for instance, the extreme cases of firing at a gun pit at long range with shrapnel, and resisting the rush of infantry with case.

No pains should be spared to instruct layers thoroughly in accurate

and uniform laying, combined with quickness.

Under all circumstances, even with case at short ranges, correct elevation is a first necessity. It should always be easily and speedily obtained, since it depends simply on the movement of the gun on a stable carriage, with appliances giving steady and minute movement.

But deflection is far more difficult, depending as it does on the movement of the trail on rough and unstable ground by the very uncertain motion of a handspike. It is difficult to obtain, and its disturbing effect on the elevation leads to a correction of the latter being also neces-

sary, and consequently to a double loss of time.

Attempting too much nicety in this respect may lead to no compensating advantage. Take, for instance, a 13-pr. M.L. shrapnel, at 2,000 yards, which, when burst 100 yards short, has a spread of 57 feet; if the object has breadth, a few feet right or left can make no possible difference in the result.

Nevertheless it is on this minute correction that most time is spent. When all is done, a flaw of wind which cannot be foreseen or guarded against, is quite sufficient to vitiate the allowance given. At the same time no excuse should be allowed for rough laying, unless the factor of rapidity is manifestly one of the first importance.

GENERAL REMARKS.

Laying with an Auxiliary Mark.

41. This method of laying is applicable to all stationary targets. It is the only method possible whenever such targets cannot be seen over the sights; for instance when—

- (a.) The object may be hidden from time to time by smoke, mist, rain or dust. At 1,500 or 2,000 yards very little of any of these will do this.
- (b.) A battery engaging artillery may be forced by the enemy's infantry to leave its position on the crest of a ridge, and yet there may be a necessity for continuing its fire.
- (c.) A battery may have to take position and fire from behind some low cover without exposing itself at all.
- (d.) Where the object may be clearly visible to a mounted man, or even to a man on foot, but is invisible over the sights.

Take case (a). Section officers, as soon as the fire is distributed, always take up an auxiliary mark either in front or rear as most convenient. This is done by moving the sight after having laid, and without shifting the gun on any conspicuous mark, the further off the better. The mark and the division at which tangent scale and the deflection leaf cover the mark are noted down; then as long as the gun is run up to about the same position it can by these means be laid in the original position.

Case (b) may be done thus: The gun is laid on the target. The section officer looks back over the sights, and sends a man to a convenient distance in rear and in line, and halts him. The gun is retired and brought into action over the spot the man is marking, a big stone, a sod, a bush, or anything being left to mark the gun's first position. The gun is laid on this mark, the elevation being guessed at. Even if

it is 500 yards out, it can be easily corrected next round.

Case (c). The cover may be a plantation, a thick hedge, a ridge of ground, or anything else. Suppose it be a ridge of ground. The battery is brought into action behind the ridge. In order to lay any gun, two men are sent out on the ridge, the one furthest off faces the battery, the other faces the target, they align each other on the gun and object respectively, thus bringing the four points in line. The men then go in, that one nearest the gun first marking his position, or remaining there till the gun is laid on him; an auxiliary mark is then taken up. The elevation is given in case (b).

In cases (b) and (c) each gun can find its own line; or two guns of the battery, say 2 and 5, may be aligned, and the other guns on coming into action alongside, can take up the line of fire from them.

Case (d). Here a man standing or mounted lines the gun on the target, No. 1 chooses an auxiliary mark and gives the trial elevation.

This method of laying is generally more accurate than laying direct, because the mark is as a rule so much more distinct than the target; but an observing party that can see the target is absolutely necessary except in case (a).

The rifles ordered for the German army at the Austrian rifle manufactory of Steyr are not to be made on the Mannlicher system, but upon a system similar to it, only simpler, which was invented in Spandau. The ammunition is made with a new block powder, which gives very little smoke.

"Her Majesty's Army."

Some time ago we noticed in these columns the first two numbers of the neatly printed and handsomely illustrated octavo publication now being issued containing the historical and descriptive records of the corps comprising Her Majesty's army. The third and fourth parts are now before us. The former commences with a continuation of the story of the Cavalry, including a thrilling record of the immortal charge at Balaklava. Many incidents of the American war of independence are given. To come down to more modern times the reader cannot fail to be interested in the pages devoted to the recent Egyptian campaign, and the incidents of Kassamin, Abuklea, and Tel el Kebir.

The Royal Artillery is next treated of, and the history of this branch of the service is traced intechnically "from its struggling, almost despised, birth to its present pride of place, immeasurable importance and farreaching renown." The story dates from 1716, since when the Royal Artillery has "shared in all the victories that the British arms have gained." Special attention is given to the achievements of Waterloo and the Crimea, the Indian mutiny horrors, the China campaign and the

Tulu and Boer entanglements.

Next in order come the Royal Engineers, "the men of all work of the army, the navy and the public." Conspicuous among the many distinguished Engineer officers mentioned is General Charles Gordon, of whom it was written after his Chinese campaign that: "Charles Gordon has gained more battles in the field, taken more cities, more men have laid down their arms to him, than any British General living."

The foot complement of the Household troops—the Grenadier Guards, the Coldstream Guards, and the Scots Guards are then written of, and of these first attention is claimed by the Grenadiers, "the very name of whom suggests in an exceptional manner visions of the proudest victories and of the dourest struggles that have befallen British arms." Their history, which ends the Third and commences the Fourth part, is brought down to the time of the Soudan campaign, when the Grenadiers last left England. The records of the Coldstream Guards are given from as far back as 1660, and that of the Scots Guards from the birth of this illustrious corps in 1632. The next history written is that of the Royal Scots Lothian regiment, "by far the oldest in the British service," for their story is traced to before the time of the Conqueror. A number of other territorial regiments are also written up in the concluding portion of Part IV.

The illustrations in the two numbers here reviewed comprise hand, some coloured full page plates showing the uniform and equipment of the 16th Queen's Lancers, the 1st Life Guards, the 1st Royal Dragoons,

and the Royal Engineers, respectively.

The sole agents for "Her Majesty's Army" in Canada, are the Canadian Subscription Co., of Montreal, of which company Capt. John Hood, of the 5th Royal Scots, is manager.

Correspondence.

[This paper does not necessarily share the views expressed in correspondence published in its columns, the use of which is treely granted to writers on topics of interest to the Militia.]

TEAM SHOOTING.

Editor Militia Gazette.—Your article on the encouragement of team shooting, in your last issue, is a good move towards encouraging rural battalions to compete in rifle matches; but the great drawback is, who is to pay?

I would suggest that the Provincial Rifle Association give several prizes to be competed for by battalions in camp in each District, under the direction of the Musketry Instructor, the Brigade Major and superintendence of the officer commanding the camp, who shall report the

result to the Association.

The sum required and sufficient would be about \$100.00 to each district, paid by each Provincial Association, taken from the Dominion grant; and this would benefit both the Militia and Association by improving their efficiency.

E. LAMONTAGNE, Lt.-Col., D.A.G.

MONTREAL, April 8th, 1889.

The whole of the German mastered ironclads are fitted with only a fighting equipment, viz., three lower masts with military tops, pole-top-masts, and a signal yard. No bowsprit but several steam derricks. Every ship, be she armourclad, cruiser, or armoured gunboat, is fitted with torpedo defence nets, and the booms are kept permanently shipped with rigging on, and nets bent and neatly stowed in shallow iron trays or boxes running right round the ship. On account of ground tackle, the bow defence is kept separate. By this means the Evolutionary Squadron last summer had their nets out at sea in three minutes after the signal was hauled down. Wooden booms are preferred to iron or steel.