ON TUE BESTL DETATL FORMATION FOR TIIE NEW Infantry tactics.

> H 3. H. A. MACDONaLD.

Lieateath' Coloncl Qucen's Elinburgh, R. $\quad$. Brigade.

## (Continued from Page 99 )

The conveyance of orders is another most important matter which requires to be dealt. with. Just in proportion as the precision of modern fire'arms causes troops engaged in fighting to seek enclosed ground and cover rather than the open plain, so does it become necessary to abandon the old style of working by fixed words of command, or bu. gle sounds representing fixed words of com mand, and to train officers and men to work by directions communicated, the detail of carrying them out being lelt to be adapted by those in immediate charge of the men, to the circumstances of each company, or each fraction of the company, as the case may happen to be. In this view it is expedient to put an end to the bugle as a substitute for commands as regards movements, and to train soldiers in time of peace exactly as they would be worked in time of war-to practise moving on broken ground, the orders being conveyed from group to group systematically. The bugle might still be useful as a means of signalling, as dis'in guished from conveying words of command. Where it was desirable that a movement should be simultaneons along a considerable front, the direction might be given to be carried out on a note from the bugles, just as is now done in other branches of the service. But as regards the directory commands themselves. no system of drill will be complete which does not provide efficient means for the rapid.conveyance of orders, and fur the fulleat training of all ranks in carrying out orders under and according to the special circumstances of $t$ e moment.
Last of ali, I would submit as a principle to be adopted, that while orderly and for mal movements should always be adhered to as far as possible, still troops should be prac. tised where circumstances make it advisable and when ordered, to abandon all regular formation in passing from one position to another, and to make a rapid push, possibly by several lines, or even wholly scatterred. and to reform quickly on reaching the new position. This proposal I make chiefly in consequence of the range and deadliness of modern artillery, and applicable not to the fighting line, but to the masses of reserve troops. It will often happen that a column which is practically for the time being perfectly safe from any attack by infantry or cavalry, is nevertheless brought to a position where it must traverse a considerable distunce exposed to the fire of artillery. Or, again, a line may have opened fire upon it by artillery, and have near it, but not directly in front or in rear, a rising ground which would make it safe from the fire. Now in such circumstarces it might be most important for the commander of these troops to pass them from one point to another, regardless of their being in any military for mation, properly so called. Take the first instance supposed. The commander of the column has to traverse a space exposed to lite of artillery, but as far as other troops is concerned he is safe fromattack. It is surely mucb better for him to fix, and indicate to his officers, a rallying point beyond the space, and to allow his battalion to melt
away, some companies into one field, somo into another, and dribble along any sllght covered there may be, the markers leading and the men running separate and as freely and fist as they tan, than to attempt to double his cnlumn across the space in a close formation, by which pace is limited and and such cover as is afforded by a hedge or a wall, or a water course, or the low banik of a road, is made praclically useless. In such a case, the more fragments a force is broken into the better, particulaly as re: gards obstacles lying across the space to be traversed ; for it is evident, that is several hundred men have to climb a wall, or push through a hedge, and the slowest way to get it done would be to bring them all up to it in one solid mass, and the quickest to spread them out, and let little knots of men find the easiest spols for getting past the ob. struction; always provided the commander knows his men to be so trained that they will at once re form when the fire swept space is passed, and the rallying point which was fixed on is reached. Again, the other case suggested I saw occur in actual practice last autumn on Salisbury Plain. A battalion lying down in line as a reserve was fired upon by artillery, where it was completely safe from attack by uther troops. It was order. ed to change front and retire, 'so as to get behiud a rising ground on its right rear. This was all right according to the "Field Exercise," but surely, instead of exposing the whole battalion for some time by making a change of front, it would have been better had such a thing been permitted, to pass the word to all the captains to rush their men at the utmost speed behind the rising ground, and there to reform line. The three or four minutes spent in changing front, and in doubling in line formation to the rear, exposed the whole battalion to the number of shots that could be fired from a battery during that time, no trifling matter considering the extreme precision of mo dern artillery. I would also urgo that to break up a battalion, and make it traverse a distance without strict formation, and then reform quickly, is excellent training for both officers and men, tending to make any acci dental confusion that may occur less dangerous than it might otherwise be. The power not to be confused by mere external confusion, but to recover order rapidly, is one that can scarcely be overrated, and is one that few men possess naturally, but that most men may learn by training. And therefore, it may not be an unwise thing to teach men not to be shaken by disorder, and to resume order by habit and at once.

I have now stated what I consider are the prinbiples to be attended to in framing a tactical scheme for Infantry; but, before passing toldetails, I would refer to one other subject of paramount importance, namely, the husbanding of physical strength. This, though not embraced in the expression "tac tical principie," ought to be kept in view at every step that is taken in fixing what manœuvres are to be adopted for Infantry Service. Just as a pugilist or professional pedestrian is never ready to "go in and win," although he possess ever so much pluck and skill, unless he is also physically in condition, so is it with the soldier. Bravery and good drill are not enough to make a thoroughly efficient soldier ; there muat Le physical endurance as well, capability of holding out against fatigue. IIe must have power, as well as will and knowledge. Now the boxer or race-ruaner requires two things to enablo him to come "to the scratch", with good chance of success. He must have undergone training to bring him into condition,
and ho must be kept out of harassing or wearying circumstances immediately before he is called on to fight or run. So also with the soldier. He requires general training, and he also requires to be protected from unnecessary fatigue or exhaustion on his way to the fight. The first of these requisites has no direct connection with manceuvring at all. It embraces a great many sub. jects- diet, clothing, regularity of habits, ventilation, cleanliness, gymnastics, Sc., \&c. But the second requisite is intimately con nected with manœuvring. Let it be supposed that two armies opposed to one an. other set out under exactly similar advant. ages as regards physical training, the men in equally good condition, and yossessing the other personal qualities which are essential in an equal degree. Let it further be supposed that the system of manoeuvres of the one army is cumbrous and comp'icated, requiring more time and more exertion for the execution of movements than is necessary, and that the men are so arranged as to cause them to be very uncomfortable in the execution of movements, or in route mach ing, while the other army has a system ol mancuvres which admits of movements be ing done with the minimum of fatigue, and arranges the men so that they are, comparatively speaking, able to move with ease and comfort. It is quite evident that if these $t$ wo armies meet in baltle, after each has formed up into its fighting position, the lat ter will be the fresher of the two, :will have more life in it, will be likely to hold out lon. ger than the other. In short, though not truly superior in personal material, its ma terial will be in better preservation, less of it having been dissipation and requiring re novation. Every little bit of fatigue or har rassing work tells. Suppose two sets of men numbering twenty each, were to be pitled against one another to walk twelve miles on a hot day, and immediately after to go through some trial of endurance, "can any one believe that it would make no difference to the chances of the ultimate contest of en durance, how the twelve miles were marched or if one of the Twenties walked in such a way as to make the distance a mile, or even a quarter of a mile more than the twelve. If one of the Twenties walled crowded together, so that where the road was rough some were compelled to walk on the stones, all rubbing their elbows one against the other, breathing the hot exhalations of one an other's bodies, and the foul air ejected from each other's lungs, keeping out any cool breeze there was blowing, and at intervals doing a little extra walking by perlorming some erratic and unnecessary movement while the other Twenty moved straight, every man keeping well free of the others, selecting the hest walking ground, and get. ting the advantage of every breath of nir that was stirring,-could any one doublas to wbich twenty would have the best chance in the subsequent trial of endurance when the twelve miles' walk was over? It is just the same with an army, only the evil of making aurangements which causes extr:4 exertion and tend to exhaustion is greater in the case of the army than in that supposed. For it is not merely as regards physical endurance that such arrangements produce evileffects. Fotigue and exhaustion do more than prostrate the body; they also affect the mind. They tend to demoralize as well as to weaken

This is putting the matter at the very iowest. For the sothier is called on not merely for ellulirance, but for skill. Does anyone expect a riflewhen he is fresh? Is a ured man's eyestght as good, either to judge distance or to aim, as that of a man who has indergone less falline :

