

From SEDAN to the MARNE

river, some good lessons, badly applied...

That French army, said to be invincible during the second empire, collapsed during only two engagements under the rush of the Prussian army organized and led by Moltke, inspired by Clausewitz's principles. Being too confident, the French army, trained by the successful campaigns in Crimea and Italy and also by the colonial ventures, did not know how to take advantage from the technological progress of that time and how to adapt its employment doctrine neither to the threats nor to the weapons' capabilities of that time.

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Although not prepared by his education, Napoleon III wanted to personally exercise the supreme command of the armies and his successive war ministers did not know or dare how to imagine a rational organization of the forces. A corrupted conscription system was giving the armies only poor elements. Finally some taste for luxury and small wages were leading the officers to fight for promotions with all the compromises and retreats that can be imagined. Living apart from the country, cherished by the power and carried away by its victories outside the borders, the army was in fact vegetating in an atmosphere unfit for progress.

As the chronicle for an announced defeat, the improvisation of the campaign in Crimea and Italy was already announcing Metz and Sedan. From Gallipolis, Saint Arnaud, the war minister, was complaining to the emperor : *" We have not complete the setting up of our forces..., we only have twenty four horse drawn guns..., it is not clever going to war without bread, shoes, cooking pots or cans..."*. In 1859 the emperor himself was writing from Alexandria to his minister : *" We gathered a 120 000 men strong army before having set up the supplies. This is the contrary of what is generally done"*.

In this context, it is easy to understand that, after the victory of the French army during the imperial campaigns, it was important, especially in 1870, that no spats button be lacking ! For the rest, as usual, one will do its best according to this very French principle, already sufficient at that time to win the battle... While the army of Napoleon III was teaching contempt for what Germany was

doing, Moltke was continuously improving the army of his country in strength and quality of its equipment, and through doctrinal thinking and staff's works. He was the one who succeeded in taking advantage of the lessons of the wars of the empire (the first one) and in transforming in facts the principles taught by Clausewitz the Prussian, notably that of fires' concentration.

To the German strategic deployment in several armies, each one tasked with a specific role in the offensive action, was opposed a line of troops stretched over almost 240 km, without any disposition in the depth or reserves, and above all, without maneuvering spirit. A few weeks were enough to establish the incompetence of the French imperial army. If the inferiority of its artillery is not to be regarded as the main cause of its defeat, and although the Chassepot rifle provided it an undisputable advantage over its German adversary, the French army was mainly not able either to have the equipment in line with the technical innovations of the moment or to finalize a coherent doctrine to federate spirits and energies. But it is generally from the first ones that we can build up the second one. And at that time, the period was open to it.

After the 1870 disaster the government was going to draw the lessons of the failure of its army. From the three main laws that marked the army reorganization and led it up to the Marne, we will here retain the technical improvements which gave it the firepower that was then bitterly lacking : smokeless powder, rapid firing rifle, 75 mm gun and gelignite shells are some of the

essential elements of the French army's renewal and through this latter, the doctrine, which prepared it for the great war. After some period of time that we can call "*reaction time*" when the army organized itself for a defense strategy marked in the field by the disposition conceived by General Séré de Rivières, the progress of the armament progressively led to the come back of offensive spirit, to the concentration of efforts' principle and to superiority of fire. If the 1875 field manual about maneuver had stressed the preponderance of fire, from now on "*offensive will be fire moving on*". "*Only offensive makes possible to obtain decisive results*" could be read between the lines in the writings of men such as Foch, Pétain, Grandmaison. By multiplying by two the speed of the projectiles, the colloidal powders called "*smokeless*", developed by Paul Vieille, a powder engineer, gave a lead to the French army by providing it with an undisputable fire superiority.

The Lebel rifle, which equipped the infantry as of 1886 was the first automatic weapon using this smokeless powder. Manufactured at a rate of 3 000 a day, it is, in the French industrial history, the first example of mass production. This rifle gave to infantry an additional capability that placed it among the most formidable of that time. The high rate of production permitted its rapid fielding into the forces. In the same time, artillery never ended improving its equipment with the bronze Reffye gun (1873) loaded by the breech, the first steel gun (1875), the 80 and 90 mm Bange systems, and also improving range and accuracy with the 120 and 155 mm siege guns. Its huge lead occurred in 1893 with the 75mm gun, the first production of a rapid firing piece of ordnance with an hydro pneumatic brake and an indirect aiming. "*Good for everything*" "*the 75mm gun is God the father, God the Son and God the Holy Spirit*" was taught at that time in the high studies centre !

Bibliography :

- General Weygand : *History of the French army - Flammarion 1961.*
- J. Carpentier : *The technical progress and the issue of the land battles - Revue scientifique et technique de la défense N° 55 - mars 2002.*

If Germany had already in 1870 a device for the variable adjustment of the shell burst, while France only had one for triggering the burst at two fixed distances, the lethal power of the French shell was considerably increased by its gelnite load. This explosive also increased its destructive action on the defense works and progressively led to the use of concrete. From these technical innovations regarding both fire power and easy delivery progressively resulted in a return to the offensive spirit. Already appearing in the 1887 field manual about operations, it was going to be the leading concept until the beginning of the great war.

We were thus renewing with Napoleon (the Great) and Clausewitz. To the point that some fundamental truths, well known from experience, were to be forgotten. "*The best security is ensured through a full attack, the energy in the execution makes for all the weaknesses and compensates for all the mistakes*" was stating Lieutenant-colonel de Grandmaison, then G3 of the armed forces staff, during his famous lectures. The excess of offensive spirit was going to lead to the all-out offensive. Therefore doctrine had well appropriated this technical progress and seemed to be ready to take advantage of it.

But, as written by Colonel Petain, this should not to be done "*against the experience of war*". But the 1884 field manual about maneuver was teaching the contrary. By condemning the use of terrain and of covers, by advising all-out offensive, by too much relying on the value of the French soldier without providing him with an organization and operating modes consistent with the fielded weapons, and which were progressively acquired by the conventional enemy of that time, the French command had demonstrated that, in fact, it was not able to take the best advantage from the armament progress, notably in artillery. When to these factors, you add the refusal to acquire heavy artillery (five regiments pending equipment with old 120, 155 and 220 mm guns hastily modernized in July 1894), the quasi ignorance of progress in cars and aircraft, you can guess that the French army was from the start placed in a difficult position against a more sound and pragmatic Germany which rapidly knew how to transform its 77 mm gun into a rapid firing gun, how to field the 105 howitzer and the 150 heavy howitzer and how to reverse the situation to its advantage.

By wrongly applying a right principle and despite the wisdom and the balance of the supreme commander, General Joffre, convinced "to set up the reasonable bases for an offensive doctrine", the French army was to dearly pay on the battlefield during August 1914 for the perverse misuse of the offensive doctrine and for its subsequent shortage in equipment. It is once again the bravery of the French soldiers that saved France by facilitating the restoration of the disposition of our forces on the Marne river and the following successful counter-attack...