expense would be the first, viz.: the moving of the required number and the equipment, as afterwards the cost would be very trifling, inasmuch as no pay would be required unless active service be performed. The number proposed is in the neighborhood of 600, and the situation somewhere near Touchwood Hills.

RIFLES AND RIFLE SHOOTING.-XVII.

IV .--- BY CAPTAIN HENRY F. PERLEY, HEADQUARTERS STAFF.

Some there are who appear as if by intention to advance to the foremost rank with ease, but as a rule they form the minority, for the largest number are those who by steady practice and careful attention to results attain the position of first-class shots. It is a mistake to suppose that if a man "has got it in him" he will find it out after a little practice. The art of markmanship is not developed suddenly, but is acquired by regular practice, and a careful study of results obtained, and the longer has been the education of the rifleman the better and more certainly to be depended upon will be his shooting. The theory upon which rifle instruction is based is, that a man is not born a good rifle shot any more than he is born a good penman or an accomplished horseman; that without training it is impossible to handle or use an instrument with the requisite accuracy and advantage, and certainly not that wonderfully made instrument, the rifle. The theory assumes that the ordinary soldier can be taught to handle and care for a rifle just as men are taught to drive a steam engine, or steer a boat. By becoming a first-class shot the soldier acquires confidence in his weapon, a matter of no slight importance; for the moment a man becomes certain that he can kill an object of his own size at any distance within 500 yards, he has acquired a stock of knowledge which, in a military sense, multiplies his value many times over; and it is just the reverse with the man who is ignorant, and thus is an incumbrance, and at the mercy of his better instructed adversary. It is not claimed that a soldier is able to fire in the presence of the enemy and the excitement and confusion of battle with anything like the precision achieved on the range, but it is claimed that the soldier who can make bull's eyes on the range, is on that account better able to throw into the enemy a larger percentage of

Last year, at a presentation of prizes to the 1st Cambridge Rifles, Prince Edward of Wales said, "It is not given to every one to possess the qualities which combine to form a good soldier. Some are more intelligent than their neighbours; others again have stronger bodies and constitutions than the rest; but every one, with scarcely an exception, can become, if not a first rate, then at least a very efficient shot. It is impossible to over-estimate the importance of our soldiers and volunteers being good marksmen. The smaller an army is, the greater the necessity of its being able to shoot well. For ordinary shooting purposes one good shot is now-a-days equal to at least half a dozen bad ones. Now, no one can be really a good shot without constant practice, and constant practice means something more than firing away the regulation number of rounds. It is not sufficient that there should be a few crack shots among you, the really important thing is that every one of you should be able to shoot steadily and well at those ranges most useful for military purposes, and you must learn then to look upon your musketry practice as a duty as well as a recreation."

In a letter lately published relative to the fight at Cut Knife Creek, the following statement was made: "And here the value of sharpshooters must be noticed. Many people think a man may be a good shot at a target without being of any use in actual fighting. In some cases, no doubt, this is true, but this training teaches him some things, one of which is not to throw away a shot—never to fire at a bush on the chance of an enemy behind it. Again, the assistance they can be to each other in getting the proper elevation and windage is of the greatest importance as was shown in Saturday's fight. The Ottawa boys, with the rifle shots of the Queen's Own, had evidently learned these lessons thoroughly, and knew how to profit by them."

Practice makes perfect—so says the old adage, and it applies with force to rifle shooting. The fault of the majority of our shooting men is that they do not practice enough, and, as will be alluded to further on, it is not only the practice on the range that is all that is desirable, but there is a practice at home, in one's own room, which is of infinite benefit, and that practice is called "aiming drill."

Take any meeting for a competition. Many attend who, perhaps, have not since the last annual gathering fired a shot, let alone having handled their rifles, save in company drill, and amongst this number are to be found those who help to swell the list of competitors in "consolation;" and who, knowing their fate, will say, "Last year I shot well, I won such and such prizes; I cannot account for it why I shot so hadly

this year; the cartridges are not so good as they were formerly; something must have happened to my rifle when it went into the armory for the half yearly inspection, etc., etc.," when perhaps the truth is such persons have not practiced at all, and they blame everything, but themselves, for their want of success.

Yet with all carefulness on the part of marksmen, unaccountable shots do take place, which appear hard to determine the wherefor, or even to surmise what has caused them to go amiss. These shots are, with good ammunition, comparatively few during a season's practice, though they sometimes occur during a match, and even then, instead of being accepted as evidences of "bad luck," they should form matters for enquiry and investigation.

To be Continued.

ATTACK FORMATION.

(From the Broad Arrow).

It may at first sight appear incredible that after many years of experiment on the merits of various types of attack formation, such a strife of tongues should still be audible as argues that no concensus of opinion has even yet been arrived at on a matter of such obvious importance. It must, however, be remembered that the only wars in which we have participated in the interval, and from which we could learn those practical lessons which the whistling of bullets would undoubtedly press home, have been little calculated to assist in the solution of the problem. For the last eight years or so we have been engaged with Asiatic, Egyptian and African foes, ignorant of military science as understood in European armies, and against whom, since the disaster at Isandlhana, we seem to have manœuvred in huge squares, not only for purpose of defence, at Ulundi, but more recently as a series of "attack formation" at El Teb.

The fact is, considerable difference of opinion exists as to whether we have succeeded in discovering a general type of attack formation which will result in passing over the intervening space with a minimum of loss and bring us to the objective point in a minimum state of confusion. Underlying this question there are also doubts as to whether we have even now read aright the lessons which the Franco-German war is capable, correctly interpreted, of teaching. "Nothing is so successful as success," runs the proverb, and in our anxiety to imitate what we believe to have been the causes which contributed to German victory, there may have been a tendency to leave out of calculation the fact that we have engrafted on a traditional line system of tactics a formation for attack originally arrived at from a different standpoint, viz., a traditional column formation. Certain moral advantages have always been admitted as favoring the assailant, but the defence has gained unmistakably from the introduction of breech-loading arms, nor is it wise in the consideration of a question of this kind to ignore the possibility of the introduction of magazine rifles into the army of some one or other of the European powers. If, then, the moral advantages on the side of the attack remain as before, they exist, at any rate, with certain others materially favoring the other side.

It is just possible that discussions on this subject are occasionally carried on in temporary forgetfulness of the fact that the attack of a position is a combined operation, to be carried out by two at least, if not by all three arms. The action of infantry is not isolated, but both prepared and supported throughout with artillery, and protected in flank by the presence if not by the action of cavalry. Moreover, the action of the artillery of the defence tends to be diverging, and in so far compares unfavorably with the converging fire of an assailant's guns.

General McDougall, in a recent number of the Nineteenth Century, has serious doubts as to the reality of the procedure described as the latest formation for infantry attack promulgated by authority. He considers that local attacks against particular points of an enemy's line will be so many assaults in point of fact entailing all the loss consequent on such operations, and the need of being fed and supported, as Sir John Burgoyne so strongly insisted that assaulting parties at sieges always should be; and suggests that the true solution of our problem lies in an advance, protected by skirmishers, as in the "brave days of old," to explore the ground and cover the advance of those destined for close fighting in a two-deep line, each man occupying a yard of front. so as to mitigate, if not to abolish, the evils of that column-like formation, into which, in its onward progress, the regulation order of attack runs so great a risk of drifting. Colonel J. H. A. Macdonald handles the problem proposed for solution in a somewhat different manner. There is, indeed, an element of similarity in both the schemes we are noticing, namely, the desire to preserve the line formation, redolent of such glorious traditions, as the foundation on which to build up a project for attack formation. Colonel Macdonald advocates the four-deep