATISE ON

I have a most particular regard for the honour of the service, and am sensible how necessary a proper appearance is to support the true character, and how inadequate the pay of the gentlemen employed is to maintain it; I have therefore taken this opportunity to represent the distressed condition of the Soldier; and though my inclination and my heart feels for the Ensign, yet I want words to do justice to the character, in order that, that August Assembly may relieve their wants, and put them upon a more respectable footing, with respect to pay. In short, the pay from the Colonel down, is by much too little, when we consider, that the present pay was established above a century ago, and at that time was worth thrice its present value.

I have heard it said, that the Judges' salaries are raised on account of the dearness of travelling, &c. I do not disapprove of the measure, their dignity and consequence ought to be supported;—Why then are not the Colonel's pay, and those downwards?—Have they more merit than the military?—Do they go through more fatigues and hardships?—Do they hazard more climates?—Do they fight more battles?—Do they do more good for their country's service?—Why then are so honourable, so deserving, and so respectable a part of the community to be thus neglected?—The consequences are, that we daily see a number of excellent officers selling out.

Of DRY and GREEN FORAGE.

Forage makes an essential part of the art of war: The country where it is intended to be, must first be reconnoitred; and in doing that, the disposition must be made, the number of horse and foot required to form the chain, is to be proportioned to the degree of danger, and the nature of the situation; but you must endeavour to cover one side effectually, if you cannot both, from the insults of the enemy.

By
By dry forage is meant, oats, barley, hay, chopt straw, &c. these are to be collected in your magazines. Care must be taken that your oats are perfectly sound, and not mouldy, otherwise your cavalry will soon be unfit for use. Chopt straw does nothing more than fill their horses belly; it is used only because it is the custom.

The reason for collecting forage, and forming magazines early, is either with a design to take the field before the enemy, or with a view to some expedition at a distance: but an army seldom attempts any thing which may carry it too far from the magazines, so long as the horses are fed with dry forage, because the number of carriages required is so great, that an entire Province would not be long able to support it.

During the campaign in Silesia, my cavalry fed upon dry forage; but then we marched only from Strehla to Schweidnitz, where we had a magazine; and then to Cracau, which was near the Breg and the Oder.

When you attempt a winter expedition, your cavalry must carry five days hay upon their own horses. If Bohemia or Moravia is to be the theatre of war, you must wait for the spring, or you will infallibly ruin all your cavalry. So long as there is any corn or herbage standing, you forage in the field, and after the harvest, in the villages.

When you take possession of a fresh camp, where you intend to continue for some time, the first thing to be done is, to reconnoitre the forage, and after having made an estimate of the quantity, to make a proper distribution for the number of days you intend to remain.

A grand forage is always made under the escort of a body of cavalry, proportion to the vicinity and power of the enemy. These forages are sometimes general, and sometimes by wings.

Your foraging party always assembles upon the road; sometimes upon the flanks, and sometimes in the rear of the army. The light horse should have the advance guard, if it is an open country; but if the country be enclosed, the infantry
infantry should march first. A fourth part of your foragers follow the advance-
guard, then a detachment of the escort, consisting of cavalry and infantry; these are succeeded by another party of foragers, which are also covered by a second detachment of troops; and so on alternately. A troop of light horse close the column. Upon all escorts, the infantry are to take their field-pieces along with them; and the foragers to have their carbines and side-arms.

As soon as the party arrives at the place where they are to forage, they are to form a chain, posting the infantry near the villages, behind the hedges, and in hollow ways, with small parties of cavalry between each, keeping a reserve in the center, ready to support any part of the chain, where the enemy may attempt to pierce.

The light horse will be ordered to skirmish and amuse the enemy in the mean time. As soon as the chain is formed, you will divide the field, allotting an equal proportion to each regiment. The respective officers are to take care that the men make their trusses large, and bind them well.

When the horses are loaded, the foragers are to return to camp, attended by small escorts; and as soon as they have quitted the field, the troops which form the chain are to assemble, and form the rear guard, followed by the light horse.

The manner of foraging in the villages is the same, with this difference only, that the infantry must be posted round the village, with the cavalry in their rear. It is proper to forage only one village at a time, that the troops that form the chain, may not be too much dispersed.

Foraging in mountainous countries is attended with most difficulty: in this case, the escort must be composed of infantry and light horse only.

When you are encamped near the enemy, if you intend to continue any time, you must endeavour as soon as possible to get possession of the forage between the two armies: you will then forage in a circle of six miles round your encampment; beginning with the fields at the greatest distance, and reserving the nearest to the last.

When
THE MILITARY SCIENCE.

When you order a grand forage, it is best not to take too large an extent, but rather to order two grand forages immediately after each other; thus your chain being closer, your foragers will be better secured, and less liable to be surprized.

That part of the forage which is received in grain, the men must thrash, and cutting the straw in half, put the whole into their sacks; this method of conveyance prevents all that loss, which is unavoidable in the use of trusses, where all the corn sheds in carriage.

Of CAMPS in OFFENSIVE WAR.

A general, whether acting on the offensive or the defensive, ought always to be watchful. Sleep is dangerous to him, with whom the safety of the army, and security of the state are intrusted. A dream sent by Jupiter to Agamemnon, [in Homer] told him, that: a General who presided at so many councils, who had such numbers under his command, and who was loaded with so many cares, should not sleep the night out.

To take an advantageous position for an army; to make choice of a spot, that by its situation is strongly secured; to establish a camp there, and to be also able to have the army within distance of marching easily to the enemy, without fear of being molested; in short, to throw sufficient difficulties in the enemy’s way as may prevent his harrassing the army, is one of the most essential branches of knowledge for a General. He who is endowed with this talent, can, with an inferior army, not only make head against, but also cause his enemies' designs to miscarry; fatigue him the whole campaign, by marches and counter-marches, which lead to nothing; oblige him to remain inactive, and at length draw him into a favourable position, where he will be morally sure of beating him, as was done by T. Turenne in 1675; who, after having exhausted
exhausted every expedient wherewith his military knowledge could furnish him, to draw *M. de Montecuculli* into a disadvantageous post, at length succeeded; found an opportunity of attacking him, and gloriously fell at the instant victory declared itself in his favour.

War is carried on either offensively or defensively: As they each require different management, it would be improper to confound them together in the same chapter; therefore the camps relative to the former shall be now treated of; then those necessary to be taken in the latter, as well as the occasions where it is proper for them to be intrenched. These two kinds of war shall be supposed to be carried on, sometimes on a plain, and sometimes in a woody and mountainous country. Let an army be now supposed in the field, with a design of making conquests; whether by attacking the enemy's army, or by advancing into his country, by forcing him to retire, or by attacking some of his towns.

Before a General takes the field, he ought to be very certain what number of troops he shall have, that his magazines both of war and provisions are ready, as well as the waggons, pontoons, and all other implements whatever, that are necessary for an army; for events may happen, that it is almost impossible to foresee, and which often alter the best-concerted designs. There has been instances of Generals who, having taken the field with an intention of acting offensively, but have been obliged to change their plan to the defensive, because the magazines which they had ordered, have, through the negligence of those intrusted with the care of them, not being collected; or because the army has been weakened by detachments necessarily sent from it, either to the assistance of allies, or to some towns threatened by the enemy; by such kind of accidents, the plan of campaign is entirely destroyed.

* It hath frequently happened, and will continue to do so, that a General who knows how to take advantage of the knowledge of the country, although inferior in point of force, may change a defensive into an offensive war. In 1671 *M. de Crêque*, who begun the campaign on the defensive, ended it with obliging the Duke of Lorrain to pass the Rhine; that Prince dispersed his army, and then *M. de Crêque*, formed the siege of Fribourg.

But
But let it be supposed, that the General has the troops necessary for acting on the offensive, or that the events of the foregoing campaigns, force the enemy to keep on the defensive; that the heavy artillery, the field pieces, and the carriages of all forts are ready to march; that the magazines are filled; the roads free and safe; the pontoons and boats got together, either for the passing of the troops, or transporting the provisions, in case the country should be divided by rivers; then a General possessed of the necessary talents, can foresee the event, even before taking the field: He will know before-hand the marches he is to make, the camps he is to occupy, and those which the enemy will endeavour to seize, in order to oppose his designs.

An offensive war is undoubtedly carried on with greater ease in an open, than in a mountainous country. In plains, an army acts openly; forage is in greater abundance; the provisions can be conveniently transported from one place to another; and the marches are performed with more ease: Among mountains, he who is best acquainted with the country; who has a head fraught with expeditions, and is the most vigilant, hath often the advantage, although inferior in numbers; at least, he maintains himself in, and preserves the posts of which he is in possession with greater ease; and an attention to seize such advantages as the ground offers, will, at least, put a General upon an equality with his adversary.

But whether in an open, or in a mountainous country, and however superior the army be to the enemy's, the least negligence in the choice of situation, may render the superiority of troops useless, and even hurtful; unless, if from a desire of taking up too much ground, the army is so divided, that the enemy may fall either upon the right or left, without a possibility of its receiving succour: Hurtful, if from a desire of assembling the army in too narrow a spot, the troops too close together, are unable to act without embarrassment to each other. This superiority should not cause a General to be neglectful of the safety of his troops in their camp; he should always be assiduous in preserving the strictest order and discipline among them; one or two checks are generally sufficient to discourage the soldier, and take away that confidence which he ought to have in his General. The advance posts should be well guarded, the flanks secured, and the detachments frequently sent outwards towards
towards the enemy: For as success is insured by vigilance and care, so negligence and slack discipline are ruin to the most formidable army; and entertaining a contemptible opinion of an enemy, renders him more daring.

Whatever situation the army is in, it always ought to avoid presenting a flank to the enemy, and should also use every endeavour to take a camp in a situation that is naturally strong: The wings should be sheltered, and every part in the front and rear, should be covered by detachments; but whatever the nature of the country is, an army should never fix upon a camp where there is not wood, water, and forage within reach.

It is observed, that a camp ought never to be fixed on the banks of rivers; but a sufficient space should always be left between them and the camp, to draw out the army in order of battle. If this precaution is not taken, it may happen that the enemy, encamped either near to, or at a distance from the other side of the river, being informed of the position of the army, will come in the night to alarm the camp, and by a discharge of artillery and small arms, throw the whole camp into confusion, without risking the loss of a single man: But again, by encamping an army upon the banks of rivers, how will there be a possibility of drawing it out in order of battle, or posting advanced guards? For these reasons, a camp should always be placed at least eight or ten hundred yards from a river, so that the guards may be advanced without being exposed; and within the circumstances of the camp, and compass of the guards, the army may be supplied with forage for, at least, four days, and more if possible.

There are some situations for a camp which are in appearance strong, but notwithstanding prove very dangerous, if care be not taken to examine, whether or not the army can with ease come out of it, to form itself in order of battle; or whether the enemy can prevent it, by blocking up the avenues and outlets. If this precaution be not taken, an army may be the means of shutting itself up, as was done at Senoff, in 1674, and by the Allies at Aschaffenburg, in 1743.
THE MILITARY SCIENCE.

If the war is carried on in a woody country, the same precautions must be used for the security of the camp; but these dispositions must be changed according to the nature of the country. There is scarcely any country so entirely wooded but has some plains in it. The choice and strength of a camp depends on the position of the enemy, and situation of a country. A General should always avoid encamping the cavalry in a wood, and should be particularly careful that the wings are sheltered: The woods should be occupied by the light infantry, and intrenchments thrown up in front, according to the designs intended to be put in execution. If the wings are sheltered by a village, it should be intrenched, and infantry posted in it; and the camp should be covered by a river as much as possible, unless the intention is to march towards the enemy; then all the obstacles that can prevent the army coming up with him should be avoided. But if from some successes of the enemy, or from his superiority of troops, the General cannot determine upon opening the campaign offensively, he must use other means to bring it about; and in the mean time should strengthen himself in camp; establish posts on the banks of a river, and cover them by continual detachments of light horse, who, by extending themselves, will prevent parties of the enemy from passing to seize on the hind parts of the camp, molest the convoys, and attack the foragers. If there are woods at a small distance from the camp, posts of infantry must be established in them. Guards of cavalry are never advantageously posted but on a plain; but if there should be any space between two woods, where cavalry can act, and from whence it can take surveys at a great distance, a guard of light cavalry should be placed there; but posts of infantry should be placed in the woods to protect it, and to which they may retire in case it is attacked.

Whatever may be the nature of the country, it is often necessary to have corps detached from the body of the army, to cover or keep open a communication with some place, in order to prevent the enemy from foraging too near the camp; to preserve the forage; to raise contributions at a distance; to occupy some advantageous post; to oblige the enemy to divide his forces, in order to oppose that body; to cover the camp, either in the front or on the flanks, according to that side which is left most unguarded and exposed: In a word, there should always be continual detachments toward the enemy, as hath been
the practice of many Generals, and of M. Saxe, in a late war. The
strength of this body is to be proportioned to the use designed for it by the Gene-
ral; but it is usually composed of light horse, some regiments of light infantry,
and a brigade or two of dragoons. In the end will be seen what use should be
made of this body; but in whatever situation it is to be placed, the commu-
ication between it and the army must always be kept open, that it may always
be able to join on the first order; and its camp must be so chosen, that the Ge-
eral may always receive intelligence from it, of the least movements made by
the enemy.

If the war is carried on in a mountainous country, there are generally some
small plains or valleys where an army may be encamped, if not altogether, at
least some part of it; besides, in these sort of countries, a General is almost
always obliged to separate his troops; to send out many detachments in order
to guard the passes and communications between each other; to endeavour to
out-flank the enemy, or for such-like dispositions; so that the army not being
altogether, it must be discerned where to fix the most considerable body.

A General who carries on war in a mountainous country, and who, by the
superiority of his army, is enabled to act offensively, ought to endeavour, by
the positions which he takes, to surround the enemy; to render his forage
difficult; to harass him by continual small detachments, which the enemy
will be forced to oppose by others more considerable; he should endeavour to
steal a march of him: and, although a General should never expect success
from the enemy's negligence; there have, nevertheless, been seen instances,
where armies, by activity and dispatch, have gained a march or two on their
enemies, although commanded by able Generals.

If the enemy's vigilance prevents the General from succeeding, he must em-
ploy new stratagems, and never give up his point. He should try all those that
lead to the same end, although by different channels; either attacking some
detached post, obliging the enemy to send succours to it, and by that means
weakening other places which he should endeavour to force; or decamping, and
feigning to penetrate on some other part, to oblige the enemy to abandon a
camp
camp that is advantageously posted, and by that means to draw him into some post that is weaker, either from situation or from extent of country, he is obliged to defend; and by this method, find an opportunity of attacking him with advantage.

In short, in whatever country, and whatever occasion, a camp is always defective if the wings are not sheltered, or are to be easily distressed by the enemy; if the front is not guarded, and the rear well covered; if the communications with the frontier towns are not secure and easy; if there is any want of forage, wood, and water; and, if there are not detachments in front, to prevent the enemy from approaching the camp.

A General who joins experience and study together, ought to see into the intention of the enemy's General, and judge of his designs by any of his proceedings, however trifling.

All those who are destined to the command of armies, cannot be endowed with his quick and exact eye; that ready power of judging of a good motion, or a ready position upon the spot: Some Generals have excelled in marches; others in position of camps: these in the arrangement of troops in order of battle; those in their conduct in time of action; others in providing subsistence; and others in projecting a campaign. There have nevertheless been some of these great men, whose genius and temper have united, and carried these qualifications to the greatest degree of perfection; but the rarer these examples are, the more a man ought by continual study, to endeavour to augment their number, and strive to merit the honour of being enrolled among those heroes, the ornament of mankind, their country's support, and their master's glory.
A TREATISE ON

OF CAMPS IN DEFENSIVE WAR.

We must sleep like the lion, without shutting our eyes, which ought to be continually open, in order to foresee the smallest inconveniences that may happen. For hence it is, that we so often see in states and armies, that such evils as were imperceptible in their origin, and which were least thought of, are the most dangerous, and those which prove of the greatest consequence in the end.

It is in general, more difficult to carry on a defensive war; but more particularly so in an open, than in a mountainous country. In the former, there is nothing to conceal the movements and dispositions of the army from the enemy, whereas in the latter, the nature of the places prevents the enemy from discovering them; but whatever may be the nature of the country, the choice of a camp, when on the defensive, and the art of pitching upon an advantageous situation, is what proves the genius and talents of a great officer. Exclusive of a thorough knowledge of the country, this operation requires a quick and penetrating eye in a General, to enable him to seize the posts, which from their situation, may prevent the enemy either from attacking him, or penetrating into the country. It is not difficult for a General to stop an enemy by his courage, when of equal force: It is still easier to prescribe bounds to him when he hath the advantage over him in number; but a General, under the necessity of receiving them, must seek for such expedients, from his own talents and understanding, as may serve to balance the enemy's superiority, or make himself equal to him in strength.

A General who acts on the offensive, takes what state or circumstances he pleases; he may act as he chuses, and, is not under the necessity of regulating himself entirely by the enemy's motions: Whereas, a General that is not sufficiently strong to attack, is generally obliged to continue quiet 'till the enemy hath acted, and then to regulate his motions according to those made by the opposite army, unless his superior abilities give him a particular advantage over the enemy's General. Although it is always necessary for a General to have a thorough knowledge of the country, this knowledge will yet become more necessary to him when acting on the defensive; he ought to prevent the enemy's
enemy's entering his country and forming any siege there, (a plan which he cannot execute, unless he is possessed of the most advantageous posts, and also of those which cover the town's liable to be threatened,) by proper dispositions that secure his camp; by covering his front and rear, and keeping the communication between the camp and places where the magazines are; by endeavouring to annoy the enemy in his convoys and foragings; by haraﬃng him in his camp, and perplexing him with small detachments, to which the enemy will be obliged to oppose more considerable ones: These dispositions, properly managed, may destroy any enterprize the enemy may have formed against the army.

By the enemy's superiority, the nature of the country, and the success of campaigns, the General should determine whether or not his camp should be intrenched; the intrenching of camps requires much observation: It is easy, says Vigetus, to intrench a camp while at a distance from the enemy, but it becomes a very diﬃcult operation when the enemy is near at hand. The Romans, according to him, used to keep all their cavalry, and half their infantry drawn up, in order of battle, in order to cover those troops that were employed in working at the intrenchments. Caesar, when in Spain, fortified himself after this manner, under the very eyes of Afranius and Petreius, without their having the least knowledge of it.

Before a General fortifies a camp in a plain, he must observe the position in which the ground will permit him to form his camp, whether or no it will be liable to be surrounded; if it will entirely cover the country it is to protect, and the towns for which there is most reason to be apprehensive; if the parts in the rear are open; if forage is plenty; if provisions can easily be brought; if there is wood and water; if it is impossible for the enemy to enter the country without forcing the camp; if all these circumstances concur, it is certainly most advantageous to intrench the camp.

Many lament the neglect of surrounding our camps with intrenchments, as it is a better security against surprize, and requires but few, and not strong guards. The Turks, and other nations of Asia, when in an open country, fortified themselves with waggons and other carriages; but though the practice of the times is to endeavour to out-line an enemy, and therefore, Generals seldom spare a third line: But the method commonly recommended, is to form two lines, and to have a body of reserve, either on the right or left, or in the center of either the first or second line, as occasion may require. But that intrenched encampments should be so much neglected, is to me no small surprize; for I know few men used to travel on foot, that would not be willing to have horses to lead in their hands, that when they are weary of walking, they may, by riding on them, come to their journeys end.
A TREATISE on

A General should never be too secure by having a superiority of troops; he ought not, on that account, to neglect fortifying his camp, even when he acts on the offensive; these intrenchments will not hinder him from marching out to the enemy whenever he judges it proper, and his army by that means be sheltered from the enemy's attempts.

A camp cannot be too well secured or defended, for which reason, encamp as often as you can under cannon of fortified places; or always let a fortress be near your camp if you can: Take possession of the rivers, high grounds, eminences, and passes which are near you: Above all things, encamp near a river, for the great convenience of your men and horses, and, if possible, let it cover one of your flanks; and keep an open communication for the joining of your troops, and the carriage of things necessary.

Caesar, whose good luck was equal to his intrepidity, having ranged over all the territory of Beauvais, like a conqueror, certain of victory, being distressed for forage, was, consequently, obliged to weaken his army, in order to increase the detachments which he sent out to forage; he therefore first took the precaution of surrounding his camp with all necessary fortifications.

If a General is fearful of fatiguing his troops, or weakening his army by employing part of it at these works, he must, for that purpose, make use of all those who follow the army; they work equally the same as the soldiers, for nothing will render them so industrious and laborious as the common dangers in which they are exposed: As formerly, at the siege of Carthage, the women, the children, and the old men all worked, and their united labour retarded, at least for some time, the taking of that city. Caesar, that he might not fatigue his troops, employed only peasants to intrench his camp.

There are many methods of intrenching a camp by lines, beginning on the right, and covering the whole front to the left; these lines, in their extent, have redoubts and angles at proper distances; and the line being continued from one to the other, forms the curtains. In the front of them, there is a large and also deep ditch; sometimes a covered way is added, which is pallisaded and stoccaded through all the whole front of the line: to render them yet
yet stronger, and more difficult to be forced, there are pits sunk before the
covered way: these pits are ranged chequer-wise, about six feet deep and five
broad, and are in form like a reversed cone. Such were the lines the Duke of
Berwick caused to be made, in 1734, to the lines of circumvallation before
Philipsburg, only with this difference, there was no covered way. Without
doubt these lines are formidable, and even difficult to attack, but a great deal
of time is required for constructing them; and, if there is not a sufficient
number of peasants in the army to work at them, troops must be employed
to expedite them, which will not only fatigue them, but may also cost the
lives of many; because removing of earth, often causes great disorders, parti-
cularly where the ground is swampy or clayey: Besides the time which these
lines take in raising, they are generally defective; and there are but few in-
stances of their being attacked without being forced; and if the enemy pene-
trates at any one part, the troops which guard them are obliged to retire, to
avoid being attacked in front and flank.

The method practised by M. Saxe, seems much superior to these lines:
It contained as large an extent of ground, without diminishing the labour;
because, instead of lines, it consisted of redoubts, which require as much work
to form the four faces and the covered way, as lines always continued. At
the siege of Maestricht, in 1748, he used these redoubts instead of lines: Their
distance from each other was forty yards; they were floccaded, and the
covered way pallisadoed. These redoubts presented an angle to the field, and,
consequently, they were mutual protections to each other: They were each
of them capable of containing a battalion.

His design was, supposing the enemy was come to attack the army, to
cause all these redoubts to be occupied; to plant ten pieces of cannon between
each; and to draw the army up in order of battle behind them: by this means,
the enemy would be obliged to force the redoubts before they could attack the
army, which could not be done without great loss: But supposing the redoubts
to be forced, how would the enemy be able to enter the intervals without divid-
ing? The army behind, in order of battle, would charge him without giving
him time to recover himself, and it is highly probable, would beat him.
By following this method of intrenching a camp, if some of the enemy's battalions should, for example, force three or four redoubts, they certainly will not dare to advance as long as the remainder hold out; so that a General might, by detaching some brigades, and causing them to march to the assistance of the battalions that have been forced, relieve the redoubts; or, without disordering the order of battle, may drive away the troops which are in possession of them with his cannon: In short, this method seems to be excellent, because it proves, that all the redoubts may be forced, and yet the army not be beaten, because it has not suffered in the action, but remained the whole time in order of battle, with all its cannon; so that the enemy will be reduced to the necessity of beginning a second battle. Lines, on the contrary, have not the same advantage; all the troops, or the greatest part of them, must line them; the cannon is planted at proper distances, either on the angles of the redans, or those of redoubts. If one part only is forced, the army is beat, and the cannon taken, because the enemy makes his attack with his front, and the front of the army being busied and taken up, the troops which have entered, seize on the flanks of the lines, and consequently the army is surrounded, unless it immediately retires.

Lines are never good, unless when there is a large extent of country to be guarded, and some frontier to be covered from the incursions of the enemy; the front of the intrenched camp seldom exceeds six miles, more or less; whereas, lines to cover a country, have sometimes extended thirty miles in front. By some it is thought, that in order to cover a country, it is sufficient to have certain holds, which shall be strong and well intrenched, with patroons continually going from one end of the posts to the other, and each post to be provided with signals both for day and night: It is unnecessary that these patroons should be strong, provided they follow, and are continually crossing each other, this will be sufficient to prevent the enemy passing undiscovered. It is certain, that the enemy will not dare to pass between these posts, whether he be strong or weak: If he passes in a body, he will be cut off behind, and his convoys.

* Redans, in field fortification, are a kind of indented works, lines, or faces, forming fallying, and re-entering angles, flanking one another; often used on the sides of a river, which runs through a garrison town. They were used before bastions were invented, and are by some thought preferable to them.
convoy intercepted; if he pass only in parties, they will be cut off with
greater ease. However, lines of this nature would require much labour, and
also take up years to complete them.

The lines of Stolboffen are a proof, that however well fortified lines may
be, they are not impregnable. The Prince of Baden had employed a conside-
rable time in the construction of them, had neglected nothing to render them
formidable, and they were deemed impossible to be taken: Nevertheless,
M. Villars forced them in 1704, without the loss of a man. There are many
instances of lines, which encompassing a large extent of country, have been
forced; those of Flanders, guarded by the French, were forced by the Duke
of Marlborough, in 1705, and many others, that are needless to mention.

M. Saxe's method for intrenching a camp in a woody country, inter-
spersed with small plains, seems also to be a very good one: The redoubts
are to be erected in the plain, and lines thrown up in the woods according to
the usual method, with redans placed on the side of each other, at twenty-
four toises* distance; there should be a palisaded ditch in the front, and the
lines, as well as the half-moons, should be friezed with pointed stakes; behind
these lines, which cannot be very extensive, because they only cover a part
of the front of the camp, must be placed the troops necessary for defending
them; a considerable intrenchment of felled trees must be made behind, with
the branches of the trees entangled with each other; and some openings
must be left, wide enough to permit the troops who guard the lines to pass
through, in case they should be over-powered, and obliged to retire; the can-

* Toise, in military mensuration, is a French measure, containing six of their feet, or a fathom; a
square toise is 36 square feet, and a cubical toise is 216 feet. These two measures correspond in the di-
vision of the feet, but these divisions being unequal, it is necessary to observe, that the proportion of the
yard, as fixed by the Royal Society at London, to the half toise, as fixed by the Royal Academy at Paris,
is, as, 36 to 38, 355.

† This is much the same, as what is now called an ABBATIS, which is formed by cutting down many
trees, the branches of which are turned towards the enemy, and pointed, and then entangled one into an-
other. They are made either before redoubts, or other works, to render the attacks difficult; or sometimes
along the skirt of a wood, to prevent the enemy from getting possession of it. In this case the trunks serve
as a breast-work, behind which, the troops are posted, and for that reason should be disposed of, so as that
the parts may, if possible, flank each other.
non must be planted in the face of these openings, and the remainder of the army must be drawn up in order of battle, an hundred paces at most, behind the intrenchments of trees and the half-moons. The retrenchments of trees are placed about sixty or eighty paces behind the lines, and not before them; because it will be a new and unexpected obstacle to the enemy. The retrenchments carefully made, and with large trees, can be destroyed by cannon only, which would take up a considerable time: If they were in front of the lines, there would certainly be a rampart more, but that might be useless, and perhaps hurtful, because the fire of an enemy to make a passage, would drive the splinters of the trees into the lines, which would do more harm than even the shot itself.

In a mountainous country, the dispositions for intrenchments are different: It is impossible there to find plains sufficiently large to draw up an army in order of battle, and place it behind redoubts, as in an open country; the avenues and the passes only can be intrenched; the redoubts would not be sufficient, because the avenues must not only be guarded, but the heights also occupied. Now, as it will often happen among mountains, that there is not a foot of earth, how then can redoubts be erected there? A General must then make use of such assistance as the country can furnish him with, whether by heaping stones upon each other, or by retrenchments of trees well jointed; and thus construct lines sufficiently strong to shelter the soldier from fire and injury. In an open country, a General, in a manner, suits the ground to his dispositions; in a mountainous country, he must apply his dispositions to the ground; but in any country whatever, he must use all the assistance of art for intrenching camps. In mountainous countries, there are more inequality of ground, which render the enemy's approach to the lines difficult; and although it is almost impossible for a camp, in a mountainous country, to be attacked in front, nothing should be neglected for its safety; but all the avenues, by which it may be surrounded, must be intrenched with care, and all the heights which over-look it secured; because the enemy, without intending to attack in front, will amuse him during the time necessary for troops to take a long round, in order to penetrate to the camp on another side. If Leonidas with his eight thousand Greeks, had been possessed of all avenues, ways, and eminences, by which he could cut off, in the same manner as he was of the
the pass of Thermopylae, Xerxes, with his innumerable army, could never have forced him in the defiles which he guarded. The three actions of Fribourg are memorable examples of the necessity of securing all parts in the rear, and of occupying the posts by which they can be turned. M. de Mercy, attacked by two Generals of the highest reputation, the great Condé and the Viscount de Turenne, took such good positions in these three attacks, that, although forced to retire, and followed from post to post, he could never be turned, but made his retreat quietly through the valley of St. Peter, without the French armies being ever able to break in upon him.

The intrenchments should never be more than two hundred and fifty to three hundred toises, which make from five to six hundred paces distant from the camp, and which ought to be divided into three parts: This distance should be made, that the troops may be able to judge of the parts that can be carried with greatest ease, and of those which are most in need of assistance, that they may march there with greater order, dispatch, and facility; whereas, if this distance is not observed, it will happen, as hath sometimes been seen, that the troops, not having ground sufficient to range themselves in order of battle, the dispositions will be impeded by confusion and disorder, and the enemy will have forced the lines before the troops can be in a condition of opposing him.

But in a mountainous country, it is not sufficient for a General that cannot be turned; that he hath profited so well by the advantage of ground, as to render the enemy's approach to the camp difficult; that the assistance of art hath been joined to nature, and that the country to be guarded is entirely covered: He must, also, be careful that the communications with the neighbouring towns, where the magazines of war and provisions are established, is safe and easy: If any one of these particulars is neglected, the camp is exposed, neither can the General continue in it the time that would be necessary to retard the march and designs of the enemy. As it hath already been observed, that there is scarcely any post that is not liable to be turned or overlooked, the camp should be intrenched only so far as the intrenchments may become an obstacle to the enemy, and as they may be the means of giving the General time to retire, or occupy another post.

When
When the enemy undertakes the siege of some town, and the General, although with an inferior army, is willing to succour it, or cause the siege of it to be raised, he should seek out a spot naturally strong, and intrench it according to its situation: If an open country, according to the method above mentioned; if among mountains, according to the assistance that the nature of the country may give; and make use of these intrenchments as a sure asylum from whence to make sallies upon the enemy, to attack his forage and his convoys, and to oblige him to raise the siege, as well by the fatigues of it, when it has been drawn out to a greater length of time than was designed by the enemy, as by the want to which he is reduced by the continual inquietudes, that the intrenched army hath given him. Metellus raised the siege of Zama, because at the very time he was preparing to assault the place, he was attacked on all sides by Jugurtha; and the Roman General found himself obliged to abandon the attack of the town, in order to repulse the enemy.

There are also some occasions where camps are intrenched under towns; the circumstances wherein these intrenchments are necessary, may be seen in the memoirs of M. de Feuquieres, who, in relating many examples of these sort of camps, seems to condemn them when too much attention is shewn in fortifying them; because, says he, if the camp is lost, the town must follow. This reflection of M. de Feuquieres, supposes the defence of the town to be neglected for the intrenchments, which is not common; but, without canvassing this opinion, it may with certainty be advanced, that the best method for defending a place, is always to present fresh obstacles to the enemy, which will fatigue him, occasion the loss of his forces, abate his eagerness, and at length entirely discourage him; besides, the more the enemy is stopped, either by exterior intrenchments, or trenches, that are pushed on towards him, as was practised at the siege of Prague in 1742, the greater time is there to fortify the place within. Rhodes would still have belonged to its defenders, had they not been betrayed; equally fortified within and without, every intrenchment became an obstacle to the enemy more difficult to be surmounted, as it was defended by soldiers glowing with honour, and zealous for their religion, and every intrenchment to be forced, was the occasion of a fresh battle. Whilst the exterior fortifications kept back the enemy, and breathed nothing but slaughter, and whatever is most terrible in war, the inside of the town remained in tranquility:
quility: The General there assembled his council, and struck out fresh lights; the fatigued soldier there found an asylum to recover his strength and spirits, while confusion reigned only amongst the enemy. But as these kind of intrenchments relate rather to sieges than camps, it is foreign to the present purpose to say more of them.

When an army is in an open country, it generally continues in the same camp for some space of time, because it is certain, the enemy cannot conceal his designs so effectually from the General, but he may be able to circumvent them; but in a mountainous country, it is uncertain, whether an army will continue in the same post till morning, that it occupied over night. A General must then encamp in such a position, and after such a manner, that in case the enemy comes to attack him in force, and with advantage, he may be able, without danger, to proceed to another post, and evade the enemy's designs. When Lucius Minutius commanded the Romans, in war against Æqui, he, by endeavouring to avoid them, shut himself up in defiles, and had his flanks and rear covered by mountains. The Æqui got possession of the only pass by which he could extricate himself from that difficulty: By this opposition of the Æqui, his provision and forage were cut off; and he must have laid down his arms without fighting, had not Cincinnatus, who came to his assistance, contrived to get the Æqui between the two armies.

It requires great skill in a General to judge, when it is proper or improper to make choice of places which have a great many avenues on one side, because, if he should be attacked in a camp enclosed by rocks, or deep in a valley, which hath but one or two passes open, it will be very difficult for him to disengage himself from the enemy; on the contrary, if there are many small passes or avenues to the ground of which he is possessed, and by which the enemy may easily invest his camp, it will require a great number of men to guard them. But on these occasions, a General should ever be careful to make a good disposition of his troops, to maintain strict order and discipline in his camp, and to send out his patrols with the greatest regularity; by which means he will free himself from all apprehensions of being surprized.
There ought to be no difference between a well-governed town and a well-ordered camp: The exactest order should be observed, and the strictest discipline kept up. If a soldier is at liberty to quit or enter it at pleasure, the enemy's spies will not fail to make their advantage of it. If the camp is unhealthy, or distressfed for provisions, water, wood, or forage, and the soldier hath real cause of complaint, every method should be tried to avoid the danger that will attend his being discouraged. It is often owing to the little order existing in the camp, that the soldiers are seized with a panic, occasioned by the absurd and groundless reports that are diffused throughout it: Troops thus terrified, are in a manner vanquished before they come to action.

In a mountainous country, such places should be avoided as are subject to be overflowed, either by melting of the snow, or by torrent, which at some seasons appear no more than trifling rivulets, but which at others, swell and carry off every thing they meet with in their way: Of this nature were those mentioned by M. de Feuquieres, which he found near the rock that he attacked and took, in 1690, from Badovais. Situations in the neighbourhood of woods are generally to be feared, because the enemy may set them on fire, and the flames be communicated to the camp.

The General ought also to satisfy himself, with regard to the nature of the springs, which may agree very well with the inhabitants, but prove very unwholesome to strangers. Such, according to the reports of the French, is the nature of the springs in many parts of Italy. The waters belonging to certain streams or rivers will be pernicious, while that belonging to the fountains and wells, in the same country, will be very wholesome and salutary.

The reader may see in Vigmatic, Santa-Cruz, Montecuculli, and Puysegur the King, further orders to be observed in camp, whether intrenched or not. It is impossible to use too many precautions for its security; they depend upon the General's ability, and upon the discipline he causes to be observed.
Of the Attack of Intrenched Camps.

Men should be sufficiently tried before they are led against the enemy.

The principles of war, among all nations, and in all times, have been still the same; but the little experience of the early ages of the world, would not permit those principles to unfold themselves, as they have since done, and to which it is owing, that new expeditions for the attack and defence, have been discovered.

In the fabulous times of Greece, the first conquerors were esteemed as Gods, because they, by their genius and valour, supplying the want of art, were regarded as beings superior to humanity, as mortals born for its destruction: But now, as arts of all kinds, and particularly the art of war, have soared to a pitch of almost perfection, these Gods of antiquity are no longer considered in any other light than as great men, who made themselves superior to the rest of cotemporaries. In proportion as posterity hath become more enlightened, it hath also become more just; it hath preserved the title of Hero for those, who have not made an ill use of their superior talents and strength; but hath given the detestable name of tyrants to those, whose desire of revenge and rage have out-lined their success.

The first epocha, wherein the military talents become conspicuous, is the siege of Troy, although there were even wars prior to that. Homer, when describing the shield of Achilles, mentions wars raised for the carrying off cattle. Horace confirms this; and, in his Satires, also mentions a war anterior to that of Troy, the occasion of which was the same, and without mixing sacred authority with these profane ones: And those who know the passions, can want no argument to convince them, that man has been in a state of warfare, from the time they have been actuated by them, or, to use a better expression, as soon as mankind was forced into society. Even before the siege of Troy, Hercules and Theseus had already astonished the Greeks by their conquests: But...
although these two heroes have purged the world of many flagitious men, 
their victories are rather a proof of their strength and cunning, than of their 
knowledge in the military science. In proportion as Greeks became polished, 
by the laws of Lycurgus, the people more enlightened, discovered, in the neces- 
sity of self-defence, the principles of attack. The Grecians gave birth to that 
science, which the Romans extended; which succeeding ages improved; and 
which we have almost brought to perfection.

What a sensible difference is there in the military art, such as it at present 
is, compared with that, of which the rulers are handed down to us by Onozan-
der, Vegetius, Leo, Frontinus, Ælian, and many others? The towns, in their 
times, had no other defence than walls, raised at a great charge, flanked at 
little distances with towers, and a large ditch in front; it is true, that the 
little force of their weapons contributed much to the advantages of their for-
tifications. Their intrenched camps had only a large ditch with some wag-
gons placed behind it; and whenever the ancients were willing to practise all 
the art at that time known in war, they surrounded the camp with walls in 
the same manner as they did their towns, with towers at a little distance. Of 
this kind was Pompey's camp at Dyrachium, in Epirus, the plan of which is 
given in the Marshal de Pujsegur's Art of War; the wall by which it was sur-
rrounded, was fifteen thousand paces in extent.

The Emperor Leo* was unacquainted with any other method of intrenching 
a camp, than by heaping fascines together, putting trees upon one another, 
and posting advanced guards.

The experience, which has been since acquired, hath, without abridging 
the labour, rendered the works of places stronger, and easier to be defended: 
The labour of the intrenchments for camps hath been shortened, they have 
taken a new form, and being constructed upon the same principles as the for-
tifications of towns, they are become more difficult to be forced. By this fame

* Sextus Julius Frontinius in his fourth Book of Stratagems, says, "That till the Romans had vanquished 
" Pyrhus, King of the Epirus, they never used a line about their camp, but lay in the open fields; but 
" having found that Prince's army intrenched, they liked it so well, as ever after to practise it.

means
THE MILITARY SCIENCE.

means of attacking them hath been discovered, and in proportion as offensive weapons have changed, and are become more powerful, the system of fortification has been new modelled.

The power and force of arms being come more considerable, it has been thought necessary to oppose them by such fortifications, as were capable of resisting them; and necessity has done that, which genius was, till then, unable to effect. It is for this reason, that in the latter wars, and in those of the present time, Generals have not been contented with making ditches in the front of their camps, in order to intrench them, after the manner of the Romans, but have to them added lines, angles, and redoubts, at proper distances. Art hath been carried farther, by the addition of wells in the front of the ditch: In short, M. Saxe, in a war, instead of making use of lines to intrench his camp before Maestricht, only caused redoubts to be erected at proper distances, each of which had a covered way.

Covert-way, which was pallisadoed, and the redoubts freized; he also caused large and deep wells to be sunk in the ditch. Our posterity may perhaps discover something to add to the strength of these intrenchments, the knowledge of a succeeding age being always increased by that of the preceding.

A General should be determined upon the attack, and the manner of it, by the nature of the intrenchment, and the situation of the country. Such intrenchments as those of M. Saxe, at Maestricht, are very difficult to be forced, nor can the design of it be formed with great superiority of force; even then the success is uncertain. The strength of these intrenchments hath been read under the article of camps, in defensive war.

But a camp intrenched with lines may be attacked, although at the siege of Philipzburg, Prince Eugene, at the head of eighty thousand men, did not dare to attack those which were erected by the Duke of Berwick; but this example should not serve as a rule. Two great men naturally fear and respect each other. Prince Eugene, being thoroughly acquainted with the Duke of Berwick's abilities, was therefore convinced, that his rival had taken all those precautions, which he himself would have done in the same situation; the
Duke of Berwick, doing the same justice which all Europe did to Prince Eugene's talents; had, to the prudence of his dispositions, added all the assistance of art. The Prince having examined the lines, and finding them strong in every part, acted the part of a wise and experienced man: The lines were not attacked, and Philipburg was taken.

Camps intrenched with lines, are not always equally strong in every part; they are neither always commanded, nor even to be attacked by Generals equal in talents, capacity, and experience; and when they are, there are some occasions, when force and resolution must be joined to the prudence of the dispositions.

Let any army be supposed intrenched behind lines, where art and nature are both joined, whose flanks are sustained and secured, furnished with troops and artillery along the front, with more troops behind, to sustain those which line the lines. The General who would attack, ought first to survey the situation of the lines himself, and as much as possible, the enemy's disposition; he will examine the construction of the lines, how they support their extent, and whether the soil is firm or light. As soon as he shall be perfectly acquainted with these circumstances, he may form his plan of attack, and cause

* Lines of communication, are trenches that unite one work to another, so that men may pass between them without being exposed to the enemy's fire; thence the whole intrenchment round any place is sometimes called a line of communication, because it leads to all the works.

Inside lines, are a kind of ditches towards the place, to prevent sallies. &c.

Outside lines, are a kind of ditches towards the field, to hinder relief, &c.

To line, in a military sense, is nothing more than to environ a rampart, parapet, or ditch, &c. with a wall of masonry, or earth.

To line hedges, &c. to plant troops, artillery, or small arms, along them under their cover, to fire upon an enemy that advances openly, or to defend them from the horse, &c.

To break the line, to change the directions from that of a straight line, in order to obtain a cross-fire.

Lines, in a military sense, a name given to all kinds of works made by an army, from one town, or strong post to another, behind which it is encamped, to guard a part of the country, &c.

If an army is so weak as to be within lines, you take care to have communications between the villages, and small parties of light horse patrolling towards the enemy, and to have videts and sentries posted so near one another, that you may have intelligence of all their transactions.
his army to march in as many columns, as there are attacks to be made, causing false attacks, with small bodies of men, to be made, in order to favour the true ones; but he should endeavour, as much as possible, to occupy the whole front of the enemy, whether for the strength, or whether to prevent the enemy from sending assistance to those places where the attack will be briskest. The head of each column should be well furnished with artillery; and as soon as it shall be within distance of cannonading the lines with effect, it should keep up a brisk and continual fire for the space of an hour at least, so as to beat down the earth of the parapet, and tumble it into the ditch, which will, in some measure render the passage of it less difficult for the troops. The time of the attack should be an hour before day, so that the cannon may have fired, before the enemy shall know where to direct his artillery; after every discharge, the situation of the cannon should be changed either to the right, or the left, in order to deceive the enemy's gunners, and to prevent their knowing where to direct their pieces. If there should be any height within proper distance, the cannon should be planted upon it; if the cannon can be brought to cross each other upon the lines, the artillery will then have a great effect.

The infantry should follow the artillery, furnished with hurdles, planks, fascines, pick-axes, and shovels; the fascines will serve to fill up the wells, if there are any before the ditch; if there are no wells, they will fill up the ditch, and the hurdles will be thrown over them. The cavalry should be formed in two lines in the rear of the infantry, in order to sustain it. The General should endeavour to find some ridges, to conceal the cavalry from the enemy: But should there be none, it must be placed at such a distance, as not to be exposed to the cannon of the lines; for should it be placed too near, it will very soon be destroyed, without having it in its power to be of any service; the great fire which it will sustain, may strike it with terror, which may cause it to give back, and discourage the infantry, or at least deprive it of that resolution and vivacity which it had, knowing itself to be sustained; besides, it is great inhumanity in a General, to expose troops which he can place in security. The enemy appears less formidable, when force cannot be opposed by force; but the bravest soldier will be often disheartened, when he sees himself exposed to blows, which he has not in his power to return. Besides, as in the beginning of an attack of lines, the cavalry cannot be of any assistance, and cannot
cannot act till the infantry hath penetrated in some part, it would be useless
to cause it to advance too near, provided it is within reach of marching readily
when the infantry has passed, and hath made a passage large enough for it, by
beating down the lines, and filling up the ditch: The cavalry then will have
no more to fear from the cannon of the lines, because the enemy's attention
will be more engaged with endeavouring to repulse the infantry, than with
firing upon the cavalry: As soon as the lines have been sufficiently cannonaded
to beat them down, and throw the enemy in confusion, the infantry should
march resolutely, and together; and should take care to leave room for the
artillery, so that it may advance at the same time, and continue its fire. The
attack should be made by the grenadiers and light infantry, and sustained by the
piquets; they will protect the soldiers who fill up the wells and ditch, and as soon
as they find an opportunity of passing, they will endeavour to get over the
intrenchments, sustained by the whole infantry of the column, which will
then be disencumbered of the fascines, hurdles, &c. in order to drive the ene-
my from his lines. As soon as there are soldiers enough upon the lines to
bear the resistance of the enemy, the soldiers who have the shovels and pick-
axes, and who ought to be last, will finish the filling up of the ditch, by beat-
ing down the parapet of the lines, and making an opening sufficient for the
passage of a squadron, in order of battle: Then the whole infantry of the
column that has broke through, will pass and divide in two parts, to let the
cavalry pass, which will form under cover of the infantry, and will not at-
tack the enemy's cavalry, 'till it shall have collected its whole force together.

If one of the attacks succeed, on the first news, which will soon be spread
throughout the army, all the troops at that time ought briskly to attack the
whole front of the line, in order to employ the enemy, and prevent his send-
ing assistance to the part that is forced. The reserve, which is composed of
infantry and cavalry, ought to join the troops that have broke through the
lines, to sustain the cavalry charged by that of the enemy, and cannot be sus-
tained by the infantry who passed the first, because it is employed in taking
the enemy in flank, to the right and left. In this situation, when the reserve and
all the cavalry, which followed the column that hath passed, and to which
others may yet be joined, shall have passed, it should attack the enemy; if it
is repulsed, it can never be to any great distance, because it hath the infantry
behind
behind it, to sustain it, and by its fire to stop the enemy. If the lines are forced by many columns, the success, and also the defeat of the enemy will be thereby rendered more certain.

This disposition appears to be good, because the lines having been partly destroyed by the cannon, because the enemy cannot but have lost a great number of men, and because part of his artillery has been dismounted, without the army that attacks having sustained much loss. The Prince of Orange, in 1639, being posted upon the Ghete, at Nervinde, intrenched his army after such a manner, that it could not be surrounded; his right was supported by a river, and his left by the village of Romdorff, bordering upon the rivulet of Landen. M. de Luxemburg, being willing to attack him, could only get up with his cavalry in the evening, his infantry and cannon not being able to come up till night; that General, during this time, formed his disposition, and between five and six in the morning, he put his army in motion, which formed in order of battle as it marched along, the infantry and cannon in front, and the cavalry in the rear.

When the Duke of Savoy and Prince Eugene, still encamped between the town of Pianesa and la Venerie, in 1706, marched to attack the lines of the French army that besieged Turin, they caused their armies to march in eight columns; the infantry formed the advance guard, the artillery, distributed by brigades, marched at the head between the columns, the cavalry was behind in fix, and out of reach of cannon-shot.

The disposition of M. de Coigny, in 1744, in order to attack the lines of Wissemburg, of which the enemy were in possession, was like it, except that the whole of his army had not time to get up; but as the moments were precious, he did not wait for it. The army which came from Landau divided itself into four, which formed the four attacks, one of which was at Wissemburg, the other at the Mill, between that town and the village of Picards, the third at the village of Picards, and the last was made above that village, which was entrusted to the Hessian troops. His cavalry, which was behind, passed after the infantry had broke through the lines; but the enemy were then almost either killed or taken; and those who could save themselves, retired
to Lauturburg, where their army had assembled themselves, after having passed the Rhine. It is difficult to determine, which is most to be admired, whether the General’s disposition, the quickness and exactness of his eye, and his coolness in a circumstance so delicate, or the courage of the French troops, who forced these lines in less than two hours.

As soon as the enemy is beat and abandoned his lines, he must be pursued, but with precaution. The vivacity with which he should be pursued, depends upon the order with which he retires; if it is an open country, the General may follow him so long as he sees all clear before him; but if the country is divided with defiles and woods, it would by no means be prudent for him to engage himself in them, for fear of any ambuscades being placed by the enemy, in order to secure his retreat: Nevertheless, the General should endeavour to make the most of his victory, and should never be content to win a battle by halves; at least it should be carried so far as to make the enemy sensible of his loss, and of tendering himself incapable of continuing openly in the field.

But if the army that attacks the lines, should be unable to force them, after many repeated attacks, and if the General perceives his troops are discouraged, he should immediately retire. If the retreat is made over an open country, he should begin it by marching off the cannon, the infantry next, and the cavalry will form the rear guard in two or three lines; the hussars and dragoons will be upon the flanks of the cavalry. If there are any defiles or woods to pass through, the General should leave some infantry at the entrance of them, to sustain and protect the cavalry, which will retreat by files. If the enemy is in full strength, the General should leave some field-pieces with the infantry, that is posted at the entrance of the woods and defiles, which will certainly stop the enemy’s impetuosity; if, on the contrary, the enemy pursues the army with only a few troops, it will be proper to charge him, if he approaches too near. In this disposition, an army may retreat easily, provided that order is observed, and the movements not made with too much precipitation.

REMARKS.
THE camping of an army within a line or intrenchment, is attended with so many solid reasons and advantages, and the neglect of it accompanied with so many dangers and inconveniencies, that by as much as the Roman discipline, which constantly obliged their armies to halt and take up their quarters, though but for one night in intrenched camps; by so much the neglect of it ought to be avoided: I shall enumerate some of the most material benefits which arises from intrenched camps.

First, The intrenching of an army keeps it safe, and frees it from those dangers which it is always exposed to, by quartering in open towns and villages, where, if your enemy be awake, he will constantly endanger the carrying off of your men, which by its being lodged in a body within lines, it is exempted from; since to assault an army so retrenched, is so daring, and so dangerous an act, that few who ever undertake it, have succeeded.

Secondly, It saves the army from keeping many and great guards, as a few will serve for all, when the troops are at hand, in case of the enemy's attempt; whereas, if dispersed in villages, and without a line, every quarter must do almost as hard duty for its own security, as the whole body encamped: But above all, it easies and secures the cavalry, which if quartered in open places, must be mounted the most part of the night.

Thirdly, Your army is better than within a strong town, for there you are mingled with the inhabitants, (some of which are too likely to be spies to the enemy) who usually are corrupters of that excellent discipline, of which sobriety is a chief ingredient; both which great evils are not only avoided in camps, but from which also you may move secretly, and with what numbers you please, on all great designs, and leave your baggage and sick men, &c. secure, during your absence.

Fourthly,
Forthly, (To omit many other material advantages,) an intrenched camp, by reason of the open air, the healthiness of the situation, which must always be attended to, and the cleanness which may, and ought to be kept in it, is exceedingly less subject to infection and sickness, than villages are, inasmuch that some Generals, of known experience, have concluded an army will be likelier preserved and kept sound and healthy, four months in a well-seated and regular camp, than four weeks, in the ordinary villages and country towns.

All which seems to prove, that one of the most necessary parts of the military art is, to know how to encamp well, and constantly to practice it; nor could I ever hear of any objection against it, which did not relish chiefly of laziness, for such as dislike it, say for their pretence, the over-harrassing of the men, and often casting them thereby into sickness; when on the contrary, idleness does often produce the latter, and the former by practice, will soon be accomplished, and prove agreeable: For no men's bodies are usually so sound, and continue so long, as the daily labourers.

The Roman camp terrified in a high degree by the fall of a tower. The Jews not in fear of any difficulties but what arose from the towers. The first breach made by the ram called Nicon. The Jews abandon the first wall, and retreat to the second. Several desperate sallies made by the Jews. The Roman discipline more than a counterpoise to the Jewish temerity. Every danger resolutely braved by the Jews. The singular veneration Simon's men entertained for their commander. Longinus performs a gallant action.

A SINGULAR alarm happened in the camp of the Romans. Orders having been given by Titus, for constructing three towers, each fifty cubits in height, on the ramparts, in order to have the command of the wall of the city, one of these towers fell suddenly to the ground during the night, and made so horrid a noise in its fall, that the whole army was alarmed in the highest degree. The Romans, unacquainted with the cause of the noise, had immediate recourse to their arms, and every legion was in a perfect tumult of confusion. Some of them imagined, that the Jews caused the commotion; but very
very various were the conjectures on this occasion. After a while, when no enemy appeared, they began to form suspicions of each other; and every one demanded the "Watch-Word" of the man who was next him, with as much strictness, as if the Jews had actually been in the camp. The terror arising from this circumstance, continued for a considerable time; till Titus, having informed himself of the particulars of the cause of the confusion, ordered proclamation of the matter of fact to be made in every part of the camp; in consequence of which, though not without great difficulty, the tumult at length subsided.

In the interim, the Jews maintained their courage in the highest degree, and appeared not to dread any other difficulties but what arose from the towers; and the danger from them was indeed very obvious. They were unavoidably assailed from these turrets, by archers, slingers, &c. and by various sorts of machines: For the Jews could not carry up their platforms to a level with these towers, and they were of too solid a construction to be thrown down; and, as they were all plated over with iron, it would have been a work of equal impracticability to burn them. Wherefore all that remained in the power of the Jews to do, was to keep at such a distance as not to be wounded by the darts, arrows, or stones of the Romans; for it was fruitless for them to think of opposing the force of the battering rams, which, by degrees, effected the purpose for which they were designed. The Romans were possessed of one ram, dreadful in its execution, which the Jews distinguished by the name of "Nicon," or "the Conqueror," the first breach having been made thereby.

The Jews had now been at hard duty during the whole night, and were extremely fatigued by fighting and watching. Thus dispirited, they came to too hasty a determination to abandon the first wall, as they had yet two others to depend on for their security. Having formed this resolution, they immediately retreated to the second wall; on which some of the Romans ascended the breach which had been made by the battering-ram above-mentioned, and opened the gates to the whole army. The Romans became masters of the first wall on the seventh day of the month Artemisius, and destroyed a great part of this wall, and also of the northern quarter of the city, which very quarter had heretofore been ravaged by Cestius.
This being done, Titus withdrew to a place known by the name of the Assyrians' camp, possessing himself of all between that and the valley of Cedron, the distance of which, from the second wall, is something more than a bow-shot. From this place he came to a resolution of beginning his attack, and immediately commenced his operations. The Jews took their stations in a regular manner on the wall, where they made a formidable opposition. John and his associates commanded the troops in the fortress Antonia, and from the sepulchre of Alexander on the north of the temple. From the monument of John, the High-Priest, to the gate by which water is conveyed to the tower Hippocos; Simon and his people held the command. A number of resolute sallies were made by the Jews, in which they came to close quarters with the Romans; but the military knowledge of the latter was more than a countervail to the desperation of the Jews, who were repulsed with considerable loss: Yet, on the walls, the Jews had the advantage. Skill and good fortune equally favoured the Romans; while the Jews, from a native hardiness, and an animation arising from despair, seemed insensible to danger or fatigue. It should be observed, that the Romans were now fighting for glory, and the Jews for life and security: Each party equally disdaining to yield. They were continually employing themselves in violent assaults, and desperate sallies and combats of every kind. Their labours commenced with the day, and they were separated only by the darkness of the night: And, even during the night, both parties were kept watching, one to protect their wall, and the other their camp: They continued all night under arms, and were ready for battle by break of day. On this occasion, the Jews despised danger and death so much, that they seemed emulous who should brave them most undauntedly, as the best recommendation to their superiors. They entertained so great a fear of, and such a perfect veneration for Simon, that they would have sacrificed their lives at his feet, on the slightest intimation, that such a sacrifice would be agreeable to him.

The Romans had been so accustomed to victory, that they were perfect strangers to defeat: Wherefore they wanted no other incitement to their valour, than the recollection of their former successes. Add to this, that war was familiar to them, being in constant exercise, in the service of the empire: And they were now inspired with more than common courage, by the presence and
and assistance of a warlike prince. They considered that cowardice, witnessed by the General, would be infamy in the abstract: And, on the contrary, that Caesar's bounty and esteem would be such a reward of, and such an honor to, glorious actions, as were worthy their highest ambition. It must be confessed, that the military ardor thus inspired and encouraged, tempted many of them to aim at exploits, which were wholly beyond the compass of their abilities to perform.

At this period, a large party of Jews were assembled in military order before the walls, and had approached so near to the Romans, that lances and blows might be mutually exchanged. At this critical juncture, one of the Roman cavalry, named Longinus, galloped forward into the midst of his foes, two of the best soldiers among whom he killed: One of these he struck through the jaws with his lance, and then, with the same weapon, ran the other through the body; which being done, he expeditiously retreated to the Romans unhurt. By the singular gallantry of this action, he acquired great reputation, and tempted others to emulate his conduct.

During this period the Jews were so anxious to destroy their enemies, that they paid no regard to their own sufferings. They looked on death as an object unworthy their notice, provided they could destroy as many of their opponents as fell of their own party. Titus, on the contrary, consulted the preservation of his troops as much as the acquiring victory, and looked upon an intemperate zeal, as a degree of madness. He insisted, that caution and prudence were the essence of true valour, consisting equally in the annoyance of our enemies, and the most effectual preservation of our own forces.

Of CAMPS, with REMARKS.

I have been convinced, by reading the Greeks and Romans' histories, that they owed as much of their conquests, to their well encamping, as to their other excellent military discipline, and their valour: It would be almost endless
endless to enumerate what kingdoms and provinces they kept in obedience, by their standing camps, and how often they stopped the invasions of torrents of barbarous nations, by the same proceedings: And having first wearied out their enemies, by such safe and beneficial delays; then on some great advantages, they would give them battle, and defeat them; none of which they could have effected, or rationally have attempted, but by thoroughly knowing how to encamp advantageously, by constantly practising it, and by a timely providing of food and forage.

It has been observed of late years, that the French have begun to revive that excellent custom, and now pay the greatest attention towards it. For I take the Prince of Condé to be one of the greatest officers, that any age hath produced; and I observe, when the Prince of Orange, the Imperialists, under the Count de Souches, and the Flemish forces were united, the Prince of Condé, who was sent to oppose them, would not give them battle, but encamped himself advantageously on the French frontiers, so that they justly apprehended to enter them, and leave him at their tacks, whereby he kept them long at a bay, and when he found his opportunity, gave them, at Seneff, so considerable a blow, as the French, from having been on the defensive, they became afterwards, the assaulters, and closed the campaign, by taking some of the enemies' garrisons.

The Marshal de Turenne also, who was sent General to the War in Germany; and who, in the art, military, had hardly a superior, having these to do with; the Count de Montecuculli, who I believe, has not been excelled by many Generals, would still by intrenched encampments, when the Germans were the strongest, preserve himself and army by spining out the time, and cover those territories and places he had won, while he had been the most powerful; and to me it seems, a thing very worthy of observation that after, by the Marshal de Turenne being killed, when the French King sent the Prince of Condé from the army in Flanders, to command his army in Germany, he did also, by intrenched encampments, weather the storm, which in itself was so threatening, not only by the sudden loss of so great a Captain, but also by the Germans being led by the Count de Montecuculli, and the Duke of Lorraine, two persons as considerable as the very forces they lead: I say, it seems worthy
worthy of observation, that two such justly celebrated commanders as the Prince of Condé and Turenne, should observe the very same methods in managing the same war: Whereas, usually when one General succeeds another in heading the same army, and ordering the same war, the last comer, judges it a kind of diminution to his own skill to tread in the very paths of his predecessors; but the Prince of Condé, not doing so, thereby, in my poor opinion, renders three things evident.

I. That he truly judged himself so justly secure in his own reputation, as it could receive no diminution, in following the steps of the dead General; especially he having done the like before, and successfully in Flanders.

II. That a wise and great General, will rather by his own actings, confirm that course to be best, (if it be so in itself) by imitating his predecessors, than try new methods of war; as by different methods, he may hazard his reputation, his army, and the country he is to cover and protect.

III. What such Generals have practiced (all circumstances considered) is to me a convincing proof, that by camps intrenched and well posted, a country may be best secured, an invading enemy be best resisted, and in time, all advantages being taken in the nick, may be defeated, or made retire.

Remarks:

The greatest part of men form their opinion of the size of a camp, or of a city, only from the circumstance. When they are told therefore, that Megalopolis contains in circumstances, fifty stadia, and Lacedæmon no more than forty-eight, and yet that this city is twice as large as the former, they know not how to believe it; and if any one, designing to increase the surprize, should affirm, that it is possible that a city, or camp, which contains only forty stadia in circumference, may be twice as large as another that contains a hundred stadia, they are struck with the greatest astonishment. The cause of this surprize is, that men forget those principles of geometry which they learned in their youth; and I was the rather inclined to take
take some notice of these matters, because not the vulgar alone, but some even of those who are employed in the administration of states, or placed at the head of armies, are sometimes astonished, and not able to conceive, that Lacedaemon is a much greater city than Megalopolis, though it be less in its circumference; and again, in the same manner likewise are persuaded, that by only viewing the circumference of a camp, they can easily determine the number of the troops which it contains. There is also another error in judging of cities, not unlike to that which has been mentioned: Many men imagine, that an unequal and hilly ground will contain more houses, than a ground that is flat and level, this however is not the truth; for the houses being raised on a perpendicular line, form right angles, not with the declivity of the ground, but with the flat surface which lies below, and upon which the hills themselves also stand. This also may be learned from the very first elements of science. Suppose a number of houses to be so built upon the sides of a hill, as to rise to an equal height, it is manifest, that the roofs of all them together, will form a surface exactly parallel, and equal to the surface of the ground, which lies under the foundations of the houses and the hill. Let this then serve as a lesson to those persons, who though they are so ignorant, as not to conceive how these things can be, are desirous of commanding armies, and of presiding in the government of states.

Of Generals, Campaigns, Battles, &c.

All who have commanded armies, or have wrote upon the Military Science, have universally agreed, that no one act of war, is greater in itself, or its consequences, than that of engaging an enemy; since the gaining of one glorious battle, has not only been the cause of taking the strongest places, but kingdoms have often been the reward of victory. Therefore the aim of a General, who commands, is universally known to be conquest, if possible: If that cannot be attempted, then the maintaining present
sent possessions, and keeping the seat of war, and subsisting as much as possible in the enemy's country. At the commencement of a campaign, every one knows a General would endeavour to acquire an accurate knowledge of the face of the enemy's country, as well as of his own; to derive advantages from every different situation which nature presents to him. From plains, eminences, hollow-ways, ponds, rivers, morasses, woods, defiles, thick hedges, large ditches, roads, &c. to make choice of the ground he would choose to incamp or engage on; and to possess and secure the most useful commanding posts with all diligence*, without which, no one plan or design can be formed with any probability of success: To compare his own strength with the enemy's, whether he has himself any superiority in infantry, cavalry, light troops, or artillery, so that he may endeavour, in the course of the campaign, to draw the enemy into such a situation, as to avail himself of such superiority†; and on the contrary, to avoid doing that, if the comparison is disadvantageous, which, had it been otherwise, he would have done: He will also consider his opponent General, whether he is a man that strokes may be attempted with security; if he is unenterprising, or whether he is of a stamp totally opposite: One who is not to be trifled with, and who never ceases to be offensive, but when necessity, or a deep and sure game, induces him to defend.

All men, even of moderate discernment, must acknowledge, that nothing is more useful, or of greater importance, in the conduct of a General, than to examine, with the nicest care, into the character and natural disposition of the opposite commander. For, as in engagements of single men, or of rank with rank, the several combatants carefully survey the bodies of their adversaries, in order to discern some part that may be open to their stroke: In the same manner also, it is necessary that a General, in the field, should endeavour to discover, in the Chief Officer that is sent against him, not what parts of his body

* As King Henry IV. of France did at the battle of Arques, where that great Monarch shewed as much conduct, as any of the Greek and Roman Generals ever did, in any of their greatest battles.

† Which was practised by the Duke of Marlborough at the battle of Ramilies, who finding his right wing had strong ground before it, drew off the English cavalry to reinforce his left wing, where the ground was open; and went thither himself, knowing that he could act there with greatest advantage.
A TREATISE ON

are most vulnerable, but whether there be any weakness in his mind and character, through which he may be attacked with some advantage. For among those, that are placed at the head of armies, there are some who are so deeply immersed in sloth and indolence, that they lose all attention both to the safety of their country and their own: Others are immediate fond of wine, so that their senses are always disordered by it before they sleep: Others abandon themselves to the love of women, a passion so infatuating, that those whom it has once possessed, will often sacrifice whole cities and armies, and even their own honor and their lives, to the indulgence of it. Some again are cowards, which is esteemed no slight disgrace, even among the private men. But in a general, this disposition is a public evil, and draws after it the most fatal consequences; for the troops under his command, not only waste the time, without attempting any thing, but, by their confidence in such a leader, are frequently betrayed into the greatest dangers: On the other hand, a precipitate rashness, or a violence that rejects the rule of reason, pride, vanity, and self-conceit, are all qualities, not only more pernicious to the friends of those who possess them, than advantageous to the enemy. For men of this character are always ready to be taken in every snare; every bait is sure to catch, and every artifice to delude them.

With parts, a man may be a good soldier; but with genius, a good soldier becomes a GREAT GENERAL: It is sometimes an assemblage of talents, but is always the perfection of that which nature has given us, that discovers genius. A man studies; he searches for his talents, and often misses it; genius unfolds it. Talents remain hidden for want of occasion to shew itself; genius breaks through all obstacles. Genius alone is the contriver; talents alone the workman.

By a knowledge of the enemy's country, forces, and of their Commander, the supported General will be able to know whether the commencement of his campaign will be offensive or defensive, and he will be able to settle firmly with his own mind, his primary and his secondary objects.—If offensive, then to begin as quick as the nature of things will permit, being clear about encampments of advance, maintenance, or in case of necessity, retreats.—If his capital object, or objects should fail, then to turn to the second: In short, never
never to be without a plan, and to take lead as long as it can be taken. The objects of offence will be various:—A siege, or sieges, the taking a capital town, or towns, the getting possession of a country, the eating one up, the raising of contributions, and from an enemy's position, the seeking to give battle*. If an army attacks, and marches of course to its adversary, impression must be its object, and that, very often will be best done by an effort of weight upon a particular part; for when one part of an army gives ground, it is in general likely it will be defeated. The concealing the real purposed attack may not always be possible, from the nature of the ground, affording the enemy a view of all proceedings; but it will on the contrary, very often permit concealments†.

In drawing up an army in order of battle, three things are to be considered: the sun, the dust, and the winds. The sun in your face dazzles the light, and perplexes the troops; if the wind is against you, it blunts the force of your

* Battle, implies an action, where the force of two armies are engaged, and is of two kinds, General and Particular: General where the whole army is engaged; and Particular, where only a part is in action; but as they only differ in numbers, the methods are nearly alike.

The order of battle, is a disposition or arrangement of battalions and squadrons, formed relatively to the situation of the places in which they are to engage, and to the order the opposite army has taken, or may take; and that in the order the most advantageous for fighting that opposite army.

There are strictly but two ways of ranging troops; the one is, to have an extended front, and that is proper for a plain; the other is, the other is to have more depth than front, and that is proper for close, covered, or irregular ground. In the first case, the cavalry and infantry may be ranged one on the side of the other, to fight each by themselves; or they may be mixed together. In the second case, it is the infantry alone who ought to attack, having their cavalry in the rear.

Line of battle; arranging troops in order of battle. This generally consists of three lines, viz. the front line, the rear line, and the reserve. The second line should be about 250 paces behind the first, and the reserve 600 paces behind the second. The artillery is likewise divided along the front of the first line; likewise, the front line should be stronger than the rear line, that its shock may be the more violent; and that by having a greater front, it may more easily close on the enemy's flanks. If the first has the advantage, it should continue to act, and attack the enemy's second line, terrified by the defeat of their first.

The artillery must always accompany the line of battle, in the order it was at first distributed, if the ground permits it; and the rest of them should follow the motions of the first line, when it continues to march after its first success.

† Marshal Luxemburg, at the battle of Fleurus, perceiving the Prince of Waldeck, could not see the march of the cavalry on the left wing, drew them up in the Prince's right, which they attacked, and gained the victory.

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balls, while it afflicts those of the enemy; and, the dust driving in your faces, fills the eyes of your men, and deprives them of their sight. The most skilful endeavour to avoid these inconveniences in the moment of making their dispositions; but a prudent General should extend his views beyond the present, he should take such measures as not to be incommoded in the course of the day, by the different aspects of the sun, or by contrary winds, which often rise at a certain hour*, and might be detrimental during the action. Our troops should be so disposed as to have those inconveniences behind them, while they are directly in the enemies' front.

The General ought, when he sees a wing of his enemies' army pallably routed by a wing of his, to draw as many as he can well spare, from the second line of his successful wing, to the rest of his army, (leaving the rest to follow the execution,) that by such help and such order, he may entirely, and more safely, both defeat such of his enemies as yet make head, and pursue those which are routed.

He ought never to think upon, much less order his army in a plain field to require the Charge, but still to meet the enemy in giving it. Pompey, at the decisive battle of Pharsalia, by the advice of Triarius, commanded his soldiers to receive Caesar's assault, and to undergo the shock of his army, without removing from the place whereon they stood, alledging, that Caesar's men would be disordered in their advance, and Pompey's, by not moving, keep their order. On which, Caesar himself says, "In my opinion, this was against all reason, for there is a certain incitation and alacrity of spirit, naturally-planted in every man, who is inflamed with a desire to fight, and therefore no Commander should repress, or restrain it, but rather increase and set it forward, and the event justified by Caesar's opinion, was well grounded.

* Contrary winds, which often rise at a certain hour.

At the battle of Cannæ, Hannibal took the advantage of a violent South East wind, called by the inhabitants of the country, Fulturnus, which generally rose at a stated hour; it incommoded the Romans excessively, during the action, by driving clouds of dust, from that flat and sandy country, directly in their faces, and contributed not a little to their defeat.
A General may, though superior to his antagonist, on considering the
nature of the country, the season of the year, or the necessities of the state to
which his enemy’s army belongs, act therefore defensively.——A change of
climate will be sometimes a certain destruction, without any other effort. The
approach of winter, or otherways, may oblige an enemy to abandon a terri-
tory through necessity, which hazardous efforts, if successful, could only ac-
complish, and dangers in opposite points may oblige an army to march from
a present position to a distant country. In such case, the least bloody part a
General would chuse to follow.

To form any certain judgment of campaigns, it may be supposed, is not
the very easiest thing in the world, since their conduct is so justly esteem-
ed the most difficult part of war; but however, as from the plain simple know-
ledge, that two and two make four, the solution of the most complex ques-
tions in figures is attained; so from the true method being pursued, to have
insight into the management of campaigns, their performance will be con-
ceived, and the conception obtain a readiness about them which it otherways
never would possess.

The hands that have ever handled the ax and spade, will be little fit for the
nicer tools of the artist; and the mind that is never occupied but in the minutiae
of a profession, will never have a capability of embracing its greater operations,
or soared to its greatest.

The main points of inquiry, in order to judge whether a campaign has been
well conducted, are not very difficult to be obtained; but to adapt those prin-
ciples to any given subject, is not always so easy.

The first point is, whether the supposed army ought to have acted offen-
sively or defensively *. If offensively, whether the first object or objects were
the proper ones, and if they failed, whether the secondary objects were well
chosen;—then will come the injury of every particular operation, what were
the causes of its success, or its failure.

* Which under the articles of camps offensive, and of camps defensive, are treated more at large.
If, on the other hand, the defensive should have been chosen—then, whether the defending army chose its true objects of defence.

The campaign of 1762, on the part of the French army in Hesse, was without any second object. After an inconsiderable loss by the affair of Williamsthal, they made a retreat which, by its length, wasted the most precious part of the campaign, and by its march abandoned all Hesse to the entire possession of the Allies, and left Cassel and Zeigenbain to be besieged. The return of the French army, when assembled at Friburg, into Hesse, must have been foreseen to be a very uncertain event, and, of course, the being able to relieve Cassell and Zeigenbain very precarious; therefore nothing but a total overthrow should have made the French army take the part they did. The French Marshals had two objects of choice; the one was to have attacked Duke Ferdinand's left, and have turned it, or made him retreat over the Dymel. If either had happened, they might have pursued their own original plan; if they had been defeated, they could, after such defeat, have been obliged to do nothing worse than what they did do without attacking at all. But a better way, perhaps, would have been, to have marched into Hanover, endeavoured to have taken its capital, or, at the worst, acted on the defensive, subsisted entirely at the expense of their enemies, and so, at the close of the campaign, retreated, and have been in the entire possession of Hesse.

Prince Ferdinand, in the campaign of 1761, when he marched round the Prince de Soubize's left flank, encamped at Unna, and got into his rear, and performed that manoeuvre from his knowledge of his opponent; nor would he have ventured such a march with a General of another cast. Prince Ferdinand had two causes for his attempt; First, to prevent being between the two French armies, as the Duke of Broglio's army was approaching; Secondly, to oblige the two French armies to join, as his own army could not afford a division. If the Prince de Soubize had made his army march with its united force, and attacked the flank of the center, or the rear of the Allies, his attack, if pushed on with spirit, must have been decisive of the fate of the allied armys' opposition for that campaign.
In the campaign of 1761, the divisions between the two French Marshals were fatal to France. Their first object was the Bishopricks; it probably should have been Hanover, as their superiority was equal to its conquest, and, when peace came, it would have weighted heaviest in its scale. To make the allied army pass the Lippe, that Lipstadt might be invested, the attack of Fellinghausen was made, after which the campaign was spent without any advantage to France. If Marshal Broglio had crossed the Lippe near its head, Duke Ferdinand must have crossed it also of necessity, and then the Prince de Soubise's army might have passed it: And if a battle was fought, in order to carry on the siege of Lipstadt, it might have been done where the allied army had no place of check in its rear, like Ham, to have secured retreat. But if, at the commencement of the campaign, the Marshals had joined, and made the same march the Duke of Broglio did after the action of Fellinghausen, Duke Ferdinand must have done at first what he did when the above march was made, that is, abandon the Lippe, and follow the French army; and he could not have been sure that Hanover was not the object; the French then might have cut the allied armies' communication with Lipstadt, and besieged it.

Duke Ferdinand, at the battle of Fellinghausen, had Ham to protect his retreat; if he crossed the Lippe without fighting, Lipstadt would have quickly been invested; if he did fight, and was successful, the security of the Bishopricks would probably be the fruits of the success: If he was beat, he then only would have crossed the Lippe, and do what he would otherwise have done had he passed it without fighting at all. Moreover, the having both the French armies acting against his whole army, was a point to be wished; First, because his army was unable to divide in any degree of equal opposition to the French; and, as there was a great jealousy and disagreement between the French Marshals, he might reasonably and justifiably hope that such jealousy would produce its natural effects, and which it did do. This then was another situation for battle, where the gain was great and probable, the loss not to be attended with fatal effects, and where an opportunity offered to fight, with such favourable circumstances, as, if missed, would not probably be regained.

The King of Prussia's battles, during the late war, were chiefly battles of state necessity; he was ruined if he did not fight. In 1758, when the King of
of Prussia fought the battle of Zorndorff, his country was either to be ravaged by the Austrians or the Russians, if he acted on the defensive, as he could not make head against both: A battle therefore might free him from one, and enable him to keep the other in check, at least. The victory of Zorndorff, freed him from the Russians, and gave him liberty to act against the Austrians.

In 1759, the battle of Cunnsdorf against the Russians, was another of absolute necessity: All the Prussian dominions were in possession of his enemies; defending was ruin; and nothing but victory, or a severe check to his adversaries, could in any shape answer his uncommon circumstances.

The composition of the imperial army in 1756, at the battle of Rosbach, was such as might have induced an opposing General to a battle, from the great probability of their defeat. No defence could be expected from that part of it, drawn from the circles of the empire; and its chief, as well as the French Commander, gave fair hopes of success to an attacker.

The battle of Blenheim was of state necessity. A defensive plan would have left the French to have wintered in Bavaria, and at the same time exposed Flanders to losses, on account of the absence of its army. A battle therefore might gain every thing, and a loss of it, scarce leave the empire more open to the French than before.

The citing of a number of examples needs no other pains than the perusal of history, where will be found battles fought on all manner of accounts, some with solid objects in view, others when scarce any benefit could attend their gain, others when ruin would attend their loss, and little advantage their success. Some fought in improper ground, some with the ground judiciously chosen; some, whose tactical forms bid fair for success, others almost ensured a defeat.

The last Duke of Burgundy, before he fought the battle of Granson against the Swiss, was offered every advantage, if he would agree to peace, that he could possess by victory; he refused to treat, fought, and was beat. He drew
drew up his men in a narrow pass, where the Swiss, much his inferiors in numbers, could oppose as great a front as that of his own army.

When Hannibal fought the battle of Zama, his second line having no intervals for the retreat of his first, was tactically liable to defeat.

When the Hereditary Prince's army passed the Rhine, after the affair of Closter Campen in 1760, the French General had the fairest opportunity of destroying them. If he had been repulsed, Wesel could be in no danger, and the year so far advanced, as that no advantages could have accrued to the allied army from success; and it was in his power (a thing very rarely the case) to have entered as little, or as much into the attack as he had pleased, for the Prince's business was to pass the Rhine. The allied army had been defeated, and of course dispirited, and were totally worn down by want of victuals and fatigue. The French had gained a victory, and were not in want of provisions. The Prince's bridge broke where there was an intrenchment to defend it, and was obliged to be moved where there was none; and farther, upon the least fault, or break, or giving ground of the allied troops, the river Rhine must have been their fate. Had the French General marched his army, which was much superior to the Prince's, and attacked before the allies began to pass, or after some were passed, a total, or a very great destruction, must have ensued, and which would have been of the most serious consequences in the fate of the next campaign; instead of which, no attack was made at all, and one of the most solid and uncommon fair opportunities to destroy a corps was missed.

Hannibal, who was so excellent a Captain to win victories (though possibly not to make the best use of them) at the famous battle of Cannes, placed all his most valiant in both his wings, and the worst men in the center of his army; whereby, when the Romans came to the charge, (who had placed their choicest legions in their center) they soon pierced into Hannibal's army, which was what he designed they should do; for then with his two wings, in which were his choicest troops, he immediately encompassed the Romans, and totally defeated them. But at the battle of Zama, or some call it Nagagara, which he fought against Scipio, thought the fate of Carthage depended
on the issue of that day, yet he totally altered the order he had observed at Cannes, and lost the victory: For at Zama he placed all his new raised men by themselves, to endure the first attack of the Romans, and of all his old soldiers, who had so memorably served him in his wars in Italy, he made, as it were, an army apart, and drew them up a few furlongs behind his new raised Africans, who were therefore soon cut to pieces, as his reserve army was not long after; whereas, if he had observed the like order of the battle of Nadagura, as he did of Cannes, he might have had the like success.

Cyrus, being to fight against Croesus, King of Lydia, and in a large plain, fearing to be environed, drew up his army but twelve deep in file, whereas formerly, the file was twenty-four deep; whereby he augmented the front of his army double, over-winged Croesus's, and won the victory.

Caesar, at the battle of Pharsalia, against Pompey, did quite alter the manner of the Roman order; for having found that Pompey exceedingly outnumbered him in horse, he covered one of his flanks with a little river, and drew all his cavalry to the other flank; among the squadrons whereof, he placed bodies of his best infantry, and there began the battle: Where, by having all his horse in one wing, and those supported by select legionary foot, he soon routed the half of Pompey's horse, which opposed all his, and then falling into the flanks and rear of his enemy, won the victory.

Battle between the Turks, Persians, &c.

In 1733, war was openly declared between the Turks and Persians, and hostilities began on both sides. Kouli Kan, not being able at the beginning to appear at the head of his army, because of some affairs which detained him at Ispahan longer than he expected; the Turks obtained some advantages. The Seraskier Topal Osman, who commanded them, fell upon and entirely defeated a body of Persians; which misfortunes was followed by another that had almost ruined the Persian army: A detachment of 30,000 men had been sent to secure a post. The Seraskier had advice of it, and marched with all expedition to meet them. The Persians took the best step they could on this occasion,
occasion, they halted and intrenched themselves, being already too far from
the body of their army, to have any hopes of rejoining it before the Seraskan
could attack them. Topal Osman, seeing them so well posted, did not think
proper to force their lines; but having his whole army with him, he so
extended it, as quite to surround the 30,000 Persians, and cut off all their
communications. It seemed impossible for them to escape; and their provi-
sions at most were but for two or three days: After which they must either
demand quarter, or perish with hunger. On either side there was equal
danger, so that these 30,000 men, were very far from being easy in their
situation.

Kouli Kan arrived opportunely to deliver them from the inquietude they
were in. He had no sooner heard of the situation of this body of troops, but
he resolved to hazard all to disengage them. With this view, pretending an
inclination to peace, he sent one of his Generals to make some propositions to
the Seraskan, and, under cover of this embaffy, introduced a messenger into
the Persian camp, which was blocked up by the Turks, to advertise the Ge-
neral, that the next day, at such an hour, he would attack the enemy;
requiring him to do the fame on his part. Kouli Kan made such expedition,
that at his second stage he was within half a day’s march of the Turks. His
army was 40,000, strong, and that of the Turks 80,000. But the thirty-
thousand Persians fell on so bravely, and did their duty so well, that they contrib-
uted much to the defeat of the Ottomans; the battle lasted eight hours.
The Turks made a good defence, but were at last broken and put to flight.
Eight thousand Tartars, and eighteen thousand Turks fell in this action, and
twelve thousand of the latter were wounded: The coming on of night pre-
vented the taking a great number of prisoners, and favoured the enemys’
escape. They left their artillery however, and all their baggage.

Topal Osman was found dead on the field of battle: There were nine
thousand Persians, either killed or wounded. Kouli Kan, received two con-
siderable wounds, and had two horses killed under him.

This action happened in July, 1738. Kouli Kan, dispatched an express
to the court of Petersburg, to give advice of his victory to the Czarini,
who wrote him a letter of felicitation on that subject, accompanied with presents of great value.

The court of Vienna also signified its satisfaction on this occasion; and it is said, that the Emperor sent him a sabæ, set with precious stones of great value, and a General's truncheon, finely wrought and gilt; and that the express which was dispatched with these presents, went by way of Petersburg. This will appear the more probable, if we consider that at the time when his Imperial Majesty sent these marks of his good-will to the Persian General, the French, the Spaniards, and the Savoyards, had begun to invade his dominions, and that it was for his interest to have the Turks so employed elsewhere, that they could take no advantage of these invasions.

However, that were, hostilities continued between the Turks and the Persians in different places, as in Georgia, the Tabrissan, and the Curdisian. The Turks were beat four times in the year 1734. Kouli Kan received a great number of wounds in these several engagements, and had many horses killed under him. He always appeared in places of the greatest danger, animating the troops by his example, and rallying with admirable celerity those who gave way. The campaign of 1735, was the most bloody of all, and the most advantageous to the Persians. The court of Constantinople, had sent the Seraskier, Abdalla Cuprogli; to command the troops that were to act against Kouli Kan, who in the mean time was busy in reinforcing his army, and forming of magazines. The Turks were ready to enter into action; when Kouli Kan, willing to keep them back, signified to the Seraskier, that he was not averse to proposals of peace, if he could but hope to obtain one on any tolerable conditions. The Seraskier, grew negligent of this feint of Kouli Kan, and let him know that he had full and ample powers to treat on that head, and that nothing was wanting but to choose out a fit place for the negociation. Kouli Kan mentioned some places, which he knew would not be accepted, and by so doing, protracted the time. But, as soon as he saw himself in condition to act, he drew off the malk, and advanced at the head of 100,000 men, into Persian Georgia, of which the Turks were then masters. He besieged Teflis, the capital, and took it; and in a short time after, the Turks were driven
November, 1760. The King of Prussia, having previously taken, or dispersed St. Ignon's regiment of dragoons, in a wood near Torgan, gave battle at Siplitza, to the Austrian grand army, under the command of Marshal Daun. The Marshal presented a front, defended by 200 pieces of cannon, which played briskly upon the Prussians; the victory was disputed with obstinacy and bloodshed, from about two in the afternoon, 'till near eight in the evening, during which time, the advantage was for the most part with the Austrians; but between ten and eleven, the Prussians, under General Zieten, made an attempt to possess themselves of the little eminences of Siplitza, which entirely commanded the army of the enemy: In this they succeeded, and fortified the ground in such a manner, as to prevent every effort of the Austrians to dislodge them. Under these circumstances, the latter was obliged to abandon the field of battle at day-break, and leave Torgan to the Prussians, who entered the fortress early in the morning. The King of Prussia received a slight contusion on the breast, by a musket shot, and forced to be carried off the field of battle, and leave the command to General O'Donnel. Had the Austrians fortified those eminences (as so great a General as Daun ought to have done,) the Prussians must have left the field instead of them.

July 15th and 16th, 1761. Marshal Broglio decamped the 15th at day-break, from Ervite, and attacked Lord Granby's camp in the evening, with great briskness, his Lordship sustained the efforts of the enemy with great resolution and success, 'till the arrival of Lieutenant General Wutgenau, who had received orders to march to his support. The French being now taken in flank, they could not no longer withstand the firmness of these Generals, with whom Prince Ferdinand was in person, but were driven back into the woods, after a fire of artillery, and small arms, which lasted 'till late in the evening. The action was renewed at three the next morning, and continued 'till nine: M. Wutgenau's corps, against which the French made redoubled attacks, maintained its ground with intrepidity; at last, M. Broglio appeared to have a design of planting some batteries upon an eminence, opposite Lord Granby's camp, which was not inclosed within the lines. To prevent the bad consequences of such a design, Prince
Prince Ferdinand ordered the nearest troops to advance upon the enemy, which they did with such courage, that the French soon gave way, retreated precipitately, abandoning their dead and wounded. Maxwell’s battalion of grenadiers took prisoners, the regiment of Rouge, consisting of four battalions, with their cannon and colours. Upon the news of this defeat on the right, the left of the French army, under the Prince de Soubie, which was opposed to the hereditary Prince, desisted from the attack; 200 men, commanded by Major Limburg, defended the village of Scheidingen, on that side, against all the attempts of the enemy.

The loss of the French, killed, wounded, and prisoners, was about 5000 men; nine pieces of cannon, and six pair of colours was taken. The brigades of the King, Auvergne, Belfonce, and Nassau, suffered the most. The Duke of Havre, and his Son-in-law, the Marquis of Cirrace, the Marquis of Rouge, Lieutenant-General, and his Son, the Colonel was killed: Their loss of Officers was very considerable. This battle was fought in the field of Kirch-Denckern, near Hiltrup, and at no great distance from Ham. The Allies had 311 men killed, 1011 wounded, 192 made prisoners, and three pieces of cannon.

Had M. Broglio, accomplished his design of raising batteries upon the eminences, the success of the day might have been doubtful; but such a masterly stroke of Generalship, was not to be played against a Ferdinand, a Granby, an Amberst, &c.

January 2, 1761. General Mansberg, having been attacked by the Count de Broglio, and M. de Stainville, in the town of Duderstadt, retired to the neighbouring heights, where he maintained himself till the next day, when he assisted by the Generals Kielmansegge and Luckner, who drove the French from the town, and pursued them as far as Wittenhausen. The Allies lost 190 men; and the French 600; among whom three companies of grenadiers were made prisoners.

In the war with the Samnites, Cornelius, the Roman Council, was repulsed in a valley, and in the greatest danger of being cut off; when Decius, the Tribune, upon an accurate observance of the country, discovered an eminence, and the avenue
avenue that lead to it; and, by securing a retreat, saved the army from destruction.

The four before recited articles will serve to shew for the present, the great necessity of occupying eminences, or rising grounds. As the means in war, consist in taking precautions against every thing the enemy can undertake for their advantage.

At the battle of Hochstel, twenty-two battalions that were in the centre threw away their fire, and were dispersed by three squadrons of the enemy, that passed the morass in their front. On the other hand, the enemy were repulsed by the troops in the village of Blenheim, who did not surrender till after their own armies had retired, and abandoned them.

At Malplaquet, those troops that were in open plain gave way; those that were strongly posted, maintained their ground for a long time, and made the Allies horse suffer considerably.

At Fontenoy, they that were in the plain gave way; those that were posted, maintained their ground.

Raucaux, was an attack of post only: Though there was a great plain; the posts alone were attacked.

Lawnfeld was a battle in open plain, and reduced to the attack of posts.

It is therefore a great defect in any infantry, to be capable of acting only in certain dispositions. This opinion will certainly meet with opposition; but I doubt much, if there are many Generals so enterprising as to undertake to march, in an open plain, a body of infantry in sight of a most numerous body of cavalry, and to flatter themselves, that they could be able to maintain their ground for several hours, with sixteen or twenty battalions, in the midst of an army, as the English did at Fontenoy, without either throwing away their
A TREATISE ON

their fire, or even altering their countenance, notwithstanding all the attacks
the cavalry made upon them.

DISPOSITION OF THE BATTLE.

PRINCE WALDECK, with the Dutch, on the left wing, to attack Fontenoy
village. Brigadier Ing—y to attack a mask'd battery near Vezon village; while
General Ligonier was to attack the French with the British and Hanoverian
infantry, covered by the cavalry under Sir James Campbell: This brave General, carried
off by a cannon-ball, left his post defective some time, till the Duke ordered up
seven cannon at the head of the foot-guards, that soon silenced the enemy's
moving guns. The army, obliged to pass by three narrow defiles, took up
from four o'clock to nine to form in order of battle as they advanced. Here the
Duke's undaunted resolution and presence of mind, though exposed to a most
terrible incessant cannonade, placed himself at the head of the British troops.

The brave Generals, Ligonier, Earl of Albemarle, and Count Zastrau, took
possession of the French trenches, and bore all down before them. But the bashful
Dutch were repulsed, and stood idle spectators, though supported by two
British battalions. The Duke and British troops were exposed, on his left flank,
to a perpetual dreadful shower of cannon: And the battery to be attacked by
Ing—y (was never attempted) poured on his right flank; and about
200 cannon, rending the very air, in his front. In this horrid situation, at
the head of the few remains of 20,000 to attack 120,000 French, defended by
260 cannon, trenches, masked batteries, &c. to avoid this infernal post or
circle of cannon, we retired from the trenches to rally the troops: By this
motion the ungenerous Dutch, as expected, made a second attack, or rather
feint, easily repulsed. The British and Hanoverian troops drove the French from
their trenches with dire slaughter, and, in all probability, had obtained a most
glorious victory, had the two flank attacks been carried on with the same alacrity,
conduct, and bravery, as Sir John Ligonier with his troops, having twice
repulsed the French from their works. To redress the misconduct of the two
wings, the Duke, at the head of Ligonier's horse, advanced, through the
fiercest fire, to the right flank; which the French-Irish brigades attacked before
he
he could come up, having poured down legions on the right, supported by their whole army.

Our most intrepid, ever undaunted young Hero, after acting the function of the most sage experienced General, deserted by his Allies, his own troops greatly decreased, was reduced to form a retreat about three at noon: Such dispositions were made, that Noailles's regiment being entirely broke, with the loss of thirty-two Officers, in making an attempt on our rear, the French declined the pursuit. The Allies marched in regular order from the field, having posted the Highland regiment, some battalions of foot, and several squadrons of horse, to secure our retreat, which that night encamped under the cannon of Aeth.

The British and Hanoverians did wonders, in standing ten hours and a half the most furious cannonading ever heard. Lieutenant-General Sir James Campbell, and Major-General Ponsonby were killed; the Earls of Albemarle and Ancram, Lord Cathcart, Major-General Howard, Brigadiers-General Churchill and Ingoldsby, wounded; several Hanoverians, and even two Brigadier-Generals of the Dutch spectators, with 7,370 men killed, wounded, and missing. We had 81 cannon, three pounders, and 8 mortars, half of them with the Dutch.

The French had above 300, mostly large ordnance, well plied. They had 40 General Officers, and 20 Colonels, killed or wounded, with 6,000 men killed, and as many wounded.

The French had all the advantages of a well-chosen situation, and a numerous artillery; add to this the scandalous behaviour of the Dutch, the enemy's great superiority in numbers, and posterity will be amazed at the glorious push the English, &c. made for victory.

Voltaire celebrates the gallantry of the Grand Monarch and Dauphin, by placing them in a dangerous situation during the action: He mentions an extraordinary instance of sang froid in the former, and puts into his mouth these words: Send these balls back to the enemy, I will have nothing belonging to them, laughing at a ball that covered him with dirt.
A fine victory to boast of! 120,000 French, covered and defended by all that art could add to nature, trenches, woods, fixed batteries, and redoubts, with 300 large ordnance, &c. against 20,000 English, and 12 cannon. Voltaire says thus; "The English march boldly on, preceded by six field pieces, with six more in the middle of their lines."

Again, "Thus the English pierced beyond Fontenoy and the redoubt. This body, drawn up before in three lines, now straitened by the nature of their ground, became a solid long column, unshaken from its weight, and still more so, from its courage, discipline, and a most undaunted intrepidity.

So great was the resolution of our young hero, and his brave Generals, with their handful, so equipped, and so seconded, that the brave Saxe, at the head of a moving world, sent to the King and Dauphin to fly, imagining all lost, and repeated the same request several times.

The battle seemed irretrievably lost; they even began to send off the train; says Voltaire, "They, the English, were masters of the field of battle." Had the bashful Dutch in the least seconded, we had gained the most glorious, surprising, and compleat victory in history.

Saxe sent orders to evacuate Antoine, and secure Calone bridge to favour a retreat; nay, sent a second and a third time, despairing of the victory, that deluding fortune crowned us with, to fix it on them. Then the Duke of Richlieu, orders the numberless French legions, and fresh artillery from all quarters, to attack the irresistible British infantry in van, rear, and flank, having near, if not more officers, than the whole number of the British column.

Thus victory seemed long doubtful, till fortune at length preponderated the scale in favour of the French. According to Voltaire, they had no title to, or expectation of it, great part of this day; he took every means to arrive at the true state of that day's action; a day of immortal glory to the Duke, and to the British arms, who, from the perfidy of their dastardly Allies, were forced to quit the laurels they had won with so much glory and slaughter, and where every private English soldier had behaved like a Caesar. No troops, since the creation, ever did or could exceed their valour.

REMARKS
REMARKS upon BATTLES, &c.

BUT after all that I have said on battles, nay after all that has been said, or practised in them (could both these be known) it is my firm opinion, that still very much will be, nay must be left to judgment and presence of mind of a General commanding. No set rules previously can be given, for they must be taken as the occasion presents itself, and then resolutely and speedily pursued; yet what I have said, may possibly be of some use, to such of our less-experienced Officers, as shall well remember, weigh, and practise them; who may by their own reasoning, do as the Spaniards did, who, though they owed the first discovery of America to Columbus, yet they owed the riches they derived from it, to their own farther improving of what he had but laid the foundation. And if this should be the result of my endeavours, I should esteem them happily employed.

In fortifications, the defendants are chiefly in force where the attack or attacks are made. In battle, where the attacks are; there is the principal defence. If an army attacks, it forms at pleasure; it makes its points at will; If it defends, it will be difficult sometimes to penetrate into the designs of the enemy, but when once found succour, succeeds to the discovery. Ground and numbers must ever lead in the form of battle. Impression and resource will ever bid fair for gaining them.

The first principal of all field-fortifications, is to contract the line of defence. All long fronts of defence give room to chicane, and divide and weaken the power of repulse.

The coup d'oeil of field-fortification is, by irregular and detached works adapted to ground, to form a complete systematical piece of fortification, though to a common eye disjointed and unconnected. The coup d'oeil of battle is to throw an attacking army into only one, perhaps, or two or three points of form that shall bear down, or, by its succession of resource, drive away an opposition not formed adequate to repulse its attackers.
OF ACCIDENTS, and UNEXPECTED EVENTS in WAR.

THIS would be a very long article, says the King of Prussia, if I were to treat of all the accidents that may possibly happen to thwart a General of an army. Great abilities, and a little good fortune, will sometimes remove all difficulties.

The Commander of an army is in one respect, very disagreeably situated: He is very often condemned without being heard: Every news-paper takes the liberty to expose his actions to the judgment of the meanest vulgar; and among the thousands who condemn him, there is hardly one man capable of conducting the smallest detachment.

I do not mean to justify those Generals who have made flagrant mistakes: I will not vindicate my own campaign in 1744. Yet, among many faults, the siege of Prague, my retreat and defence of Kolin, and also my retreat into Silesia, were tolerably well conducted: But there are many unfortunate events which no human skill or foresight can possibly prevent.

Writing only for my own Generals, I shall quote no other instances than those which have happened to myself. Whilst we were at Reichenbach, I formed a design to pass the river Neis, by a forced march, and to post myself between the town of that name, and Neuper's army, in order to cut off his communication. The necessary dispositions were accordingly made; but there fell in the mean time such heavy rain, that my advance guards, with the pontoons, could not possibly get along. Whilst we were on our march, the fog became so extremely thick, that it was impossible for our out-guards to find the way to their regiments; so that instead of four in the morning, as was designed, we did not arrive 'till noon, and thus my project was entirely frustrated.

If sickness should invade your camp, during your operations, you will soon be reduced to act defensively, as was my case in Bohemia, in 1741, owing to the bad provisions, with which the army had been supplied.
At the battle of Hohen Friedberg, I sent one of my Aid-de-Camps with orders to the Margrave Charles, who was the oldest General, to put himself at the head of the second line; General Kalckflein, having been detached to the right wing against the Saxons. This Aid-de-Camp, mistaking my orders, told the Margrave to form a second line of the first. Happily I perceived the blunder time enough to prevent its bad consequences.

Hence, it is of the utmost importance for the commander of an army, not only to give proper directions, but also to have an eye to their execution. If a General, commanding a detachment, should be taken ill, or be killed, your project may be entirely disconcerted. An army acting offensively, requires brave and able Generals. The number of these is very small: I have many brave Officers, but few Generals of great abilities.

If, notwithstanding all your precautions, the enemy should carry off two or three convoys, your measures are disconcerted, and your schemes ruined, or at least suspended.

If you should find it necessary to make any retrograde movements *, it will greatly dispirit your troops. At the battle of Mollwitz, I found how difficult it is to reanimate a corps which happens to have been much discouraged. My cavalry were at that time so extremely diffident, that they believed themselves led on to certain destruction. I employed them in small detachments, in order to inure them by degrees: It is only since the battle of Hohen Friedberg, that they are become what they ought to be, and what they now are.

If the enemy should discover one of your principal spies, whom you have sent to his camp, you are disappointed of the intelligence you expected, and consequently must remain inactive, as you are uncertain of his situation.

The negligence of Officers, who are sent out to reconnoitre, may prove another cause of great embarrassment, as was the case of Marshal Neuperg; the Officer of Husars, who was detached upon that service, having neglected

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* Retrograde, a moving backwards, or in a direction contrary to its natural one.
his duty, we fell upon them entirely unawares. It was owing to the carelessness of an Officer of the regiment of Ziethen, that the enemy were suffered to construct their bridge at Selmitz, and carry off part of our baggage.

Hence it appears highly imprudent, to trust the safety of a whole army to the vigilance of a single Officer. Things of such importance ought never to depend entirely upon one man, especially whose age and experience renders him less equal to the charge, (the reader will see what is said upon this subject, for his further instruction under the article on rivers.)

Patroles, and reconnoitring parties, should be considered as superfluous precautions; you are by no means to depend upon them, but to take every other method of security.

Treason in an army, is certainly the greatest misfortune that can befall it. Prince Eugene, in the year 1733, was betrayed by General St—, who suffered himself to be corrupted by the French. I, myself, lost Cofel by the treachery of an Officer of the garrison, who deserted to the enemy, and conducted them to the place.

From these considerations it follows, that we ought not to presume too much upon our good fortune, even in the midst of success; since all our foresight and knowledge, may be rendered ineffectual, by chance and accidents, which, by I know not what destiny, so frequently interferes, possibly with a design to correct the presumption of mankind.

GLANCE of the EYE, and SIGNS.

There are certain signs in war, which are necessary to study, and by which you may form judgments with a kind of certainty.

The military glance of the eye, may be reduced to three particulars: The first comprehends the talent of judging at one view, what number of troops a piece
a piece of ground will contain; this can only be acquired by practice. After having pointed out several camps, the eye becomes capable of measuring so exactly, that you will seldom fail in your estimate.

The second talent is of a superior nature, and consists in conceiving, at first sight, every possible advantage which the ground will afford. This talent may be acquired and carried to a great degree of perfection, by those who are born with a happy genius for the Military Science. The basis of the glance of the eye, is the knowledge of fortification, whose rules are to be applied to every position of an army. An experienced General will avail himself of every height, eminence, defile, hollow way, roads, morasses, &c.

In the space of six miles, it may be possible to make two hundred different positions. A good General will at the first glance, perceive that which is most advantageous; he will ascend every height, or eminence, in order to explore and reconnoitre the country. The same rules of fortification will shew him the weakness of the enemy's order of battle. It is also of great importance after he has taken his position, if time will permit, to know the precise extent of the ground which he occupies, and the number of paces it contains.

There are many other advantages to be drawn from the rules of fortification; as for example, to choose your heights, and possess them in such a manner, that they may not be commanded by others; that your flanks may be covered and defended; that each post may be capable of defence, and to avoid those in which a brave Officer cannot maintain his ground, without risking his reputation. By the same rules you will judge of the defects in the position of your enemy, whether from the disadvantage of his situation, or the injudicious distribution of his troops.

Thirdly and lastly, When there is any great motion in the enemy's army, it may be discerned by the clouds of dust raised by it, which is, at the same time, a certain indication of something extraordinary being in agitation. The dust occasioned by foraging parties, is not the same as that of columns in march:
A TREATISE ON

march: But then it is necessary that you should be able to distinguish the difference.

You may judge likewise which way the enemy directs his course, by the brightness of the arms, when the sun shines upon them. If its rays are perpendicular, he marches towards you; if they are varied and unfrequent, he retreats; if they dart from the right to the left, he is moving towards the left; and if, on the contrary, from the left to the right, his march is to the right. If there is a great quantity of dust in his camp, which appears to be general, and is not raised by foraging parties, he is sending off his sutlers and baggage, and you may be assured, that he will march himself presently after. This discovery furnishes you with an opportunity of making your dispositions to attack him on his march; because you ought to know, how far it is practicable for him to come to you; as also, whether that is his intention, and what way it is most probable he will march; of which you are to judge from his position, his magazines, his preparations, the situation, and in short, from his conduct in general. It is sometimes usual for him to erect his ovens upon the right or left of his army: In which case, if you happen to be covered by a small river, and in that situation can discover the time of his baking any considerable quantity of bread, you can make some movement towards the side which is remote from his ovens, in order to amuse him; after which you may suddenly return again, and send 10 or 12,000 men to attack them, supporting that detachment with your whole army, as fast as it arrives. This enterprise must be executed with so much expedition, as not to allow him time to prevent its success, because you will have the advantage of some hours, before your first movement can arrive at his knowledge, exclusive of what more time may elapse, between his intelligence and the confirmation of it; for which he will undoubtedly wait, before he puts his army in motion; so that, in all probability, he may receive information of the attack of his magazine, before he has even given orders for his march.

There are an infinite number of such stratagems in war, which a skilful Commander may put in practice, with little, or even no risk; and whose consequences are equally as beneficial as those which attend a complete victory, by
by obliging the enemy either to attack him with a disadvantage, or shamefully to retreat from him, with an army even superior in strength.

Of the STAFF of the ARMY.

The staff properly exists only in the time of war; the Quarter-Master-General may be looked upon as the first person belonging to it; he works with the General, commanding the army, on whatever regards the marches of it; and the evening before they are to move, he gives to each General Officer, who is to conduct a column, a copy of what regards him. He makes the Fourier mark the head-quarters, and the quarters of the General Officers; he visits the avenues of the camp, reconnoitres the country round about; likewise, all openings to roads or villages on your flanks, and parties posted at them, till the column is gone past, that is nearest to them; he makes the inhabitants give him exact information, and on the report he makes the General, he receives his orders for regulating the marches of the army, in the manner the General intends they should be executed; he signs and distributes all the orders for foraging, and commonly reconnoitres the quarters where the army can forage: In short, though he has not direct authority over the troops, yet he is continually with the General, whose orders almost always pass through his hands; and as he necessarily possesses the secret movements of the army; this employment gives very great consideration to him, who exercises it, and requires an intelligent Officer, well versed in the great parts of war: He has commonly three or four assistants, to ease him in his function. The Quarter-Master-General, in a day of action, stays by the General commanding.

Whenever the Quarter-Master-General demands a detachment to go out to reconnoitre, it is to be furnished immediately by the nearest troops, and a report sent to the General Officer of the day.
A TREATISE ON

A Subaltern and thirty of the light cavalry to march with the Quarter-Master General, to be posted by him in the villages appointed for the quarters of the General Officers, and to prevent plundering, marauding, and other disorders.

The Quarter-Master-General's guard to parade on days of march, with the Commander in Chief, new grand guard, the Provosts, the market-guards, and the camp-colourmen, and to march together with them.

When a march is resolved on, the first step is the parading a strong detachment of cavalry, to be commanded by a General Officer, and with proper guides, is to march them to an appointed place, lying in the way of the intended general march, and there to halt till farther orders. Before he sets out, he must be ordered by the Commander in Chief, to receive, and punctually pursue all such directions as may afterwards be given him by the Quarter-Master-General *; who, some few hours after the march of the detachment, will follow it; attended by all the Quarter-Masters of the army, with their particular men †, or camp-colourmen; by the same from the artillery; by the Waggon-Master-General, and some of his substitutes; by the Captain of the guides, with a party of his people; and by a competent number of pioneers, together with two or three tumbrils from the train, laden with all necessary tools, as well for moving earth, as for cutting down hedges or copse-wood, falling timber, &c.

The Quarter-Master-General (thus attended) as soon as he comes up to the detachment, at the place appointed, orders it to march, along with him, to another place, in like manner specified, and situate at, or near, the farther

* During a war in Flanders, there happened a few occasions, on which some of the foreign Generals made a difficulty of receiving, or complying with any directions given them by the Lord Cadogan, (then Quarter-Master-General) as inferior to them in rank; who, however, had the spirit to insist on his authority; saying, he gave the Duke of Marlborough's orders, not his own; and leaving them to obey or otherwise, as they would answer it to the service. Upon a due consideration of which inconvenience, it is humbly referred to superior judgment, whether it were not more expedient for the service, that the person exercising this great and important province, had the rank of Lieutenant or Major-General in the army.

† These men to carry with them their arms, canteens, and ten cartridges a man.
flank of the intended new camp. And here he will direct the Commander of
the detachment, what disposition to make of his troops; what posts to take up;
how he shall respectively furnish them; what patrols to keep moving all
around him, but especially towards the enemy. He will likewise appoint him
an alarm-post, and agree upon a signal*, on which he shall call in his advan-
ced posts, assemble his whole detachment, and march it in good order to
the appointed post; either to repel the threatened incursion of the enemy, (if
such there be) or to make a good and regular retreat. He will give the same
orders and directions to his own attendants above-mentioned; who, upon the
signal given, must all form together at a certain point; place themselves under
cover of the detachment, and there wait for farther orders.

All this thus prepared, by way of due precaution against what may pos-
sible happen, he will then proceed to the striking out of the lines for the en-
campment; and order them to be properly divided for the battalions, squadrons,
and intervals. The Quarter-Master, &c. from the train will have their ground
shown them; and must there, take care to mark out the park for the
artillery.

The Quarter-Master-General will then consider the way of the march;
thoroughly reconnoitre the adjacent country; observing all the intervening
castles, villages, high-roads, woods, rivers, brooks, bridges, fords, hills,
narrow passes, &c. He will appoint overtures to be made, according to the
number of columns the march is designed to consist of (which will be the more,
or fewer, as the march requires to be more or less prent) and upon all these
transactions, enquiries and observations, forms his order of march. This he
as soon as possible, communicates to the Commander in Chief, for his appro-
bation: Upon which the general order is given out, in the usual manner, for
the march; either that night, or the next morning early, as the General (all
circumstances considered) may judge expedient. The Generals of the day;
the Brigade-Majors; the Waggon-Master-General; the Commanding Officer
of the artillery, and the Captain of the guides, take each a copy of the order
of march; which points out to every column (whether of troops, artillery, or

* I am of opinion that, for proper signals on this, and other such occasions, a light field piece from the
train may be necessary.

baggage
baggage) their respective overtures; specifying every town, village, castle, mill, wood, or any other remarkable object, through, or near which the said overtures will lead them. The Captain of the guides must appoint some of those that were with him at the forming of the overtures, for conducting the columns, artillery, and baggage, each to those that properly belong to them.

N.B. If you take night marches, you may be sure it is to surprize an enemy, or to steal a march upon them; and then you must be certain that your guides know the country you are to pass through, who are kept close to the columns, and the battalions close to each other; to post strong detachments on your flanks, with pieces of cannon, if the enemy can approach you that way, and you keep your designs secret.
WHENEVER a regiment-squadron, or large detachments are ordered to some distant quarter; if for a few days, or more, the following Return should be sent to the Quarter-Master-General, the day after their arrival.

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<th>Date</th>
<th>Regiment</th>
<th>County</th>
<th>Town</th>
<th>Quarters</th>
<th>Contiguous Towns, &amp;c. for enlarging Quarters</th>
<th>Total of Troops in the Quarters and Enlargements</th>
<th>Greatest Extent of Quarters</th>
<th>From Miles</th>
<th>To Miles</th>
<th>How supplied with Provisions</th>
<th>Remarks on the Road, where good or bad</th>
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THE MILITARY SCIENCE.
A TREATISE ON

The Adjutant-General, at the opening of the campaign, settles with the Majors of brigade, the rosters for the several duties, as also, at any time that an alteration is required.

In short, the Adjutant-General is to keep an account of every thing that passes in the army, and attend on the General in Chief, when he goes abroad, if he is not employed about some other part of his duty; but in the day of action, he is always to be about his person, to carry his orders to the Generals of the horse and foot; which is likewise the duty of his Aid de Camps: But when the Adjutant-General is present, and that there are any orders of consequence to be delivered to those who command the lines, he is generally sent to avoid mistakes in the giving of them. Since we may reasonably suppose that length of service, and a thorough knowledge of military operations, were the chief motives which promoted him to that employment. The same qualifications are required in Aid-de-Camps; though but seldom to be found: For, in general (to the great detriment of the service) they are filled by young Officers, without experience or capacity.

Lest the out-posts should be forgot, upon a sudden or unexpected march, the Adjutant-General is to take care that they be drawn in due time, without which precaution, the men, on these commands, may be taken or destroyed by the enemy. He is likewise to see that all out-posts are relieved regularly, lest the Major of the brigade of the day should neglect or omit it.

On marching days, he follows the General Officer of the day with the encampment, and distributes to a Major of each brigade, the ground of the Camp; he makes a daily report to the General commanding, of the situation of all the posts of the infantry, placed for the safety of the army, and of any changes made in their posts. In a day of battle, the Adjutant-General sees the infantry drawn up. In a siege, he orders the number of workmen demanded; he counts them when they return from work, and signs the billets for their payments: He receives the guards of the trenches at their rendezvous, examines if they are in good condition, and also gives and signs all the orders for skirmishing parties. As he is charged with all the duty of the whole infantry, he has orderly men for that body; that is to say, a Serjeant and Corporal from each
each brigade of infantry in the line, to carry them the orders which he may
have occasion to send from the General commanding.

In the morning, he is at the parade of the guards, and sees them defile; he
may, if he has time, visit them at their post, and see that the piquets are
in good order; he also accompanies and follows the General, by whose orders
he commands all the detachments of infantry, and sees them march off from
their rendezvous, or leaves this care to his assistants; for it is impossible for an
Adjutant-General to be at more places than one at the same time.

Officers, when they are returned from out-posts, are to make a report to
the Adjutant-General, when the Major-General of the day is absent; as also
to the Commanding Officers of their own corps.

The Adjutant-General is to keep the details, and an account of all
things that happen in the army. He is to decide all disputes that shall arise in
doing duty. He is to visit the out-posts often, and keep as much as possible
with the Commander in Chief.

The Field Officers, when ill, to send word to the Adjutant-General, that
they may not be ordered for duty. They are also to send word when
recovered.

Whenever a Field Officer is ordered with the foragers, he is to be al-
lowed a duty, or a piquet, according to the distance of the magazine, or
from camp.

Whenever a Commanding Officer intends to exercise his battalion, he is
to acquaint the Adjutant-General over night, that he may obtain the General's
permission, and that the General Officer of the day may be acquainted
with it.

The Adjutant-General is the only person, under the rank of a General Officer,
who is entitled to give orders to the Major of brigade on the parade.

ROSTER.
# EXPLANATION

A TREATISE ON

**ROSTER for detach'd BATTALIONS.**

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EXPLANATION

Of the preceding Table.

In the first column, are the names of nations; in the second, the number of battalions each had; and, the highest number being thirty-two, there are thirty-two squares opposite to each nation: But, as the Danes have but four battalions, and only give in proportion to that number, all the squares except four are blanks: The same is observed in proportion to the Hanoverians, Prussians, and Dutch. The reason for dividing them will appear very plain; as four to thirty-two, so is one to eight. The dividing of the blank squares opposite to the Danes, will appear very regular and easy; as eight to thirty-two, so is one to four; which is the Dutch. The Prussians and Hanoverians are proportioned in the same manner:

All the columns are numbered on the top, from one to thirty-two; and, as the columns, with the figures in them, are supposed to be battalions, I have numbered them from one to eighty-four, that being the whole number of battalions; ten of which I shall suppose ordered upon duty; in this case you begin column one, number one, and carry it on to the Prussians in column three, number ten, that being the endings of such order. If two battalions more are ordered after, the endings will be with the English in column five, number twelve; and so on according to the demand of future orders. Thus, I presume, I have made the nature and form of a roster to be understood by the youngest Officer in the service, and shall therefore spare myself the trouble of adding any similar plans.
Of the Provoost-Martial-General, and of Stragling, Marauding, or Plundering the Country.

The Provosts of the right and left wings, with proper detachments, to assemble, with the Quarter-Masters and camp-colourmen, every time the army marches; and to march with them, and patrol in the villages, while the camp is settling.

Strict orders must be given, to forbid all stragling, marauding, or plundering in the country, on pain of the severest punishment; or, if that will not do, even of death.

A friend's country, all allow, is by no means to be plundered or violated; and, in my opinion, prudence and economy do require, that the same good order be observed, even in an enemy's: For the contrary conduct, it is true, may at first bring in a profusion of all necessaries to the army, that will soon be wasted and consumed; and then the army (which, perhaps, ought to have continued in that station) must be forced to quit it or starve. Whereas, had the people been protected, and properly encouraged, they might constantly have brought in provisions, and, by that means have subsisted the army there, till it had accomplished all the views of its Commander.

However, it must here be observed, that there do sometimes happen particular occasions, which necessarily require wasting and destroying an enemy's country; and, in that case, it must be done by general order, and regular parties, commanded for that purpose. But in general, the protecting the country people in their lives and properties, turns more both to the honour and advantage of armies, and their Commanders.

A Subaltern and thirty cavalry to be always ready to go out with the Provoost-General.

A Serjeant
A Sergeant and eighteen of the foot to mount the Provost's guard

The Provost's guard to be relieved every forty-eight hours.

The Provost's guard to parade, on days of march, with the Commander in Chief's new guard, the grand guard, the Quarter-Master-General's guard, and the camp-colourmen, and to march with them.

In camp, the Provost is to go his rounds twice a day.

When the army forages, the Grand Provosts of each nation shall patrol with a detachment of cavalry, to punish, with death, all those that shall be found plundering or marauding in the country, or the villages; that is to say, all such persons as belong to the corps they are appointed for. Persons of all other corps or nations shall be made prisoners, and sent to their respective Provosts-Martial.

All men guilty of capital crimes, to be sent immediately to the Provosts.

When any men are sent to the Provosts, (viz. if those who confine them be not of the same regiment the prisoners belong to) a report of them is to be sent immediately to the regiment they do belong to; and no man to be received by the Provosts, except his crime be sent with him in writing, and the Officer's name, rank, and corps signed to it.

When any man is executed, a label is to be fixed on his breast, setting forth the crime for which he is executed.

The Provost to give in a list of his prisoners to the General of the Day, (viz. of his own nation) at head-quarters, by nine in the morning.

The Commanding Officers to send and acquaint the Provost-General, when they have any dead horses, that they may be buried, for which they are to pay two shillings and four pence for each horse.
A TREATISE on

The Provost to bury all dead horses and carrion. Notice to be given where there is any in or near the camp.

The Provost is to inspect, and see that all the Sutlers of his nation sell by proper weights and measures; but the Provost-General belonging to the Commander in Chief, besides the Sutlers of his own nation, takes cognizance of all Sutlers of all nations whatsoever, whether of the army or not, that keep at head quarters; and he is to examine whether they have proper passes. He is also to inspect into those who keep at the General Officer's quarters of his own nation, and strictly to enquire into the Sutler's servants, and endeavour to watch them, and to find out, by his emissaries, whether, under pretence of going to neighbouring towns and villages to market, they do not hold correspondence with the enemy, or their spies.

Though the Provost is to inspect into the weights and measures of all Sutlers, the Commanding Officers of regiments, and Majors, are to be answerable for all Sutlers and their servants, who encamp within the limits or ground belonging to the encampment of their regiments.

Lists to be given to the Provost-Martial of the Sutlers and Butchers licensed in each corps, that they may all have weights and measures of the same standard; and to sell by no others but those stamped by the Provost, under pain of severe punishment.

WAGGON-MASTER-GENERAL.

No baggage to be sent on before the regiment, except it is ordered; nor to stir from the rear of its regiment 'till called for by the Waggon-Master-General, upon pain of being plundered.

A General commanding, should be allowed two post-coaches, or post-chaises, and three-wheel carriages.
THE MILITARY SCIENCE.

A Lieutenant-General, if next in Command, should be allowed one post-coach, or post chaise; and three-wheel carriages; Major, or Brigadier-General, should be allowed two-wheel carriages each.

No Officer, under the degree of a Brigadier, shall have coach, chariot, or chaise.

No coach, chariot, chaise, waggon, or other wheel-carriage, belonging to the General Officers, or any other else, to be permitted, on any pretence whatsoever, to remain at the head of the column, or in the front or rear of any regiment upon a march; but to go in the rear of the train with the heavy baggage of the army.

No more than two-wheel carriages shall be allowed to each regiment of horse, foot, or dragoons, exclusive of the forage carts of the horse and dragoons, viz. one to the Colonel, or Lieutenant-Colonel, where there is no Colonel, to be at his choice, whether of four wheels or two, or in what shape he thinks fit, provided the same be drawn by a proper number of able horses: And one four-wheel carriage, or waggon, shall be allowed the head Sutler of each regiment, drawn by four able horses. The commanding Officer shall be answerable for the sufficiency of the said horses.

If any country waggon is found with any corps, unless allowed them by order, the Commanding Officer of that corps, will incur the greatest displeasure.

One waggon to be allowed to each battalion for the sick, unable to march, and to go in the rear of each regiment. No women, children, or baggage, to be suffered to be put into it. Commanding Officers, who permit it, to be put in arrest.

These waggons are to be demanded the evening before a march, and returned the first halting day. No Commanding Officer is to suffer them to be detained any longer.
A TREATISE on

The bread waggons to carry off the sick, and to be sent, one per regiment, night before the army marches, and dismissed the next halting-day.

A Field-Officer, for the inspection of the baggage of each wing, to be taken in the tour of duty, of the nations who compose the wing, and to have the direction of the whole.

The usual guard of a Subaltern, and thirty dragoons for the Waggon-Master-General, to parade at the train every time the army marches.

When the army marches, a Captain from the whole foot, a Subaltern from each brigade, and a Serjeant and ten men from each battalion, to be commanded with the wheel-baggage. The Captain and Officer commanding, is to take care that the detachment never lay their arms on the waggons, that servants do not stop the line of baggage to drink, or on any other pretence, and that no women be permitted to ride on the forage waggons. The horse and dragoons to have an Officer of each brigade, and one man per troop, with the same orders.

As many countries differ in nature and size of their waggons, allowances must be made in proportion, by adding, or diminishing to the number before recited: The usual number of bat'-horses should also be allowed to each rank.

Of Marches in the Neighbourhood of an Enemy, and of Consequences, &c.

Where you are to advance through a defile, occupy, by times, its outlets.

Much consideration is required to guard against the accidents that may arise in the course of a march; and yet in every project, I shall suppose there is good reason to expect success, if the means of putting it into execution be conducted with sound sense and judgment: And yet fortune may fail, as if we trust too much to her; but a prudent conduct never will. It is true, we may
may be over-powered and conquered, notwithstanding all our precaution; but never shamefully beat, if we act as we ought; and a man may gain reputation though he is overcome.

So many and various are the causes of an army's moving, that to pretend to enumerate, and severally describe them, would far exceed my abilities, and small experience: But shall occasionally introduce some few principal motives of that operation, which may suffice to give a general idea of them.

The point now in view, is to lay down certain preliminary steps, that should induce a General to put his army in motion.

To illustrate my distinction, I must take notice, that of the first sort, there are some, whose motives are mere points of conveniency; such as forage, pasture, water, fresh ground, and consequently a purer air; or perhaps to lie more conveniently to our garrisons or magazines; while, on the other hand, I shall number among the second class (first) all forced marches, by which it is endeavoured to be before-hand with the enemy, at some important passes; and of these, the chief merit is, dispatch, at any rate; (next) all marches stolen upon the enemy; by one of which, well timed and executed, you may so effectually get the start of him, and gain so advantageous a situation, as may give you the absolute command of him during the campaign; securing to yourself the string for all manner of enterprizes, while you leave him the bow, either for preventing you, or attempting any design of his own*. These stolen marches are generally obtained by means of feint and artifice, employed to amuse and deceive the enemy: Either by setting out in the close of the evening the contrary way; and counter-marching in the night, for your intended point: Or else, under the pretence of a grand forage towards the enemy, covering the march of the army, which is performed at the same time: Or, in short, by any other method; of which there are so many, arising ex re natâ, as make all farther specifying here, both needless and impracticable.

* A certain great General was heard to say, viz. "That he should desire no more for the success of a campaign, than the stealing one march upon his enemy."

The
The marches I shall now mention of, is the moving directly to the enemy, to surprize or attack him in his camp.

It is asserted, by those who have made the profession their study, that an army is exposed to more danger on marches, than in battles. In an engagement, the men are properly armed; they see their enemies before them, and come prepared to fight; but on a march, the soldier is less on his guard, has not always his arms ready, and is thrown into disorder by a sudden attack or ambuscade. A General, therefore, cannot be too careful and diligent in taking necessary precautions to prevent a surprize on the march; and in making proper dispositions to repulse the enemy, in case of such accident, without loss. In the first place, he should have an exact description of the country, that is the feat of war, in which the distances of the places, specified by the number of miles, the nature of the roads, the shortest routs, by-roads, mountains, rivers, defiles, &c. should be correctly inserted.

We are told, that the greatest Generals have carried their precautions, on this head, so far, that not satisfied with the simple description of the country, wherein they were engaged, they caused plans to be taken of it on the spot, that they might regulate their marches, by the eye, with the greater safety. A General should also inform himself of all these particulars, from persons of sense and reputation, well-acquainted with the country, by examining them separately at first, and then comparing their accounts, in order to come at the truth with certainty. If any difficulty arises about choice of roads, he should procure proper and skilful guides: He should put them under a guard, and spare neither promises nor threats to induce them to be faithful. They will acquit themselves well, when they know it is impossible to escape, and are certain of being rewarded for their fidelity, or punished for their perfidy. He must be sure of their capacity and experience, that the whole army be not brought into danger by the errors of two or three persons; for sometimes the common sort of people imagine they know what they really do not, and through ignorance, promise more than they can perform. But of all precautions, the most important is, to keep entirely secret, which way, or by what rout the army is to march; for the security of an expedition depends on the concealment of all motions from the enemy. The figure of the Minotaur was anciently among the legionary
Legionary Ensigns, signifying, that this monster, according to the fable, was concealed in the most secret recesses and windings of the labyrinth; so the designs of a General should always be impenetrable. When the enemy has no intimation of a march, it is made with security; but, as sometimes the scouts either suspect or discover the decampment, or traitors or deserters give intelligence thereof, it will be proper to mention, the method of acting in case of an attack on the march. The General, before he puts his troops in motion, should send out detachments of faithful and experienced men of the light cavalry, to reconnoitre the places through which he is to march, in front, in rear, and on the flanks; lest he should fall into ambuscades. The night is safer and more advantageous for your spies, to do their business in, than the day; for if they are taken prisoners, you are, as it were, betrayed yourself. After this, the cavalry should march off first, then the infantry and artillery; the baggage, bat' -horses, servants, and carriages, with some cavalry and infantry in the rear, as it is oftener attacked on a march, than in the front. The flanks of the baggage, exposed to frequent ambuscades, must also be covered with a sufficient detachment to secure them. But above all, the part where the enemy is most expected, must be reinforced. If surrounded on all sides by the enemy, you must make dispositions to receive them, wherever they present themselves; and caution the men, before-hand, to keep their arms in their hands, and to be ready, in order to prevent the bad effects of a sudden attack. Men are frightened and thrown into disorder, by sudden accident and surprizes of no consequence when foreseen. The ancients were very careful that the servants, or followers of the army, if wounded or frightened by the noise of the action, might not disorder the troops while engaged, and also to prevent their either stragling or crowding one another too much, which might incommode their own men, and give great advantage to the enemy.

Proper intervals should always be kept between the baggage and the troops, that the latter may not be embarrassed for want of room, in case of an attack during the march. The manner and disposition of offence must be varied according to the difference of ground. In an open country, you are more liable to be attacked with cavalry than infantry; but in a woody, mountainous, or marshy situation, the danger to be apprehended is from the latter. Some of the divisions being apt, through negligence, to move too fast, and others too

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flow, great care is to be taken to prevent the army from being broke, or from running into too great a length; as the enemy would instantly take advantage of the neglect, and penetrate without difficulty. The Majors, and Adjutants of the corps, should have a watchful eye over their men; as also those Officers who command the advance and rear guards, to halt those who advance too fast, and to quicken such as move too slow. The men at too great a distance, in the front, on the appearance of an enemy, are more disposed to fly than to join their comrades; and those too far behind, destitute of assistance, fall a sacrifice to the enemy and their own despair. The enemy, it may be concluded, will either plant ambuscades, or make his attack by open force, according to the advantage of the ground. Circumspection in examining every place will be a security against concealed danger; and an ambuscade, if discovered and properly surrounded, will retort the intended mischief with interest. If the enemy prepare to fall upon you by open force, in a mountainous country, detachments must be sent forward to occupy the highest eminences, that on their arrival, they may not dare to attack you under such advantage of ground, your troops being posted so much above them, and presenting a front ready for their reception. It is better to send the pioneers forward, to open ways that are narrow, but safe, without regard to their labour, than to run any risk in the finest roads. It is necessary to be well informed, whether the enemy usually make their attacks in the night, or by break of day, or in the hours of refreshment or rest; and by the knowledge of their customs, to guard against what we find their general practice. We must also inform ourselves, whether they are strongest in infantry, cavalry, or artillery; whether their principal strength consist in numbers, or in their discipline, which will enable us to take the most proper measures to distress them, and for our advantage. When we have a march in view, we must consider whether it will be most advisable to begin the march by day or night; we must calculate the distance of the place or places we want to reach, and the time it will take. Supposing then, that 50,000 infantry have a march of twelve miles to perform, in a level country, in ten columns, equally strong, whose front consists of ten men, the ranks at four feet asunder, and the men marching the geometrical pace, per second, it will take up three hours, thirty-one minutes, and twelve seconds; and its depth will be, of each column, 400 geometrical paces.

Again,
Again, 60,000 men, divided into five columns, whose front consists of fifteen men, having a march of fifteen miles to make, the ranks being three feet asunder; the men marching the common pace in a second; and the front of each marching off at three o'clock in the morning; the front and rear of each column will arrive at the destined place, sixteen minutes past twelve o'clock.

A General has intelligence, that within eight miles from the enemy's camp, there is a very advantageous post, and that orders have been given to march to take possession of it, by four o'clock the next morning; and from his knowledge of the country, he supposes that only two columns can be formed of only ten men each in front, that the men will march a geometrical pace per second, and the ranks four feet asunder. Being willing, on account of the great advantages of the post, to possess himself, though eleven miles from his camp, he marches off by three o'clock in the morning; the country admitting five columns, each of ten men in front, the ranks at four feet asunder, and the men marching also the geometrical pace per second; he will arrive at thirteen minutes, and thirty-six seconds past six o'clock, and have out-marched his enemy by seven minutes, and twelve seconds; and before any of the enemy arrives, he will have 27,000 men.

To take such precautions; that, in summer, the troops may not suffer for want of water on their march, nor be obstructed, in winter, by impassible morasses or torrents, by which the army would be exposed to great danger, before it could arrive at the place of its destination. As it highly concerns us to guard against these inconveniences with prudence, so it will be inexcusable not to take advantage of an enemy, that fell into them, through ignorance or negligence. Our spies should be constantly abroad; we should spare no pains in tampering with their men; and give all manner of encouragement to their deserters; by which means we may get intelligence of their present or future designs; and we should constantly keep in readiness some detachments of light cavalry and light infantry, to fall upon them, when they least expect it, either on the march, or when foraging or marauding.
A TREATISE ON

The attention of the General is to be chiefly given to the place, time, and operations of his march: And that knowledge, which is so requisite, is to be acquired by experience; partly by inquiry, and partly by rules of science. With respect to the rout or routs; the place that is the object of the march; the nature of the place; and the persons fit to be employed in the execution of them: It is best indeed, when a Commander is acquainted with it from his own knowledge: But if it be otherwise, his duty then is, to use the greatest care in his enquiries; not trusting rashly to any information that is offered; nor following any guides, without leaving behind them some pledges of their fidelity. In these things then, and in others similar to these, a General may obtain sufficient light, by consulting that experience which is gained in armies; by employing his own industry; and by making the necessary inquiries. But there are others that demand skill and knowledge, and some acquaintance with the rules of theoretical science, especially with those of astronomy and geometry; for without having recourse to the more difficult branches of these two sciences, there are certain parts of them, which, though they require but little labour, are of the greatest use.

Among the things that are to be learned, one of the most necessary is the investigation of the theory of the days and nights. If indeed the days and the nights were at all times equal, there would be no need of study, in order to acquire knowledge which would in that case be common and obvious to all. But since they are different, not only each from the other, but also from themselves, it is plainly a matter of great importance, to know the laws by which we are severally diminished or increased: For, unless he be acquainted with the differences, how shall a Commander be able to measure, with exactness, the time of a concerted march, either by night or by day? How can he be assured, without this knowledge, that he shall not either arrive too early, or too late? It happens also upon such occasions, and indeed upon such alone, that the first of these mistakes is more dangerous than the other, for he who arrives too late, is only forced to abandon his design; perceiving his error, while he is yet at a distance, he may return back again with safety. But he who comes before the appointed time, being discovered by the enemy, upon his approach, not only fails in his intended march, but is in danger also of suffering an entire defeat. It is time indeed, which principally governs in all human actions, and
and most particularly in the affairs of war. A Commander therefore should be perfectly acquainted with the time of the summer and winter solstice, the equinoxes, and the different degrees of the diminution or increase of the nights and days, as they fall between the equinoctial points. For this is the only method that can enable him to adjust his motions to the course of time.

Nor is it less necessary, that a Commander should also know distinctly the several portions of the day and of the night: In order to determine the proper hour of rising, and putting the troops in motion; for without beginning well, it is not possible to obtain a happy end. Now the time of day may easily be known by the shadow from the sun, by the course which the sun takes, and by the different degrees of his elevation above the earth. But it is not easy to distinguish the time of night, unless to those who are versed in the doctrine of the sphere, and are able to follow the course of the twelve signs, and to mark their disposition in the Heavens. With this knowledge, it is a matter of no difficulty; for though the nights are unequal, yet in the course of every night, six of the twelve signs are raised above the horizon, it necessarily follows, that at the same times of the night, equal parts of the twelve signs must always appear. When it is known then, what part of the zodiac the sun occupies in the day, nothing more is requisite, than, at the time of his setting, to draw a line diametrically through the circle. When this is done, as much as the zodiac shall afterwards rise above the horizon, so much of the night will be also known.

When the nights are cloudy, recourse must be had to the moon, for this planet is of such a magnitude, that in whatever part of the Heavens it may happen to be, the light of it may always be discerned. It is sometimes from the time of its rising, and sometimes from those of its setting, that the hours of the night are to be computed. But it will first be requisite to know with exactness, the different times of its rising upon each several days; nor is this knowledge difficult to be obtained, for as the course of the moon is completed in a single month, the right apprehension of the progress in that period will serve equally in all the rest.
Upon these principles it may be observed, how well the Poet deserves our praise, when he represents Ulysses, who possessed all the qualities of a great Commander, forming conjectures from the appearances of the Heavens, not only concerning the course of navigation, but with respect also to actions upon land: For even those sudden and unexpected events, by which men are thrown into the greatest difficulties, may by this method be apprehended with exactness before they happen. Such are violent rains and inundations, the fall of snows, a black and clouded air, and other similar accidents. If we therefore are negligent with respect even to things of this kind, which are possible to be foreseen, must we not fail, through our own fault alone, in almost every thing we attempt? But indeed there is scarcely one of all those precautions which have been before recited, that can with safety be neglected; if we would avoid falling into those absurdities of conduct, into which many others are reported to have fallen.—I shall mention a few examples:

CLEOMENES, the King of Sparta, when he had resolved to make an attempt upon Megolopolus, agreed with some of the garrison, who were to be stationed upon that part of the wall that was called Coleum, that he would come with his forces in the night, about the time of the third watch; for this was the hour, in which these men were appointed to take the guard. But not having before considered, that at the time of the rising of the Pleiades, the nights were extremely short, he did not begin his march from Lacedæmon, till about the setting of the sun; it was therefore full day before he arrived at the destined place. He had the rashness however to attempt to storm the city, but was repulsed with disgrace and loss, and was even in danger of suffering an entire defeat; whereas, on the other hand, if he had been only exact in the computation of the time, his friends might have secured his entrance into the city, and the design have been attended with success.

Thus again, King Philip, when he attempts to take Melite, was guilty of a double error; for not only the ladders which he carried was too short, but he failed also with respect to time, instead of coming to the place in the middle of the night, as it had been concerted, when the people would have been all fast asleep, he begun his march from Larissa at an early hour; and, having entered the territories of the Meliteans, as it was neither safe for him to halt, left the enemy
enemy should gain notice of his approach, nor possible to return back again without being perceived, he was compelled by necessity to advance, and arrived at the city before the inhabitants were gone to rest: But as he could not scale the walls, because the ladders were not proportioned to the height, so neither was he able to enter through the gate, because the time of the attack prevented his friends that were within the city from favouring his entrance. At last therefore, having only provoked the rage of the inhabitants, and lost many of his men, he was forced to return back without accomplishing his purpose; and instructed all mankind for the time to come, to be suspicious of his designs, and to set themselves on their guard against him.

Another example occurs in the example of Nicias, the Athenian. This General having found a fair occasion for drawing his army from the siege of Syracuse, made choice of the proper time of night, and had retreated to a safe distance, undiscovered by the enemy, when it happened that the moon was suddenly eclipsed. Being struck by this event, and vainly imagining that it portended some misfortune, he immediately suspended his march. The consequence was, that when he designed to continue his retreat on the following night, the Syracusans, having now gained notice of his motions, fell upon him as he marched, and rendered himself master both of the army and of the leaders: And yet, if he only had enquired of men that were acquainted with these matters, he might not only have lost his own proper time, but have rendered the accident itself subservient to his purpose, on account of the ignorance of the enemy. For the ignorance of others is the surest way of conducting skilful men to the accomplishment of their designs. It is manifest then, that so much of astronomy should be acquired, as may be necessary upon such occasions: And in order to obtain success in military operations, the studies of astronomy, geometry, and mathematics, are absolutely necessary to complete the General.

'Tis impossible to give one certain and standing rule for the marching of an army, or large detachment, for the most advantageous and safest way, without being master of them, as they vary according to the country you march in, and the enemy you have to do with. If he be an enemy, not in force to give me battle, and will only, by his cavalry, posses the passies, bridges and fords,
to obstruct and retard my march. I would then have some field-pieces, and march with the infantry which are in the van of all, the better and sooner to drive him from his defences, and I would march (if numbers permitted) in two or three columns, different ways, with the artillery at the head of each column, with loaded cannon and lighted matches, yet still no farther distance the one from the other, than to be ready speedily to form into one body again; and at sun-set, all to encamp, or quartered conveniently together, whereby the whole would move with more expedition, safety, and ease. And the enemy would be less encouraged to defend a bridge, ford, or narrow pass, against one of these columns: Since while he is doing that, one or both the others, may surround him, and cut off his retreat. There are several other cases which must be provided against, as the emergencies happen, by the care, knowledge, and foresight of the Commander: For which, no positive rules can be laid down, as in some situations, the order must be given on the very spot, and according to the nature of the ground and country; the enemy and the occasion, all which require quickness, courage, design, and acting.

Of the March of the Artillery.

The marches of the artillery, are of all the operations of war, the most delicate, because they must not only be directed on the object you have in view, but according to the movements the enemy make. Armies generally march in three columns, the center column of which is the artillery: Should the army march in more columns, the artillery and heavy baggage march nevertheless in one or more of the center columns; the situation of the enemy determines this. If they are far from the enemy, the baggage and ammunition go before or behind, or are sent by a particular road; an army in such a case cannot march in too many columns: But should the march be towards the enemy, the baggage must be in the rear, and the whole artillery form the center column, except some brigades, one of which marches at the head
head of each column, with guns loaded, and burning matches, preceded by a detachment for their safety.

Suppose the enemy's army in a condition to march towards the heads of your columns; the best disposition for the march is in three columns only; that of the center, for the artillery, for it is easy to form them in order of battle. Hence it is equally commodious for each brigade of artillery to plant themselves at the heads of the troops, in the places marked for them, in such a manner, that the whole disposition being understood, and well executed, they may form quickly in order of battle, in an open country, and in the presence of any enemy, without risking any surprize, by which method, the artillery will always be in a condition to act as soon as the troops, provided they march in brigades.

If you march through a country full of defiles, some cavalry should march at the head of the columns, followed by a detachment of grenadiers and light infantry, and a brigade of artillery, cannon being absolutely necessary to obstruct the enemy's forming into order of battle.

When you decamp in the face of an army, you must give most attention to your rear guard. On such occasions, all the baggage, ammunition, provisions, and artillery, march before the troops; the grenadiers, light infantry, some cavalry, and some brigades of infantry, together with some brigades of artillery, form the rear guard: Cannon is of infinite use for the rear guard, when obliged to pass a defile, or a river, and should be placed at the entry of such defile, on an eminence, if there is one, or any other place, from whence they can discover the ground through which the enemy must march to attack the rear guard.

A Detachment of pioneers, with tools, must always march at the head of the artillery, and of each column of equipage or baggage.

If the enemy is encamped on the right flanks of the march, the artillery, &c. should march to the left of the troops, and vice versa. Should the enemy appear
appear in motion, the troops front that way, by wheeling to the right or left, by divisions; and the artillery, which march in a line with the columns, pass through their intervals, and form at the head of their front line, which is formed of the column who flanked the nearest enemy, taking care at the same time, that the baggage be well covered during the action.

Though I have said armies generally march in three columns, yet where the country will allow of it, it is better to march in a great number, and let that number be what it will, the artillery must form the center columns.

Line of March of the Artillery.

1. A guard of the army; its strength depends on the Commander in Chief.
2. The companies of miners, (except a detachment from each, dispersed in various places, to mend the roads) with tumbrels of tools, drawn by two horses, assisted by pioneers.
3. The brigades of artillerys' front guard, with four light six pounders loaded, and matches burning.
4. The kettle-drums by four horses, and two trumpeters on horseback.
5. The flag-gun, drawn by twelve horses, and ten twelve-pounders more, by four horses each.
6. Twenty waggons with stores for the said guns, and one spare one, by four horses.
7. All the pontoons, with the waggons thereto belonging.
8. Eight nine-pounders by three horses.
9. Fifteen waggons with stores for said guns, by four horses each, and two spare ones.
10. Gins and capstans, with their proper workmen, three waggons, with two horses each.
11. A forge on four wheels, and one waggon, four horses each.
12. Twelve heavy twenty-four pounders, by sixteen horses each.
13. Sixteen waggons with stores for ditto, and two spare ones, by four horses each.
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14. A waggon with tools, and pioneers to mend the road.
15. Nine light twenty-four pounders, by eight horses each.
16. Twelve waggons with stores for ditto, and two spare ones, by four horses each.
17. A forge and waggon, by four
18. Nine twenty-four pounders, by eight
19. Twelve waggons with stores for ditto, and two spare ones.
20. Twelve twelve-pounders, by eight horses each.
21. Sixteen waggons with stores for ditto, and two spare ones.
22. Sixteen five-eight-inch mortars, by two horses each.
23. Twenty-five waggons with stores for ditto, and two spare ones.
24. Ten eight-inch mortars, by four horses each.
25. Twenty waggons with stores for ditto, and two spare ones.
26. Six ten-inch howitzers, by six horses each.
27. Twenty waggons with stores for ditto, and two spare ones.
28. A waggon with tools, and men to mend the roads.
29. A forge and waggon, by four horses each.
30. Ten eight-inch mortars, by four horses each.
31. Twenty waggons with stores for ditto, and two spare ones.
32. Sixteen twelve-inch mortars, by eight horses each.
33. Thirty waggons with stores for ditto, and two spare ones.
34. Eight eighteen-inch stone mortars, by ten horses each.
35. Sixteen waggons with stores for ditto, and a spare one.
36. Eight nine-pounders, by three horses each.
37. Sixteen waggons with stores for ditto, and a spare one.
38. Twenty six-pounders, by two horses each.
39. Twenty waggons with stores for ditto, and a spare one.
40. Two flogging waggons, and two truck carriages, by four horses each.
41. Twenty three-pounders, by one horse each.
42. Ten waggons for ditto, and one spare one.
43. A waggon with tools, &c.
44. A forge and waggon, by four horses each.
45. Twelve two and one-pounders, by one horse each.
46. Six waggons with stores for ditto.

47. Sixteen
47. Sixteen six-pounders, by two horses each.
48. Ten waggons with stores for ditto.
49. Twenty spare carriages, for various calibres.
50. Eighteen ditto.
51. Fifty spare limbers.
52. Ten eighteen pounders, by six horses each.
53. Twenty waggons with stores for ditto, and two spare ones.
54. Twenty waggons with ammunition and stores.
55. Two twelve pounders, by four horses each.
56. Four waggons with stores for ditto.
57. Fifty waggons with stores.
58. A waggon with tools, and men to mend the roads.
59. A forge and waggon, by four horses each.
60. An hundred waggons with stores, and four spare ones.
61. Four two and one-pounders, by one horse each.
62. An hundred waggons with stores, and three spare ones.
63. Two hundred waggons, and two spare ones.
64. Two hundred and fourteen waggons belonging to the artillery baggage, some with four, three, and two horses each.
65. The artillery rear-guard.
66. The rear-guard from the army.

Having now finished the march of the artillery, I shall next proceed to park it. The figure of which is generally that of a parallelogram*, unless the situation of the ground renders another necessary.

**Of PARKING the ARTILLERY.**

The park of artillery is generally placed in the center of the second line of encampments, and sometimes in the rear-line, or corps of reserve: In both places, the muzzles of the guns are in a line with the fronts of the ser-

* Parallelogram:—a plain figure, bounded by four right lines, whereof the opposite are parallel one to another, as in this figure. □

jeants*
jeants' tents, of the regiment of artillery and infantry. Some Generals chuse
to place the park about three hundred paces before the center of the front
line of the army. But, let the situation be where it will, the manner of form-
ing the park is almost every where the fame, except that some artillery Officers
differ in the disposition of the carriages; others again divide the equipage, as
well as the guns, into brigades, placing the first in the front line, the second
in the next, and so on. However, the best and most approved method, is to
divide the whole into brigades, placing the guns of the first to the right of the
front line, and their ammunition behind them, in one or more lines, and the
brigades to be all numbered, with every waggon thereto belonging. Example:
Fist brigade, front line, No. 1, 2, &c. First brigade, second line, No. 1, 2,
&c. and so of all the rest. This method will prevent confusion in forming and
breaking up of the park, as also on a march, besides, according to the numbers,
the stores therein contained are known.

Of the PRUSSIAN PARK of ARTILLERY.

It consists of 80 cannon, 20 mortars, 20 howitzers, 20 pontoons, 3 forges,
and 433 waggons, with 2595 horses, and 649 drivers, ranged as follows:

First line, twenty six-pounders, twenty twelve-pounders, twenty six-
pounders; in all, sixty.

Second line, two spare carriages, eighteen waggons, with balls and car-
tridges, four carriages, thirty-two waggons with balls, four carriages, seven-
teen waggons with balls, three carriages; in all, eighty.

Third line, five spare carriages, twenty-three waggons with balls, three
ditto, with port-fires and matches, thirty-two ditto with cartridges and grape
shot, six carriages; in all, seventy-nine.

Fourth line, twenty howitzers, forty waggons with shells, fuzes fixed,
twenty mortars; in all, eighty.

Fifth
A TREATISE on

FIFTH line, four carriages, twelve powder carts, two waggons with howitzer grape-shot, forty ditto with grenades, eighteen ditto with musket-balls, in all, seventy-six.

SIXTH line, eighty waggons with musket-cartridges.

SEVENTH line, twenty-four waggons with intrenching tools, twenty pontoons, with the requisites for forming bridges, two waggons, with extraordinaries for ditto, twenty ditto with musket carriages, four ditto with artificers tools, three forges, seven spare waggons; in all, eighty. Each carriage takes up six feet, and they are placed at the same distance from each other in the lines, which makes room sufficient for loading or unloading of them. The second line is ninety feet behind the first; all the rest are sixty feet from each other.

REMARKS upon ARTILLERY and CARRIAGE.

I NEVER would have an army to consist of more than ten legions*, eight regiments of horse, and sixteen of dragoons; which would amount to thirty-four thousand foot, and twelve thousand horse; in the whole, forty-six thousand men.

* The Roman legion, according to Polybius, was composed of ten cohorts, and each cohort of three Manipuli, viz. one of Hastatia, of 100 or 120 men, another of Principes of the like number, and the third of Triarii, consisting only of half the number. The Hastatia and the Principes were drawn up ten or twelve in front, and ten or twelve deep, and the Triarii were but half the depth, but always of a front equal to the two others.

The ten Manipuli of the Hastatia formed the first line, with spaces between them, equal in the whole to the extent of their front. The ten Manipuli of the Principes composed the second line, and were posted opposite to the intervals of the Hastatia. The Triarii formed the third, and were placed behind the Hastatia, and facing the intervals between the Principes; such was, according to Polybius, the order of battle of the Roman legion.

In Captain Smith's Universal Military Dictionary, I find as follows:

Legion, in Roman antiquity, a body of foot which consisted of ten cohorts.

The exact number contained in a legion was fixed by Romulus at 3,000; though Plutarch assures us, that after the reception of the Sabines into Rome, he increased it to 6,000. The common number afterwards, in the times of the Free State, was 4,000; but in the war with Hannibal, it rose to 5,000; and after that, it is possible, that it sunk again to 4,200.

A GENERAL
A General of parts and experience commanding such an army, will be always able to make head against one of an hundred thousand; for multitudes serve only to perplex and embarrass: Not that I think reserves are unnecessary, but only that the acting body of an army, ought not to exceed such a number.

M. de Turrenne was always victorious with armies infinitely inferior in numbers to those of his enemies, because he could move with more ease and expedition; knew how to secure himself from being attacked in every situation, and kept always near his enemy.

It is sometimes impossible to find a piece of ground in a whole province sufficient to contain an hundred thousand men in order of battle, which subjects an army that is so strong, to the necessity of being frequently divided. Thus I would seize a favourable opportunity of attacking one part of it; and having defeated that, should thereby intimidate the other, and soon gain a superiority.

In short, I am persuaded, that the advantages which large armies have in point of numbers, are more than lost in the extraordinary incumbrance, the diversity of operations, under the jarring conduct of different Commanders, the deficiency of provisions, and many other inconveniences, which is inseparable from them.

But it is here somewhat unreasonable to treat on this subject, only that I have been led to make this digression, for the sake of ascertaining the proportion of things.

Sixteen pounders are equally as good as twenty-four pounders to batter in breach, and are much less troublesome in carriage: Fifty of them, together with twelve mortars, and a proportionable quantity of ammunition, will be sufficient for such an army as I have just been describing. Boats, with all the proper tackling to make a bridge; twelve pontoons with joints, for the passage of canals and small rivers; together with all other necessary instruments and utensils. These jointed pontoons do not consume above seven minutes time in laying, and are also as readily taken up again: They are of very
very great use for the communication of armies, and will require only four oxen to draw them all.

The carriages for provisions must be totally of wood, without any sort of iron-work about them; such as those of the Muscovites, and also those which we see come out of the Franche-Comte to Paris: They travel from one extremity of the kingdom to the other, without damaging the roads; one man is sufficient to drive four with ease, each being drawn by two oxen only: Ten of our carriages do more detriment to a road than a thousand of these. If we do but reflect upon the inconveniences occasioned by our present method of carriage, we shall see the use, as well as the necessity of adopting these. How frequently does it happen, that there is a total want of provisions, because the carriages have not been able to get up? How often is the baggage, and likewise the artillery, left behind, which obliges the whole army to make a sudden halt upon the spot, however inconvenient it may be? A little rainy weather, and but a hundred or two of carriages, are enough to break and destroy a good road to such a degree, as to render it impassable; and notwithstanding you repair it with fascines, yet the succeeding hundred leave it in a worse condition than it was before; for it will be cut to pieces with the wheels, by reason of that vast weight which is thus supported upon two points only.

All the carriages belonging to an army, ought to be drawn by oxen; on account, in the first place, of their equality of pace; in the second, because they are attended with no loss; in the third, every situation will produce sufficient forage to support them; in the fourth, when any are maimed or destroyed, others may be had from magazines: Add to which, that a small quantity of gear is required, and that wherever the army halts, they immediately find their natural food and nourishment. A single man and eight oxen will be able to draw more than four men, with a dozen or fifteen horses; neither will they consume the forage, which they should bring to camp, as the horses do, because they are left to pasture, while the servants are gathering and loading it; all which is moreover done without any manner of trouble or inconvenience. Such as get maimed, must be killed and eaten, and are to be replaced by others out of the magazines.

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All these reasons has induced me to prefer them to horses for carriages; but they must be likewise marked, that every one may be able to distinguish his own in the pastures.

The MARCH of a DETACHMENT of INFANTRY and DRAGOONS, in an OPEN COUNTRY, divided by RIVERS.

Although the dispositions and operations of a detachment, do not take so many particulars as the march of an army, it is nevertheless necessary to lay down the rules which must be observed, in an accurate manner, and how they vary, according to the country, through which a detachment is conducted.

A detachment is liable to be attacked upon its march, because it is impossible always to be certain, that the enemy, by their spies, have not received intelligence of it; neither can the Commanding Officer always foresee by what forces he will be opposed. The objects for detachments are many; they are sent either to carry assistance, to guard a communication, to prevent the enemy's foraging too near the camp, to hinder him from raising contributions, to keep him at a distance from the army, or in the end, to bring him to action. If the intention of a detachment is to carry assistance, it should avoid meeting the enemy as much as possible, that the march of it may not be retarded. If to guard a communication, it must also avoid the enemy, till it shall be arrived at the post it shall be ordered to occupy. If to hinder the enemy from raising contributions, to keep him at a distance, or to bring him to action, it ought to try every method for finding and fighting him, at the same time not neglecting such precautions as are most safe and necessary. A detachment is much less exposed to danger in an open, than a mountainous country, because the enemy cannot so safely form ambuscades, and are sooner discovered.

P

WHEN
When the Commanding Officer of the detachment shall have made his dis-
position, and considered every circumstance properly, he will form small
parties to march in the front, on the flanks, and in the rear, and to exa-
mine the country. These parties, of which there should be many, will scour
the country, and send out scouts, who, although they do not keep any parti-
cular road, must nevertheless be careful not to lose sight of the troops from
which they are detached, that they may join them, and the body of the
detachment, immediately after having discovered the enemy.

The scouts will stop at every village or hamlet that falls in their way,
and endeavour to gain intelligence; and if they should chance to receive
any, they will give immediate notice of it to the Commanding Officer of the
party from which they are detached, who will also immediately report it to
the Officer commanding the whole.

Before the detachment begins its march, it should form an advance guard
of dragoons, sustained by infantry, exclusive of the small parties which
are detached, and the main body of the detachment should follow, at about
two hundred yards distance; by which means it will be within reach of sus-
taining the advanced guard, and will also have ground enough, and time suf-
ficient to form in order of battle: The rear guard, which must also consist
of the same troops, must be ordered in case it is attacked, to march up to
the infantry, and post themselves on its flanks, in order to flank the enemy
at the same time, that he shall be attacked in front by the infantry. A de-
tachment, by using these precautions, may advance, without fear of being
surprized.

If the detachment is intended to carry assistance, or to take possession of a
post, it must be divided, excepting those parties, which it is necessary to de-
tach, in order to scour the distant country: But if it is intended to examine
the country, and force the enemy out of it, and the extent of country should
also be great, the detachments must then be divided, in order to scour and exa-
mine the country with greater exactness; and whenever this is necessary, the
detachment should consist of troops sufficient to admit of each separated body's
being strong enough, either to attack the enemy, or retreat with order to
the main body, without being exposed to the danger of being cut off. Before any body is sent off from the detachment, a place of rendezvous should be appointed, in order that it may know where it is to be on a day fixed, and it will also be certain of a place to retire to, in case it should be attacked by a superior force. If the country is less extensive, and each detached body can remain in sight of one another, there should be one posted in the center, a little towards the rear, by way of reserve, in order to sustain those which attack, or to enable them to retire into the rear, in case they are repulsed.

If the detachment should come up with the enemy, its dispositions for action should be regulated by the enemy's, by the sort of troops he has with him, and according to the nature of the ground he occupies. If the enemy's detachment consists of infantry, he must be opposed by infantry, and the dragoons must be posted after such a manner, as to be able to flank him during the attack; if there should be any light cavalry with the enemy's infantry, the disposition must be the same, taking care to have a reserve to prevent the light cavalry falling upon the rear of the detachment. This reserve should consist of infantry, formed in a column, with its head to the center of the infantry, that is in order of battle: By this disposition, the center will become stronger, and the flanks and rear of the detachment protected; neither will the light cavalry dare to attack the detachment in the rear, because they must sustain the whole column in reserve: This detachment, when formed in the order proposed, will be in the figure of a T, which is a disposition strong in all its parts, and does not prevent the detachment, either from advancing, or retiring. If either of the flanks can be supported by an hollow, a morass, or a rivulet, the Commanding Officer should take advantage of that position, and the dragoons may sustain the flank that is exposed; but if this advantage is not to be had, the dragoons, by being divided on the right and left, must supply the want of it.

If the detachment consists of but five or six hundred men, the infantry should be told off in companies or subdivisions, and be formed in order of battle, so as to be able to keep up a continual fire; it may also remain in a column, that position being stronger, whether for advancing or retiring. As to the cavalry,
the distance should be almost equal, in the front of the troop, that is to say, there should be almost as much spare ground between each troop, as a troop takes up. There must be very little ground more allotted for the cavalry, than for the infantry, to move in ease: These troops can act within themselves, neither is it to be supposed, that the cavalry must perform great movements, which are generally faulty in the presence of the enemy; the shortest that can be made, being always the best: At the same time, care must be taken to make it keep its intervals open; so that the second line may be able to march to the assistance of the first, and to avoid the confusion that must certainly happen in every troop, in a retreat, where the lines must retire one after the other.

These intervals are not less necessary for the cavalry, when it would attack, because if the first line gives way, the second can, by passing through the space that is between every troop, charge the enemy, and abate his eagerness. These intervals are not less necessary in a retreat, because, the intention is always to keep retreating with a front to the enemy, which cannot be done unless half of the troops remain to cover those which are retiring. The methods by which troops are made, to retire, are various; some cause squadrons to retire, by making a wheel to the right or left about; others by facing each man singly to the right about; others by wheeling by half troops, and others by fours, &c.

Wheeling the entire squadron, hath many inconveniences. First, it must be allowed double the ground the front occupies. Secondly, it is a very great movement, and consequently the performance of it would be tedious. Thirdly, it is a favourable moment for the enemy to attack it, when it hath wheeled half the circle, and, consequently presents the flank to him. Fourthly, when the squadrons make their retreat, by wheeling about entire, those of the second line ought necessarily to be in their rear, and opposite to the intervals; without this precaution, the wheel made by the troops in the first line, will consequently bring them into the front of those squadrons of the second line, which will certainly throw them into confusion. Fifthly, if, by the disposition which is absolutely necessary for the troops, when they are to retire, by wheeling about,
about, the enemy should press the first line briskly, the second cannot give any assistance, as it positively is in the rear of the first.

A single horsemanship facing about, hath also great inconveniencies, and requires three movements; the first is, if the squadron is drawn up in three ranks, it must be formed upon six; if in two, it must be formed upon four, because the odd files must advance; the second is, facing about each trooper singly; the third is, to form again on two or three ranks. If, during this evolution, the enemy should charge the squadron, the same movement must be made to bring them again to their proper front, which would take up a more considerable time than the enemy would allow.

Retiring by half troops, may perhaps be a good method, but the evolution is still considerable; and the troops require half as much ground as its front to perform it. It is therefore imagined, that the simplest and shortest movement is, to retire by wheeling each squadron to the right about by fours; then the troops will be in the rear of the intervals of the first, because each squadron performs the evolution within itself, and the doing of it takes up but little time: And there is also nothing to prevent the second line from advancing to protect the retreat of the first; by this method, the retreat is made without interruption or disorder.

It is an established rule never to depend upon the consequences of war, and it seems that, by performing this movement by fours, they must be depended upon; but it is easy to prove that it is not at all necessary: Every squadron or troop is told off by divisions of four troopers, before leaving the camp. Four men are but as one; if there should be one, two, or three killed, the remaining one can perform the disposition as well as if there were four. If the whole four are killed, the division no longer exists, and there will be no confusion among the others.

With regard to the infantry it is different, that can perform the disposition by a single man; and indeed it is the only one it should perform when it retires; at the same time, it has no occasion for intervals like the cavalry, being itself formed into two lines; and it can also retire under the protection of its own
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own fire, without any occasion of its being sustained by its second line: And if, by the briskness of the enemy's attack, the first line is obliged to make a quick retreat, it may, by joining itself to the second line, be a respectful and formidable body, and, by charging the enemy with bayonets, oblige him to retreat. In a detachment, infantry should have no intervals, unless the detachment consists of many battalions: With it, 'tis different from an army, when drawn up in order of battle, for then intervals are necessary, although not so large as those of the cavalry. The reason of these intervals being established for an army, when in order of battle, is only that, in case the battalions of the first line are forced to retire, they may do it without confusion or mixture together; but the troops of a detachment being less numerous, and consequently taking up fresh ground, there is not so much reason to apprehend their falling into confusion. If the country grows narrow, the detachment should be formed into columns, which is imagined to be the strongest disposition, as it is suitable to all countries; and when once the retreat is begun, there should be no other occasion to give fresh orders.

Many dispositions may be made by a detachment, when retreating. But in whatever manner, disposition and order, the detachments doth retreat, the Commanding Officer of it should, by all means, avoid giving out orders; the shortest, provided they are clear and expressive, being always the best*; for

* General Wolfe was remarkable for keeping the operations of his army a profound secret, till just before he put them into execution: And yet an Officer was so imprudent as to press the General to tell him, "How long they were likely to remain on their present ground of encampment?" To which he replied, with a smile, "You shall know as much as I ever intend to inform you, by reading the orders of this night."

After orders: "The army to hold itself in constant readiness to march, or fight, on the shortest notice."

Such short, clear, and expressive orders as the before-recited, shews the abilities of the General; and no longer one, if possible, should ever be given in time of action.

Having mentioned Wolfe, whose virtues combined to form the Christian, the General, and the Hero, I cannot pass over in silence, without saying, the death of Wolfe was, indeed, grievous to his country, but to himself the most happy that can be imagined, and the most to be envied by all those that have any relish for military glory. Unindebted to family or connections, unsupported by intrigue or faction, he had accomplished the whole business of life, at a time when others are only beginning to appear; and at the age of thirty-five years, without feeling the weakness of age, or the vicissitudes of fortune; having satisfied his honest ambition; having completed his character; having fulfilled the expectations of his country; he fell, at the head of his conquering troops, and expired in the arms of victory.
If they are often repeated and changed, the soldier is confused, the Officer embarrassed, and they are executed with sloth and impropriety.

If the detachment consists of three or four battalions, and the squadrons of dragoons in proportion, it should not be told off in grand divisions, unless that in firing, it may again be divided into sub-divisions or companies; but it should be told off by battalions or wings, according to the nature and situation of the country, and there must be intervals: The disposition of the detachment, as well as the number of lines in which it is to march, must be regulated by circumstances.

Although the disposition of the detachment for an attack should, in general, be regulated by the enemy's, it would nevertheless be better to derive, if possible, such an advantage from the order of the troops, and the situation of the ground, as would force the enemy to alter his disposition, and take another conformable to that which is presented to him.

When there is a necessity for passing a bridge, the detachment must be drawn up in order of battle, and the banks of the river, on each side of the bridge, must be lined with infantry, whilst the dragoons pass over to examine and scour the country on the other side: When they are returned, the passage must be begun by the center, and when the troops have passed, will form themselves again in charging order, and maintain the same order in which they were before they passed. During the time the dragoons are examining on the other side of the bridge, the rear guard must face towards the country they have marched over, and not pass the bridge till the detachment hath begun its march on the opposite side. While the troops are forming, after passing the bridge, the dragoons, who have been reconnoitring in the front, to cover the detachment. When the whole detachment shall have passed, the detachment will be continued with the same precautions, and the disposition of the troops changed, as the nature of the country alters: If the detachments is to return by the same road, a body of infantry should be left at the bridge, in order to secure the retreat.
If the enemy should have troops on the opposite side to dispute the passage with the detachment, and the Commanding Officer hath not positive orders to pass, he should be directed by the strength and superiority of the enemy, and according to that, either attempt the passage or retire.

If the bridge is intrenched, it will be in vain to attack it, because the passage being undoubtedly of consequence to the enemy, he will either be in great force, or be within reach of being speedily reinforced, and the detachment will be unable to attack him without cannon, or a very superior force; and it is very uncommon for a detachment to be furnished with cannon, when it is sent out to gain intelligence, or to keep the enemy's parties at a distance from the army.

If this post is of consequence to the enemy, it ought not to be unknown to the General, who, if he had a mind it should be attacked, would consequently have furnished the Commanding Officer of the detachment, with troops and means necessary for carrying it: But if the bridge is not intrenched, everything seems to indicate that the passage of it may be attempted, and that it is wholly owing to accident, that a detachment belonging to the enemy is on the opposite side, and that it is neither a post of his army, or within reach of assistance; nevertheless, the passage should not be attempted, but according as the General's orders are for going beyond it. If the Commanding Officer of the detachment is at liberty to act as he pleases, he ought to pay a proper regard to these obstacles, and be careful of sacrificing his troops when there is no occasion.

If the passages are positively ordered, and the enemy drawn up on the opposite side, with an intention of disputing it: Supposing the detachment to be deficient in infantry, half of the dragoons must be dismounted, and their horses sent into the rear, out of reach of the small arms. The troops will advance by forming a column in the center of the breadth of the bridge. The dragoons which are dismounted, with some picquets of the infantry, will be formed in the nature of wings to the column; in this order, the troops, keeping up a continual fire, will advance to the banks of the river. As soon as the head of the column hath approached near the bridge, the grenadiers and light infantry, in
in front, will rush upon the enemy with their bayonets, protected by the fire of the dragoons and picquets of infantry, which are upon the wings.

In proportion as the column advances, those troops who have passed the bridge will keep a constant fire upon the two flanks. When the head of the columns shall be advanced above one hundred yards, the files of it should be doubled, by which means it will become a more solid body, the front will be increased, and the passage of the remainder of the troops enlarged. The dismounted dragoons, remounting, and joining those who held their horses, will pass the bridge to cover the flanks of the detachment, and sustain the infantry: The picquets who line the banks, the grenadiers, or light infantry, which ever may have happened to occupy that station, must pass the last; then the infantry being re-united, sustained, and covered upon the flanks by the dragoons, will either remain in column, if the nature of the ground will not allow it to present a large front, or spread itself in the plain, in order to attack the enemy in front, at the same time the dragoons attack him in flank, which certainly ought to end in his defeat; more particularly as he will be intimidated at the resolution and vivacity with which this passage was effected.

If the passage is disputed, on the opposite side, by hussars or cavalry, they will never wait the approach of the infantry, some companies of which, placed on the bank of the river, would soon drive them to a distance; at which time the center should begin to pass, and when half the infantry is over, the dragoons must pass to sustain it, the remainder will follow, and each body fall into its former position. In passing a bridge, confusion must be particularly avoided, and as Santa Cruz observes, all Officers and soldiers should be expressly forbid advancing upon the bridge before their troop or company. The instructions he gives for the method of throwing a bridge over a river, either secretly, or in view of an enemy, may be of great use to a detachment before a bridge.

Before a detachment passes a bridge or defile, the Commanding Officer should always cause it to form in order of battle, on the side it is then of, till the country on the opposite side hath undergone a thorough examination, which is but a slight fatigue to the troops, but a very necessary precaution for a detachment.
Of the MARCH of a DETACHMENT of INFANTRY and LIGHT CAVALRY in a WOODY and MOUNTAINOUS COUNTRY.

ALTHOUGH there are many more particulars to be attended to in the march of an army, than of a detachment sent out only on some particular occasions; nevertheless, the ability of the Officer commanding it, is not less conspicuous; for the strength of the latter being small in comparison to that of the former, the Commanding Officer hath greater reason of multiplying precautions, and practising the stratagems of war.

It is not so difficult to conduct a detachment composed of infantry and light cavalry, through a woody and mountainous country, as through an open one; but nevertheless, as the enemy can with greater ease form ambuscades, in a country that is covered, the detachments can only advance slowly, and not till after having examined the country thoroughly.

The precautions necessary to be used, are the same with those mentioned in the foregoing chapter, at least as far as relates to the dispositions before the beginning of the march, with this difference, that the country in front will be scoured by light cavalry, instead of dragoons. It is unnecessary for these patroles to be strong, as they will be unable to make head in a mountainous country against the infantry, that will attack them, but by being disposed about in small parties, they will easily retire to the main body of the detachment.

These parties should make the strictest examinations, and endeavour to go round the mountains as much as possible, and never quit any avenue, or path-
way, before it is thoroughly examined. If the avenues are only examined, and the heights neglected, the detachment will still remain in a state of uncertainty; and, as it will be very difficult for light cavalry to reach the tops of the mountains, some corps of light-infantry should be detached, not only to examine and scour the country, but also to occupy the heights, and dispute the possession of them with the enemy.

In case the light cavalry, who form the rear-guard are attacked by infantry, they should have orders to join that belonging to the detachments, as hath been already said with regard to the dragoons: But if they are attacked by light cavalry, they are upon an equal footing with them, and should stand their ground, and some subdivisions of infantry, should also be distributed upon their flanks, which will certainly give them an advantage over the enemy. There is scarcely any ground whatever so narrow, as not to allow a body of infantry to be posted in it, sufficient to cover the light cavalry of the advanced guards. It is not to be supposed, that light cavalry will expose themselves to the danger of sustaining the fire of infantry, particularly in a country where they can only attack on one side; and therefore as the march of the detachment can be stopped by infantry only, it ought to be superior to that of the enemy: And the Commanding Officer should have judgment sufficient to pitch upon a spot, where he may be able to form many attacks at the same time.

A detachment should never march till the disposition requisite, either for an attack, or a defence are settled, nor before having secured the country in its rear, in case it should be attacked, and obliged to retire by the same road; but a detachment will always find its advantage of returning, if possible, by a different one, and the Officers of every different corps should cause all orders to be punctually observed.

If the Officer commanding the detachment is thoroughly acquainted with a mountainous country, he will march with great security through it, as he will have a perfect knowledge of the places, where it is most probable ambuscades will be formed, and of those where he himself can have an opportunity of attacking the enemy. It is very certain, that in a confined country, the
enemy cannot present a larger front than the detachment, which cannot be flanked, particularly, if care has been taken to secure the heights.

An Officer commanding a detachment, should never imagine himself superior in ability to his adversary; he should rather imagine he hath been beforehand with him, in taking the advantage which the nature of the ground hath presented; that he is so posted, as to attack when he pleases, and that his troops are divided after such a manner, as to enable him to form the attack by such dispositions as seem most convenient to him, and to charge the detachment in front and flank. To avoid the inconveniences arising from this; the Commanding Officer should always cause the detachment to march, as if in expectation of being attacked, and to pass by no height or avenue, before it hath been thoroughly examined by the detached parties; and when they are returned, a body of infantry ought to be left at the mouth of each avenue, till the whole detachment hath passed it, and to remain there till the rearguard is come up; then it will fall in again to its former post.

When the detachment arrives at the entrance of any small plains or valleys, the Commanding Officer must cause it to halt, and not suffer it to pass over them till all the hollows, woods, and avenues, and every thing that can conceal an ambushade hath been thoroughly examined. During the time necessary for this examination, the detachment must be formed in order of battle, the disposition of which must be determined by the nature of the ground, and the posts that must be occupied, to avoid being flanked or surrounded.

If the flanks of the detachment can be supported by a rivulet, a mountain, or hollow, that position must be chosen, taking care to secure the rear of it. When the observations are finished, the march will be continued, observing the precautions already mentioned, and if they are not neglected, it will be difficult for the detachment to be surprized, or if it should, it is at least in a condition to receive the enemy. If the detachment is attacked by the infantry, the Commanding Officer will judge, by the enemy's force, whether to make his dispositions for an attack, a defence, or a retreat. A Commanding Officer should not expect success so much from numbers, as from the justness of the dispositions of his order of battle, and from the confidence of his soldiers:
When they see his countenance animated by courage and resolution, and from the presence of mind they know him to possess, as well as his ability of taking advantage of any false motion made by the enemy; and from his diligence in sending speedy and proper assistance to the parts where the attack is hottest, or to those which are weakened; therefore, if the enemy is of equal, or not of great superiority in force, he ought to attack him; but if the enemy's superiority is so great, or his situation so advantageous, as to leave no hope of beating him, it is much better to retire, than hazard the defeat of the detachment, by coming to an action, the consequences of which might prove fatal.

It was a rule among the Romans, never to decree the honours of a triumph to a General who had accepted of, or offered battle in a disadvantageous situation, although he returned a conqueror.

These wise and warlike people, was as well acquainted with the principals of the military art, as convinced of the share, chance had in their success, always recommended prudent and wise dispositions to their Generals, rather choosing they should gain victories through knowledge and experience, than owe their success, however considerable, to the caprice of fortune.

Sp. Servilius was blamed for having pursued the enemy, and losing some Roman soldiers in that pursuit, after having gained a complete victory; for, however his courage might be commended, his want of prudence was disliked. Although a detachment may be harassed by light cavalry, in a hollow way, it may nevertheless proceed in its march, by disposing of the advanced and rear-guards, after the manner mentioned.

When the detachment is in a small plain or valley, and by that means more connected, and able to make use of the light infantry belonging to it, the infantry should remain in column with small detachments of light cavalry, intermixed with subdivisions of infantry upon the flanks, in which situation, the enemy's hussars would never dare to approach it: But as there may be reason to apprehend these hussars are only the advanced guard belonging to a detachment of infantry, concealed in ambushade, into which their design is to draw.
draw the detachment, the Commanding Officer must act with the greatest precaution; and if his orders are to go beyond this place, he must charge the enemies' hussars with his own, and in proportion as the enemy gives way, advance slowly, and with great caution.

The march of a detachment cannot be executed with so much dispatch, when the country, in its front, is concealed, such as a woody or mountainous country, as in an open one: If the design of the detachment is to annoy the enemy, and to hinder him from approaching too near the army, the disposition of it are different, and the infantry of it should be concealed as much as possible.

If the country is proper for forming ambuscades, not altogether, but in different parts, the Commanding Officer must seize that advantage, and disperse a great many troops of light cavalry over the country, with orders, if they meet the enemy, to endeavour to draw him upon the troops in ambuscade: But if the enemy should proceed with caution, and discover the ambuscades, the Commanding Officer must of course, give over all thoughts of defeating him entirely, but charge him vigorously, and distress him as much as possible, by attacking him on different sides, which will be the easier effected, as the infantry is distributed in different posts, which cannot have been all discovered. The instant of the attack is the time for the troops of an ambuscade to succeed, particularly if they attack the enemy with vivacity; but they must be careful not to be drawn on by over-eagerness, to engage themselves in a country that has not been thoroughly reconnoitred.

If a detachment is sent out only to prevent an enemy from approaching too near the army, its end will be answered, by keeping him at a distance, and if the Officer commanding it cannot reap any greater advantage from his vigilence, he hath at least, the satisfaction of having completely answered his General's intention; but if the enemy should pursue the light cavalry with precipitation, and fall into an ambuscade, he must then be surrounded, and all possible advantage drawn from that situation; and when the expedition is over, the detachment must retire with speed, and in good order.
There is more address required to carry on war among mountains, than in a plain; although a General can never employ too much in either: If in the former case, a General finds more opportunities of forming ambuscades, he is also more liable to be surprized; and if any precaution, however trifling, is neglected, the troops are in danger every step they take. A Commanding Officer should always know what is doing in his front, which knowledge, if he cannot attain, either through his own means, or by means of detachments, he should endeavour to form conjectures of, which may be equivalent. The caution with which Fabius Cunctator proceeded against the Carthaginians, was never imputed to him as a crime.

Of detachments, or parties of light-armed cavalry.

The theatre, or situation of a war must determine the utility, as well as success of parties. Large detachments of cavalry are seldom employed but upon enterprises which require vigour and expedition; such as the intercepting of convoys, surprizing of posts, or sustaining of advanced parties of infantry; on all which, they are of great use. Amongst other instances, suppose you receive intelligence that the enemy have a design to attack your rearguard, or your baggage, with a considerable force; they will be deterred from putting it in execution, if, the day before your march, you have detached a large body an opposite way; for that will serve to amuse them, and, being at a loss to know positively its route or destination, they will be afraid of falling in between both your parties, and becoming exposed to two fires. Detachments of this kind should be always strong, and the Commanding Officers, men of parts and experience; for of all the duties incident in service, these are the most replete with hazard and difficulty in execution; at least, where the object is not fixed; otherwise, when ordered to take possession of, or surprize some particular post, or to intercept some convoy, they have nothing to do but to be governed by their instructions.
The duty of the cavalry is such, as renders a knowledge of the art of war indispensably necessary to them; their excellence consists in resolution, and a quick perception of every situation or circumstance capable of producing any advantage. Parties of them must be always out; but, in general, they are not to consist of more than fifty men, and should avoid engaging with the enemy; for the intention of them is nothing more than to gain intelligence, and to pick up prisoners. If the enemy is bold in his measures, and makes large detachments to oppose yours, a watchful eye must be kept over his conduct, till by a constant observation of all his proceedings, a successful opportunity may be found of attacking him by surprise, with a more powerful force. Having then obtained a superiority in the field, he will no longer presume to molest your small parties: You will be able to observe all his motions, so that it will be impossible for him to take the least step without your receiving immediate intelligence of it; you will remain secure and undisturbed, he exposed to continual fatigue and danger; your foraging parties will be subject to no interruption, his obliged to use the utmost precautions to escape it.

These are the duties on which dragoons are to be employed; and, after having been inured to them by practice, they will be infinitely superior to hussars; because they are capable of expedition, as well as the light cavalry. A party of fifty dragoons need be under no apprehensions from the appearance of a superior number of hussars; for they are always to march on a trot; and when they come to the least defile, the hussars will not dare to pursue them further. After they have been taught, by exercise and experience, to know their own weight and consequence, no enterprise will appear difficult to them; insomuch that even the enemy's grand guards will be obliged to submit to perpetual insults from them.

**DIRECTIONS for the CONDUCT of OFFICERS on GRAND-GUARDS, OUT-POSTS and PARTIES, in case of an ATTACK.**

The Commanding Officer of the grand guard, when any alarm happens, is immediately to send an Officer with some men to the place, to gain information of the particulars.

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When a guard discovers any body of the enemy in motion, an Officer must immediately be sent with the intelligence, particularizing as much as possible, their numbers, and every other material circumstance: If afterwards they should approach very near the guard, the Commanding Officer must retreat slowly, and in good order, towards the camp.

When the Commanding Officer perceives the enemy will attack him, he must sally out upon them, provided they are not too strong for him, when they are at the distance of sixty yards; but if their numbers are much superior, he must retire before they approach so near.

The Vides are to carry their arms advanced before them, with the butts planted on the right knee.

When General Officers come to visit the grand guard, whether they be of the cavalry or infantry, the Officer must receive them with his guard mounted, but he is not to sound his trumpet, not even to the Commander-in-Chief himself, because that is never to be done, but at the relief of this guard.

Nor must any Officer, as his reputation and honour are at stake, take off his sword, pull off his boots, or have a chair to sleep upon, &c. but must keep on all his clothes and accoutrements, together with the Non-commissioned Officers and men, both day and night; nor presume to sleep as long as he continues on the guard.

All inferior posts, detached from the grand-guard, and commanded by Non-commissioned Officers or Subalterns, depend upon the Commanding Officer of the grand-guard, and are to make their reports to him, and receive the parole from the Subalterns.

One half of the grand-guard may, in the day-time, be suffered to dismount; the other half to be drawn up three deep, and alternately relieved.

Every Officer, as soon as he has relieved the guard, and his sentries are posted, is to visit them, to see whether they cover the ground sufficiently, or not;
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not; and if he thinks any part too open and exposed, he is at liberty to plant new centries there: But he must not remove, or alter any of the old posts, because they were appointed by the Generals, and will be visited by them frequently, to prevent surprizes and neglect of duty.

An hour before night, the Commanding Officer of the grand-guard is to give out the parole, to all the Officers depending upon him, together with the countersign, or signal, that when the posts are visited in the night-time, they may be able to distinguish with certainty their own rounds, and the enemy be prevented from imposing upon them.

As soon as it is dark, all posts belonging to the grand-guard, are to mount their horses, and to continue on horseback during the whole night; particularly where there is any probability of their being attempted by the enemy: But at other times, in camp, when there is no reason to be apprehensive of any danger, one half only of the guard must constantly remain mounted, and the other keep their horses bridled, and stand by them.

Every Officer must be careful to give proper instructions to his centries, and must often patrol himself, as well as send out patrols, to see whether they be alert and watchful on their posts: A Non-commissioned Officer, with a small party, must be also frequently detached to reconnoitre the intermediate country, between them and the enemy; in order to prevent any centry, or small guard, being surprized: When the Non-commissioned Officer, with a few men is sent to him from the guard, who is to demand the parole from him, with his pistol in his hand; and when he finds it right, he is then to take him to the Commanding Officer, that he may make his report to him.

The centries are to challenge in proper time, and to demand the countersign before they permit any one to approach within the distance of forty paces; nor must they on any account, suffer persons to pass, till they are become perfectly well convinced, they don't belong to the enemy.

The centries, when they have challenged any person, but receive no answer, are immediately to demand the countersign; and if they still receive no answer, they
they are directly to fire: For which reason, the Officers are to examine the arms of every relief, see that they are in proper order, well primed, the powder dry, and the hammer-salls taken off.

The Officers must inform their centries, that whenever they perceive more than two men with arms, whether on horseback, or on foot, advancing towards them, notwithstanding they can give the counter-sign, they are not, after they have first challenged, to suffer them to advance one pace further; but must give the word to the next centry, who is to pass it to the guard; the Commanding Officer is then to send a good Non-commissioned Officer, with a party of men, to make examinations: If the Non-commissioned Officer finds them to be a detachment from the army, he must order it to stand fast, and then return with the Officer commanding it, to the Officer of his guard, who, in case he be unacquainted with his person, and is afraid to confide, either in his cloathing, or his knowledge of the counter-sign, must scrutinize him strictly, require his orders and passports, and if he finds them authentic, permit his command to pass.

When they happen to be a few men only, the Non-commissioned Officer must bring them to the guard; from whence the Officer, in case he has no personal knowledge of them, must not dismiss them, before day-light; nay, even in the day-time, if a body of men should approach an Officer's guard, who give out that they are friends, he is nevertheless to prevent them from advancing too near, unless he has a personal knowledge of the Officer; nor is he then to let his guard dismount, 'till they have marched by.

All Officers, when on out-posts, or other parties out of camp, must take the same precautions; that whenever they shall happen to be attacked by the enemy, they may have their men mounted, in readiness to receive them; nor remain at any time exposed, even to a possibility of being surprized; every Officer therefore ought to keep his men always together, and take care that not one can find any opportunity to quit his guard, steal away to maraud, or do any other mischief. He must likewise post his centries round about in such a manner, as to render it impossible for any to escape their observation, either by day or night.
When an Officer commands an out-post, it is highly necessary that he should become a judge of the ground: He must therefore make himself perfectly acquainted with the country round about him, so as to be able to know, from what part the enemy can best make an attempt upon him: After which, he can post himself behind a defile, bridge, hollow-way, or bank; because, that when he presents his guard, drawn up in good order, in a situation so advantageous, he may rest assured, no enemy will venture to pass: An eminence is also another defensible post for a body of cavalry, where there is a valley lying before it, and the flanks can be well covered; for it is a very essential precaution for Officers in all situations to render, as much as possible, their flanks and rear secure.

When an Officer, posted in such a manner, discovers the approaches of any party, he must immediately mount his guard, and detach a corporal and two men, with their arms advanced, to reconnoitre them, who are to fire in case they find them enemies, and afterwards retire to their post with the utmost speed.

When an Officer, notwithstanding his vigilance and precaution, is attacked on his post, he shall not abandon it without first having made all possible resistance; nor retire, unless compelled thereto by absolute necessity; namely, the being over-powered by numbers, without any probability of receiving succour: The reality of which, he is moreover on an enquiry, to produce sufficient proof of, if, on the contrary, it shall in the least degree appear, that he might have either maintained his post, or made a better defence, or that he did not behave, in every respect, as became a prudent and brave Officer, he shall be cashiered, or according to the nature of his offence, be punished by the sentence of a general Court-Martial.

When an Officer is detached with a command to any considerable distance from the army, where it will be impossible for him to receive any reinforcement, and perceives a much stronger body of the enemy advancing towards him, he is to make his retreat in good order, and march back the safest way, through woods, villages, or defiles, to the army. But this is not to be done, but in case of real necessity, or on the appearance of the greatest danger, by being
being overpowered by numbers, and of which he must be most certainly assured of, before he retires.

Of the Night March of the Cavalry.

As it may easily happen, that in marching a large detachment, in the night time, some troops or squadrons may lose themselves, especially where there are any cross roads, or difficult passes; in order, therefore, to prevent such an accident, two or three guides, must be procured, if possible; and after they have satisfied each concerning the rout, by a previous consultation together, they must be distributed in the detachment.

The Commanding Officer, at the head of the detachment, must move slow, provided the nature of his expedition will admit of it; and wherever he finds any bye-roads on the march, he must post a few men there to direct the succeeding squadron; which squadron is to repeat the same caution; and so on throughout the whole.

As it is almost impossible for squadrons to keep constantly close to one another; and as it likewise frequently happens, that, in order to conceal a march from the enemy, no trumpet must be sounded (which otherwise would serve for a direction in the night): A good Non-commissioned Officer, with four or six men, must be appointed to the rear of every squadron, who are to divide themselves, and form a chain in the interval, between it and the one succeeding, in order to prevent any mistake of the road.

Before the detachment marches off, the Officer commanding, must be careful to exhort the Officers, leading troops or squadrons, strictly to observe all
the above directions; he must also have several orderly-men to attend him, and, if possible, more than one * guide in front.

The advance-guard is to be strengthened in the night-time, and march at a small distance from the main body, and whenever it shall happen unexpectedly to meet the enemy, it must instantly charge with all possible vigour; on which account, and in order to be in continual readiness, it is always to march with arms advanced.

In the day-time, the advance-guard usually marches at a considerable distance from the main-body, but not out of sight; and must have a few good men (who, if possible, that have stood fire) by way of an advance party, advanced before to give timely intelligence to the Officer commanding.

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**INSTRUCTIONS for an OFFICER COMMANDING a RECONNOITRING DETACHMENT.**

An army can never be informed of the enemies motions in too many different ways; and as to spies, as some may be discovered, others prevented giving their intelligence in time, it is very necessary to have reconnoitring parties, composed according to the nature of the country into which they have to penetrate; and by whom the General is informed of every thing which passes, within a reasonable distance of his camp.

It is necessary, that the Officer should be well acquainted with the country, the roads, and the distance of the enemy.

* Great care should be taken that the guides do not fall asleep on their march, lest their horses may take a wrong road; which, for want of this precaution, has often happened.
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His party must consist of men of approved fidelity; part of whom must be disguised.

This detachment must march off in the night. The men are to have strict orders neither to smoke tobacco nor speak.

He must be provided with two guides, who are to be strictly interrogated, but are to remain ignorant of the rout you intend to take.—But if any of your light cavalry are acquainted with the country, they are the best guides.

You must detach a Non-commissioned Officer, with three or four men and a guide, who are to march a little way in the front of the party. This Non-commissioned Officer must keep a good look-out, and from time to time report his observations to the Commanding Officer. When he is in danger of being observed by the enemy, he must retreat silently, and the whole party will then file off to the right or left, and let the enemy pass.

During the night, the Officer will preserve his communication with his advanced-guard, by causing a few men to march between them, at the distance of thirty or forty paces from each other. These men are to have strict orders not to challenge when the Serjeant of the advance-guard sends any one with a report to his Officer.

It is very necessary, during the night, to be attentive that the men do not sleep, lest those in the rear should be left behind and lost.

In case you find that you are discovered by the enemy, and consequently that your scheme is frustrated, your best way is to return immediately. But if you should already have passed the chain of the enemy, you are thence in danger of having your retreat cut off, you will, in that case, turn to the right or left, and endeavour to retire by another road; but, as this cannot be affected during the day, you must conceal yourself in some adjoining wood or copse, till the night following.

When...
When you come near the enemy, without being discovered, you must send some of your light cavalry disguised, who are to learn from the peasants, the situation of the enemy; but, to prevent suspicion, they are not to take the direct road.

Whilst, in the day time, you conceal yourself in the woods, &c. you are to fix centries in the tops of the highest trees.

A detachment of this kind, should be furnished with subsistence for two, three, or four days. The horses are to be fed every eight or ten miles, for it is absolutely necessary, that they should always be fresh and fit for duty. The Officer will take care never to halt, but at a distance from any road; and also to take every precaution to prevent being surprised, whilst his horses are feeding and watering.

In case he should be in want of forage, or provisions, he must send to the nearest village, a Non-commissioned Officer, and three or four men belonging to the light cavalry disguised, with orders to collect what is wanted, to pay the full price for the provisions, and give receipts for the forage, that you may be supposed to be their friends. The peasants are to be discharged as soon as they have delivered the forage, &c. at the place where you halted. The best time to do this, is towards the evening. As soon as you are thus provided, you are to continue your march.

The Officer who commands such a detachment, must always be certain as to the distance of the enemy; that, in case of necessity, he may retreat in time. If the roads are good, he may march five or six miles an hour. He must never halt in a village.

If he should be attacked by a superior force, if there are no woods near, he need not be afraid of retreating across a plain, provided he has been careful of his horses, as those of the enemy may probably be fatigued, if they have been out for any time in quest of him. He must by no means forget to appoint a place of rendezvous, in case he should be dispersed.
A watch, and a compass, are extremely necessary upon these secret expeditions.

In all your enquiries, concerning the road, you are always to inform yourself of five or six different ways, to prevent the Peasants forming any idea of your real designs.

When you are obliged to take any of the Peasants as guides, you are to watch them carefully, and not dismiss them till you have fed your horses, and are going towards the enemy, that they may not be before you with their intelligence. It may sometimes be advisable to bribe them with presents, to give the enemy false information.

Of the MANNER of CONDUCTING a RETREAT.

Nothing proclaims more the reputation of an Officer, than a judicious retreat.

That which is done in sight of an active enemy, who pursues with a superior force, makes a part of my present subject; and is, with reason, looked upon as the glory of the profession. It is a manœuvre the most delicate, and the properest to display the prudence, genius, courage and address of an Officer who commands; the histories of all ages testify it; and historians have never been so lavish of eulogiums as on the subject of the brilliant retreats of our heroes. If it is important, it is no less difficult to regulate, on the variety of circumstances, each of which demands a different principal, and almost an endless detail. Hence a good retreat is esteemed, by experienced Generals, that master-piece of one.

In retreats, all military operations present a difficulty of choice, and require deep consideration in the person to whose conduct they are entrusted; there are still some more difficult than others, and where the least over-sight, either
A TREATISE on

ther in the disposition of the troops, or in the exactness of the evolutions, may be productive of an entire defeat.

A GENERAL certainly discourages his own troops, and animates his enemies, by retiring out of the field without fighting; yet as this sometimes must necessarily happen, it will be most proper to consider how to perform it with honour and safety.

In the first place, your men must not imagine you retire to decline an action, but to believe your retreat an artifice to draw the enemy into an ambuscade, or more advantageous situation, where you may easier defeat them, in case they follow you: For troops who perceive their General's despair of success, are prone to flight. You must be cautious lest the enemy should discover your retreat, and fall immediately upon you: To avoid which danger, the cavalry are generally posted in the front of the infantry, to conceal their motions and retreat from the enemy. The first divisions are drawn off first, the others following in their turns; the last maintain their ground till the rest have marched off, and then file of themselves, and join them in a leisurely and regular succession. Some Generals have judged it best to make their retreat in the night, after reconnoitring their routs, and thus gained so much ground, that the enemy, not discovering their movement till day-break, were not able to come up with them. The light infantry was also sent forward to possess the eminences, under which the army might instantly retire with safety; and the enemy, in case they pursue, be exposed to the light infantry, masters of the heights, seconded by the cavalry. A rash and inconsiderate pursuit, exposes an army to the greatest danger possible, that of falling into ambuscades, and the hands of troops ready for their reception.

For as the temerity of an army is increased, and their caution lessened by the pursuit of a flying enemy, this is the most favourable opportunity for snares; and the greater the security, the greater the danger. Troops when unprepared, at their meals, fatigued after a march, when their horses are feeding, and in short, when they believe themselves most secure, are generally most liable to a surprize. All risks of this sort are to be carefully avoided, and all opportunities taken by distressing the enemy by such methods. Neither numbers
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numbers nor courage avail in misfortunes of this nature. A General if defeated in a pitched battle, though skill and conduct have the greatest share in the decision, may, in his defence, throw the blame on Fortune; but if he has suffered himself to be surprised or drawn into the snares of his enemy, he has no excuse for his fault, because he might have avoided such a misfortune by taking proper precautions, and employing spies, on whose intelligence he could depend. When the enemy begin to retreat, the following snare is usually laid: A small body of cavalry is ordered to pursue them the direct road, at the same time a strong detachment is secretly sent another way, to conceal itself on their rout. When the cavalry have over-taken the infantry, they make some feint attacks and retire. The enemy, imagining the danger past, and that they have escaped the snare, neglect their order, and march without regularity; when the detachment, privately sent to intercept them, seizing the opportunity, falls upon them unexpectedly, and destroys them with ease. Many Generals, when obliged to retreat through woods, send forward parties to possess the defiles, and difficult passes, to avoid ambuscades; and to stop up the roads with barricades of felled trees, to secure themselves from being pursued and attacked in the rear. In short, both sides have equal opportunities of surprising or laying ambuscades on the march. The army which retreats, leaves troops behind for that purpose, posted in convenient valleys, large brush wood, or mountains covered with wood, and if the enemy falls into the snare, returns immediately to their assistance. The army that pursues, detaches different parties of light troops to march before, through bye-roads, and intercept the enemy, who are thus surrounded and attacked at once in front and rear. The flying army may return and fall on the enemy while asleep in the night, and the pursuing army may, though the distance is great, surprize the adversary by forced marches. The former endeavour, at a passage of a river, to destroy such part of the enemy's army as have already passed, while separated from the rest by the channel of the river; and the pursuers hasten their march to fall upon these bodies of the enemy that have not yet crossed.

* The greatest misfortune that can befall a soldier.
The Flight of an Enemy not to be Prevented, but Facilitated.

Bad conduct will ever produce destructive consequences.

Generals, in war, think a victory incomplete, unless the enemy are so straitened in their ground, or so entirely surrounded by numbers, as to have no possibility of escape. But in such situations, where no hopes remain, fear itself will arm an enemy, and despair inspire courage; when men find they must inevitably perish, they willingly resolve to die with their comrades, and, like brave men, with their arms in their hands. The maxim of Scipio*, that a golden bridge should be made for a flying army, has been much commended; for when they have free room to escape, they think of nothing but how to save themselves by flight; and the confusion becoming general, great numbers are cut to pieces. The pursuers can be in no danger, when the vanquished have thrown away their arms for greater expedition; in this case, the greater the flying army, the greater the slaughter. Numbers are of no signification, where troops, once thrown into consternation, are equally terrified at the sight of an enemy, as at their bayonets: But on the contrary, men when shut up, though weak and few in number, become a match for the enemy, from this very reflection, but that they have no resource but in despair.—The conquereds' safety is—to hope for none.

* The maxim of Scipio. The Romans, when a place was to be stormed, surrounded it entirely with their troops, which they called, Cingere Urbem Corona; but the ancient Jews, in conformity to this maxim, left a part free and uninvested, and all who came by that passage and submitted, were pardoned.
The RETREAT of a DETACHMENT of INFANTRY and DRAGOONS, in an OPEN COUNTRY, divided by RIVERS.

The conducting of a detachment, obliged to retire, supposes more talents and skill in the Officer charged with it, than are often required in operations, which to appearance, are more important: He hath not only a superior enemy to avoid, but he must also raise the drooping courage, and dissipate the terror of the soldiers*. The retreat of an army, undoubtedly requires still greater knowledge in a General, because the number retreating is more considerable, and the extent of the ground which the troops occupy, greater; and consequently, being unable at once, to perceive all the motions of the enemy, in such a manner as to oppose them, he must remedy that inconvenience by an unbounded activity and foresight: On the contrary, an Officer leading a detachment, has all his troops immediately under his eye, he distinctly sees those belonging to the enemy, and consequently can, with greater ease, counteract his dispositions: But nevertheless, the smallest of number is a new cause for terror to the soldiers, whose fear always magnifies his danger, and entirely destroys those reasons which should induce him to take fresh courage.

War is apparently more difficult to be carried on in a mountainous, than an open country: In the latter, there is nothing to perplex the dispositions, only

* It being a general remark, that the private men, when they are to go upon action, form their notions of the danger from the outward appearance of their Officers; and, according to their looks, apprehend the undertaking to be more or less difficult, (for when they perceive their Officers dejected, or thoughtful, they are apt to conclude the Officer desperate :) In order therefore to dissipate their fears, and fortify their courage, the Officers should assume a serene and cheerful air; and in delivering their orders to, and in their common discourse with the men, they should address themselves in an affable and affectionate manner.

When the private soldier has an opinion of the military capacity of their Officers, or have had experience of their courage and conduct, the above method will effectually prevail, and create in them such an opinion of their own superiority over the enemy, that they will look upon them with contempt, and conclude them, in a manner beat, before they begin the action. When such a spirit is once raised in the men, they seldom or ever fall of success: But when Officers have not had experience of service, or neglect the means by which they might attain to it, (of which the men are strict observers, and from thence form their judgment of them) the case will not hold: For unless the men have an opinion of their conduct, as well as their courage, they will not be able to influence in the manner above spoken of.
trifling obstacles are to be encountered with, and the roads are all open for a
retreat; whereas, a mountainous country presents nothing but rocks to be
surmounted, torrents to be passed, heights to be occupied, and in short, obsta-
cles to be overcome in every part; nevertheless, these very obstacles may, on
many occasions, prove useful resources, which a General, would be happy
in meeting with in a plain. In a mountainous country, the infantry may with
ease be formed into ambuscades; by whose assistance a detachment may re-
treat in security, and even draw the enemy into them, and beat him, if he
pursues with too much precipitation, and without much precaution.

In an open country, the whole of the troops are exposed to the enemy, who
constantly sees before him; therefore, one improper disposition, or a move-
ment, not executed with the necessary exactness, furnishes the enemy, who
hath nothing in view but the detachment that is retiring, with an opportu-
nity of breaking through it, and the enemy have nothing to fear, from am-
buscades, as in a mountainous country, there will be nothing to divert his
attention from profiting by the most trifling advantages; whereas, in a
mountainous country, his march is interrupted by the windings of the rocks,
the fatigue of the troops, and by the continual apprehensions of falling into
an ambuscade.

An offensive war is carried on with greater ease in an open country, than in
a mountainous country; but in a defensive war, the latter offers many expe-
dients and recourses, not to be found in the former. An army acting on the
defensive, whether owing to the superiority of the enemy, or to some misfor-
tunes it hath sustained, either in the foregoing, or in the beginning of a cam-
paign, it is then engaged in, supposing the opposite Generals to be of equal
skill and ability, will maintain and carry on the war in a mountainous country,
with more facility than in an open one, because in this last, the enemy can
reap great advantages from the number, being able to make use of, or at least,
the greatest part of his forces; but in the first, art often prevails over number,
and frequently over courage itself: Not that art and address are useless in an
open country, war consisting wholly in courage directed by art, but it is more
difficult to employ art effectually, where the least stratagem is liable to be
discovered.
The safety of a detachment retreating in an open country, depends greatly upon the care which has been taken during the march, to secure all the strong holds or places in the rear, and to leave sufficient posts upon the road, by which it seems probable, he will be obliged to return. In all manoeuvres, there are generally two sorts of dispositions to be observed; the interior disposition, and another which is exterior. The interior disposition consists in the arrangement of the troops, for escorting a convoy; for a chain of forage; for the march of a detachment; for action; the pursuit of the enemy after the action; and at length, for the retreat. The exterior disposition consists in the advanced detachments, those upon the flanks, and those in the rear, in leaving troops to guard a bridge, a defile, and the avenues, through which a detachment must return. The first things necessary for an Officer commanding a detachment, (obliged to retreat from before a superior enemy) to observe are, the situation of the ground, and the quality of his troops. If the detachment consists of infantry and dragoons, he should be always ready to lay hold of every advantage, which the ground may offer to him, to profit by the bad dispositions of the enemy, and to oppose his good ones by the best in his power. In an open country, the detachment can either march in order of battle, or in column; and it is the Commanding Officer's business to make choice of that which seems most suitable, and best adapted to the number of troops, composing the detachment.

The proper disposition for a detachment, supposing to consist of three hundred foot, and four hundred dragoons, seems to be in drawing up these two different bodies in order of battle, upon two lines.

In this case, the foot must be told off by divisions, with intervals between each, that they may be enabled to retreat alternately: The dragoons should be posted upon the wings by troops; and supposing each division to consist of twenty-five men, there will be six in the first line, and as many in the second; and the dragoons when divided by troops, will form eight of fifty men each, of which four shall be on the right of the first and second lines, and the remaining four on the left. By this disposition, the detachment will be enabled to retire alternately, that is, the six divisions the nearest the enemy will face about to the left, pass thro' the intervals of those in their rear, and place themselves
selves at fifty or sixty paces distance, and by wheeling again to the right, present a face to the enemy. As soon as they shall be placed, those of the second line will retire by the same evolution, always observing, that the line which stands fast, is to keep up a constant fire, 'till that which is retiring, has passed through the intervals. While the foot are performing this evolution, the dragoons on the right and left of the first line must remain 'till the infantry has passed the intervals of the second, before they make their half-wheel by four, in order to retire; and so in proportion as the infantry shall retreat.

There is again another disposition for this detachment, although drawn up in order of battle, which is, by placing the infantry in one line only, three deep; for if it was four, it would be with difficulty, and risk of wounding those in the front rank, especially, during the retreat, where the evolution ought to be quick, and the fire brisk and continual; whereas, being only three deep, the fire will be kept up with more ease, and even without the front rank being under the necessity of kneeling, which (in my poor opinion) should always be avoided in the presence of an enemy, because it is not certain, that a soldier will rise after having fired, with all the activity that is necessary. The infantry should be told off in subdivisions, but in close order, that is, without intervals, (the enemy when engaged, will soon make them:) The dragoons ought to be posted upon the flanks of the right and left, in two lines, part covering the flanks of the infantry, and the rest a little advanced to form a reserve, and prevent the enemy's hussars, or dragoons from taking the detachments in the rear, as it retreats. By this disposition, the infantry will retire by degrees, keeping up the subdivision street-fire retreated. By this method of firing, the infantry will keep up a constant fire, without confusion, or retarding their retreat. The dragoons should retire in proportion as the infantry does, one troop presenting a face to the enemy, while the others retreat, always observing to cover the flanks of the infantry. Those who are in reserve, should march in the front of the detachment retreating, and to take care to prevent the enemy from turning it.

This disposition appears to me a good one, because the troops being more together, form a strong body, present a good front, in proportion to their numbers, and are able to sustain a brisk attack, and only by closing up the divisions, or troops, they are at once formed into an oblong column. The great advantage
advantage of the disposition by column, is, that it can be adapted to all kinds of countries, and to every sort of ground, it is strong in every part, and can march on without giving the enemy an opportunity of breaking through it; an advantage which neither the disposition upon one or two lines, or the square can have, both one and the other being of course obliged to break, if the nature of the country requires it; and it is very certain, the least movement of a detachment to alter a disposition in the presence of an enemy is very dangerous, particularly when it is briskly pursued; whereas, a column, sixteen deep, or more in front, can safely be lengthened, by being formed into eight deep, in case the country becomes inclosed, and contracted. If the enemy should divide in order to surround the column, the subdivisions of infantry, mixed with the troops of dragoons which are placed upon the flanks, both ought to charge the enemy, and the infantry, that part which appears to be weakest, as the bayonet is, upon most occasions, preferable to fire. If the rear-guard, which ought to be about fifty paces from the detachments, is attacked, its chief attention should be to repulse the troops attacking it in the rear, because its flanks will be protected by some infantry, which may be joined by some others in case of necessity.

If there should be two columns, the advanced and rear-guard shall cover the interval between them; and the grenadiers and light infantry companies, (which all corps of infantry should have) with some troops of dragoons, shall be posted upon the flanks that are uncovered, and not between the two columns. The troops which cover the flanks, shall observe the march of the columns, in order to retreat at the same time. By this disposition, the fire will become brisker, because that the rear-guard, only covering the interval of the two columns, does not prevent them from firing; and by it they are so protected, that the enemy cannot attack on their flanks, and the front of the defence is more considerable.

If any rivulet, a hollow, or any like advantages occur, which may serve as a support to a flank, whether the Commanding Officer causes the detachment to retreat, in order of battle, or in a column, he must take advantage of it, and cause the flank which is exposed to be strengthened with infantry and some dragoons, which will serve as a cover to it.
In the detachment, whether it retires alternately, or together in one line, has a bridge to pass, the Commanding Officer shall have established a post there, in order to guard it; and being by this means, master of it, he ought to perform that evolution which M. Saxe calls the Chaplet, that is, the two first troopers upon the right and left, march through the intervals of the second line, pass the bridge, dismount, and line the river on both sides the bridge: The two others follow; and the same must be performed by the second line. The first division on the right of the first line, and the sixth will perform the same evolution, and join those lining the river: The second and fifth will do the same, as well as the third and fourth. When the first line shall have passed, the second, which was formed in six divisions, will form but in three; so that by reducing their front, they will not conceal the troops on the other side of the river, who ought, by a constant fire, to cover their retreat. These three divisions will draw near the bridge, and being sustained by the fire of those already passed, the enemy will be unable to attack them in flank. In this position, the first, by wheeling to the left, will march towards the bridge, and pass it, and the second will follow it. As soon as they shall be got over, the last division will approach still nearer to the bridge, and pass it, being the whole time protected by the troops already passed. The enemy, seeing the whole detachment got on the other side, all, except the last division, now draws near the bridge, covered and sustained in the rear by a column of grenadiers and light infantry, will never expose his troops to the fire of those lining the river, as he can have no farther hope of his cutting off the detachment. In this position, the detachment should remain 'till the enemy retires, and should also cease firing, unless the enemy comes too near: But if his retreat is real, the detachment should, as soon as he is at a certain distance, break down the bridge, if a wooden one; but if a stone one, it should stay 'till the enemy has got so far, as to make his retreat sure, and render it impossible for him to come up with the detachment again: And it will also be proper to send two or three troops, to observe his motions. When the return of the enemy shall be no longer apprehended, the dragoons will return, and the detachment proceed on its march towards the camp. These two or three troops should remain at least a quarter of an hour near the bridge, drawn up in order of battle, to observe whether or not the enemy will return: During that time, the detachment, by marching on, will gain so much ground of the enemy,
as to avoid being molested by him a second time. The dragoons who remained at the bridge will join the detachment, after the time abovementioned, and form the rear-guard of it. If this detachment, instead of retreating alternately, marches only in one line; it must observe the same dispositions, and pass the bridge after the above manner.

If the detachment retreats in column, the dragoons must also pass the bridge first, dismount, and line the river: After which, the heads of the columns shall advance to the bridge, leaving the necessary distance for those ranks who have fired, to pass. If there are two columns, they shall join and form but one; by that means, rendering their force more considerable: Then the head, as far as the third part of the column, will pass and join the dismounted dragoons, who are posted upon the right and left of the bridge. During this time, the rear-guard, supported by the picquets, will keep up a continual fire. As soon as there shall be infantry enough passed to protect the flanks of the column, the rear-guard shall be divided into two, and be placed upon the flanks of the columns; then the three rear ranks of the column must fire, and afterwards retreat, by dividing in the center, the one to the right, and the other to the left, and must pass the bridge, marching on the outside of the column; the rear-guard, composed of four bodies, will retreat one after the other, according to the length of the column reduced. When the whole column is past, the four bodies will join and pass one after the other.

The dispositions for a detachment of infantry, retreating in a plain, from before cavalry much superior to it, will be different: Cavalry has a very great advantage in a country, where there are no obstacles to prevent it from acting, and where the infantry has not the shelter even of a bush. On these occasions, the safety of a retreat from before brave and well-conducted cavalry, depends upon the propriety and strength of the disposition which is given to the infantry.

Suppose five hundred infantry retreating from before a thousand cavalry; the infantry may retreat in a square, the four angles being covered by grenadiers and light infantry, who should preserve their fire 'till the cavalry come so near, that they are in danger of being broke in upon, unless they keep them at a distance, by firing
firing upon them. The fire of this square should be carefully managed, and
given not 'till the cavalry is within the distance of twenty yards; for if the enemy
is permitted to come nearer, the soldiers, incapable of reasoning like an Officer,
is often more frightened by the horse than the man; and being too much con-
fused to present, and fire properly, will give way, and consequently, make an
opening in the battalion, through which, resolute cavalry will not fail to at-
temt to enter; whereas, when the enemy is at twenty yards distance, he is
not yet near enough to intimidate the soldier, but is at a proper distance for
the fire to have the desired effect. But even suppose, for a moment, that the
soldier is not alarmed at this great body of cavalry moving down upon it, and
waits for it 'till it is almost within reach of its bayonets, in order to make a
furer fire, and at the same time to thrust his bayonet into the horse's breast, as
it is the nature of a horse, when killed, to fall forwards, or when wounded,
to push upon that part from whence the wound was received: The soldier is of
course obliged to give way, to make room for the killed, or wounded horse;
therefore, if only one horse, dead, or alive, gets into the ranks, a part of the
square is forced, which is one of the reasons for not suffering the enemy to ap-
proach nearer than twenty yards; and the fire, if well directed, will have its
full effect at that distance, and the killed or wounded horses will not be within
reach of breaking the square*. The reason why the square should only fire
by subdivisions is, in case any troops of cavalry should remain unbroken, and
continue the charge, they will find a fire from every part, which will, in all
probability, at last force them to retire in disorder, to a distance from the
square. But notwithstanding, for many reasons abovementioned, the disposi-
tion in column is always preferable to that of a square: Five hundred
infantry will form a column, sufficient to retreat with safety, and keep up a
constant fire.

If the detachment is stronger in infantry, and the enemy proportionable su-
perior, a column is best, because the column being solid, forms a body that

* I have seen myself the experiment tried, of a strong, stout, active horse. If the wound is mortal,
he forces forward about eight yards; if not mortal, but much wounded, he rushes on about twelve yards;
if not much wounded, the distance is not material to him, as he will take the first opening of leave-
ing both.
must act together, and of which all the evolutions are uniform; an advantage not to be found in a square, as there will be a great hollow in the center.

Suppose a detachment of twelve hundred infantry, retreating in an open country, attacked by two thousand cavalry; the disposition in column is imagined to be the best it can take. This column shall have sixteen men in front, and sixty-two in depth: The remaining two hundred and eight, supposed to be grenadiers and light infantry, shall be divided into four divisions, two of which will support the two flanks at the head, the two others, those of the rearguard: By this disposition, it is imagined the infantry will be enabled to make a good retreat. If the enemy should attack but one side, by firing in the manner before directed, he will certainly lose great numbers before he will be able to come near the column; besides, the depth of the column occupying far less ground than the enemy’s cavalry, unless he forms himself in four or five lines, the infantry can never be engaged but with the first line. Those in the rear, not adding to the weight of the charge, it must be impossible for rear-ranks of cavalry to add to the force: The success of the attack chiefly depending upon the quickness with which the troopers in the front rank charge*. Thus the column of infantry is stronger in itself than the line of cavalry, by which it is attacked.

* The Prussian cavalry execute three manner of charges, one directly straight before it, without deflecting either to the right or left; in the second, it turns off to the right, for outstretching the enemy’s line by a squadron or two; in the third, it bears to the left, for outstretching the enemy’s right flank.

All these charges are performed at full gallop. At the first word of command, March, the line immediately moves in a trot; at the second, it puts on a gallop; and thus it proceeds five or six hundred paces, till, at the command, the whole body stops and drelles.

Rapid movements are certainly the best. But to settle the rate at once, in which a squadron should meet the enemy, I will adopt rapidly; and beg leave to refer those who are for slow movements, to the facts of history, an antient and a modern one, which seem to set that affair in a clear light, viz. the Roman history, wherewith it was ordered by Tarquin the Proud, in a battle against the Sabines, that the cavalry should take off their bridles, that they might not impede the fury of its shock; and to the account given by the Duke de Sully, of the charge of Count Egmont’s squadron, at the battle of Ivry, he describes what he saw, and speaks very feelingly of it, being overturned in the shock, though he valued himself, on being always well-mounted, and was desperately wounded.
If the enemy should attack the two flanks, then the column, by making a motion to the right or left, will be formed in eight ranks one side, and eight on the other; and if the advanced, or the rear-guard is attacked, it will then be the grenadiers and light infantry inclusive, thirty-four men in front. Thus it appears, that on whatever side the column is attacked, it will be in force, and capable of resisting so superior an enemy.

The detachment should be cautioned to observe a profound silence, so that the firings, when ordered, may be executed with the utmost exactness. It is the Officers duty to make the divisions they command, obey; and to prevent them from firing 'till they order; for it is very certain, if the soldiers are left to themselves, they will be firing continually, and the column having thrown away its fire, would present so favourable a moment for the enemy to make the attack, having nothing to fear but a bayonet, that he would scarcely fail of seizing the opportunity; but if care has been taken to preserve the fire, and to fire by subdivisions only, it is morally certain, that a column in this disposition, can retreat safely from before a body of cavalry very superior. If the enemy can be prevented breaking into the column at the first charge, it is very certain that his ardour will be greatly abated in the second, and still more in the third, 'till at length, he shall be repulsed with great loss, and the detachment perhaps escape without losing a single man.

It is often more difficult to make a fine retreat, than to beat an enemy; one false motion, or too much precipitation, may give the enemy an opportunity of penetrating at some part or another, particularly if he is active. It is the authority a Commander has acquired over his troops, and the confidence they have in him, which will ascertain the least performance of every disposition he shall order: Ability in the Commander, of course produces confidence in the soldier; that gained, authority soon follows, always more to be depended on, when produced by love and esteem, than when it is the effect of force and power.

A Soldier's judgment is formed rather upon affection, than a rational knowledge of the merit of his Officers: In which case, it is difficult to deceive him. Under the command of one, he marches with pleasure; when perhaps, were
he commanded by another, his arms would be ready to fall from his shoulders. A General should be considered as the soul of his troops: A brave Commander communicates his courage to them, whilst a fearful one renders them timid and irresolute, like himself.

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The RETREAT of a DETACHMENT of CAVALRY in an OPEN COUNTRY.

CAVALRY, when in an open country, can defend itself against, or attack any sort of troops; it has its ground necessary to perform its evolutions, and can make the properest dispositions either for attacking or retreating. In an attack, the success depends upon the disposition, and the expedition with which it charges the enemy; and the success of the retreat will greatly depend upon the order, silence, and exactness of its motions; it can even, if of superior force, attack a detachment of infantry, with the expectation of beating it. It is very certain that, at the battle of Rocroi, in 1643, the cavalry could not break through what remained of the Spanish infantry, which had formed itself into a square; and the great Condé, then Duke of Engheim, was obliged to break that body with cannon: But this is one of those few examples of firmness and courage, which cannot be laid down as certain rules, because they are so very rare, and even exceed any maxims that can be given for their practice.

It is true, that those cavalry who make the first attack upon infantry, whether in order of battle, in column, or a square, are exposed to great danger, and may be called the forlorn hope; but if they charge with resolution, vivacity, and expedition; and one or two can break into battalion, the remainder who follow, may penetrate at the same place.

A DETACHMENT, whose march is stopped, in an open country, by another detachment of the same nature, but of superior force, ought to retreat by troops
troops or squadrons, according to the force of which it consists; but as cavalry in detachment, generally marches in troops, and seldom in squadrons, except when the standard march, it should be formed in two lines, with intervals; the troops of the second line being placed opposite to the intervals of the first.

Suppose a detachment of six hundred cavalry is divided into twelve troops of fifty men each, by which means, the first line will consist of six troops, and the second of the same number. As soon as the Commanding Officer shall have ordered the retreat, the first, third, and fifth troops of the first line shall retreat by wheeling to the right by fours, and passing through the intervals of the second line, shall post themselves eighty paces distance in the rear; and shall, by wheeling again to the left by four, make a face to the enemy. The second, fourth, and sixth will perform the same evolution, and take their place on the side of those already retreated, if the ground will admit of it; but if it is straightened, they must march fourscore paces farther, and make a face towards the enemy, after the manner of the first; the second line will perform the same evolutions, by three troops at a time. It may easily be seen by this disposition, that, if the ground should grow narrow, the detachment must be formed upon four lines, instead of two; it should nevertheless continue in two as long as possible, in order to present a more considerable front to the enemy. The reason of the first, third, and fifth being ordered to retreat first, and not the whole six together, is because it may happen that, although in an open country, there is not always room sufficient for six troops to march in front; besides, if the first line was to retreat together, it is a movement which would give the enemy a favourable opportunity of charging it at the instant its back was turned towards him; whereas, by only three retiring at once, there still remains three others, who make a face to the enemy, and keep him back; and with so much the more ease, as they are sustained by the second line. Again, if the ground grows narrow, a fresh order must be given to make the three first halt, that the three others may march on to a farther distance; at which time the enemy could fall upon the second line, it being unsupported by that which is retired. There is still another reason for imagining this disposition to be a good one, and that is, if the first line retreats together, the enemy need only to wait till it is upon the point of passing through the intervals of the second, at which time he would be sure of beating it, by charging
charging it briskly, because the first line of necessity turning its back to the enemy, he would have only the second to engage with, which would not only be unable to resist his impetuosity, but would also be greatly embarrassed by the line that was retreating. The above disposition for twelve troops can be equally made with more or less, according to the nature of the country.

If the detachment consists of cavalry only, without dragoons or hussars, the Commanding Officer should cause a section to be posted upon each flank of the two lines, to cover and prevent the enemy from attacking of them. These sections should be placed thirty paces distant, and must not retire till the whole line hath retreated; that is, after the three first troops have retreated, the sections should remain till the three last have passed into the intervals of the second line; after which they will retreat, and place themselves upon the flank of the line they are to cover; and those covering the flanks of the second line, shall act after the same manner.

If the detachment is obliged to retreat in four lines, instead of four sections, there must be eight, that the flanks of each line may be covered; but as each line, in this case, will consist only of three troops in front, and the retreat of course be very tedious, if they are obliged to retire one after the other, two troops of heavy cavalry should therefore be formed, which being divided into four, will always leave troops sufficient to sustain those which are retiring. The distance of these four troops from the main body should not be above sixty or eighty paces at most, and they will make their retreat chequer-wise, two and two, that is, the first and the third, then the second and fourth; they must be careful not to mix with the detachment, but must form the rear-guard of it. The two troops which retreat first, should not march more than forty paces into the rear, when they will halt and present themselves to the enemy; the others proceeding in the same manner. On this occasion, these troops of heavy cavalry should fire, but should manage their fire in such a manner, that it may be just sufficient to keep the enemy at a distance; and they should always be ready, in case they are too hard pressed, to have recourse to their swords, and charge the enemy together. If the detachment has any hussars belonging to it, part of them should be posted in the rear-guard; of which part, one-half should be formed into two troops, and the other should be dispersed, in order to slacken the pursuit.
suit of the enemy, by keeping a continual fire upon him. The two troops of hussars which are in order of battle, must retreat one after the other, because one should always continue to sustain that which is retiring, and which ought to retreat in proportion as those in order of battle, follow the detachment.

The hussars which are dispersed, and those forming the two troops to sustain them, should take care never to be at too great a distance from the main body of the detachment. These hussars should have orders, in case they are attacked by the enemy, to divide in two, and place themselves on the flanks of the detachment, instead of retreating to it: First, because they are not well enough mounted to bear the shock of the cavalry; secondly, if they retire upon their own cavalry, they will not only prevent it from marching up to the enemy, but will even help to break it, if they are not careful in passing through the intervals of each troop; therefore, to avoid this inconvenience, it is thought better for them to retreat to the two flanks, which will not prevent the cavalry from marching, and by a brisk charge, sword in hand, seconded by the hussars, abating the impetuosity of the enemy. The remainder of the hussars ought to be placed instead of sections, by troops on the right and left flanks of the two lines, to cover them. The hussars designed to cover the flanks, should not fire, but should have a small troop or section drawn from their own corps, upon their flank, to keep a fire upon the enemy, if he should approach too near.

If there are six troops of hussars belonging to the detachment, four should be distributed after the following manner; two to the rear guard, one dispersed, another divided into two, and the remaining two should be posted upon the flanks of the two lines, their own flanks being also covered by sections detached from them. If the detachment retires in four lines, four troops will form eight, in which circumstance there can be no sections upon their flanks, as each troop will consist only of twenty-five men; therefore if necessary, they must keep up a fire upon the enemy. If there are dragoons with the detachment, and the country an open one, they must perform the same service as light cavalry or hussars, with this difference, that there shall be none posted in the rear; but their disposition being the same as mentioned for the two troops of heavy cavalry, they will divide into four troops, and retreat after the same.
same manner: The others shall be posted on the flanks of each line, after the manner of light cavalry or hussars.

If there should be any hedge, hollow, or hollow-way in the road by which the detachment retreats, a party should be dismounted, and posted in it, that the detachment may proceed in the retreat, protected by their fire. The enemy, whose detachment is supposed to consist only of cavalry, not choosing to expose himself to the fire of the dismounted heavy cavalry, will, in all probability, give over the pursuit.

If there should be infantry in the enemy's detachment, it would be useless, being unable to keep pace with the cavalry, and consequently the enemy can pursue with them only. In this situation, the heavy cavalry and dragoons should continue retreating, without the latter being dismounted, which will prevent the enemy's infantry having time to join his cavalry, which it would otherwise have done. If the dragoons were dismounted to stop his cavalry, which certainly would remain quiet till joined by its infantry, and would immediately make a very brisk attack upon the dismounted dragoons, while the enemy's cavalry charged that belonging to the detachment. If, by the prudent and proper conduct of the Officer commanding the detachment, the enemy's cavalry is separated in such a manner from his infantry, as to offer a favourable opportunity, and time sufficient to attack him with advantage, it should undoubtedly be done; but the Commanding Officer should have made his dispositions with such propriety, and should be possessed of such an exactness of eye, as to be almost certain the charge will not prove ineffectual, nor the infantry have time to join the cavalry during the action.

It would be presumption to assert, that an Officer, by following the above directions, will be entirely secure from being worsted, as the measures proper to be employed for preventing it, and the means of retreating in order, and without confusion, can only be pointed out. Rules for succeeding can only be given; for it may happen that a retreat may miscarry, notwithstanding the goodness of the dispositions, or the exactness with which the orders are executed: There can be no real certainty of success where chance and circumstance have any influence. The enemy's superiority, an enterprizing General, and troops
troops who will second his endeavours to the utmost, may prove unsurmountable obstacles to the retreat of a detachment, although composed of very good troops, and commanded by an intelligent and brave Officer; and even should these troops be beaten, they will have nothing to reproach themselves with, they having performed and executed, to the utmost of their power, the dispositions and orders of a skilful Commander; the ill success should therefore be considered not as a fault, but as a misfortune.

A brave and good Officer may be beat by his own fault, if he hath neglected to take proper advantage of any circumstance, or hath not been careful to conceal his designs from the enemy; such a man certainly deserves blame, but there are different methods to remind him of his errors, which not only give him a proper sense of them, but will also correct his judgment, and encourage him to do better another time. Severity is not always successful; it dispirits an Officer, and renders him timid; the consequence of too much circumspection; too much attention to the minutiae of his duty, frequently causes him to neglect matters of importance. The effects of severity are still more dangerous, when carried to too great a length among the soldiers; although too much forbearance makes them indolent, yet too much severity renders them perfidious and cruel. A General should not overlook essential faults; on the contrary, he should cause them to be punished, but not in such a manner as to drive the criminal to despair. Before M. de Turenne reprimanded any Officer who returned unsuccessful from an expedition, he inquired of him the reasons to which he attributed his miscarriage; if in his answers he discovered intelligence, and he made an honest avowal of his faults, so far was that brave and great Officer from upbraiding him, that he encouraged him by a promise of soon giving him an opportunity of retrieving the disgrace he had sustained. An assurance so flattering, of course inspires the Officer with courage, and produced all the good, but none of the bad effects of a reprimand. A conduct so remarkably humane, could not fail of rendering the General beloved; of gaining the confidence of the soldier; and of forming excellent Officers.

Vigetius has particularly laid down the precautions necessary to be taken in a retreat, although they depend chiefly on the sagacity of the Commanding Officer, whether he retreats to avoid an action, or whether the enemy's superiority
He also observes, that there should be some reason for retiring assigned to the soldier, not that he should know it is on account of the enemy's superiority, for that would only tend to discourage, and increase the enemy's confidence; on the contrary, he should be persuaded, it is to draw the enemy into an ambush, or to gain some advantageous post. The same author also advises a General to conceal all his motions, as much as possible, from the enemy. The method practised by the Romans to conceal the number of their infantry was, by extending the cavalry in the front of it, behind which they cover; the troops retreated one after the other, beginning with the first divisions, and so on with the rest; but the inconveniences arising from such an evolution, in the presence of the enemy's infantry, will become very dangerous and difficult to be executed.

Whatever may be the nature of a country, or the kind of troops retreating, and capable of acting in it, the Commanding Officer of them should oppose the enemy's dispositions by such others, as may entirely destroy his intentions. It is on these occasions an Officer must have recourse to his own genius for expedition; more knowledge being required to keep back an enemy when retreating before him, than ability necessary for harraffing him.

PRECAUTIONS to be taken, when obliged to establish your QUARTERS in a WOODY and MOUNTAINOUS COUNTRY.

A Perfect knowledge of the country is always necessary, but more particularly when you establish your quarters in a woody or mountainous country. The more it appears difficult or impracticable to turn them and separate
A TREATISE on

them, the more precaution is required on your part. A gorge or opening which you have not founded and examined, a road, whose turnings you do not know, a valley, whose bottom you are not perfectly acquainted with, heights, which appear inaccessible, and which you have neglected to occupy, will sometimes furnish an opportunity to the enemy to penetrate by the rear of your quarters, and to attack and carry them.

With this knowledge, a General will not only keep his quarters in security, but he will spare his troops from much fatigue, by placing no unnecessary guards, and not multiplying the patrols; which he will be obliged to do, if he has only a superficial knowledge of the country.

After he has taken his first precautions, he will place all his infantry in a first line, in the most considerable places; such as small towns or large villages. To this infantry, he will join light cavalry or hussars, to be able to push detachments forward, whether for the security of the quarters, for carrying off the forage between him and the enemy, or for establishing contributions, if he finds means so to do. The dragoons can, according to the circumstances, do duty, either on foot, or on horseback: He will therefore place them on the flanks of the cavalry, to cover them.

Besides the retrenchments with which he ought to fortify every little town or village, he ought also to cut a trench at the head of all the gorges or roads leading to the quarters, placing barriers on them for the passage of the detachments of light cavalry, hussars or dragoons; and these trenches must be exactly guarded by infantry.

In a mountainous country, the detachments ought not to advance so far as in a plain country, because it will be easy for the enemy to get between them, and cut them off from the quarters, by sending infantry by bye-paths, where the light cavalry or hussars cannot penetrate. These troops will place themselves between the quarters and the detachment, after it has past, as we have said; and when it is attacked in front, they will attack it in rear, and so place it between two fires.

You
You must place sentinels on the heights, with orders to advertise you if they see any troops coming, but positively not to fire; that the enemy may believe the quarters are not on their guard, and so be drawn into a sort of ambuscade, which will give a dislike of coming to attack your quarters, or even of approaching to examine them; and this is necessary in the beginning, because the troops are there to repose, and to subsist, during the winter, that they may be in a condition to take the field early in the spring. However, if the enemy should attempt to attack some of the quarters, as, by the precautions mentioned, he will find the troops under arms, ready to receive him, he may probably be defeated, or at least be obliged to retire; and it is very likely such a check may disgust him, and he will leave the quarters in tranquility for the future. This tranquility, true or supposed, ought not to prevent the Commanding Officer from sending out detachments to reconnoitre and examine the country exactly. For such detachments, some Non-commissioned Officers, with six men each, sent out on different sides, will be sufficient. Those detachments which are sent for foraging, or for establishing contributions, must be more considerable, but not too numerous: They should be composed of infantry, light cavalry, hussars, or dragoons, according to the nature of the country.

If the gorges leading to the quarters are crossed by different roads, or if these roads all lead to the high road which conducts to the quarters, you must during the night, place a guard of light cavalry, hussars, or dragoons where these cross roads meet, and sentinels or vistets along all the roads.

This guard will retire at sun-rising; it will be useless in the day-time, as the enemy seldom chance to attack then; and, even in that case, the first attack must be made at the trenches and barriers which are before the quarters, at the entry of the roads or gorges; and consequently the troops will have time enough to take arms, and occupy the post ordered.

If, for want of forage, the General cannot keep his cavalry, as they are of no use among the mountains, he may send them behind him, to places where they can be in safety, and where they can find forage, unless his project is to quit that country, and carry on the war in another, where they can act more easily.
But if the circumstance obliges him to remain in the mountains, and that forage is wanting, he will only keep the light cavalry, hussars, and dragoons; the two first will serve for the advanced detachments, and the others will be useful on foot, and act as infantry.

Though cavalry are ill placed in the mountains, sometimes it is necessary to establish them there, when the plains have been laid waste; but they should never be placed but in a second line, and in that part of the country the least mountainous, most open, and most abundant in forage. Care especially should be taken to remove them the farthest from any danger of being attacked, both because they cannot act, and even as it is impossible for them to defend themselves against infantry, which the enemy certainly will employ, in such a country.

It would be needless to speak of the precautions to be taken by cavalry, in a mountainous country, because it cannot be supposed that cavalry alone are placed there. These precautions can only serve to facilitate their retreat, but never for their defence; and the enemy will soon be master of the country, if you have nothing but cavalry to oppose him with.

PRECAUTIONS for SECURING the CAVALRY’S QUARTERS,
in a PLAIN COVERED COUNTRY.

It is a bad Situation which yields no Resource.

It will be sufficient to mention here, the means George Basta, (a Spanish General of note, in the beginning of the seventeenth century) made use of for securing his quarters of cavalry: They appear to be the better, as they are very simple; besides, the authority of a man so conversant in the military art, and so generally approved of, ought to be regarded as a respectable law.

George
THE MILITARY SCIENCE.

George Basta, supposes a village in the middle of a plain; he establishes his guards, great and small, on all the roads which lead to the quarters; he sends out his detachments as far as they possibly can go without the risk of being cut off; he places guards one hundred and fifty paces from the quarters, the small advanced guards in proportion, and the Videts, fifty paces before the small advanced guards.

In the night-time, the Videts formed a kind of circle round the quarters, near enough to hear each other: They were continually marching towards each other, as if they intended to change place. By this perpetual movement, no person could come from, or go to the quarters, without being seen or stopped: The detachments which were advanced, secured the exterior part of the quarters to a great distance. Besides all this, there were patroles of three or four men, who kept on the roads three or four hundred paces from the Videts, in case the enemy should escape the detachments. These patroles, as well as the detachments, stopped from time to time, and listened attentively to hear if any troops were coming towards them. If the enemy had garrisons near, the detachments had orders to advance as near them as possible; first to secure the tranquility of the quarters, and then to keep the enemy in awe, and prevent their coming to disquiet them, by shewing them they were always on their guard.

These precautions appear to be excellent: But if such a quarter is attacked by infantry, what can cavalry do in a village? All it can do, is, to profit by the intelligence given them by the advanced parties, to fend off their baggage, and then make their retreat; for it is impossible to defend a town or village with cavalry against infantry. Whatever precautions are taken, by retrenching the village, making loop-holes through the walls of the houses, and advancing detachments, the cavalry, when attacked by infantry, have no resource but getting into a plain, in order to act: Ramparts are not made for cavalry; it is from their swords they are to expect victory or safety. Such quarters of cavalry alone, invented by George Basta, serve only to prove the necessity of vigilance in war; but this sort of conduct in quarters of cavalry, ought not to be followed but when they are greatly exposed. It is always a bad position for
A TREATISE ON

For cavalry to place them alone in any country, however open it may be: It is even very seldom that the circumstances oblige you to do so: But if the situation of affairs, or the want of forage, require it, the precautions of George Basta are excellent, and ought to be employed for the preventing all surprise.

Of the VIGILANCE of EACH COMMANDANT in his OWN QUARTER.

An Officer is not easily overcome, who can form a true judgment of his own, and the Enemys' Forces.

As soon as the troops are entered and established in a quarter, he who commands, ought narrowly to inspect all the environs, and, upon his own knowledge, decide the places where posts are most necessary, and fix them there. He will then mark out a place of parade, or general rendezvous, where the troops shall assemble on the first intelligence of the enemy, to be ready to march with promptitude, on the first order from the General.

No person whatever shall quit the quarter, on any pretence, without permission from the Commandant. If the Officer himself gives the example of this exactness, the soldier will not murmur against the severity of the discipline. The troops in quarters shall, as in camp, be in messes; and the Commandant shall daily, morning and evening, receive the report from the Officers of each troop or company.

A FIELD-OFFICER shall be daily appointed to visit the messes, besides the Visiting-Officer of each company, of which he shall make his report to the Commandant, who shall himself, every day, visit the posts on foot or on horseback, that he may be well assured that every thing is in order: As soon as he has
has examined every thing, and rectified what he finds wanting, or amiss, he shall go and make his report to the General; or if, by the proximity of the enemy, or the distance from the head-quarters, there may be some risk in absenting himself, it will be sufficient to send a Field-Officer to the General, to inform him of what passes in the quarter. The Commandants at each quarter shall observe the same order, as well those in the rear as those the most exposed.

It is indispensibly necessary to have always advanced detachments: This is a general rule, without any exception. It is by this the quarters are secured, or at least put beyond all surprize. This detail does not belong to the particular Commandant of each quarter; it is the province of the General who orders it; they only obey: However, as it is to be presumed they may be attacked, they ought to take every sort of precaution not to be surprized. The duty of the particular Commandant is to watch over the interior security of the quarter; and that of the General is to provide for its exterior security, without neglecting the interior. Indolent minds, whom this multiplicity of precautions drag from sloth and repose, sometimes murmur against the General, and accuse him of apprehensions and uneasiness. The Officers ought to reprove and suppress such reproaches among the soldiers, which only dishonour those who make them: But the General, or Commandant, ought to take no other notice of them, but to punish them where they appear. The glory of success, which will ever follow such precautions, is a sufficient recompence for those mean, wretched imputations.

It is not the multiplicity of guards, nor their force, which rather embarrasses them, that gives security to one or many quarters; it is the manner of disposing and adapting them to the situation of the place. In fact, of what use are very strong guards, when, by their distance from others, they cannot be secured? Whereas, guards, placed at a reasonable distance, can assemble on the first signal, and compose a little army, which appears to increase in proportion as it is attacked. The advanced detachments, the exact discipline of the troops, and vigilance of the Chiefs, are the sources of the most glorious successes.
The more the enemy appears to be tranquil, or the greater distance you are from him, the more should you be on your guard: Security founded on the distance of the enemy, is very dangerous: Often the enemy's feigned tranquility is only a stratagem to surprise you, to defeat you with more certainty, and which may draw along with it the defeat of several other quarters.

The MANOEUVRES to be OPPOSED to the ENEMY'S FALSE ALARMS.

A VIGILANT enemy does not fail to give an alarm to the quarters, true or false, as often as he can. He has frequently no other view but to disturb and fatigue them, and, by keeping them always alert, to prevent their re-establishment during the winter; or to abate the General's vigilance against true alarms, by often deceiving him with false ones. A negligence which will soon communicate itself among the troops, and the particular Commandants; if great care is not taken to prevent it, will afford an easy opportunity of surprising and carrying off, at least, some of the quarters.

But a wise and prudent General knows how to prevent these inconveniencies, by preserving order in the quarters, by taking the necessary precautions for their security, by making the infantry take arms without beat of drum, and the cavalry mount without sound of trumpet: In order that the enemy, deceived by this silence, and believing them asleep, may advance into the quarters, to fall upon them. When he finds them under arms, his surprise alone will occasion his defeat; or at least, will make him abandon his enterprise, and begin his retreat; but which he cannot perform without being greatly harassed. It is on such occasions a General's genius appears. It is not sufficient to know how to secure his quarters; he must turn to the enemy's disadvantage the very manœuvres they intend to be his. This particular way of doing it seems very favourable; and, if it succeeds, they will have no more cause to fear false alarms, because the enemy will be convinced of the vigilance of the troops.
troops. However, you must not pursue your advantage too far, for fear of an ambuscade; but so long as you see the country clear before you, you ought to profit by the enemy's surprise, and charge him with vivacity.

It is always necessary to bring the troops under arms without noise. It is a general rule, that, on all occasions, silence is favourable in war; the orders of the Commandant are then better understood, and executed with more promptitude. This silence, which does not prevent your being on your guard, prevents the enemy, troubled and dispirited by seeing himself deceived in his project, from continuing to give you false alarms, and restores tranquility to the quarters. The enemy himself will begin to think of allowing his troops to repose, after the fruitless fatigues they have suffered in these attempts.

As to the cavalry, they ought also to saddle and mount without any sound of trumpet; for whatever good order there may be in the quarters, the trumpet on one hand, the cries on another, the hurry to saddle their horses, and to find their arms, occasion confusion, and make the orders to be ill understood. Quarters in such confusion, may be easily defeated by inferior numbers, who, perhaps, only came to give a false alarm, or to reconnoitre.

In general, good order in the quarter depends on the knowledge and understanding of him who commands, and on the vigilance and good discipline he causes to be observed. It is by such conduct that he not only has nothing to fear from the enemy, but even draws from their attempts, his own certain success. The reputation he will acquire among the enemy by his vigilance, will procure him advantages beyond his expectation.

Of CHANGING an ORDER of BATTLE on a PLAIN.

A MOVEMENT made by any one of the wings, is, of all things, the most dangerous and the most delicate, if it is performed in the presence of the enemy. The greatest man among the ancients in this way was Scipio. I do not.
not speak here of the Greeks: They were no doubt greater tactics, and had more ability for general movements than the Romans.

Our present manner of ranging the troops is more favourable; because the first line covering the second, which, by extending its wings, marching at first by its flank, and afterwards in front, may, by a conversion, form on the flanks of the first line: But for these movements there must be excellent troops and intelligent Chiefs; and, besides, the time must be well chosen, and the movement performed with all possible promptitude and rapidity. That of the Mareschal de Luxembourg at Fleurus, is worthy of a great Captain.

It is better, if you are the weakest, to fortify as much as possible the first line, and refuse the combat and keep back your center, while you make your wings advance. In such a case, in order to fortify your wings, you divide the second line in two corps towards the wings; and it is these two corps who partly ought to extend to the right and left, and surround the enemy with all their vigour: For, if the wings are defeated, the center will not hold out.

The movements of the wings are not so difficult as those of the center: But these again being less common, and requiring more knowledge, are also more capable of deceiving the enemy. Vegetius says, in his general rules, "That a war-like and well-disciplined army, ought to engage by their wings.

Of the MEASURES to be TAKEN for the JUNCTION of TWO ARMIES.

A GENERAL finds himself sometimes under the necessity of fighting, when it is his interest to join an army separated from his, and that the enemy's army has got between the two to prevent their junction. To succeed on these important occasions, the Chiefs of the two armies appoint a rendezvous at a proper place, and at the same hour, on the right or left of the enemy, in order to endeavour to join before he has intelligence of their march. Or, if it
It cannot absolutely be done without fighting the enemy in the post he occupies, they take their measures so justly, that both armies arrive and attack him at the same time. To this purpose they advertise each other of the day and hour each will arrive at the place appointed, and agree on the signals to be seen or heard; to which the one and the other ought to answer, to be the more certain that they are in condition to begin the attack. If this is well concerted and well executed, it is almost impossible for the enemy's army not to be defeated, who are commonly seized with a panic, when they find themselves attacked in front and rear.

If they find they can make the junction by either side, and that there is a river or a defile, which one of the two armies must pass to join the other; that which is not to pass, ought to march first, and construct, at the place appointed, redouts or retrenchments, and guard them with infantry, to be masters of the passage. In case the enemy march to engage the other, the first shall pass the river or the defile to succour it.

If the enemy marches to one of the two, that which he marches against, shall endeavour to avoid the action till the others come up, which may be done by taking an advantageous post.

How to ACT in DETACHMENT with a FORCE SUPERIOR to that of the ENEMY.

We must previously consider, whether the affair is offensive or defensive; whether designed or unexpected; whether you have infantry at a certain distance; and whether your rear be securely covered.

If the affair be offensive, and pre-determined; as for example, in case I am resolved to attack the enemy in his camp, I ought to be assured, that my force is
is superior to his, and, that there is a possibility of surprising him, before he
will have time to form. Attacks of this kind will succeed in proportion to the
velocity with which they are made.

Before you attack, it is prudent to post some of your light infantry at the
first defile in your rear, to cover your retreat, in case of a repulse. If the ene-
my is encamped in an open plain, you are to attack their advanced guard with
all imaginable impetuosity, and to enter their camp pel-mel, before they have
time to mount their horses, putting all you meet to the sword. During this
attack, your second line will halt in the front of the enemy's camp, ready to
cover your retreat, or give you an opportunity of rallying.

If you succeed in your attempt, after having hamstrung their horses, you
will set fire to the camp; but you are to take all possible care, to prevent your
people from stragling in search of plunder. When the affair is entirely over,
and the enemy having no prospect of assistance, you may then collect as many
prisoners as you conveniently can, and secure them in the best manner your
situation will afford.

If it is possible to get round the enemy, it is best to attack them in the rear;
as you there find less resistance, you certainly will be more likely to succeed,
especially if you make your attack just before break of day.

After you are in peaceable possession of the enemy's camp, the most equi-
table method is, to collect all the booty, and then to distribute it to those who
have shewn most resolution during the attack. The Officers are to have the
privilege of chusing what they want, but they are to pay for what they take,
according to a moderate rate upon each article, by which means the Officers
will have an opportunity of providing themselves with horses, &c. at an easy
expense, and the private men will be rewarded according to their merit.

If each man was supposed to retain what he took, the bravest of them
would gain the least, as they were too intent upon driving the enemy, to con-
cern themselves with plunder, whilst the most cowardly would carry off the
spoil. Nevertheless, there are cases in which a hussar or light cavalry man ought

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to keep what they have got, provided it appears to be the immediate consequence of singular bravery.

As soon as the enemy perceives your superiority, unless he happens to be advantageously situated, he will most certainly go to the right about; therefore, when you approach his camp, you must conceal your force, by marching few squadrons in front, and closing the intervals between each.

If, when you come within fifteen hundred paces of the enemy, you perceive them inclined to move off, you must order your advance guard to gallop forward, and keep them diverted, till you have time to come up with the whole detachment. As you advance, you will detach a squadron from each wing to fall upon their flank.

But if the enemy should have prudence enough to retire in time, it will answer no end to pursue them, except with your advance guard, in order to pick up a few stragglers.

In pursuing the enemy, you are to be very cautious in entering woods, inclosures, or defiles, lest you should fall into an ambuscade. If the enemy should have been so imprudent as not to guard the defile, in their rear, with infantry; if you come up with them before they have had time to pass it, they must either be cut to pieces, or surrender themselves prisoners of war; in that case, you are to give them quarters.

But it is a difficult matter to know whether a defile be guarded or not: If they face about and appear determined, there is reason to believe the pass is guarded; but the best method of discovering the truth of this matter is, to march slow, as soon as the enemy has faced about, and to order your flanking parties to advance briskly and reconnoitre the defile. In the mean time you will interrogate your prisoners and threaten to blow out their brains, in case their intelligence should prove false; and you should upon some very extraordinary cases of deceit, keep your word with them.
If the enemy has one or more defiles in front, and an open country in his rear, though his force should be much inferior to yours, it is dangerous to attack him, unless by surprise; for the first troops which should attempt to pass, must infallibly be routed, before they could be sustained, and the enemy, having nothing to impede his retreat, would retire without danger, after having destroyed part of your troops.

But in case you can discover, that the enemy has neglected any one of the defiles in his front, you will then order part of your detachment to pass that way, and as soon as they have had time to come round, make a vigorous attack upon those defiles which are guarded.

In all these cases, it is very necessary to know the troops you are about to insult; if they are dragoons, which are generally brave and well-mounted, you must expect an obstinate resistance, and may possibly be obliged to abandon your enterprise.

If I have intelligence of a detachment of the enemy's cavalry being in a neighbouring village, I naturally conclude, that they are there, either with a design to repose themselves for a few hours, or to lay contributions. In either case it is probable, as they mean to continue there but a short time, that the precautions they have taken, are designed rather to prevent their being surprized, than to oppose the enemy, in case of an attack. Let us suppose, therefore, that they have posted a small guard at the entrance of the village, and a centry on the church-steeple. Their horses are linked in the center of the village, under the guard of a few men, whilst the rest are enjoying themselves in the houses; or at least half of them are dismounted. On this supposition, my first business would be to post half my party, between the village and the army of the enemy. I would then attack their guard on the opposite side, and endeavour to enter the village pel-mel, along with them. Those that were mounted, would certainly make the best of their way to the army, and they would as certainly fall into the hands of the other half of my detachment. But in case the enemy should resolve to maintain their post, or advance to meet me, my party, in their rear, must then force their way into the village. If there should be a third road, the enemy, will probably endeavour to escape through it,
it, but they will suffer considerably in their retreat. Such attacks are generally successful, but such opportunities are very rare.

One may venture upon these attacks without running much risk, even though the nature of the ground will not permit you to post part of your detachment between the village and the enemy's camp, because your fears will greatly multiply your numbers. If you attack a village in the night, you must order your Officers and men to put white paper in their hats, that they may distinguish themselves from the enemy.

With regard to the stratagems, by which it is possible to draw the enemy into an ambush, they are innumerable. A fertile genius will vary them almost to infinity. One of the most common, and which, nevertheless, frequently succeeds, is to detach an Officer, with a small party, to insult the enemy, with orders to retire, when pursued, and by that means gradually decoy his pursuer into a defile, both sides of which are lined with infantry. But in attempts of this nature, your main body must be so near your ambush, as to be ready to support them, in case the enemy should have perceived your design, and fall upon their rear. The Officer who advances, must march very slow, lest his horses should be out of wind before he begins his retreat. If he falls in with any waggons, in sight of the enemy, he must appear to plunder them; but lest no such opportunity should offer, it may not be improper to cause a few waggons to proceed from a neighbouring village, for that purpose: And if this will not do, he may then appear to have advanced, with an intention to discover the position of the enemy; and if they should continue inflexible, he may attack their advance guard.

Another method of decoying the enemy is, to send forty or fifty men into a village, not far from their camps, whilst you take post with your whole detachment on the out-skirts, so as not to be perceived by the inhabitants. The Officer, who is sent into the village, must dismount his troop, but not suffer the men to quit their horses. He will then assemble the Bailiff and the Peasants, and order them to provide a certain quantity of forage, which they are to transport in three or four hours from that time. His next business is, to dispatch some of them to the neighbouring villages, with the like orders, with
positive commands, not to give the enemy intelligence of his being there; or in case they should be obliged to own it, to report his party much stronger than it is. These messengers being dispatched, he must suffer no one to leave the village. In the mean while, he will collect as much forage as possible; his Videts are to be so posted, as to give intelligence of the enemy's approach, and the main body are to continue in their ambuscade, in the out-skirts of the place.

When the enemy appears (which they will not fail to do) he must endeavour to carry off his forage, till he has drawn them to the place prepared for their reception, upon which he will face about, and stop them, till the troops in ambuscade, have time to attack them in flank.

Of LINES and RETRENCHMENTS.

Never suffer the enemy, if you can prevent him, to reconnoitre your lines, or the ground between you and him.

These are works to which I am altogether averse, from a persuasion, that the only good lines are those which nature has made; and that the best retrenchments are, in other words, the best dispositions, and the best disciplined troops.

I scarcely remember a single instance of lines or retrenchments having been assaulted, and not carried. If you are inferior to the enemy in numbers, you will not be able to defend them, when they are attacked with all his forces, in two or three different places at once: The same will be the consequence, if you are upon an equality with him: And with a superiority, you have no occasion for them. What sufficient reason can you therefore assign, for bestowing so much labour in the construction of works, which appear to answer your purpose so little?
The persuasion of the enemy, that you will never dare to leave them, renders him bold. He trifles with you even before your face, and hazards several movements, which he would be afraid to make, if you was in any other situation. And this courage is equally diffused amongst both Officers and soldiers; because a man always dreads danger itself, less than he does the consequences of it; which is an argument that I could support by a number of examples.

Suppose a retrenchment to be attacked by a column, the head of which is arrived upon the brink of the ditch; if, at that time, only a handful of men should make their appearance, at the distance of a hundred paces without the retrenchment, nothing is more certain, than that the front of this column would instantly halt; or, at least, would not be followed by the rear: The reason for which can be deduced from no other source than the human heart. If only ten men get footing upon a retrenchment, whole battalions that have been posted behind for its defence, will abandon it. They no sooner see a troop of cavalry, than they give themselves totally up to flight.

As often therefore as one is obliged to defend retrenchments, one must take particular care to post all the troops behind the parapet; because, if once the enemy sets foot upon that, the defendants will no longer think of anything but their own security; which proceeds from that consternation which is the unavoidable effect of sudden and unexpected events. This is a general rule in war, and is what determines the fate of the day in all actions. It is the irresistible impulse of the human heart, which, on account of its consequences, was the principal motive that induced me to attempt this work; as I am apt to imagine, it would never have occurred to any other person, to ascribe the greatest part of the bad success of armies to this cause, although the true one.

If then you station your troops behind the parapet, their only hopes and expectations are, to prevent the enemy by their fire from passing the ditch, and forcing it; which if he is once able to accomplish, they instantly give themselves up for lost, and in consequence take to flight. Instead of this method, it
it will be much more prudent to post a single rank there, with bayonets fixed, whose business will be to push the assailants back therewith, as fast as they attempt to mount. This your men will certainly execute; because it is what they expect, and are prepared for. If, moreover you post bodies of infantry, at the distance of thirty paces, in the front of the retrenchment, they will not be confounded at the approach of the enemy, from a consciousness of their being stationed there for no other purpose than to oppose him, which, for that reason, they will do with proper vigour and resolution; while, on the contrary, had they been all posted behind it, they would have fled at his appearance. Thus we see upon what nice distinctions every thing in war depends, and how irresistibly weak mortals are governed by mere momentary caprice and opinion.

To this I might add, the absurdity of our manner of drawing up the troops for the defence of retrenchments. We post our battalions four deep behind the parapet: In which order, the front rank only is able to do execution, because it fires off the banquette: And although the others may be advanced after the front has fired, yet their shots are only thrown away, because the men are crouded together, and do not take aim at any certain object. They must necessarily also be involved in great confusion; from which the enemy cannot fail to reap advantage, when he arrives upon the parapet, which they are moreover totally incapable of preventing, for want of being properly prepared, with fixed bayonets or pikes. They make a continual bustle in your battalions; or rather, it is your battalions themselves, which form a busy and confused crowd, like a swarm of ants, that have been disturbed in their nest. Every man's attention is taken up with his firing only; and the moment the enemy sets foot upon the parapet, they abandon the defence of it.

If I had a retrenchment to maintain, I should post my grand divisions all along the parapet, in two ranks; armed with firelock and bayonet, upon the banquette. The light-armed troops I should also post upon the banquette, by the addition of which to the front rank, it would consist of about one hundred men per grand division, and the rear rank of about fifty, inclusive of Officers. As I erect my parapet six feet high, the assailants, who
who would otherwise take post upon the berm *, in order to fire over it, will be deprived of their usual resource, and find themselves obliged to mount it: In attempting which, they must be pushed back with bayonets. The Officers and Non-commissioned Officers must be attentive to their mens’ behaviour; encouraging them at the same time, and taking care that they make a proper use of their bayonets. It is moreover, in a particular manner, necessary to persuade them, that they are by no means to depend upon the effect of their small arms, or to imagine their firing only will be sufficient to repel the enemy; but that the top of the parapet is the place where they will be required to exert themselves. These precautions will prevent their being surprized, or terrified to see them enter the ditch; for as it cannot be doubted, but that they will take a firm resolution to stand their fire, which it is as certain that he will be able to go through, one ought therefore to expect, and be prepared for the consequence. If he endeavours to take post upon the berm of the retrenchment, in order to dislodge me from the banquette, which is frequently the case. I shall be able, in all probability to reach him with my bayonet, and push him back, man by man, as fast as he approaches: And if not convenient to reach him, I have as sure a game to play,—the discharging the contents of the firelock into him. But at length, notwithstanding all opposition, he forces the retrenchment, and attempts to form, I shall charge him en detail by grand divisions: And as my troops have been properly prepared for all extremities, they will, for that reason, be subject to no surprize, and will make their assault with vigour.

This is all that can be said concerning the defence of retrenchments. But one must have different reserves in readiness, to reinforce occasionally those posts, against which the enemy’s principal strength appears to be directed: A circumstance not always easy to accomplish, because it is what a skilful adversary will prevent your being able to discover: They must therefore be sta-

* Berm. A small space of ground between the wall of a place, and the moat, which the best fortifications have not, because it is advantageous for the enemy to come over the moat, and get footing; and therefore this is only left where there is not enough to defray the expense of stone to face the foot of the wall, instead whereof, this helps to support it, and is generally from three to five, or seven feet wide; so says Sir Jonas Moor; but the French say, this space is left to receive what the enemy batters down from the parapet, that it may not fill the ditch. For the more security, this Berm is generally pallisaded.
tioned as much at hand, and as advantageously as possible; which is to be
determined by the nature of the situation, as well without as within the re-
trenchment. You need be under no apprehensions of being attacked in places
where the ground is level to any considerable distance; for in such, it will be
difficult for the enemy to disguise his real purpose; but whenever there hap-
pens to be any eminence, hollow, or other piece of ground to cover his ap-
proach; there you may expect him to make all his efforts, because he will
thereby hope to conceal his disposition and numbers.

If you can contrive some passages in your retrenchments, for a party or two
to sally out of, just as the head of the enemy's columns arrives upon the
brink of the ditch, they will certainly make them halt the same instant; even
although they have forced the retrenchment, and that some part of them have
already entered; for, as they are unprepared for any such incident, they will be
alarmed for their flanks and rear, and, in all probability, take to flight.

Amongst a thousand examples, that might be produced, to authorize my
ideas upon this head, I shall make choice of the two following.

Cæsar being desirous to relieve Amiens, when it was besieged by the Gauls,
arrived with his army, which consisted of no more than 7,000 men, upon the
borders of a rivulet; where, immediately after, he threw up a retrenchment
with so much precipitation, that the barbarians, imagining he was afraid of
them, attacked it, although in reality he had no manner of intention to defend
it; for, on the contrary, while they were employed in filling up the ditch,
and rendering themselves masters of the parapet, he sallied out with his co-
horts *, and thereby threw them into so great a consternation, that they all

* Of Cohorts, says Clarke's Vergilius, the legion should consist of ten cohorts, the first of which exceeds
the others, both in the number and quality of soldiers, who are selected to serve in it as men of some fa-
mily and education. The first cohort, has the care of the eagle, the chief Ensign in the Roman armies,
and the standard of the whole legion, and of the images of the Emperors, which are always considered as
sacred. It consists of eleven hundred men, and one hundred and thirty-two horse cuirassiers, and is distin-
guished by the name of the military cohort. It is the head of the legion, and is always first formed on
the right of the first line, when the legion draws up in order of battle. The second cohort contains five
hundred and fifty-five foot, and sixty-six horse, and is called the Quingentavian cohort. The third is com-
goed of five hundred and fifty-five foot, and sixty-six horse, generally chosen men, on account of its situa-
turned their backs, and fled, without so much as a single person’s making the least attempt to defend himself.

Alesia being besieged by the Romans, the Gauls, who were infinitely superior in numbers, marched to attack them in their lines. Cæsar, instead of defending them, gave orders for his troops to make a sally, and to fall upon the enemy on one side, while he attacked them on the other; in which he succeeded so well, that the Gauls were routed with considerable loss, exclusive of above 20,000 men, that were taken prisoners, together with their General.

If one does but consider the method in which I form my troops, one must readily allow that they will be capable of moving with much more facility than our battalions in their present extensive order; for supposing several of them to be drawn up four feet deep, one behind another, what service can they render in that disposition? They are unwieldy; every trifle serves to impede them, the ground, their doubling, or any other such circumstance; and if the first is repulsed, it falls in disorder upon the second. Nevertheless, suppose the second is not thereby disordered, yet it will require a long space of time before it can possibly be able to charge, because the first, which is broken, must be allowed to move clear of its front; and unless the enemy is so complaisant as to wait with his arms crossed during all this time, he will certainly drive that battalion upon the second, and the second upon the third; for after having repulsed the first, he has nothing to do, but to advance briskly forward; and if there were thirty, one in the rear of another, he will throw them all into confusion.—Yet this is what is called attacking in column by battalions.

ation in the center of the first line. The fourth consists of the same number, as also the fifth; which should be some of the best men, being posted on the left flank, as the first cohort is in the right. These five cohorts compose the first line. The sixth includes five hundred and fifty-five foot, and sixty-six horse; which should be the flower of the young soldiers, as it draws up in the rear of the eagle, and the images of the Emperors, and on the right of the second line. The seventh contains five hundred and fifty-five foot, and sixty-six horse. The eighth is composed of five hundred and fifty-five foot, and sixty-six horse, all select troops, as it occupies the center of the second line. The ninth has five hundred and fifty-five foot, and sixty-six horse. The tenth consists of the same number, of five hundred and fifty-five foot, and sixty-six horse, and requires good men, as it closes the left flank of the second line. These ten cohorts form the complete legion, confining in the whole, of six thousand, one hundred foot, and seven hundred and twenty-six horse.
My disposition is of a very different kind: For although the first battalion should be driven back, that which follows it, will notwithstanding be able to charge in the same instant, moving up in quick succession, and renewing the attack with fresh vigour. I am moreover formed eight deep; have no sort of imbarraiment to apprehend; my march is rapid, and yet free from all manner of disorder; my charge is violent; and I shall always out-flank the enemy, although equal in numbers. Nothing certainly can be more absurd, than the common order of battle which is in general used; and I am at a loss to know why the principal Officers can suffer it so long to prevail, and have not yet attempted to make some alteration in it.—Mine is far from being new; for it is that of the Romans, that with which they conquered the universe. The Greeks had great knowledge in the art of war, and were very well disciplined; yet their large phalanx* was never able to contend with the small bodies of the Romans disposed in this order; in which opinion I am supported by Polybius, who concurs with me in giving them the preference. What then can be expected from our battalions, when opposed against them, which have neither strength nor principal to vindicate their disposition? Let the divisions be posted in what situation you please; in a plain, or in rough ground; make them sally out of a narrow pass, or any other place, and you will see with what surprising celerity they will form: Order them to run at full speed, in order to take possession of a defile, hedge, or eminence; and the instant in which the colours are advanced flying, they will be drawn up and dressed. This is what is absolutely impracticable with our long battalions: For to march them with any regularity, and to form them in their natural disposition, will require a great deal of time, and likewise a piece of ground made on purpose; which are things so incompatible with the service, that it is impossible to see them put in execution, without the utmost disgust and impatience.

* Phalanx, in ancient military History, a large battalion of infantry, joined close together, with their shields in close order, and pikes turned cross-ways. The Phalanx was a form peculiar to the Macedonians; the front exceeding the depth, and the depth generally consisted of fifteen men.
ATTACK of LINES or RETRENCHMENTS.

Reconnoitre well the enemy's lines, that you may know their situation, and the approaches to them before you attack.

When you are to attack a line or intrenchment, it is always proper to extend your line as far as possible, in order to amuse the enemy and keep them in awe, and thereby to prevent his drawing troops from any post, to reinforce that which you have an intention to attack, even after you have put it in execution. To effect this, the grand divisions, which are to deceive the enemy by their appearance only, are to draw up four deep, and to march in a line, the rest of your manoeuvre, and your preparations for a real assault, are to be conducted in the rear of them; which is what I call making the attack. This part of the military art depends upon the imagination. A General, in this situation, may have recourse to all sorts of stratagems, because the certainty of his not being attacked in it, leaves him at full liberty to make what experiments he pleases: Every valley, hollow-way, hedge, and a thousand other things may be converted to some advantage, and rendered instrumental to his success.

In charging by divisions, you need be under no apprehension of confusion; every division, for the honor of its own Officer, being commanded by them, will be glad of an opportunity to risk their lives, for the sake of signalizing themselves, and their own particular division.

In approaching the intrenchments, you must advance light troops, to draw away the enemy's fire, taking care to support them with others. After the firing is begun, the divisions are to march up, and charge; if the first are repulsed, they must be succeeded by others before they have had time to fly, till at length, by force and numbers, seasonably supplied, you have overcome all obstacles. Your divisions that are drawn up four deep, are likewise to arrive at the same time, provided you have forced the intrenchments in several places at once; after which the enemy's battalions, perceiving your lines adv
vanishing upon them, and finding themselves exposed in front and rear, will abandon their posts. You have then nothing to do, but to take possession of the parapet, and, after that, to form your troops in proper order; during which time the enemy, instead of making any further opposition, will be retreating from you, because he imagines he has done all that he could.

A General must ever remember to make false attacks, with a small body of men, in order to favour the true ones; and these attacks must be made at the same time; and in the night, the enemy not seeing your dispositions, will not know where the storm will fall, and consequently must keep every place guarded. For the above purpose, carry store of fascines and hurdles with you; let your cavalry, as well as the infantry, be well loaded with them, in order to fill up all advanced or other fosses; and direct your men, as soon as they have entered the lines, to open the barriers, and level the line for the cavalry to enter.

Seem to resolve to attack the intrenchment in that part you least design; let fascines be cut, and other glaring preparations made; and whilst the enemy is intent on the defence of that part, you march in the night, and slip into their line where they least suspected you *

† When any part of the first line is broke, the nearest regiment of the second should instantly march up, repulse the enemy, and make good the line; and give time to the broken regiments or squadrons to form in their room. But it too often happens, for want of courage or presence of mind, that the first overset of a part of the front line strikes a terror in the second, who instead of sustaining gallantly, look on all as lost, and fly before they have struck a stroke; when, if they would but consider, that if the attacks, however brisk and successful on the front line, were well supported and repulsed by troops of the second, it is odds but the enemy, seeing your bravery and resistance, and

* This was practiced, with success, by the Duke of Marlborough, to the great savings of the lines of men, when he passed the Gelt, and the lines at Heilborn, and after that at Arlieux.

† This was gallantly done by Medovi against the Landgrave of Hesse, as Frequiere says, at the battle of Cassigione, in 1706.
their first fire and spirit spent, will give way, get a panic, and leave the victory to you, as they did at Ramillies.

But there is another method of attacking retrenchments altogether different from this, and to the full as good; provided you are perfectly well acquainted with the ground, and that it is such as will admit of being put in practice. When there is any hollow-way or bottom near the retrenchment, capable of holding troops under cover, you are to convey, without the enemy's knowledge, and during your march, a proper number into it; after which, you must advance in several columns with large intervals between them, to attack a part of the retrenchment at some distance from it; for these will attract all his attention, and tempt him to draw away his troops from other posts, in order to strengthen his disposition against the columns in this. As soon therefore as they begin the attack, all his forces will unite to oppose them; upon which your troops, that have been concealed, are suddenly to sally out, and to assault the abandoned part of the retrenchment: Those who are engaged against the columns, upon seeing this, will be thrown into a consternation, because they are totally unprepared for any such event; and, under the pretence of hastening to the defence of that part of the retrenchment, which is thus unexpectedly attacked, will instantly desert the other, and fly.

In the attack of retrenchments, I must beg leave to add my poor opinion, viz. if retrenchments have no cannon, I most certainly would attack in several columns with rapidity; if cannon, in line of battle.

The defence of retrenchments is attended with a great many difficulties, because it is a manoeuvre that intimidates the troops: And although I have given my opinion in regard to what may be useful upon the subject, and have recommended such measures as appears the most promising of success; yet I am far from being an advocate for these works, and am rather disposed to exert my influence towards having them totally laid aside. My favourite defences are redoubts, the superior advantage of which, I shall endeavour to demonstrate in the following chapter.
To justify by facts that high opinion which I entertain of redouts, is a task remaining now to be performed.

The arms of Charles XII. King of Sweden, were always victorious before the battle of Pultowr: The superiority they obtained over those of the Muscovites, is almost incredible: It was no unusual thing for 10 or 12,000 Sweeds to force retrenchments defended by 50, 60, or even 80,000 Muscovites, and to cut them to pieces; they never inquired after their numbers, but only after the place where they might be found.

The Czar Peter, who was the greatest man of his age, bore the bad success of that war with a patience equal to the dignity of his genius, and still persisted in fighting, on account of exercising his troops, and inuring them to hardships. In the course of his adversities, the King of Sweden laid siege to Pultowr; upon which the Czar called a council of war, where it was for a long time debated, and various opinions were given, concerning the step most proper to be taken in this exigency. Some were for surrounding the King of Sweden with the Muscovites army, and for throwing up a large retrenchment in order to oblige him to surrender. Others were for burning all the country within 100 leagues in circumference, to reduce him by famine; which opinion was far from being the worst, and was also most conformable to that of the Czar: Others, however, objected to it, by observing, that it could never be too late to have recourse to such an expedient, but that they ought first to hazard a battle, because the town and its garrison were in danger of being carried by the invincible obstinacy of the King of Sweden, where he would find a large magazine, and a sufficient supply of every thing to enable him to pass the desert with which they proposed to surround him. This being at length the determined opinion of the council, the Czar thus addressed himself to them.

SINCE
SINCE we have come to a resolution to fight the King of Sweden, nothing remains but to agree about the method, and to make choice of that which promises the most success. The Swedes are well exercised, well disciplined, adroit under arms, and impetuous in their charge: Our troops are not inferior to them in point of resolution, but they certainly are in many other respects; it therefore becomes necessary to fall upon some scheme that may render this superiority of theirs useless to them: They have frequently forced our retrenchments; and have always defeated us in the open field by dint of art, and by the facility with which they form their manoeuvres. In order then to counterbalance these advantages in the enemy, I propose to draw near to him; to throw up several redouts in the front of our infantry, with deep ditches before them; to raise and palisade them, and to defend them with infantry; and after having erected these works, which will not require above a few hours labour, to wait for the enemy with the rest of our army behind them: He must infallibly be broken in attacking them, must lose great numbers, and will both be weakened, and in great disorder, when he attempts to pass the redouts to charge us; for it is not to be doubted, but that he will raise the siege to engage us, as soon as he perceives that we are within his reach. We must therefore march in such manner as to arrive before him, towards the close of the day, that he may be thereby induced to defer his attack till the day following, and take the advantage of the night to erect these redouts.

Thus spoke the sovereign of the Russians, and all the council approved of the disposition, orders were given for the march, for tools, fascines, chevaux de frise, &c. and towards the evening of the 8th of July 1709, the Czar arrived in the presence of the King of Sweden.

This Prince, although he was wounded at that time, nevertheless informed his general Officers, that he intended to attack the Muscovite army the day following; and accordingly, having made the necessary dispositions, and drawn up his troops, he marched a little before day-break.

The Czar had thrown up seven strong redouts in his front, with two battalions posted in every one; behind which was all his infantry, having its flanks covered by his cavalry: In this disposition, therefore, it was impracticable to attack the Muscovite infantry, without having first carried the redouts, because they could neither be avoided, nor was it possible, at the same time,
time, to pass between any two of them, without being destroyed by their fire. The King of Sweden and his Generals remained totally ignorant of this disposition, 'till the moment in which they saw it: But the machine, as it were, having been once put into motion, it was now impossible to stop it. The Swedish cavalry presently routed that of the Muscovites, and even pursued them too far; but their infantry was stopped by the redoubts, which made an obstinate resistance. Every military man knows the difficulty that usually attends the taking of a good redoubt; that it requires a disposition on purpose; that a great many battalions must be employed, in order to be able to attack it in several places at once; and that, after all, their success is extremely uncertain. Nevertheless, the Swedes carried three of these, although it was with difficulty; but they were repulsed at the others with great slaughter: All their infantry was broken and disordered, while that of the Muscovites, being drawn up in order at the distance of 200 paces, beheld the scene with great tranquility. The King and the Swedish Generals saw the danger in which they were involved, but the inactivity of the Muscovites' infantry, gave them some hopes of being able to make their retreat: It was absolutely impossible for them to do it with any regularity, for they were totally in confusion; however, as it was the only remaining step which they had to take, after having withdrawn their troops from the three redoubts they had carried, and from the attack of the others, they proceeded to put it in execution. In the mean time, the Czar called together his general Officers, and asked their advice concerning what was to be done at this juncture: Upon which Monsieur Alert, one of the youngest amongst them, without even allowing time to any of the others to declare their sentiments, thus addressed himself to his Sovereign: If your Majesty does not attack the Swedes this instant, they will be gone, and you will lose the opportunity.—This being acceded to, the line advanced in good order through the intervals between the redoubts, leaving them guarded to favour their retreat in case of an accident. The Swedes had but just halted, to form their broken army, and to restore it to some order, when they saw the Muscovites at their heels. Nevertheless, confused as they were, they made an effort to return the charge; but order, which is the soul of battle, being totally wanting, they were dispersed without opposition. The Muscovites, not having been accustomed
tomed to conquer, were afraid to pursue them; so the Swedes retreated without molestation to the Boristhenes, where they were afterwards taken prisoners.

From hence it appears, how practicable it is, by skilful dispositions, to render fortune favourable. If the Muscovites, who were at this time undisciplined, and dispirited likewise by an uninterrupted series of misfortunes, owing the victory to their redouts, what success may not be expected from them, under the defence and direction of a nation experienced in war, and whose property it is to attack? If you act upon the defensive with them, you have, notwithstanding, as much advantage to the full as your enemy, by charging him by brigades, advanced in proportion as the redouts are attacked. You can, moreover, renew the charge as often as you please, and always with fresh troops; which are waiting for your orders with impatience, and will make it with vigour, because they are exposed to public view, as well as supported; but above all, because they know their retreat is secure. It is incredible, with what a panic armies are sometimes seized; so far from being subject to which, you render yourself, if I may be allowed the expression, master of the favourable minute that is capable of deciding the event of battles; I mean that in which the enemy is in disorder. What an advantage therefore must it be, to be prepared for such an incident, with a certainty of its coming to pass? The Muscovites neglected to reap the benefit of all those opportunities which the excellence of their disposition afforded them; for they calmly suffered three of their redouts to be taken before their face, without attempting to succour them; a circumstance that must have discouraged those who defended them, have intimidated the rest of the troops, and have augmented the audacity of their enemy. One may therefore venture to say, that it was the disposition alone which conquered the Swedes, in this action, without the Muscovite troops having contributed to the victory.

These redouts are also the more advantageous, in that they require but little time for their construction, and are moreover useful on numberless occasions; a single one is sufficient to stop a whole army in a close or confined situation; to prevent your being harassed or insulted, on some critical march; to cover one of your wings; to divide a piece of ground; or to occupy a larger quantity than the number of your troops will otherwise permit, &c.
A TREATISE on

A calculation of the time, and the number of men required for the construction of a redout.

The excavation of the ditch, being 144 toises, will require, including the:

- Trimners * 288 men.
- To get fascines 500
- To get Pickets 300
- To get Pallisades 400

Total 1488.

Fourteen hundred and eighty-eight, will therefore be able to draw up a redout in the space of five hours.

Of the GRAND MANOEUVRE.

I am persuaded, that unless troops are properly supported in an action, they must be defeated; and that the principles which M. de Montecucculli has laid down in his memoirs, are founded upon certainties. He says, that infantry and cavalry should be always reciprocally sustained by each other; nevertheless, we, in direct opposition to his measures, post all our cavalry upon the wings, and our infantry in the center, each to be sustained by itself only; which disposition, as the interval between our lines is usually five or six hundred paces, is in itself sufficient to intimidate the troops; because, it is natural for every man, who sees danger before him, and no relief behind, to be discouraged; and this is the reason why even the second line has sometimes given ground, while the first was engaging; which is what many others,

* In the construction of the fort, in another work, the Marshal allows two diggers to one trimmer; and according to his own calculation, the 188 men here mentioned, would be necessary only to dig the ditch of his redout within the time limited. This must therefore be a mistake, and there ought to be half as many more, 144, adding for trimming, which makes the whole number amount to 1632, instead of 1488, probably.
probably, as well as myself, have seen happen more than once; and although
it seems hitherto to have escaped the reflection of any, it cannot, as I have
already observed, be imputed to any other cause than the frailty of the hu-
man heart. The following is a transcript of what the abovementioned illuf-
trious author says upon this subject.

In the armies of the antients, every regiment of foot had a certain propor-
tion of horse and artillery; the horse were divided into two sorts, under the
appellation of heavy armed and light armed; the former of which wore
breast-plates: Why, therefore, would they incorporate these distinct bodies
together, unless it was on account of the absolute necessity of such a connec-
tion, and the mutual service they would be capable of rendering each other
by acting in concert? According to the modern practice, where all the in-
fantry is posted in the center, and the cavalry upon the flanks, at the extent
of several thousand paces, how is it possible they can support each other? If
the cavalry are defeated, it is evident that the infantry, becoming abandoned,
and their flanks exposed, must unavoidably share the same fate, from the ene-
mys' cannon at least, if not by other means, which happened to the Swedes,
in the year 1614. When their cavalry had been driven off the field of bat-
tle, they perceived the error of their disposition, and, in order to remedy it,
posted some sub-divisions between the squadrons; but all efforts were
then ineffectual, for the squadrons were totally disordered; and the sub-di-
visions, not having any body of troops at hand to retire to, nor pikemen to
cover them, were put to the sword; for how could they possibly retreat to
their infantry, which was at so great a distance.

It is for these reasons, I would post small bodies of cavalry at the distance
of thirty paces, in the rear of my infantry; and battalions of pikemen,
formed in the square, in the interval between my two wings of cavalry; in
the rear of which, likewise, it will be able to rally, if broken or repulsed *.

* Perhaps it may be objected, that this cavalry, if repulsed by the enemy, will fall into disorder upon
the square battalions; but it should be observed, that the Marshal furnishes them with pikes, on purpose to
render them capable of opposing the shock of cavalry; besides, the intervals between them are so large, that
however precipitate the horse might be in their retreat, it is improbable they would fall upon them; but,
for a farther security, they might be covered with chevaux-de-frise.
My second line of cavalry will never fly, so long as they see the square battalions in their front, and their countenance will also animate the first. The battalions will maintain their ground, from the persuasion of being soon surrounded by the cavalry, who, under the cover of their fire, and a vigorous resistance, will presently form again, and renew the charge with fresh courage; in order to retrieve their honour, and wipe out the disgrace of their late discomfiture: The battalions will moreover serve to cover the flanks of the infantry. Some, very improperly, post small bodies of infantry between the intervals in their line of cavalry: The weakness of this disposition is alone sufficient to intimidate them; for the foot see that if the cavalry are defeated, they must inevitably be cut to pieces; and if the cavalry, who have also a dependance upon them, make but a brisk movement, they leave them behind; so that, perceiving they have lost their assistance, they soon fall into confusion, and, being put to flight, leave the flanks of your army open to the enemy.

Others again, post squadrons of cavalry amongst their infantry, which is equally absurd; for the destruction of horses from the enemies' fire occasions disorder, and if the cavalry give way, the infantry will presently do the same.

But I would ask, in what manner squadrons in this disposition are to act? Are they to stand fast, sword in hand, and wait the attack of the enemies' infantry, firing and advancing upon them with fixed bayonets; or must they make the charge themselves? If they do the last, and are repulsed, which will most probably be the case, they must break their own infantry in their retreat, because it will be difficult for them to find their former posts again; and the intervals allowed them being small, will certainly have been filled up; for the battalions are subject to such great inconveniences, from their present method of forming, that the disorder of a few files, whether occasioned by their own movement, the doubling of the ranks, or the enemies' cannon, is sufficient to throw the whole into irretrievable confusion. It is far otherwise with my centries; they follow each their respective standard, and keep in a body together: All disorders among them are easily remedied, and if not, so long as they are guided by their standards, which are to range in a line with
with that of the legion, no fatal consequence can ensue, because the Officers
will be able to keep the ranks straight, which it is impossible for them to do
in the battalions; and this being also one great defect in M. de Folard's co-

Notwithstanding the very great regard I have for the Chevalier Folard,
and the high esteem I entertain for his ingenious writings, yet I cannot agree
with him in opinion concerning the column: It is striking, indeed, and for-
midable in appearance; and the idea of it, which first presented itself to my
imagination, seduced, for a while, my judgment, till, by trying it in exe-
cution, I became convinced of my error. The following analysis, or calcula-
tion, will be necessary to discover the defects of it.

In action, every man is to be allowed one foot and a half, dis-
tance, and the flanks of the column are to face outwards; which
flanks, in whatsoever order they are formed, must be always composed of at
least forty files in depth, upon twenty-four ranks in breadth; and thus, when
faced, it consequently takes up sixty feet for its flank front: In marching, it
requires one hundred and twenty, which is double its former distance; be-
cause a man will not be able to move, without kicking his leader, if confined
within the space of eighteen inches: But to march with celerity, he must be
allowed three feet; so that when the front of the column marches first off its
ground, the rear will be obliged to wait till it has gained sixty paces; and
likewise to march the same distance, after the front has halted; as it must
make intervals in the flanks, which will expose them to great danger. This
defect will naturally be increased, in proportion to the number of files which
are added; so that a column, consisting of two hundred and forty, will oc-
cupy, in its standing order, three hundred and sixty feet in length, and, of
course, seven hundred and twenty, marching. After having pierced the ene-
my, its flanks are to face to the right and left outwards, in order to charge
their broken ranks: But as it takes up double its proper allowance of ground,
its files will remain open, and large intervals be left, especially if the charge
is to be made with speed and impetuosity, which ought to be the property
of the column.
COLUMNS, indeed are striking and formidable in appearance, and the idea which at first presents itself; may for a while seduce the judgment, till by trying in execution, they will be convinced of its error. The following analysis, or calculation, will be necessary to discover the defects of it:

In action, every man is to be allowed one foot and a half; and the flanks of the column to face outwards, which flanks, in whatsoever order they are formed, must be always composed of at least forty files in depth, upon twenty-four ranks in breadth; thus, when faced, it consequently takes up sixty feet for its flank front: In marching, it requires one hundred and twenty, which is double its former distance; because a man will not be able to move without kicking his leader, if confined within the space of one foot and a half, but to march with celerity, must be allowed three feet; so that when the front of the column marches first off its ground, the rear will be obliged to wait till it has gained sixty paces; and likewise to march the same distance, after the front has halted; as it must make intervals in the flanks, which will expose them to great danger. This defect will naturally be increased, in proportion to the number of files which are added; so that a column, consisting of two hundred and forty, will occupy in its standing order, three hundred and sixty feet in length, and, of course, seven hundred and twenty, marching. After having pierced the enemy, its flanks are to face to the right and left outwards, in order to charge their broken ranks: But as it takes up double its proper allowance of ground, its files will remain open, and large intervals be left, especially if the charge is to be made with speed and impetuosity, which ought to be the property of the column.

The Chevalier is very much deceived, in imagining it to be a body capable of moving with ease; insomuch, that I do not know any one so unwieldy, particularly when it is formed in the manner just above described. If it happens
pens that the files are once disordered, either by marching, the unevenness of
the ground; or the enemys' cannon, which laft must make dreadful havock
amongst them, it will be impossible to restore them to good order again: Thus
it becomes a huge, inactive mass, divested of all manner of regularity, and
totally involved in confusion. I do not think, notwithstanding what the Che-
valier says, that the weight of it can be of any great consequence; for the
men do not push one another forwards in the manner which he describes,
neither is it possible they should, while they take up three paces distance,
which they are obliged to do in marching.

In retreating, it has the advantage of battalions formed in the square:
Not that it is capable of marching with more celerity, but because every part
moves together: And although it be even pierced by the enemys' cavalry in
pursuit, yet the injury it will thereby sustain, is inconsiderable; for they
must be exposed to a fire behind, and the interval they make, will presently
be closed up.

Two battalions, formed back to back, will answer the same purpose, march-
ing by files, and facing to the right and left outwards, when necessary. This
method of retreating must be performed very slowly; for otherwise the rear
will soon be separated from the main body, by reason of that distance of three
feet, which every man will take up in marching. But to believe that the co-
1olumn is an active and light body, is an error, of which I am thoroughly con-
vinced: Infomuch, that I am even induced to think it a dangerous disposition, when
composed of but twenty-four by sixteen, on account of the difficulty of form-
ing it again, when once broken or disordered. Properly, it should never con-
fist in breadth, of more than two battalions, formed each four deep; which
does not at all confound their natural order.

What I have been saying concerning the room which every man must
necessarily take up, shews the danger of marching by files. If you do it in
the presence of an enemy, in order to fill up any interval, you must inevita-
ably be undone: For your battalion will then occupy double the former quan-
tity of ground, and you will also require double the proper time to form it
again:
again: As, for instance, supposing your battalion to consist of six hundred men with files closed, it will cover two hundred and twenty-five feet, if it is to gain ground to the right, the right-hand men will have marched that distance before the left-hand man has moved: And after the former has halted, the latter will have the same number of feet to march before the battalion can be in its proper order, to face to the front again, which together takes up as much time as would be necessary to march the distance of four hundred and fifty feet, or one hundred and eighty paces. If then the enemy is a hundred paces off, and seizes this opportunity to charge you, he will have the advantage of as much time, before you can be formed, as is required to march eighty paces. The danger of this movement naturally increases, in proportion as you augment the number of troops that are to make it: For if you have four battalions, and the enemy is at the distance of eight hundred paces, you are exposed to as great disadvantage. In this I proceed upon geometrical principles, to which it is necessary to have recourse on many occasions in war.

The tact, or cadence, is the only effectual remedy for those defects, on which the event of all engagements totally depends. It is what I shall speak upon hereafter; and, at the same time, to expose the ignorance of our modern disciplinarians; who, notwithstanding they concur with me in regard to the reality of these errors, remain yet unacquainted with any other method of avoiding them in practice, than by marching slow.

We cannot even bring a single battalion drawn up but four deep to the charge, without being subject to the greatest inconvenience: Unless we march at a snail’s pace, our ranks and files when they approach the enemy are open. This monstrous defect in our discipline, is what gave rise to the present method of firing; for to charge otherwise, it is necessary to move briskly, and together, which cannot be done, allowing only one foot and a half to a man, without the tactic.

It is also impossible, that the Romans and Macedonians, as their manner of forming was in close and deep order, could engage without it. It is a term which
which is very familiarly used, but has hitherto, methinks, been totally misapplied or mistaken.

I have frequently been surprised, that the column is not made use of against the enemy on the march: For it is certain, that a large army always takes up then three or four times more ground than is necessary to form it. If therefore, you get intelligence of the enemy's rout, and the hour at which he is to begin his march, although he is at the distance of six leagues from you, you would have very sufficient time to intercept him: For his front equally arrives in the new camp before his rear has quitted the old. It is impossible to form troops that take up so much more than their proper quantity of ground, without making large intervals, and a dreadful confusion. Notwithstanding which, I have very often seen the enemy suffer it to be done without molestation; when one would have imagined, that nothing less than fascination could have prevented his taking the advantage of an opportunity so favourable to him.

The present subject might furnish a very useful chapter: For how many different countries will occasion such straggling marches? And in how many places may one make an attack without risking any thing? How frequently does it happen to an army to be divided on its march by bad roads, rivers, difficult passes, &c.? And how many situations will enable you to surprise some part of it? How often do opportunities present themselves, of separating it, so as to be able, although inferior, to attack one part with advantage, and at the same time, by the proper disposition of a small number of troops only, prevent its being relieved by the other? But all these circumstances being as various as undetermined, as the situations which produce them, nothing more is required than to keep good intelligence, to acquire a knowledge of the country, and to assume the courage to execute: For as these affairs are never decisive on your side, and may be so in that of the enemy, the risk you run is inconsiderable, when compared with the advantages you may gain. The manner of attack is with the heads of your columns, which are to charge as fast as they arrive, and to be sustained by the others which follow; so that your disposition is made in a manner spontaneously, and
you attack an enemy, without either order or support, and totally unprepared to make any defence.

Much having been said for and against the advantages and disadvantages of the column, I therefore shall conclude that subject, upon the following just remarks, wrote by that excellent Officer, Lord Viscount Townsend.

Of the COLUMN of ATTACK, or PLESION.

This column is formed upon the principle of that of Folard; or rather of the Nouveau Projet du Tactique, who calls it by the name of Plesion: Though it has not quite the proper depth; the strength and disposition of our battalions not permitting it. The French form the column of attack with two battalions; and if the two battalions of the militia of our country were to unite, we should then be able to form a compleat column, or Plesion, having its due proportions and strength.

We must observe here, that the true strength of the column, does not at all consist in its fire, (which can be no more than the common street-firing) but in the violence and impetuosity of its charge; which it is always to make with fixed bayonets, and with the greatest celerity imaginable. We cannot possibly here enter into a disquisition, of all that has been said for and against this method of attack; it would be much too long for this place, and not very intelligible to such of our readers, as are not already conversant in military affairs. We shall only observe, that it seems to have been the favourite system of two no less Generals than Epaminondas, and Gustavus Adolphus; and has been generally attended with victory, those few times that we certainly know of its
its having been practised*: That it seems entirely adapted to the courage, vigour, activity, and bodily strength of the English common people; and particularly calculated for an English militia; as its motions and manoeuvres are extremely simple and easy; not demanding near that exactness, and precision of discipline, which is requisite in all parts of firings; and its success chiefly depends up on the courage and resolution of the men; and the valour and intrepidity of the Officers in leading them on.

* There is no one term in military language, that has been used in more vague and different senses than the word column, and made to signify a greater variety of things. Folard's column, has often been criticized, condemned, and treated with great contempt, in our hearing; by those who had no kind of idea, either of the nature of it, the manner in which it was formed, or the use to which it was to be put; and even some authors that have wrote about military affairs, have shewn themselves no better acquainted with it. Voltaire in his romantic account of the battle of Fontenoy, talks of the formidable colonne, that the English troops formed there; whereas, in fact, it was no original disposition; but produced by necessity, from the ground in the front growing narrow, and obliging the battalions to double behind one another! and had no kind of resemblance to the column of Folard, nor the pletion. The author of the Projet de Tactique, says with great justice and sharpness, "On dit qu'a Fontenoy l'ordre de l'infanterie Anglaise fut un effet du hasard; un effet plutôt du feu des redoutes & du village; au reste, ce n'est pas la faute de Gustave ni de Folard, si l'on a appelé ce cabas une colonne."—It is said, that at Fontenoy the order of the English infantry was the effect of chance; it was rather the effect of the fire of the redouts, and the village, and of the narrowness of the ground: However, it is neither the fault of Gustavus nor of Folard, if people have called that mass of confusion a column.

Somewhat of this nature where the columns in which the French attacked Laufeld, i.e. battalions drawn up in several lines behind one another, but not closed up to make a solid body. For the faults of this kind of disposition, vide. Projet de Tactique, page 217. For this reason, when one meets with the word column in an author, or hears it used in conversation, it is very necessary to be explicit, and ascertain, precisely, what is meant by it.

And we must likewise add, (for the sake of such of our readers, as being a little versed in military affairs, are inclined to look farther into this subject); that the battle of Culloden against the Highland rebels, in 1746, in which they came down in a column, sword in hand, to attack the King's troops, furnishes a very strong argument in favour of the column; though we have heard it cited with equal confidence against it; for if a mob of Highlanders, (and those not well supported by the rest), could put in disorder, and break through, two of the bravest and best regiments of the whole army, (who likewise behaved remarkably well) notwithstanding the great inferiority of the broad sword to the firelock and bayonet; added to their almost total want of discipline: What could it be owing to, but to the irresistible strength of their disposition, and the order they were formed in; and we cannot but think, that every well-wisher to our happy constitution has great reason to bless God, that the Highlanders had not time to acquire discipline; nor the skill to add to their column, what, in the opinion of its greatest advocates, are absolutely essential to it; that is to say, arms of length, such as the bayonet, pike, partisan, or cispontoon.
THE passages of rivers are very dangerous, without great prudence and precaution.

Force is entirely useless when the enemy is on the opposite bank of the river, which you intend to pass; you must therefore have recourse to stratagem. You need but imitate Caesar’s passing the Rhine, Prince Charles’s passage of the same river, or Prince Eugene’s passage over the Po. if large rivers be the object.

These Generals detached part of their army to deceive the enemy, and conceal the place where they really intended to pass. They made preparations for constructing bridges in places where they had no design to pass, whilst their army stole a march, during the night, to some distant part which was not defended by the enemy.

It is common to make choice, for this purpose, of some part of the river where there are small islands, as they greatly contribute to the facility of the operation: It is likewise advisable to pitch upon a spot where you have a wood on the opposite bank, as that will hinder the enemy from attacking you immediately upon your landing.

These attempts require infinite precaution. You must take particular care that your boats, pontoons, &c. are conveyed to the place of rendezvous precisely at the hour appointed; and that each person employed be properly instructed, to avoid the confusion which generally attends nocturnal expeditions. All things being properly disposed, the troops are ordered to pass, and establish themselves on the other side.

N. B. Fifty thousand men may pass a small river or bridge, admitting ten men in front, the ranks at only three feet asunder, and marching the common pace per second, it will take up one hour and forty minutes to perform it in.
THE MILITARY SCIENCE.

In every attempt of this sort, it is necessary that both extremities of your bridge should be covered by an intrenchment properly lined with troops. The islands must likewise be fortified, in order to defend your bridge from any attempt of the enemy. And lastly, never post your troops in such a situation, as will permit the enemy to act on your flank.

If the river is not broad, you will choose a place, if possible, where it makes an elbow, and where the bank rises so as to command the opposite side. You plant as many cannon as the ground will permit. On the other hand, if we have neither cannon, boats, or pontoons, what then is to be done? Having first sounded the ford, two lines of cavalry, mounted, are ranged at a convenient distance, quite across the river, that the infantry, &c. may pass between them. The line above the ford breaks the violence of the stream, and the line below recovers and transports the men carried away by the current. When the river is too deep to be forded by either cavalry or infantry, the water is drawn off, if it runs in a plain, by cutting a great many trenches; but this requires some time. Again, I shall suppose a large detachment is ordered to pass a river of near four feet deep, and that they have no convenience for passing; that the stream runs very strong and rapid, so as to endanger their lives; in such a situation; the whole should link together, and move through the water, stepping as regular together as they possibly can.

In what MANNER to PREVENT PASSING of RIVERS.

NOTHING is more difficult, not to say impossible, than to prevent the enemy from passing a river; especially if the front of attack be too extensive. It is indeed so extremely difficult, that if the part to be defended should extend above 15 or 16 miles, I would not attempt it, unless I had several redouts already thrown up on the banks of the rivers; moreover, there must be no part of it fordable.

But
But suppose things to be thus circumstanced, it will nevertheless require time to make the necessary preparations, which are to be effected in the following manner:

First, you will cause all the vessels which are to be found upon the river, to be collected and brought to the redouts, to prevent them from being of any use to the enemy.

You will reconnoitre the banks of the river, and demolish those parts which seem to offer a passage to the enemy.

You will observe particularly every eminence which may serve to cover the enemy in their passage, and determine your method of attack upon each.

You will cause several spacious avenues to be opened, leading to the banks of the river, so that, upon the appearance of the enemy, you may march in different columns to oppose them.

Having taken these precautions, you will encamp your army near the center of your line of defence, so that you may be nearly at the same distance from each extremity.

You will distribute sixteen small detachments along the banks of the river, commanded by the same number of the most active Officers of light cavalry; eight of which are to be subject to the orders of a General upon the right, and the other eight to those of another General upon the left. These detachments are to watch the motions of the enemy, and to give immediate notice of any attempt to pass. In the day time their sentries will be sufficient to observe the enemy, but during the night, they must send patrols every quarter of an hour along the river, with orders not to return till they distinctly conceive the enemy's design.

The two Generals who command these detachments, as also the Officers who command the redouts, are to repair to the Commander in Chief four times
times a day, and at different hours, as the Commander in Chief will appoint. It is also necessary, for greater dispatch, to have a proper number of light cavalry stationed upon the roads for the use of express. As upon the appearance of the enemy, the presence of the General will be required. Every preparation for his departure should be previously made.

These several dispositions being fixed, he will distribute to each of his Generals, the orders relative to the attack. He will march with all expedition possible. The infantry at the head of each column, because he must suppose the enemy would throw up an intrenchment the moment they had passed the river. He will attack them on the instant of his arrival, without the least hesitation, for his success will depend upon his resolution.

Small rivers are still more difficult to defend. All that can be done in this case is, to render the fords impassable, by throwing trees, harrows with their teeth uppermost, &c. into the water: But in case the opposite bank, by its height, commands the other, all attempts to oppose their passing will be useless.

As too much cannot be said upon the subjects of rivers; I shall beg leave to add to those before recited, part of what Gustavus Adolphus relates upon that element.

Gustavus Adolphus was pleased to find himself arrived within one day's march of the town of Wurtzburg*: Nevertheless, he had a precious work still upon his hands, a point of nicety of the highest importance to him, an adopted favourite idea in one branch of his military system, and that was, to secure to himself the free navigation of rivers, and the Mayne especially, at the present conjunction: For it was a doctrine with him, as war was then circumstanced, (few towns being fortified more than to make a fortnight's resistance.) That the General, who commanded the great rivers, commanded more or less the countries adjacent; possessing himself of the most useful tracts in corn and herbage, enabled to receive provisions from remote territories, and transport his heavy artillery with no considerable difficulty. I observe,

* Wurtzburg, a rich and populous city, lies in a semi-circle, and the river Mayne forms the diameter. The town in point of strength, was no great object.
said he, (and the observations at that time was) that countries are conquered upon the same principles they were first peopled, the method of war and the method of nature, being in these cases the same. Rivers are the great ducts and arteries in the system of the world: On the banks of the rivers stand always, the richest and most populous cities; nor can a general be compelled to fight, when one half of his intrenchments is the best natural fosse in the world, ready made to his hands, namely, a large and deep body of water. Upon this principle therefore, his Majesty (in conjunction with some other reasons assigned, not to mention that he chose to have the Mayne spread between him and Tilly) commanded Bauditsen to pursue a separate route on the banks of the afore-named river, for the space of thirty miles below Wurtsburgh, himself directing the course the same number of miles on the banks of the said river, above the town, (for the Mayne here forms a sort of a horse-shoe) so that about one and the same time, he and his Lieutenant-General made themselves masters of Hasfurt, Gemund, Lohr, Folkach, Kitzing, Oxensurt, Remliagen, and Carlsadt, all places of importance, which commanded the navigation of the Mayne, nor was the taking these precautions unworthy of Guflavus: For Tilly, by this time being joined by Aldringen, Fugger, and the troops of Lorrain, advanced full speed at the head of fifty thousand men, in order to stop or raise the siege of Wurtsburgh. Nevertheless, the King, contented with possessing the bridges and passes, and not displeased with placing so deep a river as the Mayne between himself and his enemy, pursued his journey to Wurtsburgh, without dismay, and having invested the city, and petarded one of his gates before nine in the morning, received a visit from Father Ogleby, Abbot of the Scotch monastery, and a citizen, whom the magistrates had deputed to sign terms of capitulation with him. Of course, hostilities were ordered to cease, and articles were agreed upon without delay.

Of CONVOYS, and of the ATTACK of THEM.

The same motive that ought to oblige a General to practice every resource of art, in order to conduct the convoy in safety, should also induce him to use the same expedients to carry off the enemys' subsistence,
to oblige him to retire, if advanced into the country, into the neighbourhood of some one of his own towns, in order to find subsistence: To carry off the enemies' convoys, and depriving him of the means of subsistence, is in reality, to overcome him without fighting. Vigilance, so necessary for all kinds of operations, become more particularly so for those which may decide the fate of a campaign. Whatever may be the nature of the convoys, the General should never neglect any opportunity of attacking them: If they consist of provision, the most numerous army is in want of that, because its own destruction; if of forage, the taking of that causes the ruin of horses, and renders the cavalry useless. The ammunition necessary for carrying on a war, cannot be transported to an army, nor the artillery conducted to it. Without ammunition, the wisest and bravest Generals cannot have resource: And if destitute of money, the soldier is disheartened, and those very men, whom pay, renders heroes, are converted into so many deserters: The bravest man who, without fear, exposes himself, insensibly to the greatest terrors of war, cannot support even the appearance of a famine.

If the escort of a convoy marches in a mountainous country, the Officer who commands it should have a body of infantry, as his advance guard, another as the rear guard, and a third in the center; for it may happen that he may be attacked in flank, particularly if the enemy, discovering any opening, presents himself in the very road that the convoy keeps: And there should be also troops in all parts, to oppose any attack that may be made.

Cavalry are very useful upon these occasions, and should be employed to attend upon the convoys, when infantry cannot be spared, and they should be divided upon the flanks of the carriages, to see that they all follow close and regular, not permitting one to halt, under pretence of forage or water, left the march be hindered, and the train lengthened: To prevent which, they are not to be overloaded. The van and rear-guards should also be composed of light-cavalry, and the Commanding Officer should also detach small parties on the flanks to reconnoitre, and carefully examine all suspected places, contiguous to the road, march up to the top of every adjacent hill or eminence, and take a view of the country, and to give intelligence of any danger. The Commanding Officer is to post a detachment of his cavalry towards the ene-
my, by way of grand guard, and keep patroes going constantly all night, that in case the enemy should make any disposition to attack him, he may be able to receive timely intelligence of him.

The attack and defence should always be provided against, and the most certain means for succeeding, should be taken before hand. Upon this principle, he who would attack a convoy, ought to be informed of the day it is to set out, and the number of troops with which it is to be escorted. From the knowledge of which he ought to have of the country, he will place his ambuscade out of sight, and search for the enemy's advanced detachments: He will choose such places for the attack as are most favourable for him, and most disadvantageous for the enemy, and should the convoy have a bridge to pass, that will be the most proper place for the attack.

On this occasion, the Commanding Officer should divide his troops in three bodies that are to attack: Two must be placed in ambuscade, on the opposite side of the bridge, and the third remain on its own side. As soon as the Officer of the troops in ambuscade shall see the head of the convoy, he will permit the advanced guard, the body, at the center, and some wagons to pass: Then the two bodies in ambuscade, on the opposite side of the bridge will shew themselves, and charge the troops, one of those of the advanced guard, and the other, those of the center: He will also permit some wagons to follow the troops of the center, so that the passage of the bridge may be embarrassed: The third body, which is on its own side, ought to march in order to attack the rear guard, which cannot have any communication with the advanced guard, and the troops of the center, the passage of the bridge being stopped up with the wagons with which it is covered, and because, also, the advance and rear guard are attacked. It is to be presumed, that these three attacks, made at the same time, by superior force, will have the whole advantage of the action, and the more so, as the troops of the escort being every where employed, cannot send assistance to any particular part. If the two bodies which attacked the advanced guard, and the center should break and put them to flight, there should be troops enough left in pursuit of them, to finish their entire defeat, without any fear of being repulsed; the remainder ought to march to the bridge, and cause
cause the wagons that are upon it to be ranged in order, and march to the rear guard, in order to finish its defeat, if it still continues to make resistance.

It is necessary to mention, that some troops ought to be left at the head, and along the convoy, in order to take care that the horses are not taken off from the wagons, and that none of the soldiers or drivers make use of that method to escape.

If the General has not troops sufficient to be divided into three bodies, the ambuscades on this side the river can no longer take place, but the advanced guard, and the center must be vigorously attacked, the General must observe not to attack till the troops of the center shall have passed; this attack should, if possible, be executed by the infantry, with bayonets, and without fire, and by the dragoons and light cavalry sword in hand. The General should not stay then to make prisoners; but should put to death all those he finds in arms. If the two first detachments are beaten, the General should march with the remainder to the rear-guard, which, not being strong enough to resist a body of troops much more numerous, will undoubtedly make a retreat. As it is the convoy, and not the troops of the escort, that is the principal object, the General should leave only some troops of light infantry to pursue the rear-guard; he should make the wagons file off as fast as possible, and conduct them the nearest way to the camp, or the neighbouring town.

If the action has happened at too great a distance from the army, and wagons cannot be conducted without running the hazard of being attacked, the traces must be cut to pieces, the horses carried away, and the wagons, if time will permit, broke to pieces, in particular the wheels and axle-trees. The light cavalry which have been left in pursuit of the advanced guards of the rear and the center, should not follow them more than one mile, and then ought to return, in order to form together, the rear guard of the convoy that is taken; to which some infantry should be added, especially if it is to pass through a woody country; if it is in a mountainous country, the pursuit of the enemy, as well as the rear guard on the return, ought to be intrusted to the infantry.
A TREATISE ON

OF DETACHMENTS FOR FORMING A CHAIN OF GREEN FORAGE.

An army, unsupplied with corn, and other necessary provisions, will be vanquished without striking a blow.

Those operations, whose object is the subsistence of the troops, requires the greatest precautions: A General can defend himself against an enemy, however superior, but when forage and provisions are wanting, there can be no hope remaining.

It is very difficult to provide a large army with forage; and a General often exposes it to inevitable danger, if he is not thoroughly experienced in this operation, or if he is destitute of that knowledge which at once presents all the wants of an army, and the means of supplying them to his view.

Foraging parties, like convoys, are attended with greater or less degree, according as the country is more or less acceptable, and the forage at a distance or near at hand. This disposition for the chain, in an open country, is different to what it must be in a mountainous one: When forage is within reach of the camp, and the enemy at a distance, fewer troops and attendants are required, because, in case of an attack, there is assistance near at hand; but in proportion as the forage is farther from the camp, and nearer to the enemy, the precautions should be increased, and more troops should be allotted for the chain, which should also sometimes be furnished with cannon.

A General should never forget that maxim, which says, The enemy must always be opposed by troops of the same nature as those with which he makes the attack; if the forage is therefore in an open country, the chain, as it is certain the enemy will be more numerous in cavalry than infantry, should consist chiefly of cavalry, and only have infantry sufficient to occupy such posts as are necessary to be guarded: In a mountainous country, the dispositions will
of cavalry to move easily, the chain should be strongest in infantry. In short, the number and quality of the troops, for the chain, should be regulated, in proportion to the nearest or distance of the enemy; by the extent of ground to be foraged; and by the nature of the country; and as M. Puiséguir observes, before the ground to be foraged is examined, there should be a calculation made of the number of horses to be fed, and of the fertility of the ground that is to be foraged; for if it is a plentiful spot, a less extent will be sufficient: If it is not plentiful, a larger must be taken; but in either case, the chain must be always proportionable.

Before a forage is undertaken, the ground on which it is to be performed, should be always thoroughly known; in order for which, the General should send out in the evening, or on the day before, the Officer who is to command it, with a detachment to survey the situation of the country; the places where he must post his troops of cavalry; the posts which the infantry must occupy; the ground necessary for the foragers; that where the corps of reserve must be posted; and what part, in the front of the chain, to post the lightest cavalry to scour.

After having examined all these particulars, the Officer makes his report to the General, who, from the account given him, will order the troops necessary to secure the forage, and render the execution of it easy. The chain of forage should be in proportion to the number of troops that are to forage, as well as the quantity of sown fields, and thickness of the grain. Besides the cavalry and infantry, there should be light troops, to scour the country in the front of the chain; the number of them is undetermined, as it will be sufficient for them to cover and protect the front, and give the Commanding Officers immediate notice of every thing that makes its appearance.

If the forage is to be made at a distance from the camp, the troops destined for the chain should move at day break, or the evening of the foregoing night, as was done by M. de Coigny in the campaign of 1735. This General being desirous of foraging under the cannon of Mentz, the troops taken from the army to form the chain, one body under the command of the Count de Belleijsc, and the other
other under the command of the Marquis de Dreux, set out after retreat-beating, and at break of day, the chain found itself properly posted. When the distance is not so great, it is sufficient that the troops set out at day break, and the General will have time enough to establish his chain; especially as the ground, and the post necessary to be occupied, have been reconnoitred two days before. The Commanding Officer must take care to establish his chain before the foragers arrive; and also that the hussars have scoured the country first, because the foragers should not, by waiting, fatigue the horses; and secondly, that no trooper or servant shall pass, which will undoubtedly be the case, if there is any vacancy where troops are not placed.

The whole of the troops should be disposed after such a manner, as to be able to see one another; and the Vídets also that are placed between the troops to prevent the foragers from passing, should be within hearing. The infantry should be posted in hollows and villages, and behind hedges and ditches, with cavalry to sustain it, and support the flanks; and the disposition of the chain will be still better, if these troops can be mixed with it, provided the infantry can be sheltered by any hollows, hedges, bushes, &c.

Grenadiers and light infantry, sustained by cavalry and cannon, if there are any, should be posted on those sides which, either from the situation of the country, or the nearest of the enemy, are the most liable to be attacked; but in reinforcing these posts, the Commanding Officer must be very careful not to weaken the chain too much, in any particular part. When an enemy attacks a foraging party, he generally attempts to penetrate at different parts; but if he forms only one attack, the disposition of the chain becomes useless, as all the troops must be brought to that part where the attack is made. But as it is naturally to be supposed, the enemy will form many attacks, particularly if his General acts like a man understanding his business; he must be strong in every part; the reserve, which is in the center, will, with expedition and speed, send assistance to the parts which are attacked.

Before the Commanding Officer fixes his chain, he should detach some light cavalry to survey and scour, with great exactness, the woods, villages, hollows, and all suspected places, for at least three miles in front, as may be capable
capable of containing ambuscades; and during the time of this surveying, the troops destined for the chain will remain in order of battle, in the front of the ground that is to be foraged, in order to cover it, and protect the hussars, in case they should be attacked.

When this examination is finished, the Commanding Officer may begin to establish his chain, and the light cavalry will remain in the front till the foraging is finished; and will detach small bodies to march round about the chain, crossing each other, halting at times, and sending some hussars before them to patrol.

If the light cavalry gain intelligence of the enemy's being either on the march, or placed in ambush, they will send immediate notice of it to the Officer commanding the chain, who should always fix himself in a particular spot, that there may be no time spent in seeking him; his post should be in the rear of that part of the chain that is nearest to, and most in front of the enemy; and he will regulate the dispositions for his defence according to the report made to him. When an ambush is discovered, and the troops marching to attack, a General should always suspect there may be more ambushes, and more troops on the march to form different attacks; he must therefore, instead of weakening the chain in any parts, strengthen it as much as he can, by causing either the whole reserve, or part of it, to march where circumstances shall require.

The avenues and heights, in a mountainous country, should be occupied by infantry; the avenues, in order to prevent the enemy from penetrating into the valley or plain where the forage is made; the heights, in order to observe the enemy at a distance, and to prevent his getting possession of them, and flanking the troops which guard the avenues. In this case, there should be a greater number of infantry than cavalry, no more of the latter being requisite than what is necessary to sustain and support the infantry, in case it should be attacked, repulsed, or obliged to retire through a valley or a plain. Then if it hath no cavalry to support it, the wings will be entirely exposed, and the enemy being superior, can, at the same time, attack the front and flanks; whereas,
whereas, by the means of cavalry, which can act easy in a plain or valley, this inconvenient will be prevented, and the infantry greatly assisted.

If the forage is made at a distance from the camp, and in the neighbourhood of the enemy, the infantry guarding the avenues, should throw up some intrenchments in its front, which will soon be done; and it is then cannon becomes necessary, as there should be two or three planted at each avenue. The heights also must, on every occasion, be occupied, which should be constantly observed as a standing rule, whether the enemy is at a distance or near at hand, in every disposition that is to be executed in a mountainous country.

When the forage is made in an open country, the chain should be more numerous in cavalry than infantry; but some infantry is absolutely necessary to guard villages, hollows, and such other places, as it would be difficult for cavalry to guard. In short, the number of the troops should always be in proportion to the extent of ground to be encompassed, and their species determined by the nature of the country that is to be foraged, and, as it is generally known with what troops the enemy will attack, he must always be opposed by those troops from whom the best defence may be expected; and it would be still better to force him, in some measure, to use troops of the same kind, as those by which he is opposed.

If the enemy forms one or more attacks, the small escorts belonging to each regiment, must join on the first order, and cover the foragers as much as possible, who should at the same time assemble in the center by regiments. The foragers should always be armed.

If it is in a plain, and the enemy having formed but one attack, and charges the chain in one particular part, the troops of cavalry, which are opposite to him, should march up resolutely and sustain his efforts; if they are repulsed, they will be supported by the infantry that hath remained in its post; the light cavalry, which were in front, will unite, and place themselves upon the flanks of the troops which are attacked, in order to cover them, and endeavour to defeat the enemy by charging him in flank and rear. If the General is certain that the whole of the enemy's troops is engaged in this one attack, he may then
then bring up all the troops belonging to the chain, both cavalry and infantry, in order to oblige him to retire the sooner, which if he does, some light cavalry, sustained by horse, or heavy dragoons, should be sent in pursuit of him, till his retreat becomes certain; but with caution not to pursue too far, lest he should rally upon those troops, who, being too far from the chain, cannot receive assistance so soon as would be necessary; and besides, the making and accomplishing the forage being the grand object, the Commanding Officer should be contented with succeeding in that, without seeking for any other advantage, unconnected with the original destination of the troops.

As soon as the enemy has retired, and the Commanding Officer is certain of his retreat, (for he may return with greater force, and with fresh troops) he will re-establish the chain; at the same time neglecting nothing that may contribute to its security. But if the enemy, instead of being forced to retire, should break into the chain, the Commanding Officer who, on the first notice given him that the enemy was marching to attack him, had caused all the foragers to assemble in the center, and to retire in good order, the small escorts forming their rear guard, will then assemble his troops as readily as possible; and oppose them to the enemy, in order to cover the retreat of the foragers; always taking care to regulate his dispositions by the enemy's, and according to the nature of the ground.

If the enemy forms more attacks than one, the foragers who, as hath been already observed, must be assembled in the center, should have orders to take the road of the camp, and will re-enter it covered by the small escorts who form the rear guard; but as a forage should never be abandoned till the last extremity, they should be drawn up in order of battle, when they are within a mile of the camp, in order to return and compleat the forage upon the first order. But if the enemy is in force, and by his superiority, all hope of continuing the forage is destroyed; or if it is made at so great a distance from the camp, that the troops belonging to the chain cannot expect to be readily assisted, the Commanding Officer ought to order a retreat, with every disposition a good Officer is capable of, and to join courage and vigilance with knowledge and experience.
If, on the contrary, the enemy is weaker, or of equal force with the chain, he should be charged without hesitation; because the enemy, regulating his attack by his defence, will be obliged to contract himself, in order to make his attack heavier and more considerable, so that the troops being united, will charge the enemy; and if, by the assistance of the light cavalry who are advanced, and act after the manner already mentioned, the enemy is forced to retire, he must be pursued in the manner above directed; after which the troops must return and compleat the forage.

As a Commanding Officer is, in case of a forced retreat after being beat, obliged to submit to circumstances, and regulate his dispositions by the enemy's; he must retire with the greatest order possible, causing the infantry to march in the center, either in columns or in order of battle, as the situation of the ground and country will best allow; the cavalry upon the wings, the light cavalry upon the flanks, that they may not confuse the dispositions, but serve as a support for the chain, and prevent its being taken in flank; and the disposition of the troops should be so conducted, that the enemy shall not be able to present a larger front than that which is opposed to him; and although it is impossible for a General to foresee, for certain, what will be the dispositions for an attack and a retreat, because they must be changed according as those of the enemy alter, or as the manner of the ground varies; they should nevertheless be so ordered, that each body shall be supported, and capable of acting without disorder. It is only on occasions thus pressing, that the Commanding Officer should suffer the forage to be abandoned; and even then, it will be some satisfaction to the Commanding Officer, that he hath been able to place the foragers and their horses in a state of security.

If, during the retreat of the chain, it should receive assistance from the army, it should charge the enemy, notwithstanding it may be too late to go on with the foraging; and if this charge should prove successful, in either beating or causing the enemy to retire, he should be pursued without intermission, in order to deprive him of all desire for repeating the attack. In order to improve this advantage to the utmost, it seems probable, that the Commanding Officer should leave a large detachment, consisting of infantry, cavalry, and light
light cavalry to continue all night upon the spot, and the next morning be-
times, the foragers, properly escorted, will come to take away the forage;
and as soon as the escort is arrived in the front of the chain, the detachment
which hath remained there all night, must return to the camp.

There still remains many other precautions to be taken for the security of
foraging parties; if the nearness of the enemy renders the execution of them
very difficult, a greater number of troops should be employed to form a chain.
Forages, thus considerable, should not be often repeated, because the army
must necessarily be fatigued, by the number of troops absolutely necessary to
form the chain, and the great distance will harass the horses, particularly on
their return, as they will then be heavily loaded.

These forages are not usual, except in cases where the General is willing to
spare the forage in the neighbourhood of his camp, that he may, in the end,
be provided nearer home; as a General cannot be certain how long he shall re-
main in the same camp. M. de Montecuculi, in this state of uncertainty, al-
ways advises foraging at a distance, and so by degrees to come nearer and
nearer home; because in proportion to the œconomy used with regard to forage,
an army is enabled to remain longer in the same camp, and the troops less under
a necessity of making fatiguing and fruitless movements. By foraging at a
distance, the enemy is deprived of the means of subsisting, and is often obliged
to quit an advantageous situation, in order to supply his necessities elsewhere.

Care must also be taken, that the foragers, in entering the ground they
are to encompass, do not occupy more than is absolutely requisite, and that
they do not spoil more grain than they carry away with them; first, because
by extending the chain it would be weakened, and become easier to be forced;
and in the second place, every prudent Officer should be an œconomist in the
article of forage: The Officers commanding the small escorts, which march at
the head of each regiment, should be charged with the care of this. These Of-
ficers will cause their troops to march, as much as possible, through roads and
over grounds which are untilled, till they arrive at the place intended to be fo-
raged. If all the grounds are sown, the Commanding Officer must order the

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cavalry to dismount at the place where the chain halts, and part of the men of
the cavalry furnished with scythes must go and cut the grain, while the remain-
der holds the horses; and when there shall be no farther room to fear damaging
the forage, the cavalry will remount and take it up. Each place should be
marked out for a regiment or brigade, which distribution should be made by the
Staff Officer before the troops arrive.

The General commanding the chain, should not assemble his troops till
such time as all the foragers are gone off the ground; but nevertheless, in pro-
portion as they retire, he may contract the chain, in order to give himself
greater strength: The Officers commanding the small escorts, are not to de-
part without leave of the General, nor till the regiment they belong to have
compleated its forage; then they will form the rear-guard, and on their arrival
in the camp, go and make a report of the forage to the Brigadier General, and
then to his own Commanding Officer.

As soon as all the foragers are gone, the General commanding the chain will
assemble all the troops of it, form a rear guard, and cause the remainder to
march with as large a front as possible; the rear-guard to the whole will be
composed of some light cavalry, and will keep at such a distance as not to em-
barass the rear-guard in case it should be attacked briskly and repulsed;
the remainder of the light cavalry will be placed on the flanks of the rear guard,
which must be composed of infantry, horse, or dragoons; these light
cavalry, which form the rear-guard of the whole, should have orders to
retire, in case they are attacked, to those upon the flanks of the rear-guard, and
not to the infantry that forms it. By this disposition, if the General should
be attacked in his retreat, the troops will be able to perform all the necessary
evolutions, and to sustain each other, without the order of march being
destroyed.

Of
Of detachments for forming a chain of dry forage.

To distress the enemy more by famine than the sword, is a mark of consummate skill.

If there is great exactness and knowledge required in conducting of parties of green forage, those for dry, perhaps require more; and, in general, every thing that regards foraging parties, whether green or dry, excites a particular attention in the Commander in Chief; and, according to the Chevalier Folard, all success in war depends on secrecy, diligence, activity, and a thorough knowledge of the country.

The dispositions for forming a chain of dry forage, which differ from those of forming one of green, will direct the means for extending the chain in proportion to its strength, and at the same place the foragers in security; although in parties of dry forage, the foragers generally take up less ground, according to the distance of the villages, that are to be foraged, from each other.

The dispositions for a chain of dry forage, are also varied according to the nature of the country; but whether it be open or mountainous, each different body should be placed in that part where it can act with the greatest facility. The infantry therefore should occupy the villages, and the cavalry the plain in front, and should be disposed after such a manner, as to be able to retire easily to the protection of the infantry. Before the foraging is put in execution, the Commander in Chief should mark out the villages to the General Officer who is to command the foraging party, and regulate their number by the quantity of troops who are to forage. The first dispositions will be the same with those mentioned in the foregoing chapter, in relation to green forage; therefore the General who is to command the forage, ought to march out with the detachment in order to examine the ground; the posts necessary to be occupied; the villages which are to be foraged; their situation; the rivers which cover or run through them; the bridges to be guarded; the distance from one village to another;
another; and with what degree of ease the communication with them may be secured.

After having thoroughly examined into these particulars, he can with ease form a judgment of the number of troops that will be necessary to form the chain and secure the foragers; after having done this, he will order the Bailiff or Burgher-Master of every village to come to him, and enquire of them the number of husbandmen, and how many ploughs each husbandman hath belonging to him, by which he will be able to calculate the number of sheafs reaped by each husbandman.

The General may, for every plough, reckon about thirty acres of ground, and, in proportion to the fertility of the ground, every acre will produce from ten to fourteen dozen sheafs; by this method, may be computed the number of sheafs reaped by an husbandman who hath three or four ploughs; and from this calculation, the General will judge whether the number of sheafs supposed to be in a village, will be sufficient for the troops coming to them.

Let every acre of ground be supposed to yield twelve dozen sheafs; then a husbandman who hath three ploughs, will have reaped twelve thousand nine hundred and sixty sheafs; so by reckoning twelve sheafs to a truss, and every truss to weigh six hundred pounds weight, this husbandman will supply sufficient for one hundred and twenty-four trusses; it is true, that some deduction should be made from the number of trusses that every acre may yield, as the husbandman or farmer may have preserved or consumed some, either for daily use or for seed.

It is very necessary the General should take care to leave sufficient grain, not only to enable the husbandman to live, but also to sow his ground; particularly if he foresees a probability of the next campaign being carried on in the same country.

Nevertheless, as this manner of reckoning may be attended with inconvenience, because there are some villages which keep up a particular trade of forage and grain, and therefore the granaries and barns may sometimes be empty,
empty, yet the quantity of sheafs and grain, remaining in the village, may be
calculated by the number of inhabitants to be subsisted. M. de Puységur's
method, which consists in informing himself of the number of horned cattle
and horses, and by deducting the time they graze, is a very good one; but
yet there must be some deficiency in the calculation, as it will be impossible to
fix, with certainty, the time of their grazing.

When the General shall have arrived at a tolerable certainty of the quantity
of forage; the ground where to establish his chain; the posts which the infan-
try are to occupy; and taking a note of the quantity of forage; he will carry
away one or two of the Bailiffs or Burgher-Masters as hostages for the security of
the forage; he will also direct them to inform the inhabitants, that if they
conceal or purloin but even a single sheaf from the whole, he will order the
village to be pillaged, and afterwards set on fire; so that the Peasants, on
whom these threats has often great effect, will scarcely give the enemy infor-
mation of the intended forage. The General must leave some companies of
light infantry, sustained by a detachment of light cavalry in every village, who,
by constantly patrolling on the out-skirts, will stop the comers and goers, while
the light infantry will keep up a strict guard on the inside of the village, and
permit no person to go out of it; nor suffer the bells to be rung, colours to be
hoisted upon the steeple, or fires to be lighted; and will put a stop to every
thing that may be supposed to be a signal agreed on with the enemy. When
the General hath compleated all these dispositions, he will return, and give an
account of them to the Commander in Chief.

The same General shall, upon the day and hour appointed for the forage,
begin his march, with the troops destined for the chain, and the Staff-Officers.
As soon as he shall be got within sight of the villages, he will not fail to have them
examined, notwithstanding he left troops in them the foregoing evening. When
they are all examined, he will leave them in the rear, march on into the
front, and draw up in order of battle; after that he will form the chain, regul-
ating the dispositions of it by the situation of the ground, and of the villages
examined over night. The light cavalry will advance one mile, in order to
scour the country; during which time the Staff Officers, instructed by the Ge-
neral, of the quantity of sheafs contained in each village, will, attended by the
Bailiffs
Bailiffs and Burgher-Masters, make a distribution of the forage by regiment or brigade, and assign a barn to each, or one to two. When this distribution is made, the Staff Officers will make a report of it to the General commanding the party.

In forming of the chain, the infantry must occupy the villages, hollows, hedges, &c. which may be found in the circumference of the chain, and the heavy cavalry will be left in the plain, in the front of the villages, but within reach of being assisted and supported by the infantry; and care should be taken to have a reserve of such troops, as can, with the greatest ease, transport themselves to those parts where assistance is needful; this reserve should be placed in the center, or nearest to the part that is most exposed, or most liable to be attacked.

As all the villages marked out to be foraged, are not in the same line, those which are in the rear, and covered by others in which there is infantry, and by the chain of heavy cavalry in the front, require but a small number of troops; and if a detachment of infantry is posted in them, it is more with a view of preventing the men and servants from marauding, than anything else.

The escort belonging to each regiment, commanded by a Captain, should remain upon the spot where the regiments forage, and with the assistance of the infantry, prevent disorder among the foragers, and fend off those who are loaded. As soon as a regiment is marched off, the Captain commanding the escort, must report it to the General Officer commanding the forage; after which he will follow, and form the rear-guard of it.

As soon as the General shall be apprized of the Staff Officers, and the Captains commanding the small escorts, that a village is evacuated, he may contract his chain, and draw it nearer together, till the foragers are gone; which when they are, he will assemble his troops, and detach as many sub-divisions of infantry as there are villages, or rather the light infantry posted in each village during the forage, should leave a party to make a strict search after all stragglers and marauders; the first they should keep with them, and make the
the MILITARY SCIENCE.

the others prisoners, and punish them severely on their return to camp. When all the different bodies shall be re-assembled, and all the Officers commanding them, have made their report, the General will order the light cavalry to be called in, and form a rear-guard according to the manner directed in the foregoing, and return to the camp in the same order, and with the same dispositions, as if he expected to be attacked.

There still remains another disposition that will be well executed with greater expedition, and prove more secure for dry forage; that is, to observe exactly the same precautions which have already been mentioned, with regard to the detachments setting out the evening or two before-hand, in order to get information of the quantity of forage, of the nature of the ground for the disposition of the chain, and the enemy's distance.

If the forage is to be performed at a distance from the camp, the General commanding it, should set out in the evening at retreat-beating, with the troops destined for the chain, the Staff Officers and the Majors and Adjutants belonging to the regiments which are to forage; but if the forage is to be performed near the camp, it will be sufficient for them to set out at day break, and the Commanding Officer should always take care never to advance up quite to the villages, till they have been examined, notwithstanding troops have been left in them the preceding evening; these precautions are always necessary, and can never prove useless. As to what remains to be done, after the same precautions which have been directed for the first manner of foraging, must be observed.

These first dispositions being made, the General, from the knowledge he hath acquired the evening before, of the quantity of forage contained in each village, will allot one to one or two brigades, or in proportion: He will next send the Staff Officers, with the Majors or Adjutants to every village, and order them to make the Peasants take the forage out of the barns, and lay them in one or more heaps on the outside of the village, not in front, but in the rear of it, in order for the greater security; and every heap will be for a brigade. If the villages are so near each other, as to admit of the heaps of forage being placed together in the same field, the dispositions will certainly become
become better, because the chain being more united, and taking up less ground, will undoubtedly become stronger, and that with fewer troops. But if the nature of the ground will not allow of this, the second method is, in appearance, the best; that is, to cause the forage to be placed in as many heaps, on the outside of the villages, as there are brigades; taking care, as in the first disposition, to have the hedges, hollows, avenues, &c. occupied by the light infantry, while the heavy cavalry remains posted in the plains; the forage will be sooner completed, confusion avoided, and all marauding prevented; and if any information should be received of the enemy, the foragers can assemble with greater ease than if they were distributed in the villages. All the horsemen and servants should have express orders not to enter the villages under pain of being treated as marauders, and the General should be very strict in punishing all those who break through this order. Which ever method the General makes use of, whether that of leaving the forage in the barns, or that of placing it in heaps on the outside of the villages, it is necessary the dispositions should be made before the foragers arrive; and great care should be taken not to make them wait, which fatigues the horses more than the burden they carry, although it is six or seven hundred pounds weight, the horsemen included.

If this forage is made in a mountainous country, the dispositions should be changed; the villages of mountainous countries are either in the avenues, at the entrance into valleys, or very much enclosed in them, or bordering upon the mountains.

There are some mountains where villages are more frequent than in many plains, but in others they are scarce to be met with, and are more dispersed; therefore, in the first case, the extent of the forage will be less, but in the last, it will be increased; but in either of these situations, a great number of infantry is required, because, besides its taking possession of the villages which are to be foraged, it must also occupy the avenues leading to them, and the heights and roads in the front, which may be in these avenues. Among mountains, it is unnecessary to have any cavalry in the chain, unless there should be some plain where it can act, and support the infantry, supposing it should be repulsed by the enemy. None of these precautions above-mentioned should be neglected;
neglected; and if the General can pursue the method the last proposed, and, by means of waggons, transport the forage of many villages into a valley or small plain, and then divide it into as many heaps as there are brigades; there should not, at most, be more than three hours taken up in the performance of it, and then it will be unnecessary to leave troops in the villages which are in the avenues, and already foraged; and it will be sufficient to place infantry in the entrance of the avenues, which may be in a plain, and on the heights by which it is over-looked.

When the foragers are gone, the General commanding the chain will assemble the troops, and march towards the camp in good order, as hath been already mentioned, with regard to foraging in an open country. It is impossible to repeat too often, that an Officer, intrusted with a command of any kind whatever, whether a convoy, a forage, a detachment, or any thing of the like nature, should never depend upon the enemy's distance, but always be equally upon his guard, as if he was in expectation of being attacked, that being the method for him to succeed, and to be but seldom disappointed in his designs. It is the General's exactness and quickness in judging of, and seizing on opportunities, in foreseeing them, bringing them about, and profiting by circumstances, that shews his superior genius, and firmly establishes his reputation; it is both the dependance and the life of the troops, and the best lesson for those Officers who aspire to glory, and are desirous of attaining to the knowledge of their profession.

Of the ATTACK of GREEN and DRY FORAGE.

Next to the convoys, the foragers become most necessary for the subsistence of an army, as it is by them the cavalry is supported; and a General can contrive to deprive the enemy of them, or to molest him in the making of them, his cavalry will soon be without resource, his infantry without baggage, and his artillery without the means of being convoyed. An army

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army, however numerous, reduced to this extremity, is necessarily obliged to
keep upon the defensive, however inferior in number of troops the army opposed
to it may be, its movements will tend only to find subsistence, and all its designs
will be by that means destroyed. A General who is so vigilant as to seize on
such-like opportunities, will fight more securely, and, instead of continuing
upon the defensive, he will find himself in a capacity of acting offensively.

An army does not fight every day, but it has daily occasion for provision
and forage. When, in the campaign of 1743, M. Noailles, by marches as
skilfully planned as prudently executed, knew so well how to shut up the ene-
my near Alsbabenbourg, on the Mayne, by posseffing himself of Worts and Mil-
tenbourg, upon the higher Mayne, and of Seliguinstat and of Sibenheim upon the
lower part of the river, made incursions up the Hanau, and carried off all that
could come from that town to the enemy, so that they were obliged to de-
camp for want of bread and forage: That campaign would have been worthy
a Turreine, and would undoubtedly have given peace to Europe, if the known
valor of the French, which that day got the better of their prudence, had not
extricated the enemy from their distressful situation; but not, without great
lofs, and with so eager a desire to get out of their embarrasment, that
they left their dead and wounded behind them, with which Seliguinstat was
filled next day.

With regard to green forage, it is necessary the General should be informed
of the time and place where it is to be made, and if possible, of the number
of troops which are to forage. In consequence of this knowledge, he will
calculate the extent of ground they will take up, and also the number of troops
necessary for forming the chain: From this judgment, and upon this exami-
nation, he must make a detachment sufficiently strong, to attack the chain in
many parts, and should also be sure, by the number of attacks made in diffe-
rent parts, of penetrating on one side or the other.

A General should, on this occasion, make use of ambuscades; it is a
very useful and also secure method of acting, when well performed. War, in
the field, is almost entirely founded upon ambuscades; the great point consists
in knowing how to place them advantageously; but it is unnecessary to en-
large
large upon this subject here, as I shall fully treat upon ambuscades in the course of the Work.

If the forage is made in an open country, the detachment destined to attack it, should be composed of infantry, light cavalry, or hussars; the infantry should not appear, but ought to remain in ambush in some hollows, behind some hedges, and other favourable places; and it should be careful not to shew its arms, because by the glittering of the steel, they may be discovered. The cavalry should be divided into two bodies, at about three miles one from the other, taking care to be able to join in case of necessity. They should be distributed about in many small detachments, to the right, the left, and in the center of the two bodies of cavalry; upon one of the flanks, there should be a more numerous body placed in ambush, at a greater distance than the small detachments. Every one of these small detachments should have a trumpet with them; and when the chain is formed, and the foragers spread over the plain, a part of these detachments should leave the ambuscades, making a great noise, and attack those belonging to the enemy, which are advanced; and these detachments will charge them with so much the more vigour, as they will be sustained by the large body in ambush behind them, and which should march to sustain them, and attract the attention of the Officer commanding the escort. It may happen, that this first attack, made on one side only, may induce the enemy to unfurnish the chain in some place, by which it will consequently be weakened; that is the time for the other detachments of light cavalry or hussars to advance, followed by one of the bodies of cavalry, in order to attack the part that has been unfurnished. If the enemy, more prudent, does not weaken the chain in any particular part; which is every way strong, but contents himself with making the reserve march to the assistance of the troops which have been attacked, the second attack ought always to take place; but in order to employ the enemy everywhere, the second body of cavalry should march and attack the center. This attack ought to be made with great briskness, sword in hand, whether the enterprise succeeds or not: If it succeeds, a great advantage may be drawn from the rout of the chain; and by pursuing the troops of the chain, with the body of the cavalry, and part of the light cavalry or hussars, the other part should fall upon the foragers, where they will, without doubt, find but little resistance: If the attack does not
A TREATISE ON

not succeed, and that by the good disposition of the troops of the chain, the detachment has not been able to force it, it should retire to the infantry that has remained behind in ambushade; this infantry will facilitate the retreat of the cavalry. But suppose the enemy, too eager, is carried away by this first success, a great advantage may be derived from his imprudence, by attacking him resolutely. The whole strength, and each body being united, it is to be imagined, and even hoped, that the advantage will turn on the side of those troops which were repulsed but a moment before; and the more so, as the General commanding the chain, can have only pursued with the body of cavalry. The light cavalry and hussars, because his infantry will have remained in his posts which is occupied, either to guard them, or to sustain the body of cavalry, supposing they should be repulsed.

If forage is made in a mountainous country, the infantry must act alone, the cavalry being only necessary, in case it can have any ground on which to act and sustain the infantry, in case it is repulsed: The infantry should attack the avenues and the heights, and possess itself, as much as possible, of those which have the greatest command, and make the attack in many places, as in an open country. These different attacks render the enemy undetermined with regard to his dispositions; he does not know where to send assistance; the uncertainty of the General becomes visible to every Officer, and soon communicates itself to all the troops; from thence proceeds their confusion, and consequently their defeat.

When the enemy is beaten and driven off, the detachments should pursue him far enough to prevent his returning to finish his forage; taking care not to go too near his camp, from whence there may come assistance, because the alarm will have been undoubtedly carried there by the foragers who may have escaped.

The prisoners and horses that have been taken, should be sent off first with an escort; the rest of the troops will retire immediately after, by the shortest road. It is cruelty, beyond expression, to abandon the wounded, whether friends or enemies; and as the detachment has undoubtedly found, within the circumference of the chain, some waggons with horses to them, they should be made...
made use of to carry off the wounded, who should also be sent on before; if there are no waggons, the detachments must take them from the neighbouring towns.

War and compassion are said to be inconsistent with each other; this old tradition was applicable to the barbarous ferocity of the Goths and Vandals. The French, and their neighbours, partakers of their valour, have restored the laws of humanity; they fight for glory, and having by turns conquered with the British arms, they have followed their example, by setting forth an assisting hand to a fallen enemy.

The attack of a dry forage is conducted nearly in the same manner, as that of a green one, but it is often necessary to employ a greater number of troops, because, as the forage is made in villages, it is almost a certainty they will all be guarded by infantry, sustained by cavalry; whereas, the chain of green forage is formed with a much greater number of cavalry than infantry, unless it should be in a country where cavalry cannot act.

It is difficult to force the village where infantry is sustained by cavalry, whereas, it is easier for cavalry to attack each other in a plain, where the contest is immediately determined; but it is not so soon decided, when entrenched infantry is attacked by infantry; but whatever resistance a Commander may find, he should always attempt to force it. As the principal object is to prevent the forage, it is obtained by attacking the chain briskly, and in all parts, because it is certain, that the General commanding the forage will cause the foragers to assemble; or else, seeing the chain attacked, without waiting for an order, they will, of their own accord, dismiss and fly towards the camp; but whether they assemble, whether they retire in order, or shift for themselves, the end is answered, and the forage is left unperformed. If by their flight, the Commander cannot hope to make any prisoners, he must keep the troops of the chain at bay such a length of time, as to make it impossible to continue the forage for the day: He should even if possible, endeavour to force them to retire; which if they do, he should pursue them long enough to be certain of their retreat, and then collect all the waggons, from the neighbouring villages, cause them to be loaded with the forage intended.
tended for the enemys' army, and conducted to the camp: If they do not retire, the Commander must remain in sight of them during the night, and send to camp to demand a reinforcement of troops, in order to oblige the enemy to retire. For the same reason that a forage should not be abandoned till the last extremity, the troops that would prevent the enemy from making it, should be absolutely bent upon it at the same time, without exposing themselves to the danger of being beat by any assistance that may come from the camp, to the troops belonging to the chain.

There are some exigencies in war, where a General must not be sparing of large detachments. In attacks, which are made by the day, it is more prudent and necessary to be in force, than in those which are made up by night; in the night, an inferior detachment may beat one that is superior, if it surprizes it, and attacks first; whereas, in the day, the enemy can see the strength of the troops attacking him, and make his disposition either for a defence or for a retreat.

When detachments are only intended to reconnoitre, the smallest are best; when it is for a surprize of a quarter, or an ambuscade, it is needless to have them stronger, all that is necessary, is to surprize and attack briskly; but when it is to cut off the enemys' provision, or deprive him of his subsistence, they cannot be made too strong; there is nevertheless a medium to be preserved, which is the General's business to know how to keep: If the detachments are too weak, it is impossible they should succeed; they cannot be prejudicial to the enemy, the troops are fatigued to no end, and are sacrificed to no purpose. If they are too strong, the matter of success is not at all doubtful; but at the conclusion of the campaign, the troops are as much fatigued as the army which they have deprived of subsistence; There is then the same inconvenience attends them, when they are either too strong or too weak; it is true that, in the last case, the troops, not succeeding in any enterprize, will be disheartened, and attribute the fault to those who command; from thence confidence is at an end; and if a soldier fails in point of respect to his Commanders, discipline is at an end; subornation no longer the same; and the best concerted enterprizes, be rendered vain and fruitless.

Troops
Troops who have no courage, are not contented with merely being beat; they droop, if their courage is not quickened by some light victory. The loss of a battle is often less fatal than frequent unsuccessful attacks; after a check, their courage is roused to make new trials, and get the better; it makes an obstinate stand even against misfortune, and an unhoped-for success is often produced from their defeat; whereas, by useless attempts, their hope is destroyed, and their courage become enervated.

M. de Turrenne, who, by repeated successes, had gained the intire confidence of the soldier, was as much indebted for his triumphs, to the love the soldiers had for him, and the estimation in which they held his talents, as he was to his own genius; and he succeeded better with twenty or twenty-five thousand men, than the conqueror's Generals did with fifty thousand.

What a treasure for a state is such a General? Besides his knowing how to keep the enemy in bounds with few men, and accomplish his designs, he also supplies the King with brave soldiers, and excellent officers. How many great men have been produced from the school of such a master? It is an happiness both to the Country, and to the King, to be possessed of such a subject, who knows how to unite in himself the talents of an hero, and the virtues of a citizen.

Of SPIES and GUIDES.

When an enemy's spy lurks in the camp, order all your soldiers, in the day-time, to their tents, and he will instantly be apprehended.

It is impossible for a General, or even for any Officer, charged with the command of a detachment, to act with certainty, if they have not spies or secret intelligence dispersed about in the enemy's army; they will have the morti-
mortification to see all their designs miscarry, and all their precautions will become useless, because they will be improperly taken.

Strada Turrenne and Vauban strongly recommended having them, whatever expence they may occasion: Vauban also adds, that a General had better be in want of many particulars, however necessary, than be destitute of spies. Nothing, says M. de Puysegur, should be spared to procure them, and even the promises made to them should be observed with the most inviolable integrity.

M. de Feuquieres observes, that spies are of many sorts; they are to be found in the cabinet of Princes; in the closets of Ministers; among Officers in the army; and in the councils of Generals: In towns belonging to the enemy, and in monasteries; some offer themselves, others are formed by the Generals, or by the Ministers; but the desire of gain is what chiefly encourages, and tempts them to undertake the business.

Besides the spies of the cabinet, there are again others who make it their business to go from one camp to another, and give an account of all the enemies' transactions, and particularly that they are not known to any General Officer, they should always be spoke to alone, and never be suffered to meet each other.

The General should study their character, and prove them by repeated trials; he should send them by degrees, beginning with things not difficult to be explained, and which, if discovered, will not be of great consequence; he should engage them in long conversations, thereby to form a judgment of their abilities and comprehension: And he should also employ them often in bringing intelligence.

Although a General should always be upon his guard with a spy whom he hath cause to suspect of treachery, he may nevertheless draw great advantages from him, provided he knows how to deceive him properly, because he may be very certain he will inform the enemy of all their consultation and resolutions that have been taken.
The Emperor Leo, in his Tactic, advises as a General, who has reason to imagine his counsels betrayed to the enemy, to conceal his real designs, by speaking in a manner quite opposite to them; for, says he, in the maxims at the end of his book, an enemy must be deceived, who receives intelligence from spies or deserters directly contrary to what is actually resolved upon: And should not the enemy give credit to their reports, he will of course neglect their intelligence, and then the General may take his precautions accordingly: But should the enemy repose confidence in them, he will be deceived, and consequently fall into the snare laid for him. But, adds he, should these spies be entrusted with the General’s real intention, he should, by some alteration in his operations, endeavour to persuade the enemy they have deceived him; upon which he will grow mistrustful of them, and be obliged to look out for others, no longer daring to confide in the former.

The spies should be taken out of the country in which the war is carried on, selecting only those who are honest, active, and intelligent, and are to consist of various ranks or orders; some to associate with the soldiers; others to follow the army under the disguise of Pedlars; but it is necessary, that all of them should be admitted to the knowledge of some one belonging to the first order of their fraternity, from whom they occasionally receive anything that is to be conveyed to the General who pays them. This charge must be committed to one who is both faithful and ingenious; obliging him to render an account of himself every day, if it can be done with safety, and to guard as much as possible his being corrupted.

Montecuculli, in his Memoirs, collects together, in a few words, the rules which I have laid down. Spies are engaged and kept, says he, by force of money, but often they are false; it is therefore proper for a General to make sure of them, for good ones are cheap at any price. The best pledges of safety, upon such occasions, are oaths; wives and children given as hostages; and, above all, the former life of the persons whom you are inclined to trust. If these are employed to betray and ruin us, the reproach must fall upon the authors of the treachery, and not upon those who are deceived. The first step therefore should be, to gain assurances of such a kind, that those with whom we treat, may be compelled by them to observe their faith. But
as these are not always to be obtained, the next course is to take every measure with such prudence, that if we fall afterwards into misfortunes, it may not be imputed to us as a fault.

If the spies purpose any enterprize, it must neither be known to the others, nor even should they be able to guess amongst themselves at the time of executing it: Prisoners, musicians, trumpeters, drummers, deserters, as well from the enemy's army as his own; peasants, couriers, soldiers in disguise, and messengers, may all be employed as spies.

There will never be any want of people; but in order to engage their fidelity, they must be well and most punctually paid.

The Guides, being well chosen, are also of great advantage to an army, because the army will then be well conducted by them; but if ill chosen, they are known to give fatigue, by misleading the columns they are to guide, and instead of going ten miles, you will go fifteen or twenty. We therefore cannot bestow too much attention in the procuring good ones; they serve as eyes to the head, and are equally as essential to the Commander.

As to spies and guides, it is a subject which depends upon the whole; in a detail of a great variety of circumstances, from which a General, by his prudence and intrigues, will be able to reap great advantages.

All guards and sentinels should have a counter-sign even for the reliefs by the corporals; also all sentinels upon out-posts and advanced pickets, should always have a counter-sign given them. A counter-sign should not be a clap or two on the pouch, or any sign that may be discovered easily by the
the ear of an enemy, who may be pretty near, and yet concealed by the darkness of the night. It should, therefore, be some town or name, which the centinel may be able to hear, without either danger of discovery, or suffering the person who gives it him, to come within reach of his arms.

Besides the security of the camp, any persons sent out by a Commander in Chief, may have the counter-sign given to him for some days, by which he will be admitted quicker and easier, and without being obliged to make himself known to so many people as he must, if he came in the day-time; and it is of no more consequence, in case an enemy should discover it, than if they did any other counter-sign; for if any more than two persons should present themselves to an out-post, all centinels are to stop them, call out to the guard, who are to examine them as rounds, and make them prisoners if they have not the whole parole, as well as the counter-sign. All persons, by the day or night, who come from towards the enemy, are to be examined by the Officer of the guard. The centinels of all out-posts, or advanced pickets near the enemy, should be posted double in the night, and relieve every hour; and between each relief, the Commanding Officer should send a subaltern to go the rounds, or a sergeant to parole; and if any centinel is missing upon an out-post, or advanced picket, the Officer commanding, is immediately to change the counter-sign with all his centinels, and order them to call to the guard, to examine any person who offers the counter-sign which has been changed; the Officer should also send notice of it to any posts, or persons with whom he has any communication.

This part of military discipline, very important abroad for the safety of all out-posts, might be made familiar to British soldiers, by accustoming them to a counter-sign wherever a guard is mounted, be it ever so small, and not permitting a corporal to relieve without it; and it would prove of greater advantage still, if such paroles were given, as are and must be used when joined with foreign troops. This, besides the use aforementioned in time of war abroad, would accustom both Officers and men to write and pronounce foreign paroles in a just manner.
A TREATISE ON

OF AMBUSCADES.

A GENERAL who loses a battle, may attribute his ill luck to fortune, although these kind of events are generally the effects of art and skill; but he who suffers himself to be surprized, and who falls into the snare laid for him by the enemy, has no excuse to make, because, by his vigilance, and the goodness of his spies, he might have avoided them.

A GENERAL should endeavour to form as many ambuscades as possible, so that, if the enemy should not fall into one, he may not escape the others; they ought to be disposed after such a manner, that one can neither attack or be attacked without being heard, sustained, and assisted by others; this junction is a stratagem which the enemy could not expect, and which will ensure victory.

An active and vigilant General, oftener employs stratagems than open force in war; and, by multiplying small advantages, procures, at length, decisive ones. Ambuscades are the surest means of procuring these small successes. They are of two kinds; great and small. It is very seldom the first kind can be practised against an able, cautious General: They may even be extremely dangerous, if discovered by the enemy; and therefore, though we speak of the manner of employing them successfully, we insist less on the necessity of them than of small ambuscades, which are frequently employed, and with little risk. These small ambuscades have different objects in view: They serve to carry off magistrates or hostages for the payment of contributions; merchants who transport provisions to the enemy, &c.

A PARTIZAN may also form an ambuscade when he is well assured, by good spies, of the day and road one of the enemy's convoys is to pass; whether with young horses to remount the cavalry, recruits, provisions, or ammunition, and that the effort is weaker than his party. The advice he receives from spies or friends, who give him intelligence, gives him often the facility of
of taking by an ambuscade, one of the enemys' Generals detached to reconnoitre some particular place, to be cured of his wounds, to receive some person of distinction, or otherwise.

When you have a spy intriguing enough to be instructed, and to give advice of the day and road the enemy are to go a foraging, an ambuscade may be formed near the road to carry off some of the horses or foragers: you may also lie in ambuscade within the chain of forage, and fall on the foragers when dispersed; but you must observe to plant your ambuscade, in both these cases, in a place distant from the chain; that is to say, behind the center of the foragers, and have a sure retreat as soon as you have struck your stroke.

You may also plant small parties of light troops in ambuscade in different places, without the chain of escort; who, as soon as the foragers disband, give the alarm at the different posts; so that the enemy, not knowing on what side the real attack is, are obliged to re-assemble the escort; and as much time is lost in his way, night comes on before the foraging is compleated, and the cavalry are fatigued, weakened, and insensibly destroyed. Ambuscades may also be placed to carry off the men or equipages who remain behind when the army disperses to go to quarters, or when the troops, which are to compose it, are assembling in the spring.

Ambuscades are drest to carry off prisoners or inhabitants of the country, in order to gain intelligence. In this case, the prisoners ought not to be allowed to remain or talk together, lest they concert some false intelligence to deceive you.

In short, ambuscades may be employed to carry off couriers, or small convoys of the enemy, who pass between their army and their great towns: But in all these cases, the parties who know all the bridges, rivulets, fords, passes, marshes, footpaths through woods or over mountains, that they may retire through roads unknown to the enemy.
It is not necessary that these kind of ambuscades should be composed of greater numbers than the escorts of the enemy, especially if these escorts must march through defiles.

If you form an ambuscade, where the safety of your retreat does not depend on your numbers, but entirely on their address and celerity, it should be composed of light cavalry, and of no more than are judged necessary to defeat that part of the enemy's corps, against whom they are intended.

When your retreat is short, but through a rough covered road, the ambuscades should consist of more infantry than cavalry; but if the retreat is to be long, and by a broad open road, you must have no more infantry than what the half of your cavalry can carry behind them; while the other half, having nothing to embarrass them, form the front or rear-guard, and make head against the enemy. If you would disquiet and harass the enemy by small but frequent ambuscades, you must, from time to time, form a great ambuscade, to overawe the enemy, and prevent their sending out detachments against your small parties.

Ambuscades should march with great secrecy, and generally in the nighttime; they ought never to carry dogs with them, because they bark; nor mares with stone-horses, because of their neighing; they ought to take as few servants with them as possible; and strictly forbid them, or the party to fire at game, if it should spring.

They should endeavour to enter the place of ambush, so as to leave no trace behind them; and for this purpose, they may turn the shoes of their horses of the rear-guard, or throw down their cloaks for the rest to walk along.

They should not arrive at the place of ambush long before they expect the enemy, because the accidents that may happen to discover them; or their men, if fatigued, may fall asleep.
It is needless to mention the places fit for parties to lay in ambush; every place is proper; a hollow way, a small wood, a dry ditch, the grotto of a mountain, a garden, a court-yard, a field of corn, a thick hedge; in short, every place covered by art or nature. It is the person that commands who must choose the spot where he is not exposed to be discovered, and at hand to carry off his intended prize.

Great ambuscades have so little connection with marches, surprizes of armies, and battles, that, to have a just notion of the manner of employing them with some hopes of success, it is necessary to combine what will be said hereafter on these three subjects.

The object of great ambuscades is to carry off a corps of the enemy left to their own strength; to surprize a convoy, or the equipages of the army; the attack of an army on march; the carrying off a part of a garrison; or taking a town by escalade.

Great ambuscades are formed in woods or vallies, and care taken to place small parties in ambush all around, or on the neighbouring eminences, to stop and arrest hunters, travellers, or other passengers, who might discover your main body.

Great ambuscades may also be formed in a village or town, whose inhabitants favour you; where, for fear of being betrayed by some spy, you leave sentinels all around, publishing a strict order, on pain of death, not to pass beyond your sentinels. On a steeple, or the highest place, there you send an Officer, who, with good glasses, discovers the approach of the enemy, their numbers, and the road they keep; and informs you of these particulars, that you may have your troops in order of battle in the streets: But if the Officer on the steeple informs you that the enemy is superior, and that you have not time to retire, you must draw up your troops in an opposite street, or in a church, placing only a few of your men, disguised and dressed like townsmen, in the street through which the enemy are to march, to try to prevent any inhabitants informing them. This sort of precaution supposes you have taken all...
all others proper for your defence; for if the enemy has the least experience, he will not enter the village till he has searched and examined it.

Plains covered with corn or brush-wood are very commodious for placing infantry in ambuscade, because from thence you can see at some distance the number of the enemy, and the manner in which they approach; you can march out in order of battle to attack them; or, if you find them superior, you have a free retreat on all sides.

When you know the enemy's army is to march through a country which produces little water, especially if the season is hot, you may, if the ground permits it, dress a strong ambuscade near some fountain or rivulet by the road. The success in this case is the more certain, because the soldiers, fatigued with the march, never fail to disband, each trying to be the first to quench his thirst before the water is troubled by the rest; and as the current of the water has dug a course for itself, and has formed a hollow way where the corps are obliged to defile, this renders it the more easy to attack one part of them, before or after they passed, with great advantage.

If it is necessary to keep in ambuscade more than one day, it is supposed they have brought provisions with them, and they must choose a place where there is water; lest, if at a distance, the soldiers are discovered going to fetch it.

The troops in ambuscade must be placed without confusion, so as to be able to make their sally in order.

As soon as they have arrived at the place where they are to form the ambuscade, the Commanding Officer of each troop must review them: If any soldier, servant, or others are missing, he must immediately inform the Commander in Chief; who ought, in that case, to retire with the party.

He must place his sentinels where they can see farthest on all sides: But, that they may not themselves be perceived at a distance, by the colour of their regimentals, or the shining of their arms, the sentinels ought to place their firelocks
firelocks on the ground, and lay themselves amongst the leaves or bushes on the eminence where they are placed; for, from the summit of a little hill or rising ground, a man sees more than a mile: If there is no rising ground, they can place the centinels towards the top of thick bushy trees, behind branches, or cover them by some small brush-wood they may have carried with them for the purpose.

If the centinels' post is so far from the ambuscade that they cannot be heard, or come, or send another with their intelligence without the risk of being perceived by the enemy, in walking over some open field betwixt the ambuscade and the first or farthest off centinels, other centinels must be placed at smaller distances, under the cover of some hollow way, rock, or bush, that the intelligence may pass by word of mouth from one to the other.

But, lest these advices should not be clear, or to the purpose, and may throw you into confusion, these centinels should be Officers, or intelligent non-commissioned Officers. This is particularly necessary with regard to the centinel the most advanced on each side; that is to say, he who has the farthest view.

It is necessary to have, on the right, the center, and left of the ambuscade, three small parties of cavalry, who, on the first advice from the centinels, are ready to ride after and arrest deserters, or Peasants, who may discover your ambuscade.

If you know the road a detachment of the enemy intends to take, and that this march is through your country, place at the side opposite to your centinels, some flocks or heard of cattle scattered along the hills, within sight of your ambuscade; the desire of carrying them off will make the enemy disband, or at least weaken themselves by sending parties to carry them off. Instead of shepherds, place soldiers disguised to tend these flocks; who seeing the enemy advance, shall seem to retire with their flocks; and, when the enemy have got very near, these soldiers shall make their escape, the best way they can, on horses given them for that purpose.
You may also draw the enemy into your ambuscade, by bribing their
guides; who, in concert with you, may propose a road where you shall be
in ambush; or may draw them there by giving false advice of the force of
your party, or of your project. They may also be drawn into an ambuscade,
by detaching a party to carry off cattle, or by making some prisoners near the
enemy: in such a case, this party must be sent out before any of the soldiers
who compose it can suspect your design; so that if any one should desert, he
can never inform the enemy of your intended enterprise; the officers of the
party must alone be informed of your intentions, and you must mention the
exact hour at which they shall begin to shew themselves, lest the enemy fol-
lowing them, should arrive at the place of ambuscade before you are posted.

But this party must not retire so near the ambuscade, that the enemy's pa-
trols may discover it before their main body is engaged in it. The centinels
placed near the road, by which the enemy march, who are pursuing your
small party, shall retire before they are discovered, and the party shall con-
tinue their feigned flight, till they are got considerably beyond the ambuscade,
to oblige the enemy to advance the farther; for the troops which compose the
ambuscade, ought not to begin to charge the enemy, till their main body is op-
posite to your front, in order to attack their flanks, that the action may be
complete and less dangerous.

To prevent your ambuscade being discovered too soon, you must caution
your men to remain quiet and concealed till they get a certain signal, even
though they should hear some shots fired by their troops in ambuscade, which
may happen either by some firelocks going off by accident, or by some one fir-
ing at game which may spring.

The signal may be made by planting a standard on some eminence within
fight of your troops, by sounding a charge with several trumpets or drums
united, or some other warlike sound, different from what the enemy use on
their march, and which may be easily distinguished by your own troops.
You may also place some straw, so as to be seen by all your troops, and, by
setting fire to it, give the signal for the attack; or by firing a certain number
of shots, or throwing one or more sky-rockets from an eminence, which may be
be seen by the whole. But in all these cases, the persons destined to give the signals must be people of intelligence, who give them exactly at the proper time, when the enemy are thoroughly engaged in your ambuscade.

When the troops of your ambuscade are greatly superior in number to those of the enemy whom you expect, divide them in two corps, which you may place at a greater or smaller distance from each other, in proportion to the breadth of the road or the ground the enemy may occupy from his vanguard to his rear-guard; so that these two corps may fall at once from their ambuscade, and charge the enemy when just between the two.

Even if the troops are not numerous enough to be divided in two equal bodies, each of which are superior in number to the enemy, the defeat will still be the greater, if you charge their vanguard with their main body, and their rear-guard with a detachment; but if the nature of the ground makes it easy for the ambuscade to attack the whole flank of the enemy's troops when defiling, it will be needless to divide the troops, it being more advantageous to charge them in flank.

If the enemy have in the rear a considerable party at hand, to sustain their rear-guard as soon as engaged, it is necessary to preserve a detachment of your troops, in order to oppose this party, in case they should advance to charge your troops who have attacked the enemy's rear.

When the ground (because of its inequality, it being covered with woods, or any other obstacle) prevents your seeing whether the enemy have in their rear such a party as is just mentioned; in such a case, you must have the precaution to keep in ambuscade, a small corps de reserve; and your troops the farthest advanced in the ambuscade, must use the same precautions, if the front of the enemy's main body is preceded by a detachment; without which, there would be great danger that this detachment, by wheeling to right or left, might take your troops in flank, when engaged by the enemy's main body.

In an ambuscade, the best marksmen should be placed in the front line, and desired to fire at those whom they can distinguish to be Officers; for small resistance
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If the Officers who have been placed have reported, that they have discovered a more considerable body of the enemy than you expected, and more than you are able to defeat, let the Commanding Officer repair to that post; and if by the help of good glasses he is convinced of the truth of the report, he ought to hasten his retreat; for it is then to be presumed, that the enemy, informed of your design, comes with a strong detachment to surprize you in your ambuscade.

If the enemy have a superior body of troops near you, and you have reason to believe your ambuscade has been discovered, either by any of your people defecting, or that your march has been seen by any of the enemy's parties, who will discover it to their camp or garrisons; in any of these cases, you ought also immediately to form your retreat.

If, in spite of retiring with all promptitude, you shall be overtaken and attacked by the enemy with superior numbers, you must then take such necessary precautions as prudence requires, to secure your retreat; or, if you are near enough to hope for succours, make a vigorous and gallant defence till they shall arrive.

If you have made any detachments who are in ambush at a certain distance, that they may not be abandoned and lost, you should immediately send five or six horsemen, who should take the most favourable road, and inform them of your retreat; having taken care to mark to these Officers with the detachments, the route they are to pursue; either to join you, or to form their own retreat.

If you want to draw a part of the troops of one of the enemy's garrisons into an ambuscade, you should conceal beyond your ambuscade, and as near the garrison as possible, a small party of cavalry, who must endeavour to carry off
off the herds of cattle, flocks of sheep, or Officers' horses belonging to the place, which come out to feed or water in the morning; or, in the evening, try to carry off the Governor, the Officers, principal Citizens, or Ladies, who then come out to take the air.

In this last fort of expedition, you should wait for a fare or a holiday, when many walk out; because the more people of distinction you can surprize, the more will their friends and relations endeavour to prevail with the Governor, and engage him to send out a detachment against your party, which ought not to retire precipitately, lest the enemy should abandon the pursuit; but draw them on by degrees towards the ambushade.

You ought not to place the main body of your ambushade too near the town, in order to render the retreat of the enemy's detachment more difficult, after you have put them in disorder.

You may also, if the ground allows of it, place in ambushade a corps of cavalry, a little beyond the principal ambushade, towards the town, to cut off the enemy's retreat when defeated. We suppose, however, that these two ambushades are not so far distant from each other, but that the principal one, which is the farthest from the town, can easily come to the others' assistance, in case they have by any accident been discovered, and are attacked by the enemy.

If the environs of a garrison are so entirely open, that it is not possible to place a proper number of troops in ambushade, the cavalry, in that case, may serve to conceal the infantry.

If you have plenty of troops, and have reason to believe the Commandant of the town or post is weak enough, or so ill advised as to allow himself to send out so great a number of troops on a sally, as to leave his garrison unprovided, you may place an ambushade on the opposite side of the town, provided with the necessaries for a surprize-escalade, or by applying the petard, who shall make their attack when the enemy are at some distance in pursuit of your other party.
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The same stratagem may be employed against a town where there are no regular troops, and whose unexperienced inhabitants are easily deceived by all the common stratagems of war.

Before you try a great ambuscade, it is very proper to have often formed small ones, or to have made excursions into the country with small parties; so that the Governor or Commandant of the post being accustomed to believe you have but a few troops, is the more easily determined to detach a part of his garrison.

If you want to draw the enemy's army, or a great part of it, into an ambuscade, you must march with your army towards the enemy, so long as you are not afraid of being discovered by their parties, or grand advanced guards: There you must halt with all possible silence, and detach a good part of your cavalry; which, without halting, shall charge that flank of the enemy nearest your ambuscade; the first charge being over, without giving the enemy time to attack them with too many troops, they must retire to their main body, so that, if the enemy shall inconsiderately pursue them, they fall into the ambuscade.

An ambuscade that is successful, may cause the destruction of a whole army. The example cited by M. de Feuquieres, in his Memoirs, on that head is striking. M. de Luxemburg, still attached to the Prince, took all the baggage belonging to M. Turenne's army, because the Lieutenant-General who commanded the escort did not foresee that the enemy, shut up in his lines of circumvallation before Arras, having two armies near his camp with a design of attacking him in his lines, could think of sending out a large detachment of cavalry on an enterprize of such a sort. In the mean time, M. Luxemburg, who was in ambuscade within reach of the column of baggage, seeing that the Lieutenant-General was gone on before with the head of the escort, imagining the baggage in security, marched speedily to the head of that column, whose march he stopped, and turned towards St. Pol, where he conducted the whole baggage belonging to M. Turenne's army, without his knowing any thing of the matter. It is thus that, by the negligence of an Officer, and by an ambuscade seasonably placed
placed, an army finds itself stripped of all its baggage, and as may be said, not in a condition of continuing the campaign.

Having given our ideas on this subject, we shall end it with observing, that, with the quantity of light troops now in use, and who are continually patrolling the country, it is very difficult to surprize an enemy with a great ambuscade; the small ones only can succeed, and such particularly as are conducted by an able partisan, who has good intelligence, and who understands the petit guerre.

The MANNER in which SCIPIO SUPPRESSED and PUNISHED a SEDITION that happened in the ROMAN ARMY.

THOUGH Scipio had now gained a sufficient experience in affairs, he was thrown however by this revolt into a state of great irresolution and perplexity. For, as in the case of the human body, the causes of external injuries of those for example which arise from heat and cold, from fatigue or wounds, may either be guarded against before they happen, or afterwards be remedied without much difficulty; while the disorders on the other hand, which are bred in the body itself, ulcers and diseases, are neither easily foreseen, nor easy to be cured; just so it happens with respect to governments and armies. When they are attacked by any enemy from without, if necessary attention only be employed, it is no hard thing to take the measures that are requisite for their security and defence. But to appease the violence of intestine factions, to quell popular tumults and seditions, is a work of the greatest difficulty; and such as requires a very uncommon exertion both of address and prudence. There is one precaution however, which, in my judgment, would be very serviceable in the case of states and armies, as well as in human bodies; and that is, not to suffer in any of them a too long continuance in laziness and inactivity; especially when they enjoy the blessings of plenty and prosperous fortune.
Scipio then, who, besides that steady application to affairs which we have 
mentioned, was very ready also, and dexterous both in thought and action, 
contrived the following method for remedying the disorders that had happened. 
He called together the Tribunes, and told them, that the stipends that were de-
manded should be paid; and that his promise might gain the greatest credit, 
he directed that the taxes, which had been before imposed upon the cities for 
the support of the whole army, should be levied publickly, and with the 
greatest diligence; as if his only intention had been to raise the sums that were 
now required. He ordered the Tribunes also to go back again to the revolted 
troops; and to use all entreaties to engage them to return to their duty, and 
to come and receive their stipends, either separately, if they should choose 
that method, or altogether in a body; assuring them also, that, when this 
was done, he would then consider in what manner all other things might be 
adjusted. Agreeable to this plan, the money was collected without delay: 
And when Scipio was informed that the Tribunes had discharged also their com-
mission, he assembled the council together, to consider what was most proper 
to be done. The result of their deliberations was, that the troops should come 
all to New Carthage on an appointed day, that a general pardon should then be 
granted to the multitude; but that the authors of the mutiny should be pu-
nished with the last severity. These were in number thirty-five.

When the day was come, and the revolted troops, were now on their way 
towards the city, to receive their pardon, and the stipends that were due, 
Scipio gave secret instructions to the seven Tribunes, who had been before deputed 
to them, to meet them as they approached; and that each of them, taking 
five of the seditious leaders, and accosting them with a shew of friendship, 
should press them to take a lodging in their quarters, or at least to accept of 
the entertainment of a supper. Three days before he had ordered the troops 
that were in the city, to furnish themselves with provisions for a considerable 
time, on pretence that they were to march under the command of Marcus, 
against Adnobalis who had revolted. The seditious, being informed also of 
this order, were filled with greater confidence. For they persuaded themselves, 
that, as the rest of the army would be removed, they should have all things 
in their own power, as soon as they should join the General.
When they were now ready to enter the city, Scipio sent orders to the other troops, that they should begin their march, with all their baggage, very early on the morning of the following day. But the Tribunes and the Prefects were at the same time secretly commanded, to send the baggage forwards as soon as they should come out of the city, but to keep the soldiers in arms near the gate; to divide them afterwards into parties at every gate; and to be careful that none of the seditious should come out of the city. The Tribunes, who had been appointed to receive the seditious leaders, met them as they arrived; and having accosted them with much civility, carried them to their houses. The order given to them was, that they should immediately secure the persons of these men; and, when supper was ended, should bind them and keep them safe; and that no person afterwards should be suffered to go out of the houses; except only a messenger from each, to acquaint the General that the thing was done. This order was punctually observed and executed. On the morrow, when the day appeared, and the seditious already had begun to come in crowds towards the Forum, Scipio ordered the assembly to be called. As soon as the signal was made, the soldiers ran together, according to their custom, expecting eagerly to see again their General, and to hear what he would say to them on the present occasion. Scipio then sent orders to the Tribunes, who were without the gates, that they should bring the troops in arms, and surround the assembly: At the same time, he presented himself to them, and in the instant, by his very first appearance, filled them with extreme confusion; for they had supposed him to be broken with disease, and they beheld him vigorous and strong: His very aspect therefore, so different from all that they had conceived, struck them at once with surprize and terror. He then began his discourse to them in the following manner:

He could not, he said, but wonder what motives either of expectation or disgust, had led them into this revolt. That men usually rebelled against their country and their leaders, either because they were dissatisfied with the conduct of those who held the supreme command, or were displeased with the condition of affairs; or lastly, perhaps, because they were ambitious of some greater fortune, and had filled their minds with aspiring hopes: Tell me then, continued he, to which of these causes is your revolt to be ascribed? Is it with me that you are offended, because the payment of your stipends has been
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been so long delayed? The fault however is not mine, for during the whole time of my command, your stipends have been always fully paid. If it be Rome then, that is in fault, in having neglected to discharge your former arrears, was it just that you should shew this resentment? Taking arms against your country, and declaring yourselves the enemies of her who had bred and nourished you? How much better then would it have been to have made me the judge of your complaints; and to have intreated your friends to join together in obtaining for you the relief which you desired. When mercenary troops indeed, who have no other object but their pay, desert the service in which they are engaged, such a conduct, in certain circumstances, may perhaps be excused. But in men who fight for themselves, their wives, and children, this defection is a most unpardonable crime. It is no other indeed, than if a son, on pretence that his parent had defrauded him in settling an account, should go armed to take away the life of him, from whom himself had received his being. Or will you say then, that I have employed you in more painful duties, or exposed you more frequently to danger than the rest; and have given to others the advantage of the war, and the chief part of all the booty. You dare not say, that I have ever made this distinction; and if you dare, you cannot shew the proof.

To what part of my conduct can you then impute the cause of your revolt? Speak, for I wish to be informed. There is not one among you that is able to declare; not one among you that can even form to himself, in thought, the least matter of offence against me. Nor is it again in the condition of affairs, that you can find any reasonable ground of discontent: For when were all things in a more prosperous state? At what period were her soldiers flattered with a fairer prospect? But some of you, perhaps, are diffident of these appearances, and have fixed your hopes upon greater advantages to be found among our enemies: And who are these enemies? Mandonius and Andobalis! Do not all of you then know that when they first joined our army, they broke their treaty with the Carthaginians; and that now again they have no less violated the most solemn oaths, by commencing new hostilities against us? How honourable is it for you to place a confidence in men like these; and to become, for their sakes, the enemies of your country. You had surely never any hopes, that with such allies you could render yourselves the masters
masters of Spain. Neither assisted by Andobalis, nor separately by yourselves, would you ever be able to stand in the field against our forces. What then was your design? Let me hear it only from yourselves. Is it the skill, the courage of those leaders, whom you have chosen to command you, that has filled you with confidence? Or those rods and axes which are carried in solemn state before them; and which it is even shameful for me now to mention. No, soldiers, these are not the causes; nor can you offer even the smallest matter of complaint, either against me, or against your country. I must endeavour then to justify your conduct both to Rome and to myself, by those common principles, the truth of which is acknowledged by all mankind. The multitude is, in a word, susceptible, upon all occasions of the same agitations as the sea; for as the latter, though in itself it is calm and stable, and carries no face of danger, is no sooner set in motion by some violent blast, than it resembles the winds themselves, which raise and ruffle it; in the same manner the multitude also, assumes an aspect conformable to the designs and tempers of those leaders, by whose councils it is swayed and agitated. From this consideration, all the Officers of the army and myself, have resolved to pardon your offences, and to engage our promise, that no remembrance of it ever shall remain; but to those who excited you to this revolt we are inexorable: The crime which they have committed, both against us and against their country, shall be punished with the severity which it deserves.

As soon as he had ended this discourse, the troops that had surrounded the assembly in arms, upon a signal given, clashed their swords against their bucklers; and at the same time, the seditious leaders were brought in bound and naked; and while some of them were scourged, and some beheaded, the whole multitude was so struck with terror, both by the danger that encompassed them, and by the dismal spectacle that was before their eyes, that not one among them changed his countenance, or uttered a single word, but all of them stood fixed in silent astonishment and dread. The leaders, being thus put to death, were dragged through the midst of the assembly. The General then, and all the Officers, gave a solemn assurance to the rest, that their fault should never be remembered. The soldiers, approaching one by one, renewed their oath before the Tribunes, that they would be obedient to their
their Chiefs, and not engage in any designs against their country. In this manner Scipio, by his great prudence, stifled a danger in its birth, which might have grown to be extremely formidable; and restored his army again to its former state.

METHODS to PREVENT MUTINY in an ARMY.

An army drawn together from different parts, sometimes disposed to mutiny, and the troops, though not inclined to fight, pretend to be angry at not being led against the enemy; which seditious disposition, principally shews itself in such as have lived in their quarters in idleness and effeminacy. These men, unaccustomed to the necessary fatigue of the field, are disgusted at its severity; their ignorance of discipline makes them afraid of action, and inspires them with insolence. There are several remedies for this evil. While the troops are yet separated, and each corps continues in its respective quarters, let the Commanding Officers of the corps, and those under their command, make it their business, nay study to keep up so strict a discipline, as to leave them no room to harbour any thoughts but of submission and obedience. Let them be constantly employed, either in field-days, or in the inspection of their arms, accoutrements, and necessaries, and not to be allowed to be absent; let them be practised in the motions of priming, loading, and presenting, and often let them be kept under arms for a considerable time; let them be exercised in charging the bayonet upon a run, but in good order; to facilitate the passing of ditches; and if their quarters are near the sea, or a river, let them all, without exception, be obliged, in the summer, to the frequent practice of swimming, that when, in war, they come to a river, and no bridge or boats nigh, they might with their hatchets make a raft for their cloaths, &c. and swim over. Let them be accustomed to march through thickets, enclosures, and broken grounds; to fell trees, and cut
cut out timber; to break ground\(^\ast\), and to defend a post against their comrades, who are to dispose of them. All the different kind of troops, thus trained and exercised in their quarters, will find themselves inspired with emulation for glory, and eagerness for action, when they come to take the field. In short, a soldier who has proper confidence in his own skill and strength, entertains no thoughts of mutiny. A General should be attentive to discover the turbulent and seditious soldiers in the army; and he should endeavour to procure his intelligence not from common hear-say, but from Officers, and those of undoubted veracity; it would then be prudent in him to separate them from the rest, under pretence of some service agreeable to them, or detach them to garrisons, but with such address, that although he means to get rid of them, they may think themselves employed by preference and favor. A multitude never break out into open sedition at once, and with unanimous consent; they are prepared and excited by some few mutineers, who hope to secure impunity for their crimes, by the number of their associates. But if the height of the mutiny requires violent remedies, it will be most advisable, after the manner of the ancients, to punish the ring-leaders only, that tho' few suffer, all may be terrified by the example. But it is much more to the credit of a General to form his troops to submission and obedience, by habit and discipline, than to be obliged to force them to their duty by the terror of punishment.

\(\ast\) Break-ground, is the first opening of trenches against a place; which is done in the night time, by the advantage of some rising ground, hollow-way, or any thing that can cover the men from the enemies' fire.
manders in Chief of British troops. A bountiful and humane care was taken
of the sick and wounded; they were as well fed and attended, as people in
their condition and station of life could have even wished. A bedstead, palaife,
a pair of sheets, and blankets, were provided for every man, and these always
clean to each fresh patient, as also when accidents occasioned by sickness or
otherwise made it necessary; plenty of nurses; and great care and precaution
used to prevent them from defrauding the men of their diet allowed them, or
making mistakes, there being a diet-board to each nurse, on which the sick
men's names she attended, as also the nourishment to be given them, was set
down by the physician who visited them, and every patient had it in his power
to know what was ordered for him; for the diet was distinguished by the de-
nominations of full diet, half diet, and low diet; and every one in the hospital
knew what the allowance for each denomination was. But the circumstance
of every man's lying single is a point in which the British princely care had a
great advantage over that of the French, so deservedly praised in other respects.
They place two in each bed. Besides the addition of fresh disorders, which
may be communicated reciprocally to each other by two sick persons lying in
the same bed, how dreadful, and what impediment must it be to their recovery,
when their cases are very different! such as a man in a fever lying with an-
other in a flux, the one continually rising, cooling, and disturbing the other;
and the feverish man in his turn, by restlessness or delirium, keeping his com-
rade awake, when, perhaps, Nature oppressed, or helped by medicines, would
permit him to sleep!

Many other instances and particulars I could point out, of the wife and com-
passionate management and œconomy of the said Hospital General, both with re-
gard to the nation, and to the army, by preventing frauds and impositions, all
which I had an opportunity to inform myself thoroughly of, having been sent
with a particular warrant, signed by his Royal Highness the late Duke of Cumber-
land, and strict orders given me by word of mouth besides, to inspect narrowly and
diligently into every thing transacted there. But, as what I have proposed to
myself to lay down under this head relates chiefly to the care of the men's
arms, I shall proceed upon it. This was the only thing at the Hospital in
which I could perceive there wanted some amendment and method; and not
only in the hospital, but also in the regiments, which must unavoidably send

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the arms with the sick, while they are in the field, many of which were lost, not only belonging to men who died in the Hospital, but also those of recovered men, who were often sent to their corps with some part or other of their arms or accoutrements wanting, the whole or part being either exchanged, mislaid, or lost. This was owing to the incapacity of the storekeeper, who had so jumbled and intermixed those of all the regiments, and had let them grow so rusty, that it took several days to sort them, and find out what corps they belonged to. The custom of marking arms with the Colonel’s and Captains’ names, did not a little contribute to confusion; some regiments’ arms (I believe I may say most of the British) being marked with two or three Colonels’ names, according as they had exchanged them, and received new arms, which generally happened after battles; for which reason, and it is my opinion, they should be only marked regiment, No. 1, 2, &c. Company, No. 1 to 8, the other two companies, viz. the grenadier and light infantry. To have their own mark, G. R. for grenadier company, and L. J. for light infantry, beside the No. of the regiment; and under the number of the company, that of the firelock; and no company to alter their number, though perhaps in time that marked No. 8. might become the second company in rank of the regiment, as it is of no consequence. Another fault in the corps, was not packing up properly the sick men’s arms and accoutrements, when they put them in the waggon with the sick; for the men were seldom capable of taking care of them; and as only one Commissioned Officer, and one serjeant was commonly sent to conduct twenty, thirty, or more; if it happened after a battle, the Officer not having given any receipt, and of course not being chargeable with the arms, contented himself with looking after those of two or three, who perhaps belonged to his own corps, but seldom took any care of the rest; to prevent which, I propose the following rules, as to what relates to the Hospital, towards the care of the arms:

First, The storekeeper should understand book-keeping, and open a regular account of Dr. and Cr. with every regiment for all arms, accoutrements, &c. delivered to him; having columns in his book for the man’s name, the regiment, and company he belongs to; when received, what arms, whether firelock, bayonet, sword, (and numbers of the same) scabbards, pouch, belts, cartridge-box, &c. according as it relates to infantry or cavalry, as also a column
lumn for the time of their leaving the Hospital, whether recovered, and sent
to the army, dead, deserted, or recommended to Chelsea, mentioning what is
become of his arms, &c. and, if remaining in store, he is to carry a credit
of them forward in favour of the regiment, until he delivers them.

Secondly, The storekeeper should have printed receipts, the same with his
book, ready to fill up and sign for the arms, &c. delivered to him, giving a se-
parate one for each regiment which sends sick; and when the recovered men are
discharged from the Hospital, he should take a receipt like the one he gave, as-
abovementioned, from the Officer or other who conducts them to the army ;
but if sent by themselves, as it sometimes happens, he should take a receipt:
from each man, in presence of one of the surgeons or mates of the Hospital,
who may be ordered on such occasions to see what arms, &c. are delivered, and:
sign the receipt as a witness.

Thirdly, The storekeeper should divide the rooms in which he keeps the
arms, &c. into as many stalls as there are regiments: I mention stalls, as being;
an easy and cheap way, to be done with small poles, and is the method I ad-
vised, and which was followed in the Hospital; he should roll each man's
accoutrements close round his firelock, there seldom being sufficient store-room
to be had at an Hospital, to dispose every thing as one would desire; he should
also have a great number of tickets, or, what is better, small pieces of wood
ready, with a string to fasten to each firelock, writing on it the man's name,
the regiment and company he belongs to, and the number of the firelock, in
order to find it when wanted.

Fourthly, An armourer should be appointed to look daily to the arms,
and prevent them from growing rusty, beginning with those of one regiment,
and going on regularly from one stall to the next. An intelligent storekeeper
will soon be able to judge how many an armourer can rub and oil in a day,
and tax him accordingly, taking care for his own fake that he does not em-
bezzle or fell any; the peasants in the Netherlands being always ready to buy
them, on account of the facility with which they can keep them concealed.
Of what relate to the Regiments.

FIRST, That the Officer who conducts the men to the Hospital, do give a receipt, of the same sort with the one he is to receive from the storekeeper, for all arms, accoutrements, &c. sent with each sick or wounded man; and at his return, he should exchange with the regiments, giving the storekeeper's receipt for his own; otherwise remain chargeable to any regiment for anything lost belonging to it.

SECONDLY, Every regiment, whether it sends one or more men to the Hospital, is to appoint an Officer to go to the rendezvous of the sick, and to deliver them, and their arms, accoutrements, &c. tying the scabbards of swords and bayonets, so as to prevent their dropping off, many being lost for want of this precaution; he is also to roll them as aforesaid in the third article, and to see them placed in a waggon, taking the Officer's receipt who conducts them, for the same.

I am sensible it will be objected, that if the aforesaid rules should be approved and followed, it will be the cause of keeping the sick men a long time in the cold, while the arms are delivering, and receipts signing, as aforesaid: To this I answer, that I am convinced there is no other way to prevent many arms from being lost; for, if no receipt is given, no one is answerable; and whoever conducts the sick to the Hospital, a very few exact Officers excepted, will, the instant he arrives there, get into a house, and leave it to the nurses and other servants of the Hospital, to take the sick off the waggons, and conduct them into the wards; thus the arms often remained in the waggons or streets many hours, and sometimes all night, without any one to look after them, till the storekeeper picked them up at his leisure: This neglect was inexcurable, because the Officers who conducted the sick, might have centinels placed over the arms till delivered, by only giving notice, and applying to the Commanding Officer of a guard, which was and is generally given to an Hospital.

But,
But, in order to prevent the sick from being delayed any longer than what is absolutely necessary, and to make the delivery of them and their arms as expeditious as possible, the arms may be sent to the rendezvous an hour before the men they belong to; and the regiment that gives the conducting Officer may, besides him, send the Quarter Master, or any other Officer, and a couple of careful serjeants, as far as the rendezvous, to assist the Officer, till he has received and placed all the arms and men in the waggons, each sick man in the one that carries his arms; and it is only setting down the number of the waggon, and the regiment, company, and number of the firelock they place in it, which will be a guide for disposing of the men when they come; and when the Officer has received the arms, &c. of any regiment, he may sign the receipt.

The Clerk of the Hospital keeps an account of the regimental cloaths and linen of the dead, which is delivered by the matron or nurses of the Hospital to the Storekeeper, who should pack and ticket the same; and each regiment, as soon as it comes into winter quarters, should send to the Hospital for the arms and cloaths of the dead men, or otherwise belonging to their corps. And that they may be informed of such as die, desert, or are recommended to Chelsea, or sent to the army, the Director of the Hospital should send frequent returns to head quarters, which the Adjutant General may direct the Majors of brigade, to impart to each regiment in their brigade, as far as relates to any of them, and is necessary they should be informed of. Six pounds ten shillings per month per regiment was declared in orders at Ghent, to be allowed each regiment, to provide nurses, &c. for an Hospital in winter quarters; and the same was paid while the army was abroad.

The Surgeons to be accountable to the Commanding Officer of each regiment for every sum they receive for the Regimental Hospital; and the Commanding Officer to take care that the overplus be kept in the Pay-master's hands, for any future use or exigency that may happen to the several regiments.

His Royal Highness the Duke of Cumberland, in the year 1748, when the army was in cantonments upon the territory of the States General, and very sickly,
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sickly, paid twenty pounds sterling to the Officer commanding each battalion of foot, more than the allowance as above in garrison, to enable them to provide nurses, firing, and proper nourishment for the sick, and promised to make good any further expenses if they would shew a fair account they had been at for the sick, or men that were recovering.

Of CAVALRY.

THE cavalry ought to be well appointed; to be mounted on horses inured to fatigue; to be incumbered with as little baggage as possible; and, above all, that leading mistake of making the horse fat should be avoided. The oftener, likewise, they see an enemy the better; as it renders them familiar with danger, and capable of attempting any thing; but that immoderate love which we are apt to have for our horses, leaves us ignorant of their strength and importance.

A regiment of German horse, in Poland, marched in eighteen months, above fifteen hundred leagues; and at the end of that time was fitter for service, than another whose horses were too full of flesh. Unless cavalry be able to endure fatigue, in running, and violent exercise, they are in reality good for nothing; but then they must be broke by degrees, and familiarized to it in length of time and custom, after which, galloping at full speed by squadrons, and a constant use of violent exercises, will both preserve them in better condition, and make them last much longer; it will moreover form the men, and give them a martial and soldier-like becoming air. To exercise the horses only once in a year or two, to prepare them for a general review, and then but in a gentle manner, from an apprehension that violent fatigue and sweating may be prejudicial to them, is un-soldier like, and far from being sufficient: For I insist upon it, that unless they are accustomed to hard treat-
ment, they will be more subject to disorders, and at the same time not fit for service.

I would have but two kinds of cavalry, and that is, dragoons and light cavalry (no nation has better than the British); the first are equal, if not superior, in point of weight, to the foreign horse. Fifty squadrons of dragoons are sufficient for an army of 50,000 or 60,000 men. Their movements should not be so rapid as the light cavalry; the most essential point being to engage in a firm body, and never to disperse, except real necessity demands it, and then, upon some particular occasions, they may act as light cavalry: The mounting of grand guards, is one of the duties they are to do; for escorts, detachments, out-posts, foraging parties, and flying ones are always to be composed of light cavalry.

The light cavalry, must be taught to vault and skirmish, after the manner of the Prussians, always retreating by the intervals between the squadrons, and rallying in their rear.

**Lieutenant-General Earl Pembroke** has published an excellent Treatise upon breaking horses, and teaching the men to ride; and I have heard it said, by an Officer of the cavalry (whose judgment I can depend upon), that it is a masterly performance.

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Of Infantry.

The manual exercise, is, without doubt, a branch of military discipline necessary to render a soldier steady and adroit under arms; but it is by no means of sufficient importance to engage so much of our time; and I am firmly
firmly of opinion, that it ought still to be shortened, and at the same time to instruct the soldier in the most useful parts.

First, An exercise ought to teach the recruits how to use his arms, with grace, quickness, and uniformity.

Secondly, It ought therefore to include every action necessary to be performed in a day of battle; as also such as may be useful on any other occasion of duty.

Thirdly, All useless motions, and needless repetitions of such as are not useful, ought to be retrenched, without regard to show; as also all motions which are tedious, or attended with inconvenience to the soldier, or danger in the performance.

Fourthly, The origin of the several parts of the exercise is not to be considered, but only the being useful or not.

Each complete action ought to have its particular word of command.

Fifthly, Each word of command ought to be executed in one or more motions, what should be capable of being performed in equal time, and clearly distinguishing in the application, and in the performance.

Sixthly, When an action is too much compounded to be capable of being performed in four, or five motions only, it ought to be divided into two or more words of command; and not to overburden the memory and attention of the soldier, which generally is but very moderate.
It now becomes necessary, after the before-going article, to say something by way of

**FORMING TROOPS for ACTION, and their MANNER of ENGAGING.**

I SHALL begin with the march; which lays me under the necessity of first advancing what will appear very extravagant to the ignorant: It is, that notwithstanding almost every military man frequently makes use of the word tactic, and takes it for granted, that it means the art of drawing up an army in order of battle; yet not one can properly say, what the ancients understood by it. It is every where a custom amongst troops to beat a march, without knowing the original or true use of it; and it is universally believed, that the found is intended for nothing more than a warlike ornament.

Yet sure we ought to entertain a better opinion of the Greeks and Romans, who either are, or ought to be our masters; for it is absurd to imagine, that martial sounds were first invented by them, for no other purpose than to confound their senses.

But to return to the march: According to the present practice, it is accompanied with a great deal of noise, confusion and fatigue, which serve no good end. The sole remedy for this appears to be a secret, and left for me to disclose. As every man is suffered to consult his own ease and inclination, some march slow, and others fast: But what is to be expected from troops that cannot be brought to keep one certain, regular pace, either quick or slow, as the Commanding Officer shall think proper, or the exigency of affairs require; and that an Officer is obliged to be posted at every turning, to haften the rear, which is perpetually loitering behind? A battalion moving off its ground, improperly conveys the idea of a machine, constructed upon no principle, which is ready to fall in pieces every moment, and which cannot be kept in motion without infinite difficulty.
If, on a march, the front is ordered to quicken its pace, the rear must unavoidably lose ground, before it can perceive it; to regain which, it sets up a run: The front of the succeeding corps will naturally do the same, which presently throws the whole into disorder. Thus it becomes impossible to march a body of troops with expedition, without forfaking all manner of order and regularity.

The way to obviate these inconveniences, and many others of much greater consequence, which proceed from the same cause, is however, very simple, because it is dictated by nature: It is nothing more than to march in cadence *, in which alone consists the whole mystery, and which answers to the military pace of the Romans. It was to preserve this, that martial sounds were first invented, and drums introduced; and in this sense only is to be understood the word tactic, although hitherto misapplied and unattended to. By means of this, you will be always able to regulate your pace at pleasure; your rear can never lag behind, and the whole will step with the same foot; your wheeling will be performed with celerity and grace; your men's legs will never mix together; you will not be obliged to halt, perhaps, in the middle of every wheel to recover the step; nor will the men be fatigued in any degree equal to what they are at present.

Nothing is more common, than to see a number of persons dance together during a whole night, even with pleasure; but deprive them of music, and the most indefatigable amongst them will not be able to bear it for two hours only. This sufficiently proves, that sounds have a secret power over us, disposing our organs to bodily exercise, and, at the same time, deluding, as it were, the toil of them.—If any one, thinking to ridicule what I have advanced, asks me what particular air I would recommend to make men march, I will readily answer, without being moved by his raillery, that all airs, in common or triple time, will produce such an effect; but only in a greater or lesser degree, according to the taste in which they are severally set; that nothing more is required, than to try them upon the drum, accompanied by the fife, and to chuse such as are best adapted to the nature and compass

* This cadence, or equal measure, preferred in marching, is the same which is now in use amongst the Prussian troops.
of those instruments. Perhaps it may be objected, that there are many men
whose ears are not to be affected by sounds. But this is a falsity; for the
movement is so natural, that it can hardly be even avoided. I have fre-
quently taken notice, that, in beating to arms, the soldiers have fallen into
their ranks in cadence, without being sensible of it, as it were; nature and
instinct carrying them involuntarily; and without it, it is impossible to perform
any evolution in close order well.

If what I have been saying is only considered in a superficial manner, the
cadence may not appear to be of such great importance; but to be able to in-
crease or diminish the rapidity of a march, during an engagement, is an ad-
vantage which may be of infinite consequence. The military pace of the
Romans was no other than this, with which they marched twenty-four miles,
equal to eight of our leagues, in five hours. Let us try the experiment upon
a body of infantry, and see whether they will be able to perform as much in
the same space of time. It must be allowed indeed, that marching composed
the principal part of their discipline; nevertheless, one may from hence form
a judgment of the pains they took in exercising their troops, as well as of the
importance of the cadence. It will be no difficulty to prove, that it is impos-
sible to keep the ranks close, or to make a vigorous charge upon an enemy,
without it. What a prodigy is this! and yet I don't believe many persons
have paid that regard or attention to it which they ought.

It now becomes necessary to examine our present method of forming batt-
alions for action. Those who understand it best, divide a battalion into six-
teen parts; that is, supposing it to consist of eight battalion companies, and
that each company is told off into two subdivisions (beside the grenadier and
light infantry companies, which cover the flanks of the battalion); it is drawn
up three deep; and that its front may be rendered as extensive as possible, it
marches to attack an army in a line. The battalions which form the whole
line of battle, are close to each other, the infantry being all together in one
body, and the cavalry in another; a method contrary to common prudence.

In advancing towards the enemy, they are compelled, by the nature of
the disposition, to move very slow, the Majors and Adjutants calling out,
close!
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Close! on which they press inwards, and crowding too much upon the center, it insensibly breaks, and becomes six deep, while the flank remains only three; an instance which every person who has been in an action will acknowledge the truth of. The General seeing this disorder; and being afraid to have its flanks exposed, by the intervals which have consequently been made between the battalions, is obliged to halt; which, in the face of an enemy, is very dangerous; but as they also, from similar measures, are probably in as much confusion, the mischief is not so great as it would be otherwise. Nevertheless, a person ought, at all events, to persist in advancing, and never make a halt, to remedy such disorders; because, if the enemy takes advantage of that opportunity to fall upon him, he must inevitably be undone.

When the two armies arrive within a certain distance from each other, they both begin to fire, and continue their approaches, till they come within about forty or fifty paces; where, as is usually the case, either the one or the other takes to flight, and this is what is called a charge. It is inconsistent indeed, that they should not be able to make a better; because I look upon it as an impossibility, without the use of the cadence. But let two battalions, which are to engage each other, march up with straight ranks, and without doubling or breaking, and say which of them will gain the victory; the one that gives its fire in advancing, or the other that reserves it. Men of any experience will, with great reason, give it in favour of the latter: For, to add to the consternation into which the former must be thrown, in seeing their enemy advancing upon them through the smoke, with his fire reserved, they will be either obliged to halt, or, at least, to march very slow, till they have loaded again; during which time, they are exposed to a dreadful havoc, if he enlarges his pace, and falls upon them before they are ready again.

If the last war had continued some time longer, the close fight would certainly have become the common method of engaging; for the insignificancy of small arms began to be discovered, which make more noise than they do execution; and which must always occasion the defeat of those who depend too much upon them. If, therefore, the firings had been laid aside, it is highly probable, the present method likewise of forming three or four deep, would have soon shared the same fate: For what service could reasonably be expected
expected from a body of men, rendered slow and unwieldy by their extent of front, against an opposite one, four or eight deep, who were able to march with more rapidity, and to perform every movement with more ease.

Yet, notwithstanding the weakness and absurdity of such a disposition, there are many who pretend to vindicate it by reason; alledging, that in thus extending their front they will be able to enlarge their fire, and therefore draw up their battalions three deep in firing order; but they have been made so sensible of their error, by severe experience; otherwise, I really imagine, they would soon have formed the battalion companies two deep, as the light infantry are formed now; for it has been an invariable rule in all engagements to endeavour to out-flank the enemy by exceeding him in front. As for my part, I shall not take it upon me to determine, which of the two methods of drawing up I would make choice of: As much may be said both for and against it. In firing three deep, if your center and rear rank men lock up properly, the front rank are in no danger of being hurt by the rear; but by being four deep (in time of action) I cannot say I would answer for the consequences that might attend the front rank; an old soldier is so sensible of this, that after the first round, he seldom rises till they are ordered to advance or retreat; and in firing, standing four deep, the danger still becomes the greater.

I shall here conclude the First Part of the Work upon The Roman Discipline, the Cause of their Greatness.

Victory, in war, depends not absolutely on numbers or mere courage; conduct and discipline only will ensure. The Romans, we find, owed the conquest of the world to no other cause but a continual exercise of arms, and an exact observance of discipline in their camps and quarters, and an unwearied cultivation of the other arts of war; without these, what would the inconsiderable number the Roman armies consisted of, have availed against the
the multitudes of the Gauls *, or with what success could their small fire have been opposed to the prodigious stature of the Germans +? The Spaniards surpassed us not only in numbers, but in strength of body. We were always inferior to the Africans in wealth, and the recourses of subtility and stratagem; and the Greeks, beyond dispute, were far superior to us in a genius for arts, and all kinds of knowledge. But to all these advantages, the Romans opposed an unusual care in the choice of their levies, and in their instructions in the use of arms. They thoroughly understood the importance of hardening them in the field of Mars, to every evolution that might happen in the line, and in action; nor were they less strict in punishing idleness and sloth.

The courage of a soldier is heightened by his knowledge of his profession, and he wants but an opportunity to execute what he is convinced he had been perfectly taught.

A handful of men, inured to war, proceed, as it were, to certain victory, while on the contrary, numerous armies of raw and undisciplined troops are but multitudes of men dragged to slaughter. Therefore, much more incumbent is it on a soldier, on whom the preservation of his country depends, to make himself master of the science of war, and perfect himself in all its branches, by continual practice. He has before him the incitement of victory and honour, and I hope may expect, by seniority, and his Generals attention to reward, to rise to the most honourable and profitable employment of the service.

After what I have said under the heads of Military Science, how necessary is it for the soldier, whether recruit or veteran, engaged by oath to the service, to labour indefatigable in the exercise of his profession, as it is his duty to fight for his own sake, the King, and the preservation of his country. And the old maxim is certain, that the essence of an art consists in constant practice.

* Multitudes of the Gauls. See the beginning of the second book of Cæsar's wars in Gaul.

† Prodigious stature of the Germans. This is taken notice of by Cæsar, Plutarch, Tacitus, and other authors. Cæsar tells us, Book XI. that at one of his sieges, the Gauls made a jest of the small size of his men. It may be proper here to observe, that the stature of the Romans was of the middle size, not remarkable for either extreme.
Of ATTACKING and DEFENDING

OF MILITARY POSTS, &c.

That the Glory acquired in the Defence of a weak Post, is infinitely above what may be gained in the most important Fortresses, no Officer will deny.

ET the abilities of the General be ever so great, it is impossible that he can have an eye to all the little details that contribute to their defence: It is sufficient if he knows that the guards are well posted. It is afterwards the duty of the several Officers that command them, to make the best dispositions for a vigorous defence, that they may answer the General's views, and the end for which they were established.

Every one knows of what importance even the smallest detachments are to an army, and must be sensible, that, if they happen to be commanded by Officers who are negligent or ignorant of their duty, that they can neither expect
pect to procure advantage to the army, nor honour to themselves; but, as it is only on occasion of being employed in commanding small detachments or small posts, that the inferior ranks of Commissioned Officers can hope to signalize themselves, the knowledge of this particular branch is an object the most worthy to study and admire; Nor can an Officer, who would distinguish himself as an alert partisan, be too minutely acquainted with a subject of as much importance to him, as he is to the army, with whom he serves; especially as the method of forming strong corps of light troops and partisans now prevails.

When an Officer is commanded to go on detachments, he should carry with him, pen, ink, paper, wax, or wafers; a watch to mark the hour with, a case of instruments for drawing, and a line divided into four fathoms, to measure out intrenchments, &c. if he finds them necessary to make.

He must rise early, and be at the place of parade or rendezvous at least half an hour before the appointed time; and being told he is to command a party, he should ask the Brigade Major, whether he is designed to relieve another detachment, or if he is to be the first that is to take possession of the post? If he is to relieve a body, he is only to require a guide to conduct him. This guide is generally a soldier sent by the Officer to be relieved; who goes as an orderly man to the Adjutant General, to be ready to carry any orders that may be necessary; and, who having been at the post before, comes to conduct the new detachment. In case the post is to be taken for the first time, the Officer is to ask the Brigade Major for instructions relative to its defence, &c.

Having received the instructions, he must inspect the men of his party, and be careful that every soldier is properly provided with ammunition, that the piece is properly loaded, the flint good and well fixed; that each soldier has his canteen filled with water (if the water is good) and bread for twenty-four hours, or longer if found to be necessary; and never to let a man be absent to eat or drink, till relieved. Care must be taken that you carry proper tools to entrench with.

Some young unthinking Officers may say, perhaps, That these precautions they think unnecessary: But surely those, then, which I have before recited,
cited, and shall hereafter, are not shewn so little essential as to be neglected? and, as it is not reasonable to think, if they are unprovided of these things, that he will consequently be incapable of making the least defence that he ought? it is of no purpose to say, that soldiers are of course supplied with every necessary of this kind in the field; for on the contrary, I have often seen them wanting, through neglect, of almost every thing, and thereby becoming useless members, and rather a burthen in a post.

This, says M. de Vaubon, is what makes us unsuccessful in defences; owing to the carelessness of many Officers, in the provision of tools, &c. necessary on those occasions; and the source of this carelessness, which is too common; besides their ignorance and imprudence, is, that they treat it as too trifling an article to merit their attention; though, in fact, it is one of the most important things to be observed.

As to war, when you form a plan of a good defence, it is better to take a thousand useless precautions, than to neglect one good one; because the least neglect may disconcert the best measures. But you must never be disheartened by imagining the enemy more vigilant than they really are, and by starting difficulties that most probably will never happen. If in war you stop at every supposition that the imagination suggests, you will neither undertake or execute any thing. One general rule in military projects, is, never to forget any thing that may lead to success, and whereof the execution depends on ourselves only; as for what depends upon the enemy, some part must be left to chance.

When an Officer has made an exact inspection of his party, he should ask his guide the nature of the roads; if they are narrow, wide, open, woody, &c. if the enemy's posts are near; if they send out patrols; if he gets sight of their parties in the country in the day-time: Lastly, if he is to pass before, or near any houses, cottages, or chateaus; and how the roads are encompassed, whether by thick hedges, ditches, or banks, &c. on these informations the Officer should take the necessary precautions for his march, and his return again to camp.
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M. de Vaubon says, That if an Officer is to remain but four or six hours in a post, he ought to intrench; and he should cause the works, which are to be constructed, to be well executed, so as to defend every place where the enemy can come. M. Folard gives an excellent maxim, to attack an imaginary post, that we may be able to defend a real one. And the Baron de Travers says, That with regard to the strength and means of resistance in posts, they should be in proportion to the force the enemy can bring against them. If to pass only some hours in a post, it is a good way to make an abbatis, or if it is in a village, to intrench one of the most detached houses.

The way to guard against being surprised, betrayed, or made prisoners, is to take precautions against everything the enemy can undertake; and at whatever distance he may be at, we ought not to found our security on probabilities. Neither stranger nor soldier of any party should be admitted into the post, and the roll should be called over four times in the day, and every hour in the night, which will keep the guard alert, and be the means of preventing desertion: he should likewise examine the sentries, to see if they are acquainted with their duty, for which they were posted there; and should instruct them how to defend themselves in case of being attacked; observing to them, that, if the enemy make such a movement, they should oppose such another; if they try one scheme to resist with another, and deceive them at every step: He may make some of them to try to scale the intrenchment, to shew the difficulty of mounting it, and by exercising them in this manner, will easily prepare them to resist the enemy; besides, it will flatter their vanity, and give them a confidence in him: But let him take care not to be too familiar, lest, in a brisk attack, he order some thing to be done not to their mind, when, instead of obeying like good soldiers, they may resist his orders, and perhaps mutiny; but when he has shewn his men the advantage of a party that are intrenched, over those who are exposed to the attack; he must take care to preserve subordination with an unshaken firmness, and not to allow himself to fall into the snares of an enemy.

Two hours before day, the men should in particular be kept alert, sitting on the banquette, or other place with their arms and bayonets fixed; and the patrols sent at that time (as well as in the dead time of the night) to march slowly,
slowly, to listen attentively, and to examine every place round the post, where
a person may conceal himself.

It happens frequently, that two armies are encamped opposite to one another,
and have several posts on the same line, and that two patroles meet in the
night. As it is impossible to distinguish whether they are friends or ene-
mies, they who first discover the others, should conceal themselves on the sides
of the roads, behind bushes, hay-ricks, or in a ditch, to examine if they are
stronger, and in that case to let them pass in silence, and return another way
to the post, and to report what they have seen; but if they find them weaker,
he who commands the patrole should make the signal which is ordered for the
patroles of the night, which is answered by an appointed number; but I
would recommend a word as the safest: If the patrole does not answer, they
should rush upon them with fixed bayonets, and fire upon them if they see
them taking to flight, in order to kill, wound, or make prisoners. In the
year 1748, when I was upon command in Italy, I have heard the Officers of
the Sardinian corps say, (when in conversation with them upon military mat-
ters) "That there were old soldiers who used to beg for the employment of
patrolling, and took pleasure in it; as where the most danger was, there was
the post of honour."

If detached opposite to the enemy, it is to be presumed that you may be
attacked; therefore small detachments should be advanced, between the cen-
tries in the night, about forty or fifty yards from the post, laying with their
bellies upon the ground, (as our light infantry men now do) in those places
where they imagine the enemy may come; with orders to those who com-
mand these detachments to make a soldier reconnoitre any parties that are seen
lurking about, so as not to confound their own patroles with the enemys' par-
ties, and to retire to the posts on the first firing.

In villages there should be great care taken of suspected persons, or of the
peasants revolting; and for this purpose, you should make the magistrates or-
der two peasants, the best known, and the most likely to be intrusted, to be
put on duty with the centries of the party at the passages. These peasants,
who are relieved every two hours, the magistrates must again order those

whom
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whom he supposes faithful, and should be charged to recollect all who pass out, or come into the village; and both the one and the others must be told, that they shall be answerable for all accidents that may happen from treachery or negligence of these centries, who have even let enemies in disguise enter the village.

They must likewise order the soldiers who guard the entrenchments to let no peasants approach, and to shut up the passages with a small abbatis, and not to permit any person in the night to pass but their own Officers upon duty, and the patroles; in the day-time they must examine all carts that want to pass, with iron spits, iron ramrods, or their swords, lest they may have concealed under hay, straw, or casks, mens' arms, ammunition, &c.

The inhabitants should be prevented from making possessions, holding fares or markets; because under favour of these, and such like assemblies, the enemy have often entered and seized posts. There are hundreds of proofs how fatal these indulgences have been, yet still remain unrecollected (though I have published them in three of my former publications) truly it is wrong, that man should pass for the most artful of all animals, since there is no one so easy to surprize: How many camps, garrisons, and posts, have been surprized by giving this liberty, and it is a sad misfortune that has happened to numbers; yet these surprizes are always new: An Officer cannot watch too carefully to prevent schemes that may be contrived against him.

OF DISPOSITIONS NECESSARY TO MAINTAIN A PARTY IN A POST.

It is not sufficient for the preservation of a post to have good intrenchments, and to have taken precautions against all kinds of surprizes; for as the enemy may attack it with superior forces, those who are attacked should make
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make their dispositions so as not to embarrass one another, that every arm may be so properly placed, that all may contribute to the common defence.

If it is a redout that is to be defended, or whatever other intrenchment of earth, seven or eight trees, with all their branches, should be reserved to stop the breaches that the enemy may make; the parapit should be lined with all the soldiers of the party, and arm the rear rank with esponoons, halberts, or forks; or as M. Folard says in his notes on Pobybius, "with long poles;" and to them I would have a bayonet knife fixed at their ends. These long weapons will keep the enemy at the edge of the ditch, or at the outward edge of the parapit, where it will be easy to bring them down by your ball. These men of the rear rank may also be furnished with hand-grenades * or faggots well lighted, to throw among the enemy that have got into the ditch; as also ashes or slack lime may be thrown on them, the burning dust of which, will for the present blind them; but of all these articles, the hand-grenade is to be preferred, and after many trials, I may take upon me to answer for its success.

It is evident, that the different methods I have been speaking of, to arm them for the defence of a parapit, cannot be practised by a small party of thirty or forty men; the number not being sufficient to form two or three deep; they therefore are to be armed with firelock and bayonet only: And if the enemy gains the parapit, they must be resisted with the bayonet, and the men are to keep close up to it; care must also be taken to post eight or ten men, more or less, according to your numbers in the ditch, at the parts the least exposed, and the least in sight of the enemy; to keep in this position till the enemy leap into the ditch, then to divide into two parts, one to the right, the other to the left, to fall on their flanks with their bayonets. This kind of sally will astonish the enemy greatly, as those who attack, don't dream of being attacked; but, on the contrary, are surprized to find themselves so warmly charged.

* Grenades during the siege of Cassel, under the command of de La Lippe, in the campaign 1762, a young Engineer undertook to carry one of the out-works, with a smaller detachment than one that had been repulsed, and succeeded with ease from the use of hand-grenades; which is a proof that grenades ought not to be neglected, either in the attack or defence of posts.
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The parapit of a redan (see p. 26.) is to be lined the same way as that of a redout, observing if the right or left of those redans were joined to any heights, or commanded by any rocks, which often happens: They should be taken possession of by seven or eight men, covered with an abbatias, (which is explained in p. 27.) to hinder the enemy from making themselves masters of them, and that they should not overwhelm those in the intrenchments by throwing down heaps of heavy stones.

If it be a chateau, a house, a cottage, or a small mill fortified with a curved parapit, that is to be defended, a part of the men designed for the defence of the intrenchment, are to be posted, as I have just now mentioned: This first disposition being made, it is not necessary to place men in the ground floor at the loop holes, as they will be useless there, while the out-work can be maintained; but if those who defend it, are forced and obliged to abandon it, they are to take shelter in the house, and post themselves at the loop holes. Two of the strongest men are, at the same time, to be placed at each jam of the door, within side, with bayonets fixed, to stab the enemy if they attempt to enter and pass the defile made by the trees, &c. placed before the door, by way of a barricade.

An Officer will acquaint his men with the different manoeuvres that are to be performed, in case they should be attacked, that they need not be afraid that they should execute what I am now speaking of in disorder. The men at the loop holes should never fire, until they are sure of their object, and to mind that one of them always keeps his muzzel of his piece in the loop-holes, while the other is loading.

There should be also at the loop-holes, of the first story, two or three men to annoy the enemy by musket shot; and there should be one of the before recited poles, halberts, &c. left beside each loop-hole, to thrust occasionally through the holes, to grapple and over-turn the ladders, the enemy might lean against the walls, observing to push them quick and strong, so as to over-turn, at the same time, both the ladders and men who are upon them.
If the windows of the first floor are not quite stopped up, and though the floor is cut away before it, two men may be posted near it, to overturn the enemy's ladders: Lastly, some men should mount up to the second floor, which is generally uppermost in the peasants houses in the country, they are to be posted at the brink of the walls where the tiles were taken off, with orders to pour down stones, ashes, lime, or half burnt dung on the besiegers, and to beat down their ladders with the rafters of their roof, in order to prevent them from gaining the top of the house.

If it is in a village that is to be defended, and that little guards are posted at the entrance of the streets, it will be proper to shew each of them, in what manner they are to retreat, if being forced, and obliged to fall back to the principal post, defending themselves from house to house, and from street to street, behind the trenches, that they have cut across them.

If there be a few cavalry in the detachment, they should be posted in the market-place, or any open street, where they may be ready to fall on the enemy sword in hand, as soon as they appear repose; but if they find they are too numerous, their horses should be sent to a place of safety with a part of the men, and the remainder should join the infantry, and act as such.

Lastly, if there are cannon, they should be placed opposite to the streets that lead to the chief post, to keep the enemy at a distance.

When all these dispositions are made, the Officer commanding should strictly order each and every one of his Officers and men, to remain at the posts assigned to them; to make a little fire if the season is cold, and to place their arms and ammunition, so as to be free from wet and damp, if possible, and to take them at a moment's warning, without the least confusion.
Of the MANNER of FORTIFYING VILLAGES and CHURCHES:

VILLAGES are fortified for different causes: When not too far from the camp, they keep the enemy's irregulars at a distance; and upon a day of action, serve to cover the advanced posts, or, perhaps, one of the wings of the army. When troops are in barracks, cantonments, or in winter quarters; villages, put in a state of defence, are of use to prevent surprizes, particularly those which are by their situation most exposed, as being nearest the enemy. But, in short, whatever may be the end proposed by fortifying them, the following rules must be observed.

When I speak of intrenching a village, it is meant only such as have the houses collected, and sometimes surrounded with a wall. An Officer detached to a post of this nature, ought to go several times round it, and observe the adjacent buildings before he begins to intrench, and cause loop-holes to be pierced in them; the entries of those passages leading to the country, should be blocked up with trees, and, if time permits, he should make an abbatis, and intrench the entries of the street, he has then done his duty, so far, like a discreet prudent Officer. An Officer who would fortify a post of some extent, ought to make a kind of plan of the village, and of the intrenchments which he intends, which will often furnish ideas of defence that escape the memory.

He should thoroughly examine and reconnoitre, whether the enemy can penetrate unperceived, under cover of any wood; whether or not the village

* Intrenching a village or small post, are generally made with trees: This is an excellent intrenchment, and is called an abbatis.

The works are also called intrenchments, which are thrown up in a fortification that is attacked, in order to dispute it the longer with the enemy, and this generally consists of a trench and parapit.

Trenches are likewise a kind of way carried on by traverses or zigzags, which is dug in the ground by the besiegers, without being exposed to the view or fire of the enemy.

† Loop-holes, are commonly made eight inches long, two inches wide within, and six without.
is commanded by heights; whether the communication to it is easy or difficult; whether a brook runs through it, or on one side; the nature of the banks; whether making it overflow would incommode the enemy; how the village may be most easily relieved; and in what manner a good retreat may be effected, when necessary. All these points ought to be well considered beforehand, and every advantage taken that can result from a perfect knowledge of the ground. Very often, for example, a deep and rugged ravine; a rivulet with steep banks and of difficult access; an inundation + which may be formed, an impassable morass, a flat ground intersected with ditches, and many

* Ravine, a deep hollow usually formed by a great flood, or a long continued running of water, frequently turned to good purposes in the field.

+ Inundations are made from stopping the currents of brooks, and overflowing the meadows, &c. on each side. By this means fords are rendered impassable; and also the posts within a certain distance so well covered, that an attack upon them becomes impracticable.

Inundations of this sort are formed by laying dams across brooks or streams, as follows:

If the brook runs through flat ground, the banks being nearly on a level with the rest, dykes are raised on each side, at right angles with the stream, about thirty or forty paces long, five feet broad, and the same in height. The upper side, or that towards the source, is lined with fascines; but it is unnecessary to fascine the other. If there is only three or four feet deep of water, a dam six or eight feet broad, must be then formed entirely of fascines, in the middle between the two dykes, by laying one bed of them upon another, each being fastened with flakes; or loaded with stones, to prevent the current from carrying them away. But when the water is deeper, two rows of strong flakes or piles, four or five inches diameter, must be driven close to each other, between the two dykes. The two rows, being eight feet asunder, will form a space, called the Coffre, which is then to be filled with earth and stones. The course of the water being by this means stopped, it will naturally overflow its banks; and being kept up by the dykes, must consequently inundate the low grounds, and seek new passages at the end of the dykes. If the brook is so very trifling, as to make it to be apprehended that the inundation would not be of sufficient depth, small ditches, four feet deep, and eight feet broad, may be here and there dug in the ground intended to be overflowed. This must be done before the coffre is completed.

The earth taken out of them, is scattered about on each side. These ditches are naturally filled with water, as soon as the brook begins to overflow its banks; so that if the inundation should prove too shallow, the enemy will nevertheless find equal difficulty in passing it, as the little ditches can neither be perceived or avoided.

To prevent the dykes serving by way of passages to the enemy, chevaux-de-frise, trees, branches, &c. are laid all along them. If the brook is rapid, the dam across it must be ten feet broad, or more, otherwise it will very soon be destroyed. At the same time it must be remembered, to lay it over at the shallowest place, which consequently will save a great deal of trouble.

When the stream runs in a narrow vale, with heights on each side, the same kind of dykes must be raised as above-mentioned; but to render the inundation deeper, they should cross the whole valley, leaving only a small opening at each extremity, that the water may pass, and not be forced to overflow the dykes,
many other natural advantages, cover a post much more effectual than any thing in the power of art to add. When the village is situated upon a height, it is fortified with much less trouble, as then the natural advantages render the post respectable; and many things may be omitted, which cannot be dispensed with when it lies in a plain.

A street is to be defended like a ford or bridge with a redan, (see p. 26.) or with a single parapit in a semicircle with a ditch; many loop-holes in the houses at the entrance, and deep ditches across the streets, with chaussé traps* thrown into the bottom of them. The streets should be barricaded with trees, carts, and casks, &c. several passages in the back part of the houses should likewise be opened, to keep up a different communication with the several streets from one to another, so that none may be cut off: but above all, if there are but few men, the middle of every open place or square must be filled with felled trees, to prevent the enemy forming if he penetrates. As cannon or fire are most to be dreaded in the defence of a village, an Officer ought to break up the roads by which cannon can pass, which is an easy matter in a mountainous country; but if the village happens to be in a plain, large ditches should be cut across the avenues at every little interval, placing trees across that take up the whole breadth: If there is time, the joists of the house should be propped up with the trunks and the parts of trees next formed to it, being the stoutest, or large beams, put like bricklayers horses, to prevent their tumbling down and hurting the besieged. The best security against fire is to burn all the materials that an enemy can make use of for that purpose; but, if there which would very soon totally ruin them. These two openings must be lined with fascines, to resist this new course of the stream, and the dykes likewise made more sloping at these parts, otherwise the continual running of the water would wash them away by degrees.

When there is a pond already made, which is supplied by a constant stream, and sluices established in the dam, or head which keeps the water; if, in this case, it should become necessary to enlarge the pond, or lay a greater extent of ground under water, the sluices must, of course, be shut till the inundation is completed (if the height of the head is sufficient for that purpose), and are then to be opened just so much as to allow the quantity of water to pass which the stream constantly supplies. Should this be neglected, the water would soon overflow the top dam, and gradually wear it away.

* Chaussé de traps, are four pointed irons, so made that what so ever they fall, one point is always uppermost; they are four inches long, the short ones; the long ones six or seven. The short ones are thrown on bridges, &c. and the long ones on the earth, both to incommode the cavalry, that they may not approach without difficulty.
is a quantity of wood, straw, or hay, the General or Officer commanding should be asked, whether he chooses to have it burned, or carried off to supply the army.

Another essential thing for an Officer to attend to, who is detached to a village, is to secure his retreat, in case he is fired at by the enemy at the entry of the street, or in his first entrenchments. However, if there is a church in the village, I would restrict myself to the defence of it alone.

If the wall of the church-yard should be very high, and plenty of wood can be got, scaffolding ought to be erected all along the inside, or at least at certain distances, which the soldiers mount by means of planks, with pieces of laths or small pieces of wood nailed across in form of a ladder. Loopholes about eight inches long are pierced in the wall, seven feet from the ground, by which a good defence may be made, and the enemy greatly incommoded, as the situation of the garrison which so much commands them when they make an attack. There may be also loopholes pierced at the bottom of the wall, almost even with the bottom of the ground, and a ditch three feet and a half deep dug just behind, scattering the earth towards the rear. The men are posted in the ditch, to fire through the lower loopholes, which are of great service in keeping the enemy from approaching the gate, and perhaps setting fire to it, which by stooping and running up, they might very easy effect *. Should there be a scarcity of wood, earth may be thrown up against the gate; in that case, loopholes cannot be made at bottom.

When the wall happens to be very high, and wood for scaffolding not to be procured, the upper part of the wall should be broken down, and a banquette + of sufficient height made with the rubbish; but on the other hand, when the water is very low, a ditch must be dug behind it deep enough to cover the men breast high.

* Therefore large hogsheads or tubs filled with water, should be provided to extinguish the fire, if the enemy should attempt to burn the church.

† Banquette, is a kind of step made in the rampart of a work, for the troops to mount upon, in order to fire over the parapet; it is generally three feet high, as many broad, and about four and a half lower than the parapet.

A Ditch
A ditch is made very near the bottom of the wall on the outside, but so as not to affect the foundation, about twelve feet wide, and four feet deep, pointed at bottom, that the enemy may have no footing. The earth taken out is scattered about, and no little heaps left which might conceal their approach. When trees surround the church-yard, or are near at hand, the post may be still farther strengthened, by laying them down, branches and all, along the bottom of the pointed ditch.

If there should be any thatched houses in the neighbourhood, they must be covered immediately, and the straw burned. If they are even covered with tiles, it is likewise necessary to unroof them, to prevent the enemy taking possession of them and firing from the garrets, which overlooking the church-yard, as it would soon render it too hot for the troops to remain. The walls even of all the houses within gun shot, ought to be demolished, that the enemy may not conceal themselves behind them, and incommode the garrison by their fire. In short, every possible means must be used to discover the enemy, on whatever side they make their approach. All the trees and hedges of the neighbouring gardens should be cut down and pointed, and thrown as before-mentioned, into the ditch on the outside of the wall; and on the side where the attack seems the most probable, the obstacles must be increased, by digging trous-de-loup *, and even constructing fougasses †, if materials can be got.

When all these precautions are taken, a garrison, who do their duty steadily, will not easily be forced without cannon; but if the enemy bring artillery, and make a breach in the wall in order to make an assault, it is even necessary to endeavour to defend the breach (particularly when the post must be held out to the last) by filling it with logs of wood, and setting it on fire by some of the volunteers (which their generally is). If there are any trees in

* Troux-de-loup, are round holes, about six feet deep, and pointed at the bottom with a stake placed in the middle; they are frequently dug round a redout, to obstruct the enemy's approach. They are circular at top, of about four feet and a half diameter.

† Fougasse, a small mine, from six to eight feet under ground; they are generally placed under the glacis or dry ditches.
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the church-yard, they may be likewise cut down, and thrown entire into the breach. All this must so embarrass the enemy, that their fire will be entirely thrown away, and they obliged to begin the attack anew. But if they are determined to carry their point, the wall must be at last abandoned, though indeed not till the very utmost extremity, and a retreat made to the church, where it is expected that every particular person knows his post before hand.

When soldiers who defend a post, know they have a place to retreat to, they do not think of surrendering, while they see themselves in a situation of obtaining at last an honourable capitulation.

If the works with which posts, especially villages are fortified, were to be executed entirely by the soldiers of the detachment, who ought never to be fatigued, it would be too laborious and tedious (though in cases of necessity they must, and ought to do it, without the least murmuring) therefore an Officer should cause a number of peasants, by the appointment of the magistrates to work alone, or jointly with a third of the party, while the two thirds remain under arms to prevent surprizes. The soldiers and peasants should be relieved every two hours by fresh men, taking care that the peasants have no concealed arms, and that they work without interruption till the work is compleated.

The first thing to be thought of in fortifying a church, is, to prevent the enemy from being able to force the gates; they must therefore be properly secured by a tambour*: after which a scaffold is to be erected within side, two feet high, for the soldiers to stand upon, or a banquette may be raised of the same height, made of earth taken from the inside of the tambour. Immediately above the scaffold, or banquette, another row of loop-holes are pierced, in the intervals of those of the upper row; and in this manner the three sides of the tambour have each a double row of loop-holes.

* Tambour, is a kind of work formed of palisades, or pieces of wood ten feet long and six inches thick, planted close together, and driven two or three feet into the ground; so that, when finished, it may have the appearance of a square redout cut in two. Loop-holes are made six feet from the ground, and three asunder, about eight inches long, two inches wide within and six without. They are frequently made in the place of arms of the covert-way, at the salient angles, in the gorges, half-moons, and ravelins, and for church-gates &c.
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If wood cannot be got of the thickness above-mentioned, thinner pieces may be used; but then the deficiency must be made good by nailing planks within side, to prevent the enemys' shot coming through, being to line it from the bottom. A pointed ditch is next made, two paces from the tambour, scattering the earth all round. To secure the troops against the enemys' grenades, it would be of great service to cover the top of the tambours, by leaving beams or joints horizontally over it, supported by others that stand perpendicular. On the joints planks are laid, and above them about two feet thickness of earth, taken from the pointed ditch. Tambours constructed in this manner are extremely useful, serving both to defend the entrance into the church, and to furnish a cross, or flanking fire for the parts of the building on the right and left of it. But they must be occupied properly with troops, before the church-yard wall is abandoned, to cover the retreat of the rest towards the church. These kind of works may be likewise constructed before the gates of the church-yard, that the wall may be defended by a cross fire, only with this difference, that the latter has oblique flanks with no openings in them.

An opening about three feet square, and two feet from the ground, is cut in the gate of the church, by which only one man can pass at a time; it is covered with a little door made of planks, bolted within side: and as the other part of the gate is strongly barricaded, it will be the only passage into the church; so that if the enemy were even masters of the tambours, they would not dare to approach the gate, being pierced with loop-holes.

Should the church windows be so high as to make it impossible for the enemy to fire in upon the garrison, scaffolding must then be erected in the inside for the soldiers to stand upon, to fire into the church-yard; but if they happen to be so low as to enable the enemy to see, and fire into the church, they ought then to be immediately closed up with beams and planks, to about eight feet from the ground, and scaffolding of a proper height erected behind for the use of the garrison.

Loop-holes must likewise be pierced in the walls of the church, all round, if not too thick; and if there should happen to be galleries, they may serve instead
instead of scaffolds, and the loop-holes must be opened accordingly. There should be also another row of loop-holes within seven feet of the ground, and the seats and benches of the church used by the troops by way of banquette; but when the walls are too thick, the loop-holes must be pierced between the pillars, where they are generally thinner.

The principal thing to be considered in all these works, is, to obtain a cross fire. As churches for the most part are built in form of a cross, this advantage is at once gained; for there is of course a cross fire from the loop-holes; but when the form of the principal building is such, as not to answer the purpose, then it is to be procured by making loop-holes in the porches of the church, vestry, and other smaller projecting parts of the church. If there are none, tambours must be constructed on every side.

It is necessary soldiers should be posted in the upper part of the church, that the enemy may be discovered even at a distance, and consequently fixed upon. The windows of the steeple ought at the same time to be barricaded, and loop-holes made. The very pavement of the church should be lifted, and the bricks and stones carried to the top of the wall, in order to gall the enemy when they approach too near, or endeavour to take shelter under them.

If you can find a spring in the church, it is an object of the first moment; if not, you should contrive to turn a stream of water into it: if that cannot be accomplished, you must get all the spare casks you can, filled with water, and taken into the church, with a quantity of bread, and such other provisions as will keep the longest; in short, nothing should be left to chance when the honour of a soldier is at stake. No person should be suffered to remain in the church, except such as are able to oppose the enemy, least you may have too many mouths for your provisions.
Of the MANNER of ATTACKING a VILLAGE.

THOUGH the taking a village is always difficult when you have to do with those who know how to defend it; nevertheless you may succeed by surprize and stratagem.

We ought never to form a plan for an attack, upon simple speculation; because from reasoning we often think things are feasible, which we find impossible in the execution.

When you intend to undertake an attack of this kind, you ought to form a just idea of it, by examining all the branches separately, and the different means you can use, so that by comparing them together, you may see if they concur, and answer to the general purpose; and to take such measures as may in a manner render you certain of success before you begin.

The preparations for the attack of a village, are pretty near the same with those that stand alone; but as these kind of attacks are always more difficult than others, on account of the various devices that may be opposed to every attempt. An Officer should not begin his movements * till he knows the strength of the intrenchments; the obstacles he may meet with in every street, and how the inhabitants stand effected towards the garrison.

If you are to be conducted by spies or guides, they should be examined concerning every thing that can be of use before they are employed, especially about the road by which they propose to conduct you. The reason of this is, because we often see simple people, animated with the hope of gain, imagine they can easily lead a party, when they have only a great deal of good will;

* That is, he should not move until he has got the best information the nature of the matter admits of: And an Officer must be cautious in constructing this sentence, not to draw hence reasons for his inactivity, under pretense of his not having sufficient intelligence.

but
but if you find, in those who offer, all the necessary qualities, you must immediately secure them to you as much as possible, by making them dread the destruction of their houses, and pillaging their goods, if they lead the party into a snare. You may likewise ask their wives and children as pledges of their fidelity, and the moment of beginning your march, place them between the front and center ranks, tied with a small cord or chain; which precaution is the more necessary (on these small attacks) as traitors have often been known, on pretence of conducting a party to seize a post, to have led them where they have been murdered in the middle of the night, and have disappeared at the very moment of its execution. If you make your guides hope for recompence proportioned to their services on one side; on the other, you must make them fear the cruelest punishment if they do amiss.

The night being the most proper time to march to the attack of a post, you should begin your march soon enough to be ready to make your attack an hour or two before day. Care must be taken that it is not moon light when you propose making the attack; the soldiers ought to march two and two, without making the least noise possible, especially when passing between the enemy's centries: You must likewise not suffer them to spit or smoke. The detachment must get as opposite as possible to the salient angles of the intrenchment, as it is probable they may be the least defended by the enemy's small arms. If a patrol of the enemy comes while you are on your march, or ambushed in the environs, you need not be alarmed, nor make the least motion which may make the enterprise fail, but remain concealed in the profoundest silence, that the patrols may pass without perceiving any thing, and afterwards pursue your design.

If an Officer takes this information from the people of the country, he should affect a great indifference in his inquiries, that they may not suspect his design, and communicate it to the enemy, who, by that means, may take precautions to overturn his projects. He should also endeavour to be well assured of the truth, by comparing the peasants, deserters, and what he knows, or has seen himself, altogether, in order to find out the most probable. When he knows the enemy's situation, he is then to make his dispositions for the attacks,
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attacks, and must point out the duty to each officer of the divisions, as well to those of the false attacks, as those of the true.

The true attacks are to be made at the places that are most difficult of access, because here the enemy, confiding in the strength of the situation, are the least on their guard*. They may also be made upon the houses situated at the entrance of the streets, because when you are in possession, it is an easy matter to break through the walls of one house into another; and being possessed of the houses, it will be easy to drive the enemy out of the streets even with stones, and obliged them to take to their last intrenchment.

If the war is in an enemy's country, which you do not choose to spare, it would be an easy matter to set fire to the four corners of the villages, and obliges the besieged to surrender themselves presently; but besides the inhumanity of using means that tend to lay waste a whole country, it is likewise very dangerous to throw all the inhabitants of the open country into despair, because then flying into the woods, they form into bodies (as it has been the case in America) and spread about everywhere to knock the straggling soldiers on the head; murder the sutlers; hinder the peasants from carrying any provision to camp, and ravage the whole country. M. Folard, speaking on this subject, says, He saw during the war in 1688, fifteen hundred Barbets, of the valley of St. Martin, kept forty battalions in awe, through the whole extent of the valley of Pragelais, where the Bifan runs in the bottom between two very high mountains, of most difficult access, and where each party guarded their own. These Mountaineers came down sometimes when they saw our convoys in motion, and attacked them; at the same time they had scarcely ten or twelve men, where they had intire corps.

It appears from the example I have now mentioned, that it is very imprudent to master considerable posts, such as villages, by setting them on fire; and that it is much better to take them by smart attacks, in preference to the burning, if it can be done. An Officer who commands an expedition of this

* People always guard against probabilities; therefore, as Cardinal de Retz says, probabilities seldom come to pass: At the late conquests of Cape Breton and Quebec, the successful landings were made at places, deemed by the enemy (the French) to be inaccessible.
kind, should not attach himself obstinately to one single attack: For the false ones may become true, and he ought to know the success of each, so as not to throw away men to open a passage. On one side, whilst perhaps it may already be opened on another.

When the assailants have penetrated the village, the Officers commanding each division should be attentive to leave small detachments at every church, and at every strong and tenable place fit for the bulk of their party, in case they should be repulsed. They should be very watchful that the soldiers do not scatter about, to pillage the inhabitants houses. Detachments have been often driven back out of a town or village, by neglecting this precaution.

Three days after the surprize of Cremona, in 1702, some German soldiers were still found in the cellars, where they had got drunk, and were greatly astonished when they were told, that they must quit those lovely retreats.

An Officer who would avoid so dangerous a disorder, should make it death for a soldier to stir from his party, and should post a serjeant or two just in the rear of each, to prevent any man from staying behind.

If they find any cavalry drawn up in the markets, or open places of the village, the besiegers are to stop, and stand firm at the heads of their streets, opening into the place or market; some of them are to get into the houses next the corners, to fire on the enemy through the windows; and if they find it disorders them, they should immediately move out and charge them with fixed bayonets, to oblige them to surrender.

Lastly, if the internal parts of the village be defended by cannon, the troops should march with speed to possess themselves of them, to spike them up, or to turn them on the enemy, or against their chief post in the village.

One may judge from all I have said of posts, and shall hereafter say, that those actions, though different, are not impossible, when means intended to be employed in the execution are judiciously combined, and well concerted.

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These ways are easy to be imagined; nevertheless few examples of such actions appear, because young gentlemen of the army do not apply themselves enough to this part of war; wherein to succeed requires sense and courage, a head for stratagem, a daring spirit, a ready execution, and a cautious foresight.

Of the ATTACK of a VILLAGE SURROUNDED with HEDGES and GARDENS.

This article admits of very little to be said upon the subject; any more than a village thus fenced should never be attempted in line of battle, nor with large columns, but in small; or divisions, such as might be able to penetrate into the different openings, without changing much of their dispositions; and each, if possible, to push forward at the same time.

N. B. The men should be in their waistcoats, to be less constrained, and less liable to be intangled with the hedges.

Of the ATTACK of SMALL TOWNS, CASTLES, &c.

In the course of a war, small towns will frequently present themselves, which serve for posts to the enemy, and are therefore necessary to be taken; there are also small castles which do not deserve the attention of an army, but are seized and taken possession of by detachments. Some observations on the manner of conducting the attack of these holds will perhaps be
of service to young Officers, for whom this particular part is intended, and who may probably be sent to take such posts.

Most of these towns and castles are inclosed only by a single wall, without any rampart, or at most they have only a paltry ditch, easy enough to be passed, or some little works of earth, raised and pallisaded, before the gates, to cover them, and secure them from being forced by the first attack.

How weaksoever the walls of these places may be, it would be exposing troops to destruction to appear before them in open day, and endeavour to force a passage through them into the town or castle.

If the defendants are men of resolution and courage, the assailants will be soon rendered sensible how very difficult it is to open a passage through their walls, or to pass over them, or to force an entrance by breaking down the gates.

It is therefore necessary, in order to attack these little places, to be prepared for making a breach in the wall; and for that purpose some small pieces of cannon, which may be easily transported from place to place, must be taken on these expeditions, and also a couple of mortars of about 7 or 8 inches diameter, if they can be easily had. These must be so disposed as to arrive near the place towards the close of the day, and during the night a kind of epaulment* must be made, to cover the troops, and to serve also as a cover to the cannon and mortars, which as soon as day breaks, must begin to play upon the enemy, by which means these kinds of places may be reduced speedily, and without much loss.

If cannon cannot be had, the most secure and easy method of gaining possession of the place, supposing it to be well known, seems to be the escalade †.

* Epaulment is a kind of breast-work to cover the troops in front, and sometimes in flank. These works are sometimes made of filled gabions, or fascines and earth.

† In order to succeed in the escalade, you must have a perfect knowledge of the place, that you may determine on which side it may be easily scaled; though it will be very difficult to force an enemy who is apprized of your design.
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A feint may be made of attacking it on one side, in order to draw the attention of the troops within to that part, and the ladders * at the same time may be applied to the other, in order to gain a passage over the wall into the town. Supposing the escalade to succeed, the men who have entered the town ought immediately to run to the gates, and throw them open to the rest of the troops. This done, they are to go and charge the rear of the defendants, who are opposing themselves against the false attack, and render themselves masters of whatever may insure the capture of the place, and so force the troops which defend it to surrender.

In these kind of attacks, the petard + may be employed to advantage; it is also of excellent use in forcing open gates, and opening a passage into places intended to be taken. These attacks must, as much as possible, be made by surprize, that they may succeed the better, and be attended with the less loss. The memoirs of M. de Feuquieres furnish several examples of posts, such as we

But in the confusion which an unexpected attempt of this nature immediately causes, the enemy cannot think of every thing that is proper to be done, or at least cannot guard at all parts. He is attacked at several sides at once, in order to divide his forces; it is not easy for him to distinguish the false attacks from the true, wherefore he will be obliged equally to sustain all his parts, and if he does not take the greatest precaution, while he is employed on one side, the place is entered at another. The success of an attack is infallible, if they mount the four sides at once, and take care to shower a number of hand grenades among the enemy. Especially when supported by some grenadiers and light infantry, who share the fire and attention of the enemy.

* With regard to the measure of ladders, the methods of determining it is this: If the height of the walls be known by the means of some communication with those within; the proposition of the ladders is most easy to be ascertained: For if the wall, for example, contains ten certain parts of any measure in height, the height of the ladders must include at least twelve such parts. The distance at the foot of the ladders from the walls should be equal to one half of their heights; for this is the most just proportion with respect to men that are to mount upon them: If the distance be greater, the ladders will too easily be broken under the weight; if less, they will then be so erect, that the soldiers as they ascend, must be in continual danger of falling down: If the walls are not to be approached, and the measure of them is unknown; the height of any body that stands perpendicularly upon a plain surface may be taken at a distance. The method of doing this is not only practicable, but easy to those who are acquainted with the mathematics. N. B. The soldiers are to carry their ladders with their left arms, thrust through the second step; they must keep them upright and close to their sides; and hold them so short, as not to come too near the ground, to avoid dislocating their shoulders when they leap into the ditch.

+ Petard, an engine to burst open gates, of small fortresses; it is made of gun metal fixed upon a board two inches thick, and about two and a half square, to which it is screwed, and holds from nine to twenty pounds of powder, with a hole at the end, opposite to the plank to fill it, into which the event is screwed: the Petard thus prepared is hung against the gate by means of a hook, or supported by three slaves fastened to the plank, and when fired it bursts open the gate.
are now considering, which he forced; and the method which he observed, may be followed in like cases. But I shall not insert it here, because the memoirs themselves are very proper to be read by young Officers, as they were written by a consummate master in the whole art of war, who well knew how to improve the knowledge which he gained from the instructions of those excellent Generals under whom he had served.

There is one certain method of driving the enemy from posts which he is not willing to abandon, and from which it is difficult to force him; that is, to set them on fire. This way is indeed something rude and violent, but it is allowed by the rules of war, and an Officer must not scruple to put it in practice, when he finds it necessary for the preservation of the troops under his command.

Whatever be the nature of these little places which you would attack, if they cannot be taken by surprize, and you find it necessary to have recourse to open force, some infantry must be so disposed, as to keep a continual fire upon those parts where the enemy is posted, and at the battlements which he may have constructed in his walls; the gates must be broke open, either by the petard, or with hatchets, and, for the security of the men who are employed in this dangerous service, a great fire must be made wherever the enemy may shew themselves. The gate being broken, if there are barricades behind it, they must be forced by a brisk and resolute attack, that the defendants may have no time to recover themselves, but be glad to surrender prisoners of war, after they have made their utmost efforts, and find it impossible to hold out any longer.

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Of the MANNER of FORTIFYING a MILL or FARM-HOUSE.

An Officer who is sent to posts of this kind, which are detached from other buildings, should intrench them with a turning parapet, if he has men enough to defend; but, if he has only a few, he should make an ab-
batis round them, especially opposite to the angles, to prevent the enemy from undermining it. He must likewise take off the tiles and slates, least the enemy get up by ladders, and crush his men that are within. If the mill or house is covered with thatch, it should be pulled off and burned, as well as every thing combustible that can be found near them, least the enemy make use of them against the mill or house.

Though the mill or house is surrounded with an abbatis, he should not fail to pierce the walls with loop-holes about a foot from the ground, so as to discover the enemy's legs, that they may not get footing on the other side. These loop-holes should be four inches wide, and three feet distant from one another; and a little ditch should be made a foot and a half from the wall within the mill or house, in which the men should be placed. Other loop-holes should likewise be pierced seven or eight feet from the ground, opposite to the interstices of the lower ones, and of the same width, placing the soldiers that are to defend them upon tables, planks, bedsteads, ladders, &c. and taking care to pierce a greater number opposite to the avenues before, and at the sides of the gate, and the angles of the house, because these are the places where the enemy usually make the greatest efforts. If the mill or house has an inner court, the walls should be pierced which inclose it, so as to fire upon the enemy after he has made himself master of it.

If there are several gates, they should all be blocked up, except one to be left for an entrance to the mill or house, which should be made so as to admit but one man at a time.

If there are low windows which are not grated, they should be shut up with wet dung, planks, stones, earth, logs of wood, or trees. If there are any houses, such as stables, cellars, &c. there should be an abbatis made in the front of them, to prevent the enemy from forming, if they are about to penetrate into the mill or house; and one or two trees should be put three or four feet within the entry, to prevent the enemy from penetrating right forward.
If there is a broad staircase to the first floor, it should be broke down, or blocked up with stones or casks filled with earth. If it is a winding stair, the wall should be pierced in different places with loop-holes, to fire upon the enemy that are already entered, keeping ladders to get up to the first floor, which should have the boards pierced with a number of holes about four inches diameter, to fire down upon the enemy, observing to pierce them only where there are no trees below; but to have a greater number over the door and other weak places which the enemy can force.

Loop-holes should be pierced breast high in the wall of the first floor, with about ten inches opening, and opposite to the interstices of those immediately below. If there are not men sufficient to defend the windows of the first floor, they should be barricaded to prevent the enemy from firing upon those within; and a large opening should be made in the pavement opposite to each window, a little longer than the width of the window, which is to serve by way of ditch, into which you may throw those who penetrate that way.

The same may be done with the second and third floors, so as to make an equal resistance over all: But, instead of piercing loop-holes in the highest floor, the tiles and slates being taken away, the wall may be taken down to breast high for the men to fire over; the stones kept to throw upon the enemy, and the rafters to throw upon the ladders which happen to be placed against the mill or house. A mill or house intrenched in this manner may resist a great while, and even tire out an enemy if defended by resolute men.

If an Officer has not time to oppose all the schemes which have been mentioned to the enemy, or when the General of an army wants to make a forage, and throws infantry into the mill or house to form a line, he should lose no time in placing a couple of trees across before the door, pierce the boards, shut the windows, and prepare for his defence; which gives time to the foragers to retire, and the supporting parties to advance.
YOU attack or take a place by assault, surprize, blockade, or a siege in form.

When you assault, you attack the place vigorously on every side, and employ every thing you can think of to become master of it. Chuse the time when the garrison is weakest, or when they are terrified, or are in disorder among themselves, or when you have any other intelligence among them to encourage you.

To execute a surprize or assault, chuse your most resolute troops, and those of best capacity; have more than enough of them, and let each of them know what he is to do, to avoid confusion.

Have a perfect knowledge of the place and way to it; furnish yourself with all necessary implements and machines for the business; have more than enough of each fort: Either march your troops in separate bodies, or all together, as you see occasion.

Be well informed of the time it will take to march to it; and set out exactly at the appointed minute. Write down the orders you would have observed, and the names of those you appoint for the action.

When you are master of the place attacked, cut off immediately the place of arms from the streets, make several coupures in them; disarm the garrison and inhabitants, and give some of the best houses to be plundered by the most deserving, and the rest to be divided by lots among those who have assisted in the service.

If it be in fair day-light, you must escalade it in several places at the same time, make sham attacks; keep a continual fire on the flanks and other defences
fences of the place: Let your ladders be of a right length, strong, and light of carriage.

If it be in the night, raise them without noise; and let them be so contrived, that you can take them to pieces; and let them have at top pullies well greased and furnished with old hat, to erect them against the wall without noise. Those which one man only can mount are strongest and most secure.

These sort of rough and bold expeditions require diligence, intrepidity, a cool head, and great presence of mind. The General must judge whether those he employs in the affair have these qualities.

It seldom happens that you succeed without the assistance of petards.

Of the Attack of a Place situate along a Great River.

Fortresses situate along large rivers may be taken with much less difficulty than those which are surrounded by morasses.

The attack of these places must be carried on as usual on that side which appears to be most favourable, and disposed in such a manner, as that batteries may be placed on the other side of the river, or in small islands which it may perhaps form over against the place, for protecting the progress of the trenches, and perhaps battering in breach the front, against which the attack is directed, as it happened under the direction of M. Vauban at the siege of Old Brisack in 1703. A battery which he caused to be erected in one of the little islands formed by the Rhine over against that place, called Isle des Cadets, from which a bastion on the banks of the Rhine was discovered, and battered in breach at
its foot, much hastened the taking of this place, which surrendered on the fourteenth day after opening the trenches.

At the siege of Fort Keil in 1733, batteries were also placed in the islands formed by the Rhine, which made a breach in the horn-work* of the attack, and in the face of the bastion of that fort which was placed behind the horn-work. These batteries played in ricochet+ on the face and the covered way of this bastion, that defended the branch or the horn-work next to the Rhine, which much facilitated the progress of the trenches between this branch and the river, and hastened the capitulation of this fort.

At the siege of Philippsburch in 1734, the besiegers first made themselves masters of the work which was over-against the town on the other side of the Rhine, and there erected ricochet batteries, which enfilading the defences of the front towards which the attack was directed, prevented the enemy from making such a fire on the trenches, as he would have been able to make but for these batteries, which raked the whole length of his defences.

When there is a bridge over the river opposite to the town, it is generally covered, either by a horn-work, or half-moon, &c. and as getting possession of this work is a matter of great consequence, for the more easy reducing it, batteries may be placed near the bank of the river, to ruin or break down part of the bridge, by which means the communication of this work with the place being rendered very difficult, the enemy will be compelled to abandon it.

* Horn-work, is composed of a front and two branches; the front is made into two half bastions and a curtain. This work is of the nature of a crown work, only smaller, and serves for the same purposes. The use of horn-works in general is, to take possession of some rising ground advanced from the fortification; the distance of which determines that of the horn-work; and they are places either before the curtain, or before the bastions, according to circumstances.

+ Ricochet, is when guns, howitzers or mortars, are loaded with small charges, and elevated from five to twelve degrees, so as to fire over the parapet, and the shot or shell rolls along the opposite rampart; it is called ricochet-firing, and the batteries are likewise called ricochet-batteries. At the battle of Lobsach in 1757, the King of Prussia had several six-inch mortars made with trunnions and mounted-travelling carriages, which fixed obliquely on the enemy's lines, and amongst their cavalry, loaded with eight ounces of powder, and at an elevation of one degree fifteen minutes, which disgrace execution; for the shells rolling along the lines, with burning fuses, made the shoutest of that enemy not wait for their bursting.
It is of the last importance in the siege of towns which are situated by the sides of great rivers, to know pretty exactly the time in which they are subject to overflow, and the extent of the inundation when at its greatest height, not only for securing the trenches from all accidents that might happen by such floods, but also for disposing the part of artillery in a place of safety, where the inundation cannot reach it, and spoil the ammunition and military stores intended for carrying on the siege.

Of the TAKING TOWNS by SURPRISE.

Towns are not to be surprized unless fortifications are bad, or their garrisons weak; and in case they are environed by a wet ditch, it can only be attempted in the winter when the water is froze over.

A town may be surprized by a whole army, as was the case of Prague, in the year 1741, for after lulling the garrison into a state of security by a tedious blockade, as was done by Prince Leopold of Anhalt, at Glogau, or by detachment, as was attempted by Prince Eugene at Cremona, and was executed at Cosel by the Austrians.

The principal thing required in making your dispositions for a surprize, is a perfect knowledge of the fortifications, especially the interior parts of it, otherwise your attack will be improperly directed.

The surprize of Glogau was a master-piece of military art, worthy the imitation of all those who would attempt any thing of the nature. That of Prague was by no means so extraordinary, as from its vast extent it was much more difficult to defend. Cosel and Cremona were betrayed; the first by an Officer of the garrison, who having deserted, informed the enemy that the fosse
ATTACKING AND DEFENDING

fosse* was not entirely finished; every Officer who has read knows the story of the latter.

If you attempt small places, you have nothing to do but apply petards to one of the gates, posting troops at the others to prevent the escape of the garrison; for if it is to be abandoned, the enemy will make a sally, and just before putting it in execution, they will fire smartly upon you; then form in one body, open the gate, and rush forward with bayonets to the place the Officer thinks the least guarded.

They never should, says M. Folard, wait for day to execute these sallies, which seldom succeed but in the dark, by which they easily conceal from the enemy the road they have taken, and for which reason they should not fire, but open to themselves a passage charging bayonets, least the enemy come where they hear the least noise.

The Baron de Travers says, that not to be met by the enemy, they should take the contrary way to that they expect them to take; and which it appears they ought to take; a small party can hide themselves almost anywhere, and, as it is not common to search a place on the enemys' side, there they are most secure, and may pass the day to take another road under favour of the night.

In case you find it necessary to employ cannon, take care to plant them, that your artillery men are not exposed to the fire of the garrison, or to those that sally, or you will be in great danger of losing your cannon.

* Fosse, is a large deep trench, made round each work, generally from twelve to twenty-two fathom broad, and from fifteen to sixteen feet deep; the earth dug out of it serves to raise the rampart and parapet of a work. Almost every engineer has a particular depth and breadth for ditches or fosses: some are for narrow ones and deep, others for broad ones and shallow: and it is most certain, that fosses should be regulated according to the situation; in regard to wet or dry fosses, all Authors almost has given it in favour of the latter: and I shall only add, that the best of all are those which either can be filled, or kept dry at pleasure.
How Philip Rendered Himself Master of Prinassus by Stratagem.

After some attacks which this little city rendered fruitless, Philip resisted from the attempt, and leading his army through the country, destroyed the citadels, and plundered the villages that were near.

He then went and encamped before Prinassus; and having in a short time finished his blinds *, and compleated the other preparations that were necessary for a siege, he begun to undermine the wall of the city.

But when he found that the rockiness of the soil rendered this work altogether impracticable, he had recourse to the following stratagem:

He ordered the soldiers to make a great noise under ground in the daytime, as if they were employed in digging the mines, and in the night to bring earth from distant parts, and to lay it along the mouths of the pits that were opened; that the besieged, on seeing a large quantity of earth, might be struck with apprehensions of their danger. At first, however, the inhabitants displayed a great shew of bravery, and seemed determined to maintain themselves in their posts.

But when Philip informed them by beating a parley †, and sending them a letter, saying, That the wall was undermined to the length of four hundred feet; and that he left it to their choice, whether they would now retire with safety, or remain till he should set fire to the props, and be then destroyed amidst the ruins of the place: in less than five minutes they gave an intire credit to his account, and delivered up the city.

* Blinds, are properly every thing that covers the besiegers from the enemy; such as wool-packs, fascines, chandeliers, mantelets, gabions, sand-bags, and earth baskets.

† Parley, is a signal made by beat of drum, or sound of trumpet when no drum can be easily had, for a conference with the enemy, when any thing is to be proposed, as a ceasation of arms to bring off the dead; or by the besieged, when they have a mind to deliver up a place upon articles of capitulation; and then there is a suspension of arms, and hostages delivered on both sides.
ATTACKING AND DEFENDING

A remarkable Circumstance that once happened to the Commander, Gonzalvo, who was Lieutenant-General to Spinola, and Governor of Milan, in the Campaign of 1621.

It was his intention to possess a little walled village in the palatinate, called Oegerheim; and of course he dispatched an Officer at the head of some troops upon that errand. On the first alarm, nine-tenths of the inhabitants removed to Manheim, excepting about twenty insignificant people, and a poor shepherd, who, besides being a brave fellow, was a man of humour. The shepherd in good time fastened the gates, let down the draw-bridge, and made a wonderful show of resistance. A trumpeter accosted the village in form; upon which the few inhabitants that remained, made their escape through a postern gate*, and left only the shepherd and his shepherdess big with child. This unaccountable peasant, in the style of a representative of the garrison, gave audience from the walls to the military herald, and made his terms of capitulation inch by inch; contracting at the same time for the preservation of estate, and the free exercise of the protestant religion. Let the reader judge what surprize the Spaniards felt, when they entered the village; yet the Droll preserved the muscles of his countenance inflexible; and some weeks afterwards, when his wife lay in, he desired the great Gonzalvo to be sponsor, which honour the pompous Castilian, for the jest's sake, could not decline, and on the contrary sent her some very handsome presents. "This account, faith a veracious historian [F. Spanheim, Mem. d'Elecr. Palat.] might appear to posterity to border a little on the romantic kind, if the notoriety of it had not been a circumstance indisputable at the time it happened."

* Postern gate, more frequently called a sally port, is a small door in the flank of a bastion, or other part of a garrison, to march in and out unperceived by an enemy, either to relieve the works, or to make sallies.

A Remarkable
A Remarkable Military Anecdote.

Towards the close of the last century, when Mareschal Catinat invaded Piedmont, it was of the highest importance to the King, then Duke, to march in time for putting Turin in a better posture of defence. To this end he dispatched the Count de Santena, then a Major, and since General, with a few hundred men, to Avigliano, an old castle about three German miles from Turin, which commands the road and valley of Soufa. As the French army, which consisted of thirty thousand men, was for passing by Santena, he fired at them with what little artillery he had. Catinat, who was no less surprised than provoked at this insult, sent to the castle, threatening to hang up the Commanding Officer; who returned him for answer, he should never have him alive, and that till the artillery should be brought before the castle, no surrender was to be expected. Catinat, now still more incensed, ordered a battery to be erected, and summoned the castle a second time. Santena answered, that a breach must first be made, which being begun, he offered to capitulate. Catinat sent a lieutenant into the castle to settle the articles of capitulation; but as a preliminary condition, demanded, that the soldiers should be made prisoners of war, and the Officers hanged. Upon this Santena took the lieutenant into his chamber, shut the door, and conducted him between two barrels of powder, with two lighted matches lying by. Santena taking one of the lighted matches, got upon one of the powder barrels, and desired the lieutenant to follow his example; adding, that since he must die, many more of the French should take a spring into the air, before all the Piedmontese in the castle should lose their lives. The lieutenant so little relished this compliment, that he begged of Santena to lay aside such a desperate design, promising to do all that lay in his power for obtaining an honourable capitulation for the garrison. Upon this assurance, the commandant dismissed the lieutenant, who having made his report to Catinat, the Mareschal said, I must see this man of such extraordinary spirit and resolution; and allowed that he and his men should march out with their swords. As Santena passed by him, the Mareschal said, That he did indeed well deserve to be hanged; but to shew him that he could esteem courage and bravery in an enemy, he should dine with
with him that day. At table some French Officers upbraided Santena, on account of the Duke of Savoy's forming a league with heretics against the most Christian King. Santena remained silent for some time, till at last he asked the Marechal, whether he would allow him freedom of speech? Catinat consenting, he replied, That his master had indeed, for self-defence, taken arms against the King of France, and had entered into an alliance with heretics, such as the English and Dutch; nay further, that his master was for doing something worse, and had sent to Constantinople, to negotiate a league with the Turks; but his most Christian Majesty had unluckily been before-hand with him there. Catinat laughed at the Officers who had forced this keen repartee from Santena, saying, this might teach them never to insult brave men under misfortunes. However, Santena, by his extraordinary behaviour, had the good fortune to obtain for his master a suspension of arms for some days.

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How to CALCULATE the PROPER QUANTITY of each MATERIAL for a SMALL REDOUT.

WHEN the situation and strength of the detachment appointed to defend a work, have determined its dimensions, the necessary quantity of materials for constructing it, is next to be calculated; in regard to which, it must be observed,

1st. To line five paces of the inside of the parapet, requires Fascines
2d. To line five paces of the outside
3d. To fascine five paces of the banquette
4th. To each embrasure

By
By the preceding table, the number of fascines required is easily found. Let us suppose, for example, a small redout is to be constructed to contain a small detachment of two hundred and forty men, they proceed as follows:

1st. To line one hundred and twenty paces of the parapet within side, allowing six fascines to every five paces, it requires

$$\text{Fascines} = 144$$

2d. To line the outside, four fascines to every five paces

$$\text{Fascines} = 144$$

N. B. As many, however, are allowed, viz.

$$\text{Fascines} = 144$$

3d. To fascine the banquette, about a fourth of what are allowed for the inside of the parapet

$$\text{Fascines} = 36$$

4th. In reserve, to supply those that break

$$\text{Fascines} = 30$$

Total 354

Each fascine requires five pickets - Total 1770.

The number of palisades that are wanted, is found in the following manner; they are made six inches broad, and planted three inches asunder; so that every palisade takes up nine inches. The circumference of the work measuring along the middle of the ditch, must be found in paces, allowing eight palisades to every three paces, which at the rate of two feet to a pace, is six feet taken up by eight palisades. If the circumference of the work is therefore one hundred and fifty paces, four hundred and ninety-five palisades will be required, allowing eight palisades to every three paces.

As to the proper quantity of fraises, they are calculated on the same principle. Each fraise requires eight inches, viz. five for the fraise, and three for the interval between them; so that three fraises are allowed to one pace, or twenty-four inches. They are so placed, as to hang over the berm, and to reach beyond it. The outside circumference of the parapet must be known in paces, and the calculation then made. For example, we will suppose it to be one hundred and sixty-five paces; three fraises are allowed to each, so that there will be required four hundred and ninety-five fraises in all. The same number of nails must be provided, seven inches long. The beams or sleepers the fraises are fixed to, are twelve feet long; so that one beam is allowed to eighteen fraises, or to reckon more readily, a beam to every six paces.
In order to find with greater ease the proper quantity of materials required in the construction of a work, it is necessary to accustom oneself to take paces about two feet wide, which practice will render habitual. This will save much time and trouble, that must otherwise be employed in measurements and long calculations, &c.

Of the ATTACK of a COMMON REDOUT.

If the redout to be attacked, has a dry ditch and a parapet of earth *, the front and center ranks of each divisions, are to be provided with shovels and pick axes, and are to sling their firelocks. Things being thus prepared, and the several divisions having secretly advanced near to the redout, and laying down upon their bellies: The Officers commanding the different divisions are, as soon as they see or hear the signal, are to spring up at once, and march with speed to leap into the ditch at the same instant; I say at the same instant, because it should be a maxim, in the attack of a common redout or post, for all to fall on at once. When the front rank has leaped into the ditch, the center should stop a moment, lest they should jump upon the heads of the front rank, and throw themselves on their bayonets. The front and center ranks having got into the ditch, they are immediately to undermine the scarpe or flope †, and the parapet of the redout, to facilitate the climbing up of the rest of the party. The Officers of each division are to take care, that the sol-

* Parapet, an elevation of earth for covering the soldiers from the enemy's cannon and small arms; its thickness is from eighteen to twenty feet; its height, six on the inside, and four or five on that side next the country.

† Scarpe or Slope, is the interior talus or slope of the ditch, next the place, at the foot of the rampart, and reaches from the bottom of the ditch, up to the ordinary level of the ground; and the parapet is the super-addition lying above the berme, which marks the surface or level of the ground.
of MILITARY POSTS, &c. 293

diers with their firelocks, who have also got into the ditch, may not obstruct
the workmen, but that they protect them, by presenting to the right and
the left; and that they are always ready to repulse the enemy that may have
been posted in the ditch. If the parapet is fraised, they are to cut away with
their hatchets, as many of these pointed posts as will leave a sufficient passage;
and when the breach is made, the workmen are to lay down their tools, han-
dle their arms, and mount all at once with fixed bayonets, and fall upon the
enemy, crying aloud, kill! kill! kill!

When a body of men march against a common redout, or other post, with
an intent to surprize it, the Commanding Officer ought always to make his
attack on that side, which may have communication with some other more
considerable posts, in order to cut off his communication; for people who see
themselves warmly attacked, and have no hopes either to retreat or succour,
will very soon ask for quarters.

AGAIN upon REDOUTS.

IMAGINARY hopes and fears are stronger than reality, therefore the
troops who give fire, having most to fear, will be beat by those that pre-
serve it. There is no profession where the study of human nature is more ne-
cessary than in the military. To illustrate what I mean, I'll suppose I have
two hundred and fifty men given me to attack a small square redout, such as
an Officer may throw up in a few hours with his detachment, and that his
detachment consisted of one hundred men, and which he is to defend it with.

I send fifty men to approach each face, with orders not to go too near, but
to keep upon it an incessant fire, and endeavour to obtain a return from the ene-
my; which, if I draw from them, I am almost sure of gaining the redout, for
the moment the two hundred march, the remaining fifty, strip off their
accoutrements.
attacking and defending

accoutrements and ammunition, depending upon their bayonets, their arms being unloaded. What would not draw from mankind in general is, that the fifty men, seeing their brother soldiers engaged before them, will have the greatest desire to attack, and being without ammunition and accoutrements, they will look upon it as absolutely necessary to mount the parapet, as the point of decision; on the contrary, the enemy thinking they have only to defend themselves against the first attackers, they will very likely throw away their arms, the moment they see them upon the parapet; in this case, the fifty will attack one of the corners.

Of the passage of a ditch full of water.

If the ditch of the post to be attacked is full of water, and only takes a man up to his belly, that need not hinder their jumping into it, and carrying on the attack; but if it is too deep to be passed by wading, the soldiers of each division must carry fascines or faggots, of slender branches, made as thick as possible, and tied very tight, to fill up the ditch, or render it so far fordable, that the assailants may get to the parapet, either to undermine it, or to scale it.

Some authors recommend, for this purpose, casks filled with earth; and M. de Folard, sacks filled with dung or litter, of five feet diameter; but I have found, by many trials, that the casks are very difficult to roll, especially if the ground is uneven, and you have a considerable way to move them; that it is difficult to fill up the ditch with them, because their solidity makes the water rise higher and higher; that sacks of earth, or of dung, cannot be rolled, on account of their great weight; that they burst in the carriage, spill their contents, make the ford very muddy, raise it but little, and leave it still difficult to
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to be passed. Therefore fascines * are preferable to all these, because the sol-
dier can carry them before them, where they serve to cover them from mus-
quet-shot; and being light, they do not retard their march. All these fascines, which may be handed from one man to another, and thrown into the water, will soon fill up the ditch, so as to make a passable ford.

M. Folard gives another method of passing a wet ditch; which is, to make frames of seven or eight feet broad, by ten or twelve long. These frames, says he, consist of three bars of wood, with cross-bars, in the manner of a hurdle †, and well mortoised; planks should be nailed on the top, and a grapple fastened to one end, to cling to the fascines of the enemy's intrenchment."

N. B. M. Folard has not told how these bridges are to be carried to the ditch, or how an Officer is to get them made.

WAYS to COUNTER-ACT the other CONTRIVANCES.

If the approaches of a post are defended by chevaux-de-frise ‡, the front and center ranks of each sub-division should cut away the spikes with hatchets, or they may hale them forward, or throw them aside, with an iron grapple fastened

* To make fascines: Lay upon the ground four branches of willows, or if they cannot be got, four ropes of straw, at about two feet asunder from each other, that they may serve as bindings; take branches of trees or willows, and lay them on these bindings, so that they may reach a foot beyond the flank ones; when these branches are about a foot high and a foot broad, begin with the middle willow or straw ropes, and bind these branches as fast together as possible; this must likewise be done with those at the ends, so that you will have a good round fascine a foot thick, and between eight and ten feet long.

† Hurdles, or clays, are made of branches or twigs, interwoven together in the figure of a long square, about five or six feet long, and three, or three and a half broad; the closer they are woven the better; they are used in covering traverses, lodgments, caponiers, coffers, &c. and are covered over with earth, to secure them from the enemy's artificial fire-works, or stones which might be thrown upon them; and likewise to lay upon marshy ground or pass a fos.

‡ Chevaux-de-frise, a large joint or piece of timber, about fifteen or sixteen inches square, and ten or twelve feet in length; into the sides whereof are driven a great number of wooden pins, about six feet long, and one and a half inch diameter, crossing one another at right angles, and pointed with iron.
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at the end of a rope; if by an abbatis, they should throw fascines or great faggots on the points, and over the branches, by which means, the soldiers will be able to pass easily over it; also, if these abbatis are double or triple, they may be set on fire, by throwing well dried faggots, lighted at one end, in the middle of them. If this last proposition is to be executed, as soon as the lighted faggots are thrown on the abbatis, the soldiers should retire to a certain distance, so that the enemy may not have an opportunity to level their shot at them by the light of the fire; and they also should be posted, so as to be able to fire at those of the enemy who shall endeavour to extinguish the flames.

But lastly, if the avenues to a post are defended with caltrops, they must be swept away, by dragging one or two trees, with all their leaves on, over the ground, where they have been laid.

Of the CONSTRUCTION of FOUGASSES.

IN order to render a work stronger and more respectable, small mines, called fougasses, are constructed before the weakest parts, and generally those most exposed to an attack, namely, the salliant angles* and faces, not defended by a cross fire. Very little time is required for the construction of these mines, which are nevertheless of great utility; for suppose the enemy should already have advanced within a few paces of a work, yet they are not in the smallest degree nearer becoming masters of it, since, on spring-mines, they are blown up in a moment, which, besides the loss of men, throws the others into the utmost confusion, not suspecting in the least what is prepared for them.

As engineers may not always be upon the spot, it is therefore necessary that an Officer of infantry should know how to construct these mines; for though

* Sallient angles, is that angle which points outwards, or towards the country, such is the angle of the counter-scarp before the curtain.
he is not expected to be master of the whole art of mining, which would lead him into a detail both extensive and intricate, yet he ought to inform himself well in every thing relating to the construction of fougasses, with respect to which the following rules are sufficient.

At the distance of ten, twelve, or even fourteen feet from the ditch of a work, a pit or shaft, three feet square, is dug, to the depth of six, seven, or eight feet. When the earth is not of a very firm nature, the sides are supported with boards or planks (in the same manner as practised in the metallic mines), three feet long, having a small piece about an inch broad sawed out at each end, and half the width of the plank. When two feet of earth is dug out, four of these boards being put together, form a kind of frame, which is applied to the inside of the pit, just below the surface of the ground, and so on, as it becomes deeper, to prevent the earth from falling in. If it is a light sandy soil, these frames must be placed close together; but if not, about a foot interval may be left between them. Indeed in a clay, all this trouble may be saved, as no more supporting is required, except the first frame almost even with the surface, that the workmen standing on the edge, may not break down the earth.

When the shaft is of a sufficient depth, properly supported, &c. a square hole is made at the bottom, in that side next the work, forming a lodgment for the box of powder. This excavation is called the chamber of the mine. It is also propped up with boards or pieces of wood. The dimensions of the box holding the powder, fix the height and breadth of the chamber; but to save the trouble of measuring, it should be exactly a cube, whose side is one sixth part the depth of the shaft. If the latter, for instance, is six feet deep, the chamber must be a cube of one foot, and so in proportion.

To know the proper quantity of powder for a mine, the depth must be known, and the nature of the soil thoroughly examined. The depth of an ordinary mine, is six, seven, or eight feet. But the following table of M. Vauban, will determine at once the necessary quantity of powder proportioned to the nature of the soil.

| TABLE |
The powder must be good and dry, in order to have its proper effect.

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<th>Depth of the Mine</th>
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<td>Six feet deep requires</td>
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<td>Stoney Ground</td>
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<td>Clay</td>
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<td>Mixed Ground</td>
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<td>Sandy Ground</td>
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<td>Ordinary Ground</td>
<td>Half Ounces</td>
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The size of the box is determined by the quantity of the powder it is to contain; but there is a rule for that also, viz. the inside of the box must be a cube, whose side is exactly the ninth part of the depth of the shaft. Should the latter, for example, be six feet, or seventy-two inches deep, the inside of the box must be eight inches square every way; the cover is not made fast to it. A hole, an inch and a half square, is cut in the inside of the box, about an inch from the bottom, to admit a small wooden tube. The use of it is, to conduct the fire to the powder. It appears about an inch on the outside, but reaches quite to the middle of the box within, that the powder may kindle from the center, which produces the best effects. If there is reason to imagine the powder will remain long in the chamber of the mine before it is fired; it will be necessary, in a moist soil, or where there are springs, to pitch well over all the joints of the box, or line it with straw woven together, and wrap up either in straw, wax cloth, or mats, to keep the powder from contracting any damp. When want of time, or other circumstances, makes it impossible to procure such a box, some other contrivance must be thought of; for instance, a bucket, a corn cribble, a small basket, in short any thing of this kind will do, provided the wooden tube above-mentioned can be applied. When the box is filled with powder, and the cover laid upon it, it is placed in the chamber of the mine, which must fit it exactly, without projecting into the shaft. Great care must be taken, at the same time, that it does not move in the chamber; for if the latter should be either too high or too wide, the vacant space must be filled with sod, or pieces of wood. A board three feet long is then placed before the box, so that it is entirely shut up in the chamber; but a hole, three inches square, is first cut at the bottom of the plank, for the small wooden tube to pass through.

The mine is fired with a saucisson, which is a long pipe in form of a sausage, made of coarse cloth or fustian, sewed length-wise, about two inches diameter. As it must be well crammed, near half a pound of powder is allowed to every foot. This train reaches from the chamber to the place within the redout where it is fixed, called the foyer * or focus.

* The author calls the end of the saucisson that comes within the work, and which is to be set on fire, the foyer or focus; but in mines, this is generally understood to be the center of the chamber; however the term is preserved in the translation.
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The saucisson, to preserve it from growing damp, is laid in an auger, or long wooden trough, made of boards three inches thick and an half broad, joined together lengthways. A part of the auger, two feet shorter than the shaft is deep, is then placed perpendicular in it, in such a manner, that the lower end communicates with the small wooden tube fixed in the box of powder. It is sometimes nailed to the frames supporting the sides of the shaft. A small channel, two feet deep, is next made to the pit of the ditch of the work, and the auger laid along it, nailed to the part set up right. From thence it is continued across the ditch quite to the rampart, which it likewise passes, an opening being cut for that purpose as far as the focus. The lower end of the saucisson is then tied with a piece of pack-thread, to the abovementioned wooden tube, which communicates with the powder, and is laid all along the auger, quite to the focus within the work, fastening it to the sides every half foot with small iron nails, driven with a wooden hammer. The lid of the auger is then made fast with wooden nails, and the channel cut for it filled up, as well as the rampart repaired. Where the auger crosses the ditch, it must be supported by two or three pickets driven well into the ground, and to which it is nailed. Some stones are laid over the end of the auger within side the work, as it is there on a level with the ground, and liable to be moved; or it may be secured with some cross-pickets driven in obliquely.

In this manner one may proceed when straitened for time; but when that is not the case, the auger, instead of crossing the ditch, should pass underneath it, so as that it may be every where two feet below the surface. If the ground happens to be moist, or that there is reason to think so, the mine will not soon be sprung, the joints of the auger should be well pitched within: But, on the contrary, when the soil is dry, there is no occasion for the auger; some dry straw wrapped round the saucisson, about four or five inches thick will be sufficient.

When every thing in regard to the auger and saucisson is quite compleated, three or four pieces of wood, about three inches thick, and three feet two inches long, are put against the board which is placed before the box of powder, and two such pieces against the upright part of the auger; the shaft is then solidly filled with earth.
Four workmen provided with pick-axes, and two carpenters, may easily contract such a fougasse in six or seven hours, if they are furnished with all the necessary materials.

The focus where the mine is fixed, must be eight or nine paces from the rampart, and great care taken that it neither catches fire accidentally, nor gets injured by the damp. The end of the auget at the focus, must be about six inches longer than the saucisson, to preserve the latter from the rain. Six inches of the cover are therefore to be cut off, and only laid on loosely, that it may be removed when the mine is to be sprung. Some bruised or ordinary powder should be in readiness when the enemy begin their attack, to strew over the focus and end of the saucisson (first removing the small piece of the cover) and a match applied the moment the enemy are arrived upon the spot over the mine.

When a mine is well constructed; and properly charged, the instant it is fired it forms an excavation, called the entonnour, or funnel, resembling an invested cone, or sugar-loaf, the diameter of which at top is exactly twice the depth of the shaft. For example, if the pit is six feet deep, the diameter of the funnel will be twelve feet; and if ten deep, the diameter will be twenty-feet, and so in proportion.

Sometimes several fougasses are constructed in front of a work, but then it is not necessary that each should have a particular focus, as one may be quite sufficient for three, four, or even more mines. If they must go off one after another, an auget must be laid from each, two feet below the surface, within two feet of the ditch, almost meeting in a point; from whence they are continued separately across the ditch and rampart, running very near each other quite to the focus. It must only be remembered to make the augets of different lengths, that the mines may be sprung separately; and to be careful that the fire, when put to one, does not communicate with the others. By having only one focus to the several mines, a great deal of trouble is saved, as otherwise the rampart must be as often cut through, as there are augets to conduct.

But
But when several mines are endeavoured to be sprung at once, a point, some feet from the ditch must be found, equally distant from all the different chambers. An auget with a faucisson is then laid from each to this point, the ends joined, and a single auget and faucisson continued across the ditch and rampart to the focus; so that of course all the mines must go off at the same instant, as soon as the match is applied to the focus. Care, however, must be taken to have the shafts so far asunder, that the effect of one does not interfere with that of another; or, in other words, that the funnels formed by the explosion do not cross: this is entirely prevented by making them double their depth asunder.

These kind of mines may be constructed and very advantageously disposed, en trefe, or in a triangular form, before the salient angles of the works. That they may be fired together, a point is found equally distant from the three chambers, called the centre of the chambers. An auget with a faucisson is then laid from each mine to this point, and from thence a single auget is carried over the ditch.

If circumstances should make it necessary to abandon a redout (though newly raised) which might be of advantage to the enemy, if left undestroyed; mines are constructed under the rampart, that it may be blown up the moment the last of the troops have quitted it; or in case of a tete-de-pont that is to be thrown up to cover the retreat of a corps, and which from the first is intended merely as a temporary work; before it is begun, shafts should be sunk from five to seven feet deep, directly under where the rampart lies, and principally its angles are to come, that it may be destroyed when the rear guard have passed the river. To find what quantity of powder such mines will require, the height of the rampart must be added to the depth of the shaft; for example, if the latter is five feet deep, and the rampart six feet high, a charge is allowed for a mine eleven feet deep. The focus of these mines is always in the centre of the work, and the faucisson laid in an auget.
How to Reconnoitre a Post.

An Officer who goes to take a near view of the post he intends to attack, should go out at the beginning of a dark night, and give those that go with him as assistants, instructions how to act in every circumstance; such as to examine well every place through which they pass; to approach the post, by searching with long poles, least there should be any traps or ditches covered over, into which they might fall; and to stick large branches of trees with the leaves on, at those they discover, so as to guide them when they return to the attack; to take particular notice of the position of the centries, their distances from each other, and their numbers to advance to the edge of the ditch, to try the depth of the water with their poles, and if too deep to be fathomed with one; you must fasten two or three together, or the easiest and best way is, to have a line with a lead, to see whether the post is fraised * or pallisaded, built of earth or fascines, or masonry; in the last case they guess as near as they can at its height, to be able to proportion the length of their scaling ladders. Lastly, to know how many men the garrison consists of, and in what they are negligent; if they are likely to receive succours, or if they have any cannon, &c.

It is upon the knowledge of all the circumstances which one can examine into himself, or may learn from the report of deserters or peasants, that an Officer may form the project of an attack. Had Lieutenant General Gonfalone taken these precautions, he had no occasion to have given the shepherd (see page 288).

If a person receives his instructions only from the reports of others, he must be cautious how he gives credit to those, whom perhaps either through a desire

* A fraise is a pallisade laid horizontally, or nearly so, half buried in the earth of the parapet; the other end sharpened, and pointed out towards the enemy. Pallisade, properly so called, is commonly put perpendicular.
of betraying him, or the hopes of recompense, might have induced them to throw themselves in his way; on the contrary, he should question them separately, and write down what each shall say, and then oblige them to sign it, compare their dispositions, and judge afterwards what part of their intelligence may be true, or what false. Having taken these instructions, the Officer should return to his General or Officer commanding the whole, to inform him of his discoveries, and receive his last orders for the attack; for the soldiers that are to second him, and those who are to march to support him.

The dispositions for an attack ought to be relative to the discoveries that have been made, so that one should not be obliged to return in the middle of the execution.

The men for the command are to be narrowly inspected, to see that they want nothing that may contribute to their success; I say, that may contribute to their success, because if the post is fortified with an intrenchment of earth, or of fascines, the front and centre ranks should be provided, besides their arms, with shovels and pick-axes; if it is frayed and palisaded, they should have very good strong hatchets; and if it is faced with stone or brick-work, they should carry scaling ladders. All the soldiers should have white paper cockades in their hats, that they may know one another in the dark. After this inspection, the following disposition should be observed and made. If the intention is to make one or two true attacks, and as many false ones, the men are to be formed into as many sub-divisions as there are to be true attacks, and the others appointed to support them are to make the false ones, in order to divide the enemy and their fire. Then I would post an Officer capable of commanding, to each sub-division; and those Officers, as far as possible, to be the same who were at reconnoitring the situation, so that each of them may be able to guide his division with prudence.

These Officers are to be ordered to march together, till they come to the place appointed for their separation; then they are to move on, each to their several stations near the post, where they are to lie down on their bellies, and wait for the signal of attack to leap into the ditch and scale the post.
Of the March of Detachments to Posts.

The march of a detachment to a post is one of the most important duties on which an Officer can be employed in time of war; and yet in the course of the common detail of duty, it often happens to fall to the lot of a young subaltern, perhaps without experience or capacity.

But as there are certain necessary precautions which ought never to be neglected, I shall hope that those young Officers that may read what I shall here insert under this article; when they command a detachment of this kind, will acquit themselves both with honour and credit to the corps they serve in.—But to proceed:

If the post to which the detachment marches is distant from camp, the Officer, or Officers, should not get on horseback till they are out of sight of it, and should dismount when they come in view of the post; and have their horses led by their servants; but if the place to which they are detached is not above six or eight miles from the army, and near the enemy, I think they had best go on foot, in order to be less embarrassed in case of any skirmishes on their march.

But whether they go on foot or on horseback, they, as well as their serjeants, should take great care not to hurry the men too fast, lest some should not be able to keep up; to march close, and in as many files as the roads will allow; never to halt, and to be very silent, so as to hear all orders that shall be given, or any noise that may be made at a distance. You may see in a treatise attributed to Marshal Saxe, entitled, "Traite des Legions, ou Memoires sur l'Infanterie," of what consequence it is to a whole army, and to an Officer particularly, to march in good order. The passage is as follows:

All the armies that the King sent into Bohemia, Westphalia, and Bavaria, marched off well equipped, in fine order and very complete; they returned ruined,
ruined, worn out, and left a vast number of Officers and soldiers; nevertheless we had no considerable action, the only one which was of any consequence was to our advantage: It was not by any visible stroke, but insensibly, that our army wasted away. In effect, the greatest part of the detachments sent out to skirmish, and posts that were distant, and escorts that were attacked by the enemy, were either surprised or beaten for want of discipline in the soldiery, or by the neglect of the Officers. The man is not yet born that ever saw a large escort march in good order; the soldiers continually employed in pillaging and stealing away out of sight of the Officer, and gets the habit of straggling from the beginning of the march, and you will scarce ever find an Officer that gives the least attention to this abuse. It is the same in posts, parties, and detachments; either in the soldiers straggling, or if he stays with his party, it is only to march in bad order, stopping every minute, talking when he ought to be silent, or murmuring when he ought to obey. If the enemy appears, they are stupefied, and comprehend nothing, and if by accident any orders are given, which is seldom done, you are to speak to men who are deaf and immovable. Being little used to military exercises, or submission, or to the obedience due to their Officers, they throw away their fire in the air, and are sure to be beaten; and that, because the soldier is not used to obey, and we are never prompt enough in punishing; but especially, because young Officers neither know how to command, nor make themselves obeyed; and those that do, often dare not, least they should incur the hatred of their companions, who imagine that punishment makes soldiers desert.

Such was the opinion of the greatest Captains, France ever had; an opinion founded on experience and complete knowledge, and which may furnish the best lessons to Officers who will reflect thereon. The decay of discipline was at all times the loss of soldiers, and the cause of shame to Officers, who dishonour themselves less by the defect of courage, than by their neglecting to apply themselves to their profession.

You must not imagine, says this same General, that subordination and servile obedience lessons a man's courage; it has been always seen, that the severest discipline has been established where the greatest exploits have been done.
Therefore an Officer who marches at the head of a body, ought to keep up the most exact order and profound silence, so that they may always be prepared to execute whatever movements he orders for their defence, however dangerous they may be. But in giving these orders, he ought always to appear confident and determined, which makes the soldiers think he is sure of his aim, and that he has taken the best measures.

Soldiers when they see their Chief wavering and doubtful in their commands, imagine him to be at his wits end; and seeing him disturbed, they themselves will be affected in the same manner.

It is on these occasions that an Officer ought to keep his head clear, to be able to manage his party, and to be obeyed directly. The danger is much greater on a march than in an attack; in the last the soldiers have their arms in their hands, and seeing the enemy near, they are always ready to engage; the contrary is observed on a march, they are less on their guard, and have not, in like manner, their arms ready for action in their hands. At such a time, says Vegetius, an attack confounds them, an ambuscade confounds them. An Officer, who has a mind to put himself out of danger of these surprizes, ought, when he gets a little distance from the camp, to make a corporal or serjeant march twenty paces before him, with four or five men, more or less, according to the strength of his detachment; and also two or three at an equal distance on his flanks, to make discoveries, and to examine hollow ways, swamps, lakes, or ditches, which are on the right and left of the road, to search into farm houses, barns, mills, and other places where the enemy might lie in ambush. He ought also to stop all peasants, men or women, who are going the same road, and endeavour to pass him; and should march them with him, till he is past all danger. I could mention several Officers of different ranks, who were surprized, beat, or carried off, by neglecting some of these precautions; but I will confine myself to this example which suits well to my purpose.*

* The late war in Flanders, and the present in America, have furnished some very unhappy instances of this want of caution in Officers, who shewed thereby that their rank was much higher than their judgment.
During the war in Spain, in 1674, M. Schomberg, who commanded the French army, having a mind to cover Roussillon, ordered a considerable detachment to march, to secure the convoys that were coming from Perpignan to the village of St John de Payes, about three hundred leagues from Perpignan.

This corps was posted on a height, which was near the high road, from whence the Commanding Officer sent his Lieutenant and thirty men to take possession of a chapel that was on an eminence that was still higher, at about three hundred paces from his post, from which eminence the Lieutenant could easily discover the Spanish incampment in the plain of Boulon, and over which their parties must pass to attempt our convoys.

From Boulon to these two posts there was a long hollow-way, through which the enemy might march under cover; and as surprizes were to be feared every hour, there was a detachment posted also in a cottage, called the Red House, with orders to light fires to give notice to the other guards, if they made any discoveries, and to be always ready to assist one another.

A Spanish Officer, with forty horse passing the hollow-way, under favour of the night, and being well acquainted with the country, and the position of the guards, lay in ambush in the midway of the three posts, with a design to surprize the Lieutenant's detachment, who went every morning to relieve the guard of the chapel. This Lieutenant having got into the hollow, through which he was necessarily to pass, the enemy fell upon him, and charged him so roughly, that all his men were either killed or wounded, before he had time to recollect himself; he received for his own part, two cuts of a broad sword on his head, from the Spanish Officer, who added to this treatment these insulting words; Go, says he, learn another time to do your duty better, and to reconnoitre a place where you are to pass with your guard.

I will not comment on this passage, which is taken from the Catalonian war, because I believe it will be sufficient to read it once, to prove what I have said; that it is necessary to examine every place where the enemy may lie in ambush to surprize you. But as it is difficult, or rather impossible, for a detachment that marches in a suspected country, to examine all the villages by which
which they must pass, and where the inhabitants are oftentimes as much to
be dreaded as the enemy: I think if an Officer can avoid them, he had best
turn off a little, and come in again to the road when he has passed them.

It is obvious, that for making these discoveries, none should be employed
but faithful old soldiers of the party, whom you must order never to stop to
drink, to divert themselves, or talk with the peasants, and never to lose sight
of the detachment; but to stop all persons that endeavour to pass before them,
and to send an account immediately of what they saw or heard to the com-
mandant.

But all these precautions that I have mentioned, do not remove the possibi-

lity of an Officer's being attacked upon his march; he must as soon as he sees
the enemy, examine whether their party be greater than his own; whether
it is cavalry or infantry, or both together. If they are of the former, and
superior to him in number, he is not to be discouraged on that account; but
on the contrary, he ought to avail himself of his own advantages, by throwing
himself into a close country, uneven, or cut, which may be difficult or inac-
cessible to the cavalry. He must also raise the spirits of his men by resolute
and bold expressions, and endeavour to make himself master of some post,
where he may be able to maintain himself, while he sends a trusty soldier to in-
form the General of his situation. If in this situation the enemy marches to-
wards him, he must do his endeavours to support the efforts of their attack,
ordering his men not to fire till they can reach the enemy with their bayonets.

However contemptible natural fortification may appear, such as are found in
every country by chance, which courageous men have defended with extraordi-
nary valour. The last age shews what seven soldiers could do in one of these situa-
tions. The Duke of Rohan says, in his Memoirs, that they stopped for two
whole days, before a poor house built of clay, near Carlat, a whole army,
which M. Themines was leading to the county of Foix, consisting of seven thou-
sand, and five hundred horse. If the road, in which a detachment is attacked
on its march, be covered on either side with vines, woods, rocks, or by such
rough broken ground as may prevent the cavalry from penetrating it; an Of-
cifer, as I said, ought to throw himself into it directly, and to continue his

march
march towards his post by that way, keeping his men close together, and always ready to receive the enemy.

If, on the other hand, the party of cavalry which he perceives, be pretty near equal in strength to his own detachment, he is not to discontinue his march on that account; but should form his men into a sub-division of five files of six men each, if he has thirty; of seven files of eight, if he has about fifty; or of ten files of ten, if he has one hundred; and thus with their bayonets fixed, presenting their arms on every side, he is to continue to march towards his post. An Officer, who marches in this manner, without breaking his order, and in silence, will convince the enemy, that he is not afraid he should fall upon him. But however, if they should, he must halt his men, make his front rank kneel, pointing their bayonets to the horses breasts; the second must kneel also, presenting their arms; and the third should take aim over them. You must observe here, that I only speak of a detachment of thirty men; for if the body is greater, you may make two ranks present at the same time. In this case, an Officer must forbid his men to fire till he gives the word of command, and that will not be till the enemies cavalry are within ten yards of the bayonets of the front rank; then the standing rank or ranks which took aim, or were presented, are to fire, and load immediately; those of the second rank are to stand up at the instance and present, in order to fire if the Officer commands them; but if the first or second fire has disconcerted the enemy, he must order his men to rise, and continue his march; always ready to begin again if the enemy should return.

But if the enemy's party, discovered, be superior, consisting of cavalry and infantry, or of the latter only, the Officer must endeavour to make himself master of a mill, or a single farm-house, to defend himself till his General, to whom he has given notice, sends to disengage him. If he sees no way to possess himself of an advantageous post, or get to the place he is detached for, he can do nothing better than to fight his way retreating, and to return to the camp, in coasting along a river or wood *, if he can to avoid being surrounded; and

* The translator thinks the wood is preferable to a river, especially if it be cavalry that opposes them, and that they can get that way to their post or camp, and would recommend the following method, partly copied
and if he is so closely pursued, that he cannot avoid being beaten and taken; I see no better expedient to be adopted in this case, than that of the Barbetts* of the vallies of Piedmont, who disperse themselves, and retiring from tree to tree, or from rock to rock, so harass their pursuers, that they can neither beat them, nor take one man.

I cannot pass over a march of M. de Beuvrigny, late Captain in the regiment of Cambrefis, which would do honour to a General Officer. I take it from the history of the revolutions of Genoa.

During the Corsican war in 1737 and 1738, the King sent reinforcements to the island, to reduce the malecontents to reason. A convoy, escorted by a frigate and two armed barks appeared in the beginning of 1739, steering towards San Fiorenzo; but they met with a dreadful storm the eighth of January, which dispersed them; nevertheless, all the vessels of this convoy arrived with four French battalions at different ports of the island, except two tartanes, which had the misfortune to run on shore the same day on the coast of the province of Belagna, to the left of the river Ofregone. M. de Beuvrigny, who commanded six companies of the regiment of Cambrefis, which were embarked in these tartanes, saved himself and the troops by his presence of mind and resolution.

copied from that practised by the Indians in North America; which is, as soon as they get near the wood to break entirely, and rush in with their firelocks in their hands, letting them swing at arms length, so as to avoid the branches of trees (this is what is called, trail your arms), and when they have got into the thick part seven or eight yards, they are to halt; it must be observed, that they will probably get in at several distances from each other, and so much the better, as they can, by that means, form the sooner in their manner, which is in files of five or six men, or more, according to their strength, leaving a space between every file, of two feet or more; so that when they find the enemy near them, and good cover for themselves, they face about and form, as the place will allow them, either in one or more ranks, or they advance by single files, to fire on the enemy, endeavouring always to cover themselves behind trees, hedges, or stones if they can; and they may advance unperceived, by creeping on their bellies, and by this means the enemy will be often deterred from their pursuit, not knowing where they may meet resistance, or what to fire at; and the best way to deceive them is, when you are fairly in, for the whole to lie down, and creep as the Officer directs; and if the enemy persists in pursuing you, after making your best defence, you must retreat in the order of open files, stopping every now and then, to amuse them with a fire, which will greatly annoy and delay them.

* Barbetts, are peasants, subject to the King of Sardinia, who abandon their dwellings when the enemy has taken possession of them. The King forms them into bodies, who defend the Alps, being part of his dominions.
It was ten o'clock at night, when the tartane, that this Officer was on board of, struck against the rocks with a dreadful shock, about one hundred paces from the coast; he hindered his people from leaping into the sea, where they must inevitably have perished; and with a pistol in his hand, he compelled the sailors to launch their boat, and did not save himself, till after embarking successively all the sailors and soldiers, which took up about two hours.

He had no sooner got on shore with his three companies, than he had intelligence brought him, with advice to think of his safety; for if he stayed till day light, he run a risque of being attacked by the Corsicans; but he would not abandon the three companies that were in the other tartane, which was also stranded on a sand bank, at a little distance from the first; the boat of which was lost, in carrying some of the Officers and men on shore, whose bodies M. de Beuvrigny knew on the strand. He determined to assist those that were still in the vessel, and made his men go into some cottages to warm and rest themselves for the remainder of the night. At day break he sent the boat to land his comrades, who brought on shore about sixty firelocks, and one hundred and sixty cartridges with ball; half the firelocks were without locks, being taken off to prevent accidents on board.

M. de Beuvrigny having inspected his men, who amounted to one hundred and forty-one, posted the soldiers, without arms, in the middle; on the flanks, those who had firelocks without locks, but with bayonets fixed; and in the front and rear, those who had arms complete in order to fire. After this prudent disposition, he set out for San-Fiorenzo, from which he was about five leagues distant; but he soon had the Corsicans at his heels, who had heard of the ships wrecked on their coast. M. de Beuvrigny crossed the river d'Ostrigone, in their sight, having the water up to his middle, and continued his rout by a mountain, in spight of their shot, which he returned now and then. He killed a good many of the Corsicans, and had some of his own men wounded; but in regard to his ammunition it was soon spent, though he took every necessary precaution not to throw away his fire, yet he was reduced to five cartridges among the whole party; and had hardly got half way, when a great body of Corsicans appeared, of cavalry and infantry, preparing to surround him, and to put all to the sword; night approaching, his men, overcome with fatigue, without guides, ammunition
ammunition and provision, seeing no remedy, he determined to surrender himself prisoner. The French General greatly commended the bravery of this Officer, who being reclaimed in the King’s name, was immediately set at liberty with all his men.

The conduct of M. de Beuvrigny was so prudent, and so well concerted, that though it was not successful in the end, I thought it my duty to mention the whole; his presence of mind in the ship wreck, his zeal to save the soldiers, and his good dispositions in his retreat to San-Fiorenzo. He withstood the repeated attacks of the Corsicans for a long time, and would certainly have retreated in good order to that place, if his ammunition had not failed, and if he had not had cold, hunger, thirst and fatigue, and a rebel army, in a dark night, to contend with, in the midst of a revolting unknown country.

The ADVANTAGE of NIGHT ATTACKS, and the PRECAUTIONS to be taken in QUARTERS.

Night attacks are almost sure of success, and the reason is pretty evident. The assailants are informed of the position and strength of the enemy; the latter are ignorant both of the numbers and of the manoeuvres that are to be employed against them; the one knows where to strike, and is sure of his blow; the other hardly knows what part to defend; in these circumstances whole battalions have been beat and routed by moderate detachments. There are some, who confiding in their numbers, and the valour of their men, and satisfied to be told that there is no considerable body of the enemy near them, abandon themselves to their ease, and cannot be persuaded that two or three hundred men could come to insult them; in this false opinion, as soon as they arrive
rive at a town or village, the Commanding Officer, after having appointed the alarm posts, and ordered the guards, seeks for a good lodging, and gives himself up to his ease; the other Officers follow his example *, and take care to want for nothing comfortable, and all indulge in the middle of danger; but they often pay very dear for such imprudent conduct: The enemy, who are on the watch, are informed of their arrival; spies bring them news of the true state of things every where, and they soon become acquainted with the position of the advanced guards, and of the commanding Officer's quarters.

These kind of enterprizes have always been looked upon as very bold and even rash, to dare to attack a body of five or six hundred men, with a detachment of two or three hundred. Yet it is not to be doubted but a true partizan, or an able Officer, who is well acquainted with the country, and with the march of a superior body, may easily form his attack in the dead of the night, and better in very bad weather than in good (taking care to preserve the locks of his arms free from wet); on such occasions he arrives at a village, with his party at the distance of about three miles from the enemy, where, during his halt, he endeavours to inform himself, by the Chief Magistrates, of every particular, who, it is likely, will not disobey him, he is also to ask for some men of the place to serve to help him to reconnoitre the enemy; such people are always to be found, who for a proper recompence, or from an inclination to be contrary to different troops, are easily determined to undertake this employment; they are to be instructed what to do, and what to observe; to know where the guards are posted; where the Commanding Officer is lodged; if there are no ways of surprising him by going behind through gardens, or woods, &c. he should ask them if they have got any relations in the places to name, in case the guards should stop them, and so take off all suspicion. After these measures, they are to be ordered to return to an appointed place, when they are ready to make their report. Those expeditions seldom fail; and to succeed, the body is to

* This to their great shame be it spoken, I have seen by some corps put in practice, but, indeed, not of late years, and hope for the honour of their King, their country, and the service, will never again happen.
be divided into three or four detachments, with a view to fall on all at once, and not to give the enemy time to look about him: But should any one say, what confusion is at night? How can these detachments join again? The answer is, that truly these attacks are very hazardous to both one side and the other, but the assailants are never embarrassed for the following reason, which is easy to be conceived, that before the attack, they take care to send eight or ten men, each carrying a truss or two of straw on a stake, to set fire to at the moment of the attack; this fire serves as a direction to those who attack to retire to the light after they have taken some prisoners. All these kind of attacks are made in less than half an hour, and the enemy cannot know the meaning of the fires, and this device hinders them from observing those who attack them, so as to be able to pursue them in their retreat.

A Commanding Officer cannot be too circumspect in and about his quarters, especially while he is in an enemy’s country, where the natural aversion of the inhabitants will be joined to the activity of the enemy to harass and overpower him.

The secret of marching small divided bodies of a detachment, and to make them rejoin quickly at the appointed time and place is of infinite advantage, and puts them in a condition to form their attack with more certainty of success, as the enemy do not expect to have to do with a large body; they are not concerned when they hear of forty or fifty men only in the neighbourhood; if they are even told of another body of the same number, that have been seen, they are persuaded that it is the same they heard of before; and they are seldom undeceived, till the time that the union of the whole is made, and ready to begin an attack, which they never apprehended.
CARE and PRECAUTIONS to be TAKEN in TOWNS, VILLAGES, and PLACES of REFRESHMENT.

A BODY or detachment of men are conducted as the Commander in Chief thinks proper, and put an implicit confidence in him who gives the command to, when he has given them proofs of his vigilance and attention to their safety. Therefore when he enters a village or town to refresh, he should immediately post double centries in the steeples of churches, or highest buildings, which are proper to make discoveries from, to observe the environs, to prevent surprizes and unforeseen attacks; then he is to distribute the provisions, and give out the necessary orders to his own people; he is not to confine himself to this alone, he must artfully pick up useful and necessary intelligence; he must discourse with the burgomaster and other principal people of the place, endeavouring by obliging means to gain their confidence, to draw from them some interesting confessions: He is to demand of them trusty persons to send before him, and to promise to pay well for any services that they may do for him: Lastly, he must spare neither money or pains; the money is the most efficacious, it must be liberally disposed of on proper occasions, and without regret; and the returns will be ample in the advantages that will result from it.

Of other PRECAUTIONS and MEASURES for NIGHT-MARCHES, Attention to FIRE ARMS, and the Essential CUSTOMS for RETREATS.

THE night is the best time for a march, and it cannot be a secret at any other time, but great care must be taken in the dark. A body should file off slowly, regularly, and in profound silence; the Commander should order
order halts from time to time for dispensable necessities, and order the Officers to watch while the men are marching in a file, lest they mistake one road for another, and remain in the rear till such time as they are again rejoined in a body or column. No man must be suffered to smoke, even in the ambuscades, on account of the inconveniences of the smoke and the smell of the tobacco; if they are to pass through ploughed ground, they should drag large faggots or briars after them, to efface the marks of their feet, lest the peasants should observe them: When they arrive in a wood at day-break, as the leaves are commonly covered with dew or rain, those at the head should carry a kind of blinds of oiled cloth to cover them, to break way for the rest to follow, so that they shall not be wet. To keep the fire arms in good order, and to prevent them from being wet in rainy weather, the method is to have a small case to draw over the lock of the firelock; this is soon put on and pulled off, and will keep the lock and priming in good order, which is not always the case; for how many regiments when it rains, match without attention and out of order, the soldiers carrying their locks exposed to the rain, and may be attacked by a much less force. Examples of which have been seen: This caution is not all; the serjeants should inspect the men's arms every day; and as ammunition is in one respect more precious than provisions, it should be managed with the greatest care and precaution. A soldier ought to have at least thirty rounds of powder and ball; and should never discharge one without a prospect of its taking effect, as light troops seldom have wagons or carts to attend them. Lastly, as we ought to foresee every circumstance, we should be provided against every accident; we should carry hand-grenades, combustible stuff, caltrops, nails to spike up cannon, petards, hatchets, shovels, match, and jointed harrows: The use of these things are soon known, they serve to burn forage, and to hinder and delay the pursuit of cavalry in a retreat.
ATTACKING and DEFENDING

M. de la CROIX alluding to his Father's and his own past Experience, shows how the most difficult Things used to be executed.

THE most difficult projects were formed and executed; difficulties never discouraged us, all obstacles were surmounted, and the enterprize had a happy issue. The reason is plain, the troops were experienced and accustomed to war; the Officers had good understandings, and were men of honour; the Commanders in Chief were assured of the merit of those they employed: Their method was not rash, knowing that immoderate heat and too much precipitation, instead of advancing the success would make it miscarry; and that by trusting too much to chance, the best enterprizes may fail. They knew how to temporize wisely, to allow their project time to ripen: They had trusty people in different places, whom they rewarded with great punctuality, and who furnished them with exact accounts. Their least step and all their motions were guided by prudence; their operations had always a successful end: What better maxims can be laid down in the Military art.

CONCLUSION on ATTACKING and DEFENDING of POSTS, &c.

In what I have said, my sole aim has been to be of use to those, who have not seen service; therefore cannot conclude without advising them, not to be carried away too much with Parade Officers, who look upon as only essential, the manual exercise, salutes of the fuzee or espontoon, and some other trifling parade manoeuvres: For they will find when they come upon actual service, that they cannot always command an engineer, or an experienced Officer. How necessary then is it to be master of the attack and defence of small posts, so that the enemy who intended to attack them, should be obliged to employ a much superior force, and even to lose a considerable number of men, without being able to effect their design.
The Officers who love their profession, will study them diligently, lest they may be in a situation critical and embarrassing. Should, for example, the defence of a post be intrusted to them, with orders to maintain it to the last; how very uneasy must they feel, if utterly ignorant how their post should be put in a state of defence: What feeble opposition must they make to the enemy, when at a loss what measures to take? and if forced at last (as indeed they justly deserve) how greatly will their conduct be reflected on? They will naturally be accused of having failed in their duty; nor will the mortifying knowledge of ignorance be considered as any excuse. From thence let us learn principles proper to direct us best to preserve posts that are intrusted to them, which by their situation are often of infinite consequence, and contribute much to the safety of the camp, as well as the army on its march, besides many other occasions wherein they may be of great utility. The duty of Officers to their Sovereign, attachment to his person and family, love of their country, their own preservation, with them intrusted to their care: Honour, a thousand times more precious than life to a military man; and, in short the truth of that maxim, which so many examples have verified. That fifty men properly posted and intrenched according to rule, can effect more than five hundred who have taken up a wrong position: These considerations prove how absolutely necessary it is for Officers to have a thorough knowledge of what is before recommended, which required but a small application and very little time; therefore young Officers are the less excusable who neglect any opportunity of improving themselves.

In short, they can scarce take one rational step without being master of it, and happy are they who are arrived at that point of knowledge, as when the enemy appear before them, they will not be confused, abased, or disgraced; but on the contrary, they will have acted with honour to themselves, and advantage to their country.
MATTERS OF UTILITY.

DUTIES and OBLIGATIONS.

Nothing but Principle can conduct a good man through life.

A K E the common good but once a fashion, and people will give their minds to it, vie with each other in expense for it as they do now in gaming, entertainments, equipage and frequenting all public places. Read what Simonides says to Hiero on the occasion; and how Philopæmen turned the luxury of the times to the service of his country! What prize would they deserve, that propose the most advantageous scheme for converting our vices to the benefit of the community? What a figure do some nations make by a misapplication of actions, which otherwise might be of the greatest utility?

Tt M E R I T,
M A T T E R S  o f  U T I L I T Y.

MERIT, RECORDS, REWARDS, and PUNISHMENTS.

MERIT, is the greatest ornament of dignity.

RECORDS. THAT of the Honourable Colonel Harcourt, I think myself happy in having an opportunity of mentioning.

That coup-de-main (or coup-de-tète) of carrying off Lieutenant-Colonel Lee, a rebel General, in the face of the rebel army, deserves a place upon record.

The Colonel being on the qui vive in the Jerseys, with about twenty-eight dragoons, in order to reconnoitre the disposition of a body of the rebels, intercepted a courier from Lee to Washington (with a quickness and address, that distinguished natural and acquired talents) and thereby made himself master of every thing necessary to accomplish the desired end of the enterprise; they then set spurs to their horses (as quick as thought) and soon assaulted on all sides the quarters of Lee, who with his party (in vain making a shew of defence) were carried away in the greatest speed.

This stroke is to be the more admired, as it was executed in full day light, and at a time when Lee was within a few miles of his own army, consisting of two thousand men.

That of Athens by Sylla is the finest antiquity hath left us any memory of, except the siege of Alexandria by Caesar. What rank does that of Jerusalem hold by Titus?

The siege of Candia in modern times was far more wonderful and bloody than that of Troy! The Turks invested it in 1645; and its Venetian garrison, after bravely defending itself till 1669, made an honorable capitulation; the besiegers lost 180,000 men, the besieged 80,000.

REWARDS.
MATTERS of UTILITY.

REWARDS. Colonel Harcourt was rewarded for his gallant and good conduct with the sixteenth (or Queen's) regiment of light dragoons.

The late King of Portugal rewarded the Count de la Lippe, for his important services, in a new but most honorable manner; for among the many valuable presents made him, were six pieces of golden cannon a foot in length, and carriages of such a weight to each, that a strong man could not sustain one of them at arms length horizontally, without being over-poized.

PUNISHMENTS. The Romans have left us examples both of indulgence and severity; no people ever took more properly the opportunity of punishing or forgiving.

Manlius caused his own son to be punished with death, for a disobedience which at any other time would have merited the honors of a triumph. Varro was applauded for an imprudence, which at any other juncture would have caused his death. In the time of the Republic, it was necessary to be severe, because every Roman could aspire to some rank; it would have been dangerous, that small crimes against the community had remained unpunished; such impunity would have countenanced enterprizes, which might have destroyed the whole system of their political government.

Every legion kept a register of merit, in which the exploits of individuals were recorded! After the taking of Jerusalem, Titus ordered them to be read in full assembly, and with praises, gifts or promotion rewarded each according to desert. Had we this encouragement, what great men would our army produce! 'Tis only in war where talents eclipse favor, and merit takes rank of interest! See Ligustius's speech for military honors, rewards, and a noble way of thinking.

Cæsar placed a Lieutenant at the head of every legion, to be an eye-witness of each man's valour in order to reward it, and then began the battle. What honors he conferred on Scæva the centurion for his gallant behaviour!

* Legio, see page 103.
When the Consul Mancinus retired, the enemy made themselves masters of his camp, and among the booty, found the public registers and papers of merit. Is there any trace of the form, purport and method of keeping these books, and by whom? Arrian mentions several that were picked up after the action of Gungumela, containing orders and dispositions for the troops that day; also a book in which was the order of march and battle against the Alani. When M. Numidicus was accused of extortion, and would have produced his books in his justification, his reputation was so great, that his word was taken without examining his accounts! rara avis!

COOLNESS and BRAVERY.

Coolness is the effect of courage, which knows its danger, but makes no other use of that knowledge, than to give directions with certainty; courage is always master of itself, provided against all accidents, and regulated by the present occasions; never confounded by any danger, so as to lose sight of the motions of the enemy, or of the means by which he may be most effectually opposed. At the battle of Cannae, when Gisco seemed to be most astonished at the superiority of the enemy's number, Hannibal answered him coolly, "There is a thing more surprizing, of which you seem to take no notice:" Gisco asked him what it was, "It is," replied Hannibal, that in all that great crowd, there is not one man whose name is Gisco. Plutarch observes, that this coolness of Hannibal greatly animated the Carthaginians, who could not imagine that their General would joke at so important a time, without being certain of overcoming his enemies.

Although Bravery and Courage are the most essential qualifications of a subordinate Officer, yet he should not be deficient in those which are required in a General; obedience to the orders delivered to him, is no longer a virtue than whilst he comprehends and knows the intention of them. War, says a celebrated Author, is a business which, like all others, must be learned; it supposes some qualities to be born with us, and demands others which are to be
be acquired; but since all these qualities must have their original source in genius, a man who proposes war for his profession, should never engage in it without having consulted his natural bent, or without knowing the particular turn or power of his mind. Ability, whether in a general or inferior Officer, is the effect of his genius, quickened by a natural liking to his business; without this liking, without this sort of call, which, as it were, draws us on against our wills, and which is the same sign of a particular determination of the mind, a man studies without effect, and practises without judgment.

Of HONOR.

The term Honor is an expression of great extent; and though many have wrote on this topic, yet I find none that have compared it to the eye, which cannot suffer the least moat in it, without being blemished! Honor may be called a precious stone, which the smallest speck makes least valuable! It is a treasure irrecoverable when once unfortunately lost! Honor is for this life, what good works are for the other world; the first is preserved by the greatest delicacy; the latter by the greatest care. Aristotle calls it the recompence of virtue, and Chaffaneus, a witness of that excellence, which distinguished the man of virtue.

Honor gives many advantages; it procures us the consideration of the public; it gives weight to our actions; it advances our fortunes. The best recompence of a brave action is, undoubtedly, the satisfaction of having done it, but nevertheless the honor resulting to us from it is a real good, which should be dear to us.

Honor and life put in separate scales; are of equal weight; but take out the former, and the latter weighs nothing. I admire the Frenchman, who remarks

*L' honneur est comme une île escarpée & sans bords!*

*On n'y peut plus rentrer dès qu'on en est dehors!*
Of F O R T U N E.

F O R T U N E is never more to be feared than while she is prodigal of her favors; there is often nothing but a slippery step from the height of prosperity to the bottom of disgraceful adversity! Such are the amusements of this blind goddess, more worthy of our contempt by her capriciousness, than of our acknowledgement by her kindness! The Great Pompey alone is fully sufficient to demonstrate this truth: Of high birth and family, from his personal qualities, actions and employments, he saw nothing that could equal him! But how did he finish his brilliant career? Fortune, the most determined coquette that ever existed, foresook him on the plains of Pharsalia, to run after Caesar; she purchased the good graces of this new lover with the blood of 15,000 of her old favorite's soldiers, and 24,000 of his prisoners! Pompey, reduced to fly, disguised like a peasant, rode out of the rear of his camp; with his wife and one son, and gained the coast of Egypt, from whence he implored the protection of Ptolemy the King; but this unnatural Monarch, after promising it in general and equivocal terms, coaxed him on shore, and forthwith inhumanly had him murdered in sight of his distressed family and friends! This barbarous Prince carried his cruelty still farther, in hopes of obtaining Caesar's favor, for he sent him the head of his competitor! who, instead of testifying any joy at being delivered from so dangerous a rival, was forced to shed tears at the tragical death of his illustrious enemy! We may add to this example the inconstancy of human affairs, that of the Emperor Valerian, prisoner of Sapor King of Persia; and of Bajazet, taken and shut up in an iron cage by Tamerlane; and both of them (as history informs) were compelled to serve their conquerors as running footmen, whenever their masters rode out.

Fortuna, cito reposcit quod dedit!
MATTERS of UTILITY.

REFLECTIONS.

Fear God, and obey the King.

WOULD it not be a shameful thing, to see either an Officer or Soldier shrink back, or hesitate in the least, to obey the orders of embarkation for any expedition whatever, especially where the service of his King and the welfare of his country require it, although danger should appear immediate? Can the Officer, who owes his preferment to the King’s bounty, imagine it an annuity, given for his ease and pleasure only? Or the one who purchases his commission, can he look upon the army only as a proper place to lay out his money at interest to the best advantage? Who can think that a country would maintain the burden in time of peace, but with the reasonable expectation of enjoying the benefit, nay, gratitude of it when occasion demands it? And where is gratitude so highly due as from the vassal to the patron, whose favours and bounty have enabled him to live for a length of time before in pleasure, and tranquility? How despicable would that man seem, in the eyes of all good and brave men, who being young, a soldier of fortune, or without any visible connection here at home, should publicly declare his want of inclination to go abroad on service; where he might in some measure make a return to his country, shew himself not unworthy of His Majesty’s commission, by his courage, conduct, and knowledge of his profession, and display those talents, which otherwise must lay in perpetual obscurity, and be deemed an unprofitable servant, and an insolvent debtor to their grace that so long has fed him? Of what weight will even twenty years service be, to intitle such a man to preferment? None; it will rather paint him to himself as ungrateful to his country, unworthy his Prince’s favor, and below the dignity of a Gentleman and an Officer; how will his conscience disturb him, not only when he reflects on the honors bestowed upon his former companions, but at every conversation where the service is concerned? What must be the consequence? The death he feared abroad will find him soon at home, or what is worse, an everlasting remorse and internal conviction of unmanly behaviour. Therefore let us reflect, and have ever foremost in our thoughts, that it
it is impossible brave men should lie buried in obscurity and oblivion; whereas cowards, when forced from their lurking retreats, bring into the field nothing but an infamous title. Whoever despises death is least liable to it—the fearful only fall a prey to it.

But what shall we say to the man, who without consulting his own courage and fortitude, runs blindly into the dangers which he has not soul to support? When once he has taken the field, it is then too late to recede, 'tis then obedience to his orders must be his only consideration; that obedience may be terrible, but it is indispensable; to be exposed to all the fire of the enemy, without daring to stir, even to defend himself, is most terrible; but every one must obey his orders and maintain his post; nay, though at a siege he should hear under his feet the hollow noise which proclaims his death and burial in the self-same moment, yet even in this horrible situation, the duty which has placed him there, demands his obedience to remain there: Necessity sometimes requires the loss of individuals for the Public service.

CONCLUSION.

IN the course of this Work I have rather endeavoured to convince the heart, than to please the ear; and happy shall I be, if the Observations that I have made in regard to what concerns the Military, may contribute to improve that art; whose rules seem to extend in proportion as we apply ourselves to study it.

FINIS.