Regiments and Battalions, Brigades and Divisions: organization and denomination of Western military units throughout history[1]

Regimientos y Batallones, Brigadas y Divisiones: organización y denominación de las unidades militares occidentales a lo largo del tiempo

Abstract: The purpose of this paper is to examine the origins of the denominations and organization of military units in the western world, as well as their composing subunits and the larger units that comprise them. The article initially examines the origins of the organization and denomination of Western military units from the creation of professional armies in the early Modern Age. Then, it discusses the consolidation of regiments and battalions, based on the Spanish model of infantry Tercios and Escuadrones, and its evolution into the Dutch model, by Maurice of Nassau, and the Swedish one, by Gustavus Adolphus. It goes on to discuss the application of these models to cavalry and artillery units, and the formation of large units at the brigade and division levels. Finally, it presents the western military model that was consolidated in the 20th century.

Keywords: Military Language. Military Terms. Military Units. Military Concepts.

Resumen: El propósito de este trabajo es examinar los orígenes de las denominaciones y la organización de las unidades militares en el mundo occidental, así como de sus subunidades y de las grandes unidades que las encuadran. Antes de todo, el artículo examina los orígenes de la organización y denominación de las unidades militares occidentales desde la creación de los ejércitos profesionales a principios de la Edad Moderna. A continuación, se discute la consolidación de los regimientos y batallones, con base en el modelo español de los tercios y escuadrones de infantería, y su evolución hacia el modelo neerlandés, de Mauricio de Nassau, y el modelo sueco, por Gustavo Adolfo. Continúa discutiendo la aplicación de estos modelos a las unidades de caballería y artillería, y la formación de grandes unidades a nivel de brigada y división. Finalmente, presenta el modelo militar occidental que se consolidó en el siglo XX.

Palabras clave: Lenguaje Militar. Términos Militares. Unidades Militares. Conceptos Militares.

Fernando Velôzo Gomes Pedrosa (ORCID)
Exército Brasileiro, Escola de Comando e Estado-Maior do Exército.
Rio de Janeiro, RJ, Brasil.
velozopedrosa@yahoo.com.br

1 Introduction

The term "military unit" can be understood as a group of forces with a specific combat or support mission, framed by a more comprehensive military organization. The military units existing in modern Western armies are called companies, squadrons, batteries, regiments, battalions, brigades, and divisions. However, it is understood that there are ranks in military formations, according to their dimensions, combat power, and ability to operate with autonomy. According to this understanding, a "unit" is a military formation of a single branch (infantry, cavalry, artillery, etc.) or activity (logistics, command actions, psychological operations, etc.), composed of several hundred soldiers – in general, from 500 to 1,000 officers and enlisted personnel – and commanded by a colonel or lieutenant colonel. The "unit" is, in turn, composed of several "subunits," called companies, squadrons or batteries (depending on the branch, or specialty to which they belong), composed of about 100 to 200 men (depending on their nature) and commanded by a captain.

In spite of a military "unit" having a certain level of administrative autonomy, its own colors, history and traditions, it does not have the capacity to operate autonomously, as it lacks the multiplicity of capacities that can only be obtained in larger and equipped structures combining branches, combat support, and logistical support. This level of combination occurs at the level of "large units," which bring together "units" of different branches[1] and specialties, in combinations suitable for use in autonomous operations. The "large units" are commanded by general officers and can be "brigades" or "divisions."

The purpose of this article is to understand how the models of organization and the denominations of military units in the Western world emerged and were consolidated from the beginning of the Modern Age until the twentieth century. The first section examines the origins of the organization of Western military units, from its first type of formation, the medieval company. The second section discusses the emergence and consolidation of military units at the regiment and battalion levels, based on the Spanish model of *tercios* and infantry squadrons, and their evolution to the Dutch model, by Maurice of Nassau, and the Swedish one, by Gustavus Adolphus. The third section discusses the application of these models to cavalry and artillery units. The fourth section traces the origins of the formation of large units of the brigade and division levels. The fifth and last section presents the Western military model that was consolidated in the twentieth century, due to the experiences of the two World Wars and the Cold War. The conclusion proves the consolidation of a Western military model, characterized by a shared typology of branches, units and large military units, and by a common terminology to designate military units, despite the existence of some specific divergences. It also notes the increasing complexity and sophistication of the organizational structures of Western military forces, from their creation in the sixteenth century, until the end of the twentieth century.

---

1   Military specialty of an army's combatant troops. They can be close combat branches – infantry and cavalry and/or armor – and combat support branches – artillery, engineering, and communications. Armies also have logistical support units – quartermaster, ordnance, maintenance, transportation, medical services.

2 The medieval company

The first permanent European armies arose at the beginning of the Modern Age, from military formations of medieval origin, the "companies." In the Middle Ages, the term "company" was used to designate a group of comrades-in-arms led by a "captain" (the head of the group). The captain was a man of some local importance or military experience, who was commissioned by some superior authority to recruit a company of soldiers in relatively defined region (MCNEILL, 1984, p. 107). He was responsible for gathering and leading the company, and also had the privilege of appointing his main assistants and designing the flag that identified him (PARKER, 2004, p. 29-30). The flag was carried by a flag bearer or "ensign," who was the company's second officer and interim substitute for the captain. The Company was the basic unit of European armies since the fourteenth century (PARKER, 2004, p. 10), but until the beginning of the Modern Age, the term "company" was very vague. It had no precise meaning in terms of manpower or composition. It could refer to infantry or cavalry troops without distinction, and to gather many hundreds or just a few soldiers; it could randomly include knights, squires, men-at-arms, archers, and crossbowmen.[2]

3 Regiments and Battalions

Until the first decades of the sixteenth century, there was no military unit level above the "companies," and these were directly subordinated to the head of the army (MCNEILL, 1984, p. 107-108). The cavalry companies had much smaller troops than the infantry, in view of the cost of acquisition and care of the mounts, as well as the loss of importance of the mounted forces in the late Middle Ages. Throughout the sixteenth century, a European infantry company ranged from 150 to 300 men, while cavalry companies had about 60 to 80 horsemen, or less.

Throughout the sixteenth and seventeen centuries, expressions such as "regiment," "*tercio*," "battalion" and "squadron" emerged, to refer to military units that gathered several companies. The use of the word "regiment" in the sense of an army's unit would have been registered for the first time in France in the 1550s, and indicated a unit under the command of a colonel (RÉGIMENT, c2012). Permanent modern European armies emerged during the process of State consolidation throughout the fifteenth and sixteen centuries, as a way of asserting royal authority in the face of the threats and challenges posed by feudal lords, protected by the walls of their castles and relying on small private armies. In 1444, Charles VII of France created the first regular forces of a Western European state, the *compagnies d'ordonnance*, in order to suppress the attacks and looting of the armed gangs of unemployed mercenaries. But contrary to the medieval practice of hiring mercenary captains who would be in charge of recruiting and paying soldiers, the Crown had the right to appoint all captains and define the number of soldiers and the place of their quarters. All officers and soldiers would be paid by the Crown, characterizing a permanent and professional force (HOWARD, 1997, p. 30-31). The success of this model

---

2   See Ayton (2017) on the variety of personnel in a "company" of soldiers in the Middle Ages.

allowed, in the early seventeenth century, ordinance companies to be brought together under the command – or "regiment" – of a colonel. This model of French origin has spread to most European countries, as well as the name "regiment" to designate units commanded by a colonel and composed of several companies.

But Spain had preceded France in organizing large infantry units. Until the beginning of the sixteen century, companies were only gathered in an improvised way, to carry out expeditions or military campaigns. But in 1536, Emperor Charles V issued an ordinance that gave regular organization to the Spanish army in Italy. On the occasion, three *Tercios* of Spanish troops were organized, each one with a number of companies and commanded by a field master – hierarchical rank corresponding to an infantry colonel (ESPAÑA, 2017).

Throughout European history, the manpower of infantry regiments has ranged from a few hundred to more than three thousand men. Cavalry regiments have always had smaller manpower than infantry ones, given the costs of acquiring and maintaining large numbers of animals. The smaller manpower of cavalry regiments was also due to the fact that speed, strength and size of an animal weighing around 500 kilos were added to the strength of the mounted man. Generally speaking, from the Modern Age to the introduction of motor vehicles, cavalry regiments were composed of a few hundred horsemen, rarely reaching a thousand men. This difference in manpower between infantry and cavalry units was prevalent in all Western armies and was reproduced when the cavalry branch adopted armored vehicles and tanks[3] in the early twentieth century. In this case, vehicles of great firepower could be operated by small crews, but with enormous lethal power.

Between the sixteenth and seventeen centuries, the manpower of Spanish *tercios* and European infantry regiments was quite flexible. Ideally, each of their companies should have between 200 and 300 men, including musketeers/harquebusiers and pikemen.[4] Thus, the manpower of a *tercio* or infantry regiment organized with 10 companies should be around 2,000 to 3,000 men. In practice, the numbers were smaller. The three Spanish *tercios* employed in the Netherlands in May 1571, organized with 10 and 11 companies, had an average manpower of 1,611 men (PARKER, 2004, p. 233-235).

The Spanish *tercio*, like the regiment, was a more administrative than tactical unit (PARKER, 2004, p. 10). It took care of recruitment, instruction, payment, discipline, etc. For combat, the *tercio* (or regiment) formed a compact tactical unit, combining thrust weapons (pikes)[5] and firearms (harquebuses and muskets),[6] under the command of the

---

3   Heavily armored vehicle equipped with caterpillar tracks and armed with a large caliber cannon and machine guns.

4   Soldiers armed with pikes.

5   The pike was a long spear used by infantry from the late Middle Ages to the early eighteenth century. Its length varied a lot, depending on the place and time. In 1536, Spanish captain Diego de Salazar noted that the peak measured nine "codos" – about 4.5 meters (SALAZAR, 1590, p. 21v).

6   Harquebuses were the first portable firearms, created in the second half of the fifteenth century. They were shoulder weapons, fired by a matchlock firing mechanism. Muskets were an evolution of harquebuses, which emerged in the early sixteenth century. Muskets were longer and heavier than harquebuses, and had greater armor-piercing power (CHASE, 2008, p. 61).

sergeant-major,[7] who should be a very experienced officer. This unit was called a squadron, but in some countries, such as France, it was called a battalion (see ALCAZAR Y ZUÑIGA, 1703; PAVE, 1548). The sergeant-major was responsible for calculating the ranks and columns, the formation of the squadron or battalion and their conduct in combat.

Figures 1 and 2, taken from the book *Arte militar*, published in 1612 by the Portuguese Luis Mendes de Vasconcelos, show, schematically, an infantry force in "battle" configuration. In Figure 1, you can see a squadron (A) formed in a quadrangular configuration at the center of the "battle." The squadron, composed exclusively of pikemen, is flanked by "garrisons" (B), "sleeves" (C) of musketeers, and "wings" of cavalry (E). Four "horns" are placed at the configuration angles, also composed of musketeers (D). Figure 2 shows a *tercio* of 3,000 men in battle configuration. At the center of the configuration, the squadron of pikemen (p) can be seen, with horns of musketeers at the four angles (o). The flags (b) are at the center of the squadron, corresponding to the 10 companies of the *tercio*. Ideally, a squadron or infantry battalion should have 800 to 1,000 men (ALCAZAR Y ZUÑIGA, 1703, p. 4), but the military manuals of the time provided guidelines for the formation of squadrons that could range from 100 to 10,000 men (see CARRION PARDO, 1595; VASCONCELOS, 1612).

Figure 1 – Seventeenth century infantry force placed for combat.

A. Esquadraõ.
B. Guarniçaõ.
C. Mangas.
D. Cornos.
E. Alas.
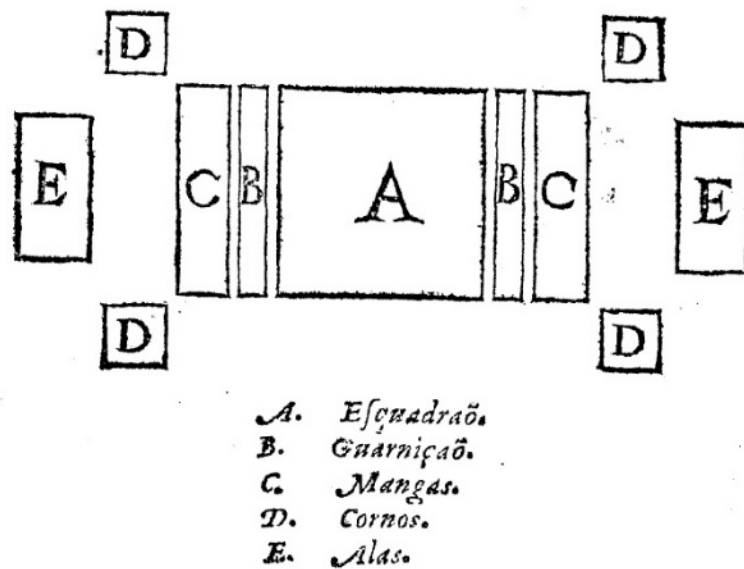
Source: Vasconcelos (1612, p. 109).

---

7   The title or hierarchical grade of "sergeant-major" was later consolidated in its abbreviated form as "major," and has no correspondence with the current figure of the sergeant-major of armies of Anglo-American tradition. The old sergeant-major was a senior officer reporting directly to the commanding colonel of the regiment, while the current sergeant-major is a sergeant-grade noncommissioned officer.

**Figure 2 – *Tercio* of 3,000 men in battle configuration.**
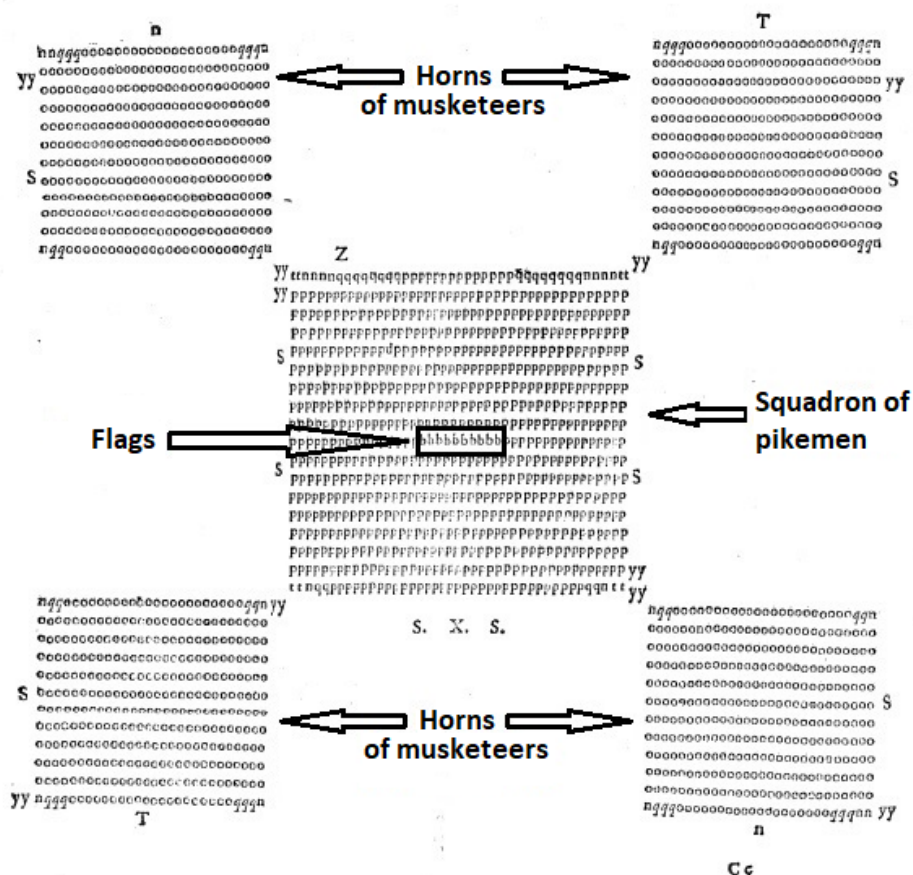
Source: Vasconcelos (1612, p. 150-151), with author's explanatory legends.

The word "squadron" has an Italian origin – *squadrone* –, with the meaning of a large *squadra* – group of soldiers in quadrilateral formation. Its most well-known meaning, which has consolidated over time in Western military terminology, is that of a cavalry regiment's subunit. But in the sixteen and seventeen centuries, it meant an infantry troop in a square configuration and armed with pikes, designed to resist the attack of the enemy, like the ancient Greek phalanges (SQUADRA, c2004-2008; SQUADRONE, c2004-2008). The term "battalion" also comes from the Italian language – *battaglione* – and originally indicated a unit composed of several *battaglia*, which was one of the names given to companies in Italy at the beginning of the Modern Age (BATTAGLIONE, c2004-2008). Conceptual imprecision and vocabulary multiplicity is a characteristic of the period of emergence and consolidation of modern military institutions. In the military literature of the time, there is a tendency to indistinctly use the terms "regiment," "battalion" and "squadron" to refer to an infantry unit commanded by a colonel and composed of several companies. And, depending on the European country or region, the "company" could be called "flag" or "battle."[8]

---

8   See Feio (2018) for an example of this inaccuracy.

Throughout the sixteen and seventeen centuries, as the *tercio* or regiment, the company had predominantly administrative functions. The infantry squadron and its accessory structures – sleeves, horns, etc. – were the tactical units and main actors in the combat actions. When a *tercio* or regiment took the combat configuration, the pikemen of all companies were gathered to form the squadron, while the harquebusiers and musketeers were employed to form the horns and sleeves, regardless of their companies. The main role was played by the sergeant-major. He was responsible for analyzing the terrain, the enemy and the number of men available in his unit, in order to choose the most appropriate formation and calculate the number of ranks and columns of each of the elements of his "battle," as well as putting the troops into formation and directing their conduct during combat. In this task, he was assisted by the captains of the companies and their sergeants. Military experience and the ability to quickly calculate the number of ranks and columns was the sergeant-major's main attribute. In order to calculate the configuration, the sergeant-major could use a series of mathematical formulas, but also tables available in the main military treaties of the time (see FEIO, 2018; VALLE, [1521]).[9] The mixture of companies in the organization of an infantry battle can be seen in Figure 3. In it, you can see an Italian regiment made up of eight companies, identified by the eight flags unfurled at the center of the compact battalion of pikemen, which advances flanked by two sleeves of harquebusiers.

Figure 3 – Sixteenth century regiment in combat formation with a battalion of pikemen and two sleeves of harquebusiers.
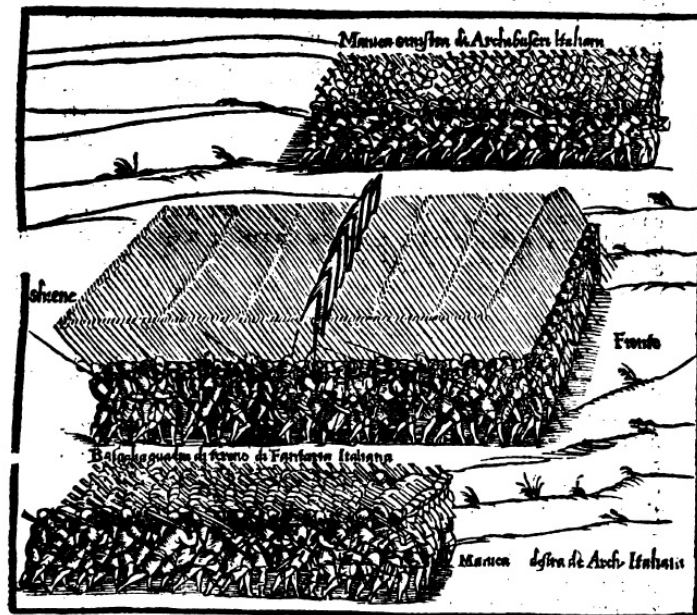
Source: Ferretti (1568, p. 73).

---

9   On the central role of the sergeant-major as the soul that moves the squadron, see Alcazar y Zuñiga (1703, p. 6); on the role of captains of companies as mere auxiliaries to the sergeant-major in the constitution of the squadron, see Melo (1744, p. 275-277). The formulas and tables for calculating the ranks and columns of squadrons can be found, among other titles, in Melo (1744), Carrion Pardo (1595) and Vasconcelos (1612).

Throughout the seventeenth century, the improvement of firearms allowed European infantry units to increase the proportion of firearms in relation to pikes, favoring the reduction of the manpower of infantry tercios and regiments. During the 80 Years' War against Spain (1568-1648), Maurice of Nassau, Prince of Orange,[10] reformed the Dutch infantry between 1585 and 1620, in order to adopt combat units of about 500 men, called "divisions" or "half-regiments." Each Dutch regiment should be subdivided into two "half-regiments" (PUYPE, 1997, p. 69-112). The half-regiment was composed of 240 pikemen and 240 harquebusiers/musketeers. For the purpose of obtaining the maximum advantage of the firepower of the harquebuses and muskets, the combat configuration of the Dutch half-regiments became wider and thinner, with only 10 ranks, instead of the dozens of ranks that were necessary to compose a Spanish squadron. Three to four of these half-regiments were brought together to form a "brigade" of 1,500 to 2,000 men, which fought in an articulate and more flexible way than the huge solid "squadrons" of 1,000 to 3,000 men of the Spanish infantry (GROOT, 2017). Figure 4 shows the combat configuration of a 500-man Dutch infantry half-regiment formed in 10 ranks. The darker block indicates 240 pikemen; the lighter ones indicate the 240 musketeers and harquebusiers. At the center of the block of pikemen, you can see the flags (V) of the four companies that compose the half-regiment. Colonel (C) and company captains (H) are at the head of the troop. The company lieutenants (L) and the second in command (lieutenant colonel or sergeant- major) (M) form the rear.

Figure 4 – Combat configuration of a Dutch infantry half-regiment.
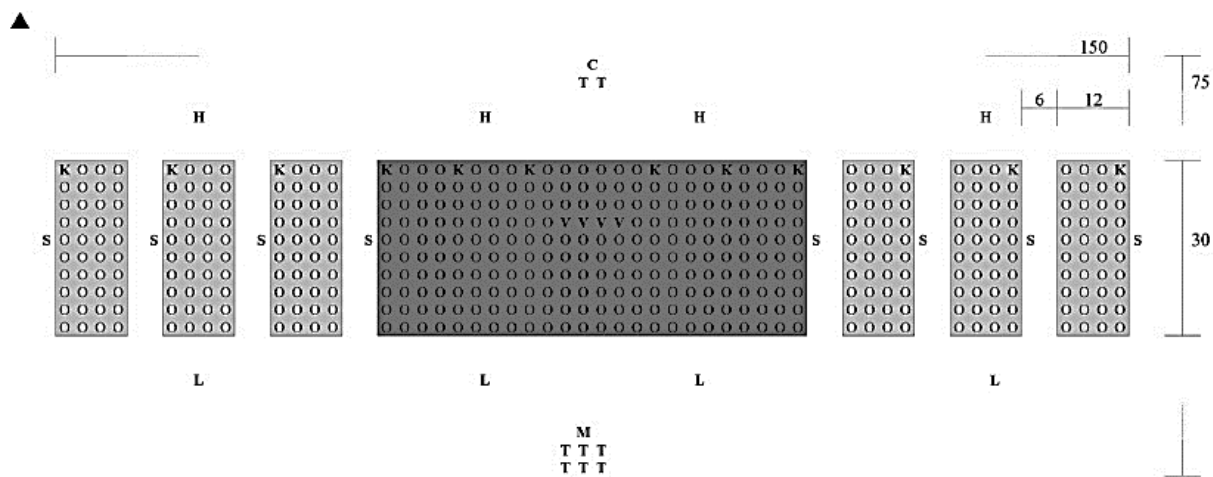
Source: Groot (2017, p. 17).

---

10   He should not be mistaken for his younger cousin, John Maurice of Nassau, Count of Nassau-Siegen, who ruled Dutch Brazil between 1637 and 1644.

The military challenges represented by the Thirty Years' War (1618-1648) led other European powers to follow and refine the Dutch model. In Sweden, King Gustavus Adolphus (reign from 1611 to 1632) introduced a series of improvements that gave the Swedish Army features completely different from the Spanish model, which was still hegemonic in Europe. The first was the establishment of a strictly executed conscription system, which allowed a permanent flow of soldiers into the ranks of their regiments (BRZEZINSKI, 1991).

The basic unit of Gustavus Adolphus' Army was the Infantry Regiment. According to the organization he established in 1621, an infantry regiment should have 1,156 men, organized into eight companies of 142 soldiers. The increase in the volume of fire of shoulder weapons allowed him to decrease the number of pikemen compared to musketeers. Until 1620, the Spanish infantry had a ratio of 3:2 between pikemen and harquebusiers. In the 1620 Spanish and Dutch armies, the ratio between pikemen and musketeers had decreased to 1:1. Gustavus Adolphus reduced it to 3:4 (GROOT, 2017, p. 36). The regiment would have a total of 432 pikemen and 576 musketeers in its ranks (BRZEZINSKI, 1991, p. 8). But, as regiments and companies were predominantly administrative organizations, the Swedes organized groups of temporary forces for the combat – squadrons and brigades of three to four squadrons. The Swedish squadrons, organized with 504 soldiers, were similar to the Dutch half-regiments designed by Maurice of Nassau (THE SWEDISH..., 1632). In theory, each regiment could form two squadrons, if they were in full strength For this reason, the formation of a brigade of three squadrons required that at least two regiments should be gathered.

The increased lethality of the new muskets also allowed infantry formations to be even smaller. Gustavus Adolphus' army started to adopt a six-rank deep formation instead of the 10 ranks of the Dutch army. For combat, each infantry squadron was deployed into a block of pikemen and four "platoons" of musketeers, all six-rank deep. The block of pikemen consisted of 216 men divided into 36 files (*rotts*). Each of the four "platoons" of 48 musketeers was aligned in eight files. The remaining musketeers of the squadron were placed at its rear or at the rear of the brigade, also divided into two platoons, as a fire reserve, to be employed at the discretion of the squadron or brigade commander (BARRIFFE, 1661 apud BLACKMORE, 2012, p 70-71). Figure 5 shows the formation of a Swedish brigade, organized with three infantry squadrons, all composed of four companies, which can be identified by the four flags gathered in each block of pikemen. The central squadron is formed with platoons of musketeers at the rear of the block of pikemen. The squadrons of the right and left wings are formed with the blocks of pikemen in a more central position, protected by the musketeer platoons, which are in external positions. At the rear of the brigade configuration, there are six platoons of musketeers, two from each squadron.

Regarding infantry fire weapons, Gustavus Adolphus reduced the caliber of muskets, in order to make them lighter and eliminate the support forks. Lightening muskets allowed the Swedes to abandon the harquebuses, standardizing infantry firearms. To facilitate and speed up the loading of weapons and increase the musketeers' rate of fire, the Swedish King introduced the paper cartridge, which contained the bullet and the powder charge in the same wrapper (FULLER, 1998, p. 98).

Figure 5 – Formation of a Swedish brigade, organized with three infantry squadrons.
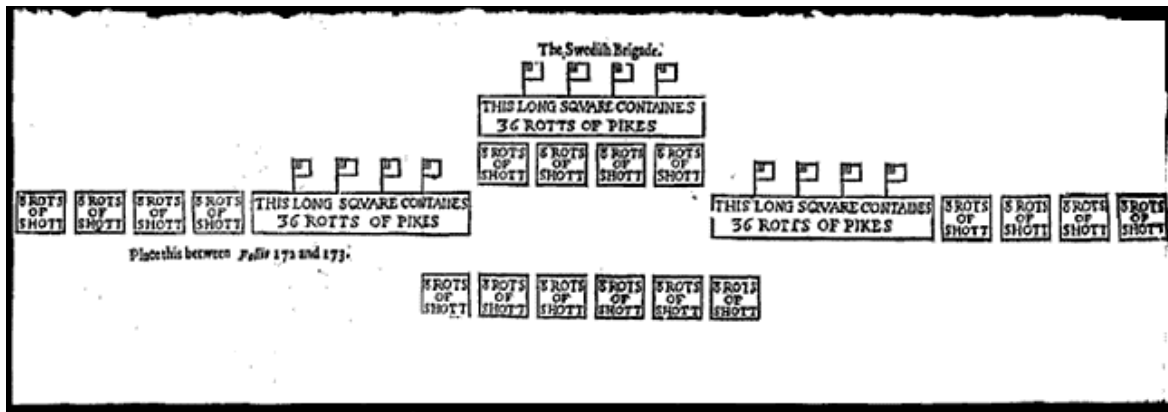
Source: Blackmore (2012, p. 71).

In spite of the evident military developments that took place in the seventeenth century in the Netherlands and Sweden, it can be seen that the basic military organizations of European armies continued to be the regiment and the company, consolidated in the sixteenth century. Likewise, its functions remained largely administrative. Regiments and their companies provided the men and command structure for the constitution of the tactical units that were formed for combat. There was not even a common name for this tactical unit – it could be called a squadron, battalion, half-regiment, or division. There is also the appearance of the "platoon" as the tactical subunit of a squadron or battalion. When it appeared, the platoon did not necessarily correspond to a company, nor was it one of its subdivisions. It was a group of a few dozen men, trained to make musket volley fire (BLACKMORE, 2012, p. 70).

The late seventeenth century saw the widespread adoption of flintlock muskets and bayonets by European armies. This resulted in the pike abandonment and the standardization of the infantry units' armament (MCNEILL, 1984, p. 141-142). At the beginning of the eighteenth century, European armies' infantry units were armed with flintlock muskets with bayonets, which simplified their tactical use and allowed them to defend themselves against the action of the cavalry, employing square formations, in which all soldiers were capable of firing muskets and using their bayonets as thrust weapons.

The eighteenth century also saw the standardization of armies' units and subunits. As a contemporary military writer noted, the general organization of European armies was "almost universally the same – into companies, battalions, regiments, brigades, divisions, wings, lines" (DUNDAS, 1788, p. 55). In infantry, the regiment was consolidated as the armies' basic unit. Even the Spanish army had followed the general European trend after the ruinous end of the 80 Years' War in 1648 and the decline of the model of its *tercios* and squadrons. In 1714, the Spanish

Crown transformed its infantry *tercios* into regiments, subdivided into battalions and these into companies (MARTÍNEZ DE MERLO, 2017, p. 185).

According to the European military model of the eighteenth century, the infantry regiment employed the battalion as its tactical combat unit. There was, however, a certain overlapping between the terms "regiment" and "battalion." Regiments with small number of soldiers formed one single battalion. Regiments with larger troops were organized into multiple battalions. The regiments were composed of a variable number of companies, which were not their tactical subunits. In combat, the companies formed one or more tactical subunits called platoons, composed of a few dozen men. This is the model found in the military regulations of the main Western countries of the period (see ESPAÑA, 1768, p. 2; UNITED STATES, 1779, p. 8; FRANCE, 1776, p. 85-87; UNITED KINGDOM, 1795, p. 82; SCHAUMBOURG LIPPE, 1794, p. 2-3).

4 Cavalry and Artillery

Cavalry units had gone through a similar process of organization and standardization. At the beginning of the Modern Age, European cavalry was an aristocracy's reserve, and was organized into units much smaller than those of infantry. Until the beginning of the seventeenth century, the company was the European cavalry's basic unit. For combat use, the cavalry formed a tactical unit called a squadron by the French and a battalion by the Spanish and their followers. This squadron or battalion did not have a fixed constitution and could be organized with troops of one or more cavalry companies – between 75 and 200 knights (PRIORATO, [166-]). In the middle of the seventeenth century, cavalry companies began to be brought together into regiments, first by the French and then by the Spanish (PARKER, 2004, p. 16-17, p. 235). The decline of the Spanish military model led to the consolidation of the term "squadron" for the cavalry regiments' tactical subunits. According to this model, each squadron would be formed by the union of two companies, so that a cavalry regiment composed of eight companies could employ four squadrons in combat. Thus, as in the infantry, the cavalry regiment was organized for combat, composing its tactical subunits with the troops provided by its companies, whose functions were basically administrative. But unlike infantry, in which companies were transformed into combat platoons, each one commanded by its captain, the cavalry companies were mixed in a larger subunit – the squadron – which was commanded by the senior captain.

The organization of artillery into units went through a slower process. In the early Modern Age, artillery was considered more of a mechanical profession than a military activity. Usually, the artillery commander was a nobleman or an experienced soldier, but, until the seventeenth century, artillerymen and bombers were civilian artisans hired by campaigning armies. The transportation of guns and their accessorieswas also in charge of

civilians hired as carters and beast drivers. Until the beginning of the seventeenth century, artillery was mostly aimed at attacking and defending fortified positions. The guns and their carriages were very heavy, and their movement on the battlefield was almost impossible (MANUCY, 1949, p. 7-8).

During the Thirty Years War, Gustavus Adolphus created a lighter and mobile field artillery,[11] equipped with shorter guns and lighter carriages, capable of being maneuvered on the battlefield. He also organized artillery into three types: siege-artillery, equipped with heavy guns; field artillery, more mobile, equipped with lighter guns; and regimental artillery, equipped with small guns, attached to infantry regiments (FULLER, 1998, p. 98-99). During the reign of Louis XIV (from 1643 to1715), War Minister Marquis de Louvois promoted a broad reform of the French Army, which included the organization of an Artillery Regiment in 1671 (MANUCY, 1949, p. 8). This would have been the first artillery unit with a military character. Other countries followed the French model, organizing artillery companies and regiments (DUNCAN, 1879; ESPAÑA, 1710).

Since the Middle Ages, the master gunners gathered cannon "batteries," that is, sets of artillery pieces used to "batter" fortification walls or other types of targets. Initially, the number of cannons in a battery was quite variable, and depended on the availability of guns and the target to be battered Over time, the batteries started to consist of six to twelve guns. After the creation of artillery units, the batteries started to be manned and operated by gunner and bomber companies. But there was no direct correspondence between a battery and an artillery company. A battery of many guns could require more than one company to be operated. Conversely, the same company could man more than a battery of few guns. Mixed batteries of guns, mortars and howitzers could require personnel from different specialized companies – gunner company, which operated guns, and bomber company, which operated howitzers and mortars.[12] Only during the nineteenth century the term "battery" replaced the term "company" to designate the subunits of artillery regiments.

Artillery regiments were also subdivided into tactical employment units of the same level as infantry battalions. The French Army used the term "group" to designate tactical units in artillery regiments. A group of artillery gathered a number of batteries under the command of a senior officer. In the British Army, the Royal Regiment of Artillery was subdivided into two battalions in 1757. In 1859, these tactical units came to be called "brigades" (DUNCAN, 1879, p. 169-171). But designating a battalion-level unit as a "brigade" caused some confusion. For this reason, in 1938, British battalion-level artillery tactical units came to be called "regiments." In other words, the British artillery administrative regiment is subdivided into several tactical units also called regiments.

---

11 Field artillery is intended to support units of close combat (infantry and cavalry) using heavy fire. It differs from garrison artillery, which provides defensive firepower to forts and fortresses, and from siege artillery, intended for the siege and demolition of fortifications.

12 Cannons are pieces of artillery whose tubes are long and fire high-speed projectiles in a tense trajectory. The howitzers have a shorter tube and fire low-speed projectiles on a parabolic trajectory to hit the target in an abrupt downward curve. The mortars are pieces of artillery with a very short tube, intended to launch bombs and grenades on much curved trajectories, larger than 45°.

The Napoleonic Wars provided the right environment for the consolidation of a Western military model. In this model, infantry was organized into line (or heavy) units, intended for combat in close order, and light infantry units, which were employed in open order for skirmishing and screening missions. Line infantry was usually organized into regiments of multiple battalions, while light units – *chasseurs*, sharpshooters and riflemen[13] – were organized into independent battalions. The infantry regiments had a table strength that ranged from 1,500 to 4,000 men, while battalion troops ranged from 500 to 1,000 men. It should be noted, however, that these numbers were rarely reached. In the cavalry branch, there were regiments of heavy and light cavalry, with picturesque but little precise names in terms of their functions – hussars, uhlans, cuirassiers, dragons, *chasseurs à cheval*, etc. Regardless of their specialty or denomination, the cavalry regiments were subdivided into squadrons, each consisting of two companies brought together. Theoretically, larger regiments could have more than a thousand men, but the actual strength, in general, was around 500 horsemen, organized into two to four squadrons. In most European armies, artillery was organized into regiments, but it was employed in batteries, made up of about 60 to 120 men, organized into one or two companies, which manned and operated about six to 12 guns (MCNAB, 2009).

5 Brigades and Divisions

The word "brigade" became part of the military vocabulary permanently after its adoption by Maurice of Nassau to designate an infantry formation composed of three or four infantry half-regiments. Since its creation, the brigade has been characterized by a certain overlap with the regiment level. According to the organization conceived by Nassau, the brigade was a temporary tactical unit that competed with the regiment. As each Dutch regiment was composed of two half-regiments, it was necessary to gather two regiments to form a brigade. If the regiments were too smaller, it would be necessary to use troops from more regiments. On the other hand, the brigade was not composed of regiments, but of its tactical units – the half-regiments. In general, the brigade was commanded by the colonel with greater military seniority among the commanders of the regiments reunited to compose it (BRZEZINSKI, 1991). This overlap is still reflected today in the hierarchical level of the officers who command the brigades in the Western world. Depending on the country, the command of the brigades can be exercised by a brigadier general[14] or a colonel.

Until the Seven Years' War, European armies had no military structure higher than brigade. Armies marched in one or two dense columns, and regiments and brigades were arranged for battle into one or two lines. The formation of the battle lines implied the lateral movement of the forces, as the column reached the battlefield, which was a lengthy operation,

---

13 Sharpshooters and riflemen were infantry troops used as snipers in scattered combat. Riflemen were equipped with rifles, that is, shoulder arms with rifled barrels, more accurate than smooth barreled muskets.

14 In some countries the rank of "brigadier general" can be replaced by that of "brigadier."

---

and difficult to be controlled. In 1760, French Marshal Victor-François de Broglie published his *Instruction pour l'Armée du Roi*, in which he established the organization of the army in several "divisions," which would march independently along parallel routs, shortening the time of arrival on the battlefield and for taking the battle formation. Each division should be composed of four brigades, and each cavalry wing would also form a division (DE BROGLIE, 1760). This measure was designed to make the combat configuration faster, but, once on the battlefield, divisions were dissolved and combat was conducted in a traditional manner, in lines (TELP, 2005, p. 19). Finally, during the French Revolution Wars (1792-1801), War Minister Lazare Carnot formalized the creation of divisions as major combat units (SCHNEID, 2015). Infantry and cavalry divisions were organized consisting of brigades or regiments of the corresponding branches. Each division had some artillery batteries to provide them with its own fire support, and was commanded by a division general.[15] The divisional system gave the army commander great employment flexibility, allowing him to march in multiple columns, each one with its own means of fire support and transportation. The use of divisions also allowed for greater decentralization of combat actions, especially in large armies.

6   The Western Military Organization in the twentieth century

The divisional and regimental organization was a model adopted by most Western armies in the first half of the twentieth century. Generally speaking, armies were composed of infantry divisions and cavalry divisions, which were gathered into "army corps" for use in major operations. Infantry troops were organized into units of two levels: the regiment and the battalion. The infantry regiments were commanded by a colonel, and consisted of three to four battalions, each commanded by a major. The manpower of infantry regiments was between 3,000 and 4,000 men. Throughout the nineteenth century, the regiment had become a tactical unit with administrative autonomy, with battalions as its combat tactical units. At the beginning of the twentieth century, battalions were organized with three to four companies led by captains. Armies also had autonomous infantry battalions – not subordinate to regiments. These independent battalions were usually light infantry units (*chasseurs or jaggers*), commanded by lieutenant colonels. The cavalry was organized into regiments, whose subunits were their squadrons, commanded by captains. Similar to infantry, artillery regiments were composed of two to three tactical units called "groups," "battalions" or "brigades," depending on each army. These units, in turn, were consisted of two to four batteries of four to six guns.

This was the "continental" organization, as it differed from the "British regimental system" consolidated with the Caldwell-Childers reforms in the 1870s and 1880s. In the British system, the regiment was a purely administrative and territorial unit, responsible for recruiting and training its personnel. It was also a symbolic institution, which should

---

15   In countries with an Anglo-German military tradition, command of the divisions was assigned to a "major-general".

promote the *spirit de corps* that guaranteed the troops' morale and sustained men in combat. In general, each British infantry regiment consisted of two battalions, one of which was assigned to service in the colonies or in war operations, and the other remained at its headquarters to provide defense for the metropolitan territory and to serve as a personnel reserve for the completion of the battalion deployed abroad. For employment in operations, battalions were subordinate to brigades and divisions, but it was very rare for two battalions from the same regiment to join the same brigade. In other words, in the British regimental system – still in force –, the infantry regiment is not deployed in the theater of war and is not part of the chain of command of the forces in operations. The British regimental system becomes more confused with regard to cavalry, artillery and engineering units. In cavalry, the regiment is the administrative unit, but it is also the tactical unit equivalent to the battalion. Thus, each cavalry administrative regiment has a single tactical regiment, usually with the same name. With regard to artillery and engineering branches, the British Army has only one administrative regiment for each branch – the Royal Regiment of Artillery and the Corps of Royal Engineers –, to which all tactical artillery and engineering regiments are subordinate (FRENCH , 2008).

During World War I, in the main armies involved in the conflict, the infantry divisions were organized with two or three infantry brigades, each composed of about 4,000 to 6,000 men. In continental European and North American armies, each brigade was composed of two regiments; each of these regiments was composed of three or four battalions of 800 to 1,000 men. In the British Army, battalions were directly subordinate to brigades, without an intermediate regimental level. In addition to the infantry units – regiments and battalions –, the infantry divisions had combat support units – artillery, engineering, and communications elements – and logistical support, such as supply columns and medical support elements (BANKS, 2013, p. 34-37, p. 190). This support structure allowed the division to operate autonomously, and made it the basic "large unit" of armies. It should be noted that the brigades were also "large units," as they brought together a number of units – regiments or battalions –, but all of the same branch, and they did not have combat support units. Therefore, the brigade was not a large autonomous unit, capable of being employed independently. It depended on the division to receive fire, engineering, and logistical support.

It should be noted that, in the continental organization, the chain of command in the infantry divisions was longer than in the British model. In the main continental armies, there were two levels of command between the division and the battalion – the brigade and the regiment. In the British organization, there was only the brigade. The continental organization was square (or quadrangular), that is, each division had four regiments. In the British organization, the division was triangular, as it was organized with three brigades, but these were square, that is, each one had four battalions, which resulted in the same 12 battalions of the continental divisions.

In the interwar world period, the main Western armies shortened the length of the chain of command, suppressing the brigade in their infantry divisions. The exception was the British Army, whose brigades acted as regiments. At the same time, the triangular organization was introduced, in which each infantry division started having three regiments

Coleç. Meira Mattos, Rio de Janeiro, v. 15, n. 52, p. 39-60, January/April 2021

53

of three battalions. The infantry divisions became lighter, with nine battalions instead of the 12 battalions of the World War I (see FRANCE, 1967; MITCHAM JR., 2007; PALMER, 2014; WILSON, 1998). The loss of the role played by cavalry in the face of machine gun and artillery fire led to the almost complete disappearance of the cavalry divisions in the main Western armies or their replacement by armored and mechanized divisions. During World War II, the United States Army nominally maintained only two cavalry divisions, one of which was equipped like infantry. The other one was extinguished in 1944, and its personnel used to compose service units (WILSON, 1998, p. 191). At the beginning of the war, the German Army had only one cavalry division, which was transformed into an armored division in 1941-1942 Winter (UNITED STATES, 1943). In the same period, the British Army's battle order did not include cavalry divisions either. French correspondent divisions were being mechanized and disappeared after the war. The development of armored vehicles during the Great War, in turn, gave rise to armored and mechanized divisions. The latter were equipped mainly with light armored vehicles, and the former were stronger in tanks. World War II also saw airborne or parachutist divisions appear.

The organization of armored divisions differed widely in each of the armies involved in the conflict. But, in general terms, they were organized with three to six tank battalions, each with about 50 tanks, three to six motorized or mechanized infantry battalions, three to four artillery groups (or battalions), a mechanized reconnaissance regiment or battalion, an engineering battalion, as well as elements of communications, anti-aircraft defense and logistical support. Mechanized infantry battalions transported their troops in armored vehicles, while motorized ones did it in conventional trucks. Artillery in armored divisions should be equipped with self-propelled guns or howitzers, mounted on armored vehicles. Each division could also be equipped with a battalion or company of anti-tank–cannons, but these elements could be integrated within the infantry battalions (see FORCZYK, 2016; GRIFFITH, 2008; WILSON, 1998). The complexity and variety of organization of the armored divisions was due to its still experimental character and the different technical characteristics of the equipment with which its units were equipped: armored protection, speed and firepower of tanks and other armored vehicles; means of mobile communications; type, caliber and mobility of artillery and anti-tank weaponry etc.

The airborne divisions had a general organization similar to those of regular infantry, despite being equipped with lighter equipment. They consisted of three regiments of three battalions and units of combat support and logistics.

The shortened divisional chain of command model was consolidated after World War II. Initially, the United States Army experimented with an even shorter divisional chain of command, eliminating the regiment. This model, called the "pentomic" division, was conceived in the mid-1950s, for the possible scenario of an atomic war in Europe (BACEVICH, 1986). In order to operate in a chaotic battlefield and with serious command and control difficulties, the "pentomic" division would be organized with five "battle groups," a battalion of tanks and a mechanized reconnaissance squadron, supported by five

artillery battalions and batteries of heavy cannons and rockets capable of firing tactical nuclear projectiles, in addition to other elements of combat support and logistics. The "battle group" was a sort of super battalion, made up of five rifle companies, a heavy mortar company and a command and service company. It had about 1,360 men, well above the normal manpower of battalions, but much smaller than that of a World War II regiment. The manpower of the "pentomic" infantry division was 13,748 men, not much smaller than the Korean War infantry division (1950-1953), with 15,973 men (WILSON, 1998). But the "pentomic" division was abandoned in the early 1960s, and American divisions began to be organized with three brigade commands and nine to 10 battalions, in addition to supporting elements. For combat, the division organized its brigades, assigning them a number of battalions and support units (WILSON, 1998, p. 291-316). This model was the one that prevailed until the end of the twentieth century.

In the 1950s, the French Army also introduced important changes in the structure of its divisions. In 1955, it started to set up the *Javelot* division, which suppressed the brigade as an intermediate echelon between the division and the regiment. The *Javelot* model was adopted in armored, airborne and motorized and mechanized infantry divisions. In this new organization, the regiments were reduced to just four to six maneuver companies, plus other support and reconnaissance companies. This model eliminated the battalion between the regiment and the companies. The French regiments started to function as a single super battalion, similar to the "battle group" of the American "pentomic" division. The *Javelot* division was composed of four to five maneuver regiments, an artillery regiment, an armored reconnaissance regiment, and other support units (JACKSON, 2005). As a result of the new structure of the regiments, these divisions had their strength reduced to around 7,000 men, that is, about half of the manpower of a World War II division. The *Javelot* model was designed to be used in the event of an atomic war in Europe, but it worked very well in the Suez Expedition in 1956 and in operations against irregular forces in the Algerian War (1954 to 1962). A similar model was finally adopted by the French army in 1977 (see BEAUGENDRE, 1976; OLIVEIRA, 1979).

7 Conclusion

The period examined traces the path of creation and consolidation of a Western military model, characterized by a shared typology of branches, military units, their subunits and the large units that comprise them and by a common terminology to designate military units, despite some occasional divergences, resulting from the historical experiences of each country. It also shows the growing complexity and sophistication of the Western military forces' organizational structures, from their creation in the sixteenth century until the end of the twentieth century. Starting with massive blocks of soldiers armed with pikes and protected by blocks of musketeers, Western armies arrived at the end of the twentieth century with large units composed of varying types of combat units, combat support and logistical support. This organizational complexity derives not only from the technological development of military armaments and equipment, but also from purely organizational improvements.

References

1. Documental sources

ALCAZAR Y ZUÑIGA, M. **Arte de esquadronar y exercicios de la Infanteria**. Madrid: Juan Garcia Infanzon, 1703.

CARRION PARDO, J. **Tratado como se deven formar los quatro esquadrones, en que milita nuestra nación española**: en que se hallaran cosas muy curiosas tocantes a al origen de las Armas. Lisboa: Antonio Alvarez, 1595.

DE BROGLIE, V.-F. **Instruction pour l'Armée du Roi, commandée par Mr. le Maréchal Duc de Broglie**. Francfort: Freres van Duren, 1760.

DUNDAS, D. **Principles of military movements**: chiefly applied to Infantry. London: T. Caldwell, 1788.

ESPAÑA. **Reglamento, y ordenanzas para la mas acertada, y puntual direccion de mi Artilleria de España, y el mejor servicio de todas sus Provincias, y particularmente del nuevo Regimiento de Artilleria que he mandado formar, y al presente sirve em mis Exercitos, y Plazas de España.** Madrid: Imprenta de Diego Martinez Abad, 1710.

ESPAÑA. **Ordenanzas de S. M. para el regimen, disciplina, subordinacion y servicio de sus Ejercitos**. Madrid: Oficina de Antonio Marín, 1768. t. 1.

ESPAÑA. Anexo XIII: Ordenanza de Génova (15 de noviembre de 1536). **Revista de Historia Militar**, Madrid, ano 61, n. 1, p. 300-311, 2017. Número extraordinário. Anexo 7.

FERRETTI, Francesco. **Della Osservanza Militare** del Capitan Francesco Ferretti d'Ancona, cauallieri di S. Stefano, Libri Due. Venetia: Appresso Camillo, & Rutili Borgominerij Fratelli, 1568.

FRANCE. **Ordonnance du Roy pour regler l'exercice de ses troupes d'Infanterie.** Toulon: Imprimerie de J. L. R. Mallard, 1776.

MELO, M. A. Regimento da Guerra (1570). In: SOUSA, A. C. (comp.). **Provas da historia genealogica da Casa Real Portugueza** [...]. Lisboa: Regia Officina de Sylviana, e da Academia Real, 1744. t. 3, p. 252-304.

PAVE, R. B. **Instructions sur le faict de la Guerre**. Paris: Michel Vascosan & Galiot du Pré, 1548.

PRIORATO, G. G. **Maneio da cavallaria, escrito pello Conde Galeaço Gualdo Priorato, com annotaçoens de Dom João Mascarenhas Conde do Sabugal do Conso de Guerra d'El Rei Dom Affonso 6º**. [S. l.]: [s. n.], [166-]. Manuscrito.

SALAZAR, D. **Tratado de Re Militari**. Brusselas: Casa de Roger Velpius, 1590.

SCHAUMBOURG LIPPE, C. **Regulamento para o exercicio, e disciplina dos regimentos de infantaria dos exercitos de Sua Magestade Fidelissima** [...]. Lisboa: Regia Officina Typografica, 1794.

VALLE, G. B. D. **Il Vallo**. [Napoli]: [s. n.], [1521].

VASCONCELOS, L. M. **Arte militar, dividida em tres partes**. Termo D'Alenquer: Vicente Alvarez, 1612.

THE SWEDISH discipline: religious, civile, and military [...]. London: Iohn Dawson for Nath: Butter and Nich: Bourne, 1632.

UNITED KINGDOM. **Rules and Regulations for the formations, field-exercise, and movements of His Majesty's Forces**. 2. ed. [London]: War-Office, 1795.

UNITED STATES. **Regulations for the order and discipline of the troops of the United States**. Philadelphia: Styner and Cist, 1779. pt. 1.

UNITED STATES. Military Intelligence Service. **Order of battle of the German Army**: April 1943. Washington, DC: Military Intelligence Service, 1943.

2. Bibliography

AYTON, A. The military careerist in fourteenth-century England. J**ournal of Medieval History,** Abingdon, UK, v. 43, n. 1, p. 4-43, 2017.

BACEVICH, A. J. **The Pentomic Era**: the US Army between Korea and Vietnam. Washington, DC: National Defense University Press, 1986.

BANKS, A. **A military atlas of the First World War**: a map history of the war of 1914-18 on land, at sea and in the air. Commentary by Alan Palmer. Barnsley, UK: Pen & Sword Military, 2013.

BATTAGLIONE. In: PIANIGIANI, O.; BONOMI, F. (org.). **Vocabolario etimologico della lingua italiana**. [S. l.]: [s. n.], c2004-2008. Available at: https://www.etimo.it/?pag=hom. Acesso em: 18 nov. 2019.

Coleç. Meira Mattos, Rio de Janeiro, v. 15, n. 52, p. 39-60, January/April 2021

57

BEAUGENDRE, M. A. P. Exército francês: a reorganização de 1976. **A Defesa Nacional,** Rio de Janeiro, Ano 68, n. 694, p. 123-149, 1981.

BLACKMORE, D. J. **"Destructive and formidable"**: British infantry firepower, 1642-1765. 2012. Tese (Doutorado em Filosofia) – Nottingham Trent University, Nottingham, UK, 2012.

BRZEZINSKI, R. **The army of Gustavus Adolphus (1)**: ifantry. Illustrated by Richard Hook. Oxford, UK: Osprey Publishing, 1991. (Osprey Military, 235).

CHASE, K. **Firearms:** a global history to 1700. New York: Cambridge University Press, 2008.

DUNCAN, F. **History of The Royal Regiment of Artillery.** 3. ed. London: John Murray, 1879. v. 1.

FEIO, G. C. **A guerra no Renascimento**: o ensino e a aprendizagem militares em Portugal e no Império: de D. Manoel I a Felipe II. Lisboa: A Esfera dos Livros, 2018.

FORCZYK, R. A. **Tank warfare on the Eastern Front, 1943-1945:** Red Steamroller. Barnsley: Pen & Sword, 2016.

FRANCE. Ministere des Armées. **Guerre 1939-1945**: les grandes unités françaises: historiques succincts: 1939-1940: divisions. Paris: Imprimerie Nationale, 1967. v. 2.

FRENCH, D. **Military identities**: the regimental system, the British Army, and the British People, c. 1870-2000. New York: Oxford University Press, 2008.

FULLER, J. F. C. **Armament and History**: the influence of armament on History from the dawn of classical warfare to the end of the Second World War. New York: Da Capo, 1998.

GRIFFITH, P. **World War II desert tactics**. Illustrated by Adam Hook. Oxford, UK: Osprey Publishing, 2008.

GROOT, B. **Dutch armies of the 80 Years' War 1568–1648 (1):** infantry. Illustrated by Gerry Embleton. Oxford, UK: Osprey Publishing, 2017. (Men-at-Arms, 510).

HOWARD, M. **A guerra na história da Europa.** Tradução de Jorge Pinheiro. Mem Martins: Publicações Europa-América, 1997.

JACKSON, P. D. **French ground forces organizational development for counterrevolutionary warfare between 1945 and 1962**. 2005. Tese (Mestrado em Arte e Ciência Militar) – US Army Command and General Staff College, Fort Leavenworth, KS, 2005.

MANUCY, A. **Artillery through the ages**: a short illustrated history of cannon, emphasizing types used in America. Washington, DC: United States Government Printing Office, 1949.

MARTÍNEZ DE MERLO, J. La organización de los ejércitos en los Austrias. **Revista de Historia Militar**, Madrid, ano 61, n. 1, p. 135-186, 2017. Número extraordinário.

MCNAB, C. (ed.). **Armies of the Napoleonic Wars**: an illustrated history. Oxford, UK: Osprey Publishing, 2009.

MCNEILL, W. H. **The pursuit of power:** technology, armed force, and society since A.D. 1000. Chicago, IL: University of Chicago Press, 1984.

MITCHAM JR., S. W. **German order of battle:** 1st – 290th infantry divisions in WWII. Mechanicsburg, PA: Stackpole Books, 2007. v. 1.

OLIVEIRA, H. J. C. As comunicações na "Divisão 77". **Revista Militar Brasileira,** Brasília, DF, ano 65, v. 115, n. 3, p. 3-32, 1979.

PALMER, R. Units & formations 1930-1956: divisions: infantry. **British Military History**, Barnstaple, 2 jan. 2014. Disponível em: https://www.britishmilitaryhistory.co.uk/docs-units-formations-divisions-infantry. Acesso em: 22 abr. 2020.

PARKER, G. **The Army of Flanders and the Spanish Road 1567-1659**. Cambridge, UK: Cambridge University Press, 2004.

PUYPE, J. P. Victory at Nieuwpoort, 2 July 1600. In: HOEVEN, M. (ed.). **Exercise of arms**: warfare in the Netherlands, 1568-1648. Leiden: Brill Academic Publishers, 1997. p. 69-112.

RÉGIMENT. In: CENTRE NATIONAL DE RESSOURCES TEXTUELLES ET LEXICALES. **Ortolang**: Outils et Ressources pour un Traitement Optimisé de la LANGue: portail lexical: etymologie. Nancy: CNRTL, c2012. Disponível em: https://www.cnrtl.fr/etymologie/r%C3%A9giment. Acesso em: 4 nov. 2019.

SCHNEID, F. C. The French Army. In: SCHNEID, F. C. (ed.). **European armies of the French Revolution, 1789–1802**. Norman, OK: University of Oklahoma Press, 2015. p. 13-35.

SQUADRA. In: PIANIGIANI, O.; BONOMI, F. **Vocabolario Etimologico della Lingua Italiana**. [S. l.]: [s. n.], c2004-2008. Disponível em: https://www.etimo.it/?pag=hom. Acesso em: 18 nov. 2019.

SQUADRONE. In: PIANIGIANI, O.; BONOMI, F. **Vocabolario Etimologico della Lingua Italiana**. [S. l.]: [s. n.], c2004-2008. Disponível em: https://www.etimo.it/?pag=hom. Acesso em: 18 nov. 2019.

Coleç. Meira Mattos, Rio de Janeiro, v. 15, n. 52, p. 39-60, January/April 2021

59

TELP, C. **The evolution of operational art, 1740-1813**: from Frederick the Great to Napoleon. Abingdon, UK: Frank Cass, 2005.

WILSON, J. B. **Maneuver and firepower:** the evolution of divisions and separated brigades. Washington, DC: US Army Center for Military History, 1998.