

to the steadiness of the Bulgarian Infantry, and to the admirable handling of the Artillery (of which the incident described below may be taken as a sample), what might have been a disaster was turned into a brilliant victory.

At one period of the action two Servian batteries (eight guns) opened fire on the left centre at a range of about 1,500 metres, and Prince Alexander detached two guns, under Captain Mattheiff, to engage them. This officer accompanied Major Clarke, C. M. G., R. E., and myself, whose good fortune it was to be at Sophia within a very short time of the cessation of hostilities, to the battle-field. He was a *réserviste* (a barrister), and like many of the Bulgarian officers who have had the advantage of being educated at the Roberts College at Constantinople, spoke excellent English.

The position selected by Captain Mattheiff for his two guns, indicated by the wheel marks which were quite visible at the time of our visit, had been occupied by some Bulgarian tirailleurs, who retired when the Servian guns opened on them; the range, therefore had been accurately obtained before the arrival of the two Bulgarian guns.

Unlimbering in a fold of the ground which afforded a partial protection to his teams, Captain Mattheiff ran his guns up on to the flat top of a small mound: this operation being carried out under a brisk fire from the opposing batteries, of percussion common shell.

Setting every fuze himself, he commenced a deliberate and careful fire of time shrapnel. His first shell was short; his second burst in a team in rear, inflicting great damage; and his third burst about the right distance short of the Servian guns. He continued to fire with this length of fuze, still adjusting each with his own hands, for a period of six minutes: at the end of this time the Servian guns were with much difficulty, and with great losses among men and horses, limbered up and taken out of action.

The ground on which the Bulgarian guns were served was admirably suited for developing the full effect of percussion common shell. A layer of about two inches of turf covered a compact, hard gravel soil—ground which precluded any possibility of the bursts being smothered. As eight guns were opposed to two, and as the fire from the latter, being under the personal observation of one man, was necessarily very slow, the number of projectiles bursting in the vicinity of the Bulgarian guns must have greatly exceeded those fired by them at the Servians. Close round the wheel and trail marks of Captain Mattheiff's guns, we counted twenty-seven grazes or small craters, showing the bursts of common shell, "and yet," to use that officer's own words, "what did they kill? A horse—he is there!" And there lay the body of the sole victim of the concentrated fire of eight guns for six minutes!

Riding over to the other side of the valley, across which this interesting duel had been fought, we had little difficulty in finding the position which had been occupied by the Servian guns. Rags, bandages, scattered pieces of uniforms and harness, all bore mute witness of the terrible effect of the lawyer's skilful shooting, and showed that the eight guns had been beaten, and well beaten, by the two, before they acknowledged that fact by limbering up.

A better comparison of the two natures of projectiles—time shrapnel and percussion common—could scarcely be made. Both were used under the most favourable conditions—that is to say, the shrapnel were used with nerve and with consummate skill, while the common were favoured by ground that might be described as ideal. Was there ever an object-lesson better devised to carry conviction to doubtful minds, or to drive home the conclusion that shrapnel is the only man-killing projectile, common shell, even of cast iron, being absolutely useless in this respect? It may be suggested that percussion shrapnel might fill a place midway, as regards effect, between the percussion common and the

time shrapnel. More fragments must perforce produce more effect, and the percussion shrapnel may, under certain conditions, compare favourably with the percussion common; but in soft soil its burst is absolutely smothered; while even on smooth, baked ground such as is found in India, its effect is immeasurably inferior to that of time shrapnel with trustworthy fuzes.

To turn back for one moment to the actual facts of the duel which I have endeavoured to describe. For two guns to put eight guns out of action under any circumstances, is undoubtedly a very fine performance; but to accomplish this in six minutes, to unlimber, to come into action, and to find the range under a fire from guns which had already found it, is an achievement of which any Army might indeed be proud. Captain Mattheiff's previous teaching had been only that of the schools, but he was endowed with the bulldog courage of his nation, the obstinate pluck which enabled the little Army, denuded by the Russians of 250 of its officers within a few weeks of the declaration of war, to defeat a force superior in numbers, and elated by small successes gained shortly after the outbreak of hostilities.

It may be that after their use by men of Captain Mattheiff's stamp, our modern ammunition may be thought to be maligned when airily described as "jincrack shells, with clockwork fuses."

Note.—It was difficult to ascertain for certain what guns the Servians used, but it may be assumed that they were similar to those used by the Bulgarians—viz., Krupp field guns, Modèle 1878, firing a shell slightly heavier than that of our 12-pounder breech-loader.

Militia General Orders (No. 19) of 16th Oct., 1891.

No. 1.—STAFF.

His Excellency Lord Stanley of Preston, Governor-General, has been pleased to make the following appointment upon his Staff:

To be Extra Aide-de-Camp; from 8th October, 1891: Captain Henry Collings Sheppard, *vice* Major Charles J. Short, R.C.A., deceased.

No. 2.—PAYMENT ON MILITIA SERVICE.

The following rules in regard to accounts and vouchers for payments of Militia service, are to be strictly obeyed:

1. With the exception of the regular pay lists of the service itself, no accounts of Militia payments are to be made out by officers or clerks of the Department of Militia and Defence, or of the District Staff, or by any Militia officer, non-commissioned officer, or man employed in connection with the service for which such account is rendered.

Creditors will make out their own accounts.

2. In no case will the signature of any of the officers, etc., above specified, be accepted in receipt of such accounts.

Creditors are to receipt their own accounts, either by themselves, or by their legally constituted agent, not being one of the parties above described.

3. In cases where the creditor cannot write, his accounts must be made out, and his receipt witnessed by some other party than an officer, etc., of the Militia service, as above set forth.

No. 3.—FLAG STATIONS.

No. 2 of General Orders (6), March, 1889, is amended by providing that the Royal Standard is to be used at the Citadel, Quebec, on Royal anniversaries, in addition to the occasions provided for in the last clause of paragraph 7, Regulations for the Permanent Corps.

No. 4.—INCREASE OF ESTABLISHMENT OF ACTIVE MILITIA.

Authority having been granted for the raising in the City of Toronto, of eight companies of Active Militia of the strength of 42 non-commissioned officers and men per company, to be formed into a Battalion wearing the Highland dress, the Deputy Adjutant General of Military District No. 2 will submit Service Rolls of those persons volunteering for service in those companies.

No. 5.—ROYAL MILITARY COLLEGE OF CANADA.

Military Staff.

Captain Charles Ernest English, Royal Artillery, lately appointed to the Staff of the Royal Military College as Professor of Artillery, Administration and Law, has been taken on the strength of the establishment, from 18th of September, 1891.

Admission as Cadets.

The gentlemen undernamed having passed their examinations and been certified by the Headquarters Board of Examiners, have been