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Military powers of Ukraine

THE FIRST PROFESSIONAL FORMATIONS IN MEDIEVAL ARMIES

In the article the reason and the time when the first professional formations appeared in the medieval armies are under review. The formations consisted of crossbowmen the first units of whom were formed in Genoa. The special attention is paid to the structure of those formations, how they were used in the armies of different European countries and the reason why they were used until the end of XVII century.

Keywords: crossbowmen, pavezier, choragiew, bandier, cranequin, balestra, shnepper.

Since the middle of the XIX century, when the law of universal conscription was carried into effect, the armies ceased to be completed by conscription but all the males who were suitable for military service were involved. The transition to mass army took place. In peacetime, the contingents of the respective military men were on active duty, the term of which fluctuated depending on the educational level of conscripts. While servicing, the conscripts developed acquired skills during short musters. Mass armies fought during both world wars. However, the Industrial Revolution, further weapon complication, which required good knowledge and qualification to maintain the weapon, led to the crisis of mass armies. The local wars which took place at the end of XX and the beginning of XXI centuries demonstrated it. It is believed that the time is ripe for professional army. But the historical experience of XIV-XV centuries (when due to the crisis the transition from the knights' armies to the mercenary armies took place) should be taken into consideration. According to Leonid Kryvyzyuk, in XIV-XV centuries, the European countries had to solve two major problems while transiting to mercenary armies: financial and economic, mental and psychological factors delayed that process for almost two centuries¹. Therefore, the study of the historical experience of the transition to a professional mercenary army is one of the most urgent issues in contemporary military historiography.

In the Middle Ages, starting from VIII century the infantry began to concede to the heavy cavalry, and then it was completely unable for it to

¹ Кривизюк Л. Криза лицарства і початки формування професійного війська // Actes testantibus. Ювілейний збірник на пошану Леонтія Войтовича / Україна: культурна спадщина, національна свідомість, державність. – Вип. 10. – Львів, 2011. – С. 369–376.

resist the arm knight cavalry, the glory of which was corroborated by the heavy Mongolian cavalry in XIII century². The development of armaments was going on by increasing armouring (plating) of not only the rider but also the horse. Therefore, training a knight warhorse – a destrier - was no less difficult and expensive than training a knight³. The continuous growth of the load on those horses forced to start horse breeding – they crossbred Arabian horses and Flemish carthorses. Those horses, however, quickly got tired; they were unable to gallop preferring a slow pace or trotting. For the same reason, in order to avoid rough terrain, the battle took place mainly on plains where the horses could easily be speeded up⁴. A knight cavalry attack could easily wipe out infantry battle dispositions.

The state could not afford to support the army, therefore, a knight had to complete, arm and equip his army at his own expense. As weapons and technology were becoming more complicated the price was increasing. At the time of Charlemagne (768-814) the cost of the equipment of heavily armed horse warrior was adequate to the cost of 45 cows (a helmet -6, a plate armor – 12, a sword with scabbard – 7, leggings – 6, a spear and a shield -2, a warhorse -12)⁵. That made often impossible to use free people as they were not able to afford such armament. Now that, the population had to pay taxes and fulfil certain obligations to the beneficiary men-at-arms who, in the end, gradually transformed into feudal lords and became a separate military caste, the duties of whom included the protection of the population. Their military service, if it was not broken off by their premature death or injury, lasted 60 years and on. Knights had to train on a regular basis. In order to be fit they needed to eat well which also required certain resources. Thus, the number of the troops was restricted, and the feudal lords, who were the basis of the units, were a threat to their overlords, since the administrative, judicial, fiscal and military power gradually concentrated in their hands, and the existence of their own small detached forces and castles encouraged them to break the oath of vassalage and become a sovereign ruler. The kingdoms split up into duchies; duchies into counties, margravates, landgravates or pfalzgrafens . Some barons in their castles feel independent owners. A few units of archers, slingers or transport drivers were formed from free rural population who had to bear the responsibility of the draft. The role of those formations was insignificant because their personnel did not have defence arms and could not withstand an attack of mounted knights. The militia relied on the city fortifications.

² Див.: *Иванин М. И.* О военном искусстве и завоеваниях монголо-татар и среднеазиатских народов при Чингис-хане и Тамерлане. – Санкт-Петербург, 1875; *Контамин Ф.* Война в Средние века. / Пер. с франц. Ю. П. Малинина. – Санкт-Петербург, 2001; *Жарков С. В.* Военное искусство рыцарей. – Минск, 2008; *Його ж.* Рыцарская конница в бою. – Москва, 2008.

³ *Clark J.* The Medieval Horse and its Equipment, с.1150–1450. – Woodbridge, 2004.

⁴ *Funcken L. et Fr.* Le costume, l'armes et les armes au temps de la chevalerie. – Т. 1. – Bruxelles, 1975. – P. 97–123.

⁵ *Овсінський Ю.* Франкська держава Каролінгів // Войтович Л., Козак Н., Овсінський Ю., Чорний М. Medium aevum: середні віки. – Львів, 2010. – С. 79.

The rulers of medieval states constantly were looking for the opportunities to replace the feudal knight armies with other formations, but the lack of resources deterred that search. As vassals' military service was limited to a certain number of days per year (usually 40 days in peacetime and two months during the war) it often put at risk the entire campaign. That is why, the search never stopped. The first who started the search were the English kings and the rulers of Christian Pyrenees States who were constantly at war with Muslim states (Reconquista). At the end of XI century, they joined into religious and military orders, and a little later – the Italian city-communes⁶.

In 1159 Henry II of England Plantagenet introduced a new tax – scutage (scutagium Lat.) which partly replaced the knight- service (initially the tax was a pound or two marks in lieu of service). Due to those means the King was able to form small formations of armor-clad warriors at the expense of the treasury⁷. That did not solve the problem, moreover, the attempt of King John of England to make the tax compulsory and to increase it led to the revolt of the barons in the early XIII century.

Meanwhile, the bow was being improved, and as a result a crossbow was invented, the sting of which was stretched with a special device and could throw bolts to a distance of 300 meters, punching out any armor up to 150 meters. The exact period when the crossbows appeared is still under discussion⁸, but the widespread use of them started since XII century. The effectiveness of those weapons was immediately evaluated and the knights began to seek the ban against them believing that the weapon was a diabolical invention. As a result, the Second Lateran Council forbade by canon 29 the use of crossbows against Christian soldiers⁹. Immediately German king Conrad III (1138-1152 banned the use of crossbows in his kingdom¹⁰. However, crossbows were massively used not only while defending fortresses. For example, Richard the Lionheart (1189-1199) used them when his army fought in Palestine. Ironically, in the time of the siege of Chalus - Chabrol Castle near Limoges in Aquitaine, on 26 March, 1199, when he was without his armor examining sapper work, King came close to the wall and got a bolt in the left shoulder near the neck above the clavicle. He tried to take the arrow out by himself but only broke the pole. The operation to extract the bolt was not a success and gangrene began. Although the king forgave Crossbow Pierre Basil after he had talked to

⁶ *Войтович Л.* Зародження професійного війська // Scripta manent. Ювілейний збірник на пошану Богдана Якимовича / Україна: культурна спадщина, національна свідомість, державність. – Вип. 21. – Львів, 2012. – С. 169–170.

⁷ *Косминский Е.А.* Исследования по аграрной истории Англии XIII в. – Москва–Ленинград, 1947. – С. 51–53; *Polle A.L.* From Domesday Book to Magna Carta 1087–1216. – Oxford, 1956. – P. 84–85; *Hollister C.W.* The Significance of Scutage Rates in Eleventh- and Twelfth- Century England // English Historical Review. – Oxford, 1960. – P. 586.

⁸ *Шакорев Ю.В.* Луки и арбалеты. – Москва, 2001. – С. 50–56.

⁹ *Hefele K.J.* Concillien Geschichte. – Bd. 5. – Freiburg, 1853. – S. 388; Concilliorum oecumenicorum Decreta. – Bologna, 1973. – P. 195–203.

¹⁰ *Шакорев Ю.В.* Луки и арбалеты. – С. 55.

him, when the king died the crossbow was flayed alive¹¹.

It was an objective necessity to form crossbow divisions at the turn of XXI-XIII centuries. Although the crossbow was inferior to the bow in rate of fire 3-4 times, its penetration made that kind of weapon the most efficient against knight armor at certain distances. The use of a crossbow required special training, although much less than knight training.

Thus special crossbow units were created. They were the first professional trained medieval troops which allowed to reduce the number of knights in the army and better prepare knight cavalry attack. Initially, crossbowmen hardly had defensive weapons. By the end of XIII century they had included steel helmets with camails, leather pricks, and later brigantine (plate-like armor on cloth-based), gauntlets and cuisses. Each archer carried a stock of 12 arrows – bolts¹². Later the number of bolts grew up to 18 and even 36 items¹³. Crossbow formations took the square in several rows. Unlike archers they did not shoot upwards but straight ahead, back rows could not shoot over the heads of the front. Then, after a volley, the front rank was divided into half and the crossbowmen departed back making room for the next. That allowed to maintain a more intense and longer shooting and to prepare the attack of knight cavalry¹⁴.

However, crossbowmen had to leave the battlefield when a foe cavalry attack began. They also could not support their own cavalry attack and often fell under the hooves of the horses of their own knights if they did not escape in time. It greatly reduced their effectiveness. The use of high-shields (a pavise), made of thick wooden planks and covered with iron stripes, worn by their helpers (a pavezier), did not solve the problem. Those shields were used to protect the crossbowmen's backs while reloading the crossbows.

Nevertheless, the first crossbow formations were complicated enough for the enemy mounted knights to execute their attacks. The French believe that the first crossbow formations appeared in the French army of King Philip Augustus (1180-1223). But it was mainly Genoese mercenaries¹⁵. In Genoa, Liguria, Pisa, Tortosa and on the Corsica weapon and ammunition manufacturing (including bow strings) was on the regular basis. The Genoese professionals were definitely the first mercenaries in the knight armies in XIII century. However, in the famous battle of Bouvines on July 29, 1214 those formations did not take part as a part of the French troops¹⁶. Only in 1230 the post of Grandmaster of crossbowmen

¹¹ Флори Ж. Ричард Львиное Сердце король-рыцарь. – Санкт-Петербург, 2008. – С. 254–278.

¹² Див.: Гадаш Л., Вискочил И. Лук и стрела. – Москва, 1960; Медведев А.Ф. Ручное метательное оружие (лук, стрелы, самострел). VIII–XIV вв. – Москва, 1966; Аганов Б. Путь лука и стрелы // Кэмпо. – Москва, 1992. – № 5; Шокарев Ю.В. Луки и арбалеты. – Москва, 2001.

¹³ David N., Embleton V.A. Italian Medieval armies 1300–1500. – London, 1983. – P. 109.

¹⁴ Шокарев Ю.В. Луки и арбалеты. – Москва, 2001. – С. 57.

¹⁵ Audouin E. Essai sur l'armée royale au temps de Philippe-Auguste. – Paris, 1913. – P. 203.

¹⁶ Гейсман П.А. История военного искусства в средние и новые века (VI–XVIII столетия). – Санкт-Петербург, 1907. – С. 34–39; Дельбрюк Г. История военного искусства в рамках политической истории. – Т. 3. – Санкт-Петербург, 1996. – С. 258–262; Duby G. La Bataille de Bouvines. Dimanche, 29 juillet 1214. – Paris, 1988; Разин Е.А. История военного искусства. – Т. 2. – Санкт-

was introduced, which was considered below the rank of Marshal and two ranks of Constable. That position lasted until 1534, i.e. crossbow formations is supposed to appear in the French army around 1230.

King Henry III of England might have formed a separate corps of crossbowmen numbering 700 (other than their paviziers) a bit earlier. They were also mercenaries from the continent. Immediately those mercenaries demonstrated the negative side of all foreign mercenaries –their disregard for the local population that ignited the hatred of the latter. The king believed them to be the core of the British troops, but after the defeat at Taillebourg (1242) the corps was dissolved and “all foreign ... crossbowmen, their paviziers and mercenaries were sent away”¹⁷.

The British began to form archer troops from the local populations, mostly freeholders (farmers who owned their own plots of land). The rate of shooting reached 10-12 shots per minute, and the *English long bow* was able to break through any knight armor by square hit at a distance of 100 steps. Archers also did not have protective armor and could not conduct aimed shooting just as a knight cavalry attack of the enemy began; they had to flee hiding behind the dispositions of their troops.

Earlier in 1201 the Polish chronicler Vincent Kadlubek recorded crossbowmen in Poland. The image of crossbows is on a mosaic in the cathedral in Wielki, and crossbow bolts were found during the excavations of some castles o XII-XIII centuries, e.g. Legnica¹⁸. However, this evidence rather *confirms* the use of a crossbow as a weapon in the Polish principalities at the beginning of XIII century. The first *professional* formations the Polish army got only in the middle of XV century but since 1479 the Polish army used them on a regular basis. Those *companies* originally numbered 20, 30, 40 soldiers. Later the most common number was 150-200 people, while 80% of them were crossbowmen (in Poland they called the crossbow *kusha*) and 20% were helpers with pavises. The first *companies* were formed mainly for 3 months with five florins pay¹⁹.

Nevertheless, the first crossbow formation was formed in Genoa. During the siege of Jerusalem in 1099, Genoese crossbowmen, commanded by Gulielmo Embriaco, suppressed the Muslim archers on the walls while attacking two helepoles²⁰. Genoese arbalesters were in the service of the republic, and the republic let them on hire to other states receiving a fee for their service. They serve under their banners. In XII century, a khorogvi-bandiere numbered 20 people and was commanded by a constable. Those bandieres arranged into units of 100 to thousands of people headed by a Genoese noble. He was responsible for their coordination in the fight. The acrossbowmen were volunteers and they served at least a year. In XIV

Петербург, 1994. – С. 192–195.

¹⁷ Шокарев Ю.В. Луки и арбалеты. – С. 56.

¹⁸ Там само. – С. 59–60.

¹⁹ Baczkowski K. Rola roty piczej z przelomu XV i XVI wieku w integracji społecznej i międzynarodowej // Wspólnoty mały i duże w społeczeństwach Czech i Polski w średniowieczu i w czasach wczesnonowożytnych / Red. Iwańczak W., Smołucha J. – Kraków, 2010. – S. 423–424.

²⁰ Гибб Г. Дамасские хроники крестоносцев. – Москва, 2009. – С. 36–37.

century, the number of people in a bandiere increased up to 25 people. Under the agreement between the Republic and French King concluded in 1339, a Genoese crossbow unit headed by Antonio Doria and Carlos Grimaldi had to provide all crossbow units. Each crossbowman had to have two crossbows, a plate brigandine (coat-of-plates) with a gorget, a bassinet without a visor, gauntlets, a sword and a dagger. He also had to have 18 bolts, the rest were in baggage. A bandiere constable had a monthly fee of 10 florins, a crossbowman – 5 florins²¹.

Long since XII century Genoa began to enter into contracts with other states and let its crossbow units on hire for certain periods. The first such contract was signed in 1173 with Liguria margravate which Obertini family owned. In 1225 Genoa let 120 arbalesters and 20 horses on hire to commune Aosta to fight against Alessandria²².

The efficiency of a crossbow formation to defend city walls was well demonstrated when Emperor Frederick II Hohenstaufen was sieging the city walls of Parma in 1247-1248. The fortifications were defended by 600 crossbowmen and the emperor was forced to go to the long siege and build a powerful castle Vittoria in front of the city fortifications. On 18 February, 1248 his passion for falconry brought him to the biggest defeat in his life when he left Vittorio and his generals missed the sortie of Parma soldiers²³. Later, the emperor spent his fury on the crossbowmen ordering to mutilate the prisoners, so they could not shoot any more²⁴.

Italian states continued to use crossbow units during XV-XVI centuries along with firearms, but their share was not of great consequence in the troops and never exceeded 10-15%. For example, under the agreement of 13.11.1432 between Florence and condottiere Mikeletto degli Attendoli, the latter had to hire 600 spears of men of arms (1800 people) and 400 foot soldiers, of which only 200 were crossbowmen and 100 helpers with pavises²⁵. Archer units armed with long British bows, who began to be formed in XIV century, consisted of much more soldiers. The reasons might be the following: the rate of fire of a bow, and the ability to shoot the front and the rear ranks simultaneously.

However, a crossbow and units of crossbowmen were long used in the battlefields of Italy and other regions of Europe. In time the design of the crossbow improved and a balestra crossbow appeared. It shot lead and iron bullets (hunting options – clay balls) and had special sights that allowed shooting rather accurately at a target²⁶. That type of the crossbow originally came from Andalusia. In XV century the balestras from Zaragoza

²¹ *Benvenuti G.* Storia della Repubblica di Genova. – Milano, 1977. – P. 127; *Urban W.* Średniowieczni najemnicy. – Warszawa, 2008. – S. 64.

²² *Fortentini U.* Genova nel Basso Impero e nell'Alto Medioevo. – Milano, 1941. – P. 123.

²³ *Виллани Джованни.* Новая хроника или история Флоренции. – Москва, 1977. – С. 155; *Глогер Б.* Император, Бог и дьявол: Фридрих II Гогенштауфен в истории и легенде. – Санкт-Петербург, 2003. – С. 197–199.

²⁴ *Renouard Y.* Les hommes d'affaires italiens du Moyen Age. – Paris, 1968. – P. 231.

²⁵ *Контамин Ф.* Война в Средние века. – Москва, 2001. – С. 150.

²⁶ *Бехайм В.* Энциклопедия оружия. – Санкт-Петербург, 1995. – С. 289, 298–299.

and Barbastro were considered the best. Italian balestras distinguished by their stretching device design accessories and trigger. The balestras were called shneppers. Around 1530 in Italy there were miniature crossbows that can be carried under clothing. In 1542 under the threat of heavy fines the Senate of Venice banned the use of such weapons²⁷.

In German states, despite the ban, those weapons were used regularly in XII century especially in the cities that were the parts of Hanseatic League. There the first professional structures evolved as handicraft corporations – Guild of St. Sebastian or Moritz²⁸. German gunsmiths invented a perfect device to stretch a sting with a *cranequin* or *ratchet-winder* which let shoot at a distance of 200-300 yards (500 meters) without using pavises. Due to that cranequin crossbow, which did 2-3 shots a minute, it was possible to form mounted troops, the main disadvantage of which was that after having shot they had to leave for recharging²⁹. The advanced design let the crossbowmen shoot at full gallop. The units of mounted crossbowmen were in Burgundy, French and also Spanish and Moorish Christian states. For example, in 1472 Burgundy armed forces had 84 steel crossbow including 80 cranequins and 2100 bolts in stock³⁰.

Since XII centuries both mounted and on foot crossbowmen were permanent parts of the troops of all the Pyrenees States and their units were quite numerous. In 1385 in the battle of Aljubarrota Portuguese King Joao I with his army of nearly 7 thousand people (1700-2000 plate armors, 800-1000 crossbowmen, 500-700 English archers and 4000 pikemen on foot) defeated the Castilian army of 14-23 thousand soldiers. The army consisted of 5-6 thousand plate armors, 5-6 thousand crossbowmen. They were reinforced by 16 bombards and culeuvrines. The Portuguese army took well-fortified position which allowed the crossbowmen and archers to use completely the combat capabilities of their weapons³¹.

Therefore, since the end of XI century the first crossbowman formations as the first professional soldier units appeared in Genoa and then in neighboring countries including Britain and France, Spanish and German states. They appeared due to the advanced design of a crossbow which allowed punching out the multilayer armor of heavy cavalry. Those formations - choragiew-bandiers – joined a unit and were 10-15% of the total number of troops. As the design of the crossbow was being advanced, the sting stretching gear in particular, its combat capabilities and the range of convenience were increasing as well. As a result mounted crossbowmen appeared. Those formations were the most effective while defending and

²⁷ Там само. – С. 299–301.

²⁸ Там само. – С. 288. Св. Себастьян (+ 288) був військовим трибуном у преторіанській гвардії, з наказу імператора Діоклетіана за приналежність до християнства його розстріляли легіонери з луків, а коли виявилось, що ране не смертельні – закидали камінням. Св. Моріц (+ 286) був військовим трибуном Фіванського легіону, його стратили за відмову нищити християн.

²⁹ *Пейн-Голлуей Р.* Книга арбалетов. – Москва, 2005. – С. 213.

³⁰ *Куркин А.В.* Вооружение бургундской армии 1460–1470 гг. // Интернет-ресурс: www.fieldof-battle.ru/modules.php?name=newa&file=ortide&sid=453

³¹ *Черних А.П.* Битва при Алжубарроте // Вопросы истории. – 1988. – № 4. – С. 79–87.

attacking fortifications. In XII century they took part in all the battles throughout Europe. Due to them, the infantry returned to the battlefield. It was crossbow advanced design that made crossbowmen autonomic; they could do without helpers-paveziars. Even when small arms appeared crossbowman units were still used until the end of the XIV century and sometimes even at the beginning of XVIII century. The reason was that crossbows were relatively cheap, had better rate of shooting comparing with the first hand cannons, harquebus and even muskets and fusils. During XIII-XV centuries along with crossbowman units there formed the units of archers armed with long English bows, which had better rate of shooting. Crossbow formations were the first professional ones in the medieval armies which were supported at the expense of the public treasury and from which the transition to professional army began.

Ігор МАЦЮК. ПЕРШІ ПРОФЕСІЙНІ ФОРМУВАННЯ В ЄВРОПЕЙСЬКИХ СЕРЕДНЬОВІЧНИХ АРМІЯХ

У статті розглядаються причини і час появи перших професійних формувань у середньовічних арміях. Цими формуваннями були арбалетники, перші підрозділи яких були утворені у Генуї. Особлива увага звернена на структуру цих формацій, практику їх застосування у військах різних європейських країн і причини використання цього роду військ до кінця XVII ст.

Ключові слова: арбалетники, павез'єри, хорогви-бандієре, кра-некін, балестра, шнеппер.