methods employed for his destruction by a force of all arms, that is, of infantry (*q.v.*), artillery (*q.v.*) and cavalry *(q.υ.).* Each of these possesses a power peculiar to itself, the full development of which depends to a greater or less degree upon the aid and co-operation of the other two. Now it is quite evident that the only force which can ensure this co-operation, and can produce harmonious working between the various components of that complex machine, a modern army, is the will-power of the supreme commander. It is, then, the sphere of the higher commander on the day of battle which is generally expressed by the term “ combined tactics,” and which will be dealt with in this article. Yet it must not be understood that because the term higher, or supreme, commander is used that the theory of combined tactics may be safely neglected by those soldiers whose ambitions or opportunities do not seem to lead to that position. In the British Army more than in any other, as the South African war showed, a comparatively junior officer may at any moment find himself placed in command of a mixed force of all arms, without any previous practical knowledge of how it should be handled. It will not then be possible to make the best use of such opportunities by the uneducated light of nature, and such theoretical knowledge as may have been gleaned from books and matured by thought will be of great value.

It is of the first importance that the commander of a mixed force should know exactly the powers and limitations of the units under his control. Should he not be a master of his profession, he will at times demand more from his subordinates than they can reasonably be expected to perform; at other times he will miss his chances by ignorance of their capabilities. An uneducated commander may indeed be likened to an in­different mechanic, who sometimes places an undue strain upon the engine he is supposed to control, and sometimes allows its precious powers to run to waste.

There is, however, a still stronger reason why all officers should study the art of grand tactics. In every battle situations arise of which the issue is decided by the promptitude and efficiency of the co-operation between the three arms. At such moments, an officer in charge of a battery of artillery, or of a squadron of cavalry, may find an opportunity of rendering valuable aid to his own infantry; and a knowledge of the tactics and training of the other arms may then be essential, for it will probably be necessary to act without instructions from superior authority.

But although the importance of studying tactics may be readily allowed, there would appear to be considerable diversity of opinion as to the best method of conducting that study. It is often confidently asserted that tactics cannot be learnt from books; and in support of this theory it is customary to adduce Napoleon’s well-known statement that tactics change every ten years. But if we examine the matter more closely, it will became evident that the changes which the great captain had in his mind were those of formations, due principally to im­proved weapons, rather than of the principles upon which combined tactics are based. Indeed, it could hardly be other­wise, for military history furnishes many instances of great battles which have been fought out on exactly the same lines, although separated in point of time by many centuries. The great similarity between Rossbach *(q.v.),* Austerlitz *(q.v.)* and Salamanca (*q.v.*) has often been quoted since Napoleon first drew attention to it, but a great deal more remarkable and instructive is the similarity between the battle on the Metaurus, which dealt the final blow to the hopes of Carthage in Italy, and Marlborough’s masterpiece, the battle of Ramillies (*q.v.*). In both cases the battle was lost through faulty dispositions before it had been begun. In both cases the ultimate loser took up a position behind a stream, thereby losing his mobility and voluntarily surrendering the initiative to an enemy who was not slow to take advantage of it. Precisely the same error was committed time after time by the Austrian generals who fought against Frederick, notably at Leuthen (see Seven Years’ War), a battle closely resembling both Ramillies and the Metaurus. Corning to a later date, we find the same error committed, with of course precisely the same result, in Manchuria, where the Russian generals repeatedly surrendered the initiative to their enterprising opponents, and allowed them to dictate the course of battle. It must not, however, be understood from this that no commander should ever stand upon the defensive; rather it is meant that we should learn from history the proper method of doing so. This we cannot do better than by studying Wellington’s battles in the Peninsula, for never have tactics been brought to higher perfection. Although frequently compelled to adopt the defensive, he never surrendered the conduct of the battle to his enemy. Even when surprised and taken at great disad­vantage by Soult at Maya (see Peninsular War), it can be seen how, while lesser men would have been content to reinforce the threatened points, Wellington’s one thought was to discover where he could deal the most effective blow. Nearly a hundred years later and in a theatre of war many thousands of miles away, a very similar battle was fought out by Kuropatkin and Oyama, though on a vastly greater scale.

But history teaches us more than the methods of the great captains; for from it we may learn those changes which have been introduced into both organization and tactics by the improved weapons which science has placed in our hands, and thence the tactician may deduce the changes of the future. Just as the “ Old Dessauer ” foresaw the advantage which the iron ramrod would give to the Prussian infantry, and as Welling­ton perceived that improved firearms would render possible the extended lines he adopted, so may the great generals of the future learn those lessons which are only brought home to others through the dire ordeal of battle. From the days of the long-bow to those of the Lee-Metford rifle, the changes in tactics have been brought about by the development of fire. It is therefore only natural that the introduction of small-bore rifles, quick-firing artillery, and smokeless powder should have revolutionized many of our ideas. Before the invention of the breech-loader and the rifled cannon, the three arms of the service employed very different methods of combat. The infantry depended principally on the bayonet, the cavalry on the lance or sabre, the artillery on fire. Now there is practically but one method common to all arms whether in attack or defence. The bayonet and the sabre still have their part to play; but in almost every phase of the combat their importance is diminishing, and infantry and cavalry must depend more and more upon fire to compass the enemy’s over­throw. All the preliminary movement and manoeuvres have but one end in view, the development of fire in greater volume and more effectively directed than that of the opposing force; for it is “ superiority of fire ” that prepares the ground for the final decision.

Side by side with the improvement in firearms there has come another great change which, on the continent of Europe at all events, has had a marked effect on modern tactics. This is the improvement in communications, which has alone made it possible to use the vast numbers with which great battles have recently been fought. Without railways the power which universal service has placed in the hands of the generals of the 20th century could never have been fully developed, for the men could neither have been conveyed to the theatre of operations, nor could they have been fed even sup­posing they had been got there. Now all this is altered, and the first step towards the attainment of superiority of fire will be to bring as many men as possible on to the field of battle; the second step will be to place them in the position from which they can use their weapons to the very best advantage. From these premises it is not difficult to foresee the type of battle which will prevail, until some new discovery changes the military systems of the world. In the future, as in the past, it will be the duty of the strategist to mass superior numbers at the decisive point; but so soon as this has been effected there is only one method by which the tactician will be able to follow up the advantage. That is by bringing