

REVOLVING AND TELESCOPIC SIGHTS.

(From the *Broad Arrow*.)

A system of sighting guns which has been discussed in the columns of the journals of the United Service and Royal Artillery Institutions, and which is to be tried by several batteries in the course of this year, is a matter of sufficient importance to justify the brief allusion to the subject which our space enables us to give. It is the invention of Major Scott, R.E., whose attention has been, more or less, engaged on the subject for thirteen years. The object of these sights is to do away with the sources of error to which a gunner is liable by reason of drift, wind, sun, inability to see distant objects, and unlevel gun wheels. The revolving system of sighting consists in so arranging the sights that they shall revolve about an axis parallel in every direction to that of the gun, thereby giving the Number One complete command over the axis of the piece under all conditions, by giving to the sights a third and additional movement over and above the motions given to the service sights of elevation and deflection. Sights made with these movements are called "revolving sights," and when a telescope is furthermore added to aid vision, they are called "telescopic revolving sights." It is claimed on behalf of the revolving sight that by its use we get rid of all errors due to the use of inclined sights, and to the calculations now needed to obviate errors due to wind and drift, while the foresight being covered by a tunnel, errors due to the sun are likewise eliminated. Still we have to combat the inability to see objects up to the full range of the gun, a defect which, though capable of being improved by practice in laying by the service sights, is got rid of, once and for all, by enclosing the deflection scale in a telescope with an arrangement dispensing with the difficulty of reading a vernier; the line of sight is taken by means of cross wires within the telescope, which also furnish a ready means of correcting errors in direction. It is claimed for the invention that it enables men mechanically, and without the tiresome calculation so liable to be erroneous, to correct errors in range and direction, and thus less training and instruction will be needed to enable gunners to use their sights compared with that necessary to overcome the difficulties inherent in the somewhat intricate service sights, and to become good shots with only the small annual regulation allowance of practice ammunition.

Objection will no doubt be made to the delicacy of the telescopic sight, less, perhaps, for heavy than for field guns, but the advantages of such a sight are so great that we cannot but think they will in the long run be found to outweigh the question of mere delicacy, for by their use the power of the weapon is infinitely extended, a matter of moment, not merely to the artillery arm itself, but likewise to the other branches of the Service who are so dependent on the success of artillery fire for the execution of their own operations in the field. If we develop shooting up to the full range of the gun, and put it in the power of any number of the gun detachment to attain the same degree of excellence as a shot, we have added to the accuracy of the fire with which artillery can prepare or assist the action of the other arms in a very extended degree.

It is evident that this is by no means an artillery question merely, but one of general and much wider interest, and we think that the mere cry of delicacy of construction is not in itself sufficient to stand in the way of a system from the introduction of which such increased development of artillery fire is claimed. Cost is always a serious consideration—the probable actual cost of making the sight irrespective of profit being estimated at about £4—but increased accuracy may really lead to economy, for it is obviously better to fire a couple of straight shots than a dozen which are wide of the mark. Artillery fire in action has hitherto been the reverse of fatal. Le Bourget was cannonaded for six hours with eighteen guns, with a loss of three men wounded only. As Major Scott's system has been tried, and is well spoken of by the French authorities, we shall certainly look forward with no little interest to the reports which will doubtless be furnished as to the results of the use of these sights by the batteries of artillery to whom they have been supplied.

THE FIGHTING OF THE FUTURE.

"The Fighting of the Future," is the title of a remarkable essay from the pen of Captain Ian Hamilton, a young officer who distinguished himself in the Afghan and the Transvaal wars, and is at present aide-de-camp to General Roberts. Captain Hamilton is at once the boldest and the most reasonable of writers on army reform. His proposals are the simplest possible. Instead of teaching as much drill and as little shooting as possible, which is the present system, he would teach as little drill as possible and concentrate the soldier's training upon the

one object of making him a real marksman. It is almost an accepted doctrine in Germany that, in spite of the size of modern armies, victory may still be attained by a very small force if it is superior in the essentials of training and discipline. But the Germans have not yet suggested what particular training is required for this object. Captain Hamilton has filled the gap in the theory. He would have an army of soldiers in whose hands the rifle should be an unerring and perfectly trusted weapon. "The soldier," he says, "under the present regime does drill in some form or another for 355 days and shoots for 10. It is proposed that this distribution of his time should be reversed." We have no hesitation in expressing the conviction that Captain Hamilton is right. An army of which every man was a practised marksman, accustomed to fire at moving and disappearing objects, and knowing from experience that the rifle was a sure weapon in his hands, would be irresistible, even if its drill was no better than that of the volunteers. The time is ripe for such a reform. The army mistrusts its much-revised and little-improved drill book. The new musketry instruction is below the level of those of other armies. Public opinion will support a thoroughgoing change provided that it carries with it the clear promise of improvement. Those who are anxious to see our defences set in order cannot do better than study the suggestions put forth in Captain Hamilton's pamphlet, which goes to the root of the matter. For ten years no more original contribution has been made to English military literature.—*Vol. Record*.

PERSONAL.

Lieut.-Col. John Ryder Oliver, R.A., has been gazetted colonel in the army. It is a local step which counts for his promotion. All those officers who get a step in rank in Canada, if called to serve in a mixed force of Imperial and Canadian troops, would be entitled to the additional rank beyond his regimental rank. In the present instance Col. Oliver gets no additional pay from the Canadian militia, his salary as Professor of Artillery in the Royal Military College being a fixed one.—*Ottawa Citizen*.

REGIMENTAL NOTES.

FREDERICTON, N.B.—The following members of maritime province corps have joined "A" School of Infantry for a "short course," commencing Sept. 1st, 1885:

Capt.	J. Mongee,	66th Batt'n.	Bugler	E. Bowie,	63rd Batt'n.
Col. Sgt.	H. G. Fletcher,	67th "	"	W. Mayboe,	63rd "
L. C. Sgt.	A. McDonald,	82nd "	"	P. Hart,	63rd "
Corp.	H. H. Barker,	71st "	"	C. Berringer,	63rd "
"	I. Hill,	66th "	Private	E. Bayer,	66th "
"	J. S. VonSchoppol,	66th "	"	T. H. Troup,	66th "
"	L. Power,	66th "	"	I. W. Hunter,	63rd "
"	J. D. Needham,	66th "	"	J. Wilson,	74th "
"	I. E. Nelson,	63rd "	"	I. McTiernan,	74th "
Bugler	H. McLaughlin,	71st "	"		

MONTREAL.—All drill orders of the city regiments have been cancelled on account of the rapid spread of smallpox. The Fifth Royal Scots were advertised to have commenced their annual drill last week, but owing to a case of smallpox breaking out in the Bonsecours market, where the armories of several of the city corps are, the commanding officers ordered the discontinuance of further drill, and in all likelihood the armories will be kept closed for some time to come.

The Montreal Troop of Cavalry left here on the 15th to be brigaded in the St. Johns camp. The troop is officered by Capt. Colin McArthur, commanding, Lieut. John Garth and Surgeon A. L. Smith, with sixteen rank and file.

The volunteers are anxiously looking forward and longing for the near completion of their new Drill Hall. The tenders for the erection of the armories being let by the Government. When it is finished No. 5 District will have the most commodious and handsome Drill Hall in the Dominion.

GLEANINGS.

Company drill for the Guards is expected to commence early next month.

The special corps organized in the North-West Territories during the insurrection have all been released.

The Militia Camp for District No. 6 will open at Lapraire to-day. The authorized strength is 1,180 men.

The School of Infantry, N.B., will join the New Brunswick camp now in progress during the training term.

The Militia Department has been advised of the successful exchange of "A" and "B" Batteries between Kingston and Quebec.

Gen. Middleton opened the Grand Central Fair at Hamilton at noon to-day, and was presented with a complimentary address.

The Lorne Rifles have a brass band this year. They still have the pipers, however, as Col. Allan could not get on without them.

Hereafter the wives, female friends, or children of officers or men are not to be lodged within the lines of any camp of instruction.

The *London Gazette*, of the 8th instant, contains a list of recent graduates of the Royal Military College, Kingston, who are gazetted lieutenants in the army.