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Captain E. Agar R.E.

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FIELD-FIRING OPERATIONS OF A MIXED FORCE IN SWITZERLAND IN CONNECTION WITH THE DEFENCE OF THE ST. GOTHARD.

Translated from the "Revue Militaire Suisse," of October, 1892, by
Captain E. AGAR, R.E.

WE borrow the following correspondence from the "Gazette de Lausanne":—

You have recounted the extraordinarily daring experiment carried out by the artillery of position in hauling 12-cm. guns up to the summit of the Gourschen. I wish to-day to give you details of an experiment of a somewhat different nature, in which I took part last week, on the same ground, and which appears to me, in all respects, to merit attention. It consisted of a field manoeuvre, carried out against an enemy marked out by targets, by a detachment of combined troops, provided with ball ammunition and live shells.

Colonel of Brigade Gallati was in command. He had under his orders the 87th Battalion of *élite*, from Uri; the 3rd Landwehr Field Battery, from Lucerne; the 1st Fortress Company of Artillery, from Airolo; the 6th Landwehr Company of Sappers; and a second company of sappers, formed from the pioneers of the Landwehr infantry of the 5th Division. You will notice that it is rather a strange mixture: the Landwehr and the special arms are in the majority, which would be difficult of explanation in the case of operations in a flat country, but which is quite natural in the case with which we are now concerned, in which we have to deal with troops detailed for the defence of the fortified district of the St. Gothard.

The general idea was as follows:—

A detachment of the enemy (indicated by targets) is about to ascend the Leventina, with Airolo as its objective. It occupies the front Altanca—Piotta—Giof, and is endeavouring to take possession of the heights of Brugnasco and of Nante, which command the fort at Airolo. A Swiss detachment is sent against it with the object, under the protection of the artillery of the fort, of arresting its further march.

Naturally it was impossible to indicate by targets the centre of the enemy's line, which was situated at the bottom of the valley. One could not venture to fire with ball cartridge, or with live shell, in this particular neighbourhood, through which pass the main road and the railway, and where the dwellings are very numerous; but the barren knolls, and the spurs of the mountain, had been all the more carefully made use of.

The enemy's principal attack, on the assumption given above, could only be directed against the Alp Ravina, to the south of the Ticino:

This Alp, which is in the shape of a square with sides of about 2 km., rises in an abrupt slope to 400 m. above the valley road. It is almost hermetically closed towards the south by the rocky crest of the Pizzo Sassello, and to the east by a spur of the Poncione di Mezzodi. In order to take possession of the heights and of the village of Nante, opposite Airolo, one must necessarily cross it throughout its length. The ground, intersected by moraines, is interspersed with clumps of trees which may, to a certain extent, mask the movements of troops, but which, however, nowhere form a very thick screen; it would be difficult to escape from the view, and from the attacks, of a vigilant adversary.

It was on this Alp Ravina that the principal forces of the enemy, in the form of targets, had been placed; they were supposed to be crossing the Alp in attack formation, in the direction of Nante. They comprised the following:—A battalion of infantry deployed, with groups of skirmishers in front, the latter partly concealed by folds of the ground and by trees; further in rear the supports, in one rank, standing; finally, the principal line, composed of companies in line; on each flank a battery supporting the infantry with its fire—on the right a field battery, on the left a mountain battery. All the targets, which were of wood, were painted, and represented men in different attitudes; lying down, kneeling, or standing. On the northern slope of the valley, along the mule road which joins the villages of Brugnasco and Altanca, there had also been placed a detachment of the enemy of the strength of one company.

The first task presented to Colonel Gallati's troops was to prevent the enemy, who were supposed to be still on the march at some distance away in the bottom of the valley, from taking possession of the exterior defences of the fort at Airolo.

With this object the 87th Battalion had placed its advanced posts, on the evening of the 13th September, on the Heights of Nante. Two sections of the Landwehr Battery No. 3 occupied a terrace to the east of the village. From Airolo to Nante there exists in truth nothing but a mule track, which is very steep, and which seems scarcely practicable, except for mountain artillery. But the pioneers had quickly improved this road, and the battery bravely breasted it. In three hours they had succeeded in bringing on to the height the four guns, thanks to the incomparable ardour with which the gunners and the sappers had come to the assistance of the horses. An enthusiastic spectator remarked with justice, "It is mountain artillery with two-legged mules."

The two other guns of the battery had been taken from Airolo to Brugnasco *via* Valle. The difficulties had been even greater. At a certain spot it had been necessary to dismount the guns and to drag them up by means of sledges, greatly assisted by manual labour. The company of sappers acted as a support to this artillery.

On both sides of the valley, observation-posts had been established. The Officer in chief command had taken up his position on a large rock to the south-east of Nante, from which the view extends for some distance, and which is called in the country the Costone. The

posts communicated with each other by means of visual signalling. Besides this, telephone lines, installed by the engineers, connected the Commanding Officer with Fort Airolo and with the positions occupied by the field artillery.

On the morning of the 14th September, the 87th Battalion and the pioneers of the Landwehr infantry occupied the slope to the south-east of Nante, the pioneers facing the Alp Ravina at the foot of the Costone. They had with them the machine-gun section of the fortress artillery.

These machine-guns, like the *chassepôts* at Mentana, do wonders. The fortress gunners who have the working of them are chosen for their powerful build. They transport these machines on their broad shoulders wherever a man can pass; no goat track seems to be too steep for them. In two minutes the Maxims are mounted and ready to open fire. You know that they fire 600 bullets a minute with great precision. A piece of rock of moderate dimensions suffices to shelter the gun and the two men serving it, one seated, the other kneeling. When the position becomes untenable, they pack up and move off. This machine is a valuable support in the hands of experts.

To return to our manoeuvres. At 9 o'clock fire was opened. It is supposed that at this instant the enemy has reached the positions where the targets are placed, and that he has accentuated his offensive movement.

This movement must be arrested. The infantry pioneers and machine-guns take, as their objective, the line of skirmishers; whilst Fort Airolo and the battery at Nante cannonade the artillery and the main body of the hostile infantry. In the meanwhile the sappers make head against the detachment on the left bank of the Ticino, and the two guns at Brugnasco fire obliquely on the positions of the Ravina Alp.

The fire, increasing in intensity, lasts for an hour, the deep roar of the guns of the St. Gothard mingling with the sharper reports of the infantry fire. Then comes the decisive attack. It is the 87th Battalion which has to carry it out. A heavy, quick fire from all the guns precedes it. In spite of a somewhat long range, more than 5,000 m., the shells of the fort fall with remarkable precision in the lines of the hostile artillery, whilst the Landwehr battery, at a range of 2,000 to 2,500 m., covers the infantry targets with shrapnel shells.

The projectiles whistle in the ears, or pass over the heads of, the infantry soldiers of the 87th and of the Landwehr pioneers, but not a man stirs, so much does the accuracy of the artillery fire inspire confidence. All the same, when the battalion from Uri makes a turning movement round the left wing of the enemy, some of the last shrapnels from Brugnasco burst almost in their lines, fortunately without wounding anyone.

At 11 o'clock the manoeuvre is over. It has been favoured throughout with superb weather, and no accident has occurred.

It is stated that the results of the firing were very successful. The targets were riddled with bullets and with the fragments of

shell, and in several places were reduced to match-wood. Without doubt on active service one could not reckon upon similar results ; one would have to make considerable reductions, in order to make allowance for factors which must necessarily be neglected in firing in cold blood against immovable targets. It is none the less true that field exercises carried out with actual service ammunition are a schooling for the troops which one cannot value too highly. Nothing is more suitable for inculcating into our foot-soldiers that fire discipline, which it is so difficult to obtain, and which is of such vast importance. As to the danger, if it exists to a certain degree, it can be reduced ; and then, again, it is an exercise of inestimable value for habituating the different arms to act in concert without difficulty and without impeding one another.

However this may be, a manœuvre with combined troops, executed throughout with live ammunition, the artillery firing over the heads of the infantry, is, I believe, a novelty in our country ; it is on these grounds that I felt it my duty to write to you. I will not lay stress upon the performance of the field artillery, although it borrows a special interest from being due to the Landwehr. I have no doubt that our *élite* batteries, bearing in mind that our country is three-fourths mountainous, would soon do even better.