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## THE WAGON LAAGER

In the historical sense the term "wagon laager" denotes a fortified encampment consisting of many wagons joined together and arranged in a row, often two or more concentric rows, circular, oval or rectangular in shape. It was already used in antiquity, known to the Arabs, the Mongols and the Turks. In the Middle Ages it was improved thanks to the Czech Hussites, who adjusted it to fighting while the wagons were moving. The fortified village in Western Bohemia founded in 1420 A.D. by a radical faction of the Hussites who were later called the Taborites derives its name from the Biblical Tabor Mountain in Galilee, the supposed place of Christ's Transfiguration. The Polish term "tabor" corresponds to the German word "der Tross", the French one "le train" and the English term "wagon laager" borrowed from the Dutch language. In Czech the wagon laager tactics is termed "vozov taktika", the moving wagon laager - "pochod ve vozovem iku", the fortified one - "vozov hradba", which corresponds to the German "Wagenburg".

A wagon pulled by horses or sometimes oxen, mules, donkeys had been an indispensable military equipment since antiquity. War wagons pulled by horses, chariots - two-horse two-wheeled carts and four-horse quadrigas used to transport warriors before the fight as well as in direct fighting, especially in the case of lancemen, were already constructed in deep antiquity in Egypt, Greece and Mesopotamia. Chariots used in Persia and India were also manned with bowmen. Ancient armies used to be accompanied by hundreds or thousands of transport wagons. It is known that Alexander the Great's loots were carried to Macedonia and Greece on 40 000 vehicles. Even if we assume that this number is exaggerated, the presence of an enormous logistic effort which accompanied great expeditions is evident. Although we do not know when wagons were used in the construction of fortified encampments for the first time, the idea seems to be natural enough to have been formed independently in different places and in different historical periods. Certainly, it was commonly accepted in late antiquity. The tactics of two decisive battles which determined the lot of the Roman Empire were based on the wagon laager. First of them was fought in 378 A.D. in the heat of August near Adrianopolis be-

tween the Romans, commanded by Emperor Valens, and the Visigoths, led by Fritigern, with tens of thousands of warriors taking part in the fight. A circular wagon laager constructed of two rows of wagons constituted the basic part of both the defensive and offensive actions<sup>1</sup>. The army had two cavalry regiments positioned at the wings, but it was the infantry armed with lances, swords and bows that constituted the core of it. The course of the battle is known thanks to the account written by the historian Ammianus. The Romans attacked the encampment on the march without a properly developed battle array and sent their light skirmish infantry forward. It was forced back by the Goths and introduced a considerable confusion into the legion's array. Eventually the Roman army was encircled and defeated by the enemy. Emperor Walens was killed in the ensuing slaughter. The great battle of Chalons on the Catalaunian Fields on the Marne proved to be equally dramatic. It was fought in 451 A.D. between the Roman commander, Aetius, allied with Teodoric's Visigoths, the Alans and the Francs, and the commander of the Huns, Attila, assisted by the Ostrogoths and various Germanic contingents. Despite serious losses, Aetius managed to maintain the field, but Atilla withdrew to a fortified encampment manned with archers, which the Romans failed to seize<sup>2</sup>.

The memory of the tactical efficiency of the wagon laager must have survived in the following centuries both among the Visigoths and the Ostrogoths, as well as among eastern warriors, the descendants of the Huns. However, the ages to come were dark ones, characterized by a minimal number of scarce and incomplete historical sources.

The revival and perfection of the wagon laager tactics took place, as it has already been said, in the first quarter of the 15th century in Bohemia in connection with the appearance of the Hussites, the followers of Jan Hus. This new religious and social doctrine was shaped not without an influence of the English reformer John Wycliffe. In 1415 A.D. Hus was imprisoned and condemned to the stake. Not before long some religious wars,

 <sup>&</sup>lt;sup>1</sup> A. Ferrill, The Fall of the Roman Empire. The Military Explanation, London 1990, p. 61.
<sup>2</sup> Ibidem, p. 148.

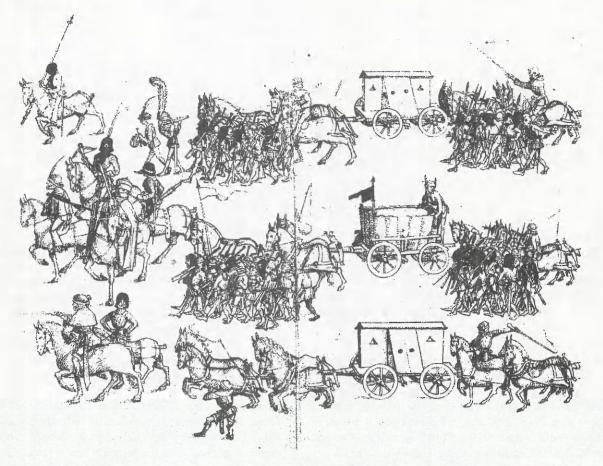


Fig. 1. The passage of a wagon laager, a drawing in Das Wolfegger Hausbuch, c. 1480.

culminating in a "crusade" summoned by Pope Martin V and organized by Sigismund of Luxembourg, broke out. The Emperor's armies encountered a determined resistence of the Hussites led by such outstanding commanders as Jan Źižka<sup>3</sup>.

No army, not even a medieval one, could do without means of transport. Provisions, fodder for the horses, arms and armour, ammunition, clothes, tents, tools, medicines had to be transported on great transport wagons, called "Fuhrwerkes" or "Fassungwagen" in German, town merchant wagons, church or monastery wagons, as well as ordinary basket or rack peasant wagons or even carts. The custom of providing the army with equipped battle wagons by monasteries was commonly adopted in Bohemia at that time. It was already in the 13th and the 14th centuries that a military encampment used to be surrounded with a rampart made of such wagons. The encampment, "vozov hradba" or "Wagenburg", usually constituted the last place of retreat and shelter after a lost battle. In the 14th century the importance of the infantry and especially the warriors armed with crossbows, arbalests, bows, and eventually guns considerably increased. The infantry formed a natural obstacle for the cavalry just inside the wagon laager. The tactics were adopted by the Hussites, who soon became divided into two factions: the more radical Taborites and the moderate Utraquists. They had at their disposal peasant and plebeian, therefore well trained and ready for sacrifice, armies composed of infantry warriors. The moral strength of these armies, namely the belief in their mission in the formation of a new order of social justice based on the uniform faith founded on two sacraments: Baptism and Communion of two consecrated elements, as well as the common struggle against feudalism, manifested in two powers — the Empire and the Pope, appeared to be extremely important at that time. At first, in the autumn of 1419, the Hussites employed in battle ordinary peasant and town wagons, which were soon transformed into powerful battle wagons. Similarly, the flail used for threshing corn was changed into the battle flail and other farm tools, like scythes or sickles, became dangerous shaft weapons. The enlarged wagons received a strong lining and their outer sides were strengthened with additional wooden plates, resembling the dividing embrasures used in fortresses, which could be lifted and lowered on chains. Such wagons constituted small movable fortresses. They were equipped not only with shaft weapons, but also thrown ones and firearms, blowpipes, harquebuses, small canons and mortars, as well as all the indispensable camp tools: hatchets, spades, hoes, pickaxes, hammers and chains with rings and hooks used for joining the wagons. A

<sup>&</sup>lt;sup>3</sup> K. T i t z, Chlasy husitského valečnictví v Evropě, Prague 1922.

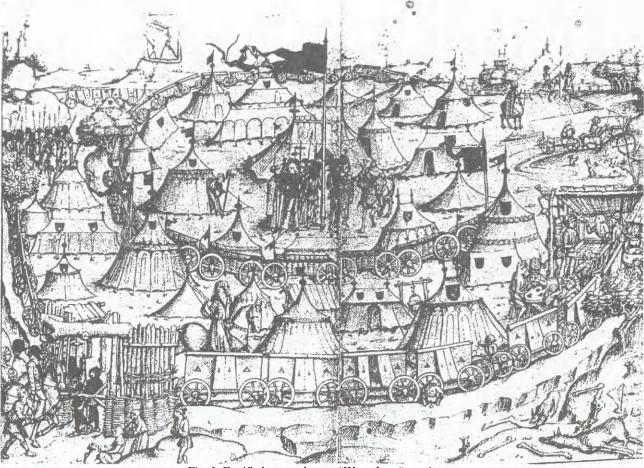


Fig. 2. Fortified wagon laager, "Wagenburg", as above.

wagon became a separate battle unit, usually manned with two gunmen, six cross-bowmen, four "flailmen", four halberdiers, two shielded warriors and two well armed and armoured trainmen, who drove the wagon and took down the wagon laager. Spaces between the wagons were filled with coach boxes bristled with a stockade or small canons placed between the vehicles.

The new system of fighting created by the Hussites and grounded on the wagon laager was based on the principle of opening each battle with some defensive actions. After the weakening of an enemy by means of fire coming from the wagons, the offensive actions were started: the attacking infantry rushed through the encampment gates and defeated the enemy by means of shaft weapons, flails, primitive weapons called in Polish "kiścień" (a piece of lead or bone fixed to a wooden handle), forks, lances and nailed clubs mainly. It has already been pointed out that the actions were reinforced by rigid discipline and involvment demonstrated by the warriors of the new faith, among whom the ideas of equality and common property were readily accepted. The Taborites were led by elected clergymen and the armed forces commanded by elected hetmans. The rules of the Bible became the only law. While fighting against Sigismund of Luxembourg's conquests, the Hussites won numerous victories. Later, however, some civil wars between the Taborites and the Utraquists broke out. In 1434 the Taborites suffered a considerable defeat in the battle of Lipany, which constituted the beginning of the fall of this movement.

The Hussites' military successes were found impressive in Europe and many countries attempted to imitate their tactics, which appeared to be quite difficult. Although the purely technical reconstruction of military structures was possible, the discipline, personal involment and the infinite faith in the right ideas the Hussites were fighting for appeared to be their vital adventages which could not be maintained. The wagon laager tactics were, among others, accepted by the Emperor's army and it is the Germans who we owe the faithful pictorial representation of this system to. It may be found in the handwritten copy of the Wolfegger Hausbuches, which has already been studied before<sup>4</sup> (fig. 1 and 2). It dates back to c. 1480. The pictures are made on parchment. They were drawn with a drawing-pen and washed with watercolours or gouache by an unknown German artist in the times of Emperor Frederick III. There is a different cycle of this artist's works, copperplates, in Rijksmuseum in

<sup>&</sup>lt;sup>4</sup> [Major] A. D. Sterzel, *Das Wolfegger Hausbuch und* seine Bedeutung für die Waffenkunde, "Zeitschrift für Historische Waffenkunde", vol. 6, Dresden 1912-1914, pp. 234, 280 and 314; J. Graf Waldburg-Wolfegg, *Das mittelalterliche Hausbuch. Betrachtungen vor einer Bilderhandschrift*, München 1957 (I would like to thank Dr Barbara Miodońska for lending this valuable publication to me).

Amsterdam. The work dates back to the fall of the Middle Ages and foretells the coming of the spring of the Renaissance. The name "Hausbuch" seems to be inadequate. The pictures offer a broad spectrum of contemporary life, which is presented under the allegories of planets and astrological omens referring to the main activities of the contemporary amusement-concerned community, animated by love affairs, hunting and tournaments rather than wars. All these activities, however, are presented in the picture of a moving wagon laager and a wagon laager encampment, "Wagenburg", which consists of two rows of wagons, numerous tents, a tavern and a fortified gate, called "zvirka" in Czech.

The illuminated hand-written copy of the Wolfegger Hausbuch has become the basis of numerous studies, some of them made by Czech authors'.

Poland did not take an active part in the Hussite wars, but suffered from the consequences of the Hussite invasions visible e.g. in Częstochowa, where the miraculous painting of the Mother of God was damadged.

The Polish took the improved wagon laager from the Hussites, but the system of fighting based on it was changed.

Probably the oldest source information about the use of the wagon laager system has been recently quoted by Andrzej Nadolski in his book on the Grunwald battle". It is a Latin memorial worked out by Mikołaj Lasocki for the envoys from Castile who arrived for the Ecclesiastical Council's proceedings in Basel in 1435. The memorial announced that the King of Poland employed heavy wagons in his fight against the Tartars: "per artem, id est cum curribus armatis". However, the use of the wagon laager arranged in the Hussite style by the Poles during Jan Czapek of San's expedition against the Teutonic Knights in 1434, as well as a year later in the battle of Ukmerge in Lithuania, and in 1439 in the battle of Grotniki by Spytko of Melsztyn has already been suggested by Zdzisław Spieralski'. To sum up, the wagon laager tactics modelled on the Hussite one became a permanent element of Polish war science and was subject to local modifications°.

While in Bohemia the wagon laager was adjusted to and used by a peasant army almost exclusively consisting of infantry, in 16th century Poland it was employed by the enlisted armies, which were mainly composed of cavalry. Mounted warriors were used by the Hussites only to a limited extent in order to chase an enemy or to intercept the enemy's retreat. In Poland the wagon la-

Ibidem, p. 287.

ager manned with infantry and equipped with artillery constituted the point of resistance in the preparations for the decisive attack of the cavalry. Battles based on the wagon laager were defensive and offensive in character and the choice of the place the wagon laager was to be situated on appeared to be of fundamental importance for the course of each battle. During the preparations for a campaign a certain number of indispensable wagons were provided by the King or hetman, some of them were furnished by the King's towns on the basis of the former duty of the levy-in-mass and most of them were simply hired. Private owners transported provisions, food, weapons, ammunition and guns for the army. The remains of such an army wagon loaded with hussar kettle-hats were fortunately found in the Vistula in the vicinity of Warsaw in 1906<sup>9</sup>. It is also known that in 1504, when the levy-in-mass expedition against the Tartars and Moldavians who occupied the region of Pokucie at that time was being prepared, King Alexander the Jagiellonian sent a proclamation to his towns and starosts ordering them to dispatch "currus bellicos cum victualibus et armis" to  $Lvov^{10}$ . The proclamations appeared in the following years, too. In Poland no special wagons for military purposes were constructed, therefore those meant for everyday use, probably additionally srengthened, were employed. In the statute worked out in the times of Sigismund Augustus called Porządek spraw rycerskich (The Order of Knight Affairs) the instruction not to employ provision wagons, chariots or coaches (i.e. vehicles used for travelling) in a row i.e. in a wagon laager may be found<sup>11</sup>. The same instruction was also written by Jan Tarnowski in Consilium rationis bellicae: market wagons are not needed in a wagon laager to make room for both the infantry and the mounted warriors on the square<sup>12</sup>. It is known from other sources that the travelling coaches and carriages which had to be used in the construction of a wagon laager used to be loaded with stones. The means of joining the extreme wagons in rows were decisive as far as the tightness and strenght of a wagon laager were concerned. In Poland the Hussite way of joining wagons "wheel to wheel" was adopted i.e. the front wheel of a preceding wagon was fastened to the back wheel of the next one by means of chains and the left wheels were joined with the right ones. As a result a "cogged" row was formed. It was characterized by a slanting arrangement of wagons. This technique enabled an easy passage from the marching array to the wagon laager battle array and vice versa. Moreover, the slanting array facilitated the defence of the wagon laager by means of flank-fire. In addition, in the slanting array horses could be left harnessed to the wagons. Of course, if such a wagon laager was to be maintained the horses were unharnessed and led to a special place inside the wagon laager, where they were

<sup>&</sup>lt;sup>5</sup> E. Wagner, Jak valcili husité, Prague 1946; J, Durdik. Husitsk vojenstv, Prague 1954; E. Wagner, Z. Drobna and J. Durdik, Tracht, Wehr und Waffen des späten Mittelalters (1350-1450), Prague 1960; P. K1učina, Pirspěvek k problematice taktiký husitských vojsk, [in:] Studia k československým vojenským dejinam, Prague 1983, pp. 3-29 (I would like to thank Dr Vladimir Dolinek for sending me this magazine from Prague).

A. Nadolski, Grunwald. Problemy wybrane, Olsztyn 1990, p. 221, ref. 1101.

Z. Spieralski, Wojskowość polska w okresie Odrodzenia, 1454-1576, [in:] Zarys dziejów wojskowości polskiej do roku 1864, ed. J. S i k o r s k i, vol. I, Warsaw 1965, p. 286. <sup>8</sup> Ihidem p. 287

<sup>&</sup>lt;sup>9</sup> Z. Żygulski Jr., Broń w dawnej polsce na tle uzbrojenia Europy i Bliskiego Wschodu, Warsaw 1982, p. 189.

Z. Spieralski, op. cit., p. 322.

<sup>&</sup>lt;sup>11</sup> Ibidem, p. 323.

<sup>&</sup>lt;sup>12</sup> J. Tarnowski, Consilium rationis bellicae, Tarnów 1558, fig. 35v.

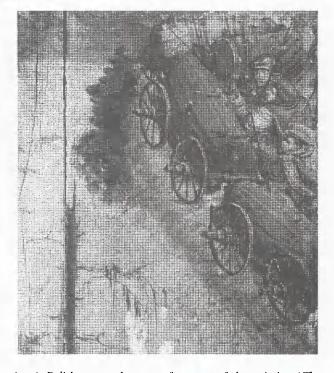


Fig. 3. The battle of Obertyn of 1531, a woodcut in M Bielski's *The Chronicle*.

hobbled, watered and fed by the stablemen. Horses played a fundamental role in these tactics. As it is known, in the Polish wagon laager, usually consisting of a single row of wagons, the square was big enough to form the cavalry into battle array. The gates were not shut, like in the case of the Hussite tactics ("na zwirkę"), but widely open and guarded only by the infantry, ready to let the cavalry pass through and outside the wagon laager. The artillery would be placed in the empty spaces between the wagons, especially at the corners.

To sum up, the role of the wagon laager in old Polish tactics was critical and sometimes decisive as far as the victory was concerned. The wagon laager battle of Obertyn, fought against the Wallachians by Hetman Jan Tarnowski on 22nd August 1531 (fig. 3), is the most often quoted example<sup>13</sup>. In brief, a masterly built fortified encampment, "Wagenburg", equipped with two gates: the front one and the back one, constituted the point of support for the cavalry troops, the task of which was to make skillful attacks through the two gates interchangeably. Hetman Jan Tarnowski, the winner in this battle, appeared to be a true master of the wagon laager tactics. His doctrine was later theoretically presented in the above quoted *Consillium rationis bellicae*.

The campaign of Cecora, led by Hetman Stanisław Żółkiewski against the Turks and the Tartars in 1620, is the most drastic and at the same time the most didactic



ig. 4. Polish wagon laager, a fragment of the painting "The Battle of Orsza", National Museum in Warsaw, soon after the year 1514.

example of a negative result of fighting based on the wagon laager<sup>14</sup>. In the face of the enemy's prospective invasion Hetman Żółkiewski decided to set off for Moldavia in August 1620, mainly in order to demonstrate his strength. He had at his disposal only 7 000 soldiers, but was accompanied by a group of outstanding commanding officers, namely Crown Field Hetman Stanisław Koniecpolski; Mikołaj Struś, the Starost of Halicz; the Lithuanian prince Samuel Korecki; the artillery colonel Teofil Szemberg. Żółkiewski's son, Jan, and his nephew, Łukasz, also took part in this expedition. Zółkiewski meant to wait for the enemy in the fortified encampment of Cecora. The encampment was built in a bend of the Prut and consisted of a rampart, thirteen bastions and four gates prepared for infantry and cavalry attacks. Gradually new and new troops as well as Grazziani's Moldavian contingent arrived, thus increasing the number of the defenders to 10 000 warriors. On 19th September Pasha Iskender's Turkish army and the Tartar army led by Kantymir appeared in front of the encampment. Żółkiewski led his soldiers out of the encampment in order to fight a decisive battle. His army was reinforced by two small wagon laagers manned with the armed with guns infantry, the task of which was to flank the main forces. Koniecpolski was in command of the right wing, while the left one was commanded by Korecki. The centre of the array was led by the Great Hetman himself. The hussars attacked the centre of the enemy's array with great force. They made the Tartars and the first two groups of Turks withdraw, but were stopped by a trench manned with firing in volleys janissaries. In the decisive moment of the battle the Molda-

<sup>&</sup>lt;sup>13</sup> W. Dworzaczek, *Hetman Jan Tarnowski*, Warsaw 1985.

<sup>&</sup>lt;sup>14</sup> R. Majewski, Cecora - rok 1620, Warsaw 1970.

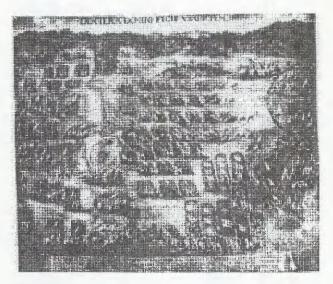


Fig. 5. The wagon laager of the Moscow army and the wagon laager of the Czar's foreign mercenary forces in the painting "The Battle of Kłuszyn" painted by S. Boguszowicz shortly before 1620. The Painting Gallery of Lvov, the exhibition at Olesko.

vians joined the side of the Turks. The Turks' counterattack forced the Poles to retreat and endangered the right wagon laager, which was eventually broken, defeated and its crew slaughtered. The Poles suffering great losses retreated to the encampment. It was a serious setback, but not a defeat yet. Councils and arguments concerning future tactics ensued in the Polish camp. Few suggested another battle, others advised to withdraw the army in a defensive wagon laager array. The tumult which arose among the soldiers was caused by the rumours about the escape of the Hetman. As a result some of the wagons and tents were set on fire and robbery spread in the encampment. Eventually discipline was restored with great effort. When the attempts at negotiations with the Turks failed in, the Poles retreated towards the borders of the Polish Republic.

On 29th September the great wagon laager formed by Szemberk and Koniecpolski departed, leaving the astouned enemy on battlefield. It consisted of a herd of cavalry horses functioning as a battering ram and protected against gunfire. The houses were followed by six rows of wagons, each of them made of one hundred vehicles carrying harquebuses and guns. Three rows of hussars and armoured warriors armed with loaded guns moved in the marching array on both outer sides of the wagon laager. In addition, small guns and harquebuses, the infantry and Colonel Lisowski's horsemen were placed at the back of the wagon laager. The wounded and the sick were transported on the wagons. At first the astonished enemy army did not attack. The passage took place by night, during the days the army reposed. Small rivers and ravines constituted greatest obstacles for the retreating army. Moreover, Kantymir's Tartars and eventually Iskender's Turks appeared. Their forces were repulsed by fire. Within a week, by 6th October, the determined army had covered 165 km and repulsed 17 bigger and smaller attacks. The Poles were one and a half mile from the Dniester River and the safety of the border when a crisis and confusion arose in the army, as a result of which the array was broken. Rumours about the escape of the senior officers spread among the servants and Colonel Lisowski's horsemen, who started to plunder the wagons. When the Tartars attacked, a dramatic struggle for the horses ensued and panic started in the wagon laager. As Żółkiewski refused to escape, he was put on horseback by force and covered with a haiduk's greatcoat. He cleared his way with a sabre in his hand, but eventually died a soldier's death, surrounded by a host of enemies.

As far as painted iconography is concerned the oldest representation of the wagon laager may be found in the painting "The Battle of Orsza" in the National Museum in Warsaw. The work was painted after  $1514^{15}$ (fig. 4), soon after the date of the battle. Dymitr Szujski's wagon laagers, in this case won by Hetman Stanisław Żółkiewski in the battle of Kłuszyn in 1610, are depicted in Szymon Boguszowicz's painting faithfully presenting the battle. This work is now displayed in the former Capuchins' monastery at Olesko (fig. 5).

Despite the painful dissapointment suffered in the battle of Cecora the wagon laager did not disappear from Polish battlefields. It was used throughout the 17th century by the Poles and by the enemies they fought against in the battle of Beresteczko in 1651, the battle of Ochmatów (1655), and the battle of Połonka in 1660.

Translated by Zuzanna Poklewska-Parra

<sup>&</sup>lt;sup>15</sup> Z. Żygulski Jr., The Battle of Orsha, [in:] Art, Arms and Armour. An International Anthology, ed. R. Held, Chiasso (Switzerland) 1979-80, pp. 108-143; "Bitwa pod Orszą" — struktura obrazu, "Rocznik Historii Sztuki", vol. 12, 1981, p. 87.