

the Imperial Army and Navy, and the names are many of them familiar as those of the families most prominent in connection with the Volunteer service in Canada at present. The officers who served with the Canadian voyageurs on the Nile are specially mentioned, and there is a list of the Royal Military College graduates now serving, with the names of their corps. The book is one which should be in every Canadian library, and it is to be hoped that its reception will be such as to encourage further work in the same direction.

EXPERIENCES AT OKEHAMPTON IN 1890.

(Extract from Lecture by Captain W. L. White, R.A.)

The practice of this year at Okehampton shows, in some respects, a marked improvement over that of last year, especially in the direction of fire discipline. The batteries were worked more smoothly and consequently more quickly, all ranks seemed to have a much more thorough grasp of the principles of the system of ranging than is shown by the reports of 1889. Having thus apparently got the rudiments engrained we may now hope to proceed with perfecting the system and accelerating the process, not by elaborating, but by simplifying it. Here let me remark that many officers bring much deep thought and long experience to bear upon the subject, but so many of them stumble into the pit-falls which some of our continental brethren, who took to the modern system of fire discipline some years before we did, have already fallen into. It is difficult for the uninitiated to formulate a theory if he is only acquainted with results and not with the principles which underlie them, and it is difficult to arrive at these principles by analysis when reading works which only deal with results. The best works that I know of for dealing with these principles in a simple way, and which should be studied in order to avoid false principles and exploded errors, are Lottin's "Etude sur le Tir d'une Batterie de Campagne" and von Rohne's work on "Artillery fire," which latter may be got either in French or German.

During the past year there does not appear to have been any advance in the accuracy of laying, though there was no falling off, and the average range was longer, in the case of infantry targets, by nearly 300 yards, and in the aggregate by nearly 100 yards. The rate of fire has increased, however, by 42 per cent., and, as there has been no falling off in the accuracy of the laying, the result may be taken as not unsatisfactory, but I shall point out in what respects there is still room for improvement. The distribution of fire still leaves much to be desired.

It is natural that those points which were noticed during the practice of 1889 as requiring improvement, and which were set forth in the "Instructions for Practice" for 1890, should have attracted the attention of officers commanding batteries, we will, therefore, take them seriatim and see what fruit the criticism has brought forth.

"(a.) As a rule, unnecessary exposure in taking up position. This was specially noticeable on the part of the Commanding Officer and his staff, and range-takers."

In this respect there has been an improvement, especially in the positions taken up by the batteries, which have been more in conformity with the requirements of service. Indeed, the Camp Commandant, in his report on the first instructional course of cavalry and infantry officers, mentions, as one of the points noticed by the course:—"The smallness of the target presented by a battery in action, as seen from the range. This shows, incidentally, that the batteries, when at practice, made a proper use of the features of the ground."

The indictment against the C. O. and his staff still, how-

ever, remains to a certain extent, though there has been an improvement. The appearance of one or two horsemen on a position at a long range, if they remained fairly still, might easily, if seen at all, be mistaken for a cavalry vedette, but the dodging backwards and forwards of the range-takers to find a suitable base, and up and down it when found, is a certain indication of the coming advent of the batteries. More care should, therefore, be taken to keep these men under cover.

A battery coming into action is most conspicuous when the teams reverse before the guns are unlimbered, this, as pointed out in the drill regulations, should be done, when possible, under cover, and the guns run up by hand. No doubt this will often throw severe work on the detachments, but it is work that must be done if we wish to take up our position without being disturbed by the enemy's fire and to get the start of him in ranging, upon which, probably, the issue of the combat will depend.

There is a tendency, too, when possible, to slightly decrease the interval between the guns at practice to render the command easier, this should be discouraged most strenuously. There are, no doubt, occasions when, to facilitate observation, the interval between the guns must be decreased in order to increase those between the batteries, but this must be looked upon as an unavoidable misfortune, as presenting a more visible objective to the enemy and an easier target for his shell to take effect upon.

"(b.) The system of notifying the point to be ranged on by word of mouth was generally adopted instead of some more definite means."

This difficulty has, I think, been thoroughly overcome by the use of a pointer about the size and dimensions of a walking stick, which is easily carried, and is immensely superior to any verbal description. One of a lighter pattern might easily be designed.

The suggestion that one gun should be laid and the Nos. 1 look over it serves the same purpose, but has the great disadvantage that the gun must be brought forward and exposed while the remainder of the battery is still in the preparatory position.

The extent of front to be covered with fire that has been assigned to the battery is also not so easily pointed out with a gun as with a light pointer, which can be easily moved so as to indicate the flanks of the target.

There is still much confusion in the application and in the understanding of the directions "right" and "left" when applied to the enemy's formations and when to the natural features of the ground, this not alone among non-commissioned officers. Much more attention will have to be paid to education in this matter in order that fire may not be misdirected, especially at the critical moment of ranging, when the mistake generally takes place.

"(c.) Too much time generally taken in picking up and verifying ranges."

As I prefaced by saying, there has been an increase of 50 per cent. in the rate of fire over that of last year, and a corresponding increase in the rate of ranging, which increase will no doubt continue to grow as those concerned get more opportunities for, and understand more about, the observation of fire.

This can only be attained by encouraging as much as possible the attendance of battery C.O.'s and their assistants at the practice of other batteries, causing them to keep a record of their observations and verifying them by the range report after practice.

One of the points noticed by the officers of the Cavalry and Infantry courses was as follows:—

"The length of time during which the battery is generally kept waiting in its preliminary position for the report of the range-takers. This time, it was remarked, would be very valuable if the target was of a transitory nature. It was explained to the course that this invariable taking of